

**ICAR – ATARI, Pune**  
**ANNUAL ACTION PLAN OF KVK – MORBI**  
**(1<sup>st</sup> January, 2025 to 31<sup>st</sup> December, 2025)**

**1. GENERAL INFORMATION ABOUT THE KVK**

**1.1 Name and address of KVK with Phone, Fax and E-mail:**

Address with PIN code	Telephone		E mail	Website address & No. of visitors (hits)
Krishi Vigyan Kendra, Junagadh Agricultural University, Morbi Dist Morbi (Gujarat) – 363641	<b>office</b>	<b>FAX</b>	<a href="mailto:kvkmorbi@gmail.com">kvkmorbi@gmail.com</a>	<a href="http://www.jau.in">www.jau.in</a>
	-	-		

**1.2 Name and address of host organization with Phone, Fax and E-mail:**

Address	Telephone		E mail	Website address
	office	FAX		
Junagadh Agricultural University, Junagadh (Gujarat)	0285-2672080	0285-2672653	<a href="mailto:dee@jau.in">dee@jau.in</a>	<a href="http://www.jau.in">www.jau.in</a>

**1.3 Name of the Senior Scientist and Head with Phone, Mobile No. and E-mail :**

Name	Telephone / Contact		
	Mobile	office	E mail
Prof. M.F. Bhoraniya	9428297863	-	<a href="mailto:mfbhoraniya@gmail.com">mfbhoraniya@gmail.com</a>

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

### 1.5 Faculty Information : (as on December 31, 2024)

No	Sanctioned post	Name of the incumbent	Mobile No.	Discipline	If Permanent, Please indicate		Date of joining	If Temporary, pl. indicate the consolidated amount paid (Rs./month)
					Current Pay Band	Current GradePay		
1.	Senior Scientist and Head	Vacant	-	-	-	-	-	-
2.	Scientist	Prof. M.F. Bhoraniya	9428297863	Plant Protection	57700 - 182400	UL-10	01/09/23	-
3.	Scientist	Dr. K.N. Vadaria	9824290555	Agronomy	57700 - 182400	UL-10	01/06/22	-
4.	Scientist	Vacant	-	Home Science	-	-	-	-
5.	Scientist	Vacant	-	Animal Science	-	-	-	-
6.	Scientist	Vacant	-	Horticulture	-	-	-	-
7.	Scientist	Vacant	-	Extension	-	-	-	-
8.	Programme Assistant (Lab Technician)	Gamansinh S. Zala	8780953478	B.Sc. Agri.	39900-126600	L-7	03/08/18	-
9.	Programme Assistant (Computer)	J.R. Shekhada	9687442282	B.C.A.	39900-126600	L-7	30/10/24	-
10.	Farm Manager	Vinuji V. Thakor	8155049089	B.Sc. Agri.	39900-126600	L-7	31/07/18	-
11.	Assistant	Vacant	-	-	-	-	-	-
12.	Stenographer	N. M. Vadhadiya	9925182898	M.A. B.Ed.	25500-81100	L-4	01/03/22	-
13.	Driver 1	Vacant	-	-	-	-	-	-
14.	Driver 2	Vacant	-	-	-	-	-	-
15.	Supporting staff 1	Govind K. Badeliya	7046091223	B.A.	14800-47100	IS-1	01/12/23	-
16.	Supporting staff 2	Bharat Prabhubhai Vaghela	9913122848	7 <sup>th</sup> Standard	14800-47100	IS-1	01/07/24	-

### 1.6 Total land with KVK (in ha): 26.2 ha. :

Sr. No.	Item	Area (ha)
1	Under Buildings and Road	2.0 ha
2.	Under Demonstration Units	1.8 ha
3.	Under Crops	8.0 ha
4.	Horticulture	Nil
5.	Others (Barren submerged under Machchhu-3 dam , Bund and Water drain)	14.4 ha
<b>Total</b>		<b>26.2 ha</b>

### 1.7 Infrastructural development:

#### A. Buildings:

No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq.m)	Expenditure (Rs. Lacs)	Starting year	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	KVK	2019-20	575.32	143.00	-	-	-
2.	Farmers Hostel	KVK	2019-20	443.96	61.00	-	-	-
3.	Staff Quarters (6)	-	-	-	-	-	-	-
4.	Demonstration Units (1) Nadep Compost	SAU	2019-20	18.0	0.40	-	-	-
5	Fencing	JAU	2017-18	4535	7.95	-	-	-
6	Rain Water harvesting system	-	2018-19	-	2.00	-	-	-
7	Threshing yard	JAU	2020-21	400	3.16	-	-	-
8	Roof Rain Water harvesting structure	SAU	2019-20	1.40 lac ltr.	4.6 Lacs	-	-	-
9	Farm road (Farmers' hostel to plot A-2) 173 m	JAU	2023-24	-	4.57 Lacs	-	-	-
10	Farm road (office to farm) 173 m	JAU	2024-25	-	4.57 Lacs	-	-	-
11	Farm protection wall 84 m	JAU	2024-25	-	4.57 Lacs	-	-	-
12	Implement Shed	JAU	2024-25	8.79	4.57 Lacs	-	-	-
13	Cause way	JAU	2024-25	-	2.65 Lacs	-	-	-

**B. Vehicles:**

Type of vehicle	Year of purchase	Cost (Rs.)	Present status
Tractor Massey DI-241	2017	607137/-	Working
Tractor Mini Trishul 10 H.P.	2007	183000/-	Working
Mahindra Bolero	2019	800000/-	Working

**C. Equipments & AV aids:**

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Computer System Acer 18.5	2017	34115/-	Working
Computer System Acer 18.5	2017	34115/-	Working
Printer MF 3010 canon	2017	10266/-	Working
Printer LBP 6230 canon	2017	8761/-	Working
Computer System SIS Agiledag-2277 LG	2010	24210/-	Not Working
Printer MF 4350d canon	-	14327/-	Working
Xerox Machine RICOH Digital	2013	113755/-	Not Working
Computer system Acer	2009	31635/-	Not Working
Computer system Acer	2010	32270/-	Not Working
Printer Samsung	2013	4579/-	Working
Computer system Acer	2009	30968/-	Not Working
LG smart television	2021	189975/-	Working

**1.8. Details of SAC meetings conducted :**

Sl.No.	Particulars	Proposed date of meeting
1	Scientific Advisory Committee – Meeting 1	26/03/2018
2	Scientific Advisory Committee – Meeting 2	19/03/2019
3	Scientific Advisory Committee – Meeting 3	12/03/2020
4	Scientific Advisory Committee – Meeting 4	10/02/2021
5	Scientific Advisory Committee – Meeting 5	10/03/2022
6	Scientific Advisory Committee – Meeting 6	09/02/2023
7	Scientific Advisory Committee – Meeting 7	31/01/2024
8	Scientific Advisory Committee – Meeting 8	27/01/2025

