



Annual Action Plan

(2023)



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

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ICAR-ATARI, Pune
ANNUAL ACTION PLAN OF KVKs DURING 2023
(1st January to 31st 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
	Office	FAX		
Krishi Vigyan Kendra Junagadh Agricultural University Adityana Road, Opp. Saint Joseph School, Khapat-360579 Dist. Porbandar, Gujarat	94089 03062	-	kvkhhapat@jau.in	-

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

Address with PIN code	Telephone		E mail	Website address
	Office	FAX		
Junagadh Agricultural University Motibaug, Junagadh-362001 Gujarat	(1)0285- 2671784 (2)0285-2672080-90	(1) 0285-2672004 (2) 0285-2672653	-	www.jau.in

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. H.R. Vadar	94089 03062	94265 43628	hrvadar@jau.in

1.4. Year of sanction& type of host organization: 2005 (SAU)**1.5. Staff Position (as on 31st December, 2022)**

Sl No	Sanctioned post	Name of the incumbent	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 (I/C)	Dr. H.R. Vadar	Soil & Water Engineering	131400-217100	-	01-07-2021	-
2	Scientist	Dr. H.A. Patel	Animal Hus.	57700-182400	-	06-04-2015	-
3	Scientist	V.M. Savaliya	Horticulture	57700-182400	-	01-08-2017	-
4	Scientist	Vacant	-	-	-	-	-
5	Scientist	Vacant	-	-	-	-	-
6	Scientist	Vacant	-	-	-	-	-
7	Scientist	Vacant	-	-	-	-	-
8	Programme Assistant (Lab. Tech.)	D.N. Hadiya	Genetics & Plant Breeding	39900-126100	-	07-08-2018	Fix Pay
9	Programme Assistant (Computer)	R.R. Shida	-	39900-126100	-	25-06-2019	-

10	Farm Manager	A.M. Gamit	Genetics & Plant Breeding	39900-126100	-	02-08-2018	Fix Pay
11	Assistant	B.S. Bokhariya	-	44900-142400	-	12-06-2008	-
12	Stenographer	Vacant	-	-	-	-	-
13	Driver 1	Vacant	-	-	-	-	-
14	Driver 2	Vacant	-	-	-	-	-
15	Supporting staff 1	Vacant	-	-	-	-	-
16	Supporting staff 2	Vacant	-	-	-	-	-

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

S. No.	Item	Area (ha)
1	Under Buildings	2.451
2	Under Demonstration Units	0.337
3	Under Crops	14.66
4	Horticulture	2.798
5	Pond	0.344
6	Others if any	-
Total		20.59

1.7. Infrastructural Development**A. Buildings**

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting year	Plinth area (Sq.m)	Status of construction
1	Administrative Building	ICAR	2007	588	30,78,850	-	-	Completed
2	Farmers Hostel	ICAR	2008	288	21,02,300	-	-	Completed
3	Staff Quarters	ICAR	2007	446	28,38,616	-	-	Completed
4	Fencing	ICAR	2009	500 RM	-	-	-	Completed
5	Rain Water harvesting system	ICAR	2009	-	10,00,000	-	-	Completed
6	Threshing floor	ICAR	2014	164.87	1,52,338	-	-	Completed
7	Farm godown	ICAR	2009	129	-	-	-	Completed
8	Mini soil testing Kit	ICAR	2017	-	90,300	-	-	-
9	Godown	ICAR	2014	62.86	4,06,425	-	-	Completed

B. Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tractor (Farmtrac)	2005	3,80,000	61257 Hrs	Medium
Scorpio Jeep	2017	11,86,893	78078	Good
Motorcycle (Hero Splender)	2010	47,000	33822	Good

C. Equipment & AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
LCD projector	2008-09	1,00,000	Running
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 intercultivator frame 86"	2008-09	37,500	Running
Samsung double door refrigerator	2008-09	17,650	Running
Electrolux grill microwave / oven	2008-09	9,580	Running
Panasonic LCD projector	2008-09	1,03,912	Running
Multi purpose groundnut cum wheat thresher	2008-09	1,14,000	Running
Cotton shredder	2008-09	2,42,000	Running
Solar street light	2008-09	28,000	Running
Solar lanterns	2008-09	4,800	Running
Solar cooker	2008-09	3,300	Running
Mobile seed grading unit	2008-09	16,85,000	Not working
Decorticators	2008-09	95,850	Running
Winnowing fan	2008-09	8,500	Running
Chaff cutter	2008-09	30,188	Running
High tech sprayer pump	2008-09	1,850	Running
Split AC (2)	2008-09	59,980	Running
Sony handycam	2009-10	24,750	Running
Honda portable genset	2009-10	47,088	Damaged
PA conference system	2010-11	9,200	Running
Chairmen unit	2010-11	43,001	Running
Delegate unit	2010-11	3,839	Damaged
Water cooler & purifier	2010-11	39,165	Running
Water cooler	2010-11	24,955	Running
Dell desktop computer	2010-11	38,619	Running
HP laser printer	2010-11	11,336	Running
Groundnut grader	2010-11	42,000	Running
Winnower	2010-11	37,000	Running
LG Refrigerator	2010-11	19,610	Running
Multicrop cleaner cum grader	2010-11	2,30,000	Running
Laptop HP	2011-12	49,875	Not working
Samsung laser printer	2011-12	9,450	Not working
Canon SLR camera	2011-12	44,750	Working
Sony projector	2011-12	75,600	Running
Vestar AC (2)	2016-17	75,000	Running
Recoh digital zerox machine	2016-17	1,46,000	Running
Water cooler	2016-17	33,500	Running
Acer desktop (3)	2016-17	1,02,345	Not working
Samsung Printer	2016-17	12,546	Running
Integrated community computer (K-YAN)	2016-17	1,19,777	Running

