ICAR-ATARI, Pune
DETAILS OF ANNUAL PROGRESS REPORT OF KVKs DURING 2021
(January 2021 to December 2021)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address with PIN code	Telephone		E mail	Website address & No. of visitors (hits)
	Office	FAX		
Senior Scientist and Head Krishi Vigyan Kendra, Junagadh Agricultural University, Keriya Road, Model farm, Amreli (Gujarat)-365601	02792 227122		kvkamreli@gmail.com	www.jau.in

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

Address	Telephone		E mail	Website address
	Office	FAX		
Junagadh Agricultural University, Agril. Campus, Motibaugh, Junagadh-362001 (Gujarat)	0285 2672080-90	0285 2672004 2672653	-----	www.jau.in

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. N. S. Joshi Ph.D, Horticulture	02792 227122	9428191963	nileshjoshi2207@gmail.com

1.4. Date and Year of sanction: Deputy Secretary, ICAR, New Delhi, Letter No. 13-16/2003/1, Dt. 7.12.2004

1.5. Staff Position (as on December, 2021)

Sl. No.	Sanctioned post	Name of the incumbent	Mobile No.	Discipline	If Permanent, Please indicate		Date of joining
					Current Pay Band	Current Grade Pay	
1.	Senior Scientist and Head	Dr. N. S. Joshi	942819163	Horticulture	15600-39100	9000	24/03/2015
2.	Subject Matter Specialist	Dr. P. S. Jayswal	9427569468	Agriculture Engineering	15600-39100 G.P. 6000	6000	10/09/2012
3.	Subject Matter Specialist	Dr. N. Tiwari	9426047547	Home Science			01/04/2013
4.	Subject Matter Specialist	Mr. P. J. Prajapati	8460468032	Crop Production			31/03/2015
5.	Subject Matter Specialist	Mr. V. S.Parmar	9724926891	Extension Education			12/05/2016
6.	Subject Matter Specialist	Mr. N. M. Kachhadiya	9824059673	Plant Protection			-
7.	Subject Matter Specialist	Vacant	-	Animal Science	-	-----	-
8.	Programme Assistant	Ms. K. K Gadhiya	8140730726	Plant pathology	09300-34800	-----	30/07/2018
9.	Computer Programmer	Shri S .N. Joshi	9426554803	-	39900-126600	-----	01/07/2010
10.	Farm Manager	Mr. S. G Baria	9586218042	Agriculture	09300-34800	-----	30/07/2018
11.	Accountant/Superintendent	Shri H. J. Ravaliya	9429772244	-	39900-126600	-----	01/12/2011
12.	Stenographer	Vacant	-	-	-	-----	-
13.	Driver 1	Out sourcing	-	-	-	-----	-
14.	Driver 2	Out sourcing	-	-	-	-----	-
15.	Supporting staff 1	Out sourcing	-	-		-----	-
16.	Supporting staff 2	Vacant	-	-	-	-----	-

1.6. Total land with KVK (in ha):

S. No.	Item	Area (ha)
1	Under Buildings	3.50
2.	Under Demonstration Units	1.50
3.	Under Crops	12.50
4.	Orchard / Agro-forestry	0.50
5.	Others if any (Specify)	2.0
	Total	**20.00**

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage			
			Complete			Incomplete
			Completion Year	Plinth area (Sq. m)	Expenditure (Rs.)	
1.	Administrative Building	ICAR	2008	500	3190000	-----
2.	Farmers Hostel	ICAR	2008	305	2088000	
3.	Staff Quarters (6)	ICAR	2008	400	3204000	
4.	Farm Wall	ICAR	2008	-	-	
5.	RWH system	ICAR	2008	-	960000	
6.	Threshing yard	ICAR	2009	-	-	
7.	Godown and processing shed	RKVY	2009	70.62	500000	
8.	Poly House	RKVY	2010	320	281600	
9.	Net House	RKVY	2010	150	64450	
10.	Training hall	RKVY	2010	190.99	1396300	

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms Running	Present status
M&M, Bolero XL	2006	4,86,500	33132	Condition is not good
Tractor	2005	3,80,000	---	
Motor Cycle	2010	42,831	23569	Working condition
Power Tiller with implements	2011	1,42,000	---	
Mini Tractor with implements	2014	3,74,820	---	
M&M, Bolero XL	2020	7,81,025	303697	

C) Equipments& AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Digital camera	2008-09	11070	Working condition
Air assisted blast type sprayer	2008-09	98750	Working condition
Vacuum cleaner, RO, water cooler	2008-09	41780	Working condition
Samsung A/C, Nos.-2	2008-09	47300	Working condition
Fax machine	2008-09	17500	Working condition

LCD projector	2008-09	98799	Working condition
Winnowing fan	2008-09	8500	Working condition
Chaff cutter	2008-09	30188	Working condition
Plasma TV, Nos.-2 (21 and 52”)	2008-09	139952	Working condition
Cotton stock shredder-Nos.-3	2008-09	363000	Working condition
Spiral binding machine	2008-09	9090	Working condition
Rotavator with cultivator, Nos.-2	2008-09	180000	Working condition
Inverter	2008-09	19800	Working condition
Manually operated seed dressing drum	2008-09	20930	Working condition
Exhibition display	2008-09	39974	Working condition
Decorticator groundnut machine	2008-09	98850	Working condition
Cotton shredder, Nos.-2	2008-09	242000	Working condition
Battery operated sprayer	2008-09	4940	Working condition
Aspee knapsack sprayer	2008-09	7400	Working condition
Bullock drawn pipe farm seed drill	2008-09	161000	Working condition
Zero till drill	2008-09	66725	Working condition
Bullock drawn clod breaker	2008-09	52000	Working condition
Tractor operated groundnut digger	2008-09	235500	Working condition
Multipurpose thresher (engine operated)	2008-09	114000	Working condition
Mobile seed processing unit	2008-09	1685000	Working condition
Electronic balance	2008-09	19425	Working condition
Power generated	2008-09	49500	Working condition
RO system	2008-09	24450	Working condition
Air condition Nos.-2	2008-09	51580	Working condition
Air condition, Nos.-3	2008-09	89970	Working condition
Photo copier	2008-09	124000	Working condition
LCD and accessories	2008-09	103912	Working condition
Oven and freeze	2008-09	30605	Working condition
Tractor drawn harrow cum cultivator	2008-09	75000	Working condition
Planter	2008-09	44000	Working condition
Rotavator	2008-09	96000	Working condition
Laptop	2008-09	47500	Working condition
Pipe frame blade harrow piece	2008-09	11000	Working condition
Solar equipments	2008-09	81830	Working condition
Gas connection for lab.	2009-10	9700	Working condition
Digital Sony Camera	2009-10	24750	Working condition
Post Whole Digger	2009-10	38000	Working condition
Motor, 1 Hp	2009-10	8650	Working condition
Power Generator	2009-10	45576	Working condition
Multi Crop thresher	2010-11	38000	Working condition
BOD incubator	2010-11	75863	Working condition
Compound light microscope	2010-11	90851	Working condition
Motor 7.5 Hp	2010-11	28600	Working condition
Motor 5 Hp	2010-11	17000	Working condition
Desktop Computer	2010-11	34810	Working condition
Hot air Oven	2010-11	15215	Working condition
Hot plate	2010-11	4725	Working condition

Physical Balance	2010-11	3623	Working condition
Refrigerator	2010-11	19200	Working condition
PH meter	2010-11	3990	Working condition
Conductivity bridge	2010-11	9450	Working condition
Chemical Balance	2010-11	45066	Working condition
Shaker-2 no.	2010-11	49000	Working condition
Flame Photometer	2010-11	44887	Working condition
Spectrophotometer	2010-11	39480	Working condition
Water Distillation Still	2010-11	157500	Working condition
Seed Drill	2010-11	27500	Working condition
Winnower	2010-11	37000	Working condition
Disc Plow	2012-13	30400	Working condition
Disc Harrow	2012-13	37500	Working condition
Nine tine Cultivator	2012-13	19600	Working condition
PC with Accessories (2 No.)	2013-14	65970	Working condition
Printer (2 No.)	2013-14	13898	Working condition
Scanner	2013-14	4309	Working condition
PC with Accessories (2 No.)	2015-16	77590	Working condition
Printer	2015-16	11900	Working condition
Rotavator (NICRA)	2015-16	70000	Working condition
Mobile shredder(NICRA)	2015-16	146000	Working condition
Chaff cutter(NICRA)	2015-16	57000	Working condition
Multi crop thresher(NICRA)	2015-16	155000	Working condition
Rear mounted reaper (NICRA)	2015-16	95000	Working condition
Digital Camera	2016-17	14400	Working condition
Desktop Computer	2016-17	34115	Working condition
Printer	2016-17	12546	Working condition
Automatic seed cum fertilizer drill(NICRA)	2016-17	66412	Working condition
Dibbler (03 nos.)	2016-17	6000	Working condition
Seed dressing drum (5 nos.) (NICRA)	2016-17	15000	Working condition
Rotavator (NICRA)	2016-17	89040	Working condition
Bund former (NICRA)	2016-17	13650	Working condition
Air conditioner (02 nos.)	2016-17	79980	Working condition
Desktop Computer	2016-17	34115	Working condition
Photo copier	2016-17	144391	Working condition
Integrated community computer	2016-17	110644	Working condition
Multi crop thresher	2017-18	187040	Working condition
Computer with UPS	2017-18	42889	Working condition
Computer with UPS (2 Nos.)	2018-19	88400	Working condition
Printer	2018-19	11416	Working condition
UPS (2 Nos.)	2018-19	9000	Working condition
Bolero Jeep	2019-20	781025	Working condition
MB Plough (NICRA)	2019-20	33143	Working condition
Designer table (2 Nos.) (DAMU)	2019-20	32000	Working condition
Almirah (DAMU)	2019-20	13000	Working condition
Revolving chair (2 Nos.) (DAMU)	2019-20	24998	Working condition