## **2. DETAILS OF JURISDICTION AREA UNDER KVK (No. of talukas)**

### **2.1 Major farming systems/enterprises (Based on the analysis made by the KVK)**

<b>S. No</b>	<b>Farming System/Enterprise</b>
1	Cotton-Wheat/Cotton-Cumin/Groundnut-Wheat/Groundnut-Cumin/Cotton-Summer Sesame
2	Animal husbandry – Crop based enterprise /Dairy product
3	Farm Waste Management/ Crop residue management
4	Value addition in Groundnut/ Sesame

### **2.2 Description of Agro-climatic Zone & major agro ecological situations:**

#### **a) Climate**

<b>Sl. No.</b>	<b>Agro-climatic Zone</b>	<b>Characteristics</b>
1	North Saurashtra Agro Climatic Zone-VI, Morbi, Wankaner and Tankara	Semi arid – region with annual rainfall 550 - 600 mm. Maximum temp – 44°C, Minimum range – 5 to 12°C & high evaporation
2	North west agro climatic Zone- V Maliya (mi) and Halvad block	Arid to semi arid region with annual rain fall – 500 to 550 mm maximum temp - 45°C, Minimum range – 3 to 12°C & high evaporation

#### **B. Topography:**

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

### **2.3. Soil Types**

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

## 2.4. Area, Production and Productivity of major crops cultivated in the district (2022-23)

S. No	Crop	Area (ha)	Production (M. T.)	Productivity (kg/ha)
1	Cotton	196231	121737 (Lint)	659 (Lint)
2	Groundnut	65830	126734	1925
3	Wheat	44325	155796	3515
4	Cumin	27452	25166	917
5	Chickpea	27250	48528	1781
6	Sesame	15365	12663	824
7	Castor	14250	42576	2988
8	Fennel	4695	8772	1868
9	Pearlmillet	2667	7523	2821
10	Onion	2140	41723	19497
11	Garlic	1965	12972	6602
12	Black gram	1900	676	356
13	Green gram	1663	974	586

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

## 2.5. Weather data (2024)

Month	Rainfall (mm)	Month	Rainfall (mm)
January	0	July	301
February	0	August	548
March	0	September	33
April	0	October	114
May	0	November	0
June	81	December	0
		<b>Total</b>	<b>1077</b>
		<b>Rainy Days</b>	<b>34</b>

Date	Rainfall (mm)	Date	Rainfall (mm)	Date	Rainfall (mm)
23-06-2024	20	25-07-2024	3	30-08-2024	8
25-06-2024	13	26-07-2024	4	<b>August-2024</b>	<b>548</b>
28-06-2024	22	30-07-2024	15	03-09-2024	14
30-06-2024	26	31-07-2024	3	06-09-2024	12
<b>June-2024</b>	<b>81</b>	<b>July-2024</b>	<b>301</b>	26-09-2024	3
01-07-2024	47	01-08-2024	3	27-09-2024	4
02-07-2024	117	02-08-2024	33	<b>September-2024</b>	<b>33</b>
08-07-2024	14	03-08-2024	14	15-10-2024	45
09-07-2024	8	09-08-2024	9	21-10-2024	69
11-07-2024	6	13-08-2024	16	<b>October-2024</b>	<b>114</b>
18-07-2024	6	17-08-2024	6		
19-07-2024	22	26-08-2024	88		
20-07-2024	2	27-08-2024	229		
22-07-2024	9	28-08-2024	103	<b>Total Rainy Days</b>	<b>34</b>
23-07-2024	45	29-08-2024	39	<b>Total Rainfall (mm)</b>	<b>1077</b>

## 2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district (Ref. Year 2023-24)

Category	Population (No)	Production	Productivity
<b>Cattle</b>	141470	241670 kg milk	630 g/animal
<b>Buffalo</b>	174976		
<b>Goats</b>	66893		
<b>Sheep</b>	97972	84570 kg wool	863 g/year
<b>Pigs</b>	-	-	-
<i>Crossbred</i>	-	-	-
<i>Indigenous</i>	-	-	-
<b>Rabbits</b>	-	-	-
<b>Poultry</b>			
Hens	1630273	823.02 lakh eggs	50 eggs/year
<i>Desi</i>			
Fish (Reservoir)	-	-	-

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

## 2.7. Priority thrust areas:

Crop/Enterprise	Thrust area
Groundnut, Sesame etc	Increasing the productivity of the major crops by adopting recommendation of dry farming technologies and to create awareness for value addition.
Water conservation	<i>In situ</i> soil moisture conservation and rainwater harvesting. Use of cotton stalk for organic manure.
Cotton	Motivating cotton growers to adopt IPM and INM practices for reducing the cost of production. Recycling of the cotton stalk by cotton shredder
Agriculture	Developing interest among youth for agriculture as a profession.
Horticulture	Value addition in agriculture produces through proper grading, processing, marketing and information technology.
Farm waste	Recycling of the farm waste through composting, vermi-composting and green manuring.
Income generating activities	Self-employment among rural youth and skill oriented income generating activities.
Spices crop	Adopt recommended practice of IDM in spices crop i.e. Cumin & Ajwain.

## 2.8. Details of operational area / villages:

Village	Land(ha)			Population		Animal				Major Crop			Major Problems
	Unirri.	Irri.	Total	Male	Female	Cow	Buffalo	Ship	Goat	Name	Area(ha)	Productivity	
Palas (Wankaner)	228	75	347	413	315	700	750	180	280	Groundnut	125	1300-1500	- Low productivity of almost all crop than dist. avg. -Stem rot & White grub in groundnut. -Pink ball in cotton.
										Cotton	125	1400-1600	
										Sesame	20	600-700	
										Wheat	30	3300-3500	
										Cumin	20	600-700	
Panchdwarka (Wankaner)	426	1000	1426	720	680	300	1700	600	190	Groundnut	625	1800-2000	-Low productivity of almost all crop than dist. avg. -Stem rot & White grub in groundnut. -Pink ball in cotton.
										Cotton	600	1500-1700	
										Sesame	175	800-900	
										Wheat	400	3800-4000	
										Cumin	150	800-900	
										Chickpea	300	2000-2200	
										Garlic+Onion	150	7000-7500	
										Othesr	25	3500-4000	
Shekhradi (Wankaner)	237	152	389	504	482	259	483	-	10	Groundnut	50	1800-2000	-Low productivity of all crop due light soil. -Stem rot in groundnut. -Pink ball warm in cotton. -Phytophthora blight in cumin
										Cotton	200	1700-1900	
										Sesame	50	600-700	
										Fodder	89	700-800	
Amarsar (Wankaner)	314	258	576	891	870	120	490	300	200	Groundnut	200	1900-2200	-Stem root in groundnut. -Pink ball warm in cotton. -Blight and wilt in cumin. -Soft rot in onion. -Tip burning in garlic. -Phytophthora blight in sesame. -Para wilt in cotton.
										Cotton	300	1500-1700	
										Cumin	100	900-1000	
										Onion	100	3000-3300	
										Wheat	50	3600-3800	
										Others	76	-	



