ICAR-ATARI, Pune

ANNUAL PROGRESS REPORT OF KVK GANDHINAGAR

(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, Gujarat Vidyapith, Randheja, Gandhinagar (Guj.) -382620	079- 23975223, 9426075146	-	kvkgandhinagar@gmail.com	www.kvkgandhinagar.org 95260

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

Address	Telephone		E mail	Website address
	Office	FAX		
Gujarat Vidyapith, Near Income Tax Circle, Ashram Road, Ahmedabad-380 014	079-27541148 079-27546767	079- 27542547	registrar@gujaratvidyapith.org	www.gujaratvidyapith.org

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

Name	Telephone / Contact		
Dr. V. K. Garg	079 23975223	9924171871	gargvk123@gmail.com

1.4. Date and Year of sanction: 1977

1.5. Staff Position (as on December, 2023)

Sl. No.	Sanctioned post	Name of the incumbent	Mobile No.	Discipline	If Permanent, Please indicate			If Temporary pl. indicate the consolidated amount paid (Rs./month)
					Current Pay Band	Current Grade Pay	Date of Joining	
1.	Senior Scientist and Head	Dr. V. K. Garg	9924171871	Soil Science	37400-67000	10000	06-03-10	
2.	Subject Matter Specialist	H. N. Patel	9998746540	Horticulture	15600-39100	7600	21-02-94	
3.	Subject Matter Specialist	Vinay Gour	9374846964	Agronomy	15600-39100	7600	23-01-06	
4.	Subject Matter Specialist	Dr. P. V. Jadav	9428437637	Animal Science	15600-39100	7600	01-07-08	
5.	Subject Matter Specialist	B. B. Hadiya	9274425558	Agri. Extension	15600-39100	6600	02-06-14	
6.	Subject Matter Specialist	Radhaben Chaudhry	9725682615	Soil Science	15600-39100	5400	26-11-20	
7.	Subject Matter Specialist	-	-	-	-	-	-	
8.	Farm Manager	Vijay Modhvadiya	8980717939	-	9300-34800	4200	03-04-21	
9.	Programme Assistant	Chandresh Gohil	9737591569	Home Science	9300-34800	4200	20-11-20	
10.	Programme Assistant (Computer)	-	-	-	-	-	-	
11.	Assistant (Acct./Admn.)	Vishal Pithiya	9106696926	-	9300-34800	4200	04-12-20	
12.	Stenographer	-	-	-	-	-	-	
13.	Driver 1	A. J. Damor	9426037194	-	5200-20200	2400	06-09-06	
14.	Driver 2	-	-	-	-	-	-	-
15.	Supporting staff 1	Madhabhai	-	-	-	-	-	Out sourcing
16.	Supporting staff 2	Rameshbhai	-	-	-	-	-	Out sourcing

1.6. Total land with KVK (in ha):

S. No.	Item	Area (ha)
1	Under Buildings	0.50
2.	Under Demonstration Units	0.50
3.	Under Crops	9.00
4.	Horticulture	9.00
5.	Pond	1.00
	Total	**20.00**

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage		
			Complete		
			Completion Year	Plinth area (Sq. m)	Expenditure (Rs.)
1.	Administrative Building	ICAR	1996	750	14,59,844.00
2.	Farmers Hostel	ICAR	1978-79	335	53,377.69
3.	Staff Quarters (6)	ICAR	1979-80, 1983-84	560	118542.94, 160782.49
4.	Demonstration Units (2)	ICAR	1978-79	200	28,995.00
5	Fencing	ICAR	2006-07	3000 m	5,91,766.50
6	Rain Water harvesting system	-	-	-	-
7	Threshing floor	ICAR	2005-06	130	1,37,245.00
8	Farm Godown	ICAR	1978-79	300	122401.08
9	Implement shed	ICAR	2010-11		301711.00
10	Garage and grass Godown	ICAR	1986-87	48	2,00,211.00

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Running	Present status
Bolero Jeep	2009-10	580412.60	169050	Good condition
Motor cycle	2010-11	45029	24413	Good condition
Tractor	2019-20	619916	1649 hrs.	Good condition

C) Equipments & AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Portable TV	1987-88	7050	Not Working
VCR	1988-89	15725	Not working
Colour TV	2002-03	25260	Not working
Fax Machine with stabilizer	2002-03	10350	Not working
Computer (NATP)	2002-03	111865	Not Working
Soil Testing Lab Equipment	2004-05	626947=34	Not Working
DVD Player	2006-07	3700	Not Working
LCD Projector	2006-07	75400	Not Working
Digital Camera	2006-07	15250	Not Working
Handy cam (SONY)	2008-09	25000	Working
Disc Harrow	1978-79	5651	Working
Rotovator	2006-07	47000	Working
Aeroblast sprayer	2008-09	99500	Not working
Generator	2008-09	37972	Not working
Laserjet Printer (HP 1020)	2010-11	6150	Working
Voltage stabilizer (for lab)	2010-11	21417	Working
Seed cum Fertilizer Drill	2010-11	30000	Working
Rotary Tiller (weeder)	2010-11	51450	Not working
Power Sprayer with stand	2010-11	24925	Working
Computer (HP)- Two	2015-16	86259	Working
LCD projector (k-yan)	2016-17	100000	Working
Photocopier machine (canon)	2016-17	89550	Working
Water cooler with RO system	2016-17	80485	Working
Digital camera with zoom kit	2016-17	36000	Working

Computer (HP)	2016-17	36000	Working
LCD projector (hitachi)	2016-17	58995	Working
Projector screen	2016-17	3170	Working
Plastic tables	2016-17	35710	Working
Furniture (Table, chairs)	2016-17	66890	Working
Solar pump with drip irrigation system	2016-17	563267	Working
Levellor (reversible)	2019-20	23500	Working
Tractor wheel ring for puddling	2020-21	21000	Working
UPS	2020-21	17341	Working

1.8. Details of SAC meeting conducted in the year:

Date	Name and Designation of Participants	Salient Recommendations	Action taken
23/3/2023	Dr. Bharat Joshi, Hon'ble Vice Chancellor, Gujarat Vidyapith Ahmedabad Dr. Nikhil Bhatt, Registrar, Gujarat Vidyapith Ahmedabad Dr. Seren Sekhar, Representative of DEE, SDAU, Dantiwada Dr. P.H.Research Scientist, Seed technology, SDAU, Dantiwada Suresh Chaudhary, Dy. Project Director, ATMA, Gandhinagar Mr. J. S. Patel, DAO, Gandhinagar Mr. Vishal Sharma, DDM, NABARD Mr. S. I. Patel, Dy. Director. AH, Gandhinagar Mr. Prerak J. Gondalia, Asstt. Dir. Hort., Gandhinagar Mr. Adesh Juneja, LDM, SBI, Gandhinagar Dr. Rajiv Patel, Coordinator, GSK, Randheja Bhartiben Bhavsar, Jyotsna Parmar, Manjulaben Gajjar, Gandhinagar Mr. Atmaram Prajapati, Progressive Farmer Parsa Mr. Roopsinh Rathod, Progressive Farmer Devkaran muvada Mrs. Pushpaben V. Patel, Progressive Farmer, Jalund Dr. V. K. Garg, Sr. Scientist & Head, KVK, Randheja	• Write research articles • Submit Mushroom cultivation project proposal to hort. Deptt. • Complete nano urea production work • Photo should be with geo tag • Organise demo of natural farming • Organise programme on International millet year • Project proposal for natural farming demo unit • Present data on income and expenditure of Revolving Fund	• Research articles are under process • Mushroom cultivation project to be submitted after grants available with hort. Dept. (as discussed with DDH) • Geo tag photo attached • programme on International millet year • NF project proposal submitted • Data on income and expenditure of Revolving Fund are presented

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	Agriculture + Animal Husbandry
2	Agriculture + Horticulture
3	Agriculture + Animal Husbandry + Horticulture

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

S. No.	Agro-climatic Zone	Characteristics
1.	Agro climatic zone IV attributed under semi - arid condition	Rainfall : 600-700 mm
		Soil type : Loamy to sandy loam
		Temperature : Max. - 48°c, Min. - 7°c
		Water table : 500 to 850 ft.

a) Topography

S. No.	Agro ecological situation	Characteristics
1	AES I Alluvial Sandy Loam soils with high rainfall	Major Soil Classes: Sandy Loam, Altitude (m amsl): 150-300, Rain fall: >850, Topography: Flat Topography with less than 5% slope
2	AES II Alluvial Sandy loam with medium rainfall	Major Soil Classes: Sandy Loam, Altitude (m amsl): 150-300, Rain fall: 750-850, Topography: Flat Topography with less than 5% slope

2.3 Soil Types

S. No	Soil type	Characteristics	Area in ha
1.	Alluvial Sandy Loam with high rainfall	High in productivity with moderate fertility	153891
2.	Alluvial Sandy Loam with medium rainfall	Moderate organic matter, Medium Water holding capacity	61947

2.4. Area, Production and Productivity of major crops cultivated in the area of jurisdiction of KVK (2020-21)

S. No	Crop	Area (ha)	Production (MT)	Productivity (kg/ha)
1	Paddy (Kharif)	12371	28827	2330
2	Bajra (Kharif)	2213	3359	1517
3	Bajra (Summer)	5392	16630	3084
4	Green gram	1390	860	619
5	Groundnut	13332	33567	2517
6	Cluterbean	4865	5471	1124
7	Castor	24772	59853	2416
8	Cotton	17552	68285 (bales)	661 (lint)
9	Pigeon pea	18	21	1185
10	Black gram	192	128	665
11	Sesamum	174	32	186
12	Wheat	28843	101051	3503
13	Mustard	802	1585	1975
14	Fennel	1047	1761	1682
15	Tobacco	4908	11330	2308
16	Potato	12134	371666	30630
17	Chick pea	953	1679	1761

Source: Gujarat state agriculture department.