Desktop computer (DAMU)	2019-20	42532	Working condition
UPS (2 nos.) (DAMU)	2019-20	3598	Working condition
Printer (DAMU)	2019-20	21110	Working condition
Flamephotometer	2020-21	52255	Working condition
Spectrophotometer	2020-21	285000	Working condition
pH meter	2020-21	24499	Working condition
Keyboard	2021-22	2650	Working condition
Hard disk (2 nos.)	2021-22	8900	Working condition
Smart television	2021-22	149512	Working condition
Galvanized steel sheet (6 nos.)	2021-22	17100	Working condition
DSLR camera	2021-22	66750	Working condition
Outdoor watertank (5000 liter capacity)	2021-22	36000	Working condition
Ceiling fan (5 nos.)	2021-22	9605	Working condition
Mini dal mill (2 nos.) (ARYA)	2021-22	290290	Working condition
Flour mill kit (2 nos.) (ARYA)	2021-22	99396	Working condition

1.8. Details of SAC meeting conducted in the year:

Sr. No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken
1	02/02/2021	Dr. V. P. Chovatia I/c Hon'ble Vice Chancellor, Junagadh Agricultural University, Junagadh	1. To Proceed for GI tag of "*Babarkot no Bajro"* (Pearl millet).	Suggestion accepted and application is prepared. Rs. 90,000/- required for filling application.
			2. To register more varieties under Protection of Plant Varieties and Farmers' Rights Act.	Suggestion accepted and "Badhada Na Ringna" sample was send for check. Rs. 1,50,000/- required for seed sample check process.
			3. To make register of uncertain climatic condition under DAMU project.	Suggestion accepted and Register of uncertain climatic condition under DAMU project is being maintain.
			4. To arrange training on market intelligence.	Suggestion accepted and Total 2 training programme with no. of participants 68 were organized.
			5. To arrange bakery training programme for male farmers.	Suggestion accepted and It will be schedule to arrange in March month.
			6. To arrange soil heath training.	Suggestion accepted and training were conducted during 10/08/2021, 10/2/2021, 27/07/2021, 22/09/21 with total no. of participants -306
			7. To increase number of popular articles.	Suggestion accepted and total 05 Article were published in different magazine related to agriculture

			8. To convert Drudgery reduction OFT of Home Science subject to FLD.	Suggestion accepted OFT of Home Science subject on Drudgery reduction is converted in to FLD
			9. Accountability of FLDs.	Suggestion accepted and accountability of FLDs was done
2		Dr. H. M. Gajipara, Director of Extension Education, JAU, Junagadh	1. To arrange training on IFS.	Suggestion accepted and 4 training programme on IFS were Organized Dated-30/11/2021, 1-2 and 18/12/2021 with total no. of participants 129.
			2. To maintain FLD observations register.	Suggestion accepted and FLD observations register was properly maintained
			3. Documentation of success stories.	Suggestion accepted and 110 success story were prepared and documented by all the SMS of KVK, Amreli
			4. To do pre and post evaluation of training.	Suggestion accepted and pre and post evaluation of training was done after training
			5. To upload all activities of KVK in website and KVK portal.	Suggestion accepted and all activities of KVK were upload regularly in website and KVK portal.
3		Dr. V. N Gohil, Research Scientist , Agricultural Research station, JAU, Amreli	1. To take Sesame variety of GT-6 in intercropping	Suggestion accepted and we demanded GT-6 variety for intercropping but mega seed does not allow GT-6 for FLD

2. DETAILS OF DISTRICT / JURISDICTION AREA OF KVK

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

S. No	Farming system/enterprise
1	Dry Farming
2	Rainfed : Cotton, Groundnut, Sesame, Black gram, Green gram, Mango, Onion
3	Agriculture – Horticulture (Mango)
4	Agriculture – Dairy
5	Agriculture – Fisheries
6	Cotton based cropping system
7	Groundnut based cropping system
8	Sesame based cropping system
9	Enterprise: Poultry, Fishery, Dairy, Sericulture, Vermicompost

2.2. Description of Agro-climatic Zone & major agro ecological situations

a) Soil type

S. No.	Agro-climatic Zone	Characteristics
1.	North Saurashtra Agro climatic Zone VI	Medium black soil, coastal alluvial soil, rocky soil and alkaline soil
		The climate of the district varies from moderately hot throughout the year except in winter. The climate is humid along with the coastal belt. The temperature varies from 8.01° C in January to 43.7° C in May. The average rainfall of last three years is 706 mm.

b) Topography

S. No.	Agro ecological situation	Characteristics
1	Medium black soil with 400-700 mm rainfall	-
2	Shallow black soils with 600-700 mm rainfall	-
3	Saline - alkali (Heavy texture) soils with 500-600 mm rainfall	Saline groundwater
4	Hilly soils with 300-600 mm rainfall	Well drained soils
5	Coastal alluvial soil with medium rainfall 750-1000 mm.	Saline groundwater

2.3 Soil Types

S. No	Soil type	Characteristics
1	Medium black	Major portion of the district is covered by the medium black soil, which is considered very productive. It is rich in lime, magnesia and alumina but poor in phosphorus, nitrogen and organic matters. It can retain considerable moisture and is much suitable for agriculture.
2	Coastal alluvial	The coastal alluvial soil is found on the coastal areas of Jafrabad and Rajula. Among the whole of the coastal areas, the land is sandy. However, the soils in Rajula and Jafrabad are less productive as they are saline. The soils in the northern part of the district including Babra and parts of Kunkavav Vadia and Dhari talukas are shallow and rocky. Certain areas in Amreli taluka known as Kharapat are poor in cultivation; but this taluka possesses the best land along the north and the south banks of the Shetrunji.
3	Rocky soils	The soil of Dhari taluka is lighter and near the Gir forest redder. The soil on the southern part of the district is light in colour with only few fertile gradients, and in many places, it is rocky and barren.
4	Medium black	Major portion of the district is covered by the medium black soil, which is considered very productive. It is rich in lime, magnesia and alumina but poor in phosphorus, nitrogen and organic matters. It can retain considerable moisture and is much suitable for agriculture.

2.4. Area, Production and Productivity of major crops cultivated in the area of jurisdiction of KVK (year 2019-20)

Sr. No.	Crop	Area (ha)	Production (MT)	Productivity (kg/ha)
1	Tur	1595	3068	1923.20
2	Wheat	23655	95742	4047.44
3	Gram	18525	38608	2084.12
4	Groundnut	112834	349158	3094.44
5	Sesamum	40	20	511.74
6	Castor	656	849	1294.40
7	Irrigated Cotton (Lint)	137703	607556 (bales)	750.05 (lint)
8	Unirrigated Cotton (Lint)	264961	859432 (bales)	551.42 (lint)
9	Cumin	4183	3259	779.00
10	Onion	6118	239584	39160.46
11	Garlic	1084	8566	7902.40
12	Bajra	2238	5020	2243.14
13	Udad	1159	2046	1765.20
14	Math	26	12	461.82
15	Sugarcan	9	648	72000
16	Mung	1887	1212	642.12

Source: Source: District wise Area, Production and Yield of Important Food & Non-food crops in Gujarat State Year: 2017-18, 2018-19 & 2019-20. https://dag.gujarat.gov.in/

Area and Production Horticultural crops cultivated in the district

S. No.	Crop	Area (ha)	Production (M.T.)	S. No.	Crop	Area (ha)	Production (M.T.)
1	Mango	6479	52869	16	Tomato	1931	44413
2	Chiku	470	3675	17	Cauliflower	520	7020
3	Citrus	758	8391	18	Cluster bean	1341	107228
4	Ber	181	1365	19	Cow Pea	919	14557
5	Banana	65	2552	20	Cucurbits	2972	27245
6	Guavava	279	2268	21	Cumin	5300	3816
7	Pomegranate	104	499	22	Chilli-Dry	376	846
8	Papaya	36	1368	23	Garlic	922	6675
9	Custard Apple	53	451	24	Coriander	10200	15096
10	Aonla	32	332	25	Ginger	4	69
11	Coconut	121	981	26	Turmeric	29	493
12	Onion	9800	249900	27	Fenugreek	29	48
13	Brinjal	1334	24012	28	Ajwain	256	230
14	Cabbage	869	17554	29	Rose	29	205
15	Okra	1369	12321	30	Marigold	12	86

District wise Estimated Area & Production Of Horticultural Crops for the year: 2020-21.

