

ANNUAL PROGRESS REPORT - 2021(1stJanuary 2021 to 31stDecember 2021)**KRISHI VIGYAN KENDRA
JUNAGADH AGRICULTURAL UNIVERSITY, JAMNAGAR****DETAIL REPORT OF APR-2021****1. GENERAL INFORMATION ABOUT 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 Air force Road, Opp. Digjam Mill Jamnagar- 361 006	(0288) 2710165	(0288) 2710165	kvkjamnagar@gmail.com kvkjamnagar@jau.in	www.jau.in 11347096

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, Air force 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 December 31, 2021)

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	147900	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/	57700-182400			

				Veterinary				
7	Scientist	Smt. A. K. Baraiya	9998227607	Home Science	68900-205500	9260 0	17.08.200 6	
8	Farm Manager	Shri H. S. Godhani	8866255223	Agril. Ent.	39900-126600	41100	19.09.201 5	
9	Programme Assistant	Shri N. D. Ambaliya	9824720448	Agril.	39900-126600	-	01.02.202 0	38090/-
10	Computer Programmer	Shri C. P. Padhiyar		Computer Operator	39900-126600	52000	29.12.200 8	
11	Accountant / Superintendent	Vacant		Adm.	39900-126600	-	-	
12	Stenographer	Vacant		Adm.	19900-63200	-	-	
13	Driver	Vacant		Supt.	19900-63200	-	-	
14	Driver	Shri. D.M. Chauhan	9824173712	Supt. (Fix)	19900-63200	27600	9.10.2007	
15	Supporting staff	Shri B. V. Bamaniya	9904553794	Supt.	14800-47100	19700	01.11.201 4	
16	Supporting staff	Shri P. S. Damor	8141457764	Supt.	14800-47100	20900	1.09.2006	

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)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
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 (2 Ponds) 60m×60m (1 Pond)	999000	-	-	-

11	Fencing	-	Not	Available	-	-	-	-
12	Threshing floor	-	Not	Available	-	-	-	-
13	Farm godown	-	Not	Available	-	-	-	-
14	ICT lab	-	Not	Available	-	-	-	-
15	Other	-	Not	Available	-	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Toyota Qualis (GJ-10G 433)	2004-05	490200	517768	Working (it is required to be right off)
Hero Honda splendor(bike)GJ-10 BB-1634	2010-11	46475	22835	Working
Mahindra Scorpio (GJ-10 GA-0535)	2019	1032156	10413	Working (New)
Tractor Mahindra B-275 DI TU (Bhoomiputra) (GJ-10GA 0885)	2019	432205	-	Working (New)

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Presentstatus
Captain Mini Tractor	2001-02	166125	Under process for rightoff
Telephoneline	2001-02	19850	Working
Multi tool carrier complete set	2001-02	6500	Working
Photocopier	2001-02	125000	Working
Over headprojector	2001-02	17600	Working
Computer	2002-03	29500	Working
HP Laser printer	2002-03	20390	Working
U.P.S. (3 KVA)	2002-03	38000	Working
Spectrophotometer	2005-06	89160	Working
Flame photometer	2005-06		Working
Physicalbalance	2005-06	10640	Working
Chemicalbalance	2005-06	100000	Working
Water distillation still	2005-06	96118	Working
Kieldahi digestion and distillation	2005-06	49644	Working
Shaker	2005-06	80080	Working
Grinder	2005-06		Working
Refrigerator	2005-06	16772	Working
Oven	2005-06	30550	Working
Hot plate	2005-06		Working
Aspee tractor mounted sprayer	2006-07	32000	Working
Air assisted blower type sprayer	2009	98750	Working
Laptop computer (HCL)	2009	47500	Working
Digital camera (Nikon)P-90 12.1	2009	24300	Working
Cotton stalk shredder	2008-09	121000	Working
Groundnut digger-tractor operated	2009	78500	Working
Cultivator cum rotavator	2009	90000	Working
Groundnut decorticator	2009	95850	Working
Multi crop thresher	2009	114000	Working
Processing Unit	2009	1685000	Working
Plantar-tractor operator	2009	44000	Working
EPBX System	2012	44000	Working
Vertical Autoclave	2012	78190	Working

Laminar Airflow	2012	127440	Working
Electronic Balance (200 gm)	2012	12600	Working
EC/ Conductivity meter	2012	6300	Working
Portable pH Meter	2012	6300	Working
Compound microscope	2012	4410	Working
Trinocular microscope	2012	112000	Working
Digital temperature & humidity indicator cum controller	2012	34750	Working
Digital TDS meter	2012	3985	Working
Research centrifuse with accesaries	2012	42480	Working
Stabilizer	2012	10440	Working
Hot air oven	2012	41580	Working
BOD incubator	2012	46305	Working
Digital camera SLR (Canon)	2012	44750	Working
AC 1.5 tonn	2012	45990	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	37	-	-
10.	27.12.2013	26	-	-
11.	21.02.2015	25	-	-
12.	29.01.2016	22	-	-
13.	25.10.2016	27	-	-
14.	12.04.2018	30	-	-
15.	25.03.2019	35	-	-
16.	07.03.2020	35	-	-
17.	08.02.2021	41	As below	As below
18.	09.03.2022	34		

The Seventeenth Scientific Advisory Committee meeting of Krishi Vigyan Kendra, JAU, Jamnagar was held at Training Hall, Krishi Vigyan Kendra, JAU, Jamnagar on 8thFebruary, 2021.

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, JAU, Junagadh	<ul style="list-style-type: none"> ➤ Arrange FLD on latest released variety of pearl millet. ➤ Take data of critical observations hectare base in OFT 	<p>Suggestion accepted and implemented with FLD taken on GHB-1231 variety of pearl millet.</p> <p>Suggestion accepted and incorporated. As per OFT purpose data recorded on pest, diseases, height etc critical observation in different OFT.</p>

		➤ Data should record lactation basis (milk yield) instead of 5 months in FLD on bypass fat in animal	Suggestion accepted and incorporated, as per lactation basis milk yield.
		➤ Arrange training on weed management during third quarter	Suggestion accepted and incorporated in training schedule.
		➤ Record maximum farmers from every taluka and village level for benefit of DAMU project	Suggestion accepted and all 10 taluka farmers have been incorporated for DAMU advisory
		➤ Accountability of FLD's	Suggestion accepted and incorporated for FLD accountability, take visit of farmers many time and do field day, field visit, note on all operation and yield etc for FLD's.
		➤ Check the usefulness and review of advisory to farmers under DAMU project	Suggestion accepted and incorporated. Special project was taken on this review.
2	Dr. H. M. Gajipara, Director of Extension Education, JAU, Junagadh	➤ Analyze maximum soil and water sample at KVK Soil Testing Laboratory	Suggestion accepted and incorporated.
		➤ Record impact assessment of training programs	Every three completion of KVK selected village and Ex trainees, this type of study undertaken by KVK scientist and reported
		➤ Maintain register for FLD farmers with observation data	Suggestion accepted and incorporated
		➤ Arrange demonstration on implements	Suggestion accepted and incorporated on different implements
		➤ Upload all extension programs on ICAR portal	Suggestion accepted and incorporated regularly on ICAR portal.
		➤ Write down the feedback of farmers under FLD	Suggestion accepted and every FLD feedback were written and presented in every SAC meeting.
3	VitthalbhaiSakhiya, Member of Extension Education Council, JAU, Junagadh	➤ suggested to work cooperatively with all departments for farmers.	Suggestion accepted and incorporated.
4	Shri Dhanpal Sir, ACF	➤ linkage with forestry department with MOU for different extension programs and work together.	Suggestion accepted and incorporated. Many programs were jointly organized with the Forest department.

18th SAC proceeding along with list of participants in Annexure -1.

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 km² i.e. 14.125 lakh ha area in the west of Gujarat state. The climate is arid (80%) and semi arid (20%) with a meanmoistureindex 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 potentialevapo-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 severeintensity occur once in 2 to 3 years. Although the integrateddrainagesystemfrom the story/rocky/gravelly surfaces and torrential nature of precipitation generate 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 resourcedevelopmentin the district. Wind velocity prevailing in the district is higher order (14.1 km) ha on an annual averagebasisdue to sea coast area.

According to physiographically, majorportion of the area in the district have an altitude ranging between 25 to 150 meters, which consists ten talukas having gentle slope to moderate slope. The district is marked by radicalrainage pattern. Deccantrap basalt occupies a major part of the district. The Quaternary formations includemilliolite, limestone, alluvium and Geolian sediments. The dominantland 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 degradationareaccelerated 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	Totalcultivablearea	4.32 lakh ha.		2.52 lakh ha.	
3	Netcultivatedarea	3.53 lakh ha.		2.38 lakh ha	
4	Totalareaunder forest	0.43 lakh ha.		0.1736 lakh ha	
5	Totalirrigatedarea	0.939 lakh ha.		0.23092 lakh ha.	
6	Number of holdings	1.44 lakh		1.17 lakh	
7	Averageannual rainfall	550 mm.		550 mm.	
8	Soiltype	Medium black		Medium black	
9	Totalnumber of villages	419 (8 city)		280 (8 city)	
10	Totalpopulation	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	<p>The influence area of North Saurashtra Agroclimatic Zone is spread among five districts viz., Amreli (7 talukas 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 Arabian sea.</p> <p>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, pearl millet, 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, Jamkhabhalia (Jamnagar District).</p>

b) Topography**Agro – Ecological situation in the District**

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

The physiography of entire region of district is more or less flat. However, the region is undulating with slopes having little hilly areas from 25 to 150 meters. Physical features of the area vary from flat land to 150 meters above mean sea level. Most of the area falls in the range of 25m to 150m above mean sea level.

Based on the soil survey information of the zone, the soils of the district hence been broadly classified in to fine 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 zone into district agro ecological situations, there major factors including various soil 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 irrigation has 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 influence area 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 Ecological Situation	Soil texture	Altitude	Principal crops	Special features	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, pearl millet	Well drained soils with rapid permeability	124	Kalawad, Jamjodhpur, Bhanvad, Okha	Moisture stress, temperature stress
AES-2	Shallow Black soils with 600-700 mm Rainfall	Clayey	75 – 150	Groundnut, wheat, sorghum, pearl millet	Slightly well drained soils with rapid permeability	180	Part of Kalyanpur, Jamnagar, Jamkhabhalia, Lalpur, Dhrol, Jodia	Moisture stress, temperature stress
AES-3	Coastal Alluvial soils with 300-400 mm Rainfall	Clayey loam to clayey	50	Groundnut, pearl millet, sorghum, chickpea	Low nitrogen and phosphorus	181	Jodia, part of Okha, Jamkhabhalia, Kalyanpur & Jamnagar	Salt affected salinity

AES-4	Coastal Alluvial soils with 500-700 mm Rainfall	Silt clay	25-50	Groundnut, pearl millet, sorghum, chickpea	Low nitrogen and phosphorus	299	Kalyanpur, Jodia & Jamnagar, Khambhadia, Lalpur, Dwarka	Salt affected salinity
AES-5	Coastal Alluvial shallow black soils with 300-400 mm Rainfall	Sandy loam to clay loam	0-25	Sorghum, Pearl millet, Groundnut, Sesamum	Arid climate	31	Okha	Known salinity for genus ephedra seacoast very rich in Algh flor and fanner of economic importance.

2.3 Soil type

As the geographical formation of Saurashtra is to volcanic origin, the soils are generally derived from basaltic rock known as Deccan trap. This is the commonest rock in India and due to its extensive occurrence in south is called "Deccan Traps". In many parts, they have flat top features and hence, are also known as plateau basalt. The trap rocks, which occupy a large part of western coast 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	Soil type	Characteristics	Area in ha
1	Shallow black soils	<p>These soils have developed from basaltic trap especially from granite and gneiss parent materials. They light grey in colour. Taxonomically, they are classified as <i>Ustorthents</i> and <i>Ustochrepts</i>. 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 distinct profile layering and are shallow, capacity to retain moisture is not sufficient.</p> <p>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.</p>	124000 ha (Kalawad, Jamjodhpur, Bhanvad, Okha)
2.	Medium black soils	<p>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.</p> <p>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</p>	180000 ha (Part of Kalyanpur, Jamnagar, Jamkhambhaliya, Lalpur, Dhrol, Jodia)

		<p>brown to light grey. Taxonomically, these soils are classified as <i>Ustochrepts</i> in <i>Inceptisol</i> 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 <i>Vertic – Ustochrepts</i> at sub group level.</p> <p>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.</p> <p>The chemical composition of these soils is neutral to alkaline reaction (p^H 7.4 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.</p>	
3.	Saline alkali soils	<p>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 salts, poor drainage, use of saline ground water and ingress of sea water (in coastal areas). The souls are classified as <i>Fluvaquents</i>, <i>Halaquents</i>, and <i>Haplaquents</i> (Entisol): <i>Haplaquents</i> and <i>Haptaquepts</i> in order – <i>Inceptisol</i>. Texturally these soils vary from sandy loam to clay. The degree of salinity and alkalinity is also highly variable.</p> <p>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.</p>	181000 ha (Jodia, part of Okha, Jamkhambhaliya, Kalyanpur & Jamnagar)
4.	Costal alluvials soils	<p>these soils are located in the district of Jamnagar consisting Kalyanpur, Jodia and Jamnagar, Jamkhambhadiya, 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 <i>Halaquents</i> and <i>Haplaquents</i> – Entisol and <i>Helaquepts</i> and <i>Hapdaquents</i> in Inceptisol order.</p>	299000 ha (Kalyanpur, Jodia & Jamnagar, Khambhadiya, Lalpur, Dwarka)
5.	Hilly soils	<p>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 <i>Ustorthents</i> and those near</p>	31000 ha (Some part of Bhanvad and Jamjodhpur)

	foothills and valley are comparatively deeper can be placed under <i>Ustochreptsand</i> can be classified under <i>estisol</i> and <i>Inceptisol</i> orders respectively.	
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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	213899	5883500	27.51	218714	6452063	29.50
2	Sesame	1225	6025	4.92	5166	21750	4.21
3	Castor	4178	113677	27.21	66	1800	27.27
4	Soybean	0	0		0	0	
5	Mustard	0	0		251	5350	21.31
	Total Oilseeds	219302	6003202	27.37	224197	6480963	28.91
	Cash Crops						
5	Cotton	166549	3254950	19.54	10758	199700	18.56
6	sugarcane	26	1340	51.54	12	610	50.83
	Total Cash Crops	166575	3256290	71.08	10770	200310	69.40
	Food Grain						
7	Wheat	48489	1722700	35.53	12843	455926	35.50
8	Pearlmillet	652	15483	23.75	939	22950	24.44
9	Sorghum	70	755	10.79	116	1218	10.50
10	Maize	15	112	7.47	50	380	7.60
	Total Food Grains	49226	1739050	77.52696	13948	480474	78.04
	Pulse Crops						
11	Greengram	3481	28035	8.05	2576	20750	8.06
12	Blackgram	1403	10200	7.27	1182	8650	7.32
13	Cowpea	20	75	3.75	0	0	0.00
14	Pigeon pea	967	17546	18.14	0	0	
15	Moothbean	26	110	4.23	0		
16	Chickpea	43688	715127	16.37	47555	780500	16.41
17	Cluster bean	158	2965	18.77	0	0	0.00
18	Other pulses	0	0		0		
	Total Pulses	49743	774058	76.58	51313	809900	31.79
	SPICES AND CONDIMENTS						
19	Cumin	2351	19987	8.50	88521	615364	6.95
20	Fenugreek	49	771	15.73	15	229	15.27
21	Coriander	1258	18237	14.50	21719	304066	14.00
22	Ajwan	2742	23312	8.50	12	99	8.25
24	Chilli	848	16104	18.99	85	1625	19.12
25	Garlic	328	26084	79.52	140	11302	80.73
	Total spices	7576	104495	145.75	110492	932685	144.31
	VEGETABLE						
27	Onion	109	22052	202.31	106	21430	202.17
28	Potato	55	7985	145.18	160	24300	151.88
29	Brinjal	650	119835	184.36	650	120500	185.38
30	Tomato	760	223247	293.75	897	266200	296.77

31	Cauliflower	53	7685	145.00	40	5880	147.00
32	Cowpea	345	25850	74.93	280	20935	74.77
33	Cabbage	432	72452	167.71	240	40450	168.54
34	Okra	1242	89541	72.09	1150	82720	71.93
37	Cucurbits	634	103498	163.25	450	73500	163.33
38	Cluster bean	1463	141254	96.55	1281	123550	96.45
39	Other vegetable	45	4350	96.67	5	468	93.60
	Total Vegetable	5788	817749	1641.80	5259	779933	1651.82
	FRUIT CROPS						
40	Chiku	136	15754	115.84	113	12989	114.95
41	Pomegranate	309	27500	89.00	256	22639	88.43
42	Citrus	141	10412	73.84	116	8560	73.79
44	Aonla	19	1148	60.42	16	942	58.88
45	Guava	7	284	40.57	5	232	46.40
46	Custard apple	36	2685	74.58	29	2208	76.14
47	Papaya	264	165079	625.30	219	136672	624.07
48	Coconut	276	23224	84.14	229	19111	83.45
49	Ber	192	18193	94.76	159	14983	94.23
50	Kharek	50	2488	49.76	41	2038	49.71
51	Banana	24	10587	441.13	20	8762	438.10
52	Mango	257	15678	61.00	213	12867	60.41
53	Cashew nut	2	22	11.00	2	17	8.50
54	Other fruits	97	7596	78.31	80	6247	78.09
	Musk melon	15		0.00	10		0.00
	Water melon	60		0.00	89		0.00
55	Total Fruits	1885	300650	1899.65	1597	248267	1895.15
56	FLOWERS						
57	Rose	36	3363	93.42	30	2769	92.30
58	Merry gold	77	6261	81.31	63	5151	81.76
60	Jasmine	2	142	71.00	1	117	117.00
62	Lilly	1	93	93.00	1	77	77.00
63	Other flowers	90	8011	89.01	75	6595	87.93
	Total flowers	206	17870	427.74	170	14709	456.00
	OTHER CORPS						
64	Chikori	27	2365	87.59	23	1947	84.65
65	Palma Rosa	24	2939	122.46	19	2424	127.58
	Total Other crops	51	5304	210.05	42	4371	212.23
	Fodder crops						
67	Lucern	632	76450	120.97	580	69050	119.05
68	Sorghum	34800	5225300	150.15	32944	4910500	149.06
69	Maize	4560	685050	150.23	8220	1233500	150.06
	Total Fodder crops	39992	5986800	421.35	41744	6213050	418.17
	Total Cultivated Area	540344			459532		

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

2.5. Weather data (January-2021 to December-2021)

Weekly mean Weather data-at JAU,Jamnagar during-2021									
Week No	Temp. °c		R.H.%		WS	BSS	Eo	Rain	Rainy
	Max	Min	I	II	(kmph)	(hrs)	(mm)	(mm)	Days
1-J	24.9	9.9	73	32	4.8	7.7	3.6		
2	26.3	13.1	67	29	8.0	9.3	4.6		
3	28.2	12.4	72	27	3.5	8.8	5.0		
4	27.4	11.1	73	27	4.5	9.2	4.7		
5	28.2	12.5	71	25	4.3	9.4	5.3		
6-F	29.5	14.2	67	25	4.4	9.3	5.5		
7	30.3	16.6	91	34	4.0	8.9	5.5		
8	32.4	17.9	72	26	5.3	9.8	6.1		
9	32.4	18.6	91	30	6.3	9.4	6.2		
10-M	34.4	20.8	93	32	6.6	9.7	6.5		
11	35.0	21.4	90	25	6.2	9.0	6.8		
12	35.2	21.9	83	26	6.3	9.1	7.2		
13	37.3	22.0	80	26	7.6	9.7	7.6		
14-A	37.3	23.1	85	30	7.2	9.9	8.3		
15	36.9	23.7	77	36	6.8	10.0	8.8		
16	35.8	24.7	84	43	8.5	10.4	8.7		
17	38.1	26.1	83	37	8.4	8.8	9.5		
18	37.0	26.2	82	38	8.5	10.7	9.5		
19-M	36.3	26.6	77	47	11.9	11.3	9.5		
20	36.5	27.1	79	46	11.3	5.7	9.5	8.0	1
21	37.0	28.1	79	50	13.0	10.6	9.7		
22	37.9	28.0	72	46	13.4	10.0	9.7		
23-J	37.2	27.8	73	51	12.7	10.9	9.6		
24	37.0	28.1	77	53	13.7	7.4	9.6	2.0	
25	33.9	26.8	79	65	10.8	4.6	8.1	59.0	2
26	35.5	27.9	73	56	13.8	8.5	8.2		
27-J	36.1	27.6	76	54	13.8	8.4	8.5		
28	35.0	27.3	83	63	9.5	5.5	7.8	9.0	2
29	33.9	27.0	89	69	12.6	4.0	5.3	72.0	3
30	32.0	27.1	93	76	15.2	1.4	5.6	30.0	2
31	32.1	26.5	85	67	16.2	1.6	5.6	4.5	1
32-A	33.0	25.8	85	66	9.3	5.8	6.6	0.5	
33	33.0	25.4	84	65	10.1	7.0	6.8		
34	32.7	25.9	86	65	9.8	6.1	6.9	2.0	
35	33.1	25.5	89	72	8.0	5.0	7.2	68.5	2
36-S	31.4	25.6	93	83	8.2	2.7	5.4	91.0	4
37	30.3	24.8	95	83	7.2	1.1	4.7	204.0	5
38	32.5	26.1	91	76	7.8	6.5	4.8	6.5	1
39	31.4	24.8	94	86	4.9	3.3	4.2	244.0	4
40-O	32.6	25.2	90	73	5.1	8.1	4.1	7.0	1
41	34.6	25.6	88	61	3.7	8.5	5.2		
42	34.8	23.9	77	38	3.9	9.5	5.2		
43	33.0	22.0	75	40	5.0	9.8	5.0		
44	34.2	20.1	65	26	3.8	9.7	5.2		

45-N	33.5	19.7	56	26	5.9	7.4	4.2		
46	31.9	19.1	61	31	8.5	7.2	4.5		
47	31.2	21.0	75	45	7.5	4.9	3.9	1.0	
48	31.7	18.2	69	31	4.2	8.0	4.7		
49-D	28.0	17.4	71	36	2.7	6.9	4.4		
50	26.0	13.0	60	21	2.2	9.7	3.4		
51	26.9	12.2	72	25	2.1	9.1	3.5		
52	27.1	13.9	83	38	2.3	6.3	3.3	1.5	
Mean	32.9	22.1	79	46	7.7	7.7	6.3	810.5	28
Highest	38.1	28.1	95	86	16.2	11.3	9.7		
Lowest	24.9	9.9	56	21	2.1	1.1	3.3		

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

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

Category	Population	Production	Productivity
Cattle	349229	2475.2 qtl. total milk	
<i>Crossbred</i>			8.585 lit/day
<i>Indigenous</i>			3.375 lit/day
Buffalo	209616		4.451 lit/ha
Sheep	232530	295.16 lakh kg wool	
<i>Crossbred</i>			
<i>Indigenous</i>			
Goats	173022		0.274 lit/ha
Pigs		290097.9 Qtl meat	
<i>Crossbred</i>			
<i>Indigenous</i>			
Poultry	38041	12.77 lakh eggs	
Hens			
<i>Desi</i>			
<i>Improved</i>			
Horse &	410		
Camels	2260		
Donkey	2577		
Total Milk			
Total egg			
Total wool			

Category	Area	Production	Productivity
Fish			
<i>Marine</i>			
<i>Inland</i>			
Prawn			
Scampi			
Shrimp			

Source: Assistant Directorate of Fisheries, Jamnagar

2.7 Details of Operational area/ Villages (2021 to 2023)

Sl No	Taluka	Name of the village	Major crops & enterprises	Major problem identified	Identified thrust area
1	Dhrol	Katada, Jayva, Mansar (Jaliya), Kharva, Khengarka	Cotton, groundnut, sesame, castor, greengram, wheat, Gram, cumin, mustard, Vegetable, Soyabean, flowers, live-stock, fisheries	Heavy infestation of sucking pest in cotton, stem rot disease & white grub in Groundnut, Root rot in castor, Less area under horticulture crops, Blight in cumin, salinity, pink bollworm in cotton	<ul style="list-style-type: none"> - ICM in major crops of the district - Organic crop production - Introduction of new crop - Recycling of farm waste - Popularization of MIS - Motivation of fisheries cultivation - Soil Reclamation - Farm women empowerment - Farm mechanization
2	Jam Jodhpur	Sonvadiya, Satapar, Bhupat Ambardi, Dal Devaliya Luvarsar			
3	Jam Khambhalia	Keshod, Shedha Bhadthar, Samor, Jakasiya, Juvangadh			

2.8 Priority thrust areas

Sl. No	Crop/ Enterprise	Thrust area
1.	Cotton, groundnut, castor, cumin, coriander, wheat, vegetables, fruits, etc.	<ul style="list-style-type: none"> ➤ Integrated Crop Management in major crops ➤ IPM & IDM in major field crops ➤ White grub management in Groundnut ➤ Wireworm management in garlic & Onion ➤ Micronutrient management in wheat
2.	Organic 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.	Fisheries	Fish Farming
8.	Improved Implements	Popularization of the mechanized technological know how
9.	Plant protection	Pink boll worm in cotton and white grub in groundnut,
10.	Horticultural area	Enhancement of pomegranate, date palm, draganfruit,
11.	Storage facility	Requirement of storage techniques and value addition in farm produce
12.	Water conservation & use of Micro irrigation	Efficient use of water by micro irrigation system, water harvesting structure, and water conservation techniques

3. TECHNICAL ACHIEVEMENTS**3.A. Details of target and achievements of mandatory activities by KVK during 2021**

OFT		FLD	
1		2	
Number of OFTs	Total no. of Trials	Area in ha	Number of Farmers

Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
5	5	17	17	102	92	308	283

Training				Extension Programme			
3				4			
Number of Courses		Number of Participants		Number of activities		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
38	52	965	2806	192	401	18166	14941

Seed Production (Qtl.)				Planting material (Nos.)			
3				6			
Target		Achievement		Target		Achievement	
150		197.01		500		658	

Livestock, poultry strains and fingerlings (No.)				Bio-products (Kg)			
7				8			
Target		Achievement		Target		Achievement	
0		1		5000		4616	

3.1. B. Operational areas details during 2021

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, Sclerotium rot (stem rot), white grub	380000 ha.	Katada, Jayva, Mansar (Jaliya), Kharva, Khengarka, Sonvadiya, Satapar, BhupatAmbardi, Dal Devaliya, Luvarsar, Keshod, Shedha Bhadthar, Samor, Jakasiya, Juvangadh	OFT, FLD and Training
2	Chilli	Thrips, Curling of leaves, nutritional deficiency	1300 ha	- " -	Training
3	Garlic	Purple blotch, wireworm, yellowing, tip burning	700 ha	- " -	Training
4	Onion	Purple blotch, bulb rotting	400 ha	- " -	Training
5	Sesame	Leaf webber, mite, blight, stem rot, root rot, yellowing, replacement of old variety	125000 ha.	- " -	OFT, FLD and Training
6	Wheat	Fall army worm, Stem borer, Termite, nutritional deficiency,	60000 ha	- " -	FLD and Training
7	Vegetable (Okra, Brinjal)	Drudgery reduction, cut & wounds, skin hardness, blisters and abrasions,	1700 ha	- " -	FLD and Training
8	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 (325000)	- " -	FLD and Training
9	Cotton	Pink bollworm, redding & yellowing of leaves, sucking pests, weevil,	65000	- " -	FLD and Training

10	Chicory	ICM	45		FLD and Training
11	Cumin	Aphid, IPM, IDM, INM, variety	26300		FLD and Training
12	Ajwain	IDM, Variety	5045		FLD and Training
13	Coriander	IDM, IPM, Variety	2100		FLD and Training
14	Pearl millet	Fall army worm, Stem borer, Variety, IPM, IDM	1200		FLD and Training
15	Chick pea	IPM, Variety, Stunt virus, IDM	32500		FLD and Training
16	Kitchen gardening	Nutritional security	Majority farmers		FLD and Training

* Support with problem-cause and interventions diagram

3.2. Technology Assessment and Refinement (Kharif 2021, Rabi 2020-21, Summer 2021)

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management										
Varietal Evaluation		2								2
Integrated Pest Management		1								1
Integrated Crop Management										
Integrated Disease Management										
Small Scale Income Generation Enterprises										
Weed Management										
Resource Conservation Technology										
Farm Machineries										
Integrated Farming System										
Seed / Plant production										
Value addition										
Drudgery Reduction										
Storage Technique		1								1
Mushroom cultivation										
Total		4								4

A2. Abstract on the number of technologies refined in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management										
Varietal Evaluation										
Integrated Pest Management				1						1
Integrated Crop Management										
Integrated Disease Management										
Small Scale Income Generation Enterprises										
Weed Management										
Resource Conservation Technology										
Farm Machineries										
Integrated Farming System										
Seed / Plant production										
Value addition										
Drudgery Reduction										
Storage Technique										
Mushroom cultivation										
Total				1						1

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. Achievements on technologies Assessed and Refined**B.1. Technologies Assessed under various Crops**

Thematic areas	Crop	Name of the technology assessed	No. of trials	No. of farmers	Area in ha (Per trail covering all the Technological Options)
Integrated Nutrient Management					
Varietal Evaluation	Sesame	Assessment of the performance of high yielding Sesame varieties in <i>summer</i> irrigated condition for Jamnagar District	3	3	1.8
	Groundnut	Assessment of suitable high yielding groundnut variety in kharif season for Jamnagar district	3	3	1.8
Integrated Pest Management	Sesame	Management of sesame leaf webber	3	3	1.8
Integrated Crop Management					
Integrated Disease Management					
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Post Harvest Technology / Value addition					

Drudgery Reduction					
Storage Technique	Groundnut	Assessment of PICS bag for Groundnut storage	5	5	-
Others (Pl. specify)					
TOTAL			14	14	

B.2. Technologies Refined under various Crops

Thematic areas	Crop	Name of the technology refined	No. of trials	No. of farmers	Area in ha (Per trail covering all the Technological Options)
Integrated Nutrient Management					
Varietal Evaluation					
Integrated Pest Management	Cumin	Management of aphid in cumin	3	3	1.8
Integrated Crop Management					
Integrated Disease Management					
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Value addition					
Drudgery Reduction					
Storage Technique					
Others (Pl. specify)					
Total			3	3	

B.3. Technologies assessed under Livestock and other enterprises

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Disease Management				
Evaluation of Breeds				
Feed and Fodder management				
Nutrition Management				
Production and Management				
Others (Pl. specify)				
Total				

B.4. Technologies Refined under Livestock and other enterprises

Thematic areas	Name of the livestock enterprise	Name of the technology refined	No. of trials	No. of farmers
Disease Management				
Evaluation of Breeds				
Feed and Fodder management				
Nutrition Management				
Production and Management				
Others (Pl. specify)				
Total				

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

OFT – 1:- Cumin (Plant Protection) [Rabi-2020-21]

1) Title: Management of aphid in cumin.

2) Problem definition:

1. Heavy infestation of aphid was found
2. Lack of seed treatment and improper cultivation practices
3. Lack of knowledge about pest outbreaks and its management
4. Injudicious use of nitrogenous fertilizer
5. Extra irrigation rather than recommendation during cloudy weather.
6. Overlapping of the crops seasons

Problem diagram :-

Resurgence of aphid	Management of aphid in cumin	Multi season cropping system
Overlapping of the crops seasons		Lack of knowledge about pest outbreaks and its management
Lack of seed treatment		Lack of improper cultivation practices
In judicious use of pesticide		In judicious use of nitrogenous fertilizer
Extra irrigation		Improper use of FYM (without decomposition)

3) Details of technologies for assessment/ refinement

Category	Source of technology	Technology details		
Technology option 1	Farmer	T ₁	Farmer practices	Injudicious use of insecticides. [use of deltamethrin, flubendiamide, imidacloprid, acetameprid, Thiamethoxam, cypermethrin, lamdacyhalothrin, carbosulfan, dimethoate after infestation of aphid repeatedly at weekly interval without follow ETL]
Technology option 2	SAU	T ₂	Reco. practices	First spray of Carbosulfan 25 EC 0.04% was made at initiation of pest and second spray was given after 15 days.
Technology option 3		T ₃	Refinement	First spray of Spray of <i>Bearuveriabassiana</i> @ 5 g/lit of water was made at initiation of pest and subsequent spray at 15 days interval.

4) Source of Technology:- State Agricultural University

5) Production system :Irrigated, rabi crop and all agronomical practices adopted commonly.

6) Thematic area : IPM, Management of aphid in cumin

7) Raw data about the Performance of the Technology assessed / refined with performance indicators

Sr. No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed (aphid population (aphid index) from five randomly selected plants from each plot at 7 days after spray and Yield q/ha)					
			T ₁		T ₂		T ₃	
			No. of Aphid	Yield	No. of Aphid	Yield	No. of Aphid	Yield
1	GoganhaiRaydebhaiVadher	Viramdad	32	6.63	20	7.75	22	7.13
2	RanabhaiRamabhaiKarmur	Tupani	30	7.25	15	9.38	19	8.38
3	RanmalbhaiSidabhaiChavada	Datrana	34	7.38	16	8.88	19	8.13
			32	7.08	17	8.67	20	7.88

8) Final recommendation for micro level situation:

Application of Carbosulfan 25 EC 0.04% was made at initiation of pest and second spray was given after 15 days have been minimum aphid population and also obtained highest yield. The farmers who doing organic farming they are also advise to application Spray of *Bearuveriabassiana* @ 5 g/lit of water was made at initiation of pest and subsequent spray at 15 days interval having minimize the pest (aphid) and good yield with decrease in input cost without hazardous effect.

9) Constraints identified and feedback for research :

- Time of application cannot be identified for spraying for aphid population
- High population of sucking pests, twisting of twigs
- Yield increase as compare to farmers' practices.
- Reduce the aphid as well as leaf curl incidence.

10) Process of farmers participation and their reaction:

Farmers have good response and they have support for OFT. Recommended practices having found incidence of aphid where it is repeated use. However, refined treatment is very effective treatment for the management of aphid for organic grower and hazardless effect along with maximum yield.

