ANNUAL ACTION PLAN
(1st January 2024 to 31st December - 2024)

KRISHI VIGYAN KENDRA
JUNAGADH AGRICULTURAL UNIVERSITY, JAMNAGAR

1. GENERALINFORMATIONABOUT THE KVK

1.1 Name and address of KVK with phone, fax and e-mail

Address	Telephone		E mail	Website address & No. of visitors (hits)
	Office	FAX		
Krishi Vigyan Kendra Millet Research Station, JAU Airforce Road, Opp. Digjam Mill Jamnagar- 361 006	(0288) 2710165	(0288) 2710165	kvkjamnagar@jau.in kvkjamnagar@gmail.com	www.jau.in 23531414

* ICT lab was established centrally at University Headquarter, Junagadh Agricultrual University, Junagadh. As a part of ICT on KVK is also established.

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

Address	Telephone		E-mail	Web address
	Office	FAX		
Junagadh Agricultural University, Junagadh – 362 001 (Gujarat)	PBX 2672080-90	(0285) 2672653	dee@jau.in	www.jau.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. K. P. BARAIYA	Senior Scientist & Head Krishi Vigyan Kendra Junagadh Agricultural University, Airforce Road, Opp. Digjam Mill Jamnagar- 361 006	9427980032	kvkjamnagar@gmail.com kvkjamnagar@jau.in

1.4. Year of sanction:

ZARS (KVK) 2001, Letter No.F.No. 18(4)/99-NATP Dated October 31st, 2001
ICAR (KVK) 2004, Letter No.F.No. 8(1)/2002-AE-II(Pt.) Dated February 5th, 2004

1.5. Staff Position (as on 31st December, 2023)

Sl. No.	Sanctioned post	Name of the incumbent	Mobile No.	Discipline	If Permanent, please indicate		Date of joining	If Temporary, pl. indicate the consolidated amount paid (Rs./month)
					Current Pay Band	Present Basic		
1	Senior Scientist & Head	Dr. K.P. Baraiya	9427980032	Plant Protection	131400-217100	152300	24.03.2015	
2	Scientist	Vacant		Crop Production	57700-182400			
3	Scientist	Vacant		Plant Protection	57700-182400			
4	Scientist	Vacant		Horti./ Ag. Engg	57700-182400			
5	Scientist	Vacant		Ext. Education	57700-182400			
6	Scientist	Vacant		Fisheries/ Veterinary	57700-182400			
7	Scientist	Smt. A. K. Baraiya	9998227607	Home Science	68900-205500	98300	17.08.2006	

8	Farm Manager	Smt. D. G. Patel	9737933102	Agronomy	39900-126600	39900	30.07.2018	
9	ProgrammeAssistant	Shri N. D. Ambaliya	9824720448	Agril.	39900-126600	39900	01.02.2020	
10	ComputerProgrammer	Shri C. P. Padhiyar		Computer Operator	39900-126600	55200	29.12.2008	
11	Accountant / Superintendent	Vacant		Adm.	39900-126600	-	-	
12	Stenographer	Shri V. A. Jadav	7203973026	Adm.	19900-63200	-	27.07.2021	26000/-
13	Driver	Vacant		Supt.	19900-63200	-	-	
14	Driver	Shri. D.M. Chauhan	9824173712	Supt.	19900-63200	29300	9.10.2007	
15	Supporting staff	Shri B. V. Bamaniya	9904553794	Supt.	14800-47100	20900	01.11.2014	
16	Supporting staff	Shri B. G. Mokariya	9824551105	Supt.	14800-47100	-	-	

1.6. Total land with KVK (in ha) :20.84 ha

Sl. No.	Item	Area in hectare(s)*
1	Under Building and Road	2.00
2	Under Demonstration units	0.70
3	Under crops	12.40
4	Orchard	3.50
5	Agro-forestry	0.24
6	Others (Farm Pond & Channels)	2.00
	Total	**20.84**

1.7. Infrastructural Development:

A) Buildings

Sl. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expen-diture (Rs.)	Star-ting Date	Plinth area (Sq.m)	Status of const-ruction
1.	Administrative Building	KVK	15-8-11	550	5500000			
2.	Farmers Hostel	KVK	15-8-11	305	3000000			
3.	Staff Quarters (6)	KVK	15-8-11	400	4000000			
4.	Demonstration Units of vegetable	KVK + ATMA	31-3-07	-	-	-	-	-
5	Poly House	RKVY	31-3-09	320	281602	-	-	-
6	Net House	RKVY	31-3-09	150	64498	-	-	-
7	Training Hall	RKVY	20-2-10	190.99	1395800	-	-	-
8	Process Plant	RKVY	20-2-10	197.31	1536400	-	-	
9	Implement shed	RKVY	11-2-10	77.33	297800	-	-	-
10	Rain Water harvesting system	KVK	31-3-2007	26m×26m (2Ponds)60m×60m (1 Pond)	999000	-	-	-
11	Fencing	-	-	Not Avalable	-	-	-	-
12	Threshing floor	-	-	Not Avalable	-	-	-	-
13	Farm godown	-	-	Not Avalable	-	-	-	-
14	ICT lab	-	-	Not Avalable	-	-	-	-

15	Other	-	-	Not Avalable	-	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Toyota Qualis (GJ-10G 433)	2004-05	490200	523058	Working (it is required to be right off)
Hero Honda splendor (bike) GJ-10 BB-1634	2010-11	46475	24985	Working
Mahindra Scorpio (GJ-10 GA-0535)	2019	1035000	43892	Working

1.8 A) Details SAC meeting conducted in the year

Sl.No.	Date	Number of Participants	Salient Recommendations	Action taken
1.	01-10-2005	21	-	-
2.	07-10-2006	30	-	-
3.	02-11-2007	31	-	-
4.	17-10-2008	30	-	-
5.	14-09-2009	33	-	-
6.	29-4-2010	35	-	-
7.	07.04.2011	37	-	-
8.	10.04.2012	32	-	-
9.	02.04.2013	34	-	-
10.	27.12.2013	37	-	-
11.	21.02.2015	25	-	-
12.	29.01.2016	22	-	-
13.	25.10.2016	27	-	-
14.	12.04.2018	29	-	-
15.	25.03.2019	35	-	-
16.	07.03.2020	36	-	-
17.	08.02.2021	41	-	-
18	09.03.2022	39	-	-
19	09.02.2023	50	As below	As below
20	03.02.2024	35	-	-

The Nineteenth Scientific Advisory Committee meeting of Krishi Vigyan Kendra, JAU, Jamnagar was held at Training Hall, Krishi Vigyan Kendra, JAU, Jamnagar on February 9, 2023.

Suggestions made by committee members during presentation:

Sl. No.	Name and Designation of Participants	Salient Recommendations	Action taken
1	Dr. V. P. Chovatiya, Hon'ble Vice Chancellor, Junagadh Agricultural University, Junagadh	➢ Analyze the pooled result of three years OFT organized in jurisdiction.	Suggestion accepted and incorporated, all the OFT completed three years have analyzed and presented by pooled results
		➢ Organized technology week with the period when maximum farmers can use newer technology and spread among maximum farmers.	Suggestion accepted and incorporated, last year organized during 21-25 August, 2023.

		➢ Arrange training on IPM in ajwain through natural farming.	Suggestion accepted and incorporated. Training on IPM in Ajwain arranged for farmers of Jodia taluka (61) participants.
		➢ Replace coriander variety GCr-3 instead of GCr-2 for FLD	Suggestion accepted and incorporated. Replace coriander variety GCr-3 instead of GCr-2 for FLD. For FLD on GCr-4 variety also planned for 2024 action plan.
		➢ In case of FLD of vegetable synchronize observation of picking	Suggestion accepted and incorporated, during current year FLD on brinjal have been organized, and collecting data on picking wise.
		➢ Arrange training on efficient use of irrigation in garlic	Suggestion accepted and incorporated. Training on irrigation management in garlic have been organized on 26.10.2023 with 60 participants.
		➢ Give more emphasis on preparation of DAMU advisory well in advance	Suggestion accepted and incorporated. On receiving of data from IMD, Ahmedabad, immediately preparation and dispatched to farmers group.
		➢ Change training title “bio-product preparation” to “production of natural farming inputs”.	Suggestion accepted and incorporated. Title of training changed “product9on of natural farming inputs” and also organized on
		➢ Give HRD training needs of scientist	Suggestion accepted and incorporated. All the scientist have been informed for HRD training needs.
1	Dr. H. M. Gajipara, Director of Extension Education, JAU, Junagadh	➢ Promotion of farmers through preparation of success stories	Suggestion accepted and incorporated. Success story of farmers prepared and published in Annual progress reports and send to ICAR.
		➢ Maximize the press out of the work done by KVK	Suggestion accepted and incorporated. Maximum tried to press out.
3	Shri R. S. Gohil, District Agriculture Officer, District Panchayat, Jamnagar	➢ Create awareness on nano fertilizers during different extension programmes.	Suggestion accepted and incorporated. During different extension programs, aware farmers about use of nano fertilizers.

2. DETAILS OF DISTRICT

The district of Jamnagar is lies in North Saurashtra Agro climatic zone(VI) with an area of 35.02 lakh hectare land. The total geographical area of entire district (21.8 – 22 ON, 69.0 – 70.7 E) occupies 14125 km^2 i.e. 14.125 lakh ha area in the west of Gujarat state. The climate is arid (80%) and semi-arid (20%) with a mean moisture index of 67.5. About 95 to 98% of annual rainfall comes during the monsoon month of June to October, July and August being the rainiest months. The co-efficient of variation ranges between 50 and 82%. The annual potential evapo-transpiration ranges between 1500 and 1650mm, three times the precipitation, resulting in no flow in the ephemeral channels for the most of the year. The district is water scarcity area droughts are common in this region draughts of moderate to severe intensity occur once in 2 to 3 years. Although the integrated drainage system from the story/rocky/gravelly surfaces and torrential nature of precipitation generates 40 to 60% of rainfall as runoff, steeper slopes and absence of checks allow the water to quickly flow to the sea. Being is hard rock terrain, the groundwater potential is very low, is already over exploited and mined, resulting in either the saline water ingress in the costal aquifers, or drying up of the ground water up to a depth of 100m. Consequently a need for holistic approach to water resource development in the district. Wind velocity prevailing in the district is higher order (14.1 km) ha on an annual average basis due to sea coast area.