2.5. Weather data (2021)

Month	Rainfall (mm)	Temperature (^{0} C)		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
January	0	29	12	68	27
February	0	33	16	64	22
March	0	38	20	63	15
April	2.5	41	24	74	11
May	129.5	40	26	84	25
June	95.5	37	27	89	42
July	172.5	34	26	93	60
August	199	33	25	96	59

September	319.5	31	25	100	74
October	1	35	23	90	40
November	3.8	33	19	64	31
December	3.2	28	15	76	40
Total	**926.5**	**412**	**258**	**961**	**446**

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

Category	Population	Production (Tone)	Productivity
Cattle			
Crossbreed	4000	10000	6.79 kg/day
Indigenous	137900	167590	3.32 kg/day
Buffalo	1375	188200	3.73 kg/day
Goats	1050	11380	0.296 kg/day
Poultry			
Hens (*Crossbred)*	00	00	00
Desi	4400	5.80 lakh	132.53/season/year/layer
Category		Production (Q.)	Productivity
Fish (Reservoir)	---	---	-----

Source: *37th issue on estimates of major livestock products for the year 2019-20, Gujarat state*

2.7. Details of Operational area / Villages

Taluka / Block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Liliya	Hathigadh	Groundnut, Cotton, Sesamum, Wheat, Cumin, Chickpea, Garlic, Onion, Mango, lemon Enterprises are dairy business, vermi composting	Heavy infestation of sucking pest in cotton, Sesame leaf blight, Stem rot disease in Groundnut, Mango Malformation, Less area under Horticultural crops	• IPM and INM in major crops of this area. • Motivate the farmers for arid Horticultural crops. • To create the awareness for grading. • Processing and marketing (value addition)
Amreli	Jasvantgadh			
Amreli	Randhiya			
Khambha	Ingorala			
Kukavav	Devgam			
Amreli	Rikadiya			
Babra	Kuvargadh			
Savakundla	Ramgadh			
Savakundla	Dhajadi			
Babra	Jambarvada			
Kukavav	Khadkhad			
Bagasra	Rafala			
Babara	Sukhpar			
Dhari	Fachariya			
Lathi	Sekhpipariya			

2.8. Priority thrust areas:

Sr. No.	Crop/ Enterprise	Thrust area
1.	Cotton, Groundnut, Castor, Cumin, Wheat, vegetables, fruits, etc.	Integrated Crop Management in major crops
2.	Farm waste	Recycling of farm waste through composting, vermin compost, green manuring, etc.
3.	Micro irrigation	Efficient use of water by micro irrigation system, water harvesting structure, and water conservation techniques
4.	Soil	Reclamation of saline & alkaline soils
5.	Farm Women	Farm women empowerment by training in value addition, handicrafts, and small scale enterprises
6.	Horticulture	Promotion of arid horticulture fruit crops
7.	Improved Implements	Popularization of the mechanized technological

3. TECHNICAL ACHIEVEMENTS

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

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
6	6	20	20	10	10	100	100

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
69	120	2690	5162	58	1358	500	8814

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
-	152.25	1500	12160

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

3.1. B. Operational areas details during 2021

Sr. 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	Intervention (OFT, FLD, Training, extension activity etc.)*
1.	Groundnut, Cotton, Sesamum, Wheat, Cumin, Chickpea, Garlic, Onion, Mango, lemon Enterprises are dairy business, vermi composting,	Heavy infestation of sucking pest in cotton, Sesame leaf blight, Stem rot disease in Groundnut, Mango Malformation, Less area under Horticultural crops	Every village of this district is facing problem.	Hathigadh	• IPM and INM in major crops of this area, • Motivate the farmers for arid Horticultural crops. • To create the awareness for grading, processing and marketing (value addition) • Various OFT, FLD, trainings, extension activities were carried out.
2.				Jasvantgadh	
3.				Randhiya	
4.				Ingorala	
5.				Devgam	
6.				Rikadiya	
7.				Kuvargadh	
8.				Ramgadh	
9.				Dhajadi	
10.				Jambarvada	
11.				Khadkhad	
12.				Rafala	
13.				Sukhpar	
14.				Fachariya	
15.				Sekhpipariya	

* Support with problem-cause and interventions diagram

3.2. Technology Assessment (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	Others	TOTAL
Integrated Nutrient Management	1										1
Integrated Pest Management		2									2
Integrated Crop Management				1							1
Resource Conservation Technology						1					1
Storage Technique			1								1
Total	**1**	**2**	**1**	**1**		**1**				**1**	**6**

A2. Abstract on the number of technologies assessed in respect of livestock enterprises: NIL
B. Achievements on technologies Assessed
B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	No. of farmers	Area in ha
Integrated Nutrient Management	Wheat	Effect of zinc on growth and yield of wheat	5	5	1.0
Integrated Pest Management	Groundnut	Management of white grub in Groundnut	3	3	0.6
	Sesame	Management of leaf Webber in Sesame	3	3	0.6
Integrated Crop Management	Cotton	High Density Planting in Cotton	3	3	0.4
Resource Conservation Technology	Watermelon	Effect of plastic mulch on yield of watermelon.	3	3	0.6
Storage Technique	Pigeonpea, Green gram	Preservation techniques of different pulses with organic methods	3	3	-
Total			20	20	3.2

B.2. Technologies assessed under Livestock and other enterprises: NIL

C. 1.Results of Technologies Assessed

Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Wheat	Irrigated	Farmers do not use Zinc	Effect of zinc on growth and yield of wheat	5	Farmers' practices: Use only DAP and Urea in various dose (Farmers Practices)	Yield (q/ha)	44.03	Intervention of zinc with RDF increases yield	Increased the yield and quality of seeds	-	-
					Recommended Practice:120-60-60 NPK kg/ha (Recommended Practices)		47.43				
					Intervention: 120-60-60 NPK kg/ha+$ZnSO_4$ @ 20 kg/ha as basal dose and foliar spray of $ZnSO_4$ @ 0.5% at heading and milking stage (Intervention)		51.08				
Cotton	Rainfed	Farmers do not adopt closer	High Density Planting in Cotton	3	Farmers' practices:120 X 45-60 cm (18519-13888 plants/ha)	Yield (q/ha)	17.5	As compare to treatmen	High density with de-topping gave better		

		planting, there for get low cotton yield due to less soil moisture and incidenc e of pest and disease.			Recommended Practice : 90 X 30 cm (37037 plants/ha) (Var. GTHH-49 (bt))	Yield (q/ha)	20.5	ts T1 and T2 producti on of cotton higher in treatmen t T3	yield		
					Intervention: T2 + De-topping at 75 DAS (Var. GTHH-49 (bt))	Yield (q/ha)	24.5				
Sesame	Rainfed	Injudicious use of pesticides	Management of leaf Webber in Sesame	3	T1: Farmers' practices: High dose and Use of conventional Chemical pesticides (Farmers Practices- Monocrotophos 50 ml, fenvalrate 20 to 25 ml and cypermathrin 20 to 25 ml/ 15 lit. of water)	Yield (q/ha)	3.4	As compare to T1 treatment production of higher in treatment T2 (But 60-70% reductio n in producti on due to heavy Rainfall)	Increase in production in treatment T2 because of judicious use of recommend ed dose of pesticideas compare to treatment T1 (But 80-90% reduction in productio n due to		
						No. of Larva per Plant /1mt. row length before spray	2.65				
						No. of Larva per Plant /1mt. row length after spray	1.70				
					T2 Spray of *Beuveria*	Yield (q/ha)	4.4				

					bassiana 75gm /10 lit + emamectin benzoate 5 SG 0.0035% (4g/10 lit. water) and 2nd spray at 15 days after 1st spray)	No. of Larva per Plant /1mt. row length before spray	2.55		heavy Rainfall)		
						No. of Larva per Plant /1mt. row length after spray	0.30				
Groundnut	Rainfed	No seed treatment & Soil application of bio pesticides	Management of white grub in Groundnut	3	T1: Farmers' practices: No Seed treatment and application of chlorpyriphos 4 lit/ha with irrigation water)	Yield (q/ha)	24.3	As compare to T1 treatment production higher in treatment T2			
						No. of Larva per Plant /1mt. row length before spray	2.45				
						No. of Larva per Plant /1mt. row length after spray	0.65				
					T2 : Seed treatment with	Yield (q/ha)	27.1				

					Chlorpyrifos 20 EC @ 25 ml/kg seed and Soil application of Metarhiziumanisopliae 1.15 WP @ 5 kg/ha along with Castor cake (300 kg/ha) before sowing and drenching in plant row after 30 days of germination	No. of Larva per Plant /1mt. row length before spray	-				
						No. of Larva per Plant /1mt. row length after spray	0.20				
Watermelon	Irrigated	Low yield potential of watermelon	Effect of plastic mulch on yield of watermelon	3	T1 (Farmers' practices): No mulch	Yield (q/ha)	213.2	Treatment T2 was found better than T1 and T3.	Plastic mulch treatment was found beneficial for insect reduction and fruit disease reduction		
						Per fruit weight	2.57				
					T2 (Recommended Practice): Silver Black Plastic Mulch (20 micron) under drip irrigation system	Yield (q/ha)	345.1				
						Per fruit weight	3.61				
					T3 (Technology assessed or Refined): Wheat straw mulch	Yield (q/ha)	220.7				
						Per fruit weight	2.66				