2.5. Weather data (2023)

Month	Normal RF(mm)	Normal Rainy days (number)	Temperature (^{0} C)		Relative Humidity (%)	
			Maximum	Minimum	Maximum	Minimum
Total						

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

Category	Population	Production	Productivity
Cattle			
Crossbred	89600	148.88	5.097 kg/day
Indigenous	71488	56.78	3.407 kg/day
Buffalo	331367	248.32	3.606 kg/day
Sheep	14214	13.9 (000kg)	1.16 kg/year
Goats	74124	3.81	0.281 kg/day
Poultry			
Deshi poultry	22200	16.08 lakh eggs	138 egg/year
Improved poultry	3600	11.38 lakh eggs	315 egg/year
Fish (Reservoir)	-	-	-

2.7. Details of Operational area / Villages

Taluka / Block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Gandhinagar	Chekhlarani	Cotton, Castor, Wheat,paddy, Groundnut, Potato, Animal Husbandry, seasonal vegetables	Low productivity of Field crops	Enhancing the productivity though high yielding varieties
	Magodi		Degradation of soil fertility	Natural Resource Management
	Moti Adaraj		Lack of knowledge about balance feeding	INM
	Jalund		Scarcity of labour	Nutritional Management
	Rupal		Low ground water table	Mechanization in agriculture
	Jakhora Haripura		High cost of cultivation	Nutritional management in farmers families
Mansa	Kharna	Castor, cotton, Wheat, Pearl millet, Animal Husbandry, Vegetables	Low productivity of Field crops	Enhancing the productivity of major crops by introduction of high yielding varieties
	Parsa		Low soil fertility	INM
	Maninagar		Lack of nutritious feed	Nutritional Mgmt.
	Ridrol		Scarcity of labour	Fodder Management

	Lodara		Low ground water table	Mechanization in agriculture
	Rajpura			
	Govindpura			
	Dholakuva			
Kalol	Paliyad	Castor, Cotton, Wheat, Mustard, Animal Husbandry, fruits, vegetables and flowers	Reproductive problems	Fodder Management
	Golathra		Scarcity of labour	Nutritional Mgmt.
	Khoraj Dabhi		Low ground water table	Scientific Dairy Mgmt.
	Chandisana		Low productivity of Field crops	Nutritional management in farmers families
	Bhavpura			INM and ICM in field crops
	Maninagar			
	Soja			
Dehgam	Devkaran na muvada	Castor, Cotton, Wheat, Groundnut, Pearl Millet, Animal Husbandry, Vegetables	Imbalance use of fertilizer	Enhancing the productivity of major crops
	Motipura		Low ground water table	Natural Resource Management
	Galajini Muvadi		Soil health degradation	Fertilizer management
	Arjanjina muvada		Scarcity of labour	Scientific Dairy Mgmt.
			Reproductive Problems	Mechanization in agriculture
Taluka / Block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas

2.8. Priority thrust areas:

Crop/Enterprise	Thrust area
Cotton, Castor, Wheat, green gram	ICM, INM, IPM, Natural Resource Management, Natural farming
	Enhancing the productivity of major crops
Vegetable/fruit crop	ICM, INM, IPM, Value Addition & Processing, Natural farming
	Enhancing productivity of vegetables crops
Agricultural extension	Entrepreneurship development
	ICT tools in agriculture & allied
Animal Husbandry	Fertility Management, Nutrition Management, Disease Management, Feed & Fodder Management
Soil Science	INM, Soil fertility management, Soil and Water Testing, Natural farming
Home Science	Value addition, Women and child care, Storage loss minimization, drudgery reduction

3. TECHNICAL ACHIEVEMENTS

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

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
7	7	80	83	21	21	400	400

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
80	90	2000	2696	150	178	7000	8242

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

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

3.1. B. Operational areas details during 2022-23

S. No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Names of Cluster Villages identified for intervention	Intervention (OFT, FLD, Training, extension activity
1	Cotton	Infestation of Diseases & Pests, Degradation of soil fertility, Use of locally available seeds (F2). No use of bio-fertilizers and micronutrients	Magodi, Kharna, Devkaran na muwada, Jhakhora, Arjanji na Muwada, Chekhlarani, Jalund, Paliyad, Soja,	FLD, Training, Extension activities
2	Castor	Arbitrary use of fertilizers Infestation of Diseases & Pests	Chekhlarani, Parsa, Devkaran na muvada, Golathara, Paliyad, Soja, Maninagar, Kharna, Motipura, Bhavpura, Adaraj	FLD, Training, Extension activities
3	Wheat	Use of locally available seeds No use of micronutrients and bio-fertilizers Scarcity of irrigation water	Chekhlarani, Motipura, Jakhora, Kharna, Moti Adaraj, Bardoli, Devkaran na Muvada,	OFT, FLD, Training, Extension activities
4	Pulses	Unavailability of quality seed Low remunerative crop No use of bio-fertilizers	Magodi, Devkaran na muwada, Jhakhora, Arjanji na muwada, Paliyad	OFT, FLD, Training, Extension activities
5	Fruits & Vegetable	High cost of cultivation Infestation of diseases & pests Arbitrary use of fertilizers	Motipura, Parsa, Magodi, Kharna, Arjanji na Muwada, Devkaran na muvada, Chandisana, Paliyad, Pratappura	OFT, FLD, Training, Extension activities
6	Animal Husbandry	Reproductive Problems, Lack of knowledge about balance feeding, Lack of nutritious feed	Vasan, Chekhlarani, Parsa, Magodi, Chandisana, Jalund, Kharna, Devkaran na muvada	OFT, FLD, Training, Extension activities

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

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management	1	1	1							3
Varietal Evaluation	1				1					2
Integrated Pest Management										
Integrated Crop Management						1				1
Total	**2**	**1**	**1**	**-**	**1**	**1**	**-**	**-**	**-**	**6**

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

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Feed and Fodder	1					1
TOTAL	**1**					**1**

B. Achievements on technologies Assessed

B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha
Integrated Nutrient Management	Chickpea	To assess the effect of Zinc Sulphate 25kg/ha +Spray of 2% urea at flowering and grain forming stage.	10	10	2.5
	Wheat	Assessment of PSB, VAM & ZnSO4	10	10	2.5
	Groundnut	Assessment of 0.2% Boric acid & Nano Boron	10	10	2.5
Varietal Evaluation	Wheat	Assessment of wheat variety GW-499	10	10	2.5
	OKRA	Assessment of Anand Okra -5 variety to measure suitability in terms of yield, quality And Growth.	10	10	2.5
Fodder Production	Fodder Sorghum	Assessment of fodder sorghum variety GFS-6	20	20	2.0
Integrated Crop Management	Mango	To overcome the potash deficiency by foliar spray of Potassium Nitrate.	13	13	2.5
Total			**83**	**83**	**17**

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
Health Management				
Dairy Management				
Nutrition management				
Disease management				
Feed and fodder management				
Total				

B.3 Technologies assessed under other enterprises

Name of Enterprises	Name of the technology assessed	No. of trials	No. of farmers
Mushroom	-	-	-
Apiary	-	-	-
Vermicompost	-	-	-
Tailoring	-	-	-
Nutrition Garden	-	-	-
Nursery Management	-	-	-
Production and Management	-	-	-
Eentrepreneurship development	-	-	-
Engegy consrvation	-	-	-
storage techniques	-	-	-
House hold food security	-	-	-
organic farming	-	-	-
mechanization	-	-	-
Bee keeping	-	-	-
Seed production	-	-	-
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
Drudgery Reduction	-	-	-
Entrepreneurship development	-	-	-
Health and Nutrition	-	-	-
value addition	-	-	-
Kitchen gardening	-	-	-
nutrition security	-	-	-
other	-	-	-

C. 1. Results of Technologies Assessed

Results of On Farm Trial

OFT 1-Chickpea

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
Chickpea	Irrigated	Low yield of Chickpea due to imbalance fertilization	Integrated Nutrient management in Chickpea	10	To assess the effect of Zinc Sulphate 25kg/ha + Spray of 2% urea at flowering and grain forming stage.	Number of pods yield	Number q/ha	T1:37 T2:45 T3:51 T1 : 16.8 T2 : 18.4 T3 : 20	1. Number of pods increases (51) with application of zinc. 19 % yield enhancement observed by use of Zinc sulphate and urea spray as compared to T1.	-	-

Contd..