According to physio graphically, major portion of the area in the district have an altitude ranging between 25 to 150 meters, which consists ten taluka having gentle slope to moderate slope. The district is marked by radical drainage pattern. Deccan trap basalt occupies a major part of the district. The Quaternary formations include milliolite, limestone, alluvium and Geolian sediments. The dominant land forms are colluvial plains and rocky uplands. Low hills occur in the southern part of district and are dissected by numerous large and small seasonal streams, most of which drain towards north and form potential drainage basins. The district is characterized by shallow, black soil and coastal alluvial soils with large variations in depth, texture, structure salinity, and water erosion. Nearly two third area of the district is under cultivation. The major factors of land degradation are accelerated water erosion and Salinization.

Basic information of operational district, Jamnagar and Devbhumi Dwarka:

Sr. No.	Details	JAMNAGAR		DEVBHUMI DWARKA	
1	Total geographical area	6.075 lakh ha.		4.07509 lakh ha.	
2	Total cultivable area	4.32 lakh ha.		2.52 lakh ha.	
3	Net cultivated area	3.53 lakh ha.		2.38 lakh ha	
4	Total area under forest	0.43 lakh ha.		0.1736 lakh ha	
5	Total irrigated area	0.939 lakh ha.		0.23092 lakh ha.	
6	Number of holdings	1.44 lakh		1.17 lakh	
7	Average annual rainfall	550 mm.		550 mm.	
8	Soil type	Medium black		Medium black	
9	Total number of villages	419 (8 city)		280 (8 city)	
10	Total population	13.89 lakh (2011)		7.48 lakh (2011)	
	(a) Male	7.18lakh .		3.84lakh .	
	(b) Female	6.71 lakh		3.64lakh .	
11	Literacy percentage	Rural	Urban	Rural	Urban
	a. Male	86.95	79.55	76.14	80.74
	b. Female	76.22	62.18	55.41	61.36
12	Number of talukas	6 (Six),		4 (Four)	
		Jamnagar		Jamkhambhalia	
		Dhrol		Jamkalyanpur	
		Jodiya		OkhaMandal (Dwarka)	
		Kalavad		Bhanvad	
		Lalpur			
		Jamjodhpur			

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

S. No	Farming system/enterprise			
1	Crops	Cereals	:	Pearl millet, Sorghum, Wheat, Maize
		Pulses	:	Greengram, Blackgram, Chickpea, pigeonpea
		Oilseeds	:	Groundnut, Sesamum, Castor, Mustard,
		Cash crops	:	Cotton,
		Spices and condiments	:	Cumin, Fennel, Coriander, ajwan, Ishabgul
		Vegetables	:	Onion, garlic, potato, chilli, binjal, tomato, cauliflower, Cowpea, cabbage, okra, peach, cucurbits etc
		Horticulture	:	Chiku, pomegranate, lemon (Citrus), Jamun, Aonla, guava, custard apple, papaya, coconut, ber, Almond, Banana, Dragon fruit, Drum stick
		Floriculture	:	Rose, merry gold, vevanti, etc
		Other Crops	:	Chikori, Fenugreek, Mulberi neem
2	Live stock	Bullocks and cows		
		Buffaloes		
		Sheep		
		Goats		
		Horse and camel		
		Poultry		
		Others animals		
3.	Fishery	340 km coastal belt		4832 tonnes fish production

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
Zone–VI	North Saurashtra	The influence area of North SaurashtraAgroclimatic Zone is spread among five districts *viz*., Amreli (7 taluukas out of 10), Bhavnagar (7 talukas out of 14), Jamnagar (all the 10 talukas), Rajkot (9 talukas of 13) and Surendranagar (6 talukas out of 9) covering 39 talukas in all. The influence area of the zone lies between 21°-02' to 23°-16' North Latitude and 68°-56' to 72°-12' East Longitude. It is founded in the north by the Gulf of Kutch and parts of Rajkot as well as Surendranagar districts, in the East by the Ahmedabad district and ncoastal part of Bhavnagar district, on the South by the Junagadh district and parts of Amreli as well as Rajkot district, to the west by Arebian sea. The North Saurashtra region which comprises the peninsular part of Gujarat has low to medium rainfall and shallow to medium black soils and also coastal saline alluvial soils. In this Agro-climatic zone, cotton (Bt), groundnut, pearlmillet, wheat are the major crops which contribute considerably to the economy of the state. In Saurashtra, among this zone taking in to consideration the rainfall pattern, the topography, soil characteristics, the climate and the cropping pattern have been identified in Gujarat. The North Saurashtra zone have five main / sub station cum testing centre of University like Dry Farming Research Station with KVK, Targhadia (Rajkot District), Main Millet Research Station with KVK, Jamnagar, Oilseeds Research Station (Sesamum, Mustard, Sunflower) with KVK, Amreli, Dry Farming Research Station, Nanakandhasar, (Surendranagar District) and Dry Farming Research Station, Jamkhambhalia (Jamnagar District).

b) Topography

Agro – Ecologicalsituation in the District

The advent of southwest monsoon greatly influences seasonal patterns of rainfall distribution in the district. Thus, meanannual rainfall provides useful comparison of agriculturalpotential of a given situation in the district. The mean rainfall in the district 539.17mm

The physiography of entireregion of district is more or less flat. However, the region is undulating with slopes having little hillyareasfrom 25 to150 metersPhysicalfeatures of the area vary from flat landto150 meters above meansea level. Most of the area falls in the range of 25m to 150m above mean sea level.

Based on the soilsurveyinformation of the zone, the soils of the district hence been broadly classified in tofine categories Available information about the properties of these soils and their textures has been considered. The types of soils categories are as under: -

Shallow black soils

Medium black soils

Saline alkali soils

Costal alluvial soils

Hilly soils

While delineating the zoneintodistrict agro ecological situations, there major factors including varioussoil types, altitude and the rainfall patterns have primarily been considered. The district can be delineated into five agro ecological situations.

Although, each of the situations has rainfed and irrigated condition, but irrigationhas not been considered in identification of the agro ecological situations. While deciding the major crops, cropping patterns and constraints in production, mention has been made of both these conditions one or the other agro ecological situation occurs in the influencearea of the district. The fact that this does not preclude the existence of more than one agro ecological situations within the same area.

Sl. No.	Agro EcologicalSituation	Soiltexture	Altitude	Principal crops	Specialfeatures	Approximate area (000ha)	Taluka included	Characteristics
AES-1	Shallow Black soils with 500-600 mm Rainfall	Sandy clay loam to clayey	75 – 150	Groundnut, wheat, sorghum, pearlmillet	Well drained soils with rapid permeability	124	Kalawad, Jamjodhpur, Bhanvad, Okha	Moisturestress, temperature stress
AES-2	Shallow Black soils with 600-700 mm Rainfall	Clayey	75 – 150	Groundnut, wheat, sorghum, pearlmillet	Slightly well drained soils with rapid permeability	180	Part of Kalyanpur, Jamnagar, Jamkhambhalia, Lalpur, Dhrol, Jodia	Moisturestress, temperature stress
AES-3	Coastal Alluvial soils with 300-400 mm Rainfall	Clayey loam to clayey	50	Groundnut, pearlmillet, sorghum, chickpea	Low nitrogen and phosphus	181	Jodia, part of Okha, Jamkhambhalia, Kalyanpur& Jamnagar	Salt affected salinity
AES-4	Coastal Alluvial soils with 500-700 mm Rainfall	Silt clay	25-50	Groundnut, pearlmillet, sorghum, chickpea	Low nitrogen and phosphorus	299	Kalyanpur, Jodia& Jamnagar, Khambhadia, Lalpur, Dwarka	Salt affected salinity
AES-5	Coastal Alluvialshallow black soils with 300-400 mm Rainfall	Sandy loam toclay loam	0-25	Sorghum, Pearlmillet, Groundnut, Sesamum	Aridclimate	31	Okha	Known salinityforgenus ephedra seacoast very rich in

								Alghlflor and fanner of economic importance.

2.3 Soil type

As the geographical formation of Saurashtra is to volcanic origin, the soils are generally desiredfrom basaltic rock known as Daccan trap. This is the commonest rock in India and due to its extensive occurrence in south is called "Daccan Traps". In many parts, they6 have flat top features and hence, are also known as plateau basalt. The trap rocks, which occupy a large part of western cost of India, is also covering North Saurashtra zone. The most common colour of the trap rock in the region is dark grey. On weathering, trap rock form a ferruginous gravelly material known as murrum, which under lie-soil formed in situ. Soils, thus derived are either brown red in colour or regular, the black soil. In district black or brown colour is predominant. The soils are shallow to moderately deep. The detailed soil survey information for the soils of Jamnagar district are as under.