Pipaliyaraj (Wankaner)	1300	681	1981	2075	2043	200	2250	250	150	Groundnut	600	1900-2200	-Stem rot in groundnut. -Pink ball warm in cotton. -Blight and wilt in cumin. -Soft root in onion. -Tip burning in garlic. -Phytophthora blight in sesame. -Para wilt in cotton.
										Cotton	1200	2000-2200	
										Sesame	50	800-900	
										Wheat	100	3200-3300	
										Cumin	100	800-900	
										Chickpea	250	1800-2200	
										Garlic+Onion	50	3800-4000	
										Castor	50	2500-3000	
Otala (Tankara)	560	720	1280	1663	1587	35	70	550	271	Groundnut	600	2400-2500	-Stem rot in groundnut. -Pink ball warm in cotton. -Blight and wilt in cumin. -Tip burning in garlic. -Phytophthora blight in sesame. -Para wilt in cotton.
										Cotton	580	2200-2500	
										Sesame	80	800-1000	
										Wheat	150	4500-5000	
										Cumin	250	800-1000	
										Chickpea	150	2800-3000	
										Garlic	50	7000-7200	
Saraya (Tankara)	350	416	766	728	725	290	117	1200	230	Groundnut	440	2300-2500	-Stem rot in groundnut. -Pink ball warm in cotton. -Blight and wilt in cumin. -Phytophthora blight in sesame. -Para wilt in cotton.
										Cotton	300	2400-2600	
										Sesame	10	800-1000	
										Wheat	100	4800-5000	
										Cumin	100	700-800	
										Chickpea	200	2400-2500	
										Others	15	-	
Neknam (Tankara)	700	176	2461	1801	1735	337	620	670	160	Groundnut	1300	1800-2200	-Stem rot in groundnut. -Pink ball warm in cotton. -Blight and wilt in cumin. -Soft root in onion. -Tip burning in garlic. -Phytophthora blight in sesame. -Para wilt in cotton.
										Cotton	1110	2000-2200	
										Wheat	100	4000-4200	
										Chickpea	200	2800-3000	
										Cumin	75	700-800	
										Sesame	50	800-900	
										Garlic-Onion	75	-	

Lakhdhargadh (Tankara)	576	20	596	536	518	188	243	-	-	Groundnut	180	2400-2500	-Stem rot & white grub problem in groundnut. -Pink ball worm problem in cotton. -Phytophthora blight in sesame. -Wilt & blight in cumin. -Soft root in onion.
										Cotton	180	2100-2200	
										Sesame	150	900-1000	
										Pulses	90	800-900	
										Wheat	160	4000-4200	
										Chickpea	150	3000-3200	
										Cumin	60	700-900	
										Others	20	-	
Bhutkotda (Tankara)	533	350	883	882	823	200	100	700	300	Groundnut	450	2500-2700	-Wilt and stunt disease in chickpea.
										Cotton	350	2000-2200	
										Sesame	50	800-1000	
										Garlic+Onion	25	3500	
										Wheat	100	6000-7000	
										Chickpea	150	800-900	
										Cumin	50	3800-4200	
										Others	30	2500-2800	
Chakamapar (Morbi)	425	1207		1001	1207	233	346	720	207	Groundnut	502	1800-2000	-Pink ball worm in cotton. -White grub in groundnut. -Wilt & blight in cumin. -FMP
										Cotton	270	1700-2000	
										Cumin	200	750	
										Chickpea	100	2250	
										Wheat	225	4100	
Jivapar (Morbi)	310	1040		1021	956	109	256	196	55	Groundnut	780	1800-2000	-Pink ball worm in cotton. -White grub in groundnut. -Wilt & blight in cumin. -FMP
										Cotton	350	1800-2000	
										Cumin	75	850	
										Chickpea	100	2200-2400	
										Wheat	200	3800-4200	

										Sesame	60	1200	
										Garlic	50	-	
Dharampur (Morbi)	12	870		797	779	200	365	371	112	Cotton	260	1800-2000	-Pink ball warm in cotton. -Wilt & blight in cumin. -FMP -Salinity problem of soil
										Wheat	30	3000-3500	
										Cumin	25	600-700	
										Sesame(summer)	25	800-000	
Thorala (Morbi)	388	434		852	785	110	398	150	35	Groundnut	260	1250	-Low yield of groundnut due to salinity problem. -Pink ball warm in cotton. -Phytophthora blight in sesame. -FMP in
										Cotton	245	1670	
										Cumin	60	780	
										Chickpea	70	2200	
										Sesame	50	700	
Andarana (Morbi)	1322	1780		1220	1180	100	300	200	400	Groundnut	500	1500-1600	-Pink ball warm in cotton. -White grub in groundnut. -Wilt & blight in cumin. -FMP
										Cotton	450	1700-2000	
										Sesame	250	700-800	
										Wheat	200	4000-4200	
										Chickpea	200	1800-2000	
										Garlic	60	7000-7200	
										Onion		35000-40000	

### **3. TECHNICAL PROGRAMME**

#### **3.1. A. Details of targeted mandatory activities by KVK**

<b>OFT</b>		<b>FLD</b>	
<b>(1)</b>		<b>(2)</b>	
<b>Number of OFTs</b>	<b>Number of Farmers</b>	<b>Area (ha)</b>	<b>Number of Farmers</b>
3	9	20.00	50

<b>Training</b>		<b>Extension Activities</b>	
<b>(3)</b>		<b>(4)</b>	
<b>Number of Courses</b>	<b>Number of Participants</b>	<b>Number of activities</b>	<b>Number of participants</b>
35	905	-	-

<b>Seed Production (Qtl.)</b>			<b>Planting material (Nos.)</b>	<b>Fish seed Prod. (No's)</b>	<b>Soil Samples</b>
<b>(5)</b>			<b>(6)</b>	<b>(7)</b>	<b>(8)</b>
<b>Crop</b>		<b>Quantity(qtls.)</b>	50	-	50
Sesame	GT-3	07			
Cumin	GC-4	13			
Onion	GWO-3	01			

### 3.1. B. Operational areas details proposed during 2025

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	Bt. cotton	Sucking Pest, Para Wilt, Pink Boll Worm	1,12,000 ha	Halvad, Tankara, Wakaner, Morbi block	FLD on pink boll worm management. Training on pink boll worm management
2	Groundnut	White Grub Stem Root	42,000 ha	Tankara , Halvad block	Training on pest and Disease management in groundnut.
3.	Cumin	Wilt and Blight	3900 ha	Morbi, Halvad, Maliya	FLD and OFT on disease management and also training for IDM in Cumin.
4	Pomegranate	Seed rot and nematode	1000 ha	Morbi, Halvad and Maliya	Training programmed and crop seminar
5	Chickpea	Wilt and Blight	2600	Morbi, Halvad and Maliya	Training programmed and crop seminar

\* Support with problem-cause and interventions diagram

### 3.2. Technologies to be assessed and refined

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

Thematic areas	Cereals	Oil Seeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation Crops	Tuber Crops	TOTAL
Integrated Pest Management	-	-	-	1	-	-	-	-	-	1
Crop management	-	-	-	1	-	-	-	-	-	1
Disease Management	-	-	-	1	-	-	-	-	-	1
<b>TOTAL</b>	-	-	-	3	-	-	-	-	-	3