Technology Assessed	Source of Technology	Production	Unit	Net Return Rs./ha	B:C Ratio
13	14	15	16	17	18
T1: N:P:S::30:50:0	Farmers practices	16.80	q/ha	52828	2.4:1
T2: N:P:S::10:30:20	SDAU	18.40	q/ha	62019	2.7:1
T3: T2 + Zinc Sulphate 25kg/ha +Spray of 2% urea at flowering and grain forming stage.	SDAU	20.00	q/ha	69000	2.8:1

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

1. Title of Technology Assessed: Integrated Nutrient management in Chickpea
2. Problem Definition: Low yield of Chickpea due to imbalance fertilization
3. Details of technologies selected for assessment: To assess the effect of Zinc Sulphate 25kg/ha +Spray of 2% urea at flowering and grain forming stage.
4. Source of technology: SDAU
5. Production system and thematic area: Mustard- Pearlmillet, INM
6. Performance of the Technology with performance indicators: Number of pods (number), Yield (q/ha)
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques :
8. Final recommendation for micro level situation: By application of Znso4@25kg/ha along with spray of 2 % urea at flowering and grain formation stages increases number of pods and yield.
9. Constraints identified and feedback for research:Nil
10. Process of farmer's participation and their reaction: Technological Gap analysis, G.D.Meeting, Training, Field Visit and Field Day

OFT 2-Wheat

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	Low Yield of late sown wheat due to high temperature.	Assessment of Wheat variety GW-499	10	Assessment of wheat variety GW-499	Test wt yield	gm q/ha	T1:36.6 T2:42 T3:44.5 T1 : 30.4 T2 : 32.8 T3 : 35.2	1. Variety GW-499 is short duration (95-100). 2. Yield is 16 % higher than Lok1.	-	-

Technology Assessed	Source of Technology	Production	Unit	Net Return Rs./ha	B:C Ratio
13	14	15	16	17	18
T1 (Farmer's practice) - Lok-1		30.40	q/ha	22060	1.6:1
T2- GW-173	SDAU	32.80	q/ha	27420	1.7:1
T3- GW-499	SDAU	35.20	q/ha	32700	1.8:1

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

1. Title of Technology Assessed: Assessment of Wheat variety GW-499
2. Problem Definition: Low Yield of late sown wheat due to high temperature.
3. Details of technologies selected for assessment: Assessment of wheat variety GW-499
4. Source of technology: SDAU
5. Production system and thematic area: Cotton-wheat, varietal evaluation
6. Performance of the Technology with performance indicators: test wt (gm), Yield (q/ha)
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:
8. Final recommendation for micro level situation : GW-499 is the best cultivar for late sown condition.
9. Constraints identified and feedback for research:Nil
10. Process of farmers' participation and their reaction: Technological Gap analysis, G.D.Meeting, Training, Field Visit and Field Day

OFT 3- Okra

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
Okra	Irrigated	Low yield of okra	Assessment of Okra cultivar Anand Okra - 5	10	Anand Okra –5 variety	yield	-	T1: 90 qtl./ha. T2 : 110 qtl./ha	Good variety to tolerate YVMV	-	-

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Technology Assessed	Source of Technology	Production	Unit	Net Return Rs./ha	B:C Ratio
13	14	15	16	17	18
T1 (Farmer's practice)	Pvt. sector	90	q/ha	31250 / vigha	2.3 : 1
T2 Anand Okra –5	AAU, Anand	110	q/ha	45,500 / vigha	3.0 : 1
		-	-	-	-

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

1. Title of Technology Assessed - Assessment of Okra cultivar Anand Okra – 5
2. Problem Definition - Low yield of okra
3. Details of technologies selected for assessment - Assessment of Anand Okra -5 variety to measure suitability in terms of yield, quality and Growth
4. Source of technology - AAU,Anand
5. Production system and thematic area - Varietal assessment
6. Performance of the Technology with performance indicators - yield - 110 qtl./ha.
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- Good variety to tolerate YVMV.

OFT 4- Mango

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
Mango	Irrigated	Low yield of Mango due to Potash deficiency.	Impact of Potassic foliar water soluble fertilizer spray.	10	Foliar spray of KNO3 @50 gm/10 ltr of water in July (2 spray), November (2 spray) and One spray in February	yield	T1 : 16 kg./tree T2 : 18 kg./tree T3 : 22 kg./tree	T1 : 16 kg./tree. T2 : 18 kg./tree T3 : 22 kg./tree	Good technology to maintain nutritional health of tree	-	-

Technology Assessed	Source of Technology	Production	Unit	Net Return Rs./unit	B:C Ratio
13	14	15	16	17	18
T1-Farmers practices (Arbitrary use of Fertilizers)	-	T1 : 16	kg./tree.	500/ tree	2.0 :1
T2- RDF (750 + 160 + 750 grams per tree per year)	AAU , Anand	T2 : 18	kg./tree.	650/ tree	2.8 :1
T3- Foliar spray of KNO3 @50 gm/10 ltr of water in July (2 spray), November (2 spray) and One spray in February	NAU , Navsari	T3 : 22	kg./tree.	850/ tree	3.8 :1

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

1. Title of Technology Assessed - To maintain the health and yield of Mango tree by Foliar spray of KNO3.
2. Problem Definition Low yield due to Imbalance Potassic fertilizers
3. Details of technologies selected for assessment- Foliar spray of KNO3 @50 gm/10 ltr of water in july(2 spray), November (2 spray) and One spray in February
4. Source of technology - NMAU, Navsari
5. Production system and thematic area- INM
6. Performance of the Technology with performance indicators - yield- T1: 16 kg/tree, T2: 18 kg/tree. T3: 22 kg/tree.
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- Easy and Good technology to overcome potash deficiency.

OFT 5: Fodder Sorghum

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
Livestock	---	Low yield of fodder Sorghum	Assessment of high yielding fodder variety of Sorghum	10	High yielding fodder variety GFS-6 CSV-21F	Green fodder yield (qt/ha)	T1 – 254 T2 – 279.8 T3 – 314	314 qt/ha	Good fodder quality	NO	--

Contd..

Technology Assessed	Source of Technology	Production	Unit	Net Return Rs./ha	B:C Ratio
13	14	15	16	17	18
T1- Farmer Practice (Marvel)	-	254	qt/ha	16990	1.57
T2- Recommendation (CSV-21F)	AICSIP-2006	279.8	qt/ha	19914	1.65
T3 – Assessment Variety (GFS-6)	NAU -2018	314	qt/ha	25970	1.85

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

1 Title of Technology Assessed: Assessment of high yielding fodder variety
2 Problem Definition: Low yield of fodder sorghum
3 Details of technologies selected for assessment: T1- Farmers practice: Marvel Variety
T2- Recommendation: CSV-21F
T3 - Assessment Variety: GFS-6
4 Source of technology: NAU (2018)
5 Production system and thematic area: Fodder management
6 Performance of the Technology with performance indicators: Green fodder yield
7. Feedback: Green fodder production is higher with higher palatability over local variety
8 Final recommendation for micro level situation: -- For fodder production GFS-6 is highly recommended with nutrient management in Kharif season.
9 Constraints identified and feedback for research and developmental departments: --
10 Process of farmer's participation and their reaction: Bench mark survey for identifying problems - Ascertain point of intervention - Probable control measures - Finalization of treatments

OFT 6: Wheat (Rabi-2022-23, second year)

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	Low yield	Assessment of PSB, VAM & ZnSO4 in wheat	10	VAM, ZnSO4 & PSB	Yield, Test weight	T1:37.3 T2: 40.0 T3: 41.5	T1: 33.6 T2: 36.4 T3: 42.6	more yield in treated plot, very less number of shrivelled grain in T3 as compared to T1, root area remain wet for more time after irrigation in T3		

Technology Assessed	Source of Technology	Production	Unit	Net Return Rs./ha	B:C Ratio
13	14	15	16	17	18
T1- Farmer practice (N:P:K; 80:140:00)	-	33.6	q/ha	40160	1.96
T2- SAU'S recommendation (N:P:K; 120:60:00)	SAU	36.4	q/ha	48930	2.23
T3:30 kg P2O5 + PSB 30 g/kg seed + Inoculation of 20 kg VAM culture + 20 kg ZnSO4 /ha + RDN	SDAU,2019	42.6	q/ha	59770	2.35

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

1. Title of Technology Assessed: Assessment of PSB, VAM & ZnSO4 in wheat
2. Problem Definition: Low yield
3. Details of technologies selected for assessment: 30 kg P2O5 + PSB 30 g/kg seed + Inoculation of 20 kg VAM culture + 20 kg ZnSO4 /ha + RDN
4. Source of technology: SDAU, 2019
5. Production system and thematic area: INM
6. Performance of the Technology with performance indicators: Yield, Test weight
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : more yield in treated plot, very less number of shrivelled grain, root area remained wet for more time after irrigation
8. Final recommendation for micro level situation: Second year
9. Constraints identified and feedback for research:-
10. Process of farmers participation and their reaction: Training, Field day, group meeting