Farm woman	Irrigated	Lack of knowledge	Preservation techniques of different pulses with organic methods	3	T1. Use of Neem leaves	Pigeon pea	Infestation percent	11	T2 was found more suitable for storage of grains	-	-	-
						Green gram		9.1				
					T2. Use of Castor oil	Pigeon pea	Infestation percent	2.1				
						Green gram		1.95				
					T3. Use of plastic bag	Pigeon pea	Infestation percent	8.74				
						Green gram		6.8				
					T4.Without any treatment	Pigeon pea	Infestation percent	18.6				
						Green gram		23.1				

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
Farmers' practices:120 X 45-60 cm (18519-13888 plants/ha)	Cotton Research Station, JAU, Junagadh	17.5	q/ha	114350	4.66
Recommended Practice : 90 X 30 cm (37037 plants/ha) (Var. GTHH-49 (bt))		20.5	q/ha	130740	4.93
Intervention: T2 + De-topping at 75 DAS (Var. GTHH-49 (bt))		24.5	q/ha	159160	5.32
T1: Farmers' practices: High dose and Use of conventional Chemical pesticides (Farmers Practices- Monocrotophos 50 ml, fenvalrate 20 to 25 ml and cypermathrin 20 to 25 ml/ 15 lit. of water)	ARS, Amreli	3.4	q/ha	9912.1	1.59
T2 Spray of *Beuveria bassiana* 75gm /10 lit + emamectin benzoate 5 SG 0.0035% (4g/10 lit. water) and 2nd spray at 15 days after 1st spray)		4.4	q/ha	17769.6	2.09
T1: Farmers' practices: No Seed treatment and application of chlorpyriphos 4 lit/ha with irrigation water)	Dept. of Entomology, COA, JAU, Junagadh	24.3	q/ha	91654.0	3.53
T2 : Seed treatment with Chlorpyrifos 20 EC @ 25 ml/kg		27.1	q/ha	108130.3	4.13

seed and Soil application of Metarhiziumanisopliae 1.15 WP @ 5 kg/ha along with Castor cake (300 kg/ha) before sowing and drenching in plant row after 30 days of germination					
T1 (Farmers' practices): No mulch	Dept. of Renewable Energy and Rural Engg., CAET, JAU, Junagadh	213.2	q/ha	17694	1.39
T2 (Recommended Practice): Silver Black Plastic Mulch (20 micron) under drip irrigation system		345.1	q/ha	108205	2.68
T3 (Technology assessed or Refined): Wheat straw mulch		220.7	q/ha	31540	1.63
T1. Use of Neem leaves	IRRI-2011	-	-	-	-
T2. Use of Castor oil					
T3. Use of plastic bag					
T4.Without any treatment					

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

OFT – 1: Agronomy (Ongoing)

1) Title of technology: Effect of zinc on growth and yield of wheat

2) Problem Diagnosed/Defined: Farmers do not use Zinc

3) Detail of technologies selected for assessment/refinement

(1) Crop : Wheat

(2) Season/Year : Rabi 2019-20 to Rabi 2020-21

T1: (Farmers' practices)	1. Use only DAP and Urea in various dose (Farmers Practices)
T2 : (Recommended Practice)	2.120-60-60 NPK kg/ha (Recommended Practices)
T3 : (Intervention)	3.120-60-60 NPK kg/ha+$ZnSO_4$ @ 20 kg/ha as basal dose and foliar spray of $ZnSO_4$ @ 0.5% at heading and milking stage (Intervention)

(4) Source of technology : Main Dry Farming Research Station, JAU, Targhadia

(5) Production system thematic area : Irrigated

(6) Performance of the Technology with performance indicators

(7) Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques

(8) Final recommendation for micro level situation

(9) Constraints identified and feedback for research and developmental departments

(10) Process of farmers participation and their reaction

OFT -2: Agronomy (Ongoing)

1) Title of technology: High Density Planting in Cotton

2) Problem Diagnosed/Defined: Farmers do not adopt closer planting, there for get low cotton yield due to less soil moisture and incidence of pest and disease.

3) Detail of technologies selected for assessment/refinement

(1) Crop : Cotton

(2) Season/Year : Kharif 2017-18 to Kharif 2019-20

T1: (Farmers' practices)	120 X 45-60 cm (18519-13888 plants/ha)
T2 : (Recommended Practice)	90 X 30 cm (37037 plants/ha) (Var. G. cot-8 (bt)
T3: (Intervention)	T2 + De-topping at 75 DAS (Var. GTHH-49 (bt))

(4) Source of technology : Cotton Research Station, JAU, Junagadh

(5) Production system thematic area : Rainfed Farming

(6) Performance of the Technology with performance indicators

(7) Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques

(8) Final recommendation for micro level situation

(9) Constraints identified and feedback for research and developmental departments

OFT-3: Plant Protection (Ongoing)

1. Title of Technology Assessed: Management of leaf Webber in Sesame

2. Problem Definition: Injudicious use of pesticides

Details of technologies selected for assessment/refinement:

3. Details of technologies selected for assessment

Crop : Sesame

Season/ Year : Kharif -2019-20 to Kharif –2021-22

Spacing : 120 x 45 cm

T1	Farmer practices	Farmers' practices: High dose and Use of conventional Chemical pesticides (Farmers Practices- Monocrotophos 50 ml, fenvalrate 20 to 25 ml and cypermathrin 20 to 25 ml/ 15 lit. of water)
T2	Assessment/ refined Practices	Spray of Beuveriabassiana 75gm /10 lit + emamectin benzoate 5 SG 0.0035% (4g/10 lit. water) and 2nd spray at 15 days after 1st spray)

4. Source of technology:ARS, Amreli

5. Production system and thematic area : Rainfed Farming

6. Performance of the Technology with performance indicators

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques

8. Final recommendation for micro level situation Farmers shouldSpray of Beuveriabassiana 75gm /10 lit + emamectin benzoate 5 SG 0.0035% (4g/10 lit. water) and 2nd spray at 15 days after 1st spray)

9. Constraints identified and feedback for research

10. Process of farmers participation and their reaction

OFT -4: Plant Protection

1. Title of Technology Assessed:Management of white grub in Groundnut

2. Problem Definition : No seed treatment & Soil application of bio pesticides

Details of technologies selected for assessment/refinement:

3. Details of technologies selected for assessment

(1) Crop: Groundnut

(2) Season/ Year : Kharif -2019-20 to Kharif –2021-22

(3) Spacing : 45 x 10

T_1	Farmer practices	Farmers' practices: No Seed treatment and application of chlorpyriphos 4 lit/ha with irrigation water)
T_2	Assessment/refined Practices	Seed treatment with Chlorpyrifos 20 EC @ 25 ml/kg seed and Soil application of Metarhiziumanisopliae 1.15 WP @ 5 kg/ha along with Castor cake (300 kg/ha) before sowing and drenching in plant row after 30 days of germination

4. Source of technology: Dept. of Entomology, COA, JAU, Junagadh

5. Production system and thematic area: Rainfed Farming

6. Performance of the Technology with performance indicators

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques

8. Final recommendation for micro level situation Farmers should Seed treatment with Chlorpyrifos 20 EC @ 25 ml/kg seed and Soil application of Metarhiziumanisopliae 1.15 WP @ 5 kg/ha along with Castor cake (300 kg/ha) before sowing and drenching in plant row after 30 days of germination

9. Constraints identified and feedback for research:-

10. Process of farmers participation and their reaction:-

OFT -5: Agriculture Engineering (Ongoing)

Title of Technology Assessed: Effect of plastic mulch on yield of watermelon

2. Problem Definition: Low yield potential of watermelon.

Details of technologies selected for assessment/refinement:

3. Details of technologies selected for assessment

Crop : Watermelon

Season/ Year : Kharif -2019-20 to Kharif –2021-22

Spacing : 40 * 40 cm

T1	Farmer practices	No mulch
T2	Recommended Technology	Silver Black Plastic Mulch (20 micron) under drip irrigation system
T3	Assessment/ refined Practices	Wheat straw mulch

4. Source of technology: Dept. of Renewable Energy and Rural Engg., CAET, JAU, Junagadh

5. Production system and thematic area : Irrigated Farming

6. Performance of the Technology with performance indicators: Yield, Per fruit weight, C:B ratio

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques

8. Final recommendation for micro level situation: -

9. Constraints identified and feedback for research:-

10. Process of farmers participation and their reaction: Plastic mulch was found beneficial for watermelon.

OFT -6: Home Science (Ongoing)