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

## **B. Details of On Farm Trials/ Technology Assessment proposed during 2025**

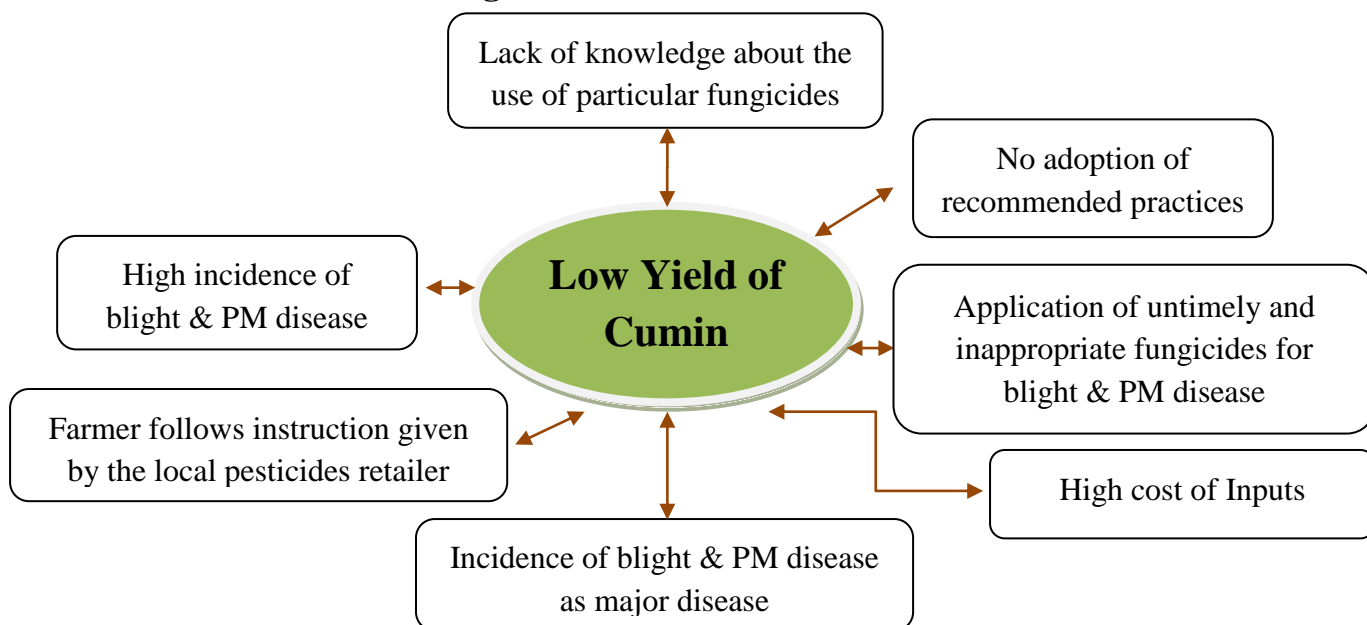
### **1) New OFTs proposed**

#### **OFT: 1 Management of blight and powdery mildew in cumin (New)**

1. **Title of OFT: Management of blight and powdery mildew in cumin**
2. **Agro Ecological Zone :** North Saurashtra Agro-Climatic Zone- VI
3. **Production system :** Irrigated
4. **Problem Definition:**

Gujarat is India's leading cumin-producing state in the country. This accounts for 57.9% of India's total cumin production. Mehsana, Banaskantha, Patan, Surendranagar and Morbi are major regions cumin cultivation in Gujarat. Rajasthan ranked second (14 %), West Bengal (0.20 %) and Madhya Pradesh (0.10 %). Productivity of cumin crop first rank in India as well Asia in the world. Now a day productivity reduced and quality point of view suffering due to incidence of diseases and pest. Farmers are practicing excess use fungicides without followed recommended dose as prescribed by concerned scientist. Therefore cost of cultivation inevitably increase and some time, crop get failure due to inappropriate and excessive use of fungicides. Application of recommended dose for the control of blight and Powdery Mildew disease in the cumin crop is being undertaken for OFT. This OFT traces the transformation in the cumin production through recommended technology in the Morbi district.

#### **• Problem Cause Diagram**



<b>Objective</b>	<b>To minimize the incidence of blight &amp; PM disease in cumin</b>
<b>Reason for low yield of cumin</b>	<ol style="list-style-type: none"> <li>1. No adoption of recommended practices.</li> <li>2. Farmers follows instruction given by the local pesticides retailer</li> <li>3. Lack of knowledge about the required of specific fungicides.</li> </ol>
<b>Technical Intervention</b>	Management of blight & PM disease in cumin
<b>Treatments</b>	<ol style="list-style-type: none"> <li>1. Farmers practice (Use of mancozeb, hexaconazole and sulphur fungicides after infestation)</li> <li>2. Recommended practices Application of the Metiram 55% + Pyraclostrobin 5% WG, 45 gm/15 lit of water or Pyraclostrobin 13.3 % + Epoxyconazole 5 % SE, 23 ml/ 15 lit of water. First spray at 30 DAS and next two spray 20 interval after first spray.</li> </ol>
<b>Cost</b>	Rs. 1450/ OFT (Rs. 4350/-)
<b>Area</b>	1.2 ha
<b>No. of replication</b>	03
<b>Source of technology</b>	Department of Plant Pathology, CoA, JAU, Junagadh (2023)
<b>Technical Indicator:</b>	<ol style="list-style-type: none"> <li>1. Yield (qui/ha)</li> <li>2. Per cent Disease Incidence : 1. Blight 2. Powdery Mildew</li> </ol>
<b>Economic Indicator:</b>	<ol style="list-style-type: none"> <li>1. Cost of Production (Rs/ha)</li> <li>2. Gross return: (Rs/ha)</li> <li>3. Net return: (Rs/ha)</li> <li>4. B:C Ratio</li> </ol>

## OFT: 2

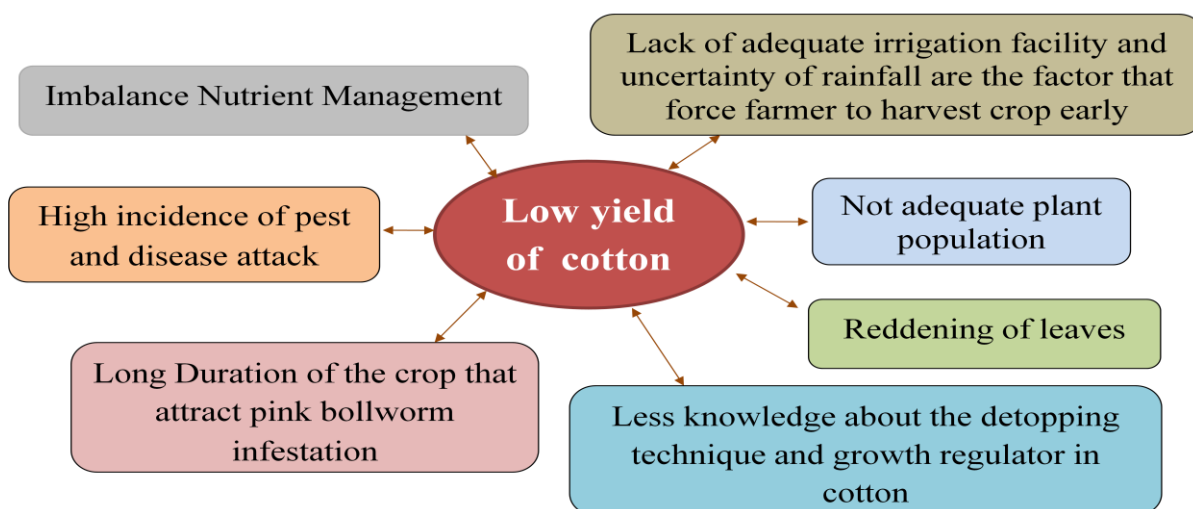
**1. Title of Technology Assessed:** - Assessment of plant growth regulator and detopping technique to enhance yield of cotton.