11) Results of On Farm Trials :

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter Q/ha	
1	2	3	4	5	6	7	8	
Cumin	Irrigated	IPM	Management of aphid in cumin	3	IPM Practices	No of aphid/3 twig and yield (q/ha)	T ₁	32.00
							T ₂	17.00
							T ₃	20.00

Crop/enterprise	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	9	10	11	12
Cumin	Application of Carbosulfan 25 EC 0.04% was made at initiation of pest and second spray was given after 15 days have been minimum aphid population and also obtained highest yield. The farmers who doing organic farming they are also advise to application Spray of <i>Bearuveriabassiana</i> @ 5 g/lit of water was made at initiation of pest and subsequent spray at 15 days interval having minimize the pest (aphid) and good yield with decrease in input cost without hazardous effect.	Farmers have good response and they have support for OFT. Recommended practices having found incidence of aphid where it is repeated use. However, refined treatment is very effective treatment for the management of aphid for organic grower and hazardless effect along with maximum yield.	Application of <i>Bearuveriabassiana</i> @ 5 g/lit of water was made at initiation of pest and subsequent spray at 15 days interval.	It is necessary against outbreak of pest and heavy infestation. Also resistance developed against conventional insecticide.

Crop/ enterprise	Technology Assessed / Refined		Production kg/ha	Input costRs./ha	Gross returnRs./ha (Rate 80.00/kg)	Net Return (Profit) in Rs. / ha	BC Ratio
1	13		14	15	16	17	18
Cumin	T ₁	Injudicious use of insecticides. [use of deltamethrin, flubendiamide, imidacloprid, acetameprid, Thiamethoxam, cypermethrin, lamdacyhalothrin, carbosulfan, dimethoate after infestation of aphid repeatedly at weekly interval without follow ETL]	708	37000	92040	55040	2.49
	T ₂	First spray of Carbosulfan 25 EC 0.04% was made at initiation of pest and second spray was given after 15 days.	867	32000	112710	80710	3.52
	T ₃	First spray of Spray of <i>Bearuveriabassiana</i> @ 5 g/lit of water was made at initiation of pest and subsequent spray at 15 days interval.	788	30000	102440	72440	3.41

OFT-2 : Home Science: (2021)**1) Title : Assessment of PICS bag for Groundnut storage****2) Problem Definition :-**

- Residual effect of insecticides used for stored godown
- Insecticidal effect on germination
- High moisture retention during summer days
- Heavy attack of storage pests
- High cost of storage
- Heavy loss of food grains and seeds
- Lack of regular inspection in stored products.

3) Details of technologies for assessment/ refinement

Category	Source of technology	Technology details		
Technology option 1	Farmer	T ₁	Farmer practices 1	Open heaps in storage godown
Technology option 2	Farmer	T ₂	Farmers practices 2	Local practices for storage in plastic bag /closely woven bag
Technology option 3	SAU (MKV-Parbhani)	T ₃	Reco. practices	Storage in Triple layer hermetic "Purdue Improved Crop Storage" (PICS) bags

4) Source of Technology:- JAU, Junagadh Formerly it was from ICRISAT, Hyderabad

5) Production system :

The Purdue Improved Crop Storage (PICS) technology, triple layer bag consists of two high density inner polyethylene plastic bags (inner liners) and a third outer sack (a woven polypropylene bag). Drying the grain adequately before storage. Fill the inner bag with groundnut pod. Gently twist the lip of the most inner liner fold it and tie, then tuck the second liner as same and finally tie the woven bag. be sure to fold and tie each bag separately. Kept it for six months and observe weight loss and insect damage.

6) Thematic area :Post-harvest management**7) Raw data about the Performance of the Technology assessed / refined with performance indicators**

Sr. No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed (weight loss, Insect (Bruchid) damage in %)					
			T ₁		T ₂		T ₃	
			weight loss	Insect damage	weight loss	Insect damage	weight loss	Insect damage
1	JetibenNagabhaiAmbaliya	Viramdad	20	24	5	9.8	3	6.2
2	RekhabenGirdharbhaiSanghani	Karana	24	32	6.6	12.6	1.4	2.5
3	DilipbhaiGordhanbhaiSanghani	Hadmatiya	18	30	7.6	14.2	1.8	3.1
4	HansabenKishorbhaiPedhadiya	Sumari	14	28	4.4	8.3	1	2.2
5	RamibenGovabnhaiAmbaliya	Viramdad	12	27	3.6	7.2	0.6	1.4
Average			17.6	28.2	5.44	10.42	1.56	3.08

8) Final recommendation for micro level situation:

Use of Purdue Improved Crop Storage (PICS) technology, triple layer bag consists of two high density inner polyethylene plastic bags (inner liners) and a third outer sack (a woven polypropylene bag) for storage of groundnut pod up to six months were highest protection against insect damage (3.08%) and lowest weight loss (1.56%) and reduce input cost as well as hazardous effect.

9) Constraints identified and feedback for research:

- Residual and germination effect of insecticides used for stored godown have been reduced
- Reduction of storage pests attack
- Reduce cost of storage
- Heavy loss of food grains and seeds

10) Process of farmers participation and their reaction:

Farmers have good response and they have support for OFT. PICS bags have very less insect damage as well as wight loss. This treatment is chemical less and hazardless.

11) Results of On Farm Trials:

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter
1	2	3	4	5	6	7	8
Groundnut (PICS bag)	Storage of seeds	Heavy attack of storage pest	Assessment of PICS bag for Groundnut storage	5	Storage in Triple layer hermetic "Purdue Improved Crop Storage" (PICS) bags	1. Weight loss 2. Insect damage (%)	1.56 % weight loss and 3.08 % insect damage

Crop/ enterprise	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	9	10	11	12
Groundnut (PICS bag)	Use of Purdue Improved Crop Storage (PICS) technology, triple layer bag consists	Farmers have good response and they	-	-

	of two high density inner polyethylene plastic bags (inner liners) and a third outer sack (a woven polypropylene bag) for storage of groundnut pod up to six months were highest protection against insect damage (3.08%) and lowest weight loss (1.56%) and reduce input cost as well as hazardous effect.	have support for OFT. PICS bags have very less insect damage as well as wight loss. This treatment is chemical less and hazardless.		
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Crop/enterprise	Technology Assessed / Refined	Healthy pod obtained out of 100 kg storage	Gross return Rs./100 kg	Storage cost Rs./100 kg	Loss of due to spoilage Rs./100 kg	Net Return (Profit) in Rs. / 100 kg	BC Ratio (Col.18/(Col.16+17))
1	13	14	15	16	17	18	19
Groundnut (PICS bag)	T ₁ Open heaps in storage godown	82.4	4120	20	880	3220	4.58
	T ₂ Local practices for storage in plastic bag /closely woven bag	94.56	4728	100	272	4356	12.71
	T ₃ Storage in Triple layer hermetic "Purdue Improved Crop Storage" (PICS) bags	98.44	4922	170	78	4922	19.85

OFT 3 :-Sesame (Summer 2021-22)

1) Title:-Assessment of the performance of high yielding Sesame varieties in *summer* irrigated condition for Jamnagar District

2) Problem definition:

Sesame is cultivated predominantly during *summer* season in Jamnagar district. The productivity of Sesame, in Jamnagar is low due to low yield in existing variety, Heavy incidence of pest and disease attack.. Hence, an OFT was carried out with the objectives to find out suitable high yielding sesame variety for *summer* season for Jamnagar district to enhance the sesame productivity.

3) Details of technologies selected for assessment/ refinement

Category	Source of technology	Technology detail	
Technology option 1	Farmer	T ₁	G. Til. 2 (Farmer's practice)
Technology option 2	JAU	T ₂	G. Til. 3
Technology option 2	JAU	T ₃	G. Til. 5

4) Source of Technology: - Junagadh Agricultural University

5) Production system:

- Crop grown as Integrated Crop Management system and all other agronomical practices adopted commonly.

- 6) Thematic area: To enhance the sesame productivity.

7) Performance of the Technology assessed with performance indicators:

Sr. No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed (from each plot)					
			Plant Height (cm)			Capsule per plant		
			T ₁	T ₂	T ₃	T ₁	T ₂	T ₃
1	MarvaniyaRatilalDayabhai	Vanshjaliya	56	63	72	51	54	60
2	HeramaVijayKhengarbhai	Udepur	52	59	64	44	51	58
3	VadhiyaMeramanNathubhai	Jasapar	54	64	69	50	55	62
	Average		54.00	62.00	68.33	48.33	53.33	60.00

Data on the performance indicators of the technology assessed (from each plot)

Sr. No	1000 seed weight (g)			Maturity days			Yield (Kg/ha)		
	T ₁	T ₂	T ₃	T ₁	T ₂	T ₃	T ₁	T ₂	T ₃
1	3.42	3.72	3.80	87	85	89	944	1025	1160
2	3.32	3.51	3.46	82	83	84	879	950	1025
3	3.35	3.63	3.66	88	86	91	910	1010	1130
Average	3.36	3.62	3.64	85.66	84.66	88.00	911.00	995.00	1105.00

8) Final recommendation for micro level situation:

The results of the study revealed that the sowing of Sesame G.Til.5 produced higher yield (1105kg/ha), Plant height (68.33 cm), Capsule per plant (60), 1000 seed weight (3.64 g), net return (Rs. 51850/ha) and BCR (3.03) than sesame variety G.Til. 2, G. Til. 3.

9) Constraints identified and feedback for research:

- Lack of knowledge about new high yielding variety
- Non availability of seed of new high yielding variety

10) Process of farmer's participation and their reaction: Satisfactory, Less incidence of collar rot**11) Results of On Farm Trials:**

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter Q/ha	
1	2	3	4	5	6	7	8	
Sesame	Irrigated	Low yield in existing variety	Assessment of the performance of high yielding Sesame varieties in summer irrigated condition for Jamnagar District	3	suitable high yielding Sesame variety for <i>summer</i> season	Yield (Kg/ha), Plant Height (cm), Capsule per plant, 1000 seed weight (g), Maturity days, Economics	Pod yield (q/ha)	
							T ₁	9.11
							T ₂	9.95
							T ₃	11.05

Crop/enterprise	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	9	10	11	12
Sesame	Sowing of sesame G.Til.5 produced higher yield (11.05 q/ha), Plant height (68.33 cm), Capsule per plant (60), 1000 seed weight (3.64 g), net return (Rs. 51850/ha) and BCR (3.03) than sesame variety G.Til. 2, G. Til. 3.	Farmers have good response and they have support for OFT. G.Til.5 produced higher yield	-	-

Crop/enterprise	Technology Assessed / Refined		Production kg/ha	Gross return Rs./ha	Cost of cultivation Rs./ha	Net Return (Profit) in Rs. / ha	BC Ratio
			Yield (Kg/ha)				
1	13		14	15	16	17	18
Sesame	T ₁	G. Til. 2 (Farmer's practice)	911	63770	25500	38270	2.5
	T ₂	G. Til. 3	995	69650	25500	44150	2.73
	T ₃	G. Til. 5	1105	77350	25500	51850	3.03

Selling Rate: Sesame: 70 Rs per kg,

OFT-4 Sesame (Assessment) (Plant Protection) [kharif-2021-22]**Title: Management of sesame leaf webber****1) Objective:** To manage the leaf webber infestation in sesame**2) Problem definition:** attack of leaf webber is increase

- Heavy infestation of leaf webber was found
- Improper cultivation practices
- Lack of knowledge about pest outbreaks and its management

Problem diagram :-

Improper cultivation practices	Management of sesame leaf webber	Irregular irrigation
Mono-cropping system		Lack irrigation facilities
No adoption of recommended practices		Lack of knowledge about pest outbreaks and its management
Crop failure due to water logging condition in rainy season		In judicious use of chemical pesticide
Farmer follows instruction given by the local pesticides retailer		Heavy incidence of pest and disease attack

3) Details of technologies selected for assessment/refinement

Category	Source of technology	Technology detail	
Technology option 1	Farmer	T ₁	Farmer practices Injudicious use of insecticides. [use of chlorpyrifos, quinalphos, flubendiamide, imidacloprid, cypermethrin, lamdacyhalothrin after infestation of leaf webber at weekly interval without follow ETL]
Technology option 2	SAU	T ₂	Reco. Practices 1 Application of the insecticide will be start at pest infestation occurred. Cartap hydrochloride 50% S.P.@10g/10 Litre of water at the time of infestation.
Technology option 2	SAU	T ₃	Reco. Practices 2 Spray of <i>Beauveria bassiana</i> @ 5 g/lit of water at 15 days interval at pest initiation.

4) Source of Technology: - Junagadh Agricultural University**5) Production System and thematic area:** Crop grown as Integrated Crop Management system and all agronomical practices adopted commonly.**6) Thematic area:** Integrated Pest Management**7) Performance of the Technology assessed / refined with performance indicators:**

Sr. No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed / refined [Yield (q/ha), No. of leaf webber per 1 meter row length from each plot]					
			T ₁		T ₂		T ₃	
			No. of leaf webber	Yield	No. of leaf webber	Yield	No. of leaf webber	Yield
1	KananiHansrajbhaiGandubhai	Hadiyani	15	6.00	8	8.13	5	8.13
2	BhensdadiyaBrijeshbhiKanjibhai	Moti Banugar	12	6.75	6	10.75	3	8.38
3	ParshotambhaiMadhabhaiSanghani	Nani Bhalsan	14	7.13	7	10.00	5	10.50
Average			13.67	6.63	7.00	9.63	4.33	9.00

8) Final recommendation for micro level situation: Application of the insecticide will be start at pest infestation occurred. Cartap hydrochloride 50% S.P.@10g/10 Litre of water at the time of infestation having minimum pest population and highest yield withfarmers practices. The farmers who have done organic farming they have to use of *Beauveria bassiana* @ 5 g/lit of water at 15 days interval at pest initiation.

9) Constraints identified and feedback for research:

- It start within early stage of crops and till remain till the pod formation
- It cannot come in direct contact of pesticide due to webbing of leaves.
- Yield increase as compare to farmers' practices.

10) Process of farmer's participation and their reaction: Farmers have good response and they have support for OFT. Recommended practices having found lower incidence of leaf webber and highest yield.

11) Results of On Farm Trial

Crop/enterprise	Farm-ing situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter Q/ha
1	2	3	4	5	6	7	8
Sesame	Rainfed	IPM	Management of sesame leaf webber	3	Cartap hydrochloride 50% S.P.@10g/10 Litre of water at the time of infestation	Yield (q/ha), No. of leaf webber per 1 meter row length from each plot	T ₁ 6.63 T ₂ 9.63 T ₃ 9.00

Crop/enterprise	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	9	10	11	12
Sesame	Application of the insecticide will be start at pest infestation occurred. Cartap hydrochloride 50% S.P.@10g/10 Litre of water at the time of infestation having minimum pest population and highest yield with farmers practices. The farmers who have done organic farming they have to use of <i>Beauveria bassiana</i> @ 5 g/lit of water at 15 days interval at pest initiation.	Farmers have good response and they have support for OFT. Recommended practices having found lower incidence of leaf webber and highest yield.	Nil	It is necessary against outbreak of pest and heavy infestation. Also resistance developed against conventional insecticide.

Crop/enterprise	Technology Assessed / Refined	Product ion kg/ha	Input CostRs./ha	Gross return Rs./ha (Rate 105.00/kg)	Net Return (Profit) in Rs. / ha	BC Ratio
1	13	14	15	16	17	18
Groundnut	T ₁ Injudicious use of insecticides. [use of chlorpyrifos, quinalphos, flubendiamide, Imidacloprid, cypermethrin, lambdacyhalothrin after infestation of leaf webber at weekly interval without follow ETL]	663	30000	69615	39615	2.32
	T ₂ Application of the insecticide will be start at pest infestation occurred. Cartap hydrochloride 50% S.P.@10g/10 Litre of water at the time of infestation.	963	26500	101115	74615	3.82
	T ₃ Spray of <i>Beauveria bassiana</i> @ 5 g/lit of water at 15 days interval at pest initiation.	900	25000	94500	69500	3.78

Pooled Result (2018-19 to 2021-22)

Sr. No.	Pooled Data on the performance indicators of the technology assessed/refined					
	Technology Option 1 Injudicious use of insecticides		Technology Option 2 Cartap hydrochloride		Technology Option 3 <i>Beauveria bassiana</i>	
	No. of leaf webber	Yield	No. of leaf webber	Yield	No. of leaf webber	Yield
1	10.75	5.81	5.00	7.46	4.00	7.26
2	8.75	6.19	3.75	8.28	4.25	7.05
3	11.08	5.78	4.25	8.40	4.50	7.60
Average	10.19	5.93	4.33	8.05	4.25	7.30

OFT :- 5. GROUNDNUT (Kharif 2021-22)

1) Title:- Assessment of suitable high yielding groundnut variety in kharif season for Jamnagar

2) Problem definition:

Groundnut is cultivated predominantly in Jamnagar district. The productivity of groundnut, in Jamnagar is low due to low yield in existing variety, Irregular rainfall, Heavy incidence of pest and disease attack. Hence, an OFT was carried out with the objectives to find out suitable high yielding groundnut variety for kharif season for Jamnagar district to enhance the groundnut productivity.

3) Details of technologies selected for assessment/ refinement

Category	Source of technology	Technology detail	
Technology option 1	Farmer	T ₁	GG-20 (Farmer's practice)
Technology option 2	JAU	T ₂	GJG-22
Technology option 3	JAU	T ₃	GJG-32

4) Source of Technology: - Junagadh Agricultural University

5) Production system:

- Crop grown as Integrated Crop Management system and all other agronomical practices adopted commonly.

6) Thematic area: To enhance the groundnut productivity.

7) Performance of the Technology assessed with performance indicators:

Sr. No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed [Yield (q/ha), from each plot]					
			T ₁		T ₂		T ₃	
			Haulm yield (q/ha)	Pod Yield (q/ha)	Haulm yield (q/ha)	Pod Yield (q/ha)	Haulm yield (q/ha)	Pod Yield (q/ha)
1	AgheraKanajibhaiValajibhai	Katada (Dhrol)	26	14	34	24	40.5	34
2	SanganiVasharambhaiGoradhanbhai	Nana Badanpar (Kalavad)	24	16.5	38	36	46.5	42
3	ManavarDhirajbhaiDamajibhai	Moti Banugar (Jamnagar)	27	17	36	26	43.31	36
Average			25.67	15.83	36.00	28.67	43.44	37.33

8) Final recommendation for micro level situation:

The results of the study revealed that the sowing of groundnut GJG-32 produced higher pod yield (37.33 q/ha), haulm yield (43.44 q/ha), net return (Rs. 169080/ha) and BCR (4.57) than groundnut GJG-22.

9) Constraints identified and feedback for research:

- Lack of knowledge about new high yielding variety
- Non availability of seed of new high yielding variety
- Irregular rainfall

10) Process of farmer's participation and their reaction: Satisfactory, Less incidence of collar rot

11) Results of On Farm Trials:

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter Q/ha		
1	2	3	4	5	6	7	8		
Groundnut	Irri-gated	Low yield in existing variety	Assessment of suitable high yielding groundnut variety in kharif season for Jamnagar	3	suitable high yielding groundnut variety for kharif season	Haulm yield (q/ha), Pod yield (q/ha),		Haulm yield (q/ha)	Pod yield (q/ha)
							T ₁	25.67	15.83
							T ₂	36.00	28.67
						T ₃	43.44	37.33	

Crop/enterprise	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	9	10	11	12
Groundnut	Sowing of groundnut GJG-32 produced higher pod yield (37.33 q/ha), haulm yield (43.44 q/ha), net return (Rs. 169080/ha) and BCR (4.57) than groundnut GJG-22.	Farmers have good response and they have support for OFT. GJG-32 produced higher yield .	-	-

Crop/enterprise	Technology Assessed / Refined		Production kg/ha		Gross return Rs./ha	Cost of cultivation Rs./ha	Net Return (Profit) in Rs. / ha	BC Ratio
			Haulm yield (Kg/ha)	Pod Yield (Kg/ha)				
1	13		14	15	16	17	18	19
Groundnut	T ₁	GG-20	2950	2600	150436	52100	98325	2.89
	T ₂	GJG-22	3600	2867	167417	50700	116717	3.30
	T ₃	GJG-32	4344	3733	216480	47400	169080	4.57

Selling Rate: Groundnut pod: 52.75 Rs per kg, Groundnut haulm: 4.5 Rs per kg

OFT-6 :Home Science: (2021-22)**1) Title :Assessment of PICS bag for Groundnut storage****2) Problem Definition :-**

1. Residual effect of insecticides used for stored godown
2. Insecticidal effect on germination
3. High moisture retention during summer days

4. Heavy attack of storage pests
5. High cost of storage
6. Heavy loss of food grains and seeds
7. Lack of regular inspection in stored products.

3) Details of technologies for assessment/ refinement

Category	Source of technology	Technology details		
Technology option 1	Farmer	T ₁	Farmer practices 1	Open heaps in storage godown
Technology option 2	Farmer	T ₂	Farmers practices 2	Local practices for storage in plastic bag /closely woven bag
Technology option 3	SAU (MKV-Parbhani)	T ₃	Reco. practices	Storage in Triple layer hermetic "Purdue Improved Crop Storage"(PICS) bags

4) Source of Technology:- JAU, Junagadh Formerly it was from ICRISAT, Hyderabad

5) Production system :

6) Thematic area :

7) Raw data about the Performance of the Technology assessed / refined with performance indicators

Sr. No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed(weight loss, Insect (Bruchid)damage in %)						
			T ₁		T ₂		T ₃		
			weight loss	Insect damage	weight loss	Insect damage	weight loss	Insect damage	
1	RanjanbenPravinbhaiBhatasana	Khengaraka							
2	AnsoyabenRameshbhaiKagathara	Khengaraka							
3	HiraparajoshanabenTulshibhai	Narmana							
4	RamiliyaSavitabenPasotambhai	Daldevdiya							
5	SangitabenJentilalParasana	Haripar							

8) Final recommendation for micro level situation:

9) Constraints identified and feedback for research :

10) Process of farmers participation and their reaction:

11) Results of On FarmTrials :**Awaited**

OFT 8 Management of aphid in cumin (Rabi 2021-22)

Objective: To minimize the aphid incidence in cumin. To reduce injudicious use of chemical pesticide. To minimize residual effect of chemical.

Problem definition:

1. Heavy infestation of aphid was found
2. Lack of seed treatment and improper cultivation practices
3. Lack of knowledge about pest outbreaks and its management
4. Injudicious use of nitrogenous fertilizer
5. Extra irrigation rather than recommendation during cloudy weather.
6. Overlapping of the crops seasons

Problem diagram :-

Resurgence of aphid	Management of aphid in cumin	Multi season cropping system
Overlapping of the crops seasons		Lack of knowledge about pest outbreaks and its management
Lack of seed treatment		Lack of improper cultivation practices
In judicious use of pesticide		In judicious use of nitrogenous fertilizer
Extra irrigation		Improper use of FYM (without decomposition)

3) Details of technologies for assessment/refinement:

Category	Source of technology	Technology details		
Technology option 1	Farmer	T ₁	Farmer practices	Injudicious use of insecticides. [use of deltamethrin, flubendiamide, imidacloprid, acetameprid, Thiamethoxam, cypermethrin, lamdacyhalothrin, carbosulfan, dimethoate after infestation of aphid repeatedly at weekly interval without follow ETL]
Technology option 2	State Agricultural University	T ₂	Reco. practices	First spray of Afidopyropen 50 G/L DC [(Inscalis) Sefina] 0.04% was made at initiation of pest and second spray was given after 15 days.
Technology option 3		T ₃	Refined practices 1	First spray of Spray of <i>Bearuveriabassiana</i> @ 5 g/lit of water was made at initiation of pest and subsequent spray at 15 days interval.

4) Source of Technology: Junagadh Agricultural University

5) Production system : Irrigated, *rabi* crop and all agronomical practices adopted commonly.

6) Thematic area : IPM, Management of aphid in cumin

7) Raw data about the Performance of the Technology assessed / refined with performance indicators

Sr. No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed (aphid population (aphid index) from five randomly selected plants from each plot at 7 days after spray and Yield q/ha)					
			T ₁		T ₂		T ₃	
			No. of Aphid	Yield	No. of Aphid	Yield	No. of Aphid	Yield
1	Viral Ranchhodbhai Ramoliya	Daldevadiya						
2	Mukesh Mulubhai Chavda	Bhankhokhari						
3	DevshiMulubhai Nandaniya	Kolva						
	Average							

8) Final recommendation for micro level situation:

9) Constraints identified and feedback for research :

10) Process of farmers participation and their reaction:

11) Results of On Farm Trials :Awaited

3.3 FRONTLINE DEMONSTRATION

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

List of technologies demonstrated during previous year and popularized during 2021 and recommended for large scale adoption in the district

Sr. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
						No. of villages	No. of farmer	Area in ha.
	Oilseeds							
1	Groundnut (NMOOP)	ICM	Seed (GJG-22)	Kharif-21	Field days, Field visit, Radio talk, On/Off Campus Training and TV Program, Exhibition and demonstration	162	1678	12500
2	Groundnut (ATIC)	ICM	<i>Trichoderma</i> , PSB, <i>Rhizobium</i> , <i>Beauveria</i>	Kharif-21		192	1150	2850
	Pulses							
3	Chickpea (NFSM)	IPM, Varietal	Seed GG-5, <i>Beauveria</i> , <i>Trichoderma</i> , <i>Azotobactor</i> , PSB	Rabi-21		32	76	530
	Spices Crops							
4	Cumin	ICM	<i>Beauveria</i> , <i>Trichoderma</i> , <i>Azotobactor</i> , PSB,	Rabi-21		87	1450	1800
5	Ajwain	ICM	<i>Beauveria</i> , <i>Trichoderma</i> , <i>Azotobactor</i> , PSB	Rabi-21		8	48	95
6	Coriander	ICM	<i>Beauveria</i> , <i>Trichoderma</i> , <i>Azotobactor</i> , PSB,	Rabi-21		112	1800	2130
	Cereals							
7	Pearl Millet	Variety	Seed (GHB-732)	Sum-21		14	56	45
	Others crops							
8	Cotton	IPM/IDM	SNPV, <i>Azadirachtin</i> , <i>Profenophos</i> , MDP, <i>Beauveria</i>	Kharif-21		53	450	650
9	Cotton (ATIC)	ICM	<i>Beauveria</i> , SNPV, MDP, <i>Azotobactor</i> , PSB,	Kharif-21		53	450	650
10	Kitchen Gardening	Nutritional Security	Vegetable seed	Kharif-21	25	65	24	
11	Chicory	IPM	<i>Beauveria</i> , <i>Azotobactor</i> , PSB,	Kharif-21	4	15	14	
12	Solar Cooker	Solar energy	Solar cooker	2021	5	12	0	
13	Cotton	Drudgery reduction	Cotton picking Apron	Kharif-21	12	28	20	

B. Details of FLDs implemented during 2021 (Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

Sr. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration		
					Prop-osed	Actual	SC/ST	Others	Total
Oilseeds									
1	Sesame (NFMS)	ICM	Guj. Til. 5 seed, Trichoderma, Beauveria, Azotobacter, PSB	Summer 2020-21	10	10	0	25	25
2	Groundnut (NFMS)	ICM	Improved var. Seed (GJG-22), Metarhiziumanisopliae, Trichoderma, PSB, Rhizobium	Kharif 2021-22	20	10	0	25	25
3	Castor (ATIC)	Varietal	Variety GCH-9	Kharif-2021-22	8	8	3	17	20
Pulses									
4	Chickpea (NFMS)	IPM, Varietal	Varietal (GG-5), Trichoderma, PSB, Rhizobium, Beauveriabassiana	Rabi-2021-22	20	20	0	50	50
Cereals									
5	Pearl Millet	Varietal	Pearl millet Seed (GHB-1231)	Summer 2020-21	4	4	0	10	10
6	Wheat	Varietal	Variety –GW 463	Rabi-2021-22	4	4	0	10	10
Spices Crops									
7	Ajwain	IPM/IDM	Beauveria, Trichoderma, Azotobactor, PSB	Kharif-2021-22	04	04	0	10	10
8	Cumin (ATIC)	ICM	Beauveria, Trichoderma, Azotobactor, PSB,	Rabi-2021-22	08	08	0	20	20
9	Coriander (ATIC)	ICM	Beauveria, Trichoderma, Azotobactor, PSB,	Rabi-2021-22	08	08	0	20	20
Others crops									
10	Cotton	IPM	Azadirachtin, Profenophos., MDP,HNPV, Beauveria bassiana	Kharif 2021-22	10	10	0	25	25
11	Kitchen Gardening	Nutritional Security	Vegetable seed	Kharif 2021-22	2	2	0	50	50
12	Chicory	IPM	Beauveria, Azotobactor, PSB,	Kharif-2021-22	2	2	0	5	5
13	Cotton	Drudgery reduction	Cotton picking Apron	Kharif-2021	2	2	0	5	5
14	Animal (Cow)	Dairy Management	Bypass Fat	2021-22	-	-	0	3	3
15	Solar Cooker	Solar energy	Solar cooker	2021-22	-	-	0	5	5

FLD conducted during 2020-21 but result was awaited so this result was present here

Sr. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration		
					Prop-osed	Actual	SC/ST	Others	Total
Oilseeds									
1	Castor (ATIC)	Varietal	Variety GCH-9	Kharif-2020-21	8	8	0	20	20

				Pulses					
2	Chickpea (NFSM)	IPM, Varietal	Varietal (GJG-6), <i>Trichoderma</i> , PSB, <i>Rhizobium</i> , <i>Beauveria bassiana</i>	Rabi-2020-21	20	20	0	50	50
				Cereals					
3	Wheat	Varietal	Variety –GW 463	Rabi-2020-21	4	4	0	10	10
				Spices Crops					
4	Ajwain	IPM/IDM	<i>Beauveria</i> , <i>Trichoderma</i> , <i>Azotobactor</i> , PSB	Rabi-2020-21	04	04	0	10	10
5	Cumin (ATIC)	ICM	<i>Beauveria</i> , <i>Trichoderma</i> , <i>Azotobactor</i> , PSB,	Rabi-2020-21	08	08	0	20	20
6	Coriander (ATIC)	ICM	<i>Beauveria</i> , <i>Trichoderma</i> , <i>Azotobactor</i> , PSB,	Rabi-2020-21	08	08	0	20	20
				Others crops					
7	Cotton	ICM	<i>Beauveria</i> , SNPV, MDP, <i>Azadirachtin</i>	Kharif-2020-21	10	10	0	25	25

Details of farming situation

Sr. No.	Crop	Season and year	Farming Situation (Irrigated / rainfed)	Soil Type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
					N	P	K					
Oilseeds												
1	Sesame (NFSM)	Summer 2020-21	Irrigated	MB	L	M	H	Cotton, Chickpea, Wheat	1 to 15Feb.	1 to 15 May	810.5	28
2	Groundnut (NFSM)	Kharif-2020-21	Rainfed	MB	L	M	H	Cotton, Chickpea, Wheat	1 to 4 July	15 Oct. to 31 Oct.	810.5	28
3	Castor (ATIC)	Kharif-2021-22	Rainfed	MB	L	M	H	Cotton, wheat, g'nut, wheat	15 to 31 August	Jan to March	810.5	28
Pulses												
4	Chickpea (NFSM)	Rabi-2021-22	Irrigated	MB	L	M	H	Groundnut	10-20 Nov.	15-30 Mar.	810.5	28
Cereals												
5	Wheat	Rabi-2021-22	Irrigated	MB	L	M	H	G'nut, Sesame	10-20 Nov.	15-30 Mar.	810.5	28
6	Pearl Millet	Summer 2020-21	Irrigated	MB	L	M	H	Cotton, wheat, g'nut, wheat	1 to 15Feb.	1 to 15 May	810.5	28
Spice												
7	Ajwain	Kharif-2021-22	Irrigated	MB	L	M	H	G'nut, Sesame	25-30 August	15-30 Mar.	810.5	28
8	Cumin	Rabi-2021-22	Irrigated	MB	L	M	H	G'nut, Sesame	10-20 Nov.	15-30 Mar.	810.5	28
9	Coriander	Rabi-2021-22	Irrigated	MB	L	M	H	G'nut, Sesame	10-20 Nov.	15-30 Mar.	810.5	28

Other												
10	Cotton	Kharif 2021-22	Irrigated	MB	L	M	H	Cotton, Wheat	1 to 4 August	15 Jan to 25Feb.	810.5	28
11	Chicory	Kharif 2021-22	Irrigated	MB	L	M	H	Cotton, Wheat	1 to 4 August	15 Jan to 25Feb.	810.5	28
12	Kitchen gardenig	Kharif, rabi 2021-22	Irrigated	MB	L	M	H	Vegetables	May-June, October	Through t season	810.5	28
13	Cotton picking apron	Kharif 2021-22	Irrigated	MB	L	M	H	Cotton, Wheat	1 to 4 August	15 Jan to 25Feb.	810.5	28
14	Animal (Cow) By pass fat	2021-22	-	-	-	-	-	-	-	-	-	-
15	Solar Cooker	2021-22	-	-	-	-	-	-	-	-	-	-

Technical Feedback on the demonstrated technologies

Sl. No.	Crop	Technology Demo.	feedback
Oilseeds			
1	Sesame (NFSM)	Improved Var.(G. Til-5), <i>Beauveria bassiana</i> , <i>Trichoderma</i> , PSB, <i>Azotobactor</i>	<ul style="list-style-type: none"> ➤ Seeds are white and bold ➤ Resistant to Alternaria & Cercospora leaf spots, Phytophthora and Powdery mildew diseases ➤ Resistant to leaf webber, gallfly, mite, jassid and other pests ➤ Late maturity period (91 Days) ➤ Very effective products for low cost management of pests & diseases
2	Groundnut (NFSM)	Improved Var.(GJG.-22), <i>Metarhizium</i> , <i>Trichoderma</i> , PSB, <i>Rhizobium</i>	<ul style="list-style-type: none"> ➤ Effective control White grub with <i>Metarhizium</i> ➤ Effective control of <i>Sclerotium</i> with <i>Trichoderma</i> ➤ Also reduce the damage of pod borer ➤ Easy to apply ➤ Damage of jasside and thrips is comparatively less ➤ Late maturity group (118 day) variety ➤ Comparatively less tikka, rust and stem rot
3	Castor (ATIC)	Variety GCH-9	<ul style="list-style-type: none"> ➤ GCH-9 is high yielding under irrigation condition ➤ Medium duration ➤ Profuse branching habit with medium plant stature ➤ Resistant to <i>Fusarium</i> wilt and <i>Macrophomina</i> root rot ➤ Thrips, leaf hopper and whitefly infestation is low
Pluses			
4	Chickpea (NFSM)	Seed GG-5, <i>Beauveria</i> , <i>Trichoderma</i> , <i>Azotobactor</i> , PSB	<ul style="list-style-type: none"> ➤ GJG-5 high yielding variety ➤ GG-5 is resistance to virus and wilt ➤ More no. of branches per plant ➤ Bio pesticide and bio fertilizer are very effective and Easy to use ➤ Easley available and eco friendly ➤ It also reduce use of chemical pesticide/fertilizer in the era of organic farming
	Chickpea (NFSM)	Seed GG-6, <i>Beauveria</i> , <i>Trichoderma</i> ,	<ul style="list-style-type: none"> ➤ GJG-6 is suitable for rainfed area ➤ GJG-6 is resistance to stunt and wilt ➤ Bio pesticide and bio fertilizer are very effective and Easy to use