1. Title of Technology Assessed: Preservation techniques of different pulses with organic methods

2. Problem Definition: Lack of knowledge

Details of technologies selected for assessment/refinement:

3. Details of technologies selected for assessment

Crop : Pigeon pea and green gram

Season/ Year : Kharif -2021 to Kharif –23

Spacing : -

T1	Farmer practices	T4.Without any treatment
T2	Recommended Technology	T3. Use of plastic bag
T3	Assessment/ refined Practices	T2. Use of Castor oil
T4		T1. Use of Neem leaves

4. Source of technology: IRRI-2011

5. Production system and thematic area: Storage Techniques

6. Performance of the Technology with performance indicators: Infestation percent

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:-

8. Final recommendation for micro level situation: -

9. Constraints identified and feedback for research:-

10. Process of farmers participation and their reaction: T2 was found more suitable for storage of grains

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

S. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1	Wheat	INM	INM	Trainings, demonstration, field days	4	10	4
2	Cumin	IDM	IDM	Trainings, demonstration, field days	7	10	4
3	Coriander	Variety	GC-2	Trainings, demonstration, field days	4	10	4
4	Sesame	Variety	GJT-5	Trainings, demonstration, field days	2	5	2
5	Black Gram	Variety	Guj. Urd-2	Trainings, demonstration, field days	3	10	4
6	Green Gram	Variety	GM-4	Trainings, demonstration, field days	4	10	4
7	Castor	Variety	GCH-9	Trainings, demonstration, field days	6	10	4
8	Cotton	Variety	INM	Trainings, demonstration, field days	5	10	4

B. Details of FLDs implemented during 2021

Sr. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration		
					Proposed	Actual	SC/ST	Others	Total
1	Castor	Varietal Evaluation	GCH-9	Kharif-21	4	4	2	8	10
2	Cotton	Nutrient	INM	Kharif-21	4	4	2	8	10
4	Wheat		INM	Rabi 20-21	4	4	2	8	10
5	Cumin	Disease Mgmt	IDM	Rabi 20-21	4	4	2	8	10
7	Coriander	Varietal Evaluation	GC-2	Rabi 20-21	4	4	2	8	10
8	Sesame		GT-3	Summer-21	4	4	2	8	10
9	Black Gram		Guj. Urd.-2	Summer-21	4	4	2	8	10
10	Green Gram		GM-6	Summer-21	4	4	2	8	10

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Castor	Kharif-21	Rainfed	M.Black	L	M	H	-	4th week of July to 2nd week of August-2021	Standing	926.5	37
Cotton	Kharif-21	Rainfed	M.Black	L	M	H	Wheat	3rd week of June to 1st week of July-2021	4th week of January to 2nd week of February-2022		
Wheat	Rabi 20-21	Irrigated	M.Black	L	M	H	Cotton	2nd week to 4th week of November-2021	3rd to 4th week of March 2021		
Cumin	Rabi 20-21	Irrigated	M.Black	L	M	H	Cotton	1st week to 2nd week of November-2021	1st to 2nd week of February-2021		
Coriander	Rabi 20-21	Irrigated	M.Black	H	M	M	Groundnut	1st week of November -2021	1st to 2nd week of February-2021		
Sesame	Summer-	Irrigated	M.Black	L	M	H	Wheat	2^{nd} to 4^{th}	3rd to 4th		

	21							week of February-2021	week of April2021		
Black Gram	Summer-21	Irrigated	M.Black	L	M	H	Groundnut	2nd to 3rd week of February-2021	2nd to 3rd week of April 2021		
Green Gram	Summer-21	Irrigated	M.Black	L	M	H	Cotton	2nd to 3rd week of February-2021	2nd to 3rd week of April2021		

Farmers' reactions on specific technologies

S. No	Feed Back
1	INM in Cotton: Application of micronutrients and bio fertilizers increased the yield and quality of cotton
2	Gujarat Coriander – 2: High prodution and good quality of seed
3	INM in wheat: High yield and good quality
4	IDM in cumin: Less incidance of diseases
5	GM-6:High yield and good quality
6	Gujarat Urad – 2:High yield and good quality
7	Gujarat Til – 3:High yield and bold seed

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Number of participants
1	Field days	10	11
2	Farmers Training	01	25
3	Media coverage	4	-
4	Training for extension functionaries	-	-

C. Performance of Frontline demonstrations

Frontline 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										
Sesamum	Variety introduction	Variety	Gujarat Til-3	10	4	12.2	10.7	12.21	10.68	14.33	22878.4	109890	87011.6	4.80	22175	85440	63265	3.85

Frontline demonstration on pulse crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Blackgram	Variety introduction	Variety	Gujarat Urad-2	10	4	-	-	9.736	8.43	15.49	19523	38944	19421	1.99	19033	32034	13001	1.68
Greengram	Variety introduction	Variety	GM-6	10	4	-	-	8.58	7.48	14.71	21198.4	55770	34571.6	2.63	21615	41140	19525	1.90

FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average												
Cereals																			
Wheat Timely sown	INM in wheat	INM	10	4	-	-	49.12	42.696	15.05	-	-	29295.6	103152	73856.4	3.52	28187.6	85392	57204.4	3.03
Vegetables																			
Coriender	Variety introduction	Gujarat Coriander-2	10	**4**	-	-	11.87	10.03	18.34	-	-	23378.4	59350	35971.6	2.54	21548	45135	23587	2.09
Spices & condiments																			

Cumin	IDM in Cumin	IDM	10	4	-	-	8.86	7.62	16.27	-	-	21053.5	109421	88367.5	5.20	20693.5	86868	66174.5	4.20
Commercial Crops																			
Cotton	INM in cotton	BG-II Private	10	4	-	-	12.2	11	10.91	-	-	30682	109800	79118	3.58	32400	82200	49800	2.54

FLD on Farm Implements and Machinery

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit etc.)			
						Demo	Check		Land preparation	Sowing	Weeding	Total	Land preparation	Labour	Irrigation	Total
Milking Stool	-	Milking stool use	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton shredder	Cotton	Waste management	10	4	-	-	-	-	-	-	-	-	-	-	-	-

FLD on Demonstration details on crop hybrids

Crop	technology demonstrated	Hybrid Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average						
Castor	Varietal Evaluation	GCH-9	10	4	-	-	28.24	27.79	14.30	30950	1,35,571	1,04,621	4.38

3.4. Training Programmes (Online programmes if any should be included under On Campus category)

Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Organic farming	2	54	0	54	0	0	0	54	0	54
Balance use of fertilizers	1	21	0	21	0	0	0	21	0	21
Integrated nutrient management	2	120	20	140	12	0	12	132	20	152
Balance use of fertilizers	1	25	5	30	0	0	0	25	5	30
Soil and Water Testing	1	30	8	38	5	0	5	35	8	43
Fertilizer Management	1	35	0	35	0	0	0	35	0	35
Quality Seed Production	1	60	0	60	0	0	0	60	0	60
Urban horticulture	1	30	30	60	0	0	0	30	30	60
Agro forestry	1	100	20	120	0	0	0	100	20	120
Total	**11**	**475**	**83**	**558**	**17**	**0**	**17**	**492**	**83**	**575**
II Horticulture										
a) Vegetable Crops										
Nursery raising	1	20	00	20	06	00	06	26	00	26
Total (a)	1	20	00	20	06	00	06	26	00	26
b) Fruits										
Layout and Management of Orchards	1	42	10	52	04	03	07	45	14	59
Total (b)	1	42	10	52	04	03	07	45	14	59
Grand Total (a to g)	**2**	**62**	**10**	**72**	**10**	**3**	**13**	**71**	**14**	**85**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	01	00	46	46	00	10	10	00	56	56

Design and development of low/minimum cost diet	01	00	25	25	00	00	00	00	25	25
Value addition	03	00	74	74	00	00	00	00	74	74
Location specific drudgery reduction technologies	01	00	52	52	00	08	08	00	60	60
Women and child care	02	00	43	43	00	00	00	00	43	43
Others (pl specify) income generation activities for empowerment of rural women	04	00	112	112	00	00	00	00	112	112
Value Addition of millets	2	00	30	30	00	00	00	00	30	30
Value Addition of fruits and vegetables	1	00	50	50	00	00	00	00	50	50
Bakery products development	1	00	29	29	00	00	00	00	29	29
Value Addition of fruits and vegetables	1	00	50	50	00	00	00	00	50	50
Value Addition of fruits and vegetables	1	00	25	25	00	00	00	00	25	25
Total	**18**	**0**	**536**	**536**	**0**	**18**	**18**	**0**	**554**	**554**
VI Agril. Engineering										
Farm Machinery and its maintenance	2	27	33	60	7	5	12	34	38	72
Installation and maintenance of micro irrigation systems	1	40	18	58	0	2	2	40	20	60
Use of Plastics in farming practices	1	0	28	28	0	0	0	0	28	28
Small scale processing and value addition	1	0	26	26	0	0	0	0	26	26
Post Harvest Technology	1	0	2	2	0	18	18	0	20	20
Groundwater recharge	1	40	18	58	0	2	2	40	20	60