### 2. Problem Definition:

In Morbi district, cotton crop ranks first than other crops (196231 ha), followed by groundnut (65830 ha). Thus cotton is very important crop of the district for sustainability point of view.

Since last two to three years, infestation of pink bollworm in cotton, uncertainty of rainfall and scattered rain and changing climatic condition, now farmers are forced to harvest crop as against they assumed for 180 to 240 days period. Ultimately this resulted in low production. So that use of plant growth regulator and detopping technique enhance yield of cotton.

### Problem Cause Diagram



Objective	:	To enhance yield of cotton through low cost technology
Reason for low yield of cotton	:	1. No adoption of recommended practices. 2. Farmers follows instruction given by the local pesticides retailer 3. Lack of knowledge about the new technique and growth regulator.
Technical Intervention	:	Enhancement yield of cotton through low cost technique.
Treatments	:	T <sub>1</sub> -Farmer practice : Natural growth of cotton plant T <sub>2</sub> -Detopping the cotton plant at 75 day after sowing for uniform height T <sub>3</sub> - Foliar spray with Ethylene 39% @ 2.0 ml/15 lit of water at 90 DAS
Source of Technology	:	T <sub>2</sub> : CRS, JAU, Junagadh (2016) T <sub>3</sub> : DFRS, JAU, Targhadia (2016)
Area	:	1.2 ha (0.40 ha each farmer)
No. of replication	:	03
Cost of OFT	:	Rs. 900/OFT (Rs. 2700)



## 2) On going OFTs

No.	Crop/ enterprise	Prioritized problem	Title of OFT	Technology options	Source of Technology	Name of critical input	Qty per trial	Cost per trial (Rs)	No. of trials	Total cost for the intervention (Rs.)	Para- meters to be studied	Team member
3	Cumin	Fifteen to twenty percent yield reduction due to blight disease	Minimize the disease intensity through line sowing in cumin crop	Sowing of cumin with broad casting method (Farmer practice)	JAU	Seed of cumin GC-4	6 kg	1200/-	3	3600/-	1) Yield 2) Percentage of incidence of blight disease in 1 sq.mt. area at 75 days after sowing and BC ratio	Dr. K.N. Vadaria, Prof. M.F. Bhoraniya
				Sowing of cumin at 30 cm distance between two rows (Recommended practices.)								
				Sowing of cumin at 15 cm distance between two rows (Intervention).								

### 3.3. Front Line Demonstrations

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

No	Crop	Variety	Thematic Area	Technology for Demonstration	Critical Inputs With Cost (Rs.)	Season And Year	Area (Ha)	No. of Farmers/ Demon.	Parameters Identified
1	Groundnut	GJG-32	Crop Improvement	Improved Variety	33500/-	Kharif-2025	4.0	10	Yield, B:C Ratio, Farmers Perception
2	Cotton	Bt. cotton	IPM	MDP-4 Nos	40000/-	Kharif-2025	4.0	10	Yield, B:C Ratio, Farmers Perception
3	Chickpea	GG-5 /GG-7	Crop Improvement	Improved Variety	20000/-	Rabi-2025-26	4.0	10	Yield, B:C Ratio, Farmers Perception
4	Cumin	GC – 5	Crop Improvement	Improved Variety	39000/-	Rabi-2025-26	4.0	10	Yield & B:C Ratio , Farmers Perception
5	Sesame	GJT-5	Crop Improvement	Improved Variety	3000/-	Summer-2026	4.0	10	Yield, B:C Ratio, Farmers Perception
					135500/-		20	50	

### B. Extension and Training activities under FLDs

S. No.	Activity	No. of activities	Month	Number of participants
1	Field days	2	Aug. and Dec.	50
2	Farmers Training	2	Sep. and Oct.	55
3	Media coverage	1	Sep.	-
4	Training for extension functionaries(ATMA-Morbi)	1	Jul.	35

### C. Details of FLD on Enterprises

a. Farm Implements :- Nil

b. Livestock and Fisheries Enterprises :- Nil

c. Other Enterprises (Mushroom, Apiculture, Sericulture, Vermi-compost, Value Addition, Women empowerment, etc) :- Nil

### 3.4 Training (Including the sponsor and FLD training programmes)

#### A. On Campus

Title of The Training Programme	No. of courses	No. of Participants			Number of SC/ST			Grand Total
		M	F	T	M	F	T	
(A) Farmers & Farm Women								
I Crop Production								
Importance and use of bio fertilisers	1	22	00	22	03	00	03	25
Bio formulations used in NF	1	22	00	22	03	00	03	25
Natural Farming in <i>Kharif</i> Crops	1	22	00	22	03	00	03	25
Preparation of <i>Jivamrut</i> and its role in crop production	1	22	00	22	03	00	03	25
Integrated nutrient management	1	22	00	22	03	00	03	25
Different criteria for natural farming	1	22	01	23	02	00	02	25
Importance and use of bio fertilizer	1	22	00	22	03	00	03	25
II Horticulture:								
Scientific cultivation of spices crops.	1	21	00	21	04	00	04	25
Improved varieties and their characteristic of vegetable crops developed by SAUs	1	24	00	24	01	00	01	25
III Soil Health								
Importance of soil and water analysis.	1	22	00	22	03	00	03	25
Management of macro and micro nutrient in natural farming	1	23	00	23	02	00	02	25
IV Live Stock Production : Nil								
V Home Science : Nil								
VI Plant Protection								
Insect pest & disease management in <i>rabi</i> crops.	1	22	00	22	03	00	03	25
Pest & disease Management in <i>kharif</i> crops.	1	22	00	22	03	00	03	25
Integrated pest and disease management in <i>kharif</i> crops.	1	22	00	22	03	00	03	25
Plant protection measures in natural farming	1	22	00	22	03	00	03	25
Different IPM modules for relevant crops.	1	24	00	24	01	00	01	25
Insect & disease management through seed treatment.	1	25	00	25	00	00	00	25
VII Agri. Engineering : Nil								
VIII Fisheries – Nil								
Total (A)	17	381	01	382	43	0	43	425
(B) RURAL YOUTH: Nil								
(C) EXTENSION PERSONNEL								
Integrated pest management in <i>Kharif</i> crop	1	34	03	37	03	00	03	40
New recommendation and package of practice of <i>Rabi</i> crops	1	34	03	37	03	00	03	40
Total (C)	2	68	06	74	06	00	06	80
Grand Total (A+B+C)	19	449	07	456	49	0	49	505