S. No	Soiltype	Characteristics	Area in ha
1	Shallow black soils	These soils have developed from basaltic trap especially from granite and gneiss parent materials. They light grey in colour. Taxonomically, they are classified as *Ustorthents* and *Ustochrepts*. Soils depth varies for cm to 45 cm. They are gravelly but mainly they are sandy clay loam to clayey in texture. The clay on tent in surface soil varies from 20% to 77.49% and calcium carbonate content varies from 3.76 to 26.71 per cent. The soil structure is weak, mainly sub angular blocky and occasionally crumb. Since these soils lack district profile layering and are shallow, capacity to retain moisture is not sufficient. The soils are neutral to alkaline in reaction p^H ranges from 7.3 – 8.4) and from fertility point of view, these are medium in available nitrogen, low to medium in available phosphorus and adequate in availability of potash.	124000 ha (Kalawad, Jamjodhpur, Bhanvad, Okha)
2.	Medium black soils	The major portion of Jamnagar (Some part of Kalyanpur, KHambhaliya& Jamnagar, major part of Lalpur, Dhrol, Jodiataluka is covered under medium black soils. These residual soils have basaltic trap parent materials. These soils vary in depth from 30 to 60 cm or more at few places. They are calcareous in nature. A layer of murrum (Unconsolidated material of decomposed trap and limestone) is generally found in sub soil layer. The drainage does not pose any problem, because of porous sub soil layer. Morphologically, the profile of these soils has A-C horizon characteristics, having moderate sub angular blocky structure. They are plastic and sticky and hard in consistency on drying. The colour of these soils varies from very dark brown to light grey. Taxonomically, these soils are classified as *Ustochrepts* in *Inceptisol* order. The soils are dominated by smectite group of clay minerals which give to mild cracking in dry season, due to which these are further classified as *Vertic – Ustochrepts* at sub group level. The soils are clay loam to clayey in texture. The souls are highly retentive of moisture because higher percentage of clay content. The percentage of clay content in the surface varies from 31.79 to 73.27 per cent, while no definite trend of clay content in different horizon of the profile is observed. The chemical composition of these soils is neutral to alkaline reaction (p^H7.4 to 8.9). Calcium is the dominant exchangeable cation followed by magnesium. The soils are generally low to medium in available nitrogen, phosphorus and adequately supplied with potassium. The calcium carbonate contents various from 5.26 to 20.36 per cent in these soils.	180000 ha (Part of Kalyanpur, Jamnagar, Jamkham-bhalia, Lalpur, Dhrol, Jodia)
3.	Saline alkalisoils	Saline alkali souls are extensively distributed on the coastal are3a as well as inlands. These soils are located in the districts of Jamnagar (Jodia, part of Okhamandal, Kalyanpur, Jamkhambhaliya and jamnagartalukas). These soils are originated as a result of higher water table, low rainfall and high evaporation losses during summer months resulting into upward movement of	181000 ha (Jodia, part of Okha, Jamkhambhali

		salts, poor drainage, use of saline ground water and ingress of sea water (in coastal areas). The souls are classified as *Fluvaquents, Halaquents,* and*Haplaquents* (Entisol): *Haplaquents* and *Haptaquepts* in order – *Inceptisol.* Texturally these soils vary from sandy loam to clay. The degree of salinity and alkalinity is also highly variable. In Jamnagar district, the saline and alkaly soils are widely distributed mainly termed as coastal soil. The soils are sandy loam to clay loam in texture. The EC varies from 1.54 to 38.6 m.mhos/cm and ESP ranges from 9.2 to 74.64% in surface soil. The p^H varies from 7.6 to 9.00 in surface soils and normally calcareous in nature. Most of these soils are low to medium in available nitrogen and phosphorus and high in available potash.	a, Kalyanpur&Jamnagar)
4.	Costal alluvials oils	these soils are located in the district of Jamnagar consisting Kalyanpur, Jodia and Jamnagar, Jamkhambhadia, Lalpur, Dwarka (OkhaMandal) and Dhrol, talukas. These soils are sandy clay loam to clay in texture. These soils are also affected with salts and are saline sodic in nature. The surface soil varies from 1.54 to 38.6 m.mhos/cm in Electrical conductivity, and from 9.2 to 74.64 in Exchangeable sodium percentage. The soil reaction varies with situation ranging from moderately alkaline or highly alkaline (p^H 7.6 to 9.0). The souls are normally medium in fertility. Taxonomically, these souls are classified as *Halaquents* and *Haplaquents* – Entisol and *Helaquepts* and *Hapdaquents* in Inceptisol order.	299000 ha (Kalyanpur, Jodia& Jamnagar, Khambhadia, Lalpur, Dwarka)
5.	Hilly soils	These soils occur in some parts Bhanvad and Jamjodhpurtalukas of Jamnagar district. Because of the steep slope and erosion, the profile is not developed. These soils are developed because of weathering of parent materials existing basaltic trap limestone and sand stone. These soils are shallow to moderately deep and are coarse to find in their texture. The texture varies from loamy sand to clay loam to clay. They have under composed rock fragments and are low in fertility status. These soils are placed in to *Ustorthents* and those near foothills and valley are comparatively deeper can be placed under *Ustochrepts*and can be classified under estisol and *Inceptisol* orders respectively.	31000 ha (Some part of Bhanvad and Jamjodhpur)

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

S. No	Crop	Jamnagar			Devbhumi Dwarka		
		Area (ha)	Production (Qtl)	Productivity (Qtl /ha)	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
	Oilseeds						
1	Groundnut	156272	4759460	25.46	202915	5391610	23.95
2	Sesame	8791	73110	8.16	4262	14480	7.31
3	Castor	5204	150930	29.00	0	0	0
4	Soybean	2449	38750	15.82	0	0	0
5	Mustard	3406	66970	19.66	5884	82190	13.97
	Total Oilseeds	**176122**	**5089220**	**20.87**	**213061**	**5488280**	**11.31**
	Cash Crops						
5	Cotton	159183	1520200	9.55	10219	61310	6.00
6	sugarcane	0	0	0	0	0	0
	Total Cash Crops	**159183**	**1520200**	**9.55**	**10219**	**61310**	**6.00**
	Food Grain						
7	Wheat	32615	1236980	37.93	8030	340150	42.36
8	Pearl millet	680	20320	29.88	100	3100	31.00
9	Sorghum	0	0	0	0	0	0
10	Maize	0	0	0	0	0	0

	Total Food Grains	**33295**	**1257300**	**33.91**	**8130**	**343250**	**36.68**
	Pulse Crops						
11	Greengram	3587	34880	9.71	1979	11070	7.63
12	Blackgram	2121	20780	10.6	2905	9710	8.54
13	Cowpea	0	0	0	0	0	0.00
14	Pigeon pea	2260	3906	17.28	0	0	0
15	Moothbean	0	0	0	0	0	0
16	Chickpea	84336	1422640	16.87	59991	1337090	22.29
17	Cluster bean	15	110	7.50	0	0	0.00
	Total Pulses	**92319**	**1482316**	**12.39**	**64875**	**1357870**	**12.82**
	SPICES AND CONDIMENTS						
18	Cumin	7296	66394	9.10	55958	587559	10.5
19	Fennel	1	15	15.0	0	0	0
20	Fenugreek	259	2952	11.4	50	975	19.5
21	Coriander	17323	242522	14.0	32455	503052	15.5
22	Ajwan	3718	35693	9.6	152	1368	9.0
23	Chilli	66	1247	18.90	722	12635	17.5
24	Garlic	938	92768	98.9	0	0	0
25	Turmeric	4	700	175.0	0	0	0
26	Suwa	128	1805	14.1	0	0	0
	Total spices	**29733**	**444096**	**40.66**	**89337**	**1105589**	**14.4**
	VEGETABLES						
27	Onion	1848	434095	234.9	55	12507	227.4
28	Potato	38	9500	250.0	141	36660	260.00
29	Brinjal	1205	291610	242.0	981	132435	135.0
30	Tomato	1499	445803	297.4	634	154062	243.0
31	Cauliflower	410	53874	131.4	190	27892	146.8
32	Cowpea	591	49585	83.9	289	19681	68.1
33	Cabbage	997	253936	254.7	388	73720	190.0
34	Okra	1614	136383	84.5	773	61222	79.2
35	Cucurbits	1671	345062	206.5	1363	203223	149.1
36	Cluster bean	346	30517	88.2	219	15593	71.2
37	Carrot	136	37074	272.6	16	2048	128.0
38	Sweet potato	4	1230	307.5	0	0	0
39	Spinach	6	530	88.3	5	300	60.0
40	Reddish	64	6010	93.9	102	10812	106.0
41	Moringa	141	45966	326.0	28	2408	86.0
42	Fenugreek	80	7960	99.5	920	79120	86.0
43	Pea	113	6735	59.6	5	250	50.0
44	Green Chilli	618	118965	192.5	726	74052	102.0
45	Other vegetable	1162	224498	193.2	1802	169028	93.8
	Total Vegetable	**12543**	**2499333**	**144.56**	**8637**	**1075013**	**126.76**
	CUCURBITACEAE VEGETABLES						
46	Bottle gourd	259	46387	179.1	116	11832	102.0
47	Bitter gourd	79	7497	94.9	82	6642	81.0
48	Musk melon	418	55928	133.8	58	11362	195.9
49	Sponge gourd	73	7548	103.4	58	4576	78.9
50	Ridge gourd	89	10911	122.6	59	4342	73.6
51	Cucumber	210	42693	203.3	202	36400	180.2

52	Water melon	543	174140	320.7	788	128050	162.5
	Total Cucurbitaceae	**1671**	**345104**	**165.4**	**1363**	**203204**	**124.87**
	FRUIT CROPS						
53	Chiku	159	18205	114.5	124	14012	113.00
54	Pomegranate	710	91448	128.8	140	16940	121.0
55	Citrus	378	43205	114.3	98	9212	94.0
56	Aonla	24	2270	94.6	10	550	55.0
57	Guava	33	3000	90.9	16	888	55.5
58	Custard apple	82	7520	91.7	17	1207	71.0
59	Papaya	56	31030	554.1	131	41920	320.0
60	Coconut	166	14874	89.6	410	36736	89.6
61	Ber	192	20659	107.6	178	14845	83.4
62	Kharek	151	13620	90.2	27	1674	62.0
63	Banana	8	3200	400.0	1	300	300.0
64	Mango	556	41144	74.00	111	6771	61.00
65	Jamun	18	1451	80.6	2	60	29.6
66	Orange	16	350	21.9	3	36	12.0
67	Bael	9	2320	257.8	0	0	0
68	Rayan(Khirni)	20	3600	180.0	11	347	31.5
69	Cordia(Gunda)	19	1980	104.2	16	992	62.0
70	Desi Almond	0	0	0	6	420	70.0
71	Kamlam	33	5782	175.2	4	330	82.5
72	Other fruits	121	16081	132.9	41	2136	52.1
	Total Fruits	**2751**	**321739**	**152.78**	**1346**	**149376**	**92.91**
	FLOWERS						
73	Rose	68	6521	95.9	16	1616	101.0
74	Merry gold	189	15536	82.2	56	4592	82.0
75	Mogra	3	320	106.7	7	595	85.0
76	Gaillardia	112	11380	101.6	40	3720	93.0
77	Other flowers	118	11942	101.2	41	3731	91.0
	Total flowers	**490**	**45699**	**97.52**	**160**	**14254**	**90.4**