1.8. Details of SAC meetings to be conducted in the year

Sl.No.	Particulars	Proposed date of meeting
1	Scientific Advisory Committee	07-02-2023

2. DETAILS OF JURISDICTION AREA UNDER KVK (No. of talukas)**2.1. Major farming systems/enterprises (based on the analysis made by the KVK)**

S. No	Farming system/enterprise	Names of talukas covered
1	Rainfed Farming System	Porbandar; Ranavav; Kutiyana
2	Cattle/ Buffalos	

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

Sl. No.	Agro-climatic Zone	Characteristics
1	South Saurashtra	Porbandar 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 pH: of the soil is ranging from 7.50 to 8.58 Water: EC value up to 8.1 mm / cm Average Rainfall: 668 mm Temperature Range: 12.0° C to 39.0 °C

b. 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 (<i>Ghed</i>)	Soil: clay with Rainfall: <750 mm
5	Mix red & black soil with medium rainfall	Soil: Sandy clay loam to clay loam with Rainfall: 750-1000 mm

2.3. Soil Types

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

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

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

Source: District Agriculture Department & District Horticulture Department, Porbandar

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

[#]Total cotton productivity

2.5. Weather data (2022)

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

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

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

2.7. Details of Operational area / Villages

Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Porbandar	Cluster I	Bokhira Pandavadar Mander Chikasa Mocha	Groundnut Wheat Cumin Coriander Sorghum Gram Fenugreek	<ul style="list-style-type: none"> White grub & stem rot in groundnut Wilt & blight in cumin Powdery mildew in coriander 	<ul style="list-style-type: none"> IPM (Management of white grub in groundnut) INM Improved package of practices IDM (Management of stem rot in groundnut) Poor quality water
Ranavav	Cluster II	Digvijaygadh Adityana Bordi Bhoddar Khambhala	Groundnut Cotton Sorghum Wheat Cumin Pearl millet	<ul style="list-style-type: none"> White grub & stem rot in groundnut Pink ball worm & sucking pest in cotton Wilt & blight in cumin 	<ul style="list-style-type: none"> IPM (Management of white grub in groundnut; pink ball worm in cotton) INM Improved package of practices IDM (Management of stem rot in groundnut) INM in Horticulture
Kutiya	Cluster III	Tarkhai Revadra Kavalka Mohabatpara Devda	Groundnut Cotton Castor Sorghum Wheat Cumin Gram	<ul style="list-style-type: none"> White grub & stem rot in groundnut Pink ball worm & sucking pest in cotton Wilt & blight in cumin 	<ul style="list-style-type: none"> IPM (Management of white grub in groundnut; pink ball worm in cotton) INM Improved package of practices IDM (Management of stem rot in groundnut) 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 PROGRAMME

3.1. A. Details of targeted mandatory activities by KVK

OFT		FLD	
(1)		(2)	
Number of OFTs	Number of Farmers	Area (ha)	Number of Farmers
5	15	43.0	235

Training		Extension Activities	
(3)		(4)	
Number of Courses	Number of Participants	Number of activities	Number of participants
59	1535	23	2645

Seed Production (q)	Planting material (Nos.)	Livestock, poultry strains and Fish seed prod. (No's)	Soil and water Samples
(5)	(6)	(7)	(8)
150	10000	-	100

3.1. B. Operational areas details proposed during 2023

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	Proposed Intervention (OFT, FLD, Training, extension activity etc.)*
1	Groundnut	• White grub & stem rot in groundnut		Bokhira Pandavadar Mander Chikasa Mocha	OFTs Training Ext. Activities
	Cumin	• Wilt & blight in cumin			FLDs Training Ext. Activities
	Coriander	• Powdery mildew in coriander			FLDs Training Ext. Activities
	Cattle/ Buffalos	• Milk Fever & Mastitis			OFTs Training Ext. Activities
2	Groundnut	• White grub & stem rot in groundnut		Digvijaygadh Adityana Bordi Bhoddar Khambhala	OFTs Training Ext. Activities
	Cotton	• Pink ball worm & sucking pest in cotton			FLDs Training Ext. Activities
	Cumin	• Wilt & blight in cumin			FLDs Training Ext. Activities
	Cattle/ Buffalos	• Milk Fever & Mastitis			OFTs Training Ext. Activities
3	Groundnut	• White grub & stem rot in groundnut		Tarkhai Revadra	OFTs Training Ext. Activities
	Cotton	• Pink ball worm & sucking pest			FLDs Training

		in cotton		Kavalka Mohabatpara Devda	Ext. Activities
Cumin	• Wilt & blight in cumin		FLDs Training Ext. Activities		
Cattle/ Buffalos	• Milk Fever & Mastitis		OFTs Training Ext. Activities		