Soil & Water Conservation	1	25	0	25	0	0	0	25	0	25
Green house & net house	2	61	31	92	3	0	3	64	31	95
Drainage importance	1	0	29	29	0	0	0	0	29	29
Micro Irrigation System	1	40	20	60	0	0	0	40	20	60
Rainwater harvesting methods	1	00	30	30	0	0	0	00	30	30
Fruit Plants	1	0	37	37	0	0	0	0	37	37
Total	**14**	**233**	**272**	**505**	**10**	**27**	**37**	**243**	**299**	**542**
VII Plant Protection										
Integrated Pest Management	1	26	0	26	3	0	3	29	0	29
Integrated Disease Management	1	22	0	22	0	0	0	22	0	22
Bio-control of pests and diseases	1	50	11	61	0	0	0	50	11	61
Production of bio control agents and bio pesticides	1	55	0	55	0	0	0	55	0	55
Honeybee farming	1	106	80	186	0	0	0	106	80	186
Total	**5**	**259**	**91**	**350**	**3**	**0**	**3**	**262**	**91**	**353**
X CapacityBuilding and Group Dynamics										
Entrepreneurial development of farmers/youths	2	50	0	50	5	0	5	55	0	55
WTO and IPR issues										
Integrated crop management	1	34	0	34	0	0	0	34	0	34
Capacity building for ICT application	1	29	5	34	0	0	0	29	5	34
Total	**4**	**113**	**5**	**118**	**5**	**0**	**5**	**118**	**5**	**123**
GRAND TOTAL	**54**	**1142**	**997**	**2139**	**45**	**48**	**93**	**1186**	**1046**	**2232**

Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Organic farming	3	252	89	341	0	0	0	252	89	341
Soil and Water Testing	1	70	15	85	0	0	0	70	15	85
Integrated nutrient management	2	65	25	90	0	0	0	65	25	90
Total	**6**	**387**	**129**	**516**	**0**	**0**	**0**	**387**	**129**	**516**
II Horticulture										
a) Vegetable Crops										
Nursery raising	1	20	00	20	06	00	06	26	00	26
Total (a)	**1**	**20**	**00**	**20**	**06**	**00**	**06**	**26**	**00**	**26**
b) Fruits										
Layout and Management of Orchards	1	42	10	52	04	03	07	45	14	59
Total (b)	**1**	**42**	**10**	**52**	**04**	**03**	**07**	**45**	**14**	**59**
Grand Total (a to g)	**2**	**62**	**10**	**72**	**10**	**3**	**13**	**71**	**14**	**85**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	02	00	56	56	00	03	03	00	59	59
Design and development of low/minimum cost diet	01	00	25	25	00	00	00	00	25	25
Minimization of nutrient loss in processing	01	06	21	27	00	00	00	06	21	27
Gender mainstreaming through SHGs	02	00	71	71	00	10	10	00	81	81
Value addition	01	00	20	20	00	02	02	00	22	22
Women empowerment	01	00	42	42	00	06	06	00	48	48
Location specific drudgery reduction technologies	02	00	40	40	09	22	31	09	62	71
Women and child care	02	00	43	43	00	00	00	00	43	43

Others (pl specify)	02	00	70	70	00	04	04	00	74	74
Total	**14**	**6**	**388**	**394**	**9**	**47**	**56**	**15**	**435**	**450**
VI Agril. Engineering										
Farm Machinery and its maintenance	1	0	51	51	0	0	0	0	51	51
Installation and maintenance of micro irrigation systems	2	14	61	75	0	0	0	14	61	75
Soil & water conservation	2	4	67	71	0	0	0	4	67	71
Repair and maintenance of farm machinery and implements	1	2	23	25	0	0	0	2	23	25
Small scale processing and value addition	1	0	22	22	0	0	0	0	22	22
Protected cultivation technology	6	110	59	169	9	18	27	119	77	196
Rainwater harvesting, drainage system	3	6	91	97	0	0	0	6	91	97
Natural Farming and Engg.	1	0	25	25	0	0	0	0	25	25
Total	**17**	**118**	**220**	**338**	**9**	**18**	**27**	**127**	**238**	**365**
VII Plant Protection										
Integrated Pest Management	1	29	18	47	0	0	0	29	18	47
Integrated Disease Management	1	55	0	55	0	0	0	55	0	55
Bio-control of pests and diseases	1	57	0	57	0	0	0	57	0	57
Production of bio control agents and bio pesticides	1	70	0	70	0	0	0	70	0	70
Cow based rakrutic shibir on pest management	2	173	0	173	0	0	0	173	0	173
Pest and disease management in oilseed crops	3	150	0	150	0	0	0	150	0	150
Total	**9**	**534**	**18**	**552**	**0**	**0**	**0**	**534**	**18**	**552**
X Capacity Building and Group Dynamics										
Leadership development	1	58	0	58	0	0	0	58	0	58
Organic farming	4	161	6	167	0	0	0	161	6	167
Total	**5**	**219**	**6**	**225**	**0**	**0**	**0**	**219**	**6**	**225**
GRAND TOTAL	**53**	**1326**	**771**	**2097**	**28**	**68**	**96**	**1353**	**840**	**2193**

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

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Organic farming	5	306	89	395	0	0	0	306	89	395
Balance use of fertilizers	2	46	5	51	0	0	0	46	5	51
Integrated nutrient management	4	277	55	332	12	0	12	289	55	344
Soil and Water Testing	2	125	28	153	5	0	5	130	28	158
Fertilizer Management	1	35	0	35	0	0	0	35	0	35
Quality Seed Production	1	60	0	60	0	0	0	60	0	60
Urban horticulture	1	30	30	60	0	0	0	30	30	60
Agro forestry	1	100	20	120	0	0	0	100	20	120
Total	**17**	**979**	**227**	**1206**	**17**	**0**	**17**	**996**	**227**	**1223**
II Horticulture										
a) Vegetable Crops										
Nursery raising	2	40	00	40	12	00	12	52	00	52
Total (a)	**2**	**40**	**00**	**40**	**12**	**00**	**12**	**52**	**00**	**52**
b) Fruits										
Layout and Management of Orchards	2	84	20	104	08	06	14	92	26	118
Total (b)	**2**	**84**	**20**	**104**	**08**	**06**	**14**	**92**	**26**	**118**
Grand Total (a to g)	**4**	**124**	**20**	**144**	**20**	**6**	**26**	**144**	**26**	**170**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	03	00	102	102	00	13	13	00	115	115
Design and development of low/minimum cost diet	02	00	50	50	00	00	00	00	50	50
Minimization of nutrient loss in processing	01	06	21	27	00	00	00	06	21	27
Processing and cooking										

Gender mainstreaming through	02	00	71	71	00	10	10	00	81	81
Value addition	04	00	94	94	00	02	02	00	98	98
Women empowerment	01	00	42	42	00	06	06	00	48	48
Location specific drudgery reduction technologies	03	00	92	92	00	30	39	09	122	131
Women and child care	04	00	86	86	00	00	00	00	86	86
Others (pl specify) income generation activities for empowerment of rural women	06	00	182	182	00	04	04	00	186	186
Value Addition of millets	2	00	30	30	00	00	00	00	30	30
Value Addition of fruits and vegetables	1	00	50	50	00	00	00	00	50	50
Bakery products development	1	00	29	29	00	00	00	00	29	29
Value Addition of fruits and vegetables	1	00	50	50	00	00	00	00	50	50
Value Addition of fruits and vegetables	1	00	25	25	00	00	00	00	25	25
Total	**32**	**6**	**924**	**930**	**0**	**65**	**74**	**15**	**991**	**1006**
VI Agril. Engineering										
Farm Machinery and its maintenance	3	27	84	111	7	5	12	34	89	123
Installation and maintenance of micro irrigation systems	3	54	79	133	0	2	2	54	81	135
Soil & Water Conservation	3	29	67	96	0	0	0	29	67	96
Repair and maintenance of farm machinery and implements	1	2	23	25	0	0	0	2	23	25
Small scale processing and value addition	2	0	48	48	0	0	0	0	48	48
Protected cultivation technology	6	110	59	169	9	18	27	119	77	196
Rainwater harvesting, drainage system	3	6	91	97	0	0	0	6	91	97
Post Harvest Technology	1	0	2	2	0	18	18	0	20	20