## B. off Campus

Title of The Training Programme	No. of courses	Number of Participants			Number of SC/ST			Grand Total
		M	F	T	M	F	T	
(A) Farmers & Farm Women								
I Crop Production								
Importance and criteria for natural farming	1	22	01	23	02	00	02	25
Integrated nutrient management in <i>kharif</i> crops	1	21	01	22	03	00	03	25
Integrated weed management	1	22	01	23	02	00	02	25
Natural farming in groundnut	1	21	01	22	03	00	03	25
Irrigation management in <i>rabi</i> crops	1	21	01	22	03	00	03	25
Integrated nutrient management in <i>rabi</i> crops	1	21	01	22	03	00	03	25
Irrigation management in NF	1	22	01	23	02	00	02	25
Management of organic carbon in natural farming	1	21	01	22	03	00	03	25
II Horticulture: Nil								
III Soil Health								
Information regarding Bio-fertilizer application in different crops.	1	22	01	23	02	00	2	25
Role of different macro and micro nutrients	1	22	00	22	03	00	03	25
IV Agri. Engineering: Nil								
V Home Science : Nil								
VI Plan Protection								
Insect pest & disease management in <i>rabi</i> crops.	1	22	02	24	01	00	01	25
Role of predator and parasite in natural farming.	1	22	00	22	03	00	03	25
Store grain pest and their management and precautions	1	21	00	21	04	00	04	25
Practical training for preparation of different component of Natural farming for pest management	1	22	01	23	02	00	02	25
Different criteria for natural farming	1	22	02	24	01	00	01	25
Integrated pest & disease management in <i>kharif</i> crops.	2	42	04	46	4	0	4	50
Insect pest management in natural farming	1	22	00	22	03	00	03	25
Role of predator and parasite in pest management.	1	22	00	22	03	00	03	25
Different components of plant protection in natural farming	1	22	01	23	02	00	02	25
Total (A)	20	432	19	451	49	0	49	500
(B) RURAL YOUTH: Nil								
(C) EXTENSION PERSONNEL: Nil								
Grand Total (A+B+C)	20	432	19	451	49	0	49	500

## C. Consolidated table (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		M	F	T	M	F	T	
(A) Farmers & Farm Women								
I Crop Production								
Importance and use of bio fertilisers	1	22	00	22	03	00	03	25
Bio formulations used in NF	1	22	00	22	03	00	03	25
Natural Farming in <i>Kharif</i> Crops	1	22	00	22	03	00	03	25
Preparation of <i>Jivamrut</i> and its role in crop production	1	22	00	22	03	00	03	25
Integrated nutrient management	1	22	00	22	03	00	03	25
Different criteria for natural farming	1	22	01	23	02	00	02	25
Importance and use of bio fertilizer	1	22	00	22	03	00	03	25
Importance and criteria for natural farming	1	22	01	23	02	00	02	25
Integrated nutrient management in <i>kharif</i> crops	1	21	01	22	03	00	03	25
Integrated weed management	1	22	01	23	02	00	02	25
Natural farming in groundnut	1	21	01	22	03	00	03	25
Irrigation management in <i>rabi</i> crops	1	21	01	22	03	00	03	25
Integrated nutrient management in <i>rabi</i> crops	1	21	01	22	03	00	03	25
Irrigation management in NF	1	22	01	23	02	00	02	25
Management of organic carbon in natural farming	1	21	01	22	03	00	03	25
II Horticulture:								
Scientific cultivation of spices crops.	1	21	00	21	04	00	04	25
Improved varieties of vegetable crops dev. by SAUs	1	24	00	24	01	00	01	25
III Soil Health and Fertility Management								
Importance of soil and water analysis.	1	22	00	22	03	00	03	25
Man. of macro and micro nutrient in natural farming	1	23	00	23	02	00	02	25
Info. regarding Bio-ferti. application in diff. crops.	1	22	01	23	02	00	2	25
Role of different macro and micro nutrients	1	22	00	22	03	00	03	25
V Home Science/Women empowerment: Nil								
VII Plant Protection								
Insect pest & disease management in <i>rabi</i> crops.	2	44	02	46	04	00	04	50
Pest & disease Management in <i>kharif</i> crops.	1	22	00	22	03	00	03	25
IPM and IDM in <i>kharif</i> crops.	3	64	04	68	07	00	07	75
Plant protection measures in natural farming	1	22	00	22	03	00	03	25
Different IPM modules for relevant crops.	1	24	00	24	01	00	01	25
Insect & disease management through seed treatment.	1	25	00	25	00	00	00	25
Role of predator and parasite in natural farming.	1	22	00	22	03	00	03	25
Insect pest management in natural farming	1	22	00	22	03	00	03	25
Role of predator and parasite in pest management.	1	22	00	22	03	00	03	25
Store grain pest and their management	1	21	00	21	04	00	04	25
Practical training for preparation of different component of Natural farming for pest management	1	22	01	23	02	00	02	25
Different criteria for natural farming	1	22	02	24	01	00	01	25
Different components of plant protection in natural farming	1	22	01	23	02	00	02	25
TOTAL (A)	37	813	20	833	92	00	92	925
(B) RURAL YOUTH: Nil								
(C) EXTENSION PERSONNEL								
Integrated pest management in <i>Kharif</i> crop	1	34	03	37	03	00	03	40
New reco. and package of practice of <i>Rabi</i> crops	1	34	03	37	03	00	03	40
TOTAL (C)	2	68	06	74	06	00	06	80
GRAND TOTAL (A+B+C)	39	881	26	907	98	00	98	1005

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		
		M	F	T	M	F	T	M	F	T
Field Day	02	42	6	48	2	-	02	48	2	50
KisanMela	01	500	100	600	28	02	30	528	102	630
Kisan Goshti	10	55	45	100	15	05	20	70	50	120
Exhibition	01	80	40	120	20	20	40	100	60	160
Film Show	-	-	-	-	-	-	-	-	-	-
Farmers Seminar	-	-	-	-	-	-	-	-	-	-
Workshop	-	-	-	-	-	-	-	-	-	-
Night Meeting	02	42	6	48	2	-	02	48	2	50
Lectures delivered as resource persons	As and when required									
Newspaper coverage	As and when required									
Radio talks	As and when required									
TV talks	As and when required									
Popular articles	05	-	-	-	-	-	-	-	-	-
Extension Literatures	05	-	-	-	-	-	-	-	-	-
Advisory Services	As and when required									
Scientific visit to farmers field	10	-	-	-	-	-	-	-	-	-
Farmers visit to KVK	07	-	-	-	-	-	-	-	-	-
Diagnostic visits	04	-	-	-	-	-	-	-	-	-
Exposure visits	-	-	-	-	-	-	-	-	-	-
Ex-trainees Sammelan	-	-	-	-	-	-	-	-	-	-
Soil health Camp	-	-	-	-	-	-	-	-	-	-
Animal Health Camp	-	-	-	-	-	-	-	-	-	-
Improved Implements Demonstration	01	21	03	24	01	-	01	24	01	25
Soil test campaigns	01	-	-	-	-	-	-	-	-	-
Farm Science Club Conveners meet	-	-	-	-	-	-	-	-	-	-
Self Help Group Conveners meetings	-	-	-	-	-	-	-	-	-	-
Mahila Mandals Conveners meetings	01	00	24	24	00	01	01	24	01	25
Celebration of important days (specify)	07	77	23	100	50	20	70	127	43	170
Krishi Mohostava	-	-	-	-	-	-	-	-	-	-
Krishi Rath	-	-	-	-	-	-	-	-	-	-
Pre Kharif Workshop	-	-	-	-	-	-	-	-	-	-
Pre Rabi Workshop	-	-	-	-	-	-	-	-	-	-
PPVFRA Workshop	-	-	-	-	-	-	-	-	-	-
Any Other (Specify)	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>62</b>	<b>1217</b>	<b>347</b>	<b>1564</b>	<b>118</b>	<b>48</b>	<b>166</b>	<b>1369</b>	<b>361</b>	<b>1730</b>