* Support with problem-cause and interventions diagram

3.2. Technologies to be assessed

A.1. Abstract on the number of technologies to be assessed in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetable	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management	1	-	-	-	1	-	-	-	-	2
Integrated Pest Management	-	1	-	-	-	-	-	-	-	1
Integrated Disease Management	-	1	-	-	-	-	-	-	-	1
TOTAL	1	2	-	-	1	-	-	-	-	4

A.2. Abstract on the number of technologies to be assessed in respect of livestock / enterprises

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Wormi culture	Fisheries	TOTAL
Nutrition Management	1	-	-	-	-	-	-	1
TOTAL	1	-	-	-	-	-	-	1

B. Details of On Farm Trials/ Technology Assessment proposed during 2022-23

S No	Crop/ enterprise	Prioritized problem	Title of intervention	Technology options	Source of Tech.	Name of critical input	Qty per trial	Cost per trial	No. of trials	Total cost for the Intervention (Rs.)	Parameters to be studied	Team members
1	Groundnut	Low yield, quality deterioration of seed in groundnut	Management of collar rot in groundnut using bio-inputs	IDM	JAU, Junagadh	<i>Trichoderma harzianum</i> ; <i>Pseudomonas fluorescens</i> & castor cake	0.5 kg 0.5 kg 100 kg	2000/- -	3	6000/-	Yield, Economics, CFU	3
2	Home Science	Pests infestation during storage	Assessment of PICS bag for groundnut storage	PICS bags	JAU, Junagadh	PICS bags	5	700/-	3	2100/-	Weight loss; Insect (Bruchid) damage	3
3	Cattle	Low fat in milk & financial loss	Effect of supplementation of concentrates on milk production of Gir cow	Nutrient management	Animal Nutrition Research Station, AAU, Anand	Concentrated mixture + Mineral mixture	1	4000/- -	3	12000/-	Milk yield & Income	3
4	Chili	Low production in Summer chili	Integrated Nutrient Management in Summer chili	INM	NAU, Navsari	Banana pseudostem sap	3 lit.	500/-	3	1500/-	Yield, Economics	3
5	Wheat	Reduce yield and soil fertility	Assessment of Nitrogen Management in wheat Crop	INM	JAU, Junagadh	Biofertilizer - <i>Azotobacter</i> & PSB culture	11 each	400/-	3	1200/-	Yield, Economics	3

3.3. Frontline Demonstrations

A. Details of FLDs to be organized (Oilseeds, pulses, cereals, cotton, commercial crops, horticulture crops, vegetables, spices and condiments, fodder crops, etc)

Sl No	Crop	Variety	Thematic area	Technology for demonstration	Critical inputs	Season and year	Area (ha)	No. of farmers/demon.	Parameters identified
1	Groundnut	GJG-22	Varietal evaluation	Improved variety	Seed	Kharif 2023	4	10	Low productivity of existing variety
2	Cotton	Bt. Variety	IPM	Pheromone trap + <i>Beauveria bassiana</i>	<i>Beauveria</i> , Phromone traps	Kharif-2023	10	25	Heavy infestation of pink ball worm
3	Kitchen Gardening	Available at JAU, Junagadh	Varietal evaluation	Improved variety of 5 crops	Seed	Kharif-2023	2.5	50	Balanced nutrition
4	Kitchen Gardening	Available at JAU, Junagadh	Varietal evaluation	Improved variety of 5 crops	Seed	Rabi-2023-24	2.5	50	Balanced nutrition
5	Chickpea	-	Bio-agent	HNPV & <i>Beauveria bassiana</i>	Bio-agent HNPV & <i>Beauveria</i>	Rabi-2023-24	4	10	Infestation of pod borer
6	Wheat	GW-451	Varietal evaluation	Improved variety	Seed	Rabi-2023-24	4	10	Low productivity of existing variety
7	Onion	GJRO-11	Varietal Evaluation	Improved variety	Seed	Rabi-2023-24	4	10	New & improved variety
8	Onion	Pillipati	IDM	IDM (for disc (root) rot)	<i>Pochonia clemaidosporium</i> + <i>Trichoderma harzianum</i>	Rabi-2023-24	4	10	Heavy infestation of nematodes
9	Mango	Kesar	IPM	Fruit fly trap	Fruit fly trap	Summer-2023	4	10	Heavy infestation of fruit fly
10	Green gram	GM-4	Varietal evaluation	Imp. Variety	Seed	Summer - 2023	4	10	Low productivity of existing variety
11	Animal Husbandry	-	Nutrition	Nutrition management	Supplement of by Pass Fat	-	-	20	Low Milk productivity
12	Animal Husbandry	-	Nutrition	Nutrition management	Chelated mineral mixture	-	-	20	Low Milk productivity
Total						-	43.0	235	-

Sponsored Demonstrations (CFLDs on O & P/Others)

S. No.	Crop	Variety	Season and Year	Area (ha)	No. of farmers
1	Gram	GJG-6	Rabi-2023-24	20.0	50
2	Sesame	GJT-5	Summer-2023	20.0	50

B. Extension and Training activities under FLDs

S. No.	Activity	No. of activities	Month	Number of participants
1	Field days	10	-	300
2	Farmers Training	8	-	250
3	Media coverage	-	-	-
4	Training for extension functionaries	-	-	-