		<i>Azotobactor</i> , PSB	<ul style="list-style-type: none"> ➤ Easley available and eco friendly ➤ It also reduce use of chemical pesticide/fertilizer in the era of organic farming
	Cereals		
5	Pearl Millet	Pearl millet Seed (GHB-1231)	<ul style="list-style-type: none"> ➤ Higher yield of grain and fodder ➤ Quality of fodder is good ➤ Good against drought spell ➤ Sweet taste of rotla ➤ Rich in Fe and Zn content
6	Wheat	Varietal GW-463	<ul style="list-style-type: none"> ➤ More number of tillers having require less seed rate ➤ Higher yielding variety ➤ Good for chapatti making ➤ Attractive grain colour with lustrous.
	Spices crop		
7	Ajwain	<i>Beauveria</i> , <i>Trichoderma</i> , <i>Azotobactor</i> , PSB	<ul style="list-style-type: none"> ➤ Use of <i>Azotobacter</i> and PSB had reduced the quantity of chemical fertilizers ➤ <i>Beauveria</i> helped in control of thrips, aphid and other pests ➤ Due to <i>Trichoderma</i> the incidence of wilt was minimized ➤ Cost of cultivation was reduced ➤ The products were easy to use
8	Cumin	<i>Beauveria</i> , <i>Trichoderma</i> , <i>Azotobactor</i> , PSB,	<ul style="list-style-type: none"> ➤ Use of <i>Azotobacter</i> and PSB had reduced the quantity of chemical fertilizers ➤ Beauveria helped in control of thrips and also other pests ➤ Due to <i>Trichoderma</i> the incidence of wilt were minimized ➤ Cost of cultivation was reduced ➤ The products were easy to use
9	Coriander	<i>Beauveria</i> , <i>Trichoderma</i> , <i>Azotobactor</i> , PSB,	<ul style="list-style-type: none"> ➤ Use of <i>Azotobacter</i> and PSB had reduced the quantity of chemical fertilizers ➤ Beauveria helped in control of thrips and also other pests ➤ Due to <i>Trichoderma</i> the incidence of wilt were minimized ➤ Cost of cultivation was reduced ➤ The products were easy to use
	Others		
10	Cotton	Azadirachtin, Profenophos., MDP,HNPV, <i>Beauveria</i> <i>bassiana</i>	<ul style="list-style-type: none"> ➤ Advance management for pest control is benefitted for less damage in plants for higher yield ➤ MDP Technology is very effectively but sum what laboring also. ➤ <i>Beauveria</i> is very effective against sucking and chewing pest ➤ Low cost chemical control for longer time
11	Kitchen Gardening	Vegetable seed	<ul style="list-style-type: none"> ➤ Fresh vegetable available at doorstep and at a time with minimum cost ➤ Regulatory daily nutritious diet. ➤ They produce organic vegetables because farm women are not applying any pesticides or agrochemicals in their backyard. ➤ Utilized maximum backyard space and waste water. ➤ Income generated by selling extra vegetables grown in kitchen garden.
12	Chicory *	<i>Beauveria</i> , <i>Azotobactor</i> , PSB,	<ul style="list-style-type: none"> ➤ Less fertilizer cost and reclamation of soil condition ➤ Reduce pest attack like aphid ➤ The products were easy to use
13	Drudgery reduction	Cotton picking Apron	<ul style="list-style-type: none"> ➤ Useful for manual cotton picking and also vegetable harvesting ➤ Use of apron makes the women comfortable while picking cotton ➤ Prevents scratching of the skin

14	Animal (Cow)	Bypass Fat	This product is quite good and may help to increase % fat of milk and productivity of animals.
15	Solar energy	Solar Cooker	<ul style="list-style-type: none"> ➤ Light weight & Easy to mobile ➤ Use less fuel ➤ Reduce fuel collection time ➤ Reduce cooking time ➤ Completely smoke less ➤ Conserve trees ➤ Allow more dung to be used as fertilizer instead of fuel ➤ Provide work for local chulha makers

Farmers' reactions on specific technologies

Sl. No.	Crop	Technology Demo.	feedback
	Oilseeds		
1	Sesame-Summer (NFSM)	ICM	<ul style="list-style-type: none"> ➤ Higher yielding white seeded variety. ➤ Effective control of diseases ➤ Bio-fertilizer reduce cost of cultivation ➤ Improve soil health
2	Groundnut Kharif NFSM	ICM	<ul style="list-style-type: none"> ➤ GJG-22 is high yielding variety ➤ Less incidence of <i>Sclerotium</i> ➤ Effective control White grub with <i>Metariazhum</i> ➤ Effective control of <i>Sclerotium</i> with <i>Trichoderma</i> ➤ Also reduce the damage of pod borer ➤ Easy to apply
3	Castor	Variety GCH-9	<ul style="list-style-type: none"> ➤ GCH-9 is high yielding under irrigation condition ➤ Medium duration ➤ Profuse branching habit with medium plant stature ➤ Resistant to <i>Fusarium</i> wilt and <i>Macrophomina</i> root rot ➤ Thrips, leaf hopper and whitefly infestation is low
	Pluses		
4	Chickpea	ICM	<ul style="list-style-type: none"> ➤ GJG-6 is suitable for rainfed area ➤ GJG-6 is resistance to stunt and wilt ➤ Bio pesticide and bio fertilizer are very effective and Easy to use ➤ Easily available and eco friendly ➤ It also reduce use of chemical pesticide/fertilizer in the era of organic farming
	Cereals		
5	Wheat	Variety – GJW-463	<ul style="list-style-type: none"> ➤ More number of tillers having require less seed rate ➤ Higher yielding variety ➤ Good for chapatti making ➤ Attractive grain colour with lustrous.
6	Pearl Millet	Variety- GHB 1231	<ul style="list-style-type: none"> ➤ Higher yield of grain and fodder ➤ Quality of fodder is good ➤ Good against drought spell ➤ Sweet taste of rotla ➤ Rich in Fe and Zn content
	Spices crop		
7	Cumin	<i>Beauveria</i> , <i>Trichoderma</i> ,	<ul style="list-style-type: none"> ➤ Use of <i>Azotobacter</i> and PSB had reduced the quantity of chemical fertilizers

		<i>Azotobacter</i> , PSB	<ul style="list-style-type: none"> ➤ <i>Beauveria</i> helped in control of thrips, aphid and other pests ➤ Due to <i>Trichoderma</i> the incidence of wilt were minimized ➤ Cost of cultivation was reduced ➤ The products were easy to use
8	Ajwain	<i>Beauveria</i> , <i>Trichoderma</i> , <i>Azotobacter</i> , PSB	<ul style="list-style-type: none"> ➤ Use of <i>Azotobacter</i> and PSB had reduced the quantity of chemical fertilizers ➤ <i>Beauveria</i> helped in control of thrips, aphid and other pests ➤ Due to <i>Trichoderma</i> the incidence of wilt were minimized ➤ Cost of cultivation was reduced ➤ The products were easy to use
9	Coriander	<i>Beauveria</i> , <i>Trichoderma</i> , <i>Azotobacter</i> , PSB	<ul style="list-style-type: none"> ➤ Use of <i>Azotobacter</i> and PSB had reduced the quantity of chemical fertilizers ➤ <i>Beauveria</i> helped in control of thrips, aphid and other pests ➤ Due to <i>Trichoderma</i> the incidence of wilt were minimized ➤ Cost of cultivation was reduced ➤ The products were easy to use
	Others		
10	Cotton	Bt.Cotton IPM/INM MDP	<ul style="list-style-type: none"> ➤ Advance management for pest control is benefitted for less damage in plants for higher yield ➤ MDP Technology is very effectively but sum what laboring also. ➤ <i>Beauveria</i> is very effective against sucking and chewing pest ➤ Low cost chemical control for longer time
11	Kitchen gardening	Vegetables seeds	<ul style="list-style-type: none"> ➤ Fresh vegetable available at doorstep and at a time with minimum cost ➤ Regulatory daily nutritious diet. ➤ They produce organic vegetables because farm women are not applying any pesticides or agrochemicals in their backyard. ➤ Utilized maximum backyard space and waste water. ➤ Income generated by selling extra vegetables grown in kitchen garden.
12	Chicory *	<i>Beauveria</i> , <i>Azotobacter</i> , PSB,	<ul style="list-style-type: none"> ➤ Less fertilizer cost and reclamation of soil condition ➤ Reduce pest attack like aphid ➤ The products were easy to use
13	Drudgery reduction	Cotton Picking Apron	<ul style="list-style-type: none"> ➤ Useful for manual cotton picking and also vegetable harvesting ➤ Use of apron makes the women comfortable while picking cotton ➤ Prevents scratching of the skin
14	Animal (Cow)	Bypass Fat	This product is quite good and may help to increase % fat of milk and productivity of animals.
15	Solar cooker		<ul style="list-style-type: none"> ➤ Light weight & Easy to mobile ➤ Use less fuel and Reduce fuel collection time ➤ Reduce cooking time ➤ Completely smoke less ➤ Conserve trees ➤ Allow more dung to be used as fertilizer instead of fuel

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	1	6.01.21	14	
		1	7.01.21	16	
		1	19.01.21	12	
		1	19.01.21	18	

		1	20.01.21	11	
		1	25.03.21	16	
		1	16.12.21	17	
		1	20.12.21	23	
2	Farmers training	1	4.03.21	30	
		1	18.06.21	33	
		1	9.07.21	18	
		1	21.07.21	51	
		1	9.08.21	25	
		1	18.08.21	20	
		1	19.08.21	25	
		1	23.09.21	99	
3	Media coverage	6			
4	Training for extension functionaries	1	4.03.21	44	
		1	6.03.21	51	
		1	9.07.21	56	

C. PERFORMANCE OF FRONTLINE DEMONSTRATIONS

FLD on Other crops

	Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)			% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)				
						High	Low	Average		Check	Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Oilseeds																				
Kharif 2020-21	Castor (ATIC)	Varietal	GCH-9	20	8	3.75	27.5	34.69	31.06	11.67	-	-	63240	190781	127541	3.02	65205	170844	105639	2.62
Cereals																				
Summer 2020-21	Pearl millet	Varietal	GHB-1231	10	4	50	43.75	47.63	46.19	3.11	-	-	31005	83344	52339	2.69	31965	75055	43090	2.35
Rabi 2020-21	Wheat	Varietal	Variety – GW 463	10	4	55.0	48.75	51.75	46.75	10.78	-	-	33660	116438	82778	3.46	34180	81813	47633	2.39
Spices & condiments																				
Kharif 2020-21	Ajwain	ICM	Beauveria, Trichoderma, Azotobactor, PSB	10	04	2.50	10.0	11.56	10.31	12.12	-	-	38830	132969	94139	3.42	39730	118594	78864	2.98
Kharif 2021-22	Ajwain*	ICM	Beauveria, Trichoderma, Azotobactor, PSB	10	04	2.13	9.38	10.93	10.29	6.20	-	-	38600	125638	87038	3.25	39039	118306	79216	3.03
Rabi-2020-21	Cumin (ATIC)*	ICM	Beauveria, Trichoderma, Azotobactor, PSB,	20	8	10.06	25	7.81	7.08	10.42	-	-	51700	89844	38144	1.74	52370	81363	28993	1.56
Rabi-2020-21	Coriander (ATIC)*	ICM	Beauveria, Trichoderma, Azotobactor, PSB,	20	8	14.6	8.7	12.21	11.01	10.90	-	-	35650	95234	59584	2.67	34075	75659	41584	2.22
Other Crops																				
Kharif 2020-21	Cotton	ICM	Beauveria, SNPV, MDP, Azadirachtin	25	10	8.7	8.75	13.45	11.20	20.72	-	-	23340	63888	40548	2.47	25160	53438	28040	2.12

FLD on Livestock

Category and Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units	Yield (Lit/5 months)		% change in yield	Fat (%)		Economics of demonstration (Rs./unit)				Economics of check (Rs./unit)					
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)		

FLD on Women Empowerment

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check
Solar cooker	Solar cooker	5	Fuel consumption (per year)	Solar energy + 65 kg LPG	91 kg LPG
			Time saving	50 to 55%	0
Drudgery reduction	Cotton picking apron	5	Seed cotton picked (kg/hr)	3.74	3.38
			Cotton picking efficiency (%)	10.71%	-

FLD on Other Enterprise: Kitchen Gardening

Category and Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units	Yield (Kg)/unit		% change in yield	Other parameters		Economics of demonstration (Rs./unit)				Economics of check (Rs./unit)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Kitchen gardening	Nutritional security	Vegetable seed	50	50	536	418.40	28.11	-	-	5020	10720	5700	2.14	4281	8368	4087	1.95

Note : Remove the Enterprises/crops which have not been shown

D. PERFORMANCE OF CLUSTER FRONTLINE DEMONSTRATIONS (CFLD)**Front line demonstrations on oilseed crops**

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Sesame (NFSM) (Sum-2020-21)	ICM	Improved Var.(G. Til-5), <i>Beauveria bassiana</i> , <i>Trichoderma</i> , PSB, <i>Azotobacter</i>	G.Til-5	25	10	9.8	5.7	7.75	6.85	13.14	22682	54250	31568	2.39	25225	47950	22725	1.90
Groundnut (NFSM)(Kf-2021-22)	ICM	Improved Var.(GJG.-22), <i>Metarhizium</i> , <i>Trichoderma</i> , PSB, <i>Rhizobium</i>	GJG-22	25	10	20.10	12.40	16.18	15.02	7.72	44636	89012	44376	2.00	47223	82632	35409	1.75

Front line demonstrations on Pulses crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Chickpea* (NFSM)(Rabi-2020-21)	IPM, Varietal	Seed GJG-6, <i>Beauveria</i> , <i>Trichoderma</i> , <i>Azotobacter</i> , PSB	GJG-6	50	20	25.20	17.90	22.16	20.48	8.18	39245	109265	70019	2.79	39702	97150	57448	2.45

3.4 TRAINING PROGRAMME

Farmers' Training including sponsored training programmes (on campus)

Thematic Area	No. of courses	No. of participant						Grand Total
		others			SC/ST			
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I Crop Production								
Weed Management				0			0	0
Resource Conservation Technologies				0			0	0
Cropping Systems				0			0	0
Crop Diversification				0			0	0
Integrated Farming				0			0	0
Micro Irrigation/irrigation				0			0	0
Seed production				0			0	0
Nursery management				0			0	0
Integrated Crop Management	1	41	50	91	6	3	9	100
Soil & water conservatioin				0			0	0
Integrated nutrient management				0			0	0
Production of organic inputs				0			0	0
Others (pl specify)				0			0	0
Total	1	41	50	91	6	3	9	100
II Horticulture				0			0	0
a) Vegetable Crops				0			0	0
Production of low volume and high value crops				0			0	0
Off-season vegetables				0			0	0
Nursery raising	1	0	88	88	0	10	10	98
Exotic vegetables like Broccoli				0			0	0
Export potential vegetables				0			0	0
Grading and standardization				0			0	0
Protective cultivation (Green Houses, Shade Net etc.)				0			0	0
b) Fruits				0			0	0
Training and Pruning				0			0	0
Layout and Management of Orchards				0			0	0
Cultivation of Fruit				0			0	0
Management of young plants/orchards				0			0	0
Rejuvenation of old orchards				0			0	0
Export potential fruits				0			0	0
Micro irrigation systems of orchards				0			0	0
Plant propagation techniques				0			0	0
c) Ornamental Plants				0			0	0
Nursery Management				0			0	0
Management of potted plants				0			0	0
Export potential of ornamental plants				0			0	0
Propagation techniques of Ornamental Plants				0			0	0
d) Plantation crops				0			0	0

Production and Management technology				0			0	0
Processing and value addition				0			0	0
e) Tuber crops				0			0	0
Production and Management technology				0			0	0
Processing and value addition				0			0	0
f) Spices				0			0	0
Production and Management technology				0			0	0
Processing and value addition				0			0	0
g) Medicinal and Aromatic Plants				0			0	0
Nursery management				0			0	0
Production and management technology				0			0	0
Post harvest technology and value addition				0			0	0
Total	1	0	88	88	0	10	10	98
III Soil Health and Fertility Management				0			0	0
Soil fertility management				0			0	0
Integrated water management				0			0	0
Integrated Nutrient Management				0			0	0
Production and use of organic inputs				0			0	0
Management of Problematic soils				0			0	0
Micro nutrient deficiency in crops				0			0	0
Nutrient Use Efficiency				0			0	0
Balance use of fertilizers				0			0	0
Soil and Water Testing				0			0	0
Others (pl specify)				0			0	0
Total	0	0	0	0	0	0	0	0
IV Livestock Production and Management				0			0	0
Dairy Management	1	34	7	41	0	0	0	41
Poultry Management				0			0	0
Piggery Management				0			0	0
Rabbit Management				0			0	0
Animal Nutrition Management				0			0	0
Disease Management				0			0	0
Feed & fodder technology	1	0	38	38	0	0	0	38
Production of quality animal products				0			0	0
Others (pl specify)				0			0	0
Total	2	34	45	79	0	0	0	79
V Home Science/Women empowerment				0			0	0
Household food security by kitchen gardening and nutrition gardening				0			0	0
Design and development of low/minimum cost diet	1		84	84		12	12	96
Designing and development for high				0			0	0

nutrient efficiency diet								
Minimization of nutrient loss in processing				0			0	0
Processing and cooking	1	0	50	50	0	3	3	53
Gender mainstreaming through SHGs				0			0	0
Storage loss minimization techniques				0			0	0
Value addition	3	0	112	112	0	10	10	122
Women empowerment	1	0	64	64	0	8	8	72
Location specific drudgery reduction technologies				0			0	0
Rural Crafts				0			0	0
Women and child care				0			0	0
Others (pl specify)				0			0	0
Total	6	0	310	310	0	33	33	343
VI Agril. Engineering				0			0	0
Farm Machinery and its maintenance				0			0	0
Installation and maintenance of micro irrigation systems				0			0	0
Use of Plastics in farming practices				0			0	0
Production of small tools and implements				0			0	0
Repair and maintenance of farm machinery and implements				0			0	0
Small scale processing and value addition				0			0	0
Post Harvest Technology				0			0	0
Others (pl specify)				0			0	0
Total	0	0	0	0	0	0	0	0
VII Plant Protection				0			0	0
Integrated Pest Management	2	28	43	71	0	5	5	76
Integrated Disease Management	2	125	0	125	4	0	4	129
Bio-control of pests and diseases	2	0	122	122	0	4	4	126
Production of bio control agents and bio pesticides	1	58	28	86	8	0	8	94
Others (pl specify)				0			0	0
Total	7	211	193	404	12	9	21	425
VIII Fisheries				0			0	0
Integrated fish farming				0			0	0
Carp breeding and hatchery management				0			0	0
Carp fry and fingerling rearing				0			0	0
Composite fish culture				0			0	0
Hatchery management and culture of freshwater prawn				0			0	0
Breeding and culture of ornamental fishes				0			0	0
Portable plastic carp hatchery				0			0	0
Pen culture of fish and prawn				0			0	0
Shrimp farming				0			0	0
Edible oyster farming				0			0	0

Pearl culture				0			0	0
Fish processing and value addition				0			0	0
Others (pl specify)				0	0	0	0	0
Total	0	0	0	0	0	0	0	0
IX Production of Inputs at site				0			0	0
Seed Production				0			0	0
Planting material production				0			0	0
Bio-agents production				0			0	0
Bio-pesticides production				0			0	0
Bio-fertilizer production				0			0	0
Vermi-compost production				0			0	0
Organic manures production				0			0	0
Production of fry and fingerlings				0			0	0
Production of Bee-colonies and wax sheets	1	30	4	34	0	0	0	34
Small tools and implements				0			0	0
Production of livestock feed and fodder				0			0	0
Production of Fish feed				0			0	0
Mushroom Production				0			0	0
Apiculture				0			0	0
Others (pl specify)				0			0	0
Total	1	30	4	34	0	0	0	34
X Capacity Building and Group Dynamics				0			0	0
Leadership development				0			0	0
Group dynamics				0			0	0
Formation and Management of SHGs				0			0	0
Mobilization of social capital				0			0	0
Entrepreneurial development of farmers/youths				0			0	0
WTO and IPR issues								
Others (pl specify)				0			0	0
Total	0	0	0	0	0	0	0	0
XI Agro-forestry				0			0	0
Production technologies				0			0	0
Nursery management				0			0	0
Integrated Farming Systems				0			0	0
Others (pl specify)				0			0	0
Total	0	0	0	0	0	0	0	0
TOTAL	18	316	690	1006	18	55	73	1079

Farmers' Training including sponsored training programmes (off campus)

Thematic Area	No. of courses	No. of participant						Grand Total
		others			SC/ST			
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I Crop Production								
Weed Management				0			0	0
Resource Conservation Technologies				0			0	0

Cropping Systems	1	10	0	10	0	0	0	10
Crop Diversification				0			0	0
Integrated Farming				0			0	0
Micro Irrigation/irrigation				0			0	0
Seed production	1	52	56	108	0	0	0	108
Nursery management				0			0	0
Integrated Crop Management	1	13	0	13	0	0	0	13
Soil & water conservatioin				0			0	0
Integrated nutrient management	1	14	0	14	0	0	0	14
Production of organic inputs				0			0	0
Others (pl specify)				0			0	0
Total	4	89	56	145	0	0	0	145
II Horticulture				0			0	0
a) Vegetable Crops				0			0	0
Production of low volume and high value crops				0			0	0
Off-season vegetables				0			0	0
Nursery raising				0			0	0
Exotic vegetables like Broccoli				0			0	0
Export potential vegetables				0			0	0
Grading and standardization				0			0	0
Protective cultivation (Green Houses, Shade Net etc.)				0			0	0
b) Fruits				0			0	0
Training and Pruning				0			0	0
Layout and Management of Orchards				0			0	0
Cultivation of Fruit				0			0	0
Management of young plants/orchards				0			0	0
Rejuvenation of old orchards				0			0	0
Export potential fruits				0			0	0
Micro irrigation systems of orchards				0			0	0
Plant propagation techniques				0			0	0
c) Ornamental Plants				0			0	0
Nursery Management				0			0	0
Management of potted plants				0			0	0
Export potential of ornamental plants				0			0	0
Propagation techniques of Ornamental Plants				0			0	0
d) Plantation crops				0			0	0
Production and Management technology				0			0	0
Processing and value addition				0			0	0
e) Tuber crops				0			0	0
Production and Management technology				0			0	0
Processing and value addition				0			0	0
f) Spices				0			0	0
Production and Management technology				0			0	0

Processing and value addition				0			0	0
g) Medicinal and Aromatic Plants				0			0	0
Nursery management				0			0	0
Production and management technology				0			0	0
Post harvest technology and value addition				0			0	0
Total	0	0	0	0	0	0	0	0
III Soil Health and Fertility Management				0			0	0
Soil fertility management				0			0	0
Integrated water management				0			0	0
Integrated Nutrient Management	1	42	0	42	0	0	0	42
Production and use of organic inputs	1	32	0	32	0	0	0	32
Management of Problematic soils				0			0	0
Micro nutrient deficiency in crops				0			0	0
Nutrient Use Efficiency				0			0	0
Balance use of fertilizers	1	12	0	12	0	0	0	12
Soil and Water Testing				0			0	0
Others (pl specify)				0			0	0
Total	3	86	0	86	0	0	0	86
IV Livestock Production and Management				0			0	0
Dairy Management				0			0	0
Poultry Management				0			0	0
Piggery Management				0			0	0
Rabbit Management				0			0	0
Animal Nutrition Management				0			0	0
Disease Management	1	0	47	47	0	4	4	51
Feed & fodder technology				0			0	0
Production of quality animal products				0			0	0
Others (pl specify)				0			0	0
Total	1	0	47	47	0	4	4	51
V Home Science/Women empowerment				0			0	0
Household food security by kitchen gardening and nutrition gardening	2	2	36	38	0	0	0	38
Design and development of low/minimum cost diet				0			0	0
Designing and development for high nutrient efficiency diet				0			0	0
Minimization of nutrient loss in processing	1	0	38	38	0	2	2	40
Processing and cooking	1	0	64	64	0	0	0	64
Gender mainstreaming through SHGs				0			0	0
Storage loss minimization techniques				0			0	0
Value addition	1	0	25	25	0	0	0	25
Women empowerment				0			0	0
Location specific drudgery reduction technologies				0			0	0

Rural Crafts				0			0	0
Women and child care				0			0	0
Others (pl specify)				0			0	0
Total	5	2	163	165	0	2	2	167
VI Agril. Engineering				0			0	0
Farm Machinery and its maintenance				0			0	0
Installation and maintenance of micro irrigation systems	1	36	0	36	0	0	0	36
Use of Plastics in farming practices				0			0	0
Production of small tools and implements				0			0	0
Repair and maintenance of farm machinery and implements				0			0	0
Small scale processing and value addition				0			0	0
Post Harvest Technology				0			0	0
Others (pl specify)				0			0	0
Total	1	36	0	36	0	0	0	36
VII Plant Protection				0			0	0
Integrated Pest Management	2	25	54	79	0	6	6	85
Integrated Disease Management	1	56	6	62	2	0	2	64
Bio-control of pests and diseases	4	154	57	211	7	12	19	230
Production of bio control agents and bio pesticides	1	36	0	36	0	0	0	36
Others (pl specify)	2	89	0	89	6	0	6	95
Total	10	360	117	477	15	18	33	510
VIII Fisheries				0			0	0
Integrated fish farming				0			0	0
Carp breeding and hatchery management				0			0	0
Carp fry and fingerling rearing				0			0	0
Composite fish culture				0			0	0
Hatchery management and culture of freshwater prawn				0			0	0
Breeding and culture of ornamental fishes				0			0	0
Portable plastic carp hatchery				0			0	0
Pen culture of fish and prawn				0			0	0
Shrimp farming				0			0	0
Edible oyster farming				0			0	0
Pearl culture				0			0	0
Fish processing and value addition				0			0	0
Others (pl specify)				0			0	0
Total	0	0	0	0	0	0	0	0
IX Production of Inputs at site				0			0	0
Seed Production				0			0	0
Planting material production				0			0	0
Bio-agents production				0			0	0
Bio-pesticides production	1	33	17	50	0	0	0	50
Bio-fertilizer production				0			0	0

Vermi-compost production				0			0	0
Organic manures production				0			0	0
Production of fry and fingerlings				0			0	0
Production of Bee-colonies and wax sheets				0			0	0
Small tools and implements				0			0	0
Production of livestock feed and fodder				0			0	0
Production of Fish feed				0			0	0
Mushroom Production				0			0	0
Apiculture				0			0	0
Others (pl specify)				0			0	0
Total	1	33	17	50	0	0	0	50
X Capacity Building and Group Dynamics				0			0	0
Leadership development				0			0	0
Group dynamics				0			0	0
Formation and Management of SHGs				0			0	0
Mobilization of social capital				0			0	0
Entrepreneurial development of farmers/youths				0			0	0
WTO and IPR issues								
Others (pl specify)				0			0	0
Total	0	0	0	0	0	0	0	0
XI Agro-forestry				0			0	0
Production technologies				0			0	0
Nursery management				0			0	0
Integrated Farming Systems				0			0	0
Others (pl specify)				0			0	0
Total	0	0	0	0	0	0	0	0
TOTAL	25	606	400	1006	15	24	39	1045

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

Thematic Area	No. of courses	No. of participant						Grand Total
		others			SC/ST			
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I Crop Production								
Weed Management	0	0	0	0	0	0	0	0
Resource Conservation Technologies	0	0	0	0	0	0	0	0
Cropping Systems	1	10	0	10	0	0	0	10
Crop Diversification	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0
Micro Irrigation/irrigation	0	0	0	0	0	0	0	0
Seed production	1	52	56	108	0	0	0	108
Nursery management	0	0	0	0	0	0	0	0
Integrated Crop Management	2	54	50	104	6	3	9	113
Soil & water conservatioin	0	0	0	0	0	0	0	0
Integrated nutrient management	1	14	0	14	0	0	0	14
Production of organic inputs	0	0	0	0	0	0	0	0

Others (pl specify)	0	0	0	0	0	0	0	0
Total	5	130	106	236	6	3	9	245
II Horticulture				0			0	0
a) Vegetable Crops				0			0	0
Production of low volume and high value crops	0	0	0	0	0	0	0	0
Off-season vegetables	0	0	0	0	0	0	0	0
Nursery raising	1	0	88	88	0	10	10	98
Exotic vegetables like Broccoli	0	0	0	0	0	0	0	0
Export potential vegetables	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0
Protective cultivation (Green Houses, Shade Net etc.)	0	0	0	0	0	0	0	0
b) Fruits	0	0	0	0	0	0	0	0
Training and Pruning	0	0	0	0	0	0	0	0
Layout and Management of Orchards	0	0	0	0	0	0	0	0
Cultivation of Fruit	0	0	0	0	0	0	0	0
Management of young plants/orchards	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0
c) Ornamental Plants	0	0	0	0	0	0	0	0
Nursery Management	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0
d) Plantation crops	0	0	0	0	0	0	0	0
Production and Management technology	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0
e) Tuber crops	0	0	0	0	0	0	0	0
Production and Management technology	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0
f) Spices	0	0	0	0	0	0	0	0
Production and Management technology	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0
Total	1	0	88	88	0	10	10	98
III Soil Health and Fertility Management				0			0	0

Soil fertility management	0	0	0	0	0	0	0	0
Integrated water management	0	0	0	0	0	0	0	0
Integrated Nutrient Management	1	42	0	42	0	0	0	42
Production and use of organic inputs	1	32	0	32	0	0	0	32
Management of Problematic soils	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0
Balance use of fertilizers	1	12	0	12	0	0	0	12
Soil and Water Testing	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0
Total	3	86	0	86	0	0	0	86
IV Livestock Production and Management				0			0	0
Dairy Management	1	34	7	41	0	0	0	41
Poultry Management	0	0	0	0	0	0	0	0
Piggery Management	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0
Animal Nutrition Management	0	0	0	0	0	0	0	0
Disease Management	1	0	47	47	0	4	4	51
Feed & fodder technology	1	0	38	38	0	0	0	38
Production of quality animal products	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0
Total	3	34	92	126	0	4	4	130
V Home Science/Women empowerment				0			0	0
Household food security by kitchen gardening and nutrition gardening	2	2	36	38	0	0	0	38
Design and development of low/minimum cost diet	1	0	84	84	0	12	12	96
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	1	0	38	38	0	2	2	40
Processing and cooking	2	0	114	114	0	3	3	117
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0
Value addition	4	0	137	137	0	10	10	147
Women empowerment	1	0	64	64	0	8	8	72
Location specific drudgery reduction technologies	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0
Women and child care	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0
Total	11	2	473	475	0	35	35	510
VI Agril. Engineering				0			0	0
Farm Machinery and its maintenance	0	0	0	0	0	0	0	0
Installation and maintenance of micro irrigation systems	1	36	0	36	0	0	0	36
Use of Plastics in farming practices	0	0	0	0	0	0	0	0
Production of small tools and	0	0	0	0	0	0	0	0

implements								
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0
Total	1	36	0	36	0	0	0	36
VII Plant Protection				0			0	0
Integrated Pest Management	4	53	97	150	0	11	11	161
Integrated Disease Management	3	181	6	187	6	0	6	193
Bio-control of pests and diseases	6	154	179	333	7	16	23	356
Production of bio control agents and bio pesticides	2	94	28	122	8	0	8	130
Others (pl specify)	2	89	0	89	6	0	6	95
Total	17	571	310	881	27	27	54	935
VIII Fisheries				0			0	0
Integrated fish farming	0	0	0	0	0	0	0	0
Carp breeding and hatchery management	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
IX Production of Inputs at site				0			0	0
Seed Production	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0
Bio-pesticides production	1	33	17	50	0	0	0	50
Bio-fertilizer production	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	1	30	4	34	0	0	0	34
Small tools and implements	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0

Apiculture	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0
Total	2	63	21	84	0	0	0	84
X Capacity Building and Group Dynamics				0			0	0
Leadership development	0	0	0	0	0	0	0	0
Group dynamics	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0
Mobilization of social capital	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	0	0	0	0	0	0	0	0
WTO and IPR issues								
Others (pl specify)	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
XI Agro-forestry				0			0	0
Production technologies	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
TOTAL	43	922	1090	2012	33	79	112	2124

Training for Rural Youths including sponsored training programmes (On campus)

(B) RURAL YOUTH								
Nursery Management of Horticulture crops					0		0	0
Training and pruning of orchards					0		0	0
Protected cultivation of vegetable crops					0		0	0
Commercial fruit production					0		0	0
Integrated farming					0		0	0
Seed production					0		0	0
Production of organic inputs					0		0	0
Planting material production					0		0	0
Vermi-culture					0		0	0
Mushroom Production					0		0	0
Bee-keeping					0		0	0
Sericulture					0		0	0
Repair and maintenance of farm machinery and implements					0		0	0
Value addition					0		0	0
Small scale processing					0		0	0
Post Harvest Technology	1	0	80		80	0	4	84
Tailoring and Stitching					0		0	0
Rural Crafts					0		0	0
Production of quality animal products					0		0	0
Dairying					0		0	0
Sheep and goat rearing					0		0	0
Quail farming					0		0	0
Piggery					0		0	0
Rabbit farming					0		0	0
Poultry production					0		0	0
Ornamental fisheries					0		0	0
Composite fish culture					0		0	0

Freshwater prawn culture				0			0	0
Shrimp farming				0			0	0
Pearl culture				0			0	0
Cold water fisheries				0			0	0
Fish harvest and processing technology				0			0	0
Fry and fingerling rearing				0			0	0
Any other (pl.specify)				0			0	0
TOTAL	1	0	80	80	0	4	4	84

Training for Rural Youths including sponsored training programmes (Off campus)