Groundwater recharge	1	40	18	58	0	2	2	40	20	60
Green house & net house	2	61	31	92	3	0	3	64	31	95
Drainage importance	1	0	29	29	0	0	0	0	29	29
Natural Farming and Engg.	1	0	25	25	0	0	0	0	25	25
Use of Plastics in farming practices	1	0	28	28	0	0	0	0	28	28
Micro Irrigation System	1	40	20	60	0	0	0	40	20	60
Rainwater harvesting methods	1	0	30	30	0	0	0	0	30	30
Fruit Plants	1	0	37	37	0	0	0	0	37	37
Total	**31**	**369**	**671**	**1040**	**19**	**45**	**64**	**388**	**716**	**1104**
VII Plant Protection										
Integrated Pest Management	2	55	18	73	3	0	3	58	18	76
Integrated Disease Management	2	77	0	77	0	0	0	77	0	77
Bio-control of pests and diseases	2	107	11	118	0	0	0	107	11	118
Production of bio control agents and bio pesticides	2	125	0	125	0	0	0	125	0	125
Cow based rakrutic shibir on pest mgmt	2	173	0	173	0	0	0	173	0	173
Pest and disease management in oilseed crops	3	150	0	150	0	0	0	150	0	150
Honeybee farming	1	106	80	186	0	0	0	106	80	186
Total	**14**	**793**	**109**	**902**	**3**	**0**	**3**	**796**	**109**	**905**
X Capacity Building and Group Dynamics										
Leadership development	1	58	0	58	0	0	0	58	0	58
Entrepreneurial development of farmers/youths	2	50	0	50	5	0	5	55	0	55
WTO and IPR issues										
Income generation	4	161	6	167	0	0	0	161	6	167
Integrated crop management	1	34	0	34	0	0	0	34	0	34
Capacity building for ICT application	1	29	5	34	0	0	0	29	5	34
Total	**9**	**332**	**11**	**343**	**5**	**0**	**5**	**337**	**11**	**348**
GRAND TOTAL	**107**	**2486**	**1947**	**4433**	**73**	**116**	**189**	**2557**	**2065**	**4622**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Integrated farming	1	29	5	34	0	0	0	29	5	34
Value addition	4	0	134	134	00	08	08	00	142	142
MIS & Rainwater harvesting	1	29	0	29	5	0	5	34	0	34
Rainwater harvesting	1	31	4	35	3	3	6	34	7	41
TOTAL	**7**	**89**	**143**	**232**	**8**	**11**	**19**	**97**	**154**	**251**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Value addition	02	00	67	67	00	13	13	00	80	80
TOTAL	**02**	**00**	**67**	**67**	**00**	**13**	**13**	**00**	**80**	**80**

Training for Rural Youths including sponsored training programmes – CONSOLIDATED (On + Off campus)

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Integrated farming	1	29	5	34	0	0	0	29	5	34
Value addition	6	0	201	201	0	21	21	0	222	222
MIS & Rainwater harvesting	1	29	0	29	5	0	5	34	0	34
Rainwater harvesting	1	31	4	35	3	3	6	34	7	41
TOTAL	**9**	**89**	**210**	**299**	**8**	**24**	**32**	**97**	**234**	**331**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Micro Irrigation System	1	40	18	58	0	2	2	40	20	60
Rainwater harvesting tech.	1	28	0	28	2	0	2	30	0	30
TOTAL	**2**	**68**	**18**	**86**	**2**	**2**	**4**	**70**	**20**	**90**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Micro Irrigation System	1	40	18	58	0	2	2	40	20	60
Rainwater harvesting tech.	1	28	0	28	2	0	2	30	0	30
TOTAL	**2**	**68**	**18**	**86**	**2**	**2**	**4**	**70**	**20**	**90**

Sponsored / colloborative training programmes

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Fertilizer Management	01	35	0	35	0	0	0	35	0	35
Quality Seed Production	01	60	0	60	0	0	0	60	0	60
Urban horticulture	01	30	30	60	0	0	0	30	30	60
Agro forestry	01	100	20	120	0	0	0	100	20	120
Production and value addition										
Honeybee farming	1	106	80	186	0	0	0	106	80	186
Fruit Plants	1	0	37	37	0	0	0	0	37	37
Post harvest technology and value addition										
Processing and value addition	02	00	80	80	0	0	0	00	80	80
Farm machinery										
Micro Irrigation System	01	40	20	60	0	0	0	40	20	60
Rainwater harvesting methods	01	00	30	30	0	0	0	00	30	30
Home Science										
Bakery products development	01	00	29	29	0	0	0	00	29	29
Value Addition of fruits and vegetables	02	00	75	75	0	0	0	00	75	75
Agricultural Extension										
Integrated crop management	01	34	0	34	**0**	**0**	**0**	34	0	34
Capacity building for ICT application	01	29	5	34	**0**	**0**	**0**	29	5	34
GRAND TOTAL	**15**	**434**	**406**	**840**	**0**	**0**	**0**	**434**	**406**	**840**

Details of vocational training programmes carried out by KVKs for rural youth (4 or more days)

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Income generation activities										
Income generation activity	02	00	60	60	00	09	09	00	69	69
Grand Total	**02**	**00**	**60**	**60**	**00**	**09**	**09**	**00**	**69**	**69**

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services Telephonic call	1512	1512	23	1535
Whatsapp group	05	320	1	321
Diagnostic visits	10	52	2	54
Field Day	10	167	15	175
Group discussions	03	201	0	201
Kisan Ghosthi	0	0	0	0
Film Show	28	1471	05	1476
Self -help groups	0	0	0	0
Kisan Mela	0	0	0	0
Exhibition	0	0	0	0
Scientists' visit to farmers field	55	549	7	768
Plant/animal health camps	0	0	0	0
Farm Science Club	0	0	0	0
Ex-trainees Sammelan	2	125	05	130
Farmers' seminar/workshop	3	73	00	73
Method Demonstrations	25	1119	0	1119
Celebration of important days	4	196	5	201
Special day celebration	6	366	4	370
Exposure visits	6	184	0	184
Others (pl.specify) Lecture Delivered	119	2637	08	2637
Total	**1358**	**8542**	**75**	**8814**

Details of other extension programmes:

Particulars	Number
Electronic Media (CD./DVD)	01
Extension Literature	03
Newspaper coverage	25
Popular articles	06
Radio Talks	00
TV Talks	00
Animal health camps (Number of animals treated)	00
Social Media (No. of platforms Used)	05 what's app group
Others (pl. specify) (Certificate course of Agro- input dealer)	03 (287)
Total	**43**

3.6 Online activities during year 2021

Sr. No.	Activity Type	Mode of implementation	Title of Program	No. of Programmes	No. of Participants/ Views
A	Farmers training				
1	World Milk Day Celebration	ZOOM App	World Milk Day	1	43
	World bee Day Celebration	Google meet	World bee Day	1	30
2	Farm women training	Whatsapp video conferencing	MIS and Water conservation	1	25
3	Farmers' and Farm women training	YouTube Live	Cotton crop planning, seed selection, natural farming & rainwater harvesting	1	31
4	Farmers' and Farm women awareness	Google meet	Rainwater harvesting & Groundwater recharge	1	27
5	Farmers' and Farm women training and awareness	ZOOM App	Rainwater harvesting & Groundwater recharge	2	75
6	Farmers' and Farm women training	Google meet	Rainwater harvesting & Groundwater recharge	1	25
7	Farmers' and Farm women training	Google meet	Efficient use of fertilizer	1	61
	Total			**9**	**317**

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

Production of seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals	Wheat	GJW-463	-	47.80	-	-
Oilseeds	Groundnut	GJG-22	-	104.45	-	-
Pulses	Chickpea	GJG-6	-	17.10	-	-
Total				**169.35**		

Production of planting materials by the KVK

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Vegetable seedlings	Brinjal	Gujarat Junagadh Round Brinjal-6	-	5000	2500	65
	Tomato	Gujarat Tomato-6	-	3560	1780	48
	Chilli	Gondal patto (local)	-	3600	1800	55
			Total	**12,160**	**6,080**	**168**

Production of Bio-Products: NIL

Production of livestock materials: NIL

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

A. KVK News Letter: JAU, Junagadh Newsletter

B. Literature developed/published

Item	Title	Authors name	Number
Research papers	A study of attitude of parents regarding gender discrimination	N. Tiwari	01
	To study opinion regarding necessity of marriage among female of the Mehsana and Ahmadabad	N. Tiwari and J. N. Vyas	01
	To study the knowledge of adolescences girls regarding iron deficiency anemia in Amreli city	N. Tiwari and J. N. Vyas	01
	Opinion of parents regarding the need to provide sex education to adolescents of Mehsana city	N. Tiwari and J. N. Vyas	01
	To study the attitude on marital adjustment of selected respondents from Mehsana and Ahmadabad city	J. N. Vyas and N. Tiwari and N. Chaudhari	01
	Adoption of selected drudgery reduction technologies related to agriculture by the farm women	N. Tiwari and J. N. Vyas	01
	An analytical study of food and nutritional values amongst urban and rural people in Ahmedabad district: A comparative evaluation	J. N. Vyas and N. Tiwari	01
	Morphometric Study of Dhatarwadi River Basin Using RS and GIS Techniques	P.S. Jayswal, N. K. Gontia and K. N. Sondarva	01
Book	Achievements and Endeavours of KVK, Amreli Since Year 2005-06 to 2020-21	N. S. Joshi, N. Tiwari., P. S. Jayswal, P. J. Prajapati, V. S. Parmar, N. M. Kachhadiya, S. G. Baria, K. J. Gadhiya, N. J. Hadiya, N. B. Ghoniya	01
	Family resource management	Dr. Jiju N Vyas and Dr. Neha Tiwari	01
Technical reports	Monthly (Gujarati, English)		24
	Quarterly (Gujarati, English)		8
	Six monthly (Gujarati, English)		4
	Nine monthly (Gujarati, English)		2
	Annual report (Gujarati, English)		2
	ZREAC Rabi 2021-22 Summer 2021		1
	ZREAC Kharif 2021-22		1
	SAC 2022		1
News letters	JAU, News Letter		4
Popular articles	વૃધ્ધાવસ્થામાં ખેડૂતો માટે આહાર અને પોષણ	ડૉ*તિવારી નેહા ., ડૉ .એન .જે . અને **વ્યાસડો .પી .એસ . જયસ્વાલ	01