C. Details of FLD on Enterprises**a. Farm Implements**

Name of the implement	Crop	Season and year	No. of farmers	Area (ha)	Critical inputs	Performance parameters / indicators
-	-	-	-	-	-	-

b. Livestock and Fisheries Enterprises

Enterprise	Breed	No. of farmers	No. of animals, poultry birds etc.	Critical inputs	Performance parameters / indicators
Animal Husbandry	Buffalo	20	-	Supplement of by	Fat % & milk yield
Animal Husbandry	Buffalo	20	-	Chelated mineral mixture	Fat % & milk yield

c. Other Enterprises (Mushroom, Apiculture, Sericulture, Vermicompost, Value Addition, Women empowerment, etc)

Enterprise	Technology demonstrated	No. of farmers	No. of units	Critical inputs	Performance parameters / indicators
Kitchen Gardening (Kharif)	Improved variety of 5 crops	50	5	Seed	Yield
Kitchen Gardening (Rabi)	Improved variety of 5 crops	50	5	Seed	Yield

3.4. Training (Including the sponsored and FLD training programmes)**A. ON Campus**

Thematic Area	No. of Courses	No. of Participants							Grand Total
		Others			SC/ST				
		M	F	T	M	F	T		
(A) Farmers & Farm Women									
I Crop Production									
Resource Conservation Technologies	1	15	0	15	5	0	5	20	
Cropping Systems	1	15	0	15	5	0	5	20	
II Horticulture									
a) Vegetable Crops									
Protective cultivation (Green Houses, Shade Net etc.)	1	20	0	20	0	0	0	20	
b) Fruits									
Value Addition	1	0	20	20	0	0	0	20	
c) Ornamental Plants									
d) Plantation crops									
e) Tuber crops									
f) Spices									
Production and Management technology	1	20	0	20	0	0	0	20	
g) Medicinal and Aromatic Plants									
III Soil Health and Fertility Management									
IV Livestock Production and Management									
Dairy Management	2	30	10	40	0	0	0	40	
Disease Management	2	35	5	40	5	0	5	45	
Feed management	1	20	0	20	0	0	0	20	
Production of quality animal products	1	15	5	20	5	0	5	25	

V Home Science/Women empowerment								
Household food security by kitchen gardening and nutrition gardening	1	0	15	15	0	5	5	20
Value addition	1	0	20	20	0	0	0	20
Income generation activities for empowerment of rural Women	1	0	20	20	0	0	0	20
VI Agril. Engineering								
VII Plant Protection								
Integrated Pest Management	1	20	0	20	0	0	0	20
Integrated Disease Management	3	55	0	55	10	0	10	65
VIII Fisheries								
IX Production of Inputs at site								
X Capacity Building and Group Dynamics								
XI Agro-forestry								
XII Others (Pl. Specify)								
TOTAL	18	245	95	340	30	5	35	375
(B) RURAL YOUTH								
Production of organic inputs	1	15	0	15	5	0	5	20
Nursery Management of Horticulture crops	1	15	0	15	0	0	0	15
TOTAL	2	30	0	30	5	0	5	35
(C) Extension Personnel								
Productivity enhancement in field crops	1	20	0	20	5	0	5	25
Kitchen Gardening	1	0	40	40	0	10	10	50
TOTAL	2	20	40	60	5	10	15	75
(D) Sponsored Training Programme								
Soil Health management (Crop Production)	2	40	5	45	8	2	10	55
Organic Farming (Horticulture)	2	40	10	50	5	5	10	60
Integrated Pest Management (Pl. Protection)	2	40	10	50	10	5	15	65
Artificial Insemination (Ani. Husbandry)	2	50	20	70	10	0	10	80
Maintenance of farm machinery (Ag.Eng.)	2	50	0	50	15	0	15	65
TOTAL	10	220	45	265	48	12	60	325
(E) Vocational training								
Resource Conservation Technologies	1	15	0	15	0	0	0	15
Nursery raising	1	15	0	15	0	0	0	15
Dairy Management	1	0	15	15	0	0	0	15
TOTAL	3	30	15	45	0	0	0	45
G. TOTAL	35	545	195	740	88	27	115	855

B. OFF Campus

Thematic Area	No. of Courses	No. of Participants						Grand Total
		Others			SC/ST			
		M	F	T	M	F	T	
(A) Farmers & Farm Women								
I Crop Production								
Resource Conservation Technologies	1	30	0	30	5	0	5	35
Crop Diversification	1	20	0	20	5	0	5	25

Seed production	2	60	0	60	10	0	10	70
II Horticulture								
a) Vegetable Crops								
Protective cultivation (Green Houses, Shade Net etc.)	1	15	0	15	5	0	5	20
b) Fruits								
Layout and Management of Orchards	1	20	0	20	5	0	5	25
c) Ornamental Plants								
d) Plantation crops								
Production and Management technology	1	20	5	25	5	0	5	30
e) Tuber crops								
f) Spices								
Production and Management technology	2	40	0	40	10	0	10	50
g) Medicinal and Aromatic Plants								
III Soil Health and Fertility Management								
Soil fertility management	2	50	0	50	15	0	15	65
IV Livestock Production and Management								
Dairy Management	2	10	25	35	5	10	15	50
Disease Management	3	55	10	65	15	5	20	85
Feed management	1	15	5	20	5	5	10	30
V Home Science/Women empowerment								
VI Agril. Engineering								
Post Harvest Technology	1	15	5	20	0	0	0	20
Drudgery reducing technology	1	0	20	20	0	5	5	25
VII Plant Protection								
Integrated Pest Management	1	20	0	20	0	0	0	20
Integrated Disease Management	2	50	0	50	10	0	10	60
Production of bio control agents and bio pesticides	1	30	0	30	5	0	5	35
VIII Fisheries								
IX Production of Inputs at site								
X Capacity Building and Group Dynamics								
XI Agro-forestry								
XII Others (Pl. Specify)								
TOTAL	23	450	70	520	100	25	125	645
(B) RURAL YOUTH								
Value addition	1	0	30	30	0	5	5	35
TOTAL	1	0	30	30	0	5	5	35
G. TOTAL	24	450	100	550	100	30	130	680