(B) RURAL YOUTH								
Nursery Management of Horticulture crops				0			0	0
Training and pruning of orchards				0			0	0
Protected cultivation of vegetable crops				0			0	0
Commercial fruit production				0			0	0
Integrated farming				0			0	0
Seed production				0			0	0
Production of organic inputs	2	178	122	300	41	25	66	366
Planting material production				0			0	0
Vermi-culture				0			0	0
Mushroom Production				0			0	0
Bee-keeping				0			0	0
Sericulture				0			0	0
Repair and maintenance of farm machinery and implements				0			0	0
Value addition				0			0	0
Small scale processing				0			0	0
Post Harvest Technology				0			0	0
Tailoring and Stitching				0			0	0
Rural Crafts				0			0	0
Production of quality animal products				0			0	0
Dairying				0			0	0
Sheep and goat rearing				0			0	0
Quail farming				0			0	0
Piggery				0			0	0
Rabbit farming				0			0	0
Poultry production				0			0	0
Ornamental fisheries				0			0	0
Composite fish culture				0			0	0
Freshwater prawn culture				0			0	0
Shrimp farming				0			0	0
Pearl culture				0			0	0
Cold water fisheries				0			0	0
Fish harvest and processing technology				0			0	0
Fry and fingerling rearing				0			0	0
Any other (pl.specify)				0			0	0
TOTAL	2	178	122	300	41	25	66	366

Training for Rural Youths including sponsored training programmes – CONSOLIDATED(On + Off Campus)**(B) RURAL YOUTH**

Nursery Management of Horticulture crops	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0
Production of organic inputs	2	178	122	300	41	25	66	366
Planting material production	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0
Small scale processing	0	0	0	0	0	0	0	0
Post Harvest Technology	1	0	80	80	0	4	4	84
Tailoring and Stitching	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0
Ornamental fisheries	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0
TOTAL	3	178	202	380	41	29	70	450

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

Productivity enhancement in field crops	1	31	4	35	0	0	0	35
Integrated Pest Management	1	26	3	29	2	0	2	31
Integrated Nutrient management				0			0	0
Rejuvenation of old orchards				0			0	0
Protected cultivation technology				0			0	0
Production and use of organic inputs	1	10	5	15	0	0	0	15
Care and maintenance of farm machinery and implements				0			0	0
Gender mainstreaming through SHGs				0			0	0
Formation and Management of SHGs				0			0	0
Women and Child care				0			0	0
Low cost and nutrient efficient diet designing				0			0	0
Group Dynamics and farmers organization				0			0	0

Information networking among farmers				0			0	0
Capacity building for ICT application				0			0	0
Management in farm animals				0			0	0
Livestock feed and fodder production				0			0	0
Household food security				0			0	0
Any other (pl.specify)				0			0	0
TOTAL	3	67	12	79	2	0	2	81

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

(C) Extension Personnel								
Productivity enhancement in field crops				0			0	0
Integrated Pest Management	1	45	3	48	3	0	3	51
Integrated Nutrient management				0			0	0
Rejuvenation of old orchards				0			0	0
Protected cultivation technology				0			0	0
Production and use of organic inputs	2	86	8	94	6	0	6	100
Care and maintenance of farm machinery and implements				0			0	0
Gender mainstreaming through SHGs				0			0	0
Formation and Management of SHGs				0			0	0
Women and Child care				0			0	0
Low cost and nutrient efficient diet designing				0			0	0
Group Dynamics and farmers organization				0			0	0
Information networking among farmers				0			0	0
Capacity building for ICT application				0			0	0
Management in farm animals				0			0	0
Livestock feed and fodder production				0			0	0
Household food security				0			0	0
Any other (pl.specify)				0			0	0
TOTAL	3	131	11	142	9	0	9	151

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

(C) Extension Personnel								
Productivity enhancement in field crops	1	31	4	35	0	0	0	35
Integrated Pest Management	2	71	6	77	5	0	5	82
Integrated Nutrient management	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0
Production and use of organic inputs	3	96	13	109	6	0	6	115
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0
Capacity building for ICT application	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0
TOTAL	6	198	23	221	11	0	11	232

SUMMARY OF TRAINING PROGRAMME**On Campus summary**

Thematic Area	Target No. of Courses	Achieved No. of Courses	No. of Participants								
			Others			SC/ST			Total		
			M	F	T	M	F	T	M	F	T
(A) Farmers & Farm Women											
Crop Production	3	1	41	50	91	6	3	9	47	53	100
Horticulture	1	1	0	88	88	0	10	10	0	98	98
Soil Health and Fertility Management	1	0	0	0	0	0	0	0	0	0	0
Livestock production and management	1	2	34	45	79	0	0	0	34	45	79
Home Science/Women empowerment	2	6	0	310	310	0	33	33	0	343	343
Agricultural Engineering	1	0	0	0	0	0	0	0	0	0	0
Plant Protection	3	7	211	193	404	12	9	21	223	202	425
Fisheries	0	0	0	0	0	0	0	0	0	0	0
Production of Inputs at site	1	1	30	4	34	0	0	0	30	4	34
Capacity Building	0	0	0	0	0	0	0	0	0	0	0
Agro-forestry	0	0	0	0	0	0	0	0	0	0	0
Total	13	18	316	690	1006	18	55	73	334	745	1079
(B) RURAL YOUTH	1	1	0	80	80	0	4	4	0	84	84
(C) Extension Personnel	2	3	67	12	79	2	0	2	69	12	81
Grand Total	16	22	383	782	1165	20	59	79	403	841	1244

Off Campus summary

Thematic Area	Target No. of Courses	Achieved No. of Courses	No. of Participants								
			Others			SC/ST			Total		
			M	F	T	M	F	T	M	F	T
(A) Farmers & Farm Women											
Crop Production	3	4	89	56	145	0	0	0	89	56	145
Horticulture	0	0	0	0	0	0	0	0	0	0	0
Soil Health & Fertility Management	3	3	86	0	86	0	0	0	86	0	86
Livestock production and management	1	1	0	47	47	0	4	4	0	51	51
Home Science/Women empowerment	5	5	2	163	165	0	2	2	2	165	167
Agricultural Engineering	0	1	36	0	36	0	0	0	36	0	36
Plant Protection	5	10	360	117	477	15	18	33	375	135	510
Fisheries	0	0	0	0	0	0	0	0	0	0	0
Production of Inputs at site	2	1	33	17	50	0	0	0	33	17	50
Capacity Building	0	0	0	0	0	0	0	0	0	0	0
Agro-forestry	0	0	0	0	0	0	0	0	0	0	0
Total	19	25	606	400	1006	15	24	39	621	424	1045
(B) RURAL YOUTH	1	2	178	122	300	41	25	66	219	147	366
(C) Extension Personnel	2	3	131	11	142	9	0	9	140	11	151
Grand Total	22	30	915	533	1448	65	49	114	980	582	1562

Consolidated table (On & Off Campus)

Thematic Area	Target No. of Courses	Achieved No. of Courses	No. of Participants								
			Others			SC/ST			Total		
			M	F	T	M	F	T	M	F	T
(A) Farmers & Farm Women											
Crop Production	6	5	130	106	236	6	3	9	136	109	245
Horticulture	1	1	0	88	88	0	10	10	0	98	98
Soil Health and Fertility Management	4	3	86	0	86	0	0	0	86	0	86
Livestock production and management	2	3	34	92	126	0	4	4	34	96	130
Home Science/Women empowerment	7	11	2	473	475	0	35	35	2	508	510
Agricultural Engineering	1	1	36	0	36	0	0	0	36	0	36
Plant Protection	8	17	571	310	881	27	27	54	598	337	935
Fisheries	0	0	0	0	0	0	0	0	0	0	0
Production of Inputs at site	3	2	63	21	84	0	0	0	63	21	84
Capacity Building	0	0	0	0	0	0	0	0	0	0	0
Agro-forestry	0	0	0	0	0	0	0	0	0	0	0
Total	32	43	922	1090	2012	33	79	112	955	1169	2124
(B) RURAL YOUTH	2	3	178	202	380	41	29	70	219	231	450
(C) Extension Personnel	4	6	198	23	221	11	0	11	209	23	232
Grand Total	38	52	1298	1315	2613	85	108	193	1383	1423	2806

Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Increasing production and productivity of crops	17	720	332	1052	63	33	96	783	365	1148
Commercial production of vegetables										
Production and value addition										
Fruit Plants	1	0	30	30	0	0	0	0	30	30
Ornamental plants										
Spices crops										
Soil health and fertility management	1	42	0	42	0	0	0	42	0	42
Production of Inputs at site	1	38	4	42	2	0	2	40	4	44
Methods of protective cultivation										
Others (pl. specify)	1	0	88	88	0	10	10	0	98	98
Total	21	800	454	1254	65	43	108	865	497	1362
Post-harvest technology and value addition										

Processing and value addition	1	0	64	64	0	0	0	0	64	64
Others (pl. specify)										
Total	1	0	64	64	0	0	0	0	64	64
Farm machinery										
Farm machinery, tools and implements	1	36	0	36	0	0	0	36	0	36
Others (pl. specify)	0									
Total	1	36	0	36	0	0	0	36	0	36
Livestock and fisheries										
Livestock production and management	1	0	47	47	0	4	4	0	51	51
Animal Nutrition Management										
Animal Disease Management										
Fisheries Nutrition										
Fisheries Management										
Others (pl. specify)										
Total	1	0	47	47	0	4	4	0	51	51
Home Science										
Household nutritional security	2	0	134	134	0	15	15	0	149	149
Economic empowerment of women	1	0	64	64	0	8	8	0	72	72
Drudgery reduction of women										
Others (pl. specify)	1	0	38	38	0	2	2	0	40	40
Total	4	0	236	236	0	25	25	0	261	261
Agricultural Extension										
Capacity Building and Group Dynamics	0									
Others (pl. specify)	0									
Total	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	28	836	801	1637	65	72	137	901	873	1774

Name of sponsoring agencies involved: ATMA, DAO, FTC, Agakhan trust, NGO, GGRC, ICDS, TCSR, ANARDE foundation, BIAF

Details of vocational training programmes carried out by KVKs for rural youth

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Commercial floriculture										
Commercial fruit production										
Commercial vegetable production										
Integrated crop management										
Organic farming										
Others (pl. specify)										
Total										
Post harvest technology and value addition										
Value addition										
Others (pl. specify)										
Total										

Livestock and fisheries																				
Dairy farming																				
Composite fish culture																				
Sheep and goat rearing																				
Piggery																				
Poultry farming																				
Others (pl. specify)																				
Total																				
Income generation activities																				
Vermi composting																				
Production of bio-agents, bio-pesticides, bio-fertilizers etc.																				
Repair and maintenance of farm machinery and implements																				
Rural Crafts																				
Seed production																				
Sericulture																				
Mushroom cultivation																				
Nursery, grafting etc.																				
Tailoring, stitching, embroidery, dying etc.																				
Agril. para-workers, para-vet training																				
Others (pl. specify)																				
Total																				
Agricultural Extension																				
Capacity building and group dynamics																				
Others (pl. specify)																				
Total																				
Grand Total																				

3.5 Extension Programmes (including activities of FLD programmes)

Activities	No. of Programme	No. of farmers	No. of Extension Personnel	Total
Advisory Services	2917	5601	165	5766
Diagnostic visits	6	22	9	31
Field Day	8	103	14	117
Group discussions	11	348	15	363
Kisan Ghosthi	6	278	16	294
Film Show	11	696	98	794
Self -help groups	4	58	0	58
Ex-trainees Sammelan	2	45	36	81
Exhibition	1	1745	42	1787
Scientists' visit to farmers field	26	243	107	350
Farmers' seminar/workshop	4	935	31	966
Method Demonstrations	2	54	4	58
Celebration of important days	8	1163	105	1268
Special day celebration	7	530	62	592
Lecture delivered	125	4349	2008	6357
Implement/Crop Demonstration	3	196	47	243
Collobrative training	2	60	2	62

Exposure visits	2	0	113	113
Farmers meeting	4	48	3	51
Fertilizer Awareness Programme	1	33	1	34
Online Conclave on natural farming	1	64	122	186
Total	3149	16474	2877	19351

Other Extension Activity

Sr. No.	Scientist Activity (give Number)	No. of Activity
1	Electronic Media (CD./DVD)	0
2	Extension Literature	1917
3	Newspaper coverage	24
4	Popular articles	9
5	Radio Talks	3
6	TV Talks	3
7	Animal health camps (Number of animals treated)	
8	Social Media (No. of platforms used)	3
9	Publications	1
	Total	1960

3.6 Online activities during year 2021

S. No.	Activity Type	Mode of implementation (Video conferencing / Audio Conferencing / Facebook Live / YouTube Live/ Zoom/ Google meet/ Webexetc)	Title of Program	No. of Programmes	No. of Participants/ Views
A	Farmers training				
1	12.05.21	Zoom	Preseasonal preparation and precaution for pest management	1	46
2	14.05.21	Google meet	Value addition in Mango	1	37
3	20.05.21	Google meet	Honey bee rearing technique and its importance in pollination	1	34
4	1.06.21	Google meet	Importance of nutrients and feed management in animal husbandry to increase milk production	1	41
5	18.06.21	Google meet	Precaution on pest and disease management and Balance use of fertilizer for Kharif season	1	33
6	7.09.21	Google meet	New Technology in Agriculture with Special emphasis on reduction of cost	1	35
	Total			6	226
B	Farmers scientist's interaction programme				
1	12.05.21	Zoom	White grub management	1	46
2	14.05.21	Google meet	Preseasonal preparation and precaution for pest management	1	37
3	1.06.21	Google meet	Clean milk production	1	41

	Total			3	124
C	Farmers seminars				
1	8.03.21	You tube live	Virtual programme telecast by ICAR, New Delhi on International women day	1	72
	16.12.21	You tube live	Online Conclave on natural farming	1	186
	Total			2	258
D	Expert lectures				
1	26.03.21	Google meet	Importance of nutrition in daily diet and techniques of minimization of nutrition loss in processing	1	84
2	1.06.21	Google meet	Disease management in Animal husbandry	1	41
3	18.06.21	Google meet	Balance use of fertilizer for Kharif season	1	33
	Total			3	158
E	Any other (Pl. specify)				
1	18.02.21	Google meet	Action Plan workshop	1	56
2	22.04.21	Zoom	DFI workshop	1	88
3	28.09.21	You tube live	Live programme by Honble PM	1	78
	Total			3	222
	Grand Total (A+B+C+D+E)			17	988

3.7 PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS

Production of seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed(q)	Rate/unit (Rs.)	Expected Value(Rs)	Expected Number of farmers
Cereals	Wheat	GW-463		76.00	2750	209000	116
Oilseed crops	Castor	GCH-9		9.06	19500	176670	195
Oilseed crops	Groundnut	GJG-31		9.30	15500	144150	76
Oilseed crops	Groundnut	GJG-9		26.70	15500	413850	137
Oilseed crops	Groundnut	GJG-32		49.50	15500	767250	88
Total				170.56	68750	1710920	612

Production of planting materials by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Vegetable seedlings	Brinjal		GHB-7	174	87	34
Fruit	Lime	Kagdi lime		92	1380	55
	Sapota, Custurd apple, Amla etc			2512		271
	Neem tree, Ashoka, Banyan, Borsali, DrumStick			1500		202
Total				4278	1467	562

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity		Value (Rs.)	No. of Farmers
		Li.	kg		
Bio Fertilizers	<i>Azotobactor</i>	55		0	55
	<i>Rhizobium</i>	85			85
	<i>PSB</i>	130			130
Bio-pesticide	<i>Beauveria Bassiana</i>		1713	17130	254
	<i>Metarizium</i>		50		50
	<i>HNPV</i>	25			25
Bio-fungicide	<i>Trichoderma</i>		250		160
Total		295	2013	17130	759

N.B. *Product was produced by JAU University and selling by KVK the amount is only given for revenue generation

Table: Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals				
Cows	Gir	3		
Buffaloes				
Calves				
Others (Pl. specify)				
Fisheries				
Indian carp				
Exotic carp				
Others (Pl. specify)				
Vermi Compost	<i>Icenia foitida</i>	430	2150	28
Total				

4. Literature Developed/Published (with full title, author & reference)**A. KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.)**

Date of start : January -2016

Periodicity : Quarterly

1. Jan to Mar, 2021
2. April to June, 2021
3. July to Sept., 2021
4. Oct. to Dec. 2021

Number of copies distributed: JAU Newsletter

B. Literature developed/published

Item	Title	Authors name	Number of copies
Book	Achievement and endeavours of KVK, JAU, Jamnagar Since : 2001 to 2020	Baraiya KP and Baraiya AK	100
Popular Articles	Alasiyanu khatar bnavvani reet ane teni agtyata 2021. Krushi Vigyan 46(11)25-27(2021)	Lakhani SH, Gadhiya VC, Baraiya AK, Baraiya KP	
	Unalu pakoma pankathiri no vadhtojo updrav, Krushi Prabhat, February 13, (13)	Godhani HS, Savliya AV, Baraiya AK, Baraiya KP	
	Unalu dhany pakonee kathirina updrav vishe jano, Krushi Prabhat, February 15, (13)	Godhani HS, Savliya AV, Baraiya AK, Baraiya KP	
	Magfali-Tal ane shakbhaji pakoma aavti kathirinu	Godhani HS, Savliya AV, Baraiya	

	sanklit niytran, Krushi Prabhat , February 16, (13)	AK, Baraiya KP	
	Unalu Tal nisafalkhetinaChavirupmudda, Krushi Prabhat, February 20, (13)	Savliya AV, Godhani HS, Baraiya AK, Baraiya KP	
	Animia (Pandu rog) vishe aatlu jano. Krushi Jivan 53(8)629:32-33,2021	Baraiya AK, Baraiya KP	
	Gramin krushi mausam seva project antrgat jilla krushi havaman ekam dvara kevama aavtee khedut upyogee kamgiri 2021. Krushi Prabhat 28.06.21	Savaliya AV, Godhani SH, Baraiya KP	
	Aapna khorakma ragi no upyog vadharie ane svashy jalvie ,Krushi prabhat, 13.07.21, Page-13	Baraiya AK, Baraiya KP, Godhani HS, Savaliya AV	
	Shu Taukte Vavozadani Nairutya na chomasa Par asar thashe, Krushi prabhat, 22.05.21, Page-13	Savaliya AV, Pandya RB, Godhani SH, Baraiya KP	
Technical reports	Annual Progress Report	Smt. A. K. Baraiya, Dr. K. P. Baraiya	7
	17 th AGRESCO Report	Smt. A. K. Baraiya, Dr. K. P. Baraiya	49
	35 rd ZREAC Report	Smt. A. K. Baraiya, Dr. K. P. Baraiya	54
	36 th ZREAC Report	Smt. A. K. Baraiya, Dr. K. P. Baraiya	54
	18 th SAC Report	Smt. A. K. Baraiya, Dr. K. P. Baraiya	35
	Annual Report of ATIC(2021)	Smt. A. K. Baraiya, Dr. K. P. Baraiya	1
	NMOOP & NFSM FLD result report	Mr. A. V. Savaliya, Dr. K. P. Baraiya	1
	DAMU Project Annual Report	Mr. A. V. Savaliya, Dr. K. P. Baraiya	1

C. Details of Electronic Media Produced

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

D. Details of Social Media Platforms Created / Used


S. No.	Type of social media platform	Title of social media	Number of Followers/ Subscribers
1	YouTube Channel	-	-
2	Facebook page/ Account	KVK,Jamnagar	3907
3	Mobile Apps	-	-
4	WhatsApp groups	Jay Kishan	136
		Agro Lovers	51
		Kishan Samachar	121
		O Budget Kudarati Kheti	252
		O Budget Kudarati Kheti Jamnagar-2	139
		Krushi Rushi Gujarat	218
		Agni Hotra Krushi	124
		Khetivadi Samachar	61

		Savdeshi Krushi Abhiyan-1	119
		Organic skill KVK JMN	20
		Farmers Group	42
		Kheti Karnar Kheduto	21
		Sasti Kheti Jamjodhpur	87
		Krishi e demop JMN	34
		Gay Prakrutik Kheti	230
		Sadguru Organic Farm	48
		Innovative Farmers	14
		Devbhumi Agro seeds	110
		Khedut Sammelan	40
		Khedoot	16
		B Van Vihar	21
		Gay Adharit Prakrutik khetee	119
		Devbhumi Krushi Vikas Kendra	202
		Khedut -16	209
		Jay Sidheshvar Mahadev Group	160
		Quality Seed Grower	15
		KVK Progressive Farm Women	48
		Gujarat Kisan	98
		Khedut Kranti	114
		Gujarat Krushi Parivar	19
		KVK, Jamnagar Kalavad	224
		KVK, Jamnagar Kalavad-2	169
		KVK, Jamnagar Kalavad-3	171
		KVK, Jamnagar Dhrol	152
		KVK, Jamnagar Dhrol-2	176
		KVK, Jamnagar Jodiya	247
		KVK, Jamnagar Jodiya-2	134
		KVK, Jamnagar Jodiya-3	165
		KVK, Jamnagar Lalpur	197
		KVK, Jamnagar Lalpur-2	147
		KVK, Jamnagar Jamnagar	256
		KVK, Jamnagar Jamnagar-2	216
		KVK, Jamnagar Jamnagar-3	158
		KVK, Jamnagar Jamjodhpur	187
		KVK, Jamnagar Jamjodhpur-2	91
		Damu Jam Khambhaliya Taluka	68
		Damu Jam Kalyanpur Taluka	97
		Damu Jam Bhanvad Taluka	65
		Damu Jam Dwarka Taluka	36
		KVK Jamnagar	114
			5958
5	Twitter Account	-	-
6	Any other (Pl. Specify)		
	Telegram	Krishi Vigyan Kendra, Jamnagar	145

E. Success Story/CASE STUDIES

5.1 Case study/ Success story

1. Case study/ Success story

		PROFILE OF FARM INNOVATORS Thematic Area: Horticulture with Micro irrigation “Entrepreneurship Development through Organic Farming & Value addition” <i>Dr. K. P. Baraiya, Smt. A. K. Baraiya</i>	
1. Personal Profile		2. Problem/ challenge Faced	
Name of farmer	: Khirsariya Rajnikantbhai (Bhupatbhai) Karshanbhai	Khirsariya Rajnikantbhai (Bhupatbhai) Karshanbhai is only 10 class educated, having 10 Gir cow, having 7.2 ha land with different ordinary cropping pattern. He lived in very interior village Morzar, Ta. Bhanvad of District Devbhumi Dwarka (Earlier Jamnagar District). He faces following challenges in his life <ul style="list-style-type: none"> ➤ Low education (10 Std.) ➤ Labour chrysiess& high cost ➤ Poor understanding ➤ Lack of marketing ➤ High production cost ➤ High chemical fertilizer, pesticides etc. usages. ➤ Resurgence of pest & Disease ➤ Poor soil fertility ➤ Lack of scientific technology know how From starting, he used more pesticide and Chemical fertilizer due to that increase cost of cultivation and reduce net profit.	
Contact No.	: 9825208551 Khirsariyaraj @gmail.com		
Address Res.	: “Shree Apartment, Ground floor, AmbajiKadva Main Road, Rajkot-360 004 (Gujarat)		
Address Farming	: At. Morzar, Ta. Bhanvad, Dist. Devbhumi Dwarka		
Age	: 54 Years		
Education	: 10 Standard		
Land holding	: 7.2 ha		
Crops grown	: Groundnut, Medicinal Plants, Vegetables, Cereals, Grains Moringa, Lemon, Tomato, okra, cucumber, ridge gourd, etc.		
Livestock	: Cow-20 Gir breed		
Business	: Organic Farming, Animal keeping & marketing with Value addition		
Special recognition	: Innovative and Progressive farmer		
3	Description of innovative practice/technology <ul style="list-style-type: none"> ➤ Started Gir cow unit ➤ Adopt micro irrigation system ➤ Innovative in farming with lemon cultivation ➤ Multi story farming ➤ Vegetable grow organically ➤ One step ahead in chemical less farming ➤ Cow based medicines preparation ➤ Cow based FYM &Gau mutra usages for cultivation. ➤ Prepare health and nutritional product from moringa ➤ Value addition in fruit & vegetable, moringa powder ➤ Lemon cultivation with organically ➤ Grading and packing of lemon ➤ Market at New Delhi, Mumbai, Ahmedabad, Surat, etc. ➤ For more profit “do not gave farming on rental basis, but kept daily labour” 		

	<ul style="list-style-type: none"> ➤ Using Drip Irrigation for application of Jivamrut and even for cow urine. ➤ Processing Unit for Post Harvest treatment for products. ➤ Well equipped Cow Shed. <p>Value Addition, Ayurvedic medicines, Gir Cow-based Organic farming, health & Nutritional based products preparation & Marketing</p> <p>Awareness to farmers for value addition in agricultural products. He is farming with cow-based organic farming, since last 10 years. He is using multistory farming with moringa (Drum stick) + vegetables, Micro irrigation usages. His moto for “Do not gave farm to partnership to labour, but kept labour every day basis, then you can profit more”. He spread technologies from every government program and advise to farmers about his success and follow him for success. Prepare ayurvedic medicines, nutritional based product and value added and pack it and directly marketing through “Organic Agro Mall”, he initiated the mall concept and joined to different organic growers in his marketing system and support them. He produces and pack themselves Gir Cow Ghee, health and nutrient product, rock salt, Produce groundnut organically and extract oil with attractive packing, babul falı powder, etc. many products.</p>		
4	<p>Silent features</p> <ul style="list-style-type: none"> ➤ Agri organic mall ➤ One step chemical less produce ➤ Health and hygienic produce ➤ Best farmers award ➤ Acting as ambassador for organic produce ➤ Support to other farmers for marketing ➤ Farmers to farmers dissemination of technology <p>Krushirushi in Krishi Mahotshavprogramm</p>		
5	<p>Practical utility</p> <ul style="list-style-type: none"> ➤ Labour saving, ➤ High marketing price ➤ Consult him for value addition ➤ Fresh vegetable available from “Organic Agri Mall” <p>Drumstick powder having high medicinal value</p>		
6	<p>Source of information</p> <p>Continuous contact with KVK and ATMA also visit exposure training at JAU, Junagadh she motivate for vegetable cultivation. Then, she started vegetable cultivation viz., okra, cucumber, tomato, ridge gourd, etc. Rajnikant K. Khirsariya has already 30 days (200 Hours) skill training course also done from Krishi Vigyan Kendra, JAU, Jamnagar</p>		
7	<p>Economics/Profitability of innovative practice/ technology (costs and return) (per intervention or area or household)</p> <p>The price of tomato earned Rs. 7 to 10 per kg (average Rs. 8/kg). gross earning is Rs. 5 lakhs per hectare and the cost of production of tomato was 1.25 lakhs per hectare. Thus, net benefit Rs. 3.75 lakhs per hectare CBR=(1:3)</p>		
8	<p>Details of result obtained due to the adoption of technologies</p>		
	<p>Particulars</p>	<p>Before NF</p>	<p>After NF</p>
	<p>Crop Production (q/ha)</p>	<p>24</p>	<p>36</p>
	<p>Cost of Production per hectare (Rs)</p>	<p>25000</p>	<p>Nil</p>
	<p>Net profit per hectare (Rs)</p>	<p>200000</p>	<p>700000</p>
	<p>Number of Sprays</p>	<p>5</p>	<p>8 Spray Jivamrut, Dasparni Ark etc</p>

	Cost of Spray (Rs)	11200	500
	Natural Resource saved/ conserved like Soil, water etc.	Irrigation-8	Irrigation-5 Soil Conservation, Decreased Soil Erosion, Increased Soil Carbon
	Product Quality Improvement	POOR	BEST QUALITY
	Marketing Strategy	APMC	Developed Processing Unit, Self-Selling by proper marketing, grading, packaging
9	Potential : Acceptance level, horizontal spread of innovation and number of farmer adopting During the era of organic farming, she has appreciated for the cultivation of organic vegetable cultivation and started one steps in an innovative work. Many farmers of the district were visited her farm. She got many awards for the animal keeping and vegetable cultivation. Door Darsha has special recorded her success story and broadcast from DD Girnar Channel during Mahila Jagat Programme. Thus, horizontal of the technology in district as well as whole state through telecasting.		

10 Illustrate with high quality photos with caption, graphs







Grading of lemon



Lemon cultivation



Moringa cultivation



2 Case study/ Success story



PROFILE OF FARM INNOVATORS Thematic Area: Organic Cultivation

“Dairy Management and Value Addition”

Dr. K. P. Baraiya, Smt. A. K. Baraiya

Personal Profile		Dairy Management and Value Addition
Name of farmer	: Changani Rinaben Jigneshbhai	<p>Changani Rinaben Jigneshbhais young & enthusiastic farm woman of village Dared near Jamnagar district. This village is 5km from Jamnagar, under North Saurashtra Agro-Climatic Zone having hardly 350 to 400 mm erratic rainfalls. Dared is declared as Industrial Zone, but family of Rinaben is completely depend on farming. At present only three farmers available in Dared, remaining all the land converted in the GIDC. Rinaben studied up to 10 standard, but her interest was in cow since his childhood. Due to small land holding and unirrigated land, it is difficult to earn sufficient amount for family. Therefore, she got ideas from her Father-in-law as well as mother-in-law for more earning. At the time her marriage one 2 cow was there on her house. Then she started gaushala on business purpose from 2010.</p> <p>Her family grow some common farming practices viz., Groundnut, sorghum, pearl millet and other fodder crops. From starting he used more pesticide and Chemical fertilizer due to that increase cost of cultivation and reduce net profit.</p>
Contact No.	: 7984027677	
Address	: At.-Dared, Ta.& Dist.- Jamnagar	
Age	: 37	
Education	: 10 Std pass	
Land holding	: 4.16 ha	
Crops grown	: groundnut, wheat, lemon, turmeric, chickpea, coriander, Vegetable,	
Livestock	: Cow – 60, Heifers – 62, Bull – 4	
Business	: Farming, animal keeping	
Special recognition	: Innovative and Progressive farmer	

She thought that animal keeping with agriculture will be beneficiary and helpful in increase in income. Its by products will also useful in farming. The thought first about buffalo keeping, but small land holding, they decided to keeping cow. Initially they started with 5-6 cow and now a days it increases upto 60 cows (35 cow are milking today), 62 heifers and 4 bull and give nomenclature as "**UpasnaGir Gaushala**". Cow farming is holistic approach, it can start with low investment as compare to other business. With the motto of clean milk production and help full to the society in the way of good produce supply to end users, started cow herds.

Increase income in comparison to traditional farming. FYM in sufficient quantity from cow herd helpful to growing organic farming. Different vegetables growing and direct marketing in Jamnagar and Dared GIDC having good profitability. Gau Mutra (cow urine) is very helpful for farming.

Thus, with the organic farming, ideas come in her mind after visit of different gaushala for value addition in cow by products. The, she started value addition like collect urine and sales. She started cow urine ark, cow dung cake, Jivamrut, etc. cow dung has very good value addition by making posters and different monuments. She started different mud-work also on wall mounting posters. She started vermicompost unit also. They sale vermicompost, vermi wash, vermi culture also which give good earning with value addition in these products. They prepare bio-fertilizers form urine, gobar and supply to organic growers for good cultivation. They also prepare phenyl and different home use product form wastage farm and gaushala.

They prepare ghee and sales @ Rs. 1000/- per 1 kg. and milk sales directly to consumers @ Rs. 60/- per litre. Prepare Panchgavya from cow ghee, it price is up to Rs. 25000/- per kg. Panchgavya can retard cancer from human being.

Economics of cow unit

Year	No. of cow	Milking cow	Annual milk production (litre)	Average milk production	Price Per litre	Total annual income (Rs.)	Total annual cost (Rs.)	Net Benefit (Rs.)	Average net benefit per animal
2016-17	50	18	43200	2400	55	237600	189800	478000	26556
2017-18	65	24	57600	2400	60	345600	247000	986000	41083
2018-19	80	27	65340	2420	60	392040	304000	880400	32607
2019-20	105	35	83125	2375	60	498750	399000	997500	28500
2020-21	126	42	104160	2480	60	624960	478800	146160	34800

Many farmers of surround area were visited "**UpasnaGirGaushala**" and take information about the organic cultivation, vermi compost, cow unit and they started on their own farm.