OFT 7: Groundnut (1st year) kharif-2023

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 Kharif-2023	Irrigated	Low yield	Assessment of 0.2% Boric acid & Nano Boron in kharif Groundnut	10	T1. Farmer practices T2. RDF (12.5+25+0) + foliar spray of 0.2 % boric acid at 30,45 & 60 DAS T3. RDF (12.5+25+0) + foliar spray of 0.2 % N ano-boron at 30,45 & 60 DAS	100 pod weight	T1-80.3 T2-85.4 T3-85.7	T1-19.5 q/ha T2-21.8 q/ha T3-22.5 q/ha	pod weight and kernal weight has been increased		

Technology Assessed	Source of Technology	Production	Unit	Net Return Rs./ha	B:C Ratio
13	14	15	16	17	18
T1- Farmer practices (No use of boron)	-	19.5	q/ha	68275	2.16
T2- RDF (12.5+25+0) + foliar spray of 0.2 % boric acid at 30,45 & 60 DAS	JAU, 2020	21.8	q/ha	80150	2.31
T3: RDF (12.5+25+0) + foliar spray of 0.2 % Nano-boron at 30,45 & 60 DAS	JAU, 2020	22.5	q/ha	82900	2.32

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

1. Title of Technology Assessed: Assessment of 0.2% Boric acid & Nano Boron in kharif Groundnut
2. Problem Definition: Low yield
3. Details of technologies selected for assessment: RDF (12.5+25+0)+ foliar spray of 0.2 % boric acid at 30,45 & 60 DAS & RDF(12.5+25+0)+ foliar spray of 0.2 % Nano-boron at 30,45 & 60 DAS
4. Source of technology: JAU, 2020
5. Production system and thematic area: INM
6. Performance of the Technology with performance indicators: Yield, 100 pod's weight
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : pod weight and kernal weight has been increased
8. Final recommendation for micro level situation:-
9. Constraints identified and feedback for research:-
10. Process of farmers participation and their reaction: Training, Field day, group meeting

3.3. FRONTLINE DEMONSTRATION

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

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

S. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1	Wheat	Variety	GW-451	Training G.D. meeting Field Demonstration Method demonstration Field days	40	825	425
2	Oat	Fodder Prod.	JHO 99-2		10	250	150
3	Mustard	Variety	GDM-4		10	150	100
4	Fennel	Variety	GF-12		18	425	175
5	Potato	INM	G4 micronutrients		15	150	200
6	Castor	Variety	GCH-9		20	250	325
7	Groundnut	Variety	GJG-24		10	110	80

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

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Wheat	Variety	GW-451	Rabi 22-23	05	05	13	07	20	
2	Cumin	Variety	GC-4	Rabi 22-23	2.5	2.5	3	7	10	
3	Wheat	INM	1% spray of micronutrient mixture Grade-IV	Rabi 22-23	2.5	2.5		8	10	-
4	Gram	INM	2% KNO3 spray at flowering & pod development	Rabi 22-23	2.5	2.5		2	10	-
5	Kitchen garden	Nutritional food security	Vegetable seeds + Vermicompost	Rabi 22-23	0.5	0.5	00	20	20	-
6	Oat	Variety	JHO 99-2	Rabi 22-23	2	2	-	-	20	
7	Mustard (CFLD)	ICM	Variety GDM-4 + ICM	Rabi 22-23	20	20	3	37	40	
8	Groundnut (CFLD)	ICM	Variety GJG-32 + ICM	Kharif 23	10	10	04	14	20	
9	Castor (CFLD)	ICM	Variety GCH-9 + ICM	Kharif 23	10	10	10	10	20	
10	Green gram	Variety	GM-6	Kharif 22	05	05	3	17	20	
11	Brinjal	Varietal Assessment	Brinjal variety GAB-6	Kharif-23	05	05	-	27	27	-
12	Chilli	INM	Banana sap (psuedostem sap) spray in chilli	Kharif -23	10	10	-	20	20	-
13	Bajara	INM	Seed treatment with Azatobacter (ABA-1) @ 40 mL/4kg seed	Kharif-2023	5.0	5.0		18	20	-
14	Cotton	INM	1% spray of 19-19-19, at flowering, ball formation and boll development stage	Kharif-2023	5.0	5.0		-	20	-
15	Kitchen garden	Nutritional food security	Vegetable seeds + Vermicompost	Kharif 23	0.5	0.5	00	25	25	-

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Wheat	Rabi 22-23	Irrigated	Sandy loam	L	M	H	Cotton	Nov.-Dec.	Mar.-April		
Cumin	Rabi 22-23	Irrigated	Sandy loam	L	M	H	Pearlmillet	Nov.	Feb		
Green gram	Kharif 23	Irrigated	Sandy loam	L	M	H	Veg.	June-July	Aug-sep		
Groundnut (NFSM)	Kharif 23	Irrigated	Sandy loam	L	M	H	Pearl millet	June	October		
Castor (NFSM)	Kharif 23-24	Irrigated	Sandy loam	L	M	H	Pearl millet	August	April		
Brinjal	Kharif –2023	Irrigated	Sandy loam	L	L	H	Bajara	July- August	Oct to Dec.		
Chilli	Kharif 2023	Irrigated	Sandy loam	L	L	H	Cluster bean	June	October-Feb.		
Wheat	Rabi-2022-23	Irrigated	Sandy loam	L	L	H	Cotton	November	Mar.-April	-	-
Bajara	Kharif-2023	Irrigated	Sandy loam	L	M	H	green gram	June	September	-	-
Gram	Rabi-2022-23	Irrigated	Sandy loam	L	M	H	cotton	November	March	-	-
Cotton	Kharif-2023	Irrigated	Sandy loam	L	M	H	Bajara	May-June	Nov.-Dec.	-	-
Mustard (CFLD)	Rabi 22-23	Irrigated	Sandy loam	L	L	H	Cotton, Paddy	Oct.-Nov.	February	-	-

Technical Feedback on the demonstrated technologies

S. No	Feed Back
Wheat GW 451 variety	Variety is short so doesn't lodge.
Cumin GC-4	Complete Wilt resistance variety needed
Greengram	Bold size seeds with YMV resistance
Groundnut (Kharif)	Variety GG-32 is 14-17 % Yield enhancement was observed by use of INM (Rhizobium, PSB, Sulphur)
Brinjal	The variety fetches Good market price
Chilli	The psuedostem liquid is cheaper and impactious
Wheat (Micronutrient G4)	Vegetative growth is good and stem girth increased. Size of seed and shining
Gram (2% KNO3 Spray)	Larger seed size, Seed index is 21.8 g , while 19.6 g is of non-treated plot
Bajra	Germination and moisture retaining was good
Cotton	poor yield due to no rain for 14 days and then heavy rain in last week of saptember which cause great reduction in yield
Mustard (CFLD)	GDM-4 variety is bold seeded and resistant to powdery mildew

Farmers' reactions on specific technologies

S. No	Feed Back
Wheat	Larger size shinning grain with good production potential.
Cumin	Variety GC-4 seems to be better in terms of yield and wilt.
Greengram	Variety GM-6 is bold seeded high yielding.
Groundnut (Kharif)	1. INM module resulted in higher productivity. 2. Due to irregular /uneven pattern of rain there is 15 -18% damage in crop.
Brinjal	The variety has very less little leaf problem
Chilli	It gives more flowers, fruiting and picking.
Wheat	No whitening and tip burning of leaves, good seed shining
Gram	Larger seed size & heavy in weight, more yield and less drying of plant
Bajra	good germination in moisture stress condition
Cotton	Initially less drying of leaves
Mustard	GDM-4 variety is bold seeded and resistant to powdery mildew

Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	14	2/1/23, 24/1/23, 1/2/23, 9/2/23, 10/2/23, 22/2/23, 14/3/23, 22/9/23, 25/9/23, 6/10/23, 10/10/23, 3/11/23, 14/12/23, 16/12/23	463	
2	Farmers Training	23	1/7/23, 7/8/23, 20/10/23, 6/4/23, 5/7/23, 25/9/23, 9/10/23, 6/11/23, 12/7/23, 8/8/23, 19/8/23, 5/9/23, 7/6/23, 1/7/23, 13/10/23, 2/11/23, 13/6/23, 26/7/23, 22/7/23, 17/11/22, 01/06/23, 21/7/23, 11/10/23	485	

Mustard (CFLD)

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training				
3	Field Visit				

Wheat (micronutrient G4)

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training				

3	Field Visit				

Gram (3% KNO3 Spray)

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training				
3	Field Visit				

Wheat (GW-451)

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training				
3	Field Visit				

Greengram

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training				
3	Field Visit				

Groundnut (CFLD)