C. Consolidated table (ON and OFF Campus)

Thematic Area	No. of Courses	No. of Participants						Grand Total
		Others			SC/ST			
		M	F	T	M	F	T	
(A) Farmers & Farm Women								
I Crop Production								
Resource Conservation Technologies	2	45	0	45	10	0	10	55
Cropping Systems	1	15	0	15	5	0	5	20
Crop Diversification	1	20	0	20	5	0	5	25
Seed production	2	60	0	60	10	0	10	70
II Horticulture								
a) Vegetable Crops								
Protective cultivation (Green Houses, Shade Net etc.)	2	35	0	35	5	0	5	40
b) Fruits								
Layout and Management of Orchards	1	20	0	20	5	0	5	25
Value addition	1	0	20	20	0	0	0	20
c) Ornamental Plants								
d) Plantation crops								
Production and Management technology	1	20	5	25	5	0	5	30
e) Tuber crops								
f) Spices								
Production and Management technology	3	60	0	60	10	0	10	70
g) Medicinal and Aromatic Plants								
III Soil Health and Fertility Management								
Soil fertility management	2	50	0	50	15	0	15	65
IV Livestock Production and Management								
Dairy Management	4	40	35	75	5	10	15	90
Disease Management	5	90	15	105	20	5	25	130
Feed management	2	35	5	40	5	5	10	50
Production of quality animal products	1	15	5	20	5	0	5	25
V Home Science/Women empowerment								
Household food security by kitchen gardening and nutrition gardening	1	0	15	15	0	5	5	20
Value addition	1	0	20	20	0	0	0	20
Income generation activities for empowerment of rural Women	1	0	20	20	0	0	0	20
VI Agril. Engineering								
Post Harvest Technology	1	15	5	20	0	0	0	20
Drudgery reducing technology	1	0	20	20	0	5	5	25
VII Plant Protection								
Integrated Pest Management	2	40	0	40	0	0	0	40
Integrated Disease Management	5	105	0	105	20	0	20	125
Production of bio control agents and bio pesticides	1	30	0	30	5	0	5	35
VIII Fisheries								
IX Production of Inputs at site								
X Capacity Building and Group Dynamics								

XI Agro-forestry									
TOTAL	41	695	165	860	130	30	160	1020	
(B) RURAL YOUTH									
Production of organic inputs	1	15	0	15	5	0	5	20	
Nursery Management of Horticulture crops	1	15	0	15	0	0	0	15	
Value addition	1	0	30	30	0	5	5	35	
TOTAL	3	30	30	60	5	5	10	70	
(C) Extension Personnel									
Productivity enhancement in field crops	1	20	0	20	5	0	5	25	
Kitchen Gardening	1	0	40	40	0	10	10	50	
TOTAL	2	20	40	60	5	10	15	75	
(D) Sponsored Training Programme									
Soil Health management (Crop Production)	2	40	5	45	8	2	10	55	
Organic Farming (Horticulture)	2	40	10	50	5	5	10	60	
Integrated Pest Management (Pl. Protection)	2	40	10	50	10	5	15	65	
Artificial Insemination (Ani. Husbandry)	2	50	20	70	10	0	10	80	
Maintenance of farm machinery (Ag.Eng.)	2	50	0	50	15	0	15	65	
TOTAL	10	220	45	265	48	12	60	325	
(E) Vocational training									
Resource Conservation Technologies	1	15	0	15	0	0	0	15	
Nursery raising	1	15	0	15	0	0	0	15	
Dairy Management	1	0	15	15	0	0	0	15	
TOTAL	3	30	15	45	0	0	0	45	
G. TOTAL	59	995	295	1290	188	57	245	1535	

Details of training programmes attached in **Annexure - I**

3.5. Extension Activities (including activities of FLD programmes)

Nature of Extension Activity	No. of activities	Farmers			Extension Officials			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	5	100	25	125	15	10	25	115	35	150
Kisan Mela	1	200	100	300	25	25	50	225	125	350
Kisan Ghosthi	10	150	50	200	-	-	-	150	50	200
Exhibition	2	200	100	300	25	25	50	225	125	350
Film Show	5	100	25	125	-	-	-	100	25	125
Farmers Seminar	5	100	50	150	-	-	-	100	50	150
Workshop	1	30	20	50	-	-	-	30	20	50
Group meetings	4	75	25	100	-	-	-	75	25	100
Lectures delivered as resource persons	20	-	-	-	-	-	-	-	-	-
Newspaper coverage	5	-	-	-	-	-	-	-	-	-
Radio talks	-	-	-	-	-	-	-	-	-	-
TV talks	-	-	-	-	-	-	-	-	-	-
Popular articles	10	-	-	-	-	-	-	-	-	-
Extension Literature	5	-	-	-	-	-	-	-	-	-
Advisory Services										
Scientific visit to farmers field	15	50	0	50	10	0	10	60	0	60
Farmers visit to KVK	1	500	300	800	100	100	200	600	400	1000