* Source : DAO, & Dy.Dir.Hort., Jamnagar

2.5. Weather data (January-2023 to December-2023)

Weekly mean Weather data-at JAU, Jamnagar during-2023									
	Temp. °c		R.H.%		WS	BSS	Eo	Rain	Rainy
Week No	Max	Min	I	II	(kmph)	(hrs)	(mm)	(mm)	Days
1-J	25.4	13.4	59	29	6.3	9.1	3.5		
2	27.2	14.2	77	31	4.7	8.3	3.5		
3	25.5	11.6	63	24	5.1	9.6	3.6		
4	24.2	13.4	53	27	6.0	9.2	3.5		
5	27.1	13.4	72	25	5.3	9.3	4.6		
6-F	30.4	16.1	91	29	4.2	9.4	4.7		
7	32.4	15.3	68	19	4.4	10.2	5.2		
8	32.2	17.7	90	30	5.2	10.0	4.7		
9	34.1	19.2	86	27	3.7	9.6	4.6		
10-M	35.3	19.7	64	22	3.9	9.5	5.5		
11	33.7	21.1	77	31	4.4	7.1	5.1		
12	31.0	21.5	83	41	4.7	8.9	5.1	6.5	1
13	31.9	21.2	77	39	7.9	9.4	5.9		
14-A	33.2	22.2	81	37	8.4	9.0	6.5		

15	35.3	22.7	81	34	8.0	9.4	7.5		
16	35.3	24.4	83	49	9.7	9.9	8.1		
17	35.3	24.1	81	43	9.5	8.7	8.6		
18	33.3	23.9	84	49	6.7	8.6	6.7	37.5	3
19-M	37.2	25.7	84	35	9.5	11.4	9.1		
20	35.9	27.1	79	53	14.0	10.9	9.8		
21	36.4	27.4	81	53	11.8	10.9	9.8		
22	35.8	27.8	84	58	15.3	11.0	9.6		
23-J	37.0	28.1	83	48	15.2	9.5	9.6		
24	34.8	26.6	86	67	24.8	4.4	5.8	173.5	5
25	34.2	27.2	86	65	12.9	6.6	4.6		
26	32.7	26.0	95	80	7.0	3.3	3.2	316.5	5
27-J	33.6	26.9	94	74	6.9	4.6	3.5	140.0	2
28	32.7	27.1	91	72	9.8	5.6	4.1	50.0	2
29	32.8	26.8	91	82	10.7	4.2	3.5	123.0	3
30	31.5	26.7	92	80	10.1	4.0	3.3	130.0	4
31	31.5	26.4	88	75	12.7	2.0	4.5	3.0	1
32-A	32.0	26.9	87	72	14.0	3.4	5.3	1.0	
33	32.3	26.3	85	69	12.6	4.2	5.5	0.5	
34	31.8	26.1	87	64	12.1	5.0	4.9	12.5	1
35	33.0	25.2	86	59	8.4	6.3	5.4		
36-S	33.6	25.7	85	54	10.6	9.0	5.6		
37	33.6	25.9	85	59	10.1	8.7	5.7		
38	31.2	25.7	93	78	8.8	3.9	3.4	84.0	4
39	33.8	25.9	87	60	5.7	9.0	5.0	0.5	
40-O	34.9	23.5	94	53	5.6	9.1	4.7		
41	33.5	24.3	86	54	4.8	9.4	4.4		
42	33.7	23.2	85	42	4.2	8.9	4.5		
43	35.1	23.0	85	41	3.6	9.4	4.7		
44	34.4	21.5	69	32	3.3	8.3	4.3		
45-N	34.6	21.4	67	32	3.1	8.1	4.3		
46	31.4	20.2	49	32	3.5	8.5	3.9		
47	30.8	19.1	74	44	3.5	8.0	3.8		
48	27.4	19.3	87	56	5.7	6.5	3.5	2.0	
49-D	27.5	19.0	79	44	7.8	7.7	3.4		
50	27.9	14.7	76	36	3.0	8.7	3.6		
51	27.0	15.9	64	35	6.0	6.1	3.5		
52	28.1	15.4	79	35	4.5	8.2	3.7		
Mean	**32.2**	**22.2**	**81**	**48**	**7.9**	**7.9**	**5.2**	**1080.5**	**31**
Highest	**37.2**	**28.1**	**95**	**82**	**24.8**	**11.4**	**9.8**		
Lowest	**24.2**	**11.6**	**49**	**19**	**3.0**	**2.0**	**3.2**		

* Source: Meteorological observatory, Millet Research Station, JAU, Jamnagar

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

Category	Jamnagar district		Devbhumi Dwarka District	
	Population	Production	Population	Production
Cattle	138176	75.60 MT	126509	
Buffalo	162333	161.92 MT	287600	
Sheep	214785		62504	
Goats	130282	8.89 MT	50263	
Camel	1960	0.88 MT	1582	
Horse	410		325	
Donkey	77		69	

Rabbits				
Poultry				
Fish				

Source: Dy. Dir. Ani. Hus., Jamnagar & Devbhumi Dwarka; Assistant Directorate of Fishries, Jamnagar

2.7 . Details of Operational area/ Villages (2024 to 2026)

Sl No	Taluka	Name of the village	Major crops & enterprises	Major problem identified	Identified thrust area
1	**Jodia**	Vavadi, Beraja, Bhadra, Bhimkata, Manamora	Cotton, groundnut, sesame, castor, greengram, wheat, Gram, cumin, Ajwain, mustard, Soyabean, Vegetable, Fruit crops flowers, live-stock etc	Heavy infestation of sucking pest in cotton, stem rot disease & whitegrub in Groundnut, Root rot in castor, Less area under horticulture crops, Blight in cumin, salinity, pink bollworm in cotton	- ICM in major crops of the district - Organic crop production - Introduction of new crop - Recycling of farm waste - Popularization of MIS - Soil Reclamation - Farm women empowerment - Farm mechanization - Natural farming - Value addition
2	**Lalpur**	Nani Rafudad, Vadpanchasara, Baghla, Nanduri, Ishwariya			
3	**Dwarka**	Tunpani, Gorinja, Positra, Vasai, Kalyanpur			

2.8 Priority thrust areas

Sl. No	Crop/ Enterprise	Thrust area
1.	Cotton, groundnut, castor, cumin, coriander, wheat, vegetables, fruits, etc.	➢ Integrated Crop Management in major crops ➢ IPM & IDM in major field crops ➢ Whitegrub management in Groundnut ➢ Wireworm management in garlic & Onion ➢ Micronutrient management in wheat
2.	Organic/Natural farming	Enhancement of organic farming through improved technologies
3.	Farm waste/ organic matter	Recycling of farm waste through composting, vermicompost, green manuring, etc.
4.	Micro irrigation	Efficient use of water by micro irrigation system, water harvesting structure, and water conservation techniques
5.	Soil	Reclamation of saline & alkaline soils
6.	Farm Women	Farm women empowerment by training in value addition, handi crafts, and small scale enterprises
7.	Improved Implements	Popularization of the mechanized technological know how
8.	Plant protection	Pinkboll worm in cotton and white grub in groundnut,
9.	Horticultural area	Enhancement of pomegranate, date palm, draganfruit,
10	Storage facility	Requirement of storage techniques and value addition in farm produce
11.	Water conservation & use of Micro irrigation	Efficient use of water by micro irrigation system, water harvesting structure, and water conservation techniques

3. TECHNICAL PROGRAMME

3.1. Details of targeted mandatory activities by KVK

OFT		FLD	
(1)		(2)	
Number of OFTs	Number of Farmers	Area (ha)	Number of Farmers
4	12	162	450

Training		Extension Activities	
(3)		(4)	
Number of Courses	Number of Participants	Number of activities	Number of participants
36	1440	**229**	17557

Seed Production (Qtl.)	Planting material (Nos.)	Fish seed prod. (kg)	Soil Samples
(5)	(6)	(7)	(8)
232.5	1700	0	350

3.1. B. Operational areas details proposed during 2024

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	Lower yield, replacement of old variety	295000 ha.	Vavadi, Beraja, Bhadra, Bhimkata, Manamora, Nani Rafudad, Vadpanchasara, Baghla, Nanduri, Ishwariya, Tunpani, Gorinja, Positra, Vasai, Varvala	OFT, FLD and Training
2	Chilli	Thrips, Curling of leaves, nutritional deficiency	1600 ha	- " -	Training
3	Garlic	Puple blotch, wireworm, yellowing, tip burning	7500 ha	- " -	Training
4	Sesame	Leaf webber, mite, blight, stem rot, root rot, yellowing, replacement of old variety	11500 ha.	- " -	OFT, FLD and Training
5	Wheat	Fall army worm, Stem borer, Termite, nutritional deficiency,	58000 ha	- " -	FLD and Training
6	Vegetabe mittens (Okra, Brinjal)	Drudgery reduction, cut & wounds, skin hardness, blisters and abrasions,	3000 ha	- " -	FLD and Training
7	Animal Husbandry	Due to inadequate nutrients in the daily ration, the % fat in milk and productivity of the animal decreased hence, financial loss.	Majority farmers (350000)	- " -	FLD and Training
8	Cotton	Pink bollworm, redding & yellowing of leaves, sucking pests, weevil,	180440		FLD and Training
9	Chicory	ICM	50		FLD and Training
10	Cumin	Aphid, thrips, wilt, powdery mildew and cumin blight, INM, variety	4650		OFT, FLD & Training
11	Ajwain	IDM, Variety	4500		FLD and Training
12	Coriander	Aphid, powdery mildew, IDM, IPM, Variety	4000		FLD and Training
13	Pearl millet	Variety, IPM, IDM	3520		FLD and Training
14	Chick pea	IPM, Variety, wilt, stund virus,	31300		FLD and Training