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training				
3	Field Visit				

Castor (CFLD)

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training				
3	Field Visit				

Brinjal

Sr.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training				
3	Field Visit				

Chilli

Sr.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training				
3	Field Visit				

Cotton (N:P:K, 19:19:19)

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training				
3	Field Visit				

Sorghum (COFS-31)

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training				
3	Field Visit				

Kitchen Garden

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training				
3	Field Visit				

Chelated Mineral Mixture

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training				
3	Field Visit				

Bypass Fat

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training				
3	Field Visit				

Kitchen garden

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training				
3	Field Visit				

Revolving stool and milking stand

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training				
3	Field Visit				

C. Performance of Frontline demonstrations

Frontline demonstrations on oilseed crops (under NFSM)

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Groundnut (Kharif 23)	ICM	Variety +ICM	GJG-32	20	10	23.20	20.00	22	19.2	14.6	58150	137500	79350	2.36	59100	120000	60900	2.03
Mustard (Rabi 22-23)	ICM	Variety +ICM	GDM-4	40	20	24.2	19.2	22.5	18.9	19.05	46800	121980	75140	2.60	43400	102060	58660	2.35
Castor (Kharif 23)	ICM	Variety +ICM	GCH-9	20	10	Crop is standing												

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Frontline demonstration on pulse crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Gram	INM	2%KNO3 spray at flowering & pod development	GJG-3	10	2.5	22.3	19.2	20.8	17.4	19.54	38400	119670	81270	3.11	34900	96882	61982	2.77
Greengram	Varietal evaluation	Variety	GM-6	20	05	10.8	8	9.6	8	20	23300	72000	48700	3:1	24200	60000	35800	2.5:1

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average												
Cereals																			
Wheat	INM	1%micronut	10	2.5	43.4	39.8	41.3	37.3	10.72	-	-	44500	99155	54655	2.23	41900	86767	44867	2.07

		rient mixture grade-4																
Wheat	Varietal evaluation	GW-451	20	5	39.2	34.4	37.6	33.6	11.9			39700	84600	44900	2.1	40150	75600	35450	1. 9:1
Vegetables																			
Chilli	INM	Foliar spray of banana sap @100 ml/pump at an interval of 15-30 days till Harvesting (Three spray)	20	10	382	306	345	287	20.2			380500	586500	206000	2.85	309000	480000	171500	1.6:1
Brinjal	Variety	GAB-6	27	5	370	3100	325	270	20.37			170000	390000	220000	2.3	185000	350000	165000	1.9:1
Spices & condiments																			
Cumin	Varietal evaluation	GC-4	10	2.5	8	6.4	7.2	6	20			44000	100800	56800	2.29	44300	84000	39700	1.89
Commercial Crops																			
Cotton	INM	1% spray of 19:19:19	20	5	15.4	12.1	13.1	12	9.17			54530	91700	37170	1.68	57280	84000	26720	1.47
Millets																			
Bajara	INM	Seed treatment of Azatobacter biofertilizer	20	5	26.2	20.8	26	24	8.33	-	-	32730	63500	30770	1.94	32350	59000	26650	1.82
Fodder Crops																			
Sorghum (F)	Fodder production	Variety COFS-31	50	5	830	649	743	610	21.80	-	-	35300	133740	77600	3.79	32200	109800	77600	3.41
Oat (F)	Fodder production	Variety JHO-99-2	20	2	360	295	328.5	278	18.15			25275	49268	23993	1.95	24850	41700	16850	1.68

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units	Major parameters (Avg milk Ltr/Day)		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Cattle																	
	Nutritional management	Chelated Mineral Mixture	20	20	12.45	11.4	9.21	Service period 62 days	Service period 85 days	201.5	313.24	111.74	1.55	192.5	255.82	63.32	1.33
Buffalo																	
	Nutritional Management	Bypass fat	20	20	8.21	7.75	5.87	-	-	203	402.05	199.05	1.98	180	336.35	156.35	1.87

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

FLD on Other enterprises

Category	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.) or Rs./unit				Economics of check (Rs.) or Rs./unit			
				Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Vermi Compost																
	Vermibed and worms	8	8	3900	-	-	-	-	9000	39000	30000	4.33	-	-	-	-

FLD on Women Empowerment

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check	% change in major parameter
Drumstick leaves powder	Drumstick leaves powder as nutritional supplement in farm women	10	(1) BMI (Kg/m^2) (2) Weight (kg)	22.33 47.5	23.51 48.6	5 % 1 kg

FLD on Farm Implements and Machinery

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Field observation (man hour/ha)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit etc.)			
						Demo	Check		Land preparation	Sowing	weeding	Total	Land preparation	Labour	Irrigation	Total
Improved sickle	Wheat	Improved sickle	25	2.5	Labour saving	15.5	21	24	-	-	-	-	-	-	-	-

FLD on Other Enterprise: Kitchen Gardening

Nutrition garden components	Thematic area	Area (sq mt)	No. of Farmer	No. of Units	Yield (Kg)- supply of vegetables, fruits, etc from KG in the year		% change in yield	Household size (number)		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Yearly requirement	Supply from KG		Demo	Check	Gross Cost	Gross Return/Savings*	Net Return	BCR (R/C)	Gross Cost	Gross Return/ Savings*	Net Return	BCR (R/C)
Kitchen gardening (Rabi 22)	Nutritional security	0.5	20	20	547.5	97	17.71	5	5	425	4003	3578	9.41	-	-	-	-
Kitchen gardening (Kharif 23)	Nutritional security	0.5	25	25	547.5	77	14.05	5	5	425	3223	2798	7.58	-	-	-	-

***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 (Online programmes if any should be included under On Campus category)

Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	01	28	16	44	0	0	0	28	16	44
Integrated Crop Management	03	72	20	92	7	0	7	79	20	99
Others (Natural farming)	04	187	08	195	10	0	10	197	08	205
Total	**08**	**287**	**44**	**331**	**17**	**0**	**17**	**304**	**44**	**348**
II Horticulture										
a) Vegetable Crops										
Off-season vegetables	02	40	0	40	0	0	0	40	0	40
Total (a)	**02**	**40**	**0**	**40**	**0**	**0**	**0**	**40**	**0**	**40**
b) Fruits										
Cultivation of Fruit	01	15	0	15	1	0	1	16	0	16
Total (b)	**01**	**15**	**0**	**15**	**1**	**0**	**1**	**16**	**0**	**16**
Grand Total	**03**	**55**	**0**	**55**	**1**	**0**	**1**	**56**	**0**	**56**
III Soil Health and Fertility Management										
Integrated water management	02	59	9	68	0	0	0	59	9	68
Integrated Nutrient Management	02	40	0	40	0	0	0	40	0	40
Micro nutrient deficiency in crops	01	22	0	22	0	0	0	22	0	22
Nutrient Use Efficiency	01	20	0	20	0	0	0	20	0	20
Total	**06**	**141**	**9**	**150**	**0**	**0**	**0**	**141**	**9**	**150**
IV Livestock Production and Management										
Animal Nutrition Management	03	31	36	67	0	4	4	31	40	71
Feed & fodder technology	02	41	0	41	0	0	0	41	0	41
Total	**05**	**72**	**36**	**108**	**0**	**4**	**4**	**72**	**40**	**112**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	02	1	46	47	0	0	0	1	46	47
Value addition	02	8	37	45	0	0	0	8	37	45
Location specific drudgery reduction technologies	01	2	25	27	0	0	0	2	25	27
Women and child care	02	3	79	82	0	0	0	3	79	82
Total	**07**	**14**	**187**	**201**	**0**	**0**	**0**	**14**	**187**	**201**
X CapacityBuilding and Group Dynamics										
Importance of millets	01	15	25	40	10	4	14	25	29	54
Natural farming	04	61	9	70	12	98	110	73	107	180
FPO formation	01	27	1	28	0	0	0	27	1	28
Warwhouse development & regulation	01	39	11	50	0	0	0	39	11	50
Honeybee keeping	01	97	18	115	0	0	0	97	18	115
Entrepreneurship development	01	45	0	45	5	0	5	50	0	50
Total	**09**	**284**	**64**	**348**	**27**	**102**	**129**	**311**	**166**	**477**