Diagnostic visits	10	30	0	30	10	0	10	40	0	40
Ex-trainees	2	40	10	50	10	10	20	50	20	70
Sammelan										
Soil health Camp	2	-	-	-	-	-	-	-	-	-
Animal Health Camp	2	-	-	-	-	-	-	-	-	-
Agri mobile clinic	-	-	-	-	-	-	-	-	-	-
Soil test campaigns	2	-	-	-	-	-	-	-	-	-
Farm Science Club	-	-	-	-	-	-	-	-	-	-
Conveners meet										
Self Help Group Conveners meetings	-	-	-	-	-	-	-	-	-	-
Mahila Mandals Conveners meetings	-	-	-	-	-	-	-	-	-	-
Celebration of important days (specify)	10	-	-	-	-	-	-	-	-	-
Krishi Mohostva	1	-	-	-	-	-	-	-	-	-
Krishi Rath	1	-	-	-	-	-	-	-	-	-
Pre Kharif workshop	1	-	-	-	-	-	-	-	-	-
Pre Rabi workshop	-	-	-	-	-	-	-	-	-	-
PPVFRA workshop	-	-	-	-	-	-	-	-	-	-
Any Other (Specify)	-	-	-	-	-	-	-	-	-	-
Total	120	1575	705	2280	195	170	365	1770	875	2645

3.6. Target for Production and supply of Technological products

Seed Materials

Sl. No.	Crop	Variety	Quantity (q)
Cereals			
	Wheat	GW-451 Truthful	30
Oilseeds			
	Groundnut	GG-20 Breeder	80
	Groundnut	GJG-17 Breeder	25
	Groundnut	GJG-22 Breeder	15
Pulses			
	-	-	-
Vegetables			
	-	-	-
Others (specify)			
	-	-	-

Planting Materials

Sl. No.	Crop	Variety	Quantity (Nos.)
Fruits			
	-	-	-
Vegetables			
	Brinjal	GJLB-4 ; GJB-2	5000
	Tomato	GT-1; JT - 3	5000
Spices			
Forest species			
Flowers and ornamental			
Fodder slips			
Total			10000

Bio-products

Sl. No.	Product Name	Species	Quantity	
			Kg	Lit
Bio pesticides				
-	-	-	-	-

Livestock

Sl. No.	Type	Breed	Quantity (No.)
Cattle	-	-	-
Goat	-	-	-
Sheep	-	-	-
Poultry	-	-	-
Pigs	-	-	-
Fisheries	-	-	-
Any other (pl. Specify)	-	-	-

4. Literature to be Developed/Published**A. Literature developed/published**

S.No.	Topic	Number
1	Research papers	2
2	Technical reports	6
3	News letters	4
4	Training manuals	-
5	Popular articles	10
6	Extension literature	5
7	E-publication	-
8	Any other (Please specify)	-
Total		32

B. Details of Electronic Media to be produced

S. No.	Type of media (CD / VCD / DVD / Audio-Cassette) and video clippings	Title of the programme	Number
1	-	-	-

C. Details of social media platforms to be started / continued

S. No.	Type of social media platform	Title / Purpose	Number
1	YouTube Channel	-	-
2	Facebook page	-	-
3	Mobile Apps	-	-
4	Whats App groups	KVK – Khapat (Porbandar)	2
5	Twitter Account	-	-
6	Any other (Pl. Specify)	-	-

D. Success stories/Case studies identified for development as a case (Based on previous years success)

S. No.	Title of success story / case study identified	Proposed month for case/story to be prepared/ developed
1	Natural Farming	June
2	Income generation activities	December

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

- A. Practicing Farmers
- B. Rural Youth
- C. In-service personnel

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

- i) PRA
- ii) Problem identified from Matrix
- iii) Field level observations
- iv) Farmer group discussions
- v) Others if any

For FLD:

- i) New variety/technology
- ii) Poor yield at farmer's level
- iii) Existing cropping system
- iv) Others if any

5.3. Field activities

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

Name of the village	Name of the block	Taluka	Year
Bokhira Pandavadar Mander Chikasa Mocha	Cluster I	Porbandar	2022
Digvijaygadh Adityana Bordi Bhoddar Khambhala	Cluster II	Ranavav	2022
Tarkhai Revadra Kavalka Mohabatpara Devda	Cluster III	Kutiyana	2022

- ii. No. of farm families selected per village: -
- iii. No. of survey/PRA conducted: 15
- iv. No. of technologies taken to the adopted villages - 2
- 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**6.1. Functional linkage with different organizations**

S. No	Name of organization	Nature of Linkage
1	ATMA	Propagation of modern agricultural technology as a resource person and through various extension activities.
2	District Agricultural Officer	Propagation of modern agricultural technology as a resource person and through various extension activities.
3	Jilla Panchyat	Propagation of modern agricultural technology as a resource person and through various extension activities.
4	State Fisheries Department	Propagation of modern agricultural technology as a resource person and through various extension activities.
5	DRDA	Propagation of modern agricultural technology as a resource person and through various extension activities.
6	DWDU	Propagation of modern agricultural technology as a resource person and through various extension activities.