15	Kitchen gardening	Nutritional security	Majority farmers		FLD and Training

* 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
Varietal Evaluation		1	1							2
Seed / Plant production										
Weed Management										
Integrated Crop Management										
Integrated Nutrient Management										
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Value addition										
Integrated Pest Management		1			1					2
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL		**2**	**1**		**1**					**4**

A.2. Abstract on the number of technologies to be refined in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Kitchen garden	Tuber Crops	TOTAL
Varietal Evaluation										
Seed / Plant production										
Weed Management										
Integrated Crop Management										
Integrated Nutrient Management										
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Post Harvest Technology										
Integrated Pest Management										
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL										

A.3. Abstract on the number of technologies to be assessed in respect of livestock / enterprises

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Vermi culture	Fisheries	TOTAL
Evaluation of Breeds								
Nutrition Management								
Disease of Management								
Value Addition								
Production and Management								
Feed and Fodder								
Small Scale income generating enterprises								
TOTAL								

A.4. Abstract on the number of technologies to be refined in respect of livestock / enterprises

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitary	Fisheries	TOTAL
Evaluation of Breeds								
Nutrition Management								

Disease of Management									
Value Addition									
Production and Management									
Feed and Fodder									
Small Scale income generating enterprises									
TOTAL									

B. Details of On Farm Trial / Technology Assessment during 2024

S. No.	Crop/ enterprise	Prioritized problem	Title of OFT	Technology options	Source of Technology	Name of critical input	Qty per trial	Cost per trial	No. of trials	Total cost for the OFT (Rs.)	Parameters to be studied	Team members
1	Brinjal	Heavy infestation of leaf sucking pest was found	**Management of brinjal whitefly**	**(Farmers practices).** Injudicious use of insecticides. (Spray insecticides at weekly interval)	FP				3		1.Record no. of whitefly per leaf 2. Yield data.	Dr. K.P.Baraiya
				2. **Recommendation)**Three sprays of chlorantraniliprole 18.5 SC, 0.002 %, 1.08 ml/10 litre water at 15 days interval starting from the pest infestation are recommended under South Saurashtra Agro-climatic Zone. The PHI for chlorantraniliprole 18.5 SC, 0.002 % is one day.	SAU	chlorantraniliprole	30 ml	500	3	1500		
				3. **(Refinement 1)** Spray of *Beauveria bassiana* 1.15 WP (Min. 2 x 106 cfu/g) 0.007 % (60 g/10 litre of water), first spray at pest initiation and subsequent four spray should be given at 10 days interval after first spray	-	*Beauveria bassiana*	2 kg	220	3	660		
				4. **(Refinement 2)** Spray of Difenthuron 50% WP @ 5 g/lit of water at 15 days interval at pest initiation.	-	Difenthuron	1 kg	900	3	1800		
2	Chickpea	Low yield in existing variety, Enhancing productivity	Assessment of suitable high yielding Chickpea Variety in Rabi season for Jamnagar	1. GJG-3 2. GG-5 3. GJG-6	JAU, Junagadh	Seed	25 kg seed of both variety	5000	3	15000	yield (kg/ha), Plant Height (cm) at harvest time, No. of branches per plant , No. of pods per plant , 100 seed weight (g), Economics	Shri. A.V. Savaliya Scientist (DAMU)
4	Home Science	Anemia	Assessment of hemoglobin and calcium level through	T_1– Farmer Practices (Existing dietary pattern) [Chapati, dal, rice, butter milk, jaggari, vegetable, pulses etc. and not use of extra supplementary nutritive product in routine]	Department of Chemical Engineering,	amla powder + drumstick leaf	3	1500	3	4500	Hemoglobin level. Calcium level	A.K.Baraiya and Dr. K.P.Baraiya

			drumstick leaf powder and amla powder in farm women.	T_2– Assessment practice: Iron supplements as amla powder (5 gm/day) + drumstick leaf powder (5 gm/day) 3.Storage in Triple layer hermetic "Purdue Improved Crop Storage"(PICS) bags	IIT, Hyderabad	powder						
5	**Ground nut**	Heavy incidence of leaf spot & rust in later stage	Management of foliar diseases in ground nut	**1. Farmer's Practices**:- Injudicious use of fungicides. [use of hexaconazole, carbendazim, floxistrobin, Metalaxyl 8 + Mancozeb 64, Kitazin 48 EC, Kresoxim-Methyl 44.3 SC, Azoxystrobin 11 + Tebuconazole 18.3 SC, Chlorothalonil 75 WP, Cymoxanil 8 + Mancozeb 64 WP, Difenconazole 25 EC, Tebuconazole + Trifloxystrobin 75 WG, Tebuconazole 25 EC] after severe attack of diseases.	SAU	-	-	-	3	3600	Record early and late leaf spot and rust from five randomly selected plants from each plot at 30, 60 and 90 days after germination and at harvest stage and yield kg/ha	Dr. K.P.Baraiya
				2. Recommendation :-Foliar spray of hexaconazole 5% SC (10ml/10 lit water) at 40 DAS + Foliar Spray of Talcum powder based *Pseudomonas fluorescens* 0.5% ($2x10^6$ cfu/g) @ 100 gm/10 litre water at 60 and 80 DAS.	SAU	Hexaconazole 5% sc, Pseudomonas	500 ml, 2 kg	1900	3			
				3. **Refinement:-** Foliar spray of Foliar Spray of Talcum powder based *Pseudomonas fluorescens* 0.5% ($2x10^6$ cfu/g) @ 100 gm/10 litre water at 40, 60 and 80 DAS.	SAU	*Pseudomonas fluorescens*	3 kg	1500	3			

S. No.	Crop/ enterprise	Prioritized problem	Title of OFT
1	Brinjal	Infestation of sucking pests in Brinjal	Management of Brinjal whitefly
2	Chickpea	Low yield in existing variety, Enhancing productivity	Assessment of suitable high yielding Chickpea Variety in Rabi season for Jamnagar
3	Groundnut	Heavy incidence of leaf spot & rust in later stage	Management of foliar diseases in groundnut
4	Home Science	Anaemia due to iron deficiency and Arthritis due to calcium deficiency in women	Assessment of hemoglobin and calcium level through drumstick leaf powder and amla

OFT-1 Brinjal (Assessment)

Title: Management of Brinjal whitefly

Objective: To manage the leaf sucking pest infestation in sesame

Problem definition: attack of leaf sucking pest is increase

- Heavy infestation of leaf sucking pest was found

- Improper cultivation practices
- Lack of knowledge about pest outbreaks and its management

Problem diagram :-

Improper cultivation practices	**Management of brinjal whitefly**	Irregular irrigation
Mono-cropping system		Lack of knowledge about pest outbreaks and its management
No adoption of recommended practices		In judicious use of chemical pesticide
Farmer follows instruction given by the local pesticides retailer		Heavy incidence of pest and disease attack

Treatments:

1. Injudicious use of insecticides. (Spray insecticides at weekly interval) **(Farmers practices).**
2. Three sprays of chlorantraniliprole 18.5 SC, 0.002 %, 1.08 ml/10 litre water at 15 days interval starting from the pest infestation are recommended under South Saurashtra Agro-climatic Zone. The PHI for chlorantraniliprole 18.5 SC, 0.002 % is one day.**(Recommendation)**
3. Spray of *Beauveria bassiana* 1.15 WP (Min. 2 x 10^6 cfu/g) 0.007 % (60 g/10 litre of water), first spray at pest initiation and subsequent four spray should be given at 10 days interval after first spray.**(Refinement 1)**
4. Spray of Difenthuron 50% WP @ 5 g/lit of water at 15 days interval at pest initiation. **(Refinement 2)**

No. of Replication: 3 (Farmers)

Observations:

1. Record no. of whitefly per leaf.
2. Yield data.

OFT:2

1. Title : Assessment of suitable high yielding Chickpea Variety in Rabi season for Jamnagar District

2. Objective : To find out suitable high yielding Chickpea variety for Rabi season

Problem definition:

1. Low yield.
2. Threat to the sustainability of crop production
3. High cost of production
4. Suffering from disease like wilt and stunt

Problem diagram :-

Improper cultivation practices	**Assessment of suitable high yielding Chickpea Variety in Rabi season for Jamnagar District**	Multi season cropping system
Low yielding variety		Mono-cropping system
Heavy incidence of pest and disease attack		Lack of knowledge about nutrient management
		In judicious use of chemical fertilizer
In judicious use of pesticide		

Treatments:

T_1 :- GJG-03 (Farmer Practices)

T_2 :- GG-05

T_3 :- GJG-06

Characterization :-

	Year Of Notification	Released For	Maturity days	Disease reaction
T 1 :- GJG-03	2010	Rainfed	98	Moderately Resistant to wilt and stunt
T 2 :- GG-05	2017	Irrigated	103	Moderately Resistant to wilt and resistant to stunt
T 3 :- GJG-06	2016	Rainfed	112	Resistant to wilt and stunt

No. of Replication :- 3 (Farmers)
Source of Technology: - Junagadh Agricultural University, Junagadh
Thematic area: Varietal evaluation
Observation:

1. yield (kg/ha),
2. Plant Height (cm) at harvest time,
3. No. of branches per plant ,
4. No. of pods per plant ,
5. 100 seed weight (g),
6. Economics

OFT-3
Title: Management of foliar diseases in groundnut
Objective: To minimize the foliar diseases (leaf spot and rust) in groundnut
Problem definition:

1. Heavy incidence of rust in later stage
2. Heavy incidence of leaf spot
3. Lack of knowledge about scheduled spray of fungicides
4. Problem in identification and diseases initiation
5. Injudicious use of fertilizer
6. Excess irrigation
7. Multi season cropping system
8. Mono cropping system
9. Overlapping of the crop's seasons
10. Treatment of diseases after savior attack

Problem diagram :-

Heavy incidence of rust in later stage	**Management of foliar diseases (leaf spot and rust) in groundnut**	Treatment of diseases after savior attack
Mono cropping system		Overlapping of the crop's seasons
Heavy incidence of leaf spot		Multi season cropping system
Excess irrigation		Injudicious use of fertilizer
Problem in identification and diseases initiation		Lack of knowledge about scheduled spray of fungicides

Treatments:

1. **Farmer's Practices**:-Injudicious use of fungicides. [use of hexaconazole, carbendazim, floxistrobin, Metalaxyl 8 + Mancozeb 64, Kitazin 48 EC, Kresoxim-Methyl 44.3 SC, Azoxystrobin 11 + Tebuconazole 18.3 SC, Chlorothalonil 75 WP, Cymoxanil 8 + Mancozeb 64 WP,

Difenconazole 25 EC, Tebuconazole + Trifloxystrobin 75 WG, Tebuconazole 25 EC] after severe attack of diseases.