Action Photographs

॥ वन्दे धेनु भातरम् ॥

જીજ્ઞેશભાઈ પટેલ
94272 80997



મગનભાઈ યાંગાણી
94287 27017

સરકારશ્રી તરફથી મેળવેલ વિવિધ એવોર્ડ્સ અને પ્રશસ્તિપત્રો

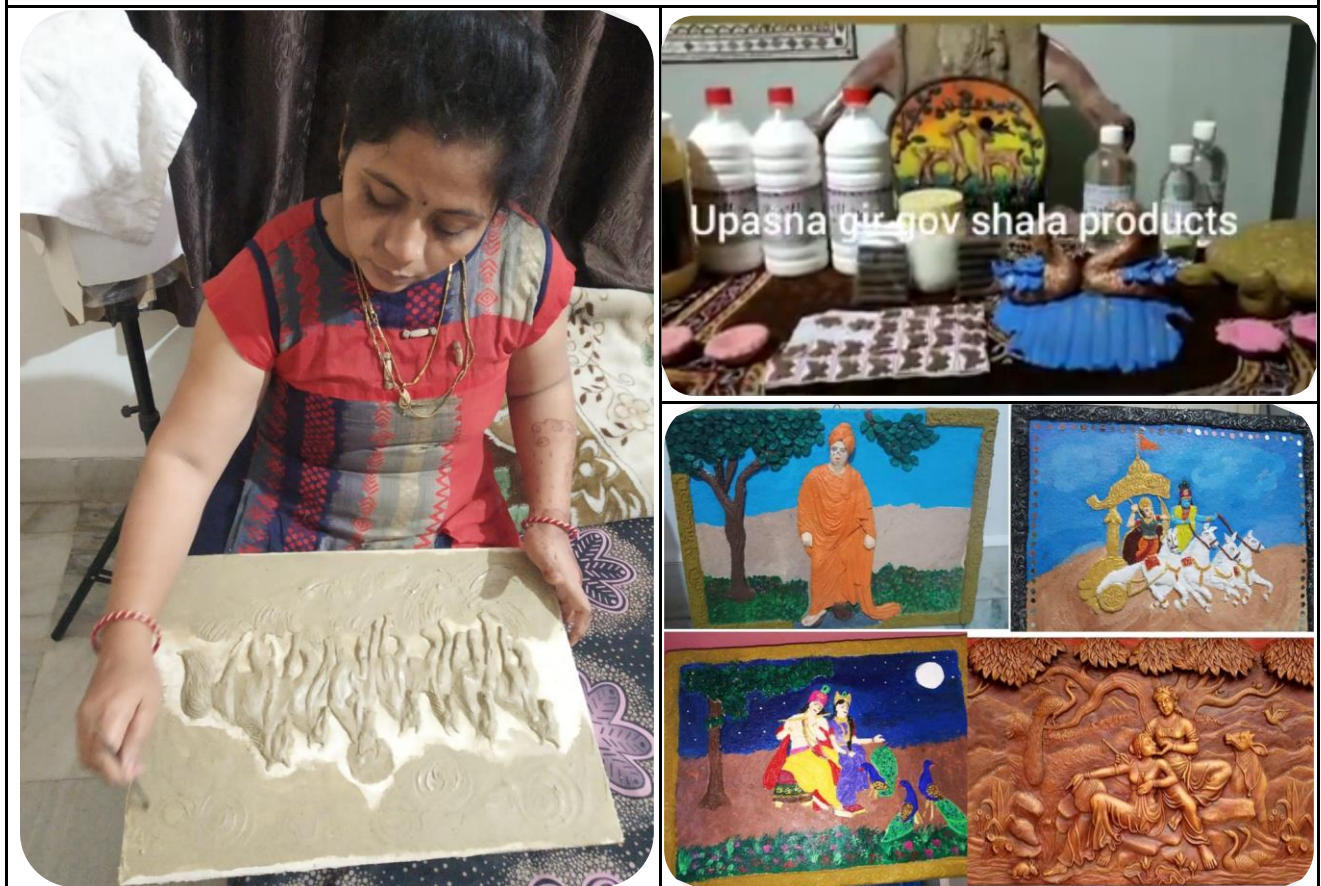


મું. દરેડ, તા. જિ. જામનગર - ૩૬૧૦૧૨

Awards received to Upasana Gir Gausala




Cow dung value addition by making posters



<p>Cow dung art work on poster</p>	<p>Saling of different value added product from cow</p>
	
<p>Upasana Gir Gaushala</p>	<p>Packaging of milk</p>

2 Case study/ Success story

	<p style="text-align: center;">PROFILE OF FARM INNOVATORS Thematic Area: Organic Cultivation “Organic Exotic Fruit and Vegetable cultivation with its Value Addition” <i>Baraiya K P, Baraiya A K, Godhani H S</i></p>
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<p>1. Personal Profile</p>	<p>Organic Exotic Fruit and Vegetable cultivation with its Value Addition</p>	
<p>Name of farmer</p>	<p>: Jesadiya Vishal Lavjibhai</p>	<p>Jesadiya Vishal Lavjibhai is young & enthusiastic farmer of Anandpar village, of Kalavad Taluka, Jamnagar district. Anandpar is well attached on Kalavad-Rajkot highway, and it is very near to Rajkot (the capital city of Saurashtra region). This village is 22 km from Kalavad and 27</p>
<p>Contact No.</p>	<p>: 9558379098</p>	
<p>Address</p>	<p>: At.- Anandpur, Ta. Kalavad Dist.- Jamnagar</p>	

Age	:	29	km from Rajkot. It come under North Saurashtra Agro-Climatic Zone having hardly 350 to 400 mm erratic rainfalls. Anandpar having no any irrigation facility available as well as no any reservoir (Dam). They completely depend on rainfall. After completion of graduation Vishal has started service of marketing in the corporate (pesticide and seed) company. During this job, he visited different progressive farmers and different cropping patters of farmers. He was very interested in organic farming as well as in horticultural crop grown. Along with the service he has started his normal farming with his father. During this period, he doing different experiment of new fruit and vegetable crops on his farm, but at the starting his father has not support for the different experiments done on his own field. He come in contact Scientist of Krishi Vigyan Kendra, JAU, Jamnagar during field work in the district. He also visited different states with ATMA project for this study. He also visited Department o Horticulture at JAU, Junagadh, and also contact to Dy. Director of Horticulture, Jamnagar for horticulture farming. Thus, encourages for organic farming with exotic vegetable and fruit cultivation.
Education	:	Graduate	
Land holding	:	2.09 ha	
Crops grown	:	Dragon Fruit, avocado, Persimmon, apple, Strawberry, purple flower, Thai basil, broccoli, green kale, lettuce, American red kale, Zucchini, knolkhol, Celery	
Livestock	:	Cow – 1, Heifers – 2,	
Business	:	Farming,	
Special recognition	:	Innovative and Progressive farmer	

Practical Utility of the Innovation/ Mode etc.

Jesadiya Vishal Lavjibhai is young, enthusiastic and innovative farmer. Now a days organic era is come back in the country. People need chemical less and quality food products. The economics of the Indian people have been increased as compare to three decades back. He doing common farming practices like groundnut, cotton, onion, wheat, etc. with his father up to his study period. After completion of study, he started service in corporate company. During this period, he has started new experiment on his farm with his father. But his father does not support him for different experiment of new fruit and vegetable. Then, he thought for the think out of box and started separate farming business. He has work hard and get knowledge for cultivation of different exotic vegetables as well as fruits crops. He started dragon fruit and strawberry cultivation. He also established dragon fruit nursery for true to type sapling. He supplies saplings to many farmers for development of dragon fruit plantation. His nursery was approved by Central Horticultural Board, Government of India. He started different value-added products from dragon fruit with the help of Krishi Vigyan Kendra, JAU, Jamnagar.

He joined interstate tour of ATMA project, and visited Dr. Y. S. Parmar University, Shimla and participation in the seminar of strawberry cultivation held at New Delhi under Department of Horticulture, programme. He stated strawberry cultivation on his own farm in Anandpur. Thus, he proved that the crop of tropical region can also grow in sub-tropical region. He also sales by packing in attracting packaging.

Then, after the growth cannot stop at this step, he established "**Gujarat Green Organic Farm**"he grow many other exotic fruits like avocado, Persimmon, apple, Strawberry etc. on another hand, he has started many vegetablescultivation of local and exotic like purple flower, Thai basil, broccoli, green kale, lettuce, American red kale, Zucchini, knolkhol, Celery etc. on his field at Anandpar.

Vishalbhai sales all these produce to the hotels, direct consumers and earn

Economics of cow unit

Year	Crop	Area ha.	Production kg/ha	Total Income Rs.	Total Cost Rs.	Net Income Rs.
2018- 19	Dragon Fruit	0.3	500	180000	20000	160000
2019- 20	Dragon Fruit	0.3	1200	240000	20000	220000
	Strawberry	0.16	3000	300000	60000	240000
2020- 21	Dragon Fruit	0.3	1500	300000	20000	280000
	Strawberry	0.16	3500	350000	60000	290000

Vishalbhai sales all exotic fruit and vegetables to the hotels and direct consumers with good earning. Thus, he also sales sapling from his certified nursery and earn very good then fruit and vegetable production.

Around 15 farmers visit his nursery and started their own fruit and vegetable cultivation. Thus, horizontal spread of technology is very high.

Thus, really he has efforts more and achieve a big hight.

Action Photographs



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

1. Innovative methodology:

- ❖ Farmers to farmer dissemination
- ❖ Distributed printed leafletto farmers
- ❖ Farm School on farmer's field
- ❖ Kishan advisory through mobile SMS
- ❖ Film show
- ❖ Cluster frontline demonstration
- ❖ Mass campaign
- ❖ Mass media communication

2. Innovative technology transfer:

- ❖ Use of FYM to minimize the chemical fertilizer in cotton
- ❖ Use of MDP in cotton for management of pink bollworm
- ❖ Use of Trichoderma against stem rot disease of groundnut
- ❖ Use of *Metarhizium* against white grub in groundnut
- ❖ Use of *Beauveria* against all pest of all crops.
- ❖ Use of bio-fertilizers viz. PSB, Rhizobium, Azatobactor etc
- ❖ Use of pheromone trap for mass trapping as well as monitoring
- ❖ Tractor mounted sprayer
- ❖ Introduction of new variety i.e.GG-3, GG-5 of Chickpea, GJG-22 of Groundnut, GW-463 of wheat
- ❖ Use of trap crop, pheromone trap etc. as a IPM component
- ❖ Cotton stalk shredder for recycling of farm waste

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

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1.	Chilly	Use castor as a trap crop	For controlling thrips and jassids
2	Crop husbandry	Crop rotation and mixed cropping	Control weed, and diseases management
3	"	Mixing of ash with pulse/millet grains	While storing to protect from pest
4	"	Vegetable seeds placed inside cowdung	Use for next year
5	Fertility Management	Application of ash	To improve soil fertility
6	"	Sheep and goat penning	To improve soil fertility
7	"	Jivamrut	To improve soil fertility and reduce chemical fertilizers
7	Crop husbandry	Panchgavya	For management of pests and diseases of crops
8	Crop husbandry	Sheep and goat grazing	For pinkboll worm management
9	Harvesting	Harvest pulse crop in the morning hours	To reduce shattering
10	Organic farming	Jivamrut, Panchgavya, Cow based farming	Reduce the cost of cultivation as well as without chemical organic farming.
11	Crop husbandry	Use of light trap	For pest reduction
12	Organic farmng	Use of yellow sticki trap	For pest management

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

- a) Group discussion with the farmers
- b) Field visits
- c) Group meeting

d) Identifying general trends in the area

e) PRA survey

Rural Youth

a) Filling up research based questionnaires

b) Identification of leader and role of rural youth in agriculture (Socio-metric method)

c) Field visit for practical experience

d) General discussion about district agriculture issues

In-service personnel

a) Knowledgetest (Interview schedule)

b) Interaction with the personnel

c) Functional areas of personnel

5.2 Indicate the methodology for identifying OFTs/FLDs

For OFT :

- PRA
- Problem identified from Matrix
- Field level observations
- Farmer group discussions
- Assessment of technology
- Others if any

For FLD :

1. New variety/technology
2. Poor yield at farmers level
3. Existing cropping system :- Coriander
4. Technology – adoption gap
5. Others if any

5.3 Field activities

- i. Name of villages identified/adopted with block name (from which year) -
- ii. No. of farm families selected per village :
- iii. No. of survey/PRA conducted :
- iv. No. of technologies taken to the adopted villages
- v. Name of the technologies found suitable by the farmers of the adopted villages:
- vi. Impact (production, income, employment, area/technological– horizontal/vertical)
- vii. Constraints if any in the continued application of these improved technologies

6. LINKAGES

A. Functional linkage with different organizations

Sr.	Name of organization	Nature of linkage
A	State corporation and state deptt.	
1	District Agricultural Officer, Deptt. of Agriculture, District Panchayat, Jamnagar& Devbhumi Dwarka	➤ Joint diagnostic team visit at farmers field
2	District Rural Development Agency, Jamnagar& Devbhumi Dwarka	➤ For collaborative training and demonstration Programme
3	Deputy Director of Veterinary, Department of veterinary &Animal Husbandry, Jamnagar& Devbhumi Dwarka	➤ Collaborative On/Off campus training programme
4	Deputy Director of Horticulture, Jamnagar	➤ For providing hostel facilities to
5	Deputy Director of Agriculture (Training), Farmer Training Centre, Jamnagar& Devbhumi Dwarka	
6	Deputy Director of Agriculture (Extension), Jamnagar& Devbhumi Dwarka	
7	Asstt. Director of Fisheries, Jamnagar& Devbhumi Dwarka	

8	Range Forest Officer, Jamnagar& Devbhumi Dwarka	participants and organizing collaborative Krishi Mela ➤ Organize all government programmes collectively	
9	Asstt. Director of GLDC, Jamnagar& Devbhumi Dwarka		
10	Estate Engineer, Department of Irrigation, Jamnagar& Devbhumi Dwarka		
11	All Taluka Development Officers, and their team at Taluka level		
12	Rajkot-Jamnagar Gramin Bank, Jamnagar& Devbhumi Dwarka		
13	Project Director, ATMA, Jamnagar& Devbhumi Dwarka		
14	Project Director, DWDU, Jamnagar & Devbhumi Dwarka		
15	NABARD Bank		
B	Private Corporation		
1	Territory Manager, GSFC, Jamnagar& Devbhumi Dwarka		➤ Impart training on Agril. aspects ➤ Collaborative on/off campus training programme ➤ Sponsor training programme
2	Territory Manager, GNFC, Jamnagar& Devbhumi Dwarka		
3	Territory Manager, IFFCO, Jamnagar& Devbhumi Dwarka		
4	Reliance Industries, Dept. of Green Belt, Jamnagar		
5	Syngenta Company		
6	GGRC		
C	NGOs		
1	Murlidhar Trust, Opp. Trajitpara Branch School, Bhanvad	➤ Impart training on Agril. aspects ➤ Collaborative on/off campus training programme	
2	Tata Chemical Society for Rural Development Foundation, At. Mithapur, Ta.-Dwarka, Dist.-Jamnagar		
3	Agakhan Rural Development Trust		
4	ANARDE foundation trust		
5	Mahindra Tractor, Jamnagar		
6	BAIF Singach		
7	ACT		

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

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Establishment of Agricultural Technology Information Centre (ATIC) (B. H.:- 12572-03)	2005-06	State Govt.	1000000
Cluster Frontline demonstration of pulses under NSFM (B.H.:- 2704-50)	2014-15	ICAR	63000
Cluster Frontline demonstration of Oilseeds under NMOOP (B.H.:- 2704-51)	2014-15	ICAR	68000
District Agromet Units (DAMUs) (B.H.2704-59)	2018-19	II	743161
Swachhta Action Plan (B.H.-2704-65)	2019-20	II	22780
Farmers outreach programme on natural farming (B.H.-2704-68)	2021-22	ICAR	14105

C. Details of linkage with ATMA

a) Is ATMA implemented in your district (Yes/No) :- Yes

S. No.	Programme	Nature of linkage	Remarks
1	District Level Training	Impart Training on Agricultural Aspects	Celebrate Technology week Arrangement of Krishi Mela
2.	Block level training	Lecture delivered	
3.	Village level training		

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

Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	AGB, AMC and other meeting	8	2	
02	Research projects	-	-	-	-
03	Training programmes	On/ Off Campus training programme	13	4	
04	Demonstrations	Method Demonstration	3	2	
05	Extension Programmes				
	Extension programmes		23	12	
	Kisan mela		1	0	
	Technology Week		0	1	
	Exposure visit		2	1	
	Exhibition		1	0	
	Soil health camps		-	0	
	Animal Health Campaigns				
	Farmers Field School (FFS)		2	0	
	Capacity Development		1	0	
	Agri-preneurs development		1	2	
	Others (Pl. specify)	Day Celebration	2	2	
		Lecture Delivered	21	10	
06	Publications				
	Video Films		0	0	
	Books		0	1	
	Extension Literature		1	4	
	Pamphlets				
	Others (Pl. specify)				
07	Other Activities (Pl. specify)				
	Watershed approach				
	Integrated Farm Development				
	Agri-preneurs development		3	2	

D. Give details of programmes implemented under National Horticultural Mission

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

E. Nature of linkage with National Fisheries Development Board

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

F. Details of linkage with RKVY

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
	Training, lecture deliver, field & diagnostic visit	Members in district level committee	-	-	-

G. Details of linkage with PKVY (Paramparagat Krishi VikasYojana)

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

H. Details of linkage with NFSM

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	Training, lecture deliver, field & diagnostic visit	Members in district level committee			

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

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

7. Convergence with other agencies and departments:

Period	Activity details	Place of activity	Officers present
8.02.21	SAC meeting with line Department	KVK, Jamnagar	43
25.01.21	DLMC meeting organized by horticulture department Jamnagar	on ZOOM app.	6
15.04.21	RKVY- DLPC meeting of Jamnagar District	DDO Chamber, Jamnagar	7
20.05.21	FLD input for Kharif crops in different scheme meeting by ZDA(Extension), Rajkot	Google meet	21
5.06.21	ATMA AMC meeting of Jamnagar and Devbhumi Dwarka district	On Zoom app	14
22.06.21	District level meeting of CWWG under crop survey	Google meet	6
24.06.21	NFSM committee Meeting	DDO chamber, Jamnagar	9

8. Innovator Farmer's Meet

Sl.No.	Particulars	Details
	Have you conducted Farm Innovators meet in your district?	Yes/ No
	Brief report in this regard	

9. Farmers Field School (FFS)

S. No	Thematic area	Title of the FFS	Budget proposed in Rs.	Brief report
1	Nil	Nil	Nil	Nil

10.1. Technical Feedback of the farmers about the technologies demonstrated and assessed:

- Demonstrated new variety

- Introduction of newer crop by KVK through different FLD as well as OFT
- Information of any crop diversification get from KVK
- Frequently visit to farmers
- Telephonic information is available 24 hours through scientist mobile
- Farmers reduce cost of production by using *Beauveria bassiana* and other bio-products
- Farmers understood the use of sulphur in oilseed crops specially in mustard through front line demonstrations in different villages
- Farmers understand the need of soil and water conservation and its future consequences in the area.
- Positive response coming from farmers about use of *Trichoderma* as seed treatment and soil application in cumin and groundnut
- Farmers are realizing the need of micronutrients and their deficiency in the different soils of the area
- Farmers are realizing the importance of seed treatment for pest and disease management
- Positive feedback coming from farmers side about the use of *Pseudomonas* in coriander for disease management
- Farmers getting satisfactory results from seed treatment for pest and disease control in different crops

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

Director (ATARI), DEE, Comptroller of University :

- Grant for the contingency for handling different programmes is in sufficient
- Limit of food provision during training and other cost should be increase along with stipend and transportation facility (Approximately Rs. 500 to 1000 per head per training required)
- Timely release of grant for successful and perfect conducting of FLD and OFT
- Required new vehicle for field visit and other extension programme. It is also required minimum two vehicle in KVK due to work load and it is among farmers field
- Contingency grant is in sufficient (It should be minimum 30 lakhs per KVK)
- Provide grant for farm protection wall and other infrastructure facilities

Soil & Water Conservation:

- Farmers are facing the problem of malfunctioning of micro irrigation systems with poor quality irrigation water.
- Problem of soil salinity/ alkalinity is increasing day by day due to inherent salinity of soils and application of poor quality water.
- More research is required for magnetic water softener and effects of softened water on soil after continuous use.

Horticulture:

- Need to be developed nematode & wilt resistant root-stock in pomegranate
- Fertigation schedule should be developed in Datepalm
- Need to be developed value addition methods for Datepalm

Plant Protection:

- Need to be developed more insect and disease resistant varieties under different crops
- Farmers need freshly prepared bio-agents like *Beauveria*, *Metarhizium*, *Trichoderma*, *Pseudomonas*, *Paecilomyces* etc.
- Need to be effective control measures for mealybug control in cotton.
- More emphasis should be given on fruit fly management in different orchards
- Research scientists should focus on discovering best management techniques for mealybug
- Also focus on para-wilt management practices in cotton
- Need to be discover new molecules of nematicides for nematode management
- Should be focus on insecticide resistance management
- Ease availability of bio-pesticides to farmers

Agronomy:

- Need to be developed salinity resistant varieties of crops like groundnut and castor
- Need to be developed high yielding/ salinity tolerant varieties of pulse crops
- Need to be farming with cow based agriculture development for doubling the farmers income

11. Technology Week celebration during 2021: Yes/No, If Yes

Period of observing Technology Week : From to September 20-24, 2021

Online / Offline : Offline

Total number of farmers visited : 520

Total number of agencies involved : 2

Number of demonstrations visited by the farmers within KVK campus: 3

KVK, JAU, Jamnagar and ATMA Jamnagar jointly celebrated technology week during September 20th to 24th, 2021 at KVK, Jamnagar. In which total 520 Farmers/farm women from different blocks were participated and also provided extension literature to each participant. This programme was chaired by Dr. H. M. Gajipara, Director of Extension Education, Junagadh Agriculture University, Junagadh. During this week, day wise different theme was kept for transfer of newer technology to the farmers. Special emphasis given on pink bollworm management rotting of groundnut and cotton due to heavy rain. They also encourage for organic farming as well as reduction of cost of cultivation with improved technologies. Special emphases were given on value addition, Kitchen gardening, Women and child care and Nursery Management for more income generation. Many demonstration and video shows were arranged during this programme.

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies	5	520	Groundnut, Sesame, Cotton, castor,

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Lectures organized	30	520	
Exhibition	1	520	
Film show	15	520	
Fair	0	0	
Farm Visit	5	520	
Diagnostic Practicals	25	56	
Supply of Literature (No.)	13	1560	
Supply of Seed (q)	0	0	
Supply of Planting materials (No.)	0	0	
Bio Product supply (Kg)	0	0	
Bio Fertilizers (q)	0	0	
Supply of fingerlings	0	0	
Supply of Livestock specimen (No.)	0	0	
Total number of farmers visited the technology week	520	520	
Number of organizations participated	1	30	

12. Interventions on drought mitigation (if the KVK included in this special programme)

A. Introduction of alternate crops/varieties

State	Crops/cultivars	Area (ha)	Number of beneficiaries
Gujarat			

B. Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds		
Pulses		
Cereals		
Vegetable crops		
Tuber crops		
Total		

C. Farmers-scientists' interaction on livestock management

State	Livestock components	Number of interactions	No. of participants
Total			

D. Animal health camps organized

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

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

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

Total				

F. Large scale adoption of resource conservation technologies

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

G. Awareness campaign

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

13. IMPACT

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

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

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

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

Sr.	Significant Achievements	Details of achievements
1	Natural farming promotion	: Farmers were aware about natural farming, through adopting technology of input material produce on their own farm. Enhancing humus in the soil, recycling of farm waste, conservation of natural enemies, potential use of bio fertilizers, bio pesticides etc. use of indigenous technology for reducing cost of cultivation. Proper value addition and marketing strategies for high earning from the valuable products.
2	Promotion of organic farming	: Farmers were aware about organic farming, skill training conducted skill development of organic growers. Horizontal spread in more than 750 farmers have been started organic farming in the KVK jurisdiction. About 17% farmers have been started organic inputs for their pest, diseases and nutrition management, through which they reduce the cost of cultivation.
3	Employment generation through seed production	: Skill training on "Organic Grower" and "quality seed grower were conducted and horizontal spread"
4	Popularization of New varieties of Groundnut	: GG-20 variety share more than 75% share of total groundnut cultivation. It was replaced by GJG-22 variety, GJG-9, GJG-31 and GJG-32 by availability of seed on about 28%

5	Spread of Beauveria	:	It reduces chemical pesticide drastically. Seed treatment is more effective as well as less quantity of insecticides is to be required. Aware farmers about use of <i>Beauveria bassiana</i> for the management of pink bollworm in cotton and white grub in groundnut. It also successful for the control the all type of pest infesting crops. This technology is expansion in about 340000 ha.
6	Spread of Trichoderma	:	Most successful biological fungicide used in groundnut cultivation for the management of stem rot (<i>Sclerotium rolfsii</i>) of groundnut, wild of cumin. It reduce chemical fungicides drastically, and having fixed in soil as regular organism, therefore repeated use having augmented in soil and reduce all soil borne diseases. More than 85% farmers used. It spread over 360000 ha.
7	Popularization of different varieties	:	Sesame : G.Til.-3, 4; 5, 6 Pearl Millet- GHB-558, 538, 732, 1129, 1231 Chickpea :- GG-5, GJG-3, GJG-6
8	New crop introduction	:	Coriander is the fourth-major crop of rafi crops after cumin, wheat and chickpea. It was introduced by KVK, JAU, Jamnagar from 2012-13.
9	The Impact of Drip Irrigation: "More Crop Per Drop"	:	<ul style="list-style-type: none"> ➤ Increased yield, Early maturity, ➤ Water saving ➤ Fertilizer saving ➤ Increased Fertilizer efficiency ➤ Energy saving ➤ Labor saving ➤ Marginal lands can be irrigated ➤ Use of saline water is possible for irrigation ➤ Reduced weed growth ➤ Less problem of disease and pest ➤ Makes inter culture operations easy ➤ Keep soil condition good & ➤ Save time
10	Re-cycling of farm waste through Bio-decomposer & Bio-Fertilizers	:	<ul style="list-style-type: none"> ➤ Reduce cost of cultivation, ➤ water saving, ➤ fertilizers & micro-nutrients saving ➤ growth hormones saving,

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

Most Successful Technology	Source of Technology with Year of Released/ Developed	Parameters/Indicators/Determinants for Large Scale Adoption or Most Successful					
		Area covered (ha)	No/ of Villages covered	Approx No. of farmers adopted	Highest yield Q/ha	Net return Rs/ha	More demand in market
Pearl millet GHB-732	JAU, Junagadh Year of release: 2010-11	530	42	218	48.00	42300	
Coriander GC-2	SAU	3725	164	384	13.27	77350	
Green Gram GM-4	GAU	6525	348	687	12.00	28500	
Chickpea GJG-3	JAU	220	315	650	26.35	69500	
Chickpea GG-5	JAU, Junagadh Year of release: 2013-14	285	28	250	31.25	82000	
Chickpea GG-6	JAU	15	3	52	27.35	79500	
IDM							
Trichoderma in Groundnut	JAU, Junagadh	3540	85	650	28.00	42000	
Groundnut variety GJG-32	JAU, Junagadh	750	80	350	36.25	114000	

Groundnut GJG-9	JAU, Junagadh	850	152	650	31.60	97600	
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N.B.: Villages were selected for the period of 2021 to 2023 for working therefore, the detail impact will be given after completion of this period.

14. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
Jan 2021	2	155443	
Feb 2021	2	155416	
March 2021	0	0	
April 2021	0	0	
May 2021	3	233115	
Jun 2021	0	0	
Jul 2021		0	
Aug 2021		0	
Sept 2021	1	72	
Oct 2021		0	
Nov. 2021		0	
Dec. 2021		0	
	8	544046	

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
Jamnagar	Text only	5	0	1		1	1	8
	Voice only							
	Voice & Text both							
	Total Messages	5	0	1		1	1	8
	Total farmers Benefitted	310931		77713		77712	77690	544046

15. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demonstration Units	Year of Establishment	Area	Details of production			Amount (Rs.)		Remark
				Variety	produce	Quantity (No.)	Cost of inputs	Gross income	
1	Nursery Unit	2016	-	-	Planting material	362	-	1680	
2	Kitchen gardening	2021	-	-	Vegetables	296	4000	5920	

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

Name Of the crop	Date of sowing	Area (ha)	Details of production			Amount (Rs.)		Remarks
			Variety	Type of Produce	Qty. kg	Cost of inputs	Gross income	
Wheat	26.11.20	2.8	GW-463	Seed	8180	70650	209000	
Castor	24.09.20	1.3	GCH-9	Seed	2306	87100	176670	
Groundnut	20.07.21	4.0	GJG-9	Seed(Breeder) Haulm	2750 4000	320000	413850 16000	

Groundnut	21.07.21	1	GJG-31	Seed(Breeder) Haulm	990 1500	80000	144150 6000	
Groundnut	19.07.21	5	GJG-32	Seed(Breeder) Haulm	4695 5900	400000	704250 23600	
Groundnut	19.07.21	1	GJG-32	Seed(TF) Haulm	780 1000	55000	63000 4000	
Maize	28.10.20	0.05		Green fodder	1490	-	-	
Sorghum	28.10.20	0.05		Green fodder	1460	-	-	
Lucerne	4.11.20	0.05		Green fodder	2530	-	-	
Sorghum	11.02.21	0.5	Gundri	Dry fodder	5000	-	-	
Maize	11.02.21	0.1		Green fodder	2980	-	-	
Sorghum	28.07.21	0.15	Gundri	Green fodder Dry fodder	1770 1000	-	-	
Sorghum	28.07.21	1.5	Gundri	Green fodder	40000		15500	

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

Sl. No.	Bio Products	Name of the bio-product	Quantity		Amount (Rs.)		No. of Farmers	Remarks
			No.	kg	Cost of inputs	Gross income		
1	Bio Fertilizers	<i>Azotobactor</i>	55		0		55	
2		<i>Rhizobium</i>	85				85	
3		<i>PSB</i>	130				130	
4	Bio-pesticide	<i>Beauveria Bassiana</i>		1713	17130		254	
5		<i>Metarizium</i>		50			50	
6		<i>HNPV</i>	25				25	
7	Bio-fungicide	<i>Trichoderma</i>		250			160	
	Total		295	2013	17130		759	

N.B. *Product was produced by JAU University and selling by KVK the amount is only given for revenue generation

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

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Cow	Gir	Milk	1449.3 Lit	-	52175	
			FYM	100 qtl	-	20000	
2	Vermi compost	<i>Eicenia fetida</i>	Vermis culture		-		
			Compost	43.0 Qtl	-	2150	

E. Utilization of hostel facilities

Accommodation available (No. of beds): 25

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
January 2021	8	7	
February 2021	18	19	
March 2021	4	12	
April 2021	1	4	
May 2021	4	10	
June 2021	3	8	
July 2021	5	14	
August 2021	42	13	
September 2021	34	14	

October 2021	67	29	
November 2021	2	6	
December 2021	45	10	
Total	233	146	

F. Database management

S. No	Database target	Database created

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

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

H. Performance of Nutritional Garden at KVK farm

If Nutritional Garden developed at KVK farm/Village Level? Yes/No

If yes,

Nutritional Garden developed at KVK farm

Area under nutritional garden (ha)	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers visited
0.2	Vegetable crops	Brinjal, Indian bean, cowpea, carrot, coriander, ridge gourd, bottle gourd, fenugreek, radish, palak, okra, cluster bean,	1154
	Fruit crops		
	Others if any		

Nutritional Garden developed at Village Level

No. of Villages covered	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers covered
3	Vegetable crops	Brinjal, Indian bean, cowpea, carrot, coriander, ridge gourd, bottle gourd, fenugreek, radish, palak, okra, cluster bean	50
	Fruit crops		
	Others if any		

H. Details of Skill Development Trainings organized

S.No.	Name of KVKs/SAUs/ICAR Institutes	Name of QP/Job role	Duration (hrs)	No. of participants					
				SCs/STs		Others		Total	
				Male	Female	Male	Female	Male	Female
1									

16. FINANCIAL PERFORMANCE**A. Details of KVK Bank accounts**

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number

With Host Institute	State Bank of India						
With KVK	State Bank of India	Khodiyar Colony, Jamnagar	SBIN0012211	Training Organizer	10319002389	361002098	12211

B. Utilization of KVK funds during the year 2020-21 (Rs. in lakh)

S. No.	Head	R.E 2020-21	Opening Balance as on 01.04.2020	Deducted by ARARI during 2020-21	Fund received during 2020-21	Expenditure during 2020-21	Closing Balance (04-05+06-07)
1	2	3	4	5	6	7	8
Grants for creation of Capital Assets (CAPITAL)							
1	Works	0	0	0	0	0	0
	A. Land	0	0	0	0	0	0
	B. Building	0	0	0	0	0	0
	i. Office building	0	0	0	0	0	0
	ii. Residential building	0	0	0	0	0	0
	iii. Minor works	0	0	0	0	0	0
2	Equipments	0	0	0	0	0	0
3	Information Technology	0	0	0	0	0	0
4	Library Books and Journals	0	0	0	0	0	0
5	Vehicles & Vessels	0	9611	9611	0	0	0
6	Livestock	0	0	0	0	0	0
7	Furniture & Fixtures	0	0	0	0	0	0
8	Others	0	0	0	0	0	0
	Total-CAPITAL (1+2+3+4+5+6+7+8)	0	9611	9611	0	0	0
Grants in Aid - Salaries (REVENUE)							
9	Establishment Expenses						0
	A. Salaries	9100000	2053945	1743787	9100000	9100000	310158
	B. 7th CPC arrears	2666000	0		2666000	2666000	0
	Total-SALARIES (9)	11766000	2053945	1743787	11766000	11766000	310158
Grants in Aid - General (REVENUE)							
10	Pension & Other Retirement Benefits	0	0	0	0	0	0
11	Travelling Allowance	100000	-6592	76582	100000	16826	0
12	Research & Operational Exp.	870000	494	48773	870000	820017	1704
	A. Research Expenses						0
	B. Operational Expenses						0
	Total - Res. & Operational Exp.	970000	-6098	125355	970000	836843	1704
13	Administrative Expenses	30000	11490		30000	42956	-1466

	A. Infrastructure			0			0
	B. Communication			0			0
	C. Repairs & Maintenance						0
	i. Equipments, Vehicles & Others			0			0
	ii. Office building			0			0
	iii. Residential building			0			0
	iv. Minor Works			0			0
	D. Other			0			0
	Total - Administrative Expenses	30000	11490	0	30000	42956	-1466
14	Miscellaneous Expenses		0				0
	A. HRD		0			0	0
Total Grants in Aid – General (10+11+12+13+14)		1000000	5392		1000000	879799	238
Grand Total (Capital + Salaries+ General)		12766000	2068948		12766000	12645799	310396

* in Column No. 5 Title :- CB Capital, Salary and General of 2017-18, 2018-19 and 2019-20 (Capital only) deducted by ARARI during 2020-21

B. Utilization of KVK funds during the year 2021-22 (Rs. in lakh)(Till Dec, 2021)

S. No.	Particulars	Sanctioned	Opening balance	Released	Expenditure	Balance
A.	Recurring Contingencies					
1	Pay& Allowances	11352000	310158	11352000	9340963	2321195
2	Traveling allowances	75000	0	75000	16035	58965
3	Contingencies	1189000	238	1189000	1096123	93115
	TOTAL (A)	12616000	310396	12616000	10453121	2473275
B.	Non-Recurring Contingencies	0	0	0	0	0
C.	REVOLVING FUND	0	0	0	0	0
	GRAND TOTAL (A+B+C)	12616000	310396	12616000	10453121	2473275

S. No.	Head	R.E 2021-22	Opening Balance as on 01.04.2021	Refund During 2021-22, if any	Fund received during 2021-22	Expenditure during 2021-22	Closing Balance (04-05+06-07)
1	2	3	4	5	6	7	8
Grants for creation of Capital Assets (CAPITAL)							
	Total-CAPITAL (1+2+3+4+5+6+7+8)	0	0	0	0	0	0
Grants in Aid - Salaries (REVENUE)							
9	Establishment Expenses						
	A. Salaries	8852000	310158	0	8852000	7976104	1186054
	B. 7th CPC arrears	2500000	0	0	2500000	2500000	0
	Total-SALARIES (9)	11352000	310158	0	11352000	10476104	1186054
Grants in Aid - General (REVENUE)							

10	Pension & Other Retirement Benefits	0	0	0	0	0	0
11	Travelling Allowance	75000	0	0	75000	31576	43424
12	Research & Operational Exp.						0
	A. Research Expenses	400000	1704	0	400000	401704	0
	B. Operational Expenses	264000	0	0	264000	264000	0
	Total - Res. & Operational Exp.	739000	1704	0	739000	697280	43424
13	Administrative Expenses	525000	-1466		525000	566958	-43424
	Total - Administrative Expenses	525000	-1466	0	525000	566958	-43424
14	Miscellaneous Expenses						0
	A. HRD					0	0
Total Grants in Aid – General (10+11+12+13+14)		1264000	238	0	1264000	1264238	0
Grand Total (Capital + Salaries+ General)		12616000	310396	0	12616000	11740342	1186054

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

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 31 st March, 2018 of this year
1 st April 2018 to 31 st March, 2019	5557697	4549175	4143409	5963463
1 st April 2019 to 31 st March, 2020	5963463	4201134	2525789	7638808
1 st April 2020 to 31 st March, 2021	7638808	3673303	1078597	10233514
1 st April 2021 to 31 st December, 2021	10233514	2549639	166666	12616487

17. Details of HRD activities attended by KVK staff during year

Name of the staff	Designation	Title of the training programme	Institute where attended	Mode (On/Offline)	Dates
Dr. K. P. Baraiya	SS & H	State Level workshop on Action Plan of KVK of Gujarat	Organized by ATARI, PUNE	Online	18.02.21
Mr. V. L. Kikani	SMS	Workshop on "Participatory Programme Planning, Monitoring and Evaluation"	Jointly Organized by DEE, JAU, Junagadh and EEI, Anand via Google Meet app.	Online	9-10.03. 2021
Smt. A. K. Baraiya	SMS	Workshop on "Participatory Programme Planning, Monitoring and Evaluation"	Jointly Organized by DEE, JAU, Junagadh and EEI, Anand via Google Meet app.	Online	9-10.03. 2021
Dr. K. P. Baraiya	SS & H	Workshop on "Participatory Programme Planning, Monitoring and Evaluation"	Jointly Organized by DEE, JAU, Junagadh and EEI, Anand via Google Meet app.	Online	9-10.03. 2021
Dr. K. P. Baraiya	SS & H	Annual Zonal Workshop of KVKs	Organized by ICAR, ATARI, Zone -VIII Pune	Online	4-6.08.21

Smt. A. K. Baraiya	SMS	Short course training on Use of Mass Media for transfer of Technology	Jointly Organized by DEE, JAU, Junagadh and EEI, Anand via Google Meet app.	Online	01-03.09.2021
Dr. K. P. Baraiya	SS & H	Short course training on Use of Mass Media for transfer of Technology	Jointly Organized by DEE, JAU, Junagadh and EEI, Anand via Google Meet app.	Online	01-03.09.2021
Dr. K. P. Baraiya	SS & H	Training Programme on Natural Farming (PrakrutikKrushi Ange TalimKaryashala)	Organized by ATMA, GOG, Gandhinagar at. Trimandir, Adalaj, Gujarat	Offline	26.11.21 to 1.12.2021
Dr. K. P. Baraiya	SS & H	PPAG seminar on Maintenance of the Quality and Safety of Horticultural and food crops through Biological Control of Pests and Disease	Organized by PPAG and NAU, Navsari	Offline	30.12.21

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

Name of the village	Total No. of families surveyed	Key interventions implemented	No. of farmers covered in each intervention	Change in net income (Rs/unit)	
				Before	After
Gadhka	1450	Crop Diversification, new crop & enterprises introduction, value addition, natural farming, bio-fertilizers and bio-pesticides, FLD, OFT & Training, awareness programmes etc	25	69000	250822
Khoja Beraja	390		22	110416	329295
Nani Banugar	285		22	83981	232480
Lothiya	291		22	82426	221459
Chandragadh	315		22	7509	240147
Total	2731		113	83780	254734

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

S. No.	Name of the programme	No. of villages adopted	Key activities performed	No. of activities carried out	No. of families covered
1	FLD, Training, Kishan Gosthi, Awareness Campaigns, Nutri Kit distributed, Field visit, Plantating material distribution,	2	Seed Distribution, awareness training, discussion, planting material distribution, etc.	12	628

20. Details of Progress of ARYA Project

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

21. Details of SAP

S. No.	Types of major Activity conducted- SwachhtaPakhwada, Cleaning, Awareness Workshop, Miccobial based Agricultural Waste Management by Vermicomposting etc.	No. of Programmes conducted	No. of Participants
1	Cleaning, awareness on vermicomposting and wate management	7	319

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

22.1 ESTABLISHMENT OF AGRICULTURAL TECHNOLOGY INFORMATION CENTRE (ATIC) (YEAR-2021).

1.	Name of the Scheme	:	Establishment of Agricultural Technology Information Centre (ATIC) B.H. 12572-03
2.	Location of the scheme	:	Krishi Vigyan Kendra, JAU, Jamnagar
3.	Officer-in charge of the scheme	:	Senior Scientist & Head, KVK, JAU, Jamnagar
4.	Objectives	:	<ul style="list-style-type: none"> ➤ Single window system for technology dissemination. ➤ Formulation of FIGs as a process of innovativeness in technology dissemination. ➤ Feedback from users to the research centre
5.	Justification of the scheme	:	<ul style="list-style-type: none"> ➤ The JAU has generated a large number of technologies in different disciplines of agriculture and all allied subjects. ➤ Location specific technology and assessment technologies and demonstration of the technological models is planned.