6.2. Details of linkage with ATMA

S. No.	Programme	Nature of linkage
1	Training	KVK Scientist as a resource person
2	Farmer Field school	KVK Scientist as a resource person
3	<i>Kishan Gosthi</i>	KVK Scientist as a resource person
4	Farmer Scientist Interaction	KVK Scientist as a resource person

6.3. Give details of programmes under National Horticultural Mission

S. No.	Programme	Nature of linkage
-	-	-

6.4. Nature of linkage with National Fisheries Development Board

S. No.	Programme	Nature of linkage
-	-	-

6.5. Additional Activities planned including sponsored projects

(NARI/DAESI/DAMU/DFI/PKVY, Skill Trainings, etc.) / schemes during 2021, if involved.

S.No.	Name of the agency / scheme	Name of activity	Technical programme with quantification	Financial outlay (Rs.)	Names of the team members involved
-	-	-	-	-	-

6.5.1. Details of activities planned under NARI (Including FSN project)

S. No.	Name of the village	Activities planned	No. of families to be covered
-	-	-	-

6.5.2. Details of activities planned under Paramaparagat Krishi Vikas Yojana (PKVY)

S. No.	Name of the village	Activities planned	No. of families to be covered
1	Kunvadar	Trainings	10
2	Ramgadh	FLDs	10
3	Degam		10

6.5.3. Details of skill trainings planned (sponsored by ASCI)

S. No.	Name of Job Role	Duration (No. of hours)	No. of participants
-	-	-	-

6.6. Activities planned in respect of FPOs / FPCs

- No. of FPOs / FPCs to be formed: 1
- No. of existing FPOs / FPCs to be facilitated: 1
- Type of support to be provided to existing FPOs / FPCs:

S. No	Name of the FPO / FPC	No. of members	Major activities of FPO / FPC	Type of support to be provided by KVK
1	Vachhraj Agro Farmer Producer Company Limited	30	Production of agri seeds	Technical backstopping

7. Convergence with other agencies and line departments in the district

S. No.	Name of the department / Agency	Type of convergence	Area (ha) / No. of farmers to be benefited
1	-	-	-

8. Innovator Farmer's Meet 2023

Sl.No.	Particulars	Details	Expected No. of participants
1	Farm innovators meet planned	September	50

9. Utilization of hostel facilities

S. No.	Month	No. of days to be utilized
-	-	-
	Total	

10. Details of online activities planned (If any)

S. No.	Type of activities	No. of programmes	Mode of implementation (Video conferencing / Audio Conferencing / Facebook Live / YouTube Live, etc)	No. of participants to be covered
1	Farmers trainings	2	Video conferencing	50
2	Farmers scientist's interaction programme	1	Video conferencing	50
3	Farmers seminars	-	-	-
4	Expert lectures	-	-	-
5	Any other (Pl. specify)	-	-	-

11. Details of collaborative applied research projects planned if any

S. No.	Name of the research project	Funding agency	Collaborating organizations	Year of commencement	Major activities planned
-	-	-	-	-	-

Training Programme

i) Farmers & Farm women (On Campus)

Date	Clientele	Title of the training programme	Duration in days	Number of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
Crop Production										
Q-1	RY	Production of inputs for natural farming	1	15	0	15	5	0	5	20
Q-3	PF	Natural farming techniques	1	15	0	15	5	0	5	20
Q-4	PF	Production technology of millets	1	15	0	15	5	0	5	20
Horticulture										
Q-1	FW	Value addition in flowers & fruits (rose, marigold, mango, sapota)	1	0	20	20	0	0	0	20
Q-2	RY	Nursery raising techniques for vegetables	1	15	0	15	0	0	0	15
Q-3	PF	Protected cultivation (Green house, net house, tunnels)	1	20	0	20	0	0	0	20
Q-4	PF	Recent advances in production technologies of spices and vegetables	1	20	0	20	0	0	0	20
Livestock prod.										
Q-1	PF/FW	Hygienic milk production and management of mastitis	1	15	5	20	5	0	5	25
Q-1	PF/FW	Housing management in milch animals	1	15	5	20	0	0	0	20
Q-2	PF/FW	ITK practices in disease management of farm animals	1	15	5	20	5	0	5	25
Q-3	PF	Silage management techniques	1	20	0	20	0	0	0	20
Q-4	PF/FW	Management of farm animals	1	15	5	20	0	0	0	20
Q-4	PF	Health management in heard	1	20	0	20	0	0	0	20
Agril. Engg.										
	PF	-	-	-	-	-	-	-	-	-
Home Sc.										
Q-1	FW	Layout of nutrition garden and importance of kitchen gardening	1	0	15	15	0	5	5	20
Q-2	FW	Value addition in fruits (Jam/Sarbat/ Squash making from seasonal fruits)	1	0	20	20	0	0	0	20
Q-3	FW	E market and social media awareness for women	1	0	20	20	0	0	0	20
Plan Protection										
Q-1	PF	Integrated pest and disease management in vegetable crops	1	20	0	20	5	0	5	25
Q-2	PF	Management of white grub in groundnut	1	20	0	20	0	0	0	20
Q-3	PF	Integrated pest and disease management in <i>Kharif</i> crops	1	20	0	20	0	0	0	20
Q-4	PF	Integrated pest and disease management in <i>Rabi</i> crops	1	15	0	15	5	0	5	20
Fisheries										
	PF	-	-	-	-	-	-	-	-	-
Soil Health										
	PF	-	-	-	-	-	-	-	-	-

ii) Farmers & Farm women (Off Campus)