2. **Recommendation** :-Foliar spray of hexaconazole 5% SC (10ml/10 lit water) at 40 DAS + Foliar Spray of Talcum powder based *Pseudomonas fluorescens* 0.5% ($2x10^6$ cfu/g) @ 100 gm/10 litre water at 60 and 80 DAS.
3. **Refinement:-** Foliar spray of Foliar Spray of Talcum powder based *Pseudomonas fluorescens* 0.5% ($2x10^6$ cfu/g) @ 100 gm/10 litre water at 40, 60 and 80 DAS.

No. of Replication: 3 (Farmers)
Source of Technology: - Department of Plant Pathology, COA, JAU, Junagadh
Thematic area: IDM
Observations:

1. Record early and late leaf spot and rust from five randomly selected plants from each plot at 30, 60 and 90 days after germination and at harvest stage
2. Record yield.

OFT-4 Home Science
Title : Assessment of hemoglobin and calcium level through drumstick leaf powder and amla powder in farm women.

Objective :

1. To assess the level of hemoglobin and calcium among farm women
2. To improving the hemoglobin and calcium level in farm women

Problem Definition :-

1. Anemia
2. Arthritis due to calcium deficiency in women
3. Lake of knowledge about nutrition
4. Lack of awareness about balanced diet

Treatment

T_1–Farmer Practices (Existing dietary pattern) [Chapati, dal, rice, butter milk, jaggari, vegetable, pulses etc. and not use of extra supplementary nutritive product in routine]

T_2– Assessment practice-1 : Iron supplements as amla powder (5 gm/day) + drumstick leaf powder (5 gm/day)

No. of Replication/farmers :- 3

Source of Technology : Department of Chemical Engineering, IIT, Hyderabad
Observation : Pre and Post (after three month)

1. Hemoglobin level
2. Calcium level

Cost of OFT : (Rs. 1500/- per person)

3.3 FRONTLINE DEMONSTRATIONS

A. Details of FLDs to be organized –

Sr. No.	Name of Crop/ Enterprise	Name of Variety Enterprises	Thematic area	Technology demonstrated	Critical Inputs	Season and year	Area (ha.)	No. of farmers /Demo.	Parameters identified
1	Cotton	Bt. Cotton	IPM/INM	Insecticide, Bio pesticide	Azadirechtin, Lambda cyhalothrin, MDP, SNPV, *Beauveria bassiana*	Kh-24	10	25	yield
2	Wheat	GW- 451/ 463/513	Varietal	Variety	Seed	Rabi-24	4	10	Yield
3	Ajwain	Gujarat Ajwain-2	IPM/IDM	Bio pesticide Bio fertilizer	Trichoderma, *Beauveria bassiana* Azotobacter, PSB, Mix micronutrient	Rabi-24	4	10	Yield
4	Pearl millet	GHB- 1129	Varietal	Variety	Seed	Sum-24	4	10	Yield
Other Scheme									
5	**NMOOP**-Groundnut	GJG 32	Improved Variety with ICM	Improved Variety, Bio pesticide, Bio fungicide, Bio fertilizer	Improved var. Seed (GJG-32), *Metarhizium anisopliae*, *Trichoderma*, PSB, Rhizobium, *Beauveria bassiana*	KH-24	60	150	Yield, % pod damage
6	**NMOOP**-Sesame	GTil -3/5 /6	Improved Variety with ICM	Improved Variety, Bio pesticide, Bio fungicide, Bio fertilizer	Improved var. Seed (GTil-3/5), *Beauveria bassian*, Trichoderma, PSB, Azotobacter	Sum-24	20	50	Yield, % pod damage
7	**NFSM**-Chickpea	GG-5/7	Improved Variety with ICM	Improved Variety, Bio pesticide, Bio fungicide, Bio fertilizer	Improved var. Seed(GG-5), *Beauveria bassiana*, *Trichoderma*, PSB, *Rhizobium*	Rabi-24	20	50	Yield, % pod damage

Sr. No.	Name of Crop/ Enterprise	Name of Variety Enterprises	Thematic area	Technology demonstrated	Critical Inputs	Season and year	Area (ha.)	No. of farmers /Demo.	Parameters identified
8	**NFSM**-Black Gram	Gujarat Urad 2 (GU 2)	Improved Variety with ICM	Improved Variety, Bio pesticide, Bio fungicide, Bio fertilizer	Improved var. Seed (GU-2), *Beauveria bassiana*, *Trichoderma*, PSB, *Rhizobium*	Sum.-24	10	25	Yield, % pod damage
9	**ATIC** Castor	GCH-9	Varietal	Variety	Seed (GCH-9)	Kh-24	8	20	Yield
10	**ATIC** Cumin	GC-5	ICM	Improved seed Bio pesticide Bio fertilizer	Seed, *Beauveria bassiana*, PSB, *Azotobector Trichoderma*, Yello sticky trap	Rabi-24	8	20	Yield
11	**ATIC** Coriander	GC-3	ICM	Improved variety, Bio pesticide Bio fertilizer	Seed, PSB, *Azotobector*, *Beauveria bassiana*, *Trichoderma*, Yello sticky trap	Rabi-24	8	20	Yield
12	**ATIC** Brinjal	GRB-5	Varietal	Variety	Seed	Rabi-24	2	5	Yield
13	**Natural farming**	Wheat	INM	Jivamrut	Materials for jivamrut	Rabi-2024	6.4	16	Yield
14					**Total**		**134.4**	**336**	

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
Cotton Picking Apron	Cotton	Kharif-24	5	2	Apron	Picking efficiency

b. FLD on Other enterprises

Enterprise	Name of the technology demonstrated	No. of farmers	No. of units	Critical inputs	Performance parameters / indicators
Kitchen gardening	Nutritional gardening	50	2 ha	Vegetable seeds	Yield

3.4. TRAINING (INCLUDING THE SPONSORED AND FLD TRAINING PROGRAMMES):

ON Campus

(A) Farmers & Farm Women	No. of couses	No. of participant						
		others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
I Crop Production	2	55	0	55	5	0	5	60
II Horticulture	1	0	30	30	0	0	0	30
III Soil Health and Fertility Management	1	25	0	25	5	0	5	30
IV Livestock Production and Management	1	0	30	30	0	0	0	30
V Home Science/Women empowerment	2	0	50	50	0	10	10	60
VI Agril. Engineering	0	0	0	0	0	0	0	0
VII Plant Protection	5	140	0	140	10	0	10	150
VIII Fisheries	0	0	0	0	0	0	0	0
IX Production of Inputs at site	1	30	0	30	0	0	0	30
X Capacity Building and Group Dynamics	0	0	0	0	0	0	0	0
XI Agro-forestry	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)	0	0	0	0	0	0	0	0
Total (A)	**13**	**250**	**110**	**360**	**20**	**10**	**30**	**390**
(B) RURAL YOUTH	1	0	25	25	0	5	5	30
(C) Extension Personnel	1	25	0	25	5	0	5	30
Grand Total (A+B+C)	**15**	**275**	**135**	**410**	**25**	**15**	**40**	**450**

Off Campus

(A) Farmers & Farm Women	No. of couses	No. of participant						
		others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
I Crop Production	3	135	10	145	5	0	5	150
II Horticulture	1	40	0	40	10	0	10	50
III Soil Health and Fertility Management	3	110	35	145	5	0	5	150
IV Livestock Production and Management	1	0	45	45	0	5	5	50
V Home Science/Women empowerment	5	0	230	230	0	20	20	250
VI Agril. Engineering	1	30	0	30	0	0	0	30
VII Plant Protection	5	220	15	235	15	0	15	250
VIII Fisheries	0	0	0	0	0	0	0	0
IX Production of Inputs at site	1	30	0	30	0	0	0	30
X Capacity Building and Group Dynamics	0	0	0	0	0	0	0	0
XI Agro-forestry	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)	0	0	0	0	0	0	0	0
Total (A)	**20**	**565**	**335**	**900**	**35**	**25**	**60**	**960**
(B) RURAL YOUTH	0	0	0	0	0	0	0	0
(C) Extension Personnel	1	25	0	25	5	0	5	30
Grand Total (A+B+C)	**21**	**590**	**335**	**925**	**40**	**25**	**65**	**990**

Consolidated (On + Off Campus)