A. Details of ATIC:

Sr. No.	Name of ATIC	Name of host institute	Name of ATIC manager	Telephone No.			E-mail address
				Office	Fax	Mobile	
1.	KVK, Jamnagar	Junagadh Agricultural University, Junagadh	Senior Scientist & Head	(0288) 2710165	(0288) 2710165	+919427980032	kvkjamnagar@gmail.com

B. Details of farmers visit:

Sr. No.	Name of ATIC	Purpose of visit	No. of farmers visited
1.	KVK, Jamnagar	For agricultural information	845
2.	KVK, Jamnagar	Technology Products	309

C. Facilities in ATIC (Operational):

Sr. No.	Particulars	No. of ATIC
1.	Reception counter	No
2.	Exhibition/technology measures	Yes
3.	Touch screen kiosk	No
4.	Cafeteria	Yes
5.	Sales counter	Yes
6.	Farmers feedback register	Yes
7.	Others	Yes

A. Technologies Information Provided

A. 1. Details technology information, category of information:

Name of ATIC	Information Category	No. of farmers benefitted	Variety	Pest Management	Disease management	Agro tech.	SWT	PHT	AH	HS
KVK, Jamnagar	1. Kisan call centre SMS	543974	77715	155381	77763	155425	0	0	0	77690
	Phone calls	4342	536	2077	963	256	184	55	52	219
	2. Video shows	696	34	290	132	0	0	0	0	240
	3. Letters	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

	received									
	4. Letter replied	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	5. Training to famers/ technocrats/ students	380	32	69	33	0	0	0	129	117
	6. Others	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

A. 2. Publication (Print & Electronic media):

Sr. No.	Name of ATIC	Particular	No. sold/distributed	Revenue generate	No. of farmers benefitted
1.	KVK, JAU, Jamnagar	Books/Booklet	Nil	Nil	Nil
2.		Tech. bulletin	96	Nil	1575
3.		Tech. inventory	Nil	Nil	Nil
4.		CDs	Nil	Nil	Nil
5.		DVDs	Nil	Nil	Nil
6.		Leaflet	640	Nil	320
7.		Folders	1917	Nil	483
8.		Video films	Nil	Nil	Nil
9.		Audio CDs	Nil	Nil	Nil
10.		Others (Poster)	Nil	Nil	Nil

B. Technology products provided:

Sr. No.	Particular	Quantity (Qtl)	Unit of quantity	Value in Rs.	No. of farmers benefitted
1.	Seeds				
(i)	Wheat (GW-463)	76.00	Quintal	212800	116
(ii)	Castor (GCH-9)	9.06	Quintal	176670	195
(iii)	Groundnut (GJG-31) (Breeder)	9.30	Quintal	144150	76
(iv)	Groundnut (GJG-9) (Breeder)	26.70	Quintal	413850	137
(v)	Groundnut (GJG-32) (Breeder)	49.50	Quintal	767250	88
2.	Planting materials	4278	No.	1909	645
3.	Live stock(Vermi compost)	430	Kg	2150	28
4.	Poultry birds	-	-	-	-
5.	Bio Product		Quintal	-	-
	1. <i>Beauveria bassiana</i>	17.13	Quintal	15370	254
	2. <i>Trichoderma</i>	2.50	Quintal	-	160
	3. PSB	130	Li.	-	130
	4. <i>Rhizobium</i>	85	Li.	-	85
	5. <i>Azotobactor</i>	55	Li.	-	55
	6. <i>Metarhizium</i>	0.50	Quintal	-	50
	7. HNPV	25	Li.	-	25
	8. MDP	25	Tube	-	25

C. Technology services provided:

Name of ATIC	Particulars	No. of farmers benefitted
KVK, Jamnagar	Soil and Water testing	130
	Plant diagnosis	86
	Services to line department	69
	Others (Group Meeting, Field Visit, Field Day)	277

D. FLD conducted:

Sr. No.	Month	Crop/Inputs	Season	Variety	No. of Farmers/ Demonstration		
					Others	SC/ST	Total
1.	January to December 2021	Castor Variety GCH-9	<i>Kharif</i>	GCH-9	20	0	20
2.		Cumin PSB, <i>Azotobacter</i> , <i>Beauveria</i> , <i>Trichoderma</i>	<i>Rabi</i>	GC-4	20	0	20
3.		Coriander PSB, <i>Azotobacter</i> , <i>Beauveria</i> , <i>Trichoderma</i>	<i>Rabi</i>	GC-2	20	0	20
Total					60	0	60

E. Short term training courses:

Sr. No.	Month	Title of the Training	No. of Beneficiaries			No. of SC/ST Beneficiaries		
			M	F	Total	M	F	Total
1	January to December 2021	Importance of nutrients and feed management in animal husbandry to increase milk production	0	38	38	0	0	0
2		Women empowerment through income generation activity	0	64	64	0	8	8
3		Precaution on pest and disease management and Balance use of fertilizer for Kharif season	33	0	33	0	0	0
4		Feed and Fodder Management in Animal Husbandry	0	38	38	0	2	2
5		Fodder, nutrition and Disease management in animal	0	47	47	0	4	4
6		Value addition and fruit and vegetable preservation	0	25	25	0	0	0
7		House hold food security by kitchen gardening	2	18	20	0	0	0
8		Pest and Disease management through organic farming	0	69	69	0	0	0
9		Scientific farming for cumin pest and diseases management	25	7	32	0	0	0
Total			60	306	366	0	14	14

F. Extension Activity:

Sr. No.	Name of Activity	No. of Activity	No. of Participant		
			M	F	T
1	Group meeting, Kishangoshthi, Night meeting etc.	7	156	121	277
2	Field visit/Field Day	13	124	36	160
3	Literature	35	183	75	258
4	Plant Diagnosis services	10	26	6	32

22.2 District Agro-Meteorological Unit (DAMU) Gramin Krishi Mausham Seva (GKMS)

India Meteorological Department (IMD), Ministry of Earth Sciences (MoES), Govt. of India, New Delhi is operating an integrated Agro-Meteorological Advisory Service (AAS) at district level, in India, which represents a small step towards agriculture management in rhythm with weather and climate variability leading to weather proofing for farm production. Under AAS, needs of farming community was defined through ascertaining information requirement of diverse groups of end-users. The Indian Council of Agricultural Research (ICAR) and India Meteorological Department (IMD) have jointly expanding Agromet network or District level to support sub-district/ Block level advisory service through a network of 660 District Agromet units (DAMUs) in KVKs premises under Gramin Krishi Mausham Sewa (GKMS). The target of the project is to provide Agromet services directly to all the farming households.

1. Title of the Project: District Agromet Unit (DAMU) Under GKMS

2. Sanction letter: A.Extn.16/01/2017-AE-I Dt. 02/11/2018

3. Name of Damu, District, ATARI zone and Year

DAMU Name: Krishi Vigyan Kendra, Jamnagar

Name of Blocks: Dhrol, Jamjodhpur, Jamnagar, Jodiya, Kalavad, Lalpur

Year of start of AAS at DAMU: November, 2019

Objectives

- To improve the district level Agromet Advisory Services (AAS) so as to deliver crop and location specific AAS to farmers at block level.
- To design optimum observatory network for issuance of village level advisories
- To establish District Agromet Units as nodal centre for catering to needs of agriculture services.
- To provide advisory bulletins through last mile connectivity to farmers with personalized agromet advisory services.
- To extend the weather based advisory service to like livestock, grazing of farm feed etc.

4. Name and address with landline and mobile numbers along with STD code (also provide e-mail address) of head of ATARI, Project Coordinator, Head of the Krishi Vigyan Kendra (KVK)

Designation	Name	Address	STD code Telephone no.& Fax	Email-id
Head of ATARI	Dr. Lakhansingh	ATARI, Pune, Maharashtra	020-2512665	atari.pune@gmail.com
Head of KVK	Dr. K. P. Baraiya	KVK, Jamnagar	0288-2710165	kvkjamnagar@gmail.com
Project Coordinator (PC)	Dr. K. P. Baraiya	KVK, Jamnagar	0288-2710165	kpbaraiya@gmail.com
SMS	Shree A. V. Savaliya	KVK, Jamnagar	8758180926	ankurv.savaliya@gmail.com
Agromet Observer (AO)	Shree R. B. Pandya	KVK, Jamnagar	7621877811	ramanikpandya@gmail.com

District Agromet Unit in KVK, Jamnagar

The District Agromet Unit is starting at KVK, JAU, Jamnagar since 2nd November 2018 but requirement of SMS and Observer joining at November 2019. Jamnagar is making Agro weather bulletin for all the 6 blocks viz. Dhrol, Jamnjodhpur, Jodiya, Kalavad, Jamnagar, Lalpur of the Jamnagar district.

Activity of DAMU at KVK Jamnagar

- Preparation of Agromet advisory bulletin Block and District wise
- Conducting Farmer awareness program (FAP)
- Maintaining Weather data record
- Dissemination of weather bulletin through different social media level

Weather Bulletin

Preparation of weather bulletin on the basis of medium range forecast provided by IMD supported by GFS model for the blockwiseweather bulletin. Preparationof advisory is in both Bothlanguage (English and Local language) twice in a week on Tuesday and Friday. There are several weather parameters forecast received from IMD i.e. Rainfall, Maximum temperature, Minimum temperature, Relative humidity (maximum and minimum), Cloud cover, Wind speed and direction. The bulletin preparation is for main crops of Jamnagar district i.e. Cotton, Groundnut, Wheat, Pigeon pea, Cumin, Chickpea, Castor, Sesame, Pearl millet etc.

Number of Weather Bulletin prepare from Jan-Dec, 2021

District Name	No. of Bulletins
Jamnagar	105
Block name	
Dhrol	105
Jamjodhpur	105
Jodiya	105
Jamnagar	105
Kalavad	105
Lalpur	105
Total No. of Block wise Weather Bulletin	630

Devbhumi Dwarka District Block name	No. of Bulletins
Kalyanpur	70
Khambhaliya	70
Okhamandal	70
Total No. of Block wise Weather Bulletin	210

Dissemination of weather bulletin.

Individually these bulletins are sending to farmers group by short message service (mKisan portal), and by social media by making farmers WhatsApp groups, Facebook.

Number of farmers

Particular	No. of farmers
Whatsapp Group-19	2904
KVK Facebook page	3090 followers
SMS (mKisan Portal)	70750
KVK Telegram Channel	157 Subscribers

Farmer Awareness Programmes

Climate based farming is drawing farmer near to precision agriculture. So, farmer awareness is very important for cover more number can receive Agro advisories. Farmers can mitigate their crops itself against uneven weather patterns.

Farmer Awareness Program (FAP) organized by KVK, JAU, Jamnagar under DAMU Project

S. No.	FAP/ Farmers meet /Meghdoot Popularization activities	Date	Location			Approx. No. of Farmers/ Participant
			Village	Block	District	
1	MeghdootApp .Popularization, Field visit	19/01/2021	Khoja Beraja	Jamnagar	Jamnagar	10
2	FAP	19/01/2021	Lothiya	Jamnagar	Jamnagar	20
3	FAP, Field visit	20/01/2021	Chandragadh	Jamnagar	Jamnagar	10
4	FAP	19/08/2021	Katada	Dhrol	Jamnagar	15
5	FAP, MeghdootApp.Popularization	19/08/2021	Jayva	Dhrol	Jamnagar	10
6	Field visit	21/09/2021	Jamnagar Block Farmers	Jamnagar Block	Jamnagar	96
7	AWS site visit	22/09/2021	Kalavad Block Farmers	Kalavad Block	Jamnagar	95
8	FAP	23/09/2021	Dhrol Block Farmers	Dhrol Block	Jamnagar	100
9	AWS site visit	29/09/2021	KVK, Jamnagar	Jamnagar	Jamnagar	25
10	FAP, Field visit	6/10/2021	Samor	Jamkhambhadi ya	Devbhumi Dwarka	13
11	AWS site visit	10/11/2021	KVK, Jamnagar	Jamnagar	Jamnagar	2
12	FAP, Field visit	16/12/2021	Keshod	Jamkhambhadi ya	Devbhumi Dwarka	23
13	AWS site visit	24/12/2021	KVK, Jamnagar	Jamnagar	Jamnagar	15
14	AWS site visit	25/12/2021	KVK, Jamnagar	Jamnagar	Jamnagar	89
15	Krusha Mela / FAP, Meghdoot App. Popularization	28/12/2021	Jamnagar	Jamnagar	Jamnagar	1787

Article Publication

- 1) "Zero Budget Natural Farming: A New Appraisal" Sabujeema: An International Multidisciplinary e-Magazine Volume-1 issue-1 April-2021

News Coverage

- 1) 'ઉનાળુપાકોમાંપાનકથીરીનોવધતોજતોઉપદ્રવ' Krushi Prabhat on Date: 13/02/2021
- 2) 'ઉનાળુદાન્યપાકોનીકથીરીનાઉપદ્રવવિષેજાણો' Krushi Prabhat on Date: 15/02/2021
- 3) 'મગફળી-તલઅનેશાકભાજીપાકોમાંઆવતીકથીરીનુંસંકલિતનિયંત્રણ' Krushi Prabhat on Date: 16/02/2021
- 4) 'ઉનાળુંતલનીસફળખેતીનાચાવીરૂપમુદાઓ' Krushi Prabhat on Date: 20/02/2021
- 5) 'શું'તોકલે' વાવાઝોડાનીનૈઋત્યનાચોમાસાપરઅસરથશે' Krushi Prabhat on Date: 22/05/2021
- 6) ગ્રામીણકૃષિમૌખમસેવાપ્રોજેક્ટઅંતર્ગતજીલ્લાકૃષિવિદ્યામાનએકમદ્વારાકરવામાંઆવતીખેડૂતઉપયોગીકામગીરી' Krushi Prabhat on Date: 28/06/2021

22.3 OTHER PROGRAMME CELEBRATED

Scientific Advisory Committee meeting

The 17th SAC meeting of KVK, JAU, Jamnagar was held at Training Hall, KVK, Jamnagar on 8th February, 2021. The meeting was chaired by Dr. V. P. Chovatiya, Hon'ble Vice Chancellor and Director of Research of Junagadh Agricultural University, Junagadh. Dr. H. M. Gajipara, Director of Extension Education, JAU, Junagadh, Dr. K. D. Mungra, Research Scientist (Millet), JAU, Jamnagar, other officers of line department and Progressive farmers remained present in this meeting. Total 41 members remain present in the ensuring meeting. Dr. K. P. Baraiya, Senior Scientist & Head, presented Annual Progress Report and Action Plan of KVK Jamnagar. Scientists of KVK Jamnagar presented their subject wise report and action plan. Committee members promoted and appreciated their work and given valuable suggestions.

INTERNATIONAL WOMEN DAY

KVK Jamnagar celebrated "International women day" in collaboration with ATMA, FTC Jamnagar and forest department of Jamnagar on 8th March. 2021 at training hall, KVK campus, JAU, Jamnagar. During this programme film show on "the most powerful and success women of India" was shown and try to motivate the farm women. Arranged lecture competition on "role of farm women in agriculture and at home", they are motivated and awarded with certificate and memento. On this day joint virtual programme telecast by ICAR, New Delhi. After this programme discussion on Women empowerment through income generation activity, roll of farm women in agriculture, drudgery reduction by improved implements. In this programme 72 farm women of Jamnagar and Devbhumi Dwarka district were participated.

WORLD WATER DAY

KVK Jamnagar celebrated "World Water Day" on March 22, 2021 at Singach Village of Lalpur Taluka of Jamnagar in collaboration with the ACT, Biaf and KVK. The programme was organized at farmers field for demonstration visit for soil reclamation, water use efficiency and water harvesting structures available. The farmers were aware about the water conservation, reduction of runoff losses during the rainy season. They are advice to prepare water harvesting structure and well recharging techniques. More emphasis was done on installation of micro irrigation system, its importance and long term benefit with it. They are aware about MIS increase soil utilization, net sown area and ultimately how to save water and maximize the cropping area with limiting water availability. Experiments were shown at the field level on micro irrigation, rain gun, sprinkler system, porous pipes for orchard and crops shown area. They are also advice for "per crop more crop" and how to doubling the farmers income with efficient water usages. This programme was joined by 57 farm women and 56 farmers total 113 beneficiaries

INTERNATIONAL MILK DAY

Krishi Vigyan Kendra, Jamnagar celebrate International milk day through online mode on 1st June, 2021. This programme was celebrated with collaboration with office of the Dy.Dr. Animal Husbandry, Jamnagar and District Cooperative Milk Producers Union Ltd Jamnagar. Smt. A. K. Baraiya has welcomed all participants and handles the programme. In this programme discussion on "Environment, nutrition and economic management with Dairy sector" by Shri. PankajbhaiMadariya Journal managers of DCMPU, Jamnagar. Dr. A. C. Virani given information about Disease management in animal and Improvement of Breed. Lecture on Clean milk production & Daily feed and nutrition management given by Dr. K.P.Baraiya. 41 farmers/farm women participated in this programme. Related slides shared to participants and farmers actively participated in group discussion.

WORLD BEE DAY

Krishi Vigyan Kendra, JAU, Jamnagar celebrate World Honey bee day through online mode on 20.05.2021. Smt. A. K. Baraiya has welcomed all participants and handles the programme. Mr. Darshanbhai, progressive honey bee cultivar has been discussed practical rearing, migration, dangerous points, and tips in rearing of honey bee. Dr. K. P. Baraiya, Senior Scientist & Head has aware farmers about cast and its function, diseases and pest problems in honey bee rearing with their remedies, and different factors affecting in honey bee rearing. Farmers have been discussed queries at the end of the programme. Farmers

are also aware about importance of honey bee in crop production, role as pollinator and ayurvedic medicine for human being. This programme was on audio visually by PPT presentation. About 34 farmers and farmwomen were participated this programme.

FERTILIZER APPLICATION AWARENESS PROGRAMME

Fertilizer Application awareness programme organized on 18th June, 2021 by KVK, Jamnagar virtually. 33 farmers participated in this programme. Farmers were aware about balance use of fertilizers, importance of micronutrients, recycling of farm waste through different methods of composting and its utility, use of bio fertilizer for cost reduction. Farmers are also advice about soil sampling, soil analysis based use of nutrients in soil. They are also emphasis on reduction of chemical fertilizers and health hazardous effect on soil and human beings.

PoshanVatikaMaha Abhiyan & Tree Plantation Programme

KVK, Jamnagar celebrated PoshanVatikaMaha Abhiyan & Tree Plantation programme under the Celebration of National Nutrition Month with the collaboration of IFFCO at Katda Village on 17th September 2021. In this Programme Discussion on Nutri cereals, their product and their role in human health and Importance of Kitchen gardening and 125 vegetable seed kit distributed to all farmers and farm women. Other discussion on Role of tree plantation on sustainable agriculture & rural livelihood and around 150 trees planted, 1000 planting materials of fruit trees distributed to the farmers and farm women for their nutria-garden. In this programme 33 farm women and 75 farmers participated.

Van Mahotsav 14.08.2021

KVK, Jamnagar, Jamnagar Municipal Corporation and Forest Department, Jamnagar jointly organized 72nd Van Mahotshav at Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar on 14th August, 2021. In this programme Smt. Binaben Ashokbhai Kothari, Mayor, Commissioner (JMC) and Officers of forest department and KVK were remain present. In this programme farmers were aware importance of tree in life, in pandemic condition and in regular lively hood. On occasion of this celebration 1500 saplings were planted in the ground of KVK. 3000 saplings were distributed to beneficiary farmers during this programme. KVK organized campaign aims to create mass awareness about boundry/bund plantation of farmlands to enhance more income and save environment to overcome the global warming.

TECHNOLOGY WEEK CELEBRATION (20-24.09.2021)

KVK, JAU, Jamnagar and ATMA Jamnagar jointly celebrated technology week during September 20th to 24th, 2021 at KVK, Jamnagar. In which total 520 Farmers/farm women from different blocks were participated and also provided extension literature to each participant. This programme was chaired by Dr. H. M. Gajipara, Director of Extension Education, Junagadh Agriculture University, Junagadh. During this week, day wise different theme were kept for transfer of newer technology to the farmers. Special emphasis given on pink bollworm management rotting of groundnut and cotton due to heavy rain. They also encourage for organic farming as well as reduction of cost of cultivation with improved technologies. Special emphases were given on value addition, Kitchen gardening, Women and child care and Nursery Management for more income generation. Many demonstration and video shows were arranged during this programme.

MAHILA KISAN DIVAS

Krishi Vigyan Kendra, JAU, Jamnagar Organized Kishangoshthi on Mahila Kisan Divas on 15th October, 2021 at Lothiya Village. In this programme, discussion on "Ways for women empowerment" by Dr. K. P. Baraiya and "Different types of Nutri cereals and their benefits in our health" by Prof. A K. Baraiya. 55 Farm women participated in this programme. We also arranged group discussion on kitchen gardening and create awareness about nutrient and health.

WORLD FOOD DAY

KVK, JAU, Jamnagar and BIAF jointly celebrated "World Food Day" on January 16, 2021 at Singach. In which 52 farmwomen were engaged for celebration of this programme. They aware about the hungry index of the world. They are aware about the quality and nutritive food preparation in daily diet. Special

emphasis was given for do not spoilage the food, prepare required quantity every day. Specific technique also discussed about the safely storage and value addition of the food produced by the farmers. Farm women aware about the IPM technologies for kitchen gardening and organic cultivation of the crops in the field. Thus, how to reduce the residual effect from the food, cook chemical less food and improve health. Special emphases were given on value addition of agricultural produce for more income generation.

WORLD SOIL HEALTH DAY

Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar celebrate world soil health day on December 5, 2021 in collaboration with M. P. Shah Commerce College, Jamnagar. The students of farmers family aware about soil testing, importance of nutrition in the plant growth, soil reclamation, management of nutrition balance in soil, microorganisms for bio fertilizers, etc. covered in this discussion. soil sampling and soil testing demonstrations, plant nutrient deficiency diagnostics and advisories for balanced nutrition of crops and field visits were organized on this occasion. Total 183 students take part in this programme.

AGRICULTURE EXHIBITION

KVK Jamnagar participant in the exhibition held on occasion good governance day celebration at Jamnagar. Department of Agriculture, Farmers Welfare and Cooperation along with district administration with the help of Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar organized good governance day on occasion of birthday of Hon'ble Ex. Prime Minister of India, Shri Atal Bihari Vajpayeeji at Jamnagar. With this celebration, also arrange exhibition cum awareness programme on natural farming in which KVK, JAU, Jamnagar participated. Different non chemical farming techniques with the natural farming process was promoted in this exhibition and function. Hon'ble Agriculture minister, Shri Raghavaji Patel, Vice chancellor of all SAUs of Gujarat, Dr. N. K. Gontia (JAU), Dr. K. B. Kathiriya (AAU), Dr. R. M. Chauhan (SDAU), Dr. A. M. Kelawala (Kamdhenu) and shri. Dharamshi bhai Chaniyara, President of District Panchayat, Jamnagar were visited KVK exhibition. Approximately, 1787 farmers and farmwomen were visited KVK exhibition and they get information about natural farming, and newer technology for the agriculture.

22.4 DETAILS OF SOIL, WATER AND PLANT ANALYSIS

Details	No. of Samples	No. of Farmers	No. of Villages	Amount to be realized
Soil Samples	116	116	25	34800
Water	14	14	12	700
Plant				
Manure				
Others (pl.specify)				
Total	350	350	27	35500

22.5 DIGRITORIES VISITED KVK, JAU, JAMNAGAR

Different dignitaries visited at Krishi Vigyan Kendra, JAU, Jamnagar during the 2021 year.

Sr. No.	Name & Designation of dignitaries	Date o visit
1	Dr. V. P. Chovatiya, Hon'ble Vice Chancellor, JAU, Junagadh	08.02.2021
2	Dr. H. M. Gajipara, Director of Extension Education JAU, Junagadh	08.02.2021
3	Dr. H. M. Gajipara, Director of Extension Education JAU, Junagadh	17.08.2021
4	Dr. H. M. Gajipara, Director of Extension Education JAU, Junagadh	21.09.2021
5	Dr. H. M. Gajipara, Director of Extension Education JAU, Junagadh	25.12.2021
6	Prof.(Dr.) N. K. Gontia, Hon'ble Vice Chancellor, JAU, Junagadh	28.12.2021

22.6 INPUT DEALERS TRAINING COURSE

Krishi Vigyan Kendra, JAU, Jamnagar conducted "Diploma in Agricultural Extension Services For Input Dealers" certificate course with collaboration of NIPHM, Hyderabad under guideline of Director of Extension Education, JAU, Junagadh. Total 3 batches with 170 participants successfully completed this course from KVK, JAU, Jamnagar.

APR SUMMARY

(Note: While preparing summary, please don't add or delete any row or columns)

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	15	54	296	350
Rural youths	3	219	231	450
Extension functionaries	6	209	23	232
Sponsored Training	28	901	873	1774
Vocational Training	0	0	0	0
Grand Total	52	1383	1423	2806

2. Frontline demonstrations

Enterprise	Area(ha)	No. of Farmers	Units/Animals
Oilseeds	28	70	
Pulses	20	50	
Cereals	8	20	
Vegetables	2	50	
Other crops	30	75	
Hybrid crops	0	0	
Total	86	215	
Livestock & Fisheries	0	3	3 animals
Other enterprises	6	65	5 units
Total	6	68	
Grand Total	92	283	

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	2	6	6
Livestock			
Various enterprises	1	5	5
Total	3	11	11
Technology Refined			
Crops	2	6	6
Livestock			
Various enterprises			
Total	2	6	6
Grand Total	5	17	17

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	3149	19351
Other extension activities	1960	
Total	5109	19351

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						Total
		Crop	Live stock	Weather	Marketing	Awareness	Other enterprise	
Jamnagar	Text only	5	0	1		1	1	8
	Voice only							
	Voice & Text both							
	Total Messages	5	0	1		1	1	8
	Total farmers Benefitted	310931		77713		77712	77690	544046

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	170.56	1710920
Planting material (No.)	4278	1467
Bio-Products (kg)	2308	17130
Livestock Production (No.)	3	0
Fishery production (No.)		

7. Soil, water & plant Analysis

Samples	No. of Samples	No. of Beneficiaries	Amount realized (Rs.)
Soil	116	116	34800
Water	14	14	700
Plant			
Total	350	350	

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	4
2	Conferences	0
3	Meetings	7
4	Trainings for KVK officials	3
5	Visits of KVK officials	3
6	Book published	1
7	Training Manual	9
8	Book chapters	0
9	Research papers	2
10	Lead papers	0
11	Seminar papers	0
12	Extension folder	0
13	Proceedings	1
14	Award & recognition	0
15	On-going research projects	0
16	Newsletter	4
17	Technical reports	8

ANNEXURE –I

PROCEEDING OF THE 17th SCIENTIFIC ADVISORY COMMITTEE MEETING OF KRISHI VIGYAN KENDRA, JAU, JAMNAGAR HELD ON FEBRUARY 8, 2021

The Seventeenth Scientific Advisory Committee meeting of Krishi Vigyan Kendra, JAU, Jamnagar was held at Training Hall, Krishi Vigyan Kendra, JAU, Jamnagar on February 8, 2021.

The following members were remaining present in the meeting.

Sr. No.	Name & Designation	Position
1	Vice Chancellor, Junagadh Agricultural University, Junagadh.	Chairman
2	Director of Extension Education, Junagadh Agricultural University, Junagadh	Member
3	Director of Research, Junagadh Agricultural University, Junagadh	Member
4	Associate Director of Research, Main Dry Farming Research Station, Junagadh Agricultural University, Targhadia (Rajkot).	Member
5	Research Scientist (Millet), Main Millet Research Station, Junagadh Agricultural University, Jamnagar- 361 006.	Member
6	District Agricultural Officer, District Panchayat, Jamnagar	Member
7	Director, District Rural Development Agency, Jamnagar	Member
8	Project Director, District Watershed Development Unit, Jamnagar	Member
9	Dy. Director of Animal Husbandry, District Panchayat, Jamnagar	Member
10	Dy. Director of Horticultural, District Panchayat, Jamnagar	Member
11	Dy. Director of Agriculture (Extension), Jamnagar	Member
12	Dy. Director of Agriculture, Farmers Training Centre, Jamnagar	Member
13	Project Director, Agricultural Technology Management Agency (ATMA), Jamnagar	Member
14	Dy. Conservation of Forest, Forest Department (Extension), Jamnagar	Member
15	Asstt. Director of Fisheries, Sumer club road, Jamnagar	Member
16	Research Officer, Fisheries Research Station, Okha	Member
17	Progressive farmer (G) Shri Bathani Jayeshbhai At:- Soyal, Ta Dhrol, Dist.- Jamnagar	Member
18	Progressive farmwomen (G): Shri Bathani Arunaben Jayeshbhai, At:-Soyal, Ta. Dhrol, Dist.- Jamnagar	Member
19	Progressive farmer (Horticulture) : Shri Jentibhai Parsana, At. Haripar Ta.:- Lalpur, Dist. Jamnagar.	Member
20	Progressive farmer (Organic) : Shri Vitthalbhai Lakhabhai Sanghani, At. Nani Bhalsan, Ta.:- Kalavad, Dist. Jamnagar.	Member
21	Progressive farmer (Organic) : Shri Altafbhai Bodubhai Sama , At. Dhichada, Ta.:- Jamnagar, Dist. Jamnagar.	Member
22	Progressive farmer (Animal Husbandry) : Shri. Pravinbhai Devchandbhai Dodhiya, At. Dhichada, Ta.:- Jamnagar, Dist. Jamnagar.	Member

23	Senior Scientist & Head, Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar	Member Secretary
24	Smt. Anjanaben K. Baraiya, Scientist (Home Science), KVK, JAU, Jamnagar	Invitee
25	Shri V. L. Kikani, Scientist (Crop Production), KVK, JAU, Jamnagar	Invitee
26	Shri Vitthalbhai Sakhiya, Member of Extension Education Council, JAU, Junagadh	Invitee
27	Dr. H. C. Chhodvadiya, Associate Extension Educationist, DEE Office, JAU, Junagadh	Invitee
28	Dr. V. J. Savaliya, Training Associate, DEE Office, JAU, Junagadh	Invitee
29	Dr. D. L. Kadvani, Research Scientist (Plant Pathology), Pearl Millet Research Station, JAU, Jamnagar	Invitee
30	Dr. K. K. Dhedhi, Associate Research Scientist, Pearl Millet Research Station, JAU, Jamnagar	Invitee
31	Dr. H. M. Bhuva, Associate Research Scientist, Pearl Millet Research Station, JAU, Jamnagar	Invitee
32	Dr. G. M. Parmar, Associate Research Scientist, Pearl Millet Research Station, JAU, Jamnagar	Invitee
33	Dr. S. K. Parmar, Assistant Research Scientist, Pearl Millet Research Station, JAU, Jamnagar	Invitee
34	Shri J. S. Sorathiya, Assistant Research Scientist, Pearl Millet Research Station, JAU, Jamnagar	Invitee
35	Shri Subhash N. Patel, Deputy Project Director, ATMA, JAU, Jamnagar	Invitee
36	Shri Jignesh B. Patel, Deputy Project Director, ATMA, JAU, Jamnagar	Invitee
37	Shri Kishorbhai Laljibhai Pedhadiya, Progressive Farmer, At. Sumari, Ta. & Dist. Jamnagar	Invitee
38	Mr. N. D. Ambaliya, Agri. Officer, KVK, Jamnagar	Invitee
39	Mr. H. S. Godhani, Agri. Officer, KVK, Jamnagar	Invitee
40	Mr. A. V. Savaliya, SMS, (Agromet), DAMU, KVK, Jamnagar	Invitee
41	Mr. R. B. Pandya, Agromet Observer, DAMU, KVK, Jamnagar	Invitee

Dr. K. D. Mungara, Research Scientist (Pearl Millet) Pearl millet Research Station, Junagadh Agricultural University, Jamnagar welcomed the dignitaries and all the members of the Scientific Advisory Committee and highlighted the brief achievements of the Centre.