Date	Clientele	Title of the training programme	Duration in days	No. of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
Crop Production										
Q-1	PF	Natural farming techniques	1	30	0	30	5	0	5	35
Q-2	PF	Advances in production technology of major <i>Kharif</i> crops and INM	1	30	0	30	5	0	5	35
Q-3	PF	Scope of crop diversification in district	1	20	0	20	5	0	5	25
Q-4	PF	Advances in production technologies of <i>Rabi</i> crops	1	30	0	30	5	0	5	35
Horticulture										
Q-1	PF	Cultivation of spices, onion and garlic	1	20	0	20	5	0	5	25
Q-2	PF	Layout and management of mango orchards and IPDM in mango	1	20	0	20	5	0	5	25
Q-3	PF/FW	Production technology of plantation crops (Date Palm, Coconut)	1	20	5	25	5	0	5	30
Q-4	PF	Production & management technology of spices (cumin, coriander)	1	20	0	20	5	0	5	25
Q-4	PF	Cultivation of leafy vegetable in protected cultivation	1	15	0	15	5	0	5	20
Live Stock Production.										
Q-1	PF	Deworming programme, control of parasites and artificial insemination in farm animals	1	20	0	20	5	0	5	25
Q-2	PF/FW	Disease, nutrition management & ITK practices in livestock	1	20	5	25	5	5	10	35
Q-2	PF/FW	Importance of vaccination in animals	1	15	5	20	5	0	5	25
Q-3	FW	Care of pregnant animals and care after calving	1	0	20	20	0	10	10	30
Q-3	PF/FW	Artificial insemination: Importance and proper timing	1	10	5	15	5	0	5	20
Q-4	PF/FW	Fodder management in dairy animals	1	15	5	20	5	5	10	30
Agril. Engg.										
Q-1	PF	Post harvest technology of major field crops	1	15	5	20	0	0	0	20
Q-2	PF	Drudgery reducing technologies for farm women in agriculture	1	0	20	20	0	5	5	25
Home Sc.										
Q-4	RY	Grading and packaging of fruits, vegetables	1	0	30	30	0	5	5	35
Plant Protection										
Q-1	PF	Biological control of pest & diseases in major crops	1	30	0	30	5	0	5	35
Q-2	PF	IPDM in major <i>Kharif</i> crops	1	30	0	30	5	0	5	35
Q-3	PF	Management of white grub in groundnut & pink bollworm in cotton	1	20	0	20	0	0	0	20
Q-4	PF	IPDM in major <i>Rabi</i> crops	1	20	0	20	5	0	5	25

Fisheries										
	PF		-	-	-	-	-	-	-	-
Soil health										
Q-2	PF	Soil fertility management & soil sampling technology	1	30	0	30	10	0	10	40
Q-3	PF	Soil fertility management & soil sampling technology	1	20	0	20	5	0	5	25

iii) Vocational training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title*	Month	Duration (days)	No. of Participants			SC/ST participants			G. Total
					M	F	T	M	F	T	
-	PIS	Production of inputs for organic and natural farming	-	7	15	-	15	-	-	-	15
Vegetables	HOV	Plug Nursery raising technique for business	-	7	15	-	15	-	-	-	15
Animal husbandry	Income Generation	Skill development training for livestock management	-	7	-	15	15	-	-	-	15

iv) Training programme for extension functionaries

Date	Clientele	Title of the training programme	Duration in days	No. of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
On Campus										
-	Ext. Functionaries	Integrated crop management-major crops	2	20	0	20	5	0	5	25
-	Anganwadi worker	Importance of kitchen gardening (Anganwadi worker)	1	0	40	40	0	10	10	50

v) Sponsored programmes

Discipline	Sponsoring agency	Clientele	Title of the training programme	No. of course	No. of participants			Number of SC/ST			G. Total
					M	F	T	M	F	T	
a) Sponsored training programme											
Crop Production	ATMA	PF/FW	Soil health management	2	40	5	45	8	2	10	55
Horticulture	ATMA	PF/FW	Production of organic spices	2	40	10	50	5	5	10	60
Plant Protection	ATMA	PF/FW	Integrated management of pink ball worm in cotton	2	40	10	50	10	5	15	65
Ag. Engineering	ATMA	PF/FW	Maintenance of farm machinery	2	50	20	70	10	0	10	80
Animal Husbandry	ATMA	PF/FW	Artificial insemination: Importance and necessity	2	50	0	50	15	0	15	65
Total				10	217	58	275	30	20	50	325
b) Sponsored research programme											
Total				-	-	-	-	-	-	-	-
c) Any special programmes											
Total				-	-	-	-	-	-	-	-

Annexure - II

Details of Budget Estimate (2023-24) based on proposed action plan

S. No.	Particulars	Proposed BE 2023-24 (Rs. in lakh)
1	Other than NEH & TSP	
1.1	Pay & Allowances	60.00
1.2	Traveling allowances	1.00
1.3	Contingencies	
A	Research and operational expenses	4.00
B	Administrative expenses	6.00
	TOTAL Recurring Contingencies	71.00
2	Non-Recurring Contingencies	-
	TOTAL Non-Recurring Contingencies	0.00
	GRAND TOTAL	71.00