(A) Farmers & Farm Women	No. of couses	No. of participant						
		others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
I Crop Production	5	190	10	200	10	0	10	210
II Horticulture	2	40	30	70	10	0	10	80
III Soil Health and Fertility Management	4	135	35	170	10	0	10	180
IV Livestock Production and Management	2	0	75	75	0	5	5	80
V Home Science/Women empowerment	7	0	280	280	0	30	30	310
VI Agril. Engineering	1	30	0	30	0	0	0	30
VII Plant Protection	10	360	15	375	25	0	25	400
VIII Fisheries	0	0	0	0	0	0	0	0
IX Production of Inputs at site	2	60	0	60	0	0	0	60
X Capacity Building and Group Dynamics	0	0	0	0	0	0	0	0
XI Agro-forestry	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)	0	0	0	0	0	0	0	0
Total (A)	**33**	**815**	**445**	**1260**	**55**	**35**	**90**	**1350**
(B) RURAL YOUTH	1	0	25	25	0	5	5	30
(C) Extension Personnel	2	50	0	50	10	0	10	60
Grand Total (A+B+C)	**36**	**865**	**470**	**1335**	**65**	**40**	**105**	**1440**

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	9	190	30	220	25	10	35	215	40	255
Kisan Mela	1	250	50	300	50	20	70	300	70	370
Kisan Ghosthi	6	180	25	205	25	15	40	205	40	245
Exhibition	2	150	230	380	40	10	50	190	240	430
Film Show	15	850	350	1200	115	35	150	965	385	1350
Method demonstration	3	25	15	40	10	5	15	35	20	55
Farmers Seminar	5	150	40	190	40	10	50	190	50	240
Workshop	1	200	100	300	25	10	35	225	110	335
Group meetings	5	50	10	60	15	5	20	65	15	80
Lectures delivered as resource persons	25	3200	600	3800	1100	350	1450	4300	950	5250
Newspaper coverage	5	0	0	0	0	0	0	0	0	0

Radio talks	1	0	0	0	0	0	0	0	0	0
TV talks	1	0	0	0	0	0	0	0	0	0
Popular articles	4	0	0	0	0	0	0	0	0	0
Extension Literature	12	1100	100	1200	500	50	550	1600	150	1750
Advisory Services	50	250	50	300	100	10	110	350	60	410
Scientific visit to farmers field	20	120	10	130	30	2	32	150	12	162
Farmers visit to KVK	25	550	250	800	200	120	320	750	370	1120
Diagnostic visits	5	30	5	35	5	2	7	35	7	42
Exposure visits	1	30	0	30	10	0	10	40	0	40
Ex-trainees Sammelan	1	20	5	25	4	1	5	24	6	30
Soil health Camp	1	100	20	120	30	20	50	130	40	170
Animal Health Camp	1	50	10	60	20	5	25	70	15	85
Agri mobile clinic	1	3000	100	3100	350	50	400	3350	150	3500
Soil test campaigns	1	60	0	60	12	0	12	72	0	72
Farm Science Club Conveners meet	1	50	0	50	4	0	4	54	0	54
Self Help Group Conveners meetings	1	12	5	17	3	2	5	15	7	22
MahilaMandals Conveners meetings	4	8	30	38	4	25	29	12	55	67
Celebration of important days (specify)	3	400	150	550	60	80	140	460	230	690
Krishi Mahotsav	5	0	20	20	0	20	20	0	40	40
KrishiRath	1	40	0	40	20	0	20	60	0	60
Pre Kharif workshop	3	80	0	80	30	0	30	110	0	110
Pre Rabi workshop	4	100	20	120	15	3	18	115	23	138
PPVFRA workshop	1	20	10	30	10	5	15	30	15	45
Any Other (Specify)	5	220	20	240	90	10	100	310	30	340
Total	**229**	**11485**	**2255**	**13740**	**2942**	**875**	**3817**	**14427**	**3130**	**17557**

3.6 TARGET FOR PRODUCTION AND SUPPLY OF TECHNOLOGICAL PRODUCTS

SEED MATERIALS

Sl. No.	Crop	Variety	Quantity (qtl.)
CEREALS	Wheat	GW-463	75
OILSEEDS	Groundnut	GJG-9	55
	Groundnut	GJG-31	40
	Sesame	G.Til.-3	6
PULSES	Green gram	GM-4	7.5
		Total	**138.5**

PLANTING MATERIALS

Sl. No.	Crop	Variety	Quantity (Nos.)
FRUITS	Jamun, Guava, custard apple		100
SPICES			
VEGETABLES	Brinjal, Tomato, Chili	GJLB-3,4	1500
FOREST SPECIES			100
		Total	**1700**

Bio-products

Sl. No.	Product Name	Species	Quantity	
			No/Li.	(kg)
1	*Beauveria*			5000
2	*Trichoderma*			10000
3	PSB		200	
4	*Azaobactor*		200	
5	Rhizobium		200	
		Total	**600**	**15000**

LIVESTOCK

Sl. No.	Type	Breed	Quantity	
			(Nos)	Unit
0	0	0	0	0

4. Targets of samples for analysis:

Details	No. of Samples	No. of Farmers	No. of Villages	Amount to be realized
Soil Samples	300	300	15	
Water	50	50	12	
Plant				
Total	**350**	**350**	**27**	

5. ACTION PLAN OF INFRASTRUCTURE IN KVK

A. Action plan of demonstration units (other than instructional farm)

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production (expected)			Expected Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Crop Cafeteria	Every year	0.5	-	-	-	20000	-	
2	Vermicompost	2008	0.1	-	-	-	10000	20000	
3	Nursery	2012	0.05	Sapling	1700	No	20000	30000	

B. Action plan of instructional farm (Crops) including seed production

Name of the crop	Area (ha)	Details of production (expected)			Expected Amount (Rs.)		Remarks
		Variety	Type of Produce	Qty. (Qtl)	Cost of inputs	Gross income	
Cereals							
Wheat	2	GW-463	Truthful	75	50000	225000	
Pulses							
Green gram	2	GM-4	Truthful	7.5	38000	67500	
Oilseeds							
Groundnut	4	GJG-9	Breeder	55	320000	700000	
Groundnut	3.5	GJG-32	Breeder	40	280000	800000	
Sesame	2	G.Til.-5	TF	6	40000	115000	
Fibers							
Spices & Plantation crops							
Floriculture							
Fruits							
Vegetables							
Others (specify)							

6 Additional Activities Planned including sponsored projects (ProCRA / Pro SOIL/NARI/DAESI/DAMU/ DFI, etc.) / schemes during 2022-23, if involved.

Out scaling of Natural Farming

S.No.	Name of the agency / scheme	Name of activity	Technical programme with quantification	Financial outlay (Rs.)	Names of the team members involved
1	Out scaling of Natural Farming	Training	10	268000	Dr. K. P. Baraiya Smt. A. K. Baraiya
		Awareness programme	25		
		Demonstration	16		

Activity wise Physical and Financial Achievements from 01 September 2022 to 31 March 2023 & 2023-24

Activities	2021-22			2022-23		
	No of activities	No. of participants	Amount incurred (Rs)	No of activities	No. of participants	Amount incurred (Rs)
Training	11	612	68525	13	929	171660
Awareness Programmes	17	1152	148225	43	10604	115745
Demonstration	16	16	40000	12	12	33840
Miscellaneous expenses at KVKs	-	-	9250	-	-	32845
Total			266000			**354120**

Results of Economic Parameters

Crops	Farming Situation	Average Yield (q/ha)	Percentage Increase in yield over Non-natural Farming (%)	Total cost of cultivation (Rs/ha)	Gross returns (Rs/ha)	Net returns (Rs/ha)	B:C ratio (Rs/ha)
Crop name 1:- Wheat	Natural Farming	30.64	-32.05	25350	130223	104873	5.20
	Non-Natural Farming	45.12	-	40875	112805	71930	2.77

Farmers/KVKs Feedback

Natural Farming

- Good market value
- Low production cost
- Chemical less having no hazardous effect
- Safe for environment
- Pest and disease attack
- Reduce risk for water lodging condition
- High water storage in soil
- Earth worms increase in soil. hence increase soil fertility.

Non-Natural Farming

- Normal market value
- high production cost
- Found hazardous effect
- Environment, soil pollution
- Lower pest and disease attack
- High risk for water lodging condition water stress is high
- Down soil fertility

Expenditure Details

Financial Year	Opening Balance	Fund received from ATARI Pune	Total fund available	Expenditure	Closing Balance
	A	B	C=A+B	D	E=A-D
2022-23	0	2.66	2.66	2.66	0
2023-24	0	3.5412	3.5412	3.5412	0

Details of Works proposed during 2021-26 for KVK, JAU, JAMNAGAR

Sr. No.	Name of works	Estimated cost for work / renovation etc. (Rs. In Lakh)	Justification for works required to be carried out
1.	**China mosaic on terrace of the building** 1. KVK Office building (400 Sq m)	6.0	There problem of water tank overflow, rain water drainage. Therefore, condition of the ceiling become dangerous, and will be destroyed shortly. Therefore, it is to be required to be renovation. Fitting of china mosaic on the terrace is to be require for long life of the building.
	2. Hostel Building (300 sq m)	4.5	
	3. Training Hall (200 sq m)	3.0	
	4. Quarter E type (135 sq m)	2.03	
	5. Quarter D type (125 sq m x 2 No.) =250 sq m	3.75	
	6. Quarter Ctype (110 sq m x 3 No.)=330 sq m	4.95	
	Total	**24.23 lakh**	
2.	**Wall painting of the building** 1. KVK Office building (400 Sq m)	2.0	Building is to old therefore, whitewash painting is required
	2. Hostel Building (300 sq m)	1.5	
	3. Training Hall (200 sq m)	1.0	
	4. Quarter E type (135 sq m)	0.67	
	5. Quarter D type (125 sq m x 2 No.) =250 sq m	1.25	
	6. Quarter Ctype (110 sq m x 3 No.)=330 sq m	1.65	
	Total	**8.07 lakh**	
3	Farm Fencing wall (L-640 m x h- 3m+1m plinth+1m base = 3200 sq m	40	
4	Open well	25	
5	Farm Development	25	
6	Office equipment	35	
7	Soil testing laboratory	25	
8	Information technology	10	
9	Over Head Water Tank	40	
10	Two wheeler	1.20	
11	Multi crop thressure (Auto feeder)	8.0	
12	LED Display	10	
13	Water storage sump 5 lakh litres	30	
14	Rat proof godown cum farmers outlet	40	This office works for farmers and distributed seeds, bio-products from KVK, ➢ This center produce many oilseeds, pulses and cereal crops breeder as well as labeled seed production for farmers. ➢ Such seeds required to be store for longer time.