GRAND TOTAL	**38**	**853**	**340**	**1193**	**45**	**106**	**151**	**898**	**446**	**1344**

Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Integrated Pest and Disease Management	01	20	0	20	2	0	2	22	0	22
Integrated Crop Management	04	76	2	78	3	0	3	79	2	81
Integrated nutrient management	01	19	1	20	0	0	0	19	1	20
Total	**06**	**115**	**3**	**118**	**5**	**0**	**5**	**120**	**3**	**123**
II Horticulture										
a) Vegetable Crops										
Off-season vegetables	03	50	0	50	0	0	0	50	0	50
Total (a)	**03**	**50**	**0**	**50**	**0**	**0**	**0**	**50**	**0**	**50**
b) Fruits										
Cultivation of Fruit	01	10	5	15	0	0	0	10	5	15
Total (b)	**01**	**10**	**5**	**15**	**0**	**0**	**0**	**10**	**5**	**15**
Grand Total	**04**	**60**	**5**	**65**	**0**	**0**	**0**	**60**	**5**	**65**
III Soil Health and Fertility Management										
Integrated Nutrient Management	02	30	15	45	0	0	0	30	15	45
Soil and Water Testing	02	51	19	70	0	0	0	51	19	70
Others (Natural farming)	01	20	1	21	0	0	0	20	1	21
Total	**05**	**101**	**35**	**136**	**0**	**0**	**0**	**101**	**35**	**136**
IV Livestock Production and Management										
Dairy Management	03	29	67	96	0	0	0	29	67	96
Animal Nutrition Management	01	45	7	52	0	0	0	45	7	52
Disease Management	01	1	26	27	0	0	0	1	26	27
Feed & fodder technology	01	22	0	22	0	0	0	22	0	22
Total	**06**	**97**	**100**	**197**	**0**	**0**	**0**	**97**	**100**	**197**
V Home Science/Women empowerment										
Storage loss minimization techniques	1	6	24	30	0	0	0	6	24	30
Value addition	3	7	63	70	0	0	0	7	63	70
Women and child care	1	1	19	20	0	0	0	1	19	20
Total	**05**	**14**	**106**	**120**	**0**	**0**	**0**	**14**	**106**	**120**
GRAND TOTAL	**26**	**387**	**249**	**636**	**5**	**0**	**5**	**392**	**249**	**641**

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

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	01	28	16	44	0	0	0	28	16	44
Integrated Crop Management	07	148	22	170	10	0	10	158	22	180
Integrated Pest and Disease Management	01	20	0	20	2	0	2	22	0	22
Integrated nutrient management	01	19	1	20	0	0	0	19	1	20
Others (Natural farming)	04	187	08	195	10	0	10	197	08	205
Total	**14**	**402**	**47**	**449**	**22**	**0**	**22**	**424**	**47**	**471**
II Horticulture										
a) Vegetable Crops										
Off-season vegetables	05	90	0	90	0	0	0	90	0	90
Total (a)	**05**	**90**	**0**	**90**	**0**	**0**	**0**	**90**	**0**	**90**
b) Fruits										
Cultivation of Fruit	02	25	5	30	1	0	1	26	5	31
Total (b)	**02**	**25**	**5**	**30**	**1**	**0**	**1**	**26**	**5**	**31**
Grand Total	**07**	**115**	**5**	**120**	**1**	**0**	**1**	**116**	**5**	**121**
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management	02	59	9	68	0	0	0	59	9	68
Integrated Nutrient Management	04	70	15	85	0	0	0	70	15	85
Micro nutrient deficiency in crops	01	22	0	22	0	0	0	22	0	22
Nutrient Use Efficiency	01	20	0	20	0	0	0	20	0	20
Soil and Water Testing	02	51	19	70	0	0	0	51	19	70
Others (Natural farming)	01	20	1	21	0	0	0	20	1	21
Total	**11**	**242**	**44**	**286**	**0**	**0**	**0**	**242**	**44**	**286**
IV Livestock Production and Management										
Dairy Management	03	29	67	96	0	0	0	29	67	96
Animal Nutrition Management	04	76	43	119	0	4	4	76	47	123
Disease Management	01	1	26	27	0	0	0	1	26	27
Feed & fodder technology	03	63	0	63	0	0	0	63	0	63
Total	**11**	**169**	**136**	**305**	**0**	**4**	**4**	**169**	**140**	**309**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	02	1	46	47	0	0	0	1	46	47
Storage loss minimization techniques	01	6	24	30	0	0	0	6	24	30
Value addition	05	15	100	115	0	0	0	15	100	115
Women empowerment	03	4	98	102	0	0	0	4	98	102
Location specific drudgery reduction technologies	01	2	25	27	0	0	0	2	25	27
Total	**12**	**28**	**293**	**321**	**0**	**0**	**0**	**28**	**293**	**321**
X Capacity Building and										

Group Dynamics										
Importance of millets	01	15	25	40	10	4	14	25	29	54
Natural farming	04	61	9	70	12	98	110	73	107	180
FPO formation	01	27	1	28	0	0	0	27	1	28
Warwhouse development & regulation	01	39	11	50	0	0	0	39	11	50
Honeybee keeping	01	97	18	115	0	0	0	97	18	115
Entrepreneurship development	01	45	0	45	5	0	5	50	0	50
Total	**09**	**284**	**64**	**348**	**27**	**102**	**129**	**311**	**166**	**477**
GRAND TOTAL	**64**	**1240**	**589**	**1829**	**50**	**106**	**156**	**1290**	**695**	**1985**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Natural farming	24	532	73	605	0	0	0	532	73	605
Dairy management	01	57	05	62	25	2	27	82	7	89
TOTAL	**25**	**589**	**78**	**667**	**25**	**2**	**27**	**614**	**80**	**694**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Natural farming	01	53	0	53	0	0	0	53	0	53
TOTAL	**01**	**53**	**0**	**53**	**0**	**0**	**0**	**53**	**0**	**53**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Natural farming	25	585	73	658	0	0	0	585	73	658
Dairy management	01	53	0	53	0	0	0	53	0	53
TOTAL	**26**	**638**	**73**	**711**	**0**	**0**	**0**	**638**	**73**	**711**

Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Natural farming	27	575	74	619	12	98	110	587	172	759
Soil and water sampling methods	01	30	10	40	0	0	0	30	10	40
Importance of MIS technology	02	59	9	68	0	0	0	59	9	68
Livestock and fisheries										
Animal Nutrition Management	02	45	24	69	0	4	4	45	28	73
Home Science										
Women and child care	02	03	79	82	0	0	0	3	79	82
Agricultural Extension										

Capacity Building and Group Dynamics	04	193	45	238	5	0	5	198	45	243
GRAND TOTAL	**38**	**905**	**241**	**1116**	**17**	**102**	**119**	**922**	**343**	**1265**

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services (Other than KMAS)	78	1425	72	1497
Field Day	12	403	18	421
Group discussions	07	76	4	80
Kisan Ghosthi	01	82	7	89
Kisan Mela	01	196	8	204
Lecture delivered	24	4496	82	4578
Diagnosis visit	09	38	10	48
Scientists' visit to farmers field	36	354	78	432
Plant/animal health camps	01	12	0	12
Farmer Scientist Interaction	01	107	3	110
Farmers' seminar/workshop	01	196	8	204
Method Demonstrations	03	13	6	19
Celebration of important days	02	402	07	409
Live webcasting	02	132	7	139
Total	**178**	**7932**	**310**	**8242**

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

Details of other extension programmes:

Particulars	Number
Electronic Media (CD./DVD)	00
Extension Literature	01
Newspaper coverage	06
Popular articles	00
Radio Talks	00
TV Talks	00
Animal health camps (Number of animals treated)	25
Social Media (No. of platforms Used)	05
Total	**37**

3.6 Online activities during year 2023

S. No.	Activity Type	Mode of implementation	Title of Program	No. of Programmes	No. of Participants/ Views
-	-	-	-	-	-

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

Production of seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals	Wheat	GW 513	-	5.17	20680	30
	Wheat	GW 499	-	3.50	14000	20
	Wheat	GW 451	-	7.00	28000	20
Fodder crop seeds	Oat	JHO 99-2	-	2.00	10000	20

Total				**17.67**	**72680**	**90**

Production of planting materials by the KVK

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
-	-	-	-	-	-	-

Production of Bio-Products

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

Production of livestock materials

Particulars of Live stock	Name of the animal	Name of the breed	Type of Produce	unit (no./ lit/kg)	Quantity	Value (Rs.)	No. of Farmers
Dairy animals	Cow	HF	Cows	8	8	133000	7
Total				8	8	133000	7

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

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

B. Literature developed/published

Item	Authors name	Number
News Paper coverage	Bharat Hadiya	06
Extension literature	Dr V.K.Garg, H.N.Patel, Vinay Gaur, Dr P.V.Jadav, Radhaben Chaudhary	08
TOTAL		**14**

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)	05	KVK Gandhinagar	06
2	Facebook page/ Account (no of Post)	-	KVK Gandhinagar	1225
3	Mobile Apps	-	-	-
4	WhatsApp groups	02	1. KVK Randheja Farmer group 2. KVK Gandhinagar	245
5	Twitter Account	02	@kvkgandhinagar	35

D. Success Stories

Title: Sustainability in agriculture through natural farming

Background

Name: Hiteshbhai Patel
Firm: Rambhumi farm
Village: Sametri, Taluka: Dehgam, District: Gandhinagar
Age: 39 years
Education: Diploma in Agriculture
Contact No. 9408296801

Interventions

Hiteshbhai is 39 years old and got Diploma in Agriculture degree. After completing study he joined his family's profession i.e. agriculture. He is having 4 acre land and after 2019, he converted 2 acre land in natural farming totally. Since 2018 he is closely connected with Krishi Vigyan Kendra and participating in each major activity of KVK. He inspired to adopt natural farming after attending the Subhash Palekar natural farming training organized by Gujarat government at Vadtal.He has also reduced usages of chemical in the area where he follows chemical farming. He grows gauva, paddy, wheat, castor, marigold and Bajara crops in 2 acres land. He uses selfmade farm yard manure. He also prepares Jeevamrut and Ghan jivamrut for the improvement of pH of soil as well as soil nutrients. He also adopted mulching and intercropping method. He prepares Neemastra, Dashparni ark, Agnistra to control the pest in the field. He also sprays the cow urine in order to control the insect population. According to him, he faced diseases problem for initial two years after switching to natural farming. After 2-3 years of continuing natural farming, rate of crop diseases started decreasing gradually.