Dr. V. P. Chovatiya, Hon'ble Vice-Chancellor, JAU, Junagadh and Chairman of Scientific Advisory Committee chaired the meeting and grant permission to proceed the meeting.

Recently developed Invocation song of Junagadh Agricultural University played. Dignitaries on dais welcomed by presenting flower. After garlanding the guests and dignitaries on the dais, and inaugurating the meeting by lightening a lamp with prayer.

Dr. K. P. Baraiya, Senior Scientist & Head, Krishi Vigyan Kendra, JAU, Jamnagar presented action taken report of the minutes of 16th SAC meeting, progress report (January to December-2020) and Action Plan (January to December- 2021) in brief. Dr. K. P. Baraiya, Senior Scientist & Head, Krishi Vigyan Kendra, JAU, Jamnagar presented progress report and Action Plan for discipline

of Plant Protection. Smt. A. K. Baraiya, Scientist (Home Science), presented progress report & Action Plan for discipline of home science, Animal Husbandry, Horticulture & ATIC Scheme. Shri V. L. Kikani, Scientist (Crop production), presented progress report & Action Plan for discipline of crop production, Agri. Engineering and Soil Health Fertility Management, NMOOP & NFSM and fisheries. The annual report and action plan both approved by the members with following suggestions.

Suggestions made by committee members during presentation:

1.	<p>Dr. V. P. Chovatiya, Hon'ble Vice Chancellor and Director of Research, Junagadh Agricultural University, Junagadh & Chairman of the SAC suggested following points.</p> <ul style="list-style-type: none"> ➤ Arrange FLD on latest released variety of pearl millet. ➤ Take data of critical observations hectare base in OFT ➤ Data should record lactation basis (milk yield) instead of 5 months in FLD on bypass fat in animal. ➤ Arrange training on weed management during third quarter. ➤ Record maximum farmers from every taluka and village level for benefit of DAMU project. ➤ Accountability of FLD's ➤ Check the usefulness and review of advisory to farmers under DAMU project.
2.	<p>Dr. H. M. Gajipara, Director of Extension Education, JAU, Junagadh advised that</p> <ul style="list-style-type: none"> ➤ Analyze maximum soil and water sample at KVK Soil Testing Laboratory. ➤ Record impact assessment of training programs. ➤ Maintain register for FLD farmers with observation data ➤ Arrange demonstration on implements ➤ Upload all extension programs on ICAR portal ➤ Write down the feedback of farmers under FLD
3.	<p>Vitthalbhai Sakhiya, Member of Extension Education Council, JAU, Junagadh suggested to work cooperatively with all departments for farmers.</p>
4.	<p>Shri Dhanpal Sir, ACF, Jamnagar, Devbhumi Dwarka and Porbandar suggested to linkage with forestry department with MOU for different extension programs and work together.</p>

Dr. H. M. Gajipara, Director of Extension Education, JAU, Junagadh appreciated work done by all scientist and presentation. Successful became with collaborative work. He advice to record of success stories of different farmers success and highlight them. He also emphasis on farmers for integrated farming system (IFS) to minimize input and maximize income of farmers. His emphasis on diagnostic crop problem and solve them maximum. He has advice to aware and promote farmers for registration of FPO (Farmers Producer Organization).

After above suggestions from the house Dr. V. P. Chovatiya, Hon'ble Vice Chancellor, Junagadh Agricultural University, Junagadh, delivered the chairmen's remarks. He promote for FPO for specific groups like Quinoa, organic farming etc and aware them for value addition, and marketing. In current year, cumin suffers from heavy attack of aphid. He also observe black wheat reported aphid population instead recommended wheat variety found resistant. Kind emphasis on restrict the early sown cotton for disturbance of pink bollworm life cycle. He appreciate work done

on rural craft and bakery product for employment generation in rural youth. He also appreciate the work done on kitchen gardening for nutritional security. Sir, remarked on nominate area specific variety under PPV&FRA. He strike a note on accountability of our work for farmers. He suggested delivering inventory on SMS for changing climate well in advance for better curative measures. At last, he appreciated for overall work done by KVK.

The meeting ended with the vote of thanks by Dr. K. P. Baraiya, Senior Scientist & Head, Krishi Vigyan Kendra, JAU, Jamnagar.

Member Secretary, SAC &
Senior Scientist & Head
KVK, JAU, Jamnagar

Director of Extension Education,
Junagadh Agricultural University
Junagadh

Note: Proceeding for approval please.

Chairman, SAC
KVK, JAU, Jamnagar & Vice Chancellor
Junagadh Agricultural University, Junagadh

Annexure II

Front line Demonstration Beneficiaries Farmers List**Summer Sesame (Guj Til. 5) CFLDs under NMOOP Scheme****(Inputs: Guj. Til. 5 seed – 1kg, Trichoderma-2.0 kg, Beauveria – 2 kg, Azotobacter -1 lit, PSB- 1 lit)**

Sr. No.	Name	Village	Taluka	District	Cell Number
1	Herma Parbatbhai Jivabhai	Satapar	Jamjodhpur	Jamnagar	9558742143
2	Herma Gaurangbhai Pravinbhai	Satapar	Jamjodhpur	Jamnagar	9574170143
3	Vadher Sharadaben Mulubhai	Satapar	Jamjodhpur	Jamnagar	9687744254
4	Vadher Govindbhai Hirabhai	Satapar	Jamjodhpur	Jamnagar	9737949464
5	Parmar Mansukhbhai Devdas	Satapar	Jamjodhpur	Jamnagar	9925893791
6	Rathod Sanjaykumar Ratilal	Satapar	Jamjodhpur	Jamnagar	9275024314
7	Parmar Jasumatiben Parbatsinh	Satapar	Jamjodhpur	Jamnagar	9909540043
8	Parmar Ashoksinh Devdasbha	Satapar	Jamjodhpur	Jamnagar	9974212423
9	Parmar Asvhinbhai Devabha	Satapar	Jamjodhpur	Jamnagar	9898772413
10	Dholetar Vinodbhai Parbatbhai	Satapar	Jamjodhpur	Jamnagar	9725232711
11	Parmar Parbatbhai Nathubhai	Satapar	Jamjodhpur	Jamnagar	9924876776
12	Dodiya Govindbhai Khengarbhai	Satapar	Jamjodhpur	Jamnagar	9624971618
13	Dodiya Bhojabhai Khengarbhai	Satapar	Jamjodhpur	Jamnagar	9597600132
14	Dodiya Ranmalbhai Khengarbhai	Satapar	Jamjodhpur	Jamnagar	9714934880
15	Parmar Kishorbhai Gopalbhai	Satapar	Jamjodhpur	Jamnagar	9998980788
16	Chavada Prakashbhai Bhojabhai	Satapar	Jamjodhpur	Jamnagar	7359338329
17	Herma Manish Khengarbhai	Satapar	Jamjodhpur	Jamnagar	7600736758
18	Parmar Arjunsinh Devdasbha	Satapar	Jamjodhpur	Jamnagar	9925579013
19	Parmar Parbatsinh Devdasbhai	Satapar	Jamjodhpur	Jamnagar	9979554450
20	Parmar Bhartbhai Gandubhai	Satapar	Jamjodhpur	Jamnagar	9725319581
21	Parmar Babubhai Rambhai	Satapar	Jamjodhpur	Jamnagar	9714018577
22	Herma Vijaybhai Khengarbhai	Satapar	Jamjodhpur	Jamnagar	9537395262
23	Parmar Ladhahbhai Rambhai	Satapar	Jamjodhpur	Jamnagar	9067040550
24	Parmar Jaysukhbhai Gopalbhai	Satapar	Jamjodhpur	Jamnagar	9714385022
25	Dodiya Jayaben Jemalbhai	Satapar	Jamjodhpur	Jamnagar	9081827927

Groundnut (GJG-22) under NMOOP Scheme CFD (Kharif – 2021)**(Inputs: Groundnut Seed (GJG-22) - 30.0 kg, Metarhizium anisopliae – 2.0 kg, Trichoderma - 2.0 kg, Rhizobium -1 Lit, PSB- 1 Lit)**

Sr. No.	Name	Village	Taluka	District	Cell Number
1	Ramshibhai Karanabhai Chavada	Samor	Jamkhambhaliya	Devbhumi Dwarka	7984447336
2	Dineshbhai Danabhai Ambaliya	Samor	Jamkhambhaliya	Devbhumi Dwarka	9925795104
3	Karashan Ranamalbhai Ambaliya	Samor	Jamkhambhaliya	Devbhumi Dwarka	9727696661
4	Dharanatbhai Pabubhai Chavada	Samor	Jamkhambhaliya	Devbhumi Dwarka	9723845696
5	Maladebhai Karubhai Chavada	Samor	Jamkhambhaliya	Devbhumi Dwarka	6351445618
6	Dadubhai Danabhai Ambaliya	Samor	Jamkhambhaliya	Devbhumi Dwarka	9898724967
7	Devashi Ranamal Ambaliya	Samor	Jamkhambhaliya	Devbhumi Dwarka	8849298017
8	Lakhamanbhai Alabhai Ambaliya	Samor	Jamkhambhaliya	Devbhumi Dwarka	9898426173
9	Jivabhai Alabhai Ambaliya	Samor	Jamkhambhaliya	Devbhumi Dwarka	9429795096
10	Danabhai Pabubhai Chavada	Samor	Jamkhambhaliya	Devbhumi Dwarka	9723845694
11	Rambhai Karanabhai Chavada	Samor	Jamkhambhaliya	Devbhumi Dwarka	9265439266
12	Vejiben Maladebhai Gojiya	Samor	Jamkhambhaliya	Devbhumi Dwarka	9723966676
13	Nagabhai Karubhai Madam	Samor	Jamkhambhaliya	Devbhumi Dwarka	9979742288
14	Karanbhai Karubhai Madam	Samor	Jamkhambhaliya	Devbhumi Dwarka	9429424567
15	Karubhai Parabatbhai Madam	Samor	Jamkhambhaliya	Devbhumi Dwarka	7567222700

16	Vejiben Karanabhai Madam	Samor	Jamkhambhaliya	Devbhumi Dwarka	7567222700
17	Maladebhai Nagabhai Gojiya	Samor	Jamkhambhaliya	Devbhumi Dwarka	9723966676
18	Amariben Ramashibhai Chavada	Samor	Jamkhambhaliya	Devbhumi Dwarka	7984447336
19	Lakhamanbhai Sajanbhai Chavada	Samor	Jamkhambhaliya	Devbhumi Dwarka	9773020371
20	Bhimashibhai Maladebhai Chavada	Samor	Jamkhambhaliya	Devbhumi Dwarka	9429796918
21	Ramashibhai Dadubhai Gagiya	Samor	Jamkhambhaliya	Devbhumi Dwarka	8780689370
22	Kanabhai Devabhai Chavada	Samor	Jamkhambhaliya	Devbhumi Dwarka	9427240462
23	Matuben Karubhai Chavada	Samor	Jamkhambhaliya	Devbhumi Dwarka	7600308492
24	Pamiben Dadubhai Gagiya	Samor	Jamkhambhaliya	Devbhumi Dwarka	8780689370
25	Manojbhai Devabhai Chavada	Samor	Jamkhambhaliya	Devbhumi Dwarka	9427775778

ATIC-Castor (Varietal) Kharif :2021-22, 8 ha. 20 farmers

Input : Castor seed- 2kg (GCH-9) Rs. 330/bag of 2 kg

S. No.	Farmer name	Village	Taluka	District	Mobile No.
1	Padaliya Maganbhai Madhavajibhai	Sonvadiya	Jamjodhpur	Jamnagar	9427572964
2	Bhensdadiya Dharamashibhai Popatbhai	Moti Banugar	Jamnagar	Jamnagar	9909617714
3	Bhensadadiya Sanjay Ranchhodhbhai	Moti Banugar	Jamnagar	Jamnagar	9925523294
4	Vadi Nanduben Bhikhubhai	Lothiya	Jamnagar	Jamnagar	9979399055
5	Akbari Sureshbhai Babubhai	Lothiya	Jamnagar	Jamnagar	
6	Pipariya Mukeshbhai Mohanbhai	Lothiya	Jamnagar	Jamnagar	9909441397
7	Dineshbhai Khimabhai Mariya	Nanduri	Lalpur	Jamnagar	9924530934
8	Bagariya Dineshbhai Govabhai	Sinhan	Khambhaliya	Devbhumi Dwarka	7046123950
9	Akbari Shantilal Keshavajibhai	Theba	Jamnagar	Jamnagar	9427425049
10	Otiben Valjibhai Donga	Theba	Jamnagar	Jamnagar	8320409483
11	Hasmukhbhai Damjibhai Donga	Theba	Jamnagar	Jamnagar	9925354257
12	Valjibhai Ukabhai Donga	Theba	Jamnagar	Jamnagar	9824890545
13	Hareshbhai Chandulal Gadda	Dhichada	Jamnagar	Jamnagar	8320544138
14	Kanabhai Karnabhai Bharvad	Sinhan	Khambhaliya	Devbhumi Dwarka	6352083848
15	Bhanderi Dhirajlal Bhanjibhai	Jamnagar	Jamnagar	Jamnagar	8780731528 9974376736
16	Rathod Bhanjibhai Vashrambhai	Jampar	Kalyanpur	Devbhumi Dwarka	9737636126
17	Hadiyal Nathabhai Dayabhai	Jampar	Kalyanpur	Devbhumi Dwarka	9624414576
18	Becharbhai Ravjibhai	Khengaraka	Dhrol	Jamnagar	
19	Kagathara Rameshbhai Ambabhai	Khengaraka	Dhrol	Jamnagar	9724080933
20	Sapiya Babubhai Husenbhai	Khengaraka	Dhrol	Jamnagar	9724610675

LIST OF FARMERS OF Cluster Frontline Demonstrations -2021-22 (Rabi)

Rabi Chickpea(GG-5) CFLDs under NFSM Scheme

(Inputs: GG-5 seed 25 kg, PSB – 1 lit., Rhizobium 1 lit., Trichoderma 2 kg, Beauveria 2 kg)

Sr. No.	Name	Village	Taluka	District	Cell Number
1	Suva Lakhbhai Karashanbhai	Juvangadh	Jamkhambhaliya	Devbhumi Dwarka	9974236903
2	Suva Gogan Karashanbhai	Juvangadh	Jamkhambhaliya	Devbhumi Dwarka	8530103352

3	Gojiya Arajan Meramanbhai	Juvangadh	Jamkhambhaliya	Devbhumi Dwarka	9978204437
4	Gojiya Pabiben Marakhibhai	Juvangadh	Jamkhambhaliya	Devbhumi Dwarka	9978204437
5	Nakum Kanabhai Naranbhai	Juvangadh	Jamkhambhaliya	Devbhumi Dwarka	9925146930
6	Suva Devashi karashanbhai	Juvangadh	Jamkhambhaliya	Devbhumi Dwarka	7990806633
7	Ravaliya Pala Samatbhai	Juvangadh	Jamkhambhaliya	Devbhumi Dwarka	9879037302
8	Suva Kubarben Karashanbhai	Juvangadh	Jamkhambhaliya	Devbhumi Dwarka	9106956873
9	Suva Hemat Karashanbhai	Juvangadh	Jamkhambhaliya	Devbhumi Dwarka	9904137193
10	Suva Sajiben Meramanbhai	Juvangadh	Jamkhambhaliya	Devbhumi Dwarka	9510907783
11	Ambaliya Nebha Alabhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9978307027
12	Ambaliya Parabat Alabhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9638953337
13	Ambaliya Vejanand Alabhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9638953337
14	Matang Pravin Karashanbhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9909494589
15	Matang Ganga Naranbhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	8758152036
16	Der Arashi Arajanbhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	8980113645
17	Bodar Ram Bhikhabhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9714065151
18	Bodar Malade Naranbhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9825532846
19	Bodar Nebha Meramanbhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9099782323
20	Bodar Arajan Govabhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9824905084
21	Ambaliya Naran alabhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9638953337
22	Bodar Khima Maladebhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9825506588
23	Bodar Desur Naranbhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9737910109
24	Ambaliya Devat Rambhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	8154888716
25	Ambaliya Natha Alabhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	8347726423
26	Ambaliya Motiben Rambhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9737792020
27	Ambaliya Bhaya Rambhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9913240744
28	Ambaliya Bhimashi Vejabhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9737801422
29	Nandaniya Bharat Lakhmanbhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	8347359664
30	Bodar Gogan Maladebhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9825532846
31	Nandaniya Devarakhi Lakhmanbhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	8347359664
32	Bodar Dilip Rambhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9737889339
33	Bodar Savadash Maladebhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	7863053356
34	Nandaniya Hebha Naranbhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	8154888716
35	Der Sajan Arajanbhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	8980113645
36	Mokariya Devaji Khimajibhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	7567536832
37	Der Himiben Savadashbhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	8980113645
38	Bodar Labhuben Khimabhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9714738067
39	Karamur Hiriben Savabhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	7575075162
40	Bodar LakhmanNaranbhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9737910109
41	Ambaliya Ramade Karubhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9714065151
42	Der Savadas Arajanbhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	8980113645
43	Jogal Vajashi Lakhmanbhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	6354956009
44	Ambaliya Karashan Vikrambhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9737801422
45	Ambaliya Naran Marakhibhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9913240744
46	Karamur Vijay Savabhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9909490130
47	Bodar Ram Keshurbhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9737910109
48	Bodar Naga Murubhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9979742570
49	Bodar Bhaya Murubhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9904295409
50	Mokariya Kanaji Ramajibhai	Keshod	Jamkhambhaliya	Devbhumi Dwarka	9537707600

Pearl millet (GHB-1231) CFLDs under KVK Scheme**(Inputs: Pearl millet Seed (GHB-1231))**

Sr. No.	Name	Village	Taluka	District	Cell Number
1	Bhanderi Rajeshbhai Dhanjibhai	Sumara	Jodia	Jamnagar	9879897026
2	Gojiya Nareshbhai Deshurbhai	Kotha Visotri	Jam khambhadiya	Devbhumi Dwarka	9978565266
3	Gojiya Kanabhai Naranbhai	Kotha Visotri	Jam khambhadiya	Devbhumi Dwarka	9428125485
4	Ranmalbhai Arjanbhai Chavda	Shedha Bhadthar	Jam khambhadiya	Devbhumi Dwarka	9327263781
5	Dineshbhai Parsotambhai Baraiya	Jashapar	Jodia	Jamnagar	9925773665
6	Rantanben Parsotambhai Baraiya	Jashapar	Jodia	Jamnagar	-
7	Mukeshbhai Parsotambhai Bariya	Jashapar	Jodia	Jamnagar	9824865382
8	Chavda Arjanbhai Meramanbhai	Shedha Bhadthar	Jam khambhadiya	Devbhumi Dwarka	9327263781
9	Ambaliya Jeshabhai Hardashbhai	Shedha Bhadthar	Jam khambhadiya	Devbhumi Dwarka	9724522042
10	Ambaliya Lakhmanbhai Hardashbhai	Shedha Bhadthar	Jam khambhadiya	Devbhumi Dwarka	9712397900

Wheat (GW-463) FLDs under KVK Scheme**(Inputs: GW-463 seed – 40 kg)**

Sr. No.	Name	Village	Taluka	District	Cell Number
1	Bodar Meraman Lkhamanbhai	Keshod	Jam Khambhaliya	Devbhumi Dwarka	9537707600
2	Nandaniya Ramade Naranbhai	Keshod	Jam Khambhaliya	Devbhumi Dwarka	-
3	Bodar Mukesh Lakhmanbhai	Keshod	Jam Khambhaliya	Devbhumi Dwarka	9016450160
4	Doru Vira valabhai	Keshod	Jam Khambhaliya	Devbhumi Dwarka	9737181481
5	Karamur Pitha Rajashibhai	Keshod	Jam Khambhaliya	Devbhumi Dwarka	7575075162
6	Bodar Hiriben Bhikhabhai	Keshod	Jam Khambhaliya	Devbhumi Dwarka	9099782323
7	Nandaniya Kana desurbhai	Keshod	Jam Khambhaliya	Devbhumi Dwarka	9537707600
8	Matang Natha Khimabhai	Keshod	Jam Khambhaliya	Devbhumi Dwarka	9712047852
9	Ambaliya Kana Rambhai	Keshod	Jam Khambhaliya	Devbhumi Dwarka	9979760531
10	Jogal Valiben Vajashibhai	Keshod	Jam Khambhaliya	Devbhumi Dwarka	6354956009

AJWAIN**(Inputs: Trichoderma-2.0 kg, Beauveria – 2 kg, Azotobacter -1 lit, PSB- 1 lit,)**

Sr. No.	Name	Village	Taluka	District	Cell Number
1	Chikhaliya Kishor Bhojabhai	Bijalka	Dhrol	Jamnagar	9723080368
2	Santoki Ramesh Gangaram	Vankiya	Dhrol	Jamnagar	9638737917
3	Santoki Kantilal Gangaram	Vankiya	Dhrol	Jamnagar	9638737917
4	Gadara Ramesh Kuvarajibhai	Vankiya	Dhrol	Jamnagar	9638731735
5	Paramar Ramaji Arajanbhai	Haripar	Dhrol	Jamnagar	9979087910
6	Chauhan Narashi Virajibhai	Dhrol	Dhrol	Jamnagar	9726773924
7	Paramar Ranachod Jerajbhai	Dhrol	Dhrol	Jamnagar	9408284731
8	Paramar Pragaji Ganejabhai	Dhrol	Dhrol	Jamnagar	9979241994
9	Gheriya Jayesh savajibhai	Dhrol	Dhrol	Jamnagar	9924337153
10	Kanjariya Govind Narashibhai	Vankiya	Dhrol	Jamnagar	8141225302

ATIC - Cumin (IPM) Rabi 2021-22 8 ha. 20 farmers

Input : Beauveria Bassiana-1 kg, Trichoderma -2 kg, PSB-1 Li., Azotobactor- 1Li.

S. No.	Farmer name	Village	Taluka	District	Mobile No.
1	Mansukhbhai Virjibhai Gadara	Khengaraka	Dhrol	Jamnagar	8160256401
2	Karubhai Ambabhai Kagathara	Khengaraka	Dhrol	Jamnagar	9974950550
3	Narendrabhai Ambabhai Kagathara	Khengaraka	Dhrol	Jamnagar	9998452475
4	Manjulaben Ramjibhai Bhalodiya	Khengaraka	Dhrol	Jamnagar	9898231404
5	Babubhai Hushenbhai	Khengaraka	Dhrol	Jamnagar	9724610675
6	Nandlal Pragjibhai Gadara	Khengaraka	Dhrol	Jamnagar	9724142309
7	Manjulaben Lavjibhai Kagathara	Khengaraka	Dhrol	Jamnagar	9898216009
8	Dhansukhbhai Shivabhai Bhatasana	Khengaraka	Dhrol	Jamnagar	9998911917
9	Bhecharbhai Samjibhai Ghetiya	Khengaraka	Dhrol	Jamnagar	9913945140
10	Bhalodiya Devjibhai Mohanbhai	Khengaraka	Dhrol	Jamnagar	9913945140
11	Tarshibhai Popatbhai Ghetiya	Khengaraka	Dhrol	Jamnagar	9724558464
12	Jitendra Samjibhai Javiya	Khengaraka	Dhrol	Jamnagar	9913271941
13	Vallabhbbhai Jerambhai Kagathara	Khengaraka	Dhrol	Jamnagar	9998509960
14	Mansukhbhai Harjibhai Bhalodiya	Khengaraka	Dhrol	Jamnagar	972458459
15	Dhirajlal Ramjibhai Gadara	Khengaraka	Dhrol	Jamnagar	9898028912
16	Devjibhai Manjibhai Bhalodiya	Khengaraka	Dhrol	Jamnagar	9724558474
17	Narshibhai Dahyabhai Bhalodiya	Khengaraka	Dhrol	Jamnagar	9725841333
18	Nitinbhai Jivrajibhai Gadara	Khengaraka	Dhrol	Jamnagar	9725840101
19	Odhhabhai Bhimabhai Bhalodiya	Khengaraka	Dhrol	Jamnagar	9913945296
20	Damjibhai Keshvajibhai Kagathara	Khengaraka	Dhrol	Jamnagar	9898507531

ATIC-Coriander (IPM) (Rabi 2021-22) 8 ha. 20 farmers

Input : Beauveria Bassiana-1 kg, Trichoderma -2 kg, PSB-1 Li., Azotobactor- 1Li.

S. No.	Farmer name	Village	Taluka	District	Mobile No.
1	Jadeja Natubha Jorubha	Daldevdiya	Jamjodhpur	Jamnagar	9712046681
2	Virani Nimishbhai Govindbhai	Daldevdiya	Jamjodhpur	Jamnagar	6351930147
3	Virani Babubhai Jadavbhai	Daldevdiya	Jamjodhpur	Jamnagar	9913165643
4	Virani Laljibhai Shamjibhai	Daldevdiya	Jamjodhpur	Jamnagar	9909897793
5	Virani Jamanbhai Valjibhai	Daldevdiya	Jamjodhpur	Jamnagar	9925421537
6	Virani Harishbhai Karshanbhai	Daldevdiya	Jamjodhpur	Jamnagar	6353184342
7	Solanki Karshanbhai Somabhai	Daldevdiya	Jamjodhpur	Jamnagar	9726626413
8	Bhanderi Kanjibhai Ratnabhai	Daldevdiya	Jamjodhpur	Jamnagar	9913786314
9	Ramoliya Mukundbhai Mohanbhai	Daldevdiya	Jamjodhpur	Jamnagar	9978140754
10	Ramoliya Vallabhbbhai Narshibhai	Daldevdiya	Jamjodhpur	Jamnagar	9825415870
11	Ramoliya Vithalbhai Vallabhbbhai	Daldevdiya	Jamjodhpur	Jamnagar	9687303808
12	Ramoliya Bhikhubhai Becharbhai	Daldevdiya	Jamjodhpur	Jamnagar	9638957463
13	Ajudiya Vrajlal Govindbhai	Daldevdiya	Jamjodhpur	Jamnagar	9904579645
14	Ajudiya Jamanbhai Bhikhabhai	Daldevdiya	Jamjodhpur	Jamnagar	9427941759
15	Ajudiya Mohanbhai Kurjibhai	Daldevdiya	Jamjodhpur	Jamnagar	9427510812
16	Nariya Rameshbhai Bhikhubhai	Daldevdiya	Jamjodhpur	Jamnagar	9913655653
17	Nariya Dhirubhai Bhimjibhai	Daldevdiya	Jamjodhpur	Jamnagar	9879338962
18	Virani Jayntibhai Harjibhai	Daldevdiya	Jamjodhpur	Jamnagar	9978140817
19	Ramoliya Ashvinbhai Gopalbhai	Daldevdiya	Jamjodhpur	Jamnagar	
20	Nariya Naradbhai Nagjibhai	Daldevdiya	Jamjodhpur	Jamnagar	

Cotton**(Inputs: MDP - 3, Beauvaria -1.0 kg, S-NPV -250.0 ml, Azadirachtin -1 lit)**

Sr. No.	Name	Village	Taluka	District	Cell Number
1	Aghera Jerambhai Tarsibhai	Katada	Dhrol	Jamnagar	9974536440
2	Aghera Harjibhai Gangdasbhai	Katada	Dhrol	Jamnagar	9998311571
3	Aghera Dhirajlal Gangdashbhai	Katada	Dhrol	Jamnagar	9898794832
4	Aghera Maheshbhai Mansukhbhai	Katada	Dhrol	Jamnagar	9558842421
5	Aghera Ashwinbhai Nagajibhai	Katada	Dhrol	Jamnagar	9904736606
6	Aghera Maheshbhai Chhaganbhai	Katada	Dhrol	Jamnagar	8980010800
7	Aghera Dhirajlal Narsibhai	Katada	Dhrol	Jamnagar	9998122256
8	Marakna Pravinbhai Dhanabhai	Katada	Dhrol	Jamnagar	9998518302
9	Marakna Chandubhai Dhanabhai	Katada	Dhrol	Jamnagar	9081685104
10	Javiya Babulal Gandalal	Katada	Dhrol	Jamnagar	9898265005
11	Javiya Ranjanben Babulal	Katada	Dhrol	Jamnagar	9998365013
12	Aghera chandulal valajibhai	Katada	Dhrol	Jamnagar	8320648342
13	Aghera Amrutlal Valjibhai	Katada	Dhrol	Jamnagar	9726377729
14	Aghera Sardaben Kanjibhai	Katada	Dhrol	Jamnagar	9879175213
15	Aghera Karmsibhai Becharbhai	Katada	Dhrol	Jamnagar	9898794145
16	Bhesdadiya Jaysukhbhai Tapubhai	Jayva	Dhrol	Jamnagar	9408164955
17	Chhatrala Bharatbhai Laljibhai	Jayva	Dhrol	Jamnagar	9998913073
18	Chhatrala Ganeshbhai Thobhanbhai	Jayva	Dhrol	Jamnagar	9978075471
19	Virsodiya Narsibhai Mohanbhai	Jayva	Dhrol	Jamnagar	9428860946
20	Dadhaniya Velajibhai Lavjibhai	Jayva	Dhrol	Jamnagar	9824239578
21	Maheshbhai Gabharubhai Oza	Jayva	Dhrol	Jamnagar	-
22	Dadhaniya Manjulaben Mavjibhai	Jayva	Dhrol	Jamnagar	-
23	Dadhaniya Govindbhai Lavjibhai	Jayva	Dhrol	Jamnagar	6353290310
24	Dadhaniya Jethalal Gorghhanbhai	Jayva	Dhrol	Jamnagar	6355027812
25	Dadhaniya Mavjibha i Lavajibhai	Jayva	Dhrol	Jamnagar	9913925317

FLD on Kitchen gardening farmer list**Year 2021**

KVK- Kitchen Gardening, ha. 4 : No. of farmers 50

(Inputs : Different vegetable seed packets - Brinjal GRB-7; Lady's Finger GJO-6; Valor GJIB-11; Sponge Gourd GJSG-2; Indian beans GJIB-2; Cucumber Gujarat-1, Cow pea AVC-1, Tomato GT-6, Bottle Gourd-Pusa Navin; Cluster beans(PNB); Bitter Gourd; Ridge Gourd(GRB-2); Chilli, Beauveria Bassiana)

S.N.	Farmer name	Village	Taluka	District	Mobile No.
1	Savdhiben Lakhmanbhai Ambaliya	Samor	Jam Khambhaliya	Devbhumi Dwarka	9898426173
2	Jetiben Maldebhai Chavada	Samor	Jam Khambhaliya	Devbhumi Dwarka	6651445618
3	Matuben Bhimabhai Chavada	Samor	Jam Khambhaliya	Devbhumi Dwarka	9429796918
4	Hiruben Kanubhai Ambaliya	Samor	Jam Khambhaliya	Devbhumi Dwarka	9727696661
5	Jayaben Karshanbhai Chavada	Samor	Jam Khambhaliya	Devbhumi Dwarka	8780101512
6	Maluben Dababhai Chavada	Samor	Jam Khambhaliya	Devbhumi Dwarka	9723845694
7	Dhiruben Dharnantbhai Chavada	Samor	Jam Khambhaliya	Devbhumi Dwarka	9723845694
8	Kariben Jivabhai Ambaliya	Samor	Jam Khambhaliya	Devbhumi Dwarka	9429795096
9	Joshnaben Dadubhai Ambaliya	Samor	Jam Khambhaliya	Devbhumi Dwarka	9898249676
10	Vejiben Dineshbhai Ambaliya	Samor	Jam Khambhaliya	Devbhumi Dwarka	9925795104