			➢ It is required for sales out late for selling different products from university. ➢ There is very high humidity, therefore, it is requiring to good godown.
15	Parking shed	20	➢ Every day, farmers, officers, scientist and student with dignitaries visited this esteemed organization. ➢ This is district level training center, continuously farmers visit daily. ➢ They parked their vehicle irrespectively.
16	Irrigation facilities Submersible pump set with pipe line facilities	40	It is required for irrigation of 20 hector farm

TRAINING PROGRAMMES

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										
Quarter-1st	PF	Natural farming in Rabi crop	1	30	0	30	0	0	0	30
Quarter-4th	PF	Integrated farming system	1	25	0	25	5	0	5	30
Horticulture										
Quarter– 3rd	PF	Production and management Technology of Spices	1	0	30	30	0	0	0	30
Soil Health										
Quarter-2nd	PF	Importance of Soil and water testing	1	25	0	25	5	0	5	30
Livestock prod.										
Quarter-2nd	PF	Dairy Management and Value addition of milk	1	0	30	30	0	0	0	30
Home Sc.										
Quarter-1st	PF	Value addition in fruits, vegetables and agriculture produce for doubling farmers income	1	0	20	20	0	10	10	30
Quarter-4th	PF	Health benefits of millets and value addition in millets	1	0	30	30	0	0	0	30
Plan Prot.										
Quarter-1st	PF	Integrated Disease and pest management through natural farming in Rabi crop	1	30	0	30	0	0	0	30
Quarter-2nd	PF	Management of pink bollworm in cotton & management of white grub in groundnut and other kharif crops	1	25	0	25	5	0	5	30
Quarter-3rd	PF	Naturally management of pest and diseases in *kharif* crops	1	30	0	30	0	0	0	30
Quarter-4th	PF	IPM in vegetable crops: onion & garlic	1	25	0	25	5	0	5	30
Quarter–4th	PF	Store grain pests and its management for reduction the storage loss	1	30	0	30	0	0	0	30
Fisheries										
Production of Inputs at site										
Quarter-4th	PF	Production of Vermi-compost and inputs for natural farming	1	30	0	30	0	0	0	30
		Total	**13**	**201**	**97**	**298**	**19**	**13**	**32**	**330**

ii) Farmers & Farm women (Off 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										
Quarter-1st	PF	summer crop production practices on Natural basis	1	45	0	45	5	0	5	50
Quarter-2nd	PF	Integrated weed management in oilseed crops	1	40	10	50	0	0	0	50
Quarter-4th	PF	Crop production technology of Millets	1	50	0	50	0	0	0	50
Horticulture										
Quarter– 4th	PF	Processing and value addition in Spices crop	1	40	0	40	10	0	10	50
Livestock prod.										
Quarter-1st	PF	Importance of Nutrients and Feed Management in Animal Husbandry to increase milk production	1	0	45	45	0	5	5	50
Home Sc.										
Quarter-1st	PF	Boosting immunity through fruits and vegetables and aware about Nutritional disease	1	0	50	50	0	0	0	50
Quarter-1st	PF	food processing and value addition in fruit, vegetable, and other agricultural produce	1	0	50	50	0	0	0	50
Quarter-2nd	PF	Income generation activities for empowerment of women	1	0	45	45	0	5	5	50
Quarter-3rd	PF	House hold food security by kitchen gardening and nutrition gardening	1	0	40	40	0	10	10	50
Quarter-4th	PF	Nutritional Value of Millets and design of Low/ Minimum cost diet	1	0	45	45	0	5	5	50
Agril. Engineering										
Quarter-3rd	PF	Installation and Maintenance of micro irrigation system	1	30	0	30	0	0	0	30
Plan prot.										
Quarter-1st	PF	IPM-IDM in rabi crops	1	50	0	50	0	0	0	50

Quarter-1st	PF	Storage techniques for pest management and reduction the storage loss	1	45	0	45	5	0	5	50
Quarter-2nd	PF	Management of pink bollworm in cotton & management of white grub in groundnut and other kharif crops	1	45	0	45	5	0	5	50
Quarter-3rd	PF	Pest and disease management in *kharif* crops through natural farming	1	40	10	50	0	0	0	50
Quarter-4th	PF	Integrated Disease and pest management in Rabi crop	1	40	5	45	5	0	5	50
Fisheries										
Production of Inputs at site										
Quarter –3rd	PF	Production of natural farming inputs	1	30	0	30	0	0	0	30
Soil Health										
Quarter-2nd	PF	Use of Bio fertilizer & recycling of farm waste through composting	1	45	0	45	5	0	5	50
Quarter-3rd	PF	Integrated nutrient management in Kharif crop	1	25	25	50	0	0	0	50
Quarter-4th	PF	Improvement of soil fertility through balance use of fertilizer	1	40	10	50	0	0	0	50
			20	**565**	**335**	**900**	**35**	**25**	**60**	**960**

ii) 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	
Value addition	women Empowerment	Value addition in fruits and vegetables	Feb	4	0	25	25	0	5	5	30

iii) Training programme for extension functionaries

Date	Clientele	Title of the training programme	Dura-tion in days	No. of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
On Campus										
Quarter-2nd	EF	Pre-seasonal training on *kharif* crops (Pigeon pea, Green gram, Groundnut, Cotton) production technology through natural resources	2	20	0	20	5	0	5	25
Off Campus										
Quarter-4rd	EF	Pre-seasonal training on *rabi* crops (Cumin, Gram, Wheat, Onion, Garlic production technology through natural resources)	2	20	0	20	5	0	5	25

Quarter and discipline wise summary of training programme :

Discipline	Subject Code	On-Campus					Off-Campus					GT
		Quarter					Quarter					
		I	II	III	IV	Total	I	II	III	IV	Total	
(A) Farmers & Farm Women, Rural Youth												
I Crop Production	CP	1			1	**2**	1	1		1	**3**	**5**
II Horticulture	HO			1		**1**				1	**1**	**2**
III Soil Health and Fertility Management	SFM		1			**1**		1	1	1	**3**	**4**
IV Livestock Production and Management	LPM		1			**1**	1				**1**	**2**
V Home Science/Women empowerment	WOE	1			1	**2**	2	1	1	1	**5**	**7**
VI Agril. Engineering	AEG					**0**			1		**1**	**1**
VII Plant Protection	PLP	1	1	1	2	**5**	2	1	1	1	**5**	**10**
VIII Fisheries	FIS					**0**					**0**	**0**
IX Production of Inputs at site	PI				1	**1**			1		**1**	**2**
X Capacity Building and Group Dynamics	CBD					**0**					**0**	**0**
Total		3	3	2	5	**13**	6	4	5	5	**20**	**33**
(B) Extension Functionaries	EF		1			**1**				1	**1**	**2**
(C) Rural youth	RY	1				**1**					**0**	**1**
Total		**4**	**4**	**2**	**5**	**15**	**6**	**4**	**5**	**6**	**21**	**36**

iv) Sponsored programme

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 progdramme**										
AEG	ATMA	PF	Importance of MIS	2	80	0	80	20	0	20	100
PLP	ATMA	PF	Kharif crop protection and production technology	3	100	40	140	10	10	20	160
SFM, AEG	AGAKHAN	PF	INM and MIS in rabi crops	2	50	50	100	5	5	10	110
PLP	DAO	PF	Integrated pest and diseases management in cumin	1	60	0	60	0	0	0	60
PLP	ATMA	PF	IPM & IDM in groundnut, cotton crops	1	55	0	55	5	0	5	60
PLP	DAO	PF	IPM, IDM, INM in groudnnut and cotton	1	55	0	55	5	0	5	60
PLP	ATMA	PF	IPM & IDM in kharif crop	1	55	0	55	5	0	5	60
PLP	Dy.D.Hort.	PF	IPM, IDM, INM in Horticultural Crops	1	55	0	55	5	0	5	60
PLP	ATMA	PF	IPM, IDM, INM in Horticultural Crops	1	55	0	55	5	0	5	60
PLP	DWDU	PF	IPM & IDM in kharif crop	1	55	0	55	5	0	5	60
PLP, CP	ATMA	PF	Seed Production technology and IPM in these crops	1	55	0	55	5	0	5	60
PLP	ATMA	PF	Storage Techniques and IPM in summer crops	1	0	55	55	0	5	5	60
			Total	16	675	145	820	70	20	90	910
b)	**Sponsored research programme**										
			Total								
c)	**Any special programmes**										
SFM	ATMA	PF	World Soil health day	1	50	50	100	10	10	20	120
WOE	ATMA	PF	Mahila Krushi Divas	1	0	100	100	0	20	20	120
			Total	2	50	150	200	10	30	40	240

Annexure - II

Details of Budget Estimate (2024-25) based on proposed action plan

S. No.	Particulars	BE 2024-25 proposed (Rs.)
25.1	**Recurring Contingencies**	
25.1.1	**Pay & Allowances**	**130**
25.1.2	**Traveling allowances**	**2**
25.1.3	**Contingencies**	**35**
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	
B	POL, repair of vehicles, tractor and equipment	
C	Meals/refreshment for trainees (ceiling up to 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 demonstrations 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	
25.1	**TOTAL Recurring Contingencies**	**167**
25.2	**Non-Recurring Contingencies**	
25.2.1	**Works**	50
25.2.2	**Equipment including SWTL & Furniture**	
25.2.3	**Vehicle** (Four-wheeler/Two-wheeler, please specify)	
25.2.4	**Library** (Purchase of assets like books & journals)	1
25.2	**TOTAL Non-Recurring Contingencies**	**51**
25.3	**REVOLVING FUND**	
25.4	**GRAND TOTAL**	**218**