### 3.6. Target for Production and supply of Technological products SEED MATERIALS

Sl. No.	Crop	Variety	Quantity (qtl.)
<b>OILSEEDS</b>	Sesame	GT-6	07
<b>OTHERS (Specify)</b>	Cumin	GC-4	13
	Onion	GJWO-3	01

### PLANTING MATERIALS

Sl. No.	Crop	Variety	Quantity (Nos.)
<b>FRUITS</b>	Jambu	Ravni	50
<b>VEGETABLES</b>	Drum Stick	Jyoti	50

**BIO-PRODUCTS (Sales Only): Nil**

**LIVESTOCK :- Nil**

**VALUE ADDED PRODUCTS :- Nil**

### 3.7. Action plan for management of KVK instructional farm

Total land with KVK : **26.2 ha**

Cultivable land : **9.8 ha** (Irrigated : **7.8 ha**, Rain fed : **2.0 ha**)

Micro-irrigation facility available at KVK : Yes / No. :- **Yes**

## 4. LITERATURE TO BE DEVELOPED/PUBLISHED

### A. Literature developed/published

S.No.	Topic	Number
1	Research papers	01
2	Technical reports	06
3	News letters	04
4	Training manuals	01
5	Popular articles	05
6	Extension literature	04
7	E-publication	-
8	Any other (Please specify)	-
	<b>Total</b>	<b>21</b>

**B. Details of Electronic Media to be produced:- Nil**

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 :- Continued**

S. No.	Type of social media platform	Title / Purpose	Number
1	YouTube Channel	JAU , Junagadh	1
2	Face book page	JAU , Junagadh	1
3	Mobile Apps	JAU ikrushi Sanhita	-
4	Whats App groups	Information about new technology	22
5	Twitter Account	KVK MORBI , JAU – GUJARAT	1
6	Any other (Pl. Specify)	INSTAGRAM - kvkmorbi	1

**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	April
2	Value addition/Implement	November

**5.1 Indicate the Specific Training need Analysis Tools/Methodology followed for**

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

**5.2. Indicate the Methodology for Identifying OFTs/FLDs****For OFT:**

- i) Field level observations      ii) Farmer group discussions

**For FLD:**

- i) New variety/technology      ii) Existing cropping system      iii) Problems at field level

**5.3. Field Activities**

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

Blocks	Wankaner	Tankara	Morbi
Villages	Palas	Otala	Chakampar
	Panch Dwarka	Saraya	Jivapar
	Shekharadi	Neknam	Dharampur
	Amarsar	Lakhdhargadh	Thorala
	Pipaliya raj	Bhutkotda	Andarana



- ii. No. of farm families selected per village : 10
- iii. No. of survey/PRA conducted : One / Village
- iv. No. of technologies taken to the adopted villages: 15
- v. Name of the technologies found suitable by the farmers of the adopted villages:
  - 1) White grub management in groundnut (IPM).
  - 2) Sucking pest management in cumin.
  - 3) Pink ball worm management in cotton (IPM).
  - 4) Para wilt management in cotton.
- vi. Impact (production, income, employment, area/technological–horizontal/vertical)
  - To increase the production and productivity.
  - To increase farm income per area.
  - To reduce the cost of cultivation.
- vii. Constraints if any in the continued application of these improved technologies-  
No

## 6. LINKAGES

### 6.1. Functional linkage with different organizations

Sl.No	Name of organization	Nature of Linkage (pl. specify)
1	<b>Dy. Director of Agriculture.</b>	Most of the Organizations are members of Scientific Advisory Committee (SAC) of KVK and have linkage with different activities of KVK viz., Training Programme, Khedut Sibir, Farmers day, Farmers fair, Film Show, Extension functionary-trainings and Soil health card etc.
2	<b>Dy. Director of Agril. Extension (FTC)</b>	
3	<b>Dy. Director of Horticulture</b>	
4	<b>Dy. Director of Animal Husbandry</b>	
5	<b>District Agriculture officer</b>	
6	<b>JillaUdhyong Kendra</b>	
7	<b>NHRDF</b>	
8	<b>Doordarshan Kendra</b>	
9	<b>All India Radio</b>	
10	<b>District Rural Development Agency(DRDA)</b>	
11	<b>ATMA</b>	
12	<b>District Watershed Development Agency (DWDA)</b>	
13	<b>GGRC</b>	
14	<b>Reliance foundation</b>	
15	<b>GSFC, GNFC</b>	
16	<b>IFFCCO</b>	
17	<b>KRIBHCO</b>	
18	<b>ANANDI NGO</b>	
19	<b>Agakhan Rural Support</b>	

## 6.2. Details of linkage with ATMA

S. No.	Programme	Nature of linkage
1	Field Visit	Field visit for current field problems
2	Training	Training at village

## 6.3. Give details of programmes under National Horticultural Mission

S. No.	Programme	Nature of linkage
1	Training	Training at farmers field with staff of Horticulture department

## 6.4. Nature of linkage with National Fisheries Development Board :- Nil

## 6.5. Additional Activities planned including sponsored projects (NARI / DAESI / DAMU / DFI / PKVY / Skill Trainings / TSP / KKA /Seed Hub on Pulses, etc.) schemes during 2024, if involved:- Nil

## 6.6. Activities planned in respect of FPOs / FPCs :- Nil

## 6.7. Activities planned in respect of developing Integrated Farming System (IFS) Models on farmers' fields during 2025

S. No	Name of the village	No. of IFS models to be identified / developed	Major components of IFS model
1	Palas, Saraya & Thorala	12	Horticulture, Animal , Pulses & Cereals product

## 7. Convergence with other agencies & line departments in the district: Nil

## 8. Innovator Farmer's Meet 2025

Sl. No.	Particulars	Details	Expected No. of participants
1	Farm innovators meet planned — For Kamalam fruit	November	50

## 9. Utilization of hostel facilities:- Farmers and extension workers will stayed in hostel if programme will 2 or more days.