Output

He is the only farmer in his locality that is engaged in natural farming and is a well known trusted farmer. Now, he sells all farm produces from his own farm. He also did value addition and packaging of the products at his farm. Demand of the crop is very high. Every year people approach him before the harvesting of the crop and book order in advance. To save the input cost, he prepares all the main products like jeevamrut,ghan jivamrut, neemastra etc. by himself. According to him, Indigenous cow breed is very important for the natural farmingbecause all these products are mainly obtained by it. He has good extension contacts with KVK scientists, ATMA officers and state agriculture department and also has contact with other natural progressive farmers. He always stays updated in terms of new innovations and inputs used in natural farming due to which he is able to manage all the agronomical practices in a proper way.

Economic Impact

Yield and Income record of major crops during 2022-23 (1.25 ha land)

Crop	Area (ha)	Yield (q/ha)	Cost of cultivation	Net Income
Gauva	0.5	20	16000	84000
Paddy	0.5	16	8000	24500
Wheat	0.5	14	14000	63000
Summer Bajara	0.5	18	12000	85000

He got many recognition and award through various government institutes, cooperative institutes and NGOs. Now many near villages' farmers and officers of various departments visited his farm and inspired by his farming. Recently he got Best District farmer award by ATMA Gandhinagar.

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

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
1	Field crops/vegetables	Use of calotropics decomposed leaves & twigs solution along with irrigation water	To control termite in different crops
2	Field crops/vegetables	Soil application of Neem cake and Tobacco dust	To control termite
3	Wheat/pulses	The grains of cereals and pulses are polished with castor oil and stored for a long period without any damage by the pest.	To control stored grain pests
4	Cattle	Grind the fresh neem & custard apple leaves & apply on wound	Wound healing

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

A. Practicing Farmers: (a). Participatory Rural Appraisal (b). Farmer group discussions (c). Diagnostic services (d). Existing cropping system

B. Rural Youth: (a) Participatory Rural Appraisal (b). Farmer group discussions

C. In-service personnel: (a). Existing cropping system (b). Feedback from state departments as well as NGOs

5.2. Indicate the methodology for identifying OFTs/FLDs

For OFT: (i) PRA (ii) Problem identified from Matrix (iii) Field level observations (iv) Farmer group discussions

For FLD: (i) New variety/technology (ii) Poor yield at farmers level (iii) Existing cropping system

5.3. Field activities

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

Sr. No.	Village	Block	Year
1	Chekhlarani	Gandhinagar	2017
2	Magodi	Gandhinagar	2015
3	Jalund	Gandhinagar	2014
4	Rupal	Gandhinagar	2014
5	Moti Adaraj	Gandhinagar	2018
6	Paliyad	Kalol	2012
7	Golthara	Kalol	2010
8	Bhaupura	Kalol	2014
9	Chandisana	Kalol	2012
10	Khoraj dabhi	Kalol	2018
11	Kharna	Mansa	2014
12	Rampura	Mansa	2016
13	Parsa	Mansa	2016
14	Govindpura	Mansa	2011
15	Devkaran na muvada	Dehgam	2016
16	ArjanjinaMuvada	Dehgam	2016
17	Motipura	Dehgam	2016
18	Pato	Dehgam	2018
19	Sonarada	Gandhinagar	2019
20	Vankanerda	Gandhinagar	2019
21	Galudan	Gandhinagar	2019
22	Vira talavadi	Gandhnagar	2019
23	Babra	Dehgam	2019
24	Khoraj Dabhi	Kalol	2020
25	Nava	Kalol	2022
26	Haripura Boriya	Gandhinagar	2023

ii. No. of farm families selected per village : 30

iii. No. of survey/PRA conducted : -16

iv. No. of technologies taken to the adopted villages: 21

v. Name of the technologies found suitable by the farmers of the adopted villages: Castror GCH-7, Mustard GDM-4, Greengram GM-6, Cotton GTHH-49, Fennel GF-12, Mineral mixture in cattle, Bypass fat, Wheat GW-451, Pusa Narangi marigold, Micronutrient in vegetable, Liquid bio fertilizers, Banana sap in vegetables

6. LINKAGES

A. Functional linkage with different organizations

Name of organization	Nature of linkage
SDAU, Dantiwada	- For arranging the FLDs - For conducting OFT - Technical support - Participation in meeting
District Agriculture, Horticulture, Animal husbandry Departments	- Joint implementation of different extension activities - For conducting different demonstration - Participation in meeting
Seed Corporation, Gandhinagar	- Timely availability of seed - Organizing seed multiplication programmes
Co-operative dairy, Gandhinagar	- Participation in training programme
GSFC/IFFCO/GUJCOMASOL/GGRC	- Timely availability of basic inputs

	- Capacity Building
Co-operative institutes at District, Taluka & Village level	-Joint survey for arranging need base training Programmes - Participation in organizing extension activities
State Horticulture Department	- Joint implementation of extension activities - Participation in demonstration
District NGOs	- Joint participation in arranging training programmes for farm women & rural youth
B. R .S colleges of the state	Participation in field work experience for students
ATMA Scheme	Jointly organizing extension programmes, participation in meeting

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

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

Name of the scheme	Date/ Month of initiation	Funding agency(State Govt./Other Agencies)	Amount (Rs.)

C. Details of linkage with ATMA

a) Is ATMA implemented in your district: Yes

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

Technological backstopping

Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	No of Farmers attending
01	Meetings	AGB, AMC, BFAC, SAC	04	1	-
02	Research projects				
03	Training programmes			28	809
04	Demonstrations				
05	Extension Programmes				
	Kisan Mela			01	204
	Exhibition				
	Soil health camps				
	Animal Health Campaigns				
	Others (Lecture delivered, Kisan goshthi)		06	01	831
06	Publications				

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

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

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

7. Convergence with other agencies and departments: Farmers training programmes with Arvind foundation

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:

S.No.	Technologies	Feed Back
1	Mustard	GDM-4 variety is bold seeded and resistant to powdery mildew
2	Wheat GW 451	Variety is short so doesn't lodge.
3	Fennel GF 12	Variety GF-12 has more branches (5.8) as compared to local check (4.8) which results in higher yield.
4	Cabbage (IPM)	Sucking pest infestation was less in demo plot as compare to check plot
5	Oat JHO 99-2	The provided variety of Oat having good growth with 2-3cutting
6	Potato (micronutrient G4)	Vegetative growth is good and stem girth increased. Size of tubers and shining increased

7	Wheat (IPM)	In demo. plot infestation of termite is less (less than 10 percent) and in some plot very negligible as compare to non treated plot or in check plot.
8	Pearl millet (Azotobacter)	Increase availability of nutrients
9	Paddy (IPM)	In demo plot Leaf folder infestation was very less (1.89 %) as compare to check plot
10	Sorghum (COFS-29)	More number of branches so produce high green fodder yield
11	Groundnut (Summer)	Irrigation Water shortage limits the yield of Summer groundnut.
12	Groundnut (Kharif)	Unavailability of seeds.
13	Cotton	Hybrid GTHH-49 has hairy leaves so least attack of sucking pest.
14	Castor GCH-8	-
15	Cowpea	Less pest and disease infestation as compare to check plot, greenness and tenderness of pods are increase, Economic yield also more as compare to check plot
16	Cucumber	The quality and girth of the fruit improved. Increase the flowering and fruiting. Reduce pest and disease infestation.
17	Mineral Mixture	Mineral mixture feeding increase milk production and milk fat percentage
18	Bypass Fat	Bypass fat feeding increase milk production and milk fat percentage and also reduced weight loss after lactation period
19	Heat synch protocol	Heat synch protocol will improve reproductively in anoestrus buffaloes which are in good nutritional plane
20	Chelated Mineral Mixture	Chelated Mineral mixture feeding increase milk production and milk fat percentage and also reduced service period
21	Banana sap (psuedostem sap) spray in cowpea	Increase flowering, Fruiting and Greeness in the pods. Also increase number of picking
22	Marigold varierty Pusa Narangi	More number of picking, Number of flower per is more, flower is big than check plot, Keeping quality is also good as compared to check plot
23	Fodder sorghum variety GFS-6	GFS-6 is shoot fly and stem borer resistant variety hence green fodder quality is superior and yield is alos high as compared to other varieties