	આર્થિક ઉપાર્જન દ્વારા મહિલા સશક્તિકરણ	ડો. નેહા તિવારી, વૈજ્ઞાનિક, કૃષિ વિજ્ઞાન કેન્દ્ર, અમરેલી, ગુજરાત*	01
	બાજરાના મૂલ્યવર્ધનથી બનતી વિશિષ્ટ વાનગીઓ	ડો. નેહા તિવારી, ડો. પી. એસ. જયસ્વાલ, ડો. એન. એસ. જોષી,	01
	Indigenous Technical Knowledge (ITK) in Organically Grown Vegetable Crops	P. J. Prajapati, Dr. N. S. Joshi, N. M. Kachhadiya and V. S. Parmar	01
	Agricultural Importance of Entomopathogenic Fungi (ENPF)	N. M. Kachhadiya, V.S. Parmar, P. J. Prajapati, N. S. Joshi	01
Extension literature (FOLDER)	બાજરાના મૂલ્યવર્ધનથી બનતી વિશિષ્ટ વાનગીઓ	ડો. નેહા તિવારી, ડો. પી. એસ. જયસ્વાલ, ડો. એન. એસ. જોષી, ડો. જે. એન. વ્યાસ, શ્રી પી. જે. પ્રજાપતી, શ્રી એન. એમ. કાછડીયા, શ્રી વી. એસ. પરમાર, શ્રી એન. જે. હડિયા, શ્રી એન. બી. ઘોણિંયા	1000
	પાંડુરોગ નિવરણ માટે ઓછા ખર્ચમાં તૈયાર થતી વાનગીઓ	ડો. નેહા તિવારી, ડો. પી. એસ. જયસ્વાલ, ડો. એન. એસ. જોષી, ડો. જે. એન. વ્યાસ, શ્રી પી. જે. પ્રજાપતી, શ્રી એન. એમ. કાછડીયા, શ્રી વી. એસ. પરમાર, શ્રી એન. જે. હડિયા, શ્રી એન. બી. ઘોણિંયા	1000
TOTAL			**2062**

C. Details of Electronic Media Produced: NIL

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	Amreli KVK	126
2	Facebook page/ Account	KVK Amreli	65
3	Mobile Apps	-	-
4	WhatsApp groups	5	320
5	Twitter Account	KVK Amreli	24
6	Any other (Pl. Specify)	-	-

D. Success Stories / Case studies:

Success Story-1: Muskmelon with Mulching and crop cover

Name	**:**	Khunt Ankit Rameshbhai
Address	**:**	At- Hirana Ta- Lathi Di-Amreli
Age	**:**	30
Contact No.	**:**	9904333038
Land	**:**	1.68 ha
Live Stock	**:**	1 buffalow
Interventions		Ankitbhai Growing Cotton crops during last 10 year . Due to the Pink bollworm attack they changed their cropping pattern and Growing Groundnut (GJG-32) Crops During the Kharif Season and in Winter Season He has Grown Muskmelon (Madhuraja)variety with plastic mulch and Crop cover.

Economics Gain:

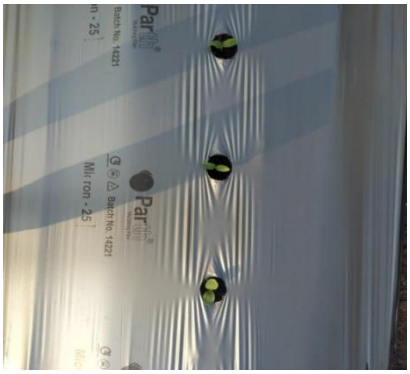
Before Intervention

Crop	Yield Quintal	cost of cultivation	Gross return	Net profit	Cost ratio
Cotton	35	85000	210000	125000	1:2.47

After intervention

Crop	Yield Quintal	Cost of cultivation	Gross return	Net profit	Cost ratio
Groundnut (GJG-32)	68	90000	374000	154000	1:4.15
Muskmelon(Madhuraja)	250	220000	750000	530000	1:3.40
Total	**930**	**310000**	**1124000**	**684000**	

The farmer used to get annual income of Rs 210000/- from cotton (BG-II) . He faced problems like Pink boll worm. With DFI interventions Groundnut GJG-32 and musk melon (madhuraja) get annual income 1124000/-



Success Story-2: Processing and value addition

Name	**:**	Arvindbhai Dhirubhai Dudhat
Address	**:**	At- chakargadh, Ta- Amreli, Di-Amreli
Age	**:**	46
Contact No.	**:**	9879572849
Land	**:**	5.28 ha
Live Stock	**:**	2 Cow
Interventions		Arvind Growing Cotton crops during last 10 year . Due to the Pink bollworm attack they changed their cropping pattern and Growing Groundnut Crops During the Kharif Season and in Winter Season He has Grown coriander and wheat . He has purchased Grading machine for the cleaning and grading of the produce and selling to the customer Directly and also use this Grading machine on rent basis.

Economics Gain:

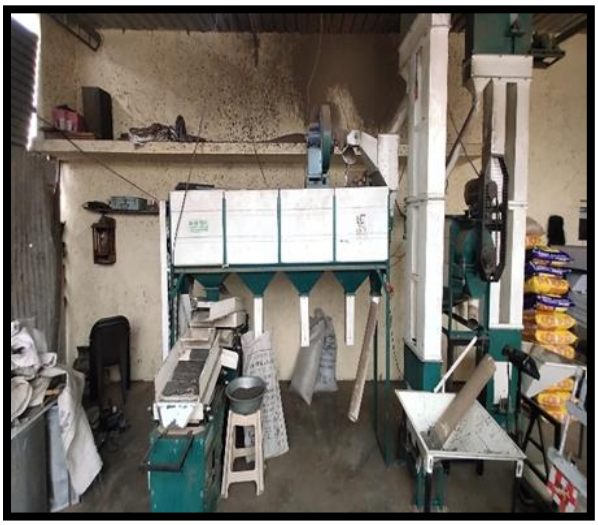
Before Intervention

Crop	Area in ha	Yield Quintal	cost of cultivation	gross return	net profit	Cost ratio
Cotton	5.28	112.20	290400	476850	286110	1:1.64

After intervention

Crop	Area in ha	Yield Quintal	cost of cultivation	gross return	net profit	Cost ratio
Cotton (BG-II)	3.6	94.50	198000	519750	337838	1:2.62
Groundnut (GJG-1)	1.68	54.60	85600	273000	163800	1:3.18
Coriander (GC-2)	0.48	10.20	12000	66300	39780	1:5.52
Wheat (GW-463)	0.4	25.00	10000	52500	31500	1:5.25
Grading machine			80000	300000	220000	1:3.75
Total	**6.16**	**184.3**	**385600**	**911550**	**792918**	

The farmer used to get annual income of Rs 286110/- from cotton (BG-II) . He faced problems like Pink boll worm. With DFI interventions Groundnut GJG-22, cotton (BG-II) , coriander (GC-2),wheat(GW-463) and from Grading machine and oil mill get annual income 9115550/- .



Success Story III

Farm women Name	Neetaben Virpara
Age	39
Farmers' address including Village, District, State	Village:Amreli Ta: Amreli District:Amreli State:Gujarat
Education	10th Std.
Farming experience	15 years
Crop (Kitchen gardening)	Vegetable grower according to different seasons and livestock management
Land	2 acre
Interventions	Neetaben Virpara is a successful farmer of amreli district. She faced problems like lack of training programme regarding vegetables crops and financial problem to start vegetable farming. With interventions like training programme organized by KVK Amreli for kitchen gardening and vegetable gardening, dairy enterprise and knowledge regarding financial support for agriculture and allied areas.
Economics Gain	She started growing vegetables as per seasons and animal husbandry work. She is getting Rs. **405625** /- gross outcome and Rs. **312625** /- net-incomes, due to good quality production.

Success story IV

Name	**:**	Chiragbhai Mansukhbhai Sakhreliya
Address	**:**	At- Medi, Taluka- Amreli, Dist.- Amreli
Age	**:**	35
Contact No.	**:**	9426199649
Land	**:**	1.29 ha
Interventions	**:**	The farmer and his brother Jagdishbhai Sarkheliya were cultivating cotton crop. Due to pink boll worm infestation and Covid situation they have decided to shift cotton cultivation to chilli, musk melon and tomato cultivation with plastic mulch and drip irrigation system.

Economic Gain	**:**	Chiragbhai was selling cotton at low price due to low quality material. After he has started chilli (Dry), tomato and musk melon cultivation with plastic