11	Jethiben Kanabhai Madam	Samor	Jam Khambhaliya	Devbhumi Dwarka	9723419193
12	Natheebeen Rambhai Madam	Samor	Jam Khambhaliya	Devbhumi Dwarka	9909655063
13	Amariben Ramshibhai Chavada	Samor	Jam Khambhaliya	Devbhumi Dwarka	7984477336
14	Manjuben Jivabhai Chavada	Samor	Jam Khambhaliya	Devbhumi Dwarka	8849294017
15	Aghera Gopiben Bachubhai	Katada	Dhrol	Jamnagar	9265424629
16	Aghera Liliben Mansukhbhai	Katada	Dhrol	Jamnagar	6354276108
17	Aghera Jayshreeben Ankitbhai	Katada	Dhrol	Jamnagar	9998122256
18	Aghera Shardaben Kanjibhai	Katada	Dhrol	Jamnagar	9313666502
19	Aghera Prabhaben Kamleshbhai	Katada	Dhrol	Jamnagar	
20	Akbari Niruben Sanjaybhai	Katada	Dhrol	Jamnagar	
21	Aghera Bhavanaben Pravinbhai	Katada	Dhrol	Jamnagar	9662617570
22	Aghera Hansaben Bachubhai	Katada	Dhrol	Jamnagar	9662617570
23	Aghera Divyaben Bhavanbhai	Katada	Dhrol	Jamnagar	9558001525
24	Aghera Ramaben Amrashibhai	Katada	Dhrol	Jamnagar	9898491186
25	Aghera Hinaben Sureshbhai	Katada	Dhrol	Jamnagar	9974950558
26	Aghera Sumitraben Shantibhai	Katada	Dhrol	Jamnagar	9172583961
27	Akbari Bhavanaben Hareshbhai	Katada	Dhrol	Jamnagar	7725809520
28	Aghera Ramaben Amrashibhai	Katada	Dhrol	Jamnagar	9898491186
29	Akbari Rekhaben Jigneshbhai	Katada	Dhrol	Jamnagar	9898848363
30	Javiya Jagrutiben Jigneshbhai	Katada	Dhrol	Jamnagar	9723083625
31	Javiya Jignaben kamleshbhai	Katada	Dhrol	Jamnagar	9898475593
32	Ranipa Muktaben Pravinbhai	Katada	Dhrol	Jamnagar	9725621753
33	Aghera Harshidaben Atulbhai	Katada	Dhrol	Jamnagar	9510742034
34	Mungara joshnaben Laljibhai	Katada	Dhrol	Jamnagar	8980709821
35	Hansaben Nanjibhai Bhalodiya	Khengarka	Dhrol	Jamnagar	7778816861
36	Ashmitaben Rameshbhai kagathara	Khengarka	Dhrol	Jamnagar	9724080933
37	Ranjanben Pravinbhai Bhatasana	Khengarka	Dhrol	Jamnagar	9724558419
38	Manjulaben Lavjibhai Kagathara	Khengarka	Dhrol	Jamnagar	9898216009
39	Hansaben Dhansukhbhai Bhatasana	Khengarka	Dhrol	Jamnagar	9998911917
40	Geetaben Dharshibhai Kagathara	Khengarka	Dhrol	Jamnagar	9662076110
41	Ranjanben Maheshbhai Gadara	Khengarka	Dhrol	Jamnagar	9974900199
42	Lakshmiben Nandlalbhai Gadara	Khengarka	Dhrol	Jamnagar	9724142309
43	Manishaben Nandlalbhai Kagathara	Khengarka	Dhrol	Jamnagar	9724373973
44	Rekhaben Kaushikbhai Gadara	Khengarka	Dhrol	Jamnagar	8128136966
45	Varshaben Amrshibhai Gadara	Khengarka	Dhrol	Jamnagar	9727561322
46	Gauriben Amrshaibhai Gadara	Khengarka	Dhrol	Jamnagar	9558895134
47	Nimuben Ashokbhai Bhalodiya	Khengarka	Dhrol	Jamnagar	7778816861
48	Chetnaben Gordhanbhai Bhalodiya	Khengarka	Dhrol	Jamnagar	9724558456
49	Champaben Bhavanbhai Ghetiya	Khengarka	Dhrol	Jamnagar	9998908057
50	Shobhnaben Dayabhai Gadara	Khengarka	Dhrol	Jamnagar	9998257709

Chikori

(Inputs: PSB culture - 1 lit, .Beauvaria -1.0 kg, Azatobactor -1.0 lit)

Sr. No.	Name	Village	Taluka	District	Cell Number
1	Ambaliya Dineshbhai Danabhai	Samor	Jamkhabhaliya	Devbhumi Dwarka	9925793104
2	Madam Vajshibhai Kanabhai	Samor	Jamkhabhaliya	Devbhumi Dwarka	7567222700
3	Chavada Malde Kalubhai	Samor	Jamkhabhaliya	Devbhumi Dwarka	6351445618
4	Chavada Danabhai Pabubhai	Samor	Jamkhabhaliya	Devbhumi Dwarka	9723845694
5	Chavada Rambhai Karanabhai	Samor	Jamkhabhaliya	Devbhumi Dwarka	9265439266

KVK-Cotton Picking Apron (Kharif :2021-22) 2 ha. 5 farmers**(Inputs: Cotton Picking Apron -1)**

S.N.	Farmer name	Village	Taluka	District	Mobile No.
1	Rashilaben Bharatbhai Gadara	Khengaraka	Dhrol	Jamnagar	9724558545
2	Kundanben Mahendrabhai Gadara	Khengaraka	Dhrol	Jamnagar	9909875257
3	Mariya Jashuben Dineshbhai	Nanduri	Lalpur	Jamnagar	9924530934
4	Neetaben Kanubhai Mariya	Nanduri	Lalpur	Jamnagar	9712351613
5	Ramoliya Ramilaben Mukundbhai	Daldevadiya	Jamjodhpur	Jamnagar	9978140754

Animal (Bypass Fat)**(Inputs: Bypass Fat)**

Sr. No.	Name	Village	Taluka	District	Cell Number
1	Karshanbhai Jetabhai Parmar	Gadhka	Jam Kalyanpur	Devbhumi Dwarka	9426337943
2	Jayshriben Mohanbhai Nakum	Gadhka	Jam Kalyanpur	Devbhumi Dwarka	9925992211
3	Jibnesh Maganbhai Changani	Dared	Jamnagar	Jamnagar	7984027677

KVK- Solar cooker (2021-22) 5 farm women**(Inputs: Solar cooker -1)**

S. No.	Farmer name	Village	Taluka	District	Mobile No.
1	Dudhagara Prabhaven Bhikhabhai	Majoth	Dhrol	Jamnagar	9512641883
2	Dudhagara Geetaben Shantibhai	Majoth	Dhrol	Jamnagar	6353911560
3	Morad Akshita Kantibhai	Majoth	Dhrol	Jamnagar	7043838204
4	Chabhadiya Kinjalben Gordhanbhai	Majoth	Dhrol	Jamnagar	7359451022
5	Dudhagara Sejalben Bhaveshbhai	Majoth	Dhrol	Jamnagar	7990832067

ANNUAL ACTION PLAN
(1st January 2022 to 31st December - 2022)

KRISHI VIGYAN KENDRA
JUNAGADH AGRICULTURAL UNIVERSITY, JAMNAGAR

1. Details of Operational area/ Villages (2021 to 2023)

SI No	Taluka	Name of the village	Major crops & enterprises	Major problem identified	Identified thrust area
1	Dhrol	Katada, Jayva, Mansar (Jaliya), Kharva, Khendgarka	Cotton, groundnut, sesame, castor, greengram,	Heavy infestation of sucking pest in cotton, stem rot disease & white grub in Groundnut, Root rot in castor, Less area under horticulture crops,	<ul style="list-style-type: none"> - ICM in major crops of the district - Organic crop production - Introduction of new crop - Recycling of farm waste - Popularization of MIS - Motivation of fisheries cultivation - Soil Reclamation - Farm women empowerment - Farm mechanization
2	Jam Jodhpur	Sonvadiya, Satapar, Bhupat Ambardi, Dal Devaliya Luvarsar	wheat, Gram, cumin, mustard, Vegetable, Soyabean, flowers, live-stock, fisheries	Blight in cumin, salinity, pink bollworm in cotton	
3	Jam Khambhalia	Keshod, Shedha Bhadthar, Samor, Jakasiya, Juvangadh			

2. Priority thrust areas

Sl. No	Crop/ Enterprise	Thrust area
1.	Cotton, groundnut, castor, cumin, coriander, wheat, vegetables, fruits, etc.	<ul style="list-style-type: none"> ➤ 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 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.	Fisheries	Fish Farming
8.	Improved Implements	Popularization of the mechanized technological know how
9.	Plant protection	Pink boll worm in cotton and white grub in groundnut,
10.	Horticultural area	Enhancement of pomegranate, date palm, draganfruit,
11.	Storage facility	Requirement of storage techniques and value addition in farm produce
12.	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
5	17	110	325

Training		Extension Activities	
(3)		(4)	
Number of Courses	Number of Participants	Number of activities	Number of participants
41	1045	192	18166

Seed Production (Qtl.)	Planting material (Nos.)	Fish seed prod. (kg)	Soil Samples
(5)	(6)	(7)	(8)
130	1700	0	350

B. Details of On Farm Trial / Technology Assessment during 2022

S. No.	Crop/ enterprise	Prioritized problem	Title of OFT
1	Brinjal	Infestation of sucking pests in brinjal	Management of brinjal whitefly
2	Sesame	Low Yield, Introduction of new high yielding variety,	Assessment of the performance of high yielding Sesame varieties in summer irrigated condition for Jamnagar District
3	Groundnut	Low yield in existing variety, Enhancing productivity	Assessment of suitable high yielding Groundnut Variety in kharif season for Jamnagar District
4	Storage PICS Bag	Heavy loss of food grains and seeds during storage, Heavy attack of storage pests	Assessment of PICS bag for Groundnut storage
5	Cumin	To minimize the infestation of aphid in Cumin, To increase production To reduce yield loss of Cumin	Management of aphid in cumin.

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 irrigation facilities
No adoption of recommended practices		Lack of knowledge about pest outbreaks and its management
		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. 2×10^6 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 Difenturon 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

Title :Assessment of the performance of high yielding Sesame varieties in summer irrigated condition for Jamnagar District

Objective : To find out suitable high yielding sesame variety for summer irrigated condition

Problem definition:

1. Low yield.
2. Threat to the sustainability of crop production
3. High cost of production
4. Shortage of irrigation water

Problem diagram :-

Improper cultivation practices	Assessment of the performance of high yielding Sesame varieties in summer irrigated condition for Jamnagar District	Multi season cropping system
Low yielding variety		Irregular irrigation/ irregular rainfall
Lack of knowledge about balance use of nutritional recommendation		Lack of knowledge about pest outbreaks and its management
High Wind velocity		In judicious use of chemical fertilizer

Treatments :

1. T₁ :- G. Til 2 (Farmer Practices)
2. T₂ :- G. Til 3
3. T₃ :- G. Til 5

No. of Replication :- 3 (Farmers)

Source of Technology: - Junagadh Agricultural University, Junagadh

Thematic area: Varietal evaluation

Observations :-

1. Yield (Kg/ha),
2. Plant Height (cm),
3. Capsule per plant,
4. 1000 seed weight (g),
5. Maturity days,
6. Economics

OFT:3

Title : Assessment of suitable high yielding Groundnut Variety in kharif season for Jamnagar District

Objective:: To find out suitable high yielding groundnut variety for kharif season

Problem definition:

1. Low yield.

2. Threat to the sustainability of crop production
3. High cost of production
4. Lack of well distributed rainfall & low rainfall

Problem diagram :-

Improper cultivation practices	Assessment of suitable high yielding Groundnut Variety in kharif season for Jamnagar District	Multi season cropping system
Low yielding variety		Mono-cropping system
Irregular rainfall		Lack of knowledge about nutrient management
Heavy incidence of pest and disease attack		In judicious use of chemical fertilizer
In judicious use of pesticide		Heavy infestation of white grub was found

Treatments:

1. T 1 :- GG-20 (Farmer Practices)
2. T 2 :- GJG-22
3. T 3 :- GJG-32

No. of Replication :- 3 (Farmers)

Source of Technology: - Junagadh Agricultural University, Junagadh

Thematic area: Varietal evaluation

Observation:

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

OFT: 4

Title :Assessment of PICS bag for Groundnut storage

Objective :

1. To provide sustainable and ecologically safe approach to preserve groundnut pods
2. To Reduce storage loss in groundnut seed
3. To increase storage period

Problem Definition :-

1. Residual effect of insecticides used for stored godown
2. Insecticidal effect on germination
3. High moisture retention during summer days
4. Heavy attack of storage pests
5. High cost of storage
6. Heavy loss of food grains and seeds
7. Lack of regular inspection in stored products.

Problem Diagram :-

Lack of regular inspection in stored products	Assessment of PICS bag for Groundnut storage	High cost of storage
Heavy loss of food grains and seeds		Heavy attack of storage pests
Residual effect of insecticides used for stored godown		Insecticidal effect on germination
High moisture retention during summer days		

Treatment

T₁–Farmer Practices (Open heaps in storage godown)

T₂–Local practices for storage in plastic bag /closely woven bag

T₃–Storage in Triple layer hermetic “Purdue Improved Crop Storage”(PICS) bags

No. of Replication/farmers :- 5 (Three bags/farmers)

Source of Technology : JAU, Junagadh Formerly it was from ICRISAT, Hyderabad

Observation :Post (after six month) storage

1. Weight loss
2. Insect (Bruchid)damage

OFT-5 (Refinement)

Title: Management of aphid in cumin.

Objective: To minimize the aphid incidence in cumin. To reduce injudicious use of chemical pesticide. To minimize residual effect of chemical.

Problem definition:

1. Heavy infestation of aphid was found
2. Lack of seed treatment and improper cultivation practices
3. Lack of knowledge about pest outbreaks and its management
4. Injudicious use of nitrogenous fertilizer
5. Extra irrigation rather than recommendation during cloudy weather.
6. Overlapping of the crops seasons

Problem diagram :-

Resurgence of aphid	Management of aphid in cumin	Multi season cropping system
Overlapping of the crops seasons		Lack of knowledge about pest outbreaks and its management
Lack of seed treatment		Lack of improper cultivation practices
In judicious use of pesticide		In judicious use of nitrogenous fertilizer
Extra irrigation		Improper use of FYM (without decomposition)

Treatments:

1. **Farmer’s Practices:**-Injudicious use of insecticides. [use of deltamethrin, flubendiamide, imidacloprid, acetamepid, Thiamethoxam, cypermethrin, lamdacyhalothrin, carbosulfan, dimethoate after infestation of aphid repeatedly at weekly interval without follow ETL]
2. **Recommendation** :-First spray of Afidopyropen 50 G/L DC [(Inscalis) Sefina] 0.04% or Carbosulfan 25 EC 0.04% was made at initiation of pest and second spray was given after 15 days.
3. **Refinement:**-First spray of Spray of *Bearuveriabassiana* @ 5 g/lit of water was made at initiation of pest and subsequent spray at 15 days interval.

No. of Replication: 3 (Farmers)

Source of Technology: - StateAgricultural University

Thematic area: IPM

Observations:

1. Record aphid population (aphid index) from five randomly selected plants from each plot at 7 days after spray
2. Record yield.

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	Azadirachtin, Profenophos.,MDP,SNPV, Beauveriabassiana	Kh-22	10	25	yield
2	Wheat	GW-499, 451	Varietal	Variety	Seed	Rabi-22	4	10	Yield
3	Ajwain	Gujarat Ajwain-2	IPM/IDM	Bio pesticide Bio fertilizer	Trichoderma, Beauveria bassiana, Azotobacter, PSB	Kharif-22	4	10	Yield
4	Pearl millet	GHB-1231	Varietal	Variety	Seed	Sum-22	4	10	Yield
Other Scheme									
5	NMOOP -Groundnut	GJG-32/22	Improved Variety with ICM	Improved Variety, Bio pesticide, Bio fungicide, Bio fertilizer	Improved var. Seed (GJG-32/22), <i>Metarhizium anisopliae</i> , <i>Trichoderma</i> , PSB, Rhizobium, <i>Beauveria</i>	KH-22	20	50	Yield, % pod damage
6	NMOOP -Sesame	GTil -3/5	Improved Variety with ICM	Improved Variety, Bio pesticide, Bio fungicide, Bio fertilizer	Improved var. Seed (GTil-3/5), <i>Beauveria bassian</i> , <i>Trichoderma</i> , PSB, <i>Azotobacter</i>	Sum-22	20	50	Yield, % pod damage
6	NMOOP -Mustard	GDM-4, 5	Improved Variety with ICM	Improved Variety, Bio pesticide, Bio fungicide, Bio fertilizer	Improved var. Seed (GDM-4, 5), <i>Beauveria bassian</i> , <i>Trichoderma</i> , PSB, <i>Azotobacter</i>	Rabi-22	10	25	Yield, % pod damage
7	NFSM -Chickpea	GG-5	Improved Variety with ICM	Improved Variety, Bio pesticide, Bio fungicide, Bio fertilizer	Improved var. Seed(GG-5), <i>Beauveria bassiana</i> , <i>Trichoderma</i> , PSB, Rhizobium	Rabi-22	20	50	Yield, % pod damage
8	ATIC Castor	GCH-9	Varietal	Variety	seed	Kh-22	8	20	Yield
9	ATIC Cumin	GC-4	ICM	Bio pesticide Bio fertilizer	<i>Beauveriabassiana</i> , PSB, <i>Azotobector Trichoderma</i>	Rabi-22	8	20	Yield
10	ATIC Coriander	GC-2	ICM	Bio pesticide Bio fertilizer	PSB, <i>Azotobector</i> , <i>Beauveriabassiana</i> , <i>Trichoderma</i>	Rabi-22	8	20	Yield
Total							116	290	

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-22	5	2	Apron	Picking efficiency

b. Livestock Enterprises

Enterprise	Breed	No. of farmers	No. of animals, poultry birds/ha. etc.	Critical inputs	Performance parameters / indicators
					1.

c. FLD on Other enterprises

Enterprise	Name of the technology demonstrated	No. of farmers	No. of units	Critical inputs	Performance parameters / indicators
Solar Cooker	Solar Cooker	5	5	Solar Cooker	Time & fuel
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 courses	No. of participant						Grand Total
		others			SC/ST			
		Male	Female	Total	Male	Female	Total	
I Crop Production	2	40	8	48	6	1	7	55
II Horticulture	1	0	20	20	0	5	5	25
III Soil Health and Fertility Management	1	18	5	23	1	1	2	25
IV Livestock Production and Management	1	0	25	25	0	0	0	25
V Home Science/Women empowerment	2	0	44	44	0	6	6	50
VI Agril. Engineering	0	0	0	0	0	0	0	0
VII Plant Protection	5	115	0	115	10	0	10	125
VIII Fisheries	0	0	0	0	0	0	0	0
IX Production of Inputs at site	1	23	0	23	2	0	2	25
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	196	102	298	19	13	32	330
(B) RURAL YOUTH	2	25	25	50	0	5	5	55
(C) Extension Personnel	2	40	0	40	10	0	10	50
Grand Total (A+B+C)	17	261	127	388	29	18	47	435

Off Campus

(A) Farmers & Farm Women	No. of courses	No. of participant						Grand Total
		others			SC/ST			
		Male	Female	Total	Male	Female	Total	
I Crop Production	3	72	5	77	3	0	3	80
II Horticulture	1	0	25	25	0	0	0	25
III Soil Health and Fertility Management	3	69	13	82	3	0	3	85
IV Livestock Production and Management	1	0	25	25	0	0	0	25
V Home Science/Women empowerment	5	0	119	119	0	6	6	125
VI Agril. Engineering	1	20	0	20	0	0	0	20
VII Plant Protection	5	115	0	115	10	0	10	125
VIII Fisheries	0	0	0	0	0	0	0	0
IX Production of Inputs at site	2	47	0	47	3	0	3	50
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)	21	323	187	510	19	6	25	535
(B) RURAL YOUTH	0	0	0	0	0	0	0	0
(C) Extension Personnel	3	40	20	60	10	5	15	75
Grand Total (A+B+C)	24	363	207	570	29	11	40	610

Consolidated (On + Off Campus)

(A) Farmers & Farm Women	No. of courses	No. of participant						
		others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
I Crop Production	5	112	13	125	9	1	10	135
II Horticulture	2	0	45	45	0	5	5	50
III Soil Health and Fertility Management	4	87	18	105	4	1	5	110
IV Livestock Production and Management	2	0	50	50	0	0	0	50
V Home Science/Women empowerment	7	0	163	163	0	12	12	175
VI Agril. Engineering	1	20	0	20	0	0	0	20
VII Plant Protection	10	230	0	230	20	0	20	250
VIII Fisheries	0	0	0	0	0	0	0	0
IX Production of Inputs at site	3	70	0	70	5	0	5	75
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)	34	519	289	808	38	19	57	865
(B) RURAL YOUTH	2	25	25	50	0	5	5	55
(C) Extension Personnel	5	80	20	100	20	5	25	125
Grand Total (A+B+C)	41	624	334	958	58	29	87	1045

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	8	180	25	205	25	5	30	205	30	235
Kisan Mela	1	300	50	350	40	10	50	340	60	400
Kisan Ghosthi	5	170	20	190	20	14	34	190	34	224
Exhibition	2	150	230	380	40	10	50	190	240	430
Film Show	20	900	400	1300	120	40	160	1020	440	1460
Method demonstration	2	20	15	35	5	5	10	25	20	45
Farmers Seminar	2	100	20	120	40	5	45	140	25	165
Workshop	1	200	100	300	25	10	35	225	110	335
Group meetings	6	60	15	75	25	15	40	85	30	115
Lectures delivered as resource persons	25	3500	700	4200	1200	450	1650	4700	1150	5850
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	3	0	0	0	0	0	0	0	0	0

Extension Literature	14	1200	100	1300	600	50	650	1800	150	1950
Advisory Services	10	100	10	110	50	10	60	150	20	170
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
Mahila Mandals 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	3	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	192	11770	2340	14110	3087	969	4056	14857	3309	18166

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	<i>Beauveria</i>			5000
2	<i>Trichoderma</i>			10000

3	PSB		200	
4	<i>Azobactor</i>		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	Animal unit	2007	-	Gir	-	-	100000	120000	
4	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-31	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.

S.No.	Name of the agency / scheme	Name of activity	Technical programme with quantification	Financial outlay (Rs.)	Names of the team members involved
1	DAMU	Farmers meeting for awareness	10	200000	Dr. K. P. Baraiya A. V. Savaliya
		weather based agro advisory	105		

6.5.1. Details of activities planned in DFI villages

Name of DFI village selected	Total No. of families in the village	Interventions planned during 2021	No. of families to be covered under the intervention	Present annual income of the family (Rs /annum)	Expected annual income of the family after intervention (Rs/ annum)
Chantragadh	315	FLD, Training	10	-	-
Lothiya	291	FLD, Training	10	-	-
Khoja Beraja	390	FLD, Training	10	-	-
Nani Banugar	285	FLD, Training	10	-	-
Gadhka	1450	FLD, Training	10	-	-

Annexure - I

TRAINING PROGRAMMES

i) Farmers & Farm women (On Campus)

Date	Client ele	Title of the training programme	Durati on in days	Number of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
Crop Production										
Quarter-1 st	PF	Organic farming	1	20	3	23	1	1	2	25
Quarter-4 th	PF	Integrated farming system	1	25	0	25	5	0	5	30
Horticulture										
Quarter-3 rd	PF	Nursery Management	1	0	20	20	0	5	5	25
Livestock prod.										
Quarter-2 nd	PF	Dairy Management and Value addition of milk	1	0	25	25	0	0	0	25
Home Sc.										
Quarter-1 st	PF	Value addition in fruits, vegetables and agriculture produce for doubling farmers income	1	0	25	25	0	0	0	25
Quarter-4 th	PF	Boosting immunity through fruits and vegetables and aware about Nutritional disease	1	0	19	19	0	6	6	25
Plan prot.										
Quarter-1 st	PF	IPM in vegetable crops: onion & garlic	1	25	0	25	0	0	0	25
Quarter-2 nd	PF	Management of pink bollworm in cotton & management of white grub in groundnut and other kharif crops	1	20	0	20	5	0	5	25
Quarter-3 rd	PF	Management of diseases in <i>kharif</i> crops	1	25	0	25	0	0	0	25
Quarter-4 th	PF	Integrated Disease and pest management in cumin and gram	1	20	0	20	5	0	5	25
Quarter-4 th	PF	Store grain pests and its management for reduction the storage loss	1	25	0	25	0	0	0	25
Fisheries										
Production of Inputs at site										
4 th Quarter	PF	Seed production technology	1	23	0	23	2	0	2	25
Soil Health										
2 nd Quarter	PF	Importance of Soil and water testing	1	18	5	23	1	1	2	25
			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-1 st	PF	Pre seasonal training on summer crop production practices	1	23	2	25	0	0	0	25
Quarter-2 nd	PF	Integrated weed management in oilseed crops	1	21	3	24	1	0	1	25
Quarter-4 th	PF	Training on Conservation and utilization of natural resources	1	28	0	28	2	0	2	30
Horticulture										
Quarter-4 th	PF	Processing and value addition in Spices crop	1	0	25	25	0	0	0	25
Livestock prod.										
Quarter-1 st	PF	Importance of Nutrients and Feed Management in Animal Husbandry to increase milk production	1	0	25	25	0	0	0	25
Home Sc.										
Quarter-1 st	PF	Importance of nutrition in daily diet and techniques of Minimization of nutrition loss in processing	1	0	25	25	0	0	0	25
Quarter-2 nd	PF	food processing and value addition in fruit, vegetable, and other agricultural produce	1	0	25	25	0	0	0	25
Quarter-2 nd	PF	House hold food security by kitchen gardening and nutrition gardening	1	0	19	19	0	6	6	25
Quarter-3 rd	PF	Income generation activities for empowerment of women	1	0	25	25	0	0	0	25
Quarter-4 th	PF	Nutritional Value of Leafy vegetable and design of Low/Minimum cost diet	1	0	25	25	0	0	0	25
Agril. Engineering										
3 rd Quarter	PF	Installation and Maintenance of micro irrigation system	1	20	-	20	-	-	-	20
Plan prot.										
Quarter-1 st	PF	IPM in vegetable crops: onion & garlic	1	25	0	25	0	0	0	25
Quarter-1 st	PF	Store grain pests and its management for reduction the storage loss	1	25	0	25	0	0	0	25
Quarter-2 nd	PF	Management of pink bollworm in cotton & management of white grub in groundnut and other kharif crops	1	20	0	20	5	0	5	25

Quarter-3 rd	PF	Management of diseases in <i>kharif</i> crops	1	25	0	25	0	0	0	25
Quarter-4 th	PF	Integrated Disease and pest management in cumin and gram	1	20	0	20	5	0	5	25
Fisheries										
Production of Inputs at site										
1 st Quarter	PF	Vermi-compost and other organic input production	1	22	0	22	3	0	3	25
Quarter – 3 rd	PF	Bio pesticides production	1	25	0	25	0	0	0	25
Soil Health										
2 nd Quarter	PF	Use of Bio fertilizer & recycling of farm waste through composting	1	28	0	28	2	0	2	30
3 rd Quarter	PF	Integrated nutrient management in Groundnut	1	22	7	29	1	0	1	30
4 th Quarter	PF	Improvement of soil fertility through balance use of fertilizer	1	19	6	25	0	0	0	25
			21	323	187	510	19	6	25	535

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	Women Empowerment through Bakery Business	Feb	4	0	25	25	0	5	5	30
Integrated farming	Integrated farming	Integrated farming system	July	4	25	0	25	0	0	0	25

iii) Training programme for extension functionaries

Date	Clientele	Title of the training programme	Duration in days	No. of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
On Campus										
Quarter-2 nd	EF	Pre-seasonal training on <i>kharif</i> crops (Pigeon pea, Green gram, Groundnut, Cotton) production technology through natural resources	2	20	0	20	5	0	5	25
Quarter-4 rd	EF	Pre-seasonal training on <i>rabi</i> crops (Cumin, Gram, Wheat, Onion, Garlic production technology through natural resources)	2	20	0	20	5	0	5	25
Off Campus										
Quarter-2 nd	EF	Pre-seasonal training on <i>kharif</i> crops (Pigeon pea, Green gram, Groundnut, Cotton) production technology through natural resources	2	20	0	20	5	0	5	25
Quarter-3 rd	EF	Constraints of Kitchen gardening and their remedies	1	0	20	20	0	5	5	25
Quarter-4 rd	EF	Pre-seasonal training on <i>rabi</i> 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	3	4	
IV Livestock Production and Management	LPM		1			1	1			1	2	
V Home Science/Women empowerment	WOE	1			1	2	1	2	1	1	7	
VI Agril. Engineering	AEG					0			1	1	1	
VII Plant Protection	PLP	1	1	1	2	5	2	1	1	1	10	
VIII Fisheries	FIS					0				0	0	
IX Production of Inputs at site	PI				1	1	1		1	2	3	
X Capacity Building and Group Dynamics	CBD					0				0	0	
Total		3	3	2	5	13	6	5	5	5	21	34
(B) Extension Functionaries												
	EF		1		1	2		1	1	1	3	5
(C) Rural youth												
	RY	1		1		2				0	2	
Total		4	4	3	6	17	6	6	6	6	24	41

iv) Sponsored programme

Discipline	Sponsoring agency	Client	Title of the training programme	No. of course	No. of participants			Number of SC/ST			G. Total
					M	F	T	M	F	T	
a) Sponsored training programme											
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 groundnut 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	MahilaKrushi Divas	1	0	100	100	0	20	20	120
			Total	2	50	150	200	10	30	40	240

Annexure - II**Details of Budget Estimate (2022-23) based on proposed action plan**

S. No.	Particulars	BE 2022-23 proposed (Rs.)
25.1	Recurring Contingencies	
25.1.1	Pay & Allowances	130
25.1.2	Traveling allowances	2
25.1.3	Contingencies	35
<i>A</i>	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	
<i>B</i>	POL, repair of vehicles, tractor and equipment	
<i>C</i>	Meals/refreshment for trainees (ceiling up to Rs.40/day/trainee be maintained)	
<i>D</i>	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	
<i>E</i>	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstrations in a year)	
<i>F</i>	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	
<i>G</i>	Training of extension functionaries	
<i>H</i>	Maintenance of buildings	
<i>I</i>	Establishment of Soil, Plant & Water Testing Laboratory	
<i>J</i>	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

Annexure-III

ON GOING TECHNICAL PROGRAMME

On going Technical Project Proposal 1 (Home Science)

1	Title	:	Knowledge of farm women about kitchen gardening in Jamnagar and Devbhumi Dwarka districts
2	Background information	:	<p>Kitchen gardening is the revolutionary step to increase vegetables production as well as provision of cheap vegetables to the consumers. Kitchen gardening contributes to household food security by providing direct access to food on a daily basis. Vegetables are major source of vitamins, minerals, and fibers; their nutritive and medicinal values in human life are well documented.</p> <p>There are many social benefits that have emerged from kitchen gardening practices, better health and nutrition, increased income, employment, food security within the household, and enhance in community social life. Apart from having a good amount of production of vegetables at national level, the per capita availability in diet is quite low in our country. The daily requirement of vegetable is around 300 gm as per ICMR but the availability is very low. Many of the rural families used to grow vegetables in their backyards for their household consumption. But still they lack in adequate consumption of vitamins and minerals because of unorganized cultivation of vegetables. Keeping in view the importance of vegetables in daily diets and its low availability, the Krishi Vigyan Kendra has conducted various training and demonstrations on kitchen gardening under Women in Agriculture discipline.</p>
3	Objective	:	<ol style="list-style-type: none"> 1. To study the profile of respondents 2. To measure the knowledge level of farm women about kitchen gardening 3. To access adoption level of respondents about kitchen gardening 4. To identify the constraints faced by respondents in adoption of kitchen gardening
4	Principal Investigator	:	Smt. A. K. Baraiya, Scientist (Home Science), KVK, JAU, Jamnagar
	Co-investigator	:	Dr. K. P. Baraiya, Senior Scientist & Head, KVK, JAU, Jamnagar Dr. H. M. Gajipara, Director of Extension Education, JAU, Junagadh
5	Location	:-	Jamnagar District
6	Year of Commencement	:	2021-22 to 2023-24 (three years)
7.	Experimental Detail/ Methodology	:	The study area of this research programme will be KVK selected three blocks viz., Jodia, Dhrol of Jamnagar District and Khambhaliya of Devbhumi Dwarka District. From each block Five villages and from each selected villages twenty women respondent will be select randomly for the study. Thus, 300 women will constitute the sample size for this study. For collection of data personal interview technique will be use. Data will be collected with the help of structured interview schedule. Frequencies, percentage and mean percent score will be used for analysing the data statistically

On going Technical Project Proposal 2 (DAMU-GKMS)

1	Title	:	Usefulness of Agro-met advisory service to the farmers of Jamnagar district
2	Background information	:	<p>Climate is the most limiting factor for crop grown. While all other physical factors, inputs and agronomic practices can be manipulated, vagaries of weather cannot be control. However, adverse effects on crops can often be mitigate. Thus, risk in agricultural operations can be minimize by the provision of weather information properly interpreted for their agricultural significance, containing advisories for farm operation and disseminate well in advance of the impending weather.</p> <p>In view of above, Agrometeorological Advisory Service (AAS) are being rendered by India Meteorological Department (IMD), Ministry of Earth Sciences (MoES) under Gramin Krishi Mausam Sewa (GKMS) scheme as a step towards contribution to weather information-based crop/livestock management strategies and operations dedicated to enhancing crop production.</p> <p>District Agro meteorological Unit (DAMU) is functional running at Krishi Vigyan Kendra, JAU, Jamnagar since 2nd November, 2020. The District Agro meteorological Unit, KVK, JAU, Jamnagar is prepared block level Agromet advisory bulletin for all the 6 block viz. Dhrol, Jodia, Jamjodhpur, Jamnagar, Kalavad, Lalpur of Jamnagar district and also prepare district level advisory bulletin for Jamnagar district separately.</p> <p>The overall objective of the study is to how to useful weather bulletin at farmers level in crop/livestock production. It would also give the information on the suggestions to the improvement in weather bulletin.</p>
3	Objective	:	<ol style="list-style-type: none"> 1. To find out usefulness of Agro-met advisory service at farmers' level 2. To seek suggestion from respondents for improving advisory of weather bulletin
4	Principal Investigator	:	Dr. K. P. Baraiya, Senior Scientist & Head, KVK, JAU, Jamnagar
	Co-investigator	:	Mr. A. V. Savaliya, SMS, Agromet, KVK, JAU, Jamnagar Mr. R. B. Pandya, Agromet Observer, KVK, JAU, Jamnagar Dr. H. M. Gajipara, Director of Extension Education, JAU, Junagadh
5	Location	:-	Jamnagar District
6	Year of Commencement	:	2021-22, 2022-23
7.	Experimental Detail/ Methodology	:	The present research study will conduct in jurisdiction of Krishi Vigyan Kendra, JAU, Jamnagar. All 6 blocks of Jamnagar district will be select for study. From every block, randomly 50 farmers will be select, who join with KVK weather WhatsApp group. Thus, 300 farmers will be select for final study. Data will be collected with the help of personal interview schedule. Personal interview method data were processed, tabulated, classified and analyzed in respective of objective