**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	-	Video conferencing / Audio Conferencing / Facebook Live / YouTube Live	-
2	Farmers scientist's interaction programme	-		-
3	Farmers seminars	-		-
4	Expert lectures	-		-
5	Any other (Pl. specify)	-		-

**11.Details of collaborative applied research projects planned if any :- Nil**

## Training Programme

### I) Farmers & Farm women (On Campus)

Date	Clientele	Title of The Training Programme	Duration In Days	No. of Participants			Number of SC/ST			Grand Total
				M	F	T	M	F	T	
Crop Production										
Jan-Mar	PF/FW	Importance and use of bio fertilisers	1	22	00	22	03	00	03	25
	PF/FW	Bio formulations used in NF	1	22	00	22	03	00	03	25
Apr-May	PF/FW	Natural Farming in <i>Kharif</i> Crops	1	22	00	22	03	00	03	25
Jun-Aug	PF/FW	Preparation of <i>Jivamrut</i> and its role in crop production	1	22	00	22	03	00	03	25
Sep-Dec	PF/FW	Integrated nutrient management	1	22	00	22	03	00	03	25
Soil Health										
Apr-May	PF/FW	Importance of soil and water analysis.	1	22	00	22	03	00	03	25
Plant Protection										
Jan-Mar	PF/FW	Insect pest & disease management in <i>rabi</i> crops.	1	22	00	22	03	00	03	25
Apr-May	PF/FW	Pest & disease Management in <i>kharif</i> crops.	1	22	00	22	03	00	03	25
Jun-Aug	PF/FW	Integrated pest and disease management in <i>kharif</i> crops.	1	22	00	22	03	00	03	25
Sep-Dec	PF/FW	Plant protection measures in natural farming	1	22	00	22	03	00	03	25

### II) Extension personnel (On Campus)

Date	Clientele	Title of The Training Programme	Duration In Days	No. of Participants			Number of SC/ST			Grand Total
				M	F	T	M	F	T	
June	EF	Integrated pest management in <i>Kharif</i> crop	1	34	03	37	03	00	03	40
October	EF	New recommendation and package of practice of <i>Rabi</i> crops	1	34	03	37	03	00	03	40

## I) Farmers & Farm women (off Campus)

Date	Clientele	Title of The Training Programme	Duration In Days	Number of Participants			Number of SC/ST			Grand Total
				M	F	T	M	F	T	
Crop Production										
Jan-Mar	PF/FW	Importance and criteria for natural farming	1	22	01	23	02	00	02	25
Apr-May	PF/FW	Integrated nutrient management in <i>kharif</i> crops	1	21	01	22	03	00	03	25
	PF/FW	Integrated weed management	1	22	01	23	02	00	02	25
	PF/FW	Natural farming in groundnut	1	21	01	22	03	00	03	25
Jun-Aug	PF/FW	Irrigation management in <i>rabi</i> crops	1	21	01	22	03	00	03	25
	PF/FW	Integrated nutrient management in <i>rabi</i> crops	1	21	01	22	03	00	03	25
	PF/FW	Irrigation management in NF	1	22	01	23	02	00	02	25
Sep-Dec	PF/FW	Management of organic carbon in natural farming	1	21	01	22	03	00	03	25
Soil Health										
Apr-May	PF/FW	Information regarding Bio-fertilizer application in different crops.	1	22	1	23	2	00	2	25
Jun-Aug	PF/FW	Role of different macro and micro nutrients	1	22	00	22	03	00	03	25
Plan Protection										
Jan-Mar	PF	Insect pest & disease management in <i>rabi</i> crops.	1	22	02	24	01	00	01	25
	PF	Role of predator and parasite in natural farming.	1	22	00	22	03	00	03	25
Apr-May	PF	Store grain pest and their management and precautions	1	21	00	21	04	00	04	25
	PF	Practical training for preparation of different component of Natural farming for pest management	1	22	01	23	02	00	02	25
	PF	Different criteria for natural farming	1	22	02	24	01	00	01	25
Jun-Aug	PF	Integrated pest & disease management in <i>kharif</i> crops.	1	20	03	23	02	00	02	25
	PF	Integrated pest & disease management in <i>Kharif</i> crops.	1	22	01	23	02	00	02	25
	PF	Insect pest management in natural farming	1	22	00	22	03	00	03	25
Sep-Dec	PF	Role of predator and parasite in pest management.	1	22	00	22	03	00	03	25
	PF	Different components of plant protection in natural farming	1	22	01	23	02	00	02	25

## II) 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	
Sponsored Training Programme											
Crop Production	ATMA-Morbi	PF	Management of macro and micro nutrient in natural farming	1	23	00	23	02	00	02	25
Plant Protection	ATMA-Staff	PF	Different IPM modules for relevant crops.	1	24	00	24	01	00	01	25
Plant Protection	DAO-Morbi	PF	Insect & disease management through seed treatment.	1	25	00	25	00	00	00	25
Horticulture	ATMA-Morbi	PF	Scientific cultivation of spices crops.	1	21	00	21	04	00	04	25
Horticulture	Reliance Foundation	PF	Improved varieties and their characteristic of vegetable crops developed by SAUs	1	24	00	24	01	00	01	25
Crop Production	ATMA-Morbi	PF	Different criteria for natural farming	1	22	01	23	02	00	02	25
Crop Production	ATMA-Morbi	PF	Importance and use of bio fertilizer	1	22	00	22	03	00	03	25
Total				7	161	1	162	13	0	13	175
Sponsored Research Programme – Nil											
Any Special Programmes – Nil											

## Annexure - II

### Details of budget estimate (2025-26) based on proposed action plan

No.	Particulars	BE 2025-26 proposed (Rs.)(Lac)
<b>1</b>	<b>Recurring Contingencies</b>	
1.1	<b>Pay &amp; Allowances</b>	108.2
1.2	<b>Traveling allowances</b>	1.3
1.3	<b>Contingencies</b>	
<i>A</i>	Stationery, telephone, postage and other expenditure on office running, publication of newsletter and library maintenance (purchase of news paper& magazines)	9.3
<i>B</i>	Pol, repair of vehicles, tractor and equipments	2.6
<i>C</i>	Meals/refreshment for trainees (ceiling up to rs.40/day/trainee be maintained)	2.6
<i>D</i>	Training material (posters, charts, demonstration material including chemicals etc. Required for conducting the training)	1.3
<i>E</i>	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	1.3
<i>F</i>	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	1.3
<i>G</i>	Training of extension functionaries	1.3
<i>H</i>	Maintenance of buildings	0.8
<i>I</i>	Establishment of soil, plant & water testing laboratory	1.3
<i>J</i>	Library	0.2
	<b>TOTAL Recurring Contingencies</b>	<b>131.5</b>
<b>2</b>	<b>Non-Recurring Contingencies</b>	
2.1	<b>Works</b>	00
2.2	<b>Equipments Including SWTL &amp; Furniture</b>	00
2.3	<b>Vehicle</b> (Four wheeler/Two wheeler, please specify)	00
2.4	<b>Library</b> (Purchase of assets like books & journals)	00
	<b>TOTAL Non-Recurring Contingencies</b>	<b>00</b>
	<b>REVOLVING FUND</b>	<b>-</b>
	<b>GRAND TOTAL</b>	<b>131.5</b>