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

11. Technology Week celebration during 2023: No

12. Interventions on drought mitigation (if the KVK included in this special programme): Not included

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

C. Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No. of participants

D. Animal health camps organized

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

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

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

F. Large scale adoption of resource conservation technologies

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

G. Awareness campaign

State	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers

13. IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./ha)	After (Rs./ha)
Castor (GCH-7 variety)	475	68.42	48000	72000
Wheat (GW-451)	350	51.42	25500	40500
Fennel GF 12 variety	160	53.12	55000	72500
Oat JHO 99-2	120	41.66	48000	65000
Mustard (GDM-4 variety)	90	38.88	21000	30500
Mineral mixture	180	61.11	13.5 litre/day	15.00
Bypass fat	180	52.7	11.50 litre/day	13.50
Green gram GM-6 variety	120	62.5	45000	60000
Kitchen Gardening	325	61.11	-	-

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Acre)	After (Rs./Acre)
Natural farming	625	22.4	65000	88000

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

B. Cases of large scale adoption
(Please furnish detailed information for each case)

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

14. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
Jan 2023	2	24606	-
Feb 2023	2	24593	-
March 2023	-	-	-
April 2023	-	-	-
May 2023	-	-	-
Jun 2023	-	-	-
Jul 2023	-	-	-
Aug 2023	2	24616	-
Sept 2023	3	36923	-
Oct 2023	-	-	-
Nov. 2023	-	-	-
Dec. 2023	-	-	-

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marketing	Aware-ness	Other enterprise	Total
Gandhinagar	Text only	8	-	-	-	1	-	9
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	**8**	**-**	**-**	**-**	**1**	**-**	**-**
	Total farmers Benefitted	**98441**	**-**	**-**	**-**	**12297**	**-**	**110738**

15. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
-	-	-	-	-	-	-	-	-	-

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

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.(q)	Cost of inputs	Gross income	
Cereals									
Wheat	Nov. 22	March 23	5.0	GW-496, 451, 499, 513, 173 Pusa ujala	Seed	116.74	226621	283678	
Barley	Nov. 22	March 23	0.25	Local	Seed	0.51	3000	-	In stock
Pearl millet	Feb. 23	May 23	1.0	Natraj 108	Seed	16.59	12000	37327	
Paddy	July 23	Oct. 23	0.25	GR-13	Seed	9.35	25000	25800	
Oilseeds									
Mustard	Oct. 22	Feb. 23	0.75	GDM-4	Seed	5.57	7000	25761	
Fibers									
Cotton	June 23	Nov. 23	0.5	Ajit 155, albela	Lint	2.24	2000	16000	
Fruits									
Lemon	2004	-	2	Kagdi	Fruit	-	5000	85000	Auction
Aonla	2003	-	1	NA-7 & Anand 2	Fruit	-	1200	410000	
Sapota	2002	-	1.5	Kali Patti	Fruit	-	1500	140000	

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

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

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

Sl. No.	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Cow	HF, Gir	Milk	14797	525109	513603	

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)
January 2023	151	06	
February 2023	174	05	
March 2023	158	04	
April 2023	21	01	
May 2023	159	12	
June 2023	173	11	
July 2023	325	21	
August 2023	52	03	
September 2023	189	10	
October 2023	327	09	
November 2023	65	03	
December 2023	142	06	

F. Database management

S. No	Database target	Database created
-	-	-

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

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.	Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
			No. of Training programmes	No. of Demonstrations	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		
-	-	-	-	-	-	-	-	-	-

H. Performance of Nutritional Garden at KVK farm

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
20/20	Vegetable crops	15	480
	Fruit crops	2	
	Others if any	3	

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

No. of Villages covered	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers covered
2	Vegetable crops	10	50
	Fruit crops	2	
	Others if any	2	

H. Details of Skill Development Trainings organized

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

17. FINANCIAL PERFORMANCE

A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	State Bank of India	Ahmedabad	2628	Gujarat vidyapith	10295506650	380002006	SBIN0002628
With KVK	State Bank of India	Randheja	2678	Guj. Vidyapith krishi vigyan kendra	10686796889	382002116	SBIN0002678
With KVK	State Bank of India	Randheja	2678	Guj. Vidyapith krishi vigyan Kendra Rev. Fund	10686798219	382002116	SBIN0002678

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

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	174.00	148	130.00
2	**Traveling allowances**	1.00	0.48	0.73
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)		7.00	7.59
B	POL, repair of vehicles, tractor and Equipments	7.00		
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library	7.50		
TOTAL (A)		**189.50**		
B. Non-Recurring Contingencies				
1	**Works**			
2	**Equipments including SWTL & Furniture**			
3	**Vehicle** (Four wheeler/Two wheeler, please specify)			
4	**Library** (Purchase of assets like books & journals)			
TOTAL (B)				
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)				

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2018 to March 2019	64.85	24.88	17.23	72.50
April 2019 to March 2020	72.50	32.00	16.81	87.69
April 2020 to March 2021	87.69	25.80	16.17	97.32
April 2021 to March, 2022	97.32	43.45	65.45	75.32
April 2022 to March, 2023	75.32	25.83	19.27	81.88
April 2023 to Dec. 2023	81.88	11.16	12.40	80.64

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
Bharat Hadiya	SMS (Extension)	Technological backstopping on natural farming	SDAU, Dantiwada	Offline	20/03/23
Dr V.K. Garg, H.N.Patel, Vinay Gaur, P.V. Jadav, Bharat Hadiya, Radha Chaudhary, CA Gohil, Vijay modhvadiya	Senior Scientist & Head, SMSs, PA and FM	Natural Farming training	Gurukul Kurukshretra	Offline	20-22/4/2023
Bharat Hadiya	SMS (Extension)	Review meeting on Annual Action Plan	SDAU, Dantiwada	Offline	11/05/23
Dr V.K.Garg	Senior Scientist & Head	Zonal workshop (AAP)	AAU,Anand	Offline	15-16/5/23
Bharat Hadiya	SMS (Extension)	Pre Annual progress report workshop	SDAU, Dantiwada	Offline	4/7/23
Dr V.K.Garg	Senior Scientist & Head	Zonal workshop (APR)	KVK, Aurangabad	Offline	28-30/7/23
Dr V.K.Garg, H.N.Patel, Vinay Gaur, Bharat Hadiya	Senior Scientist & Head, SMSs	State level workshop on Natural farming	KVK Valsad	Offline	14/8/23
Chandresh gohil	P.A (Home sci.)	Orientation on recipe contest	DDG ICAR	Online	2/05/23
Chandresh gohil	P.A (Home sci.)	Capacity building of agricultural agro processing	CIPHET ICAR LUDHIANA	Offline	07-11/08/23

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

Name of the village	Total No. of families surveyed	Key interventions implemented	No. of farmers covered in each intervention	Change in income (Rs/unit)	
				Before (base year)	After (current year)
-	-	-	-	-	-

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

S. No.	Name of the programme	No. of villages adopted	Key activities performed	No. of activities carried out	No. of families covered

20. Details of Progress of ARYA Project

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

21. Details of SAP

S. No.	*Types of major Activity conducted- Swachhta Pakhwada, Cleaning, Awareness Workshop, Microbial based Agricultural Waste Management by Vermicomposting etc.*	No. of Programmes conducted	No. of Participants

Sr. No	Name of KVK	Date	*Activity*	No of VIPs	No of Farmers	Others	Total
1							

21. Books published 2023-24

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

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

APR SUMMARY

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	64	1290	695	1985
Rural youths	-	-	-	-
Extension functionaries	26	638	73	711
Sponsored Training	38	922	343	1265
Vocational Training	-	-	-	-
Total	**128**	**2850**	**1111**	**3961**

2. Frontline demonstrations

Crops/Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	60	30	
Pulses	30	7.5	
Cereals	30	7.5	
Vegetables	47	15	
Other crops	120	19.5	
Hybrid crops			
Total	**287**	**79.5**	
Livestock & Fisheries	40	-	40
Other enterprises	78	2.5	53
Total	**118**	**2.5**	**93**
Grand Total	**405**	**82**	**93**

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	6	63	63
Livestock	1	20	20
Various enterprises			
Total	**7**	**83**	**83**
Technology Refined			
Crops			
Livestock			
Various enterprises			
Total			
Grand Total	**7**	**83**	**83**

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	178	8242
Other extension activities	37	735
Total	**215**	**8977**

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke-ting	Awar e-ness	Other enterprise	Total
Gandhinagar	Text only	8				1		9
	Voice only							
	Voice & Text both							
	Total Messages	**8**				**1**		
	Total farmers Benefitted	**98441**				**12297**		**110738**

6. Seed & Planting Material Production

	Quintal/Number	Value (Rs.)
Seed (q)	17.67	72680
Planting material (No.)		
Bio-Products (kg)		
Livestock Production (No.)	8	133000
Fishery production (No.)		

7. Soil, water & plant Analysis

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

8. HRD and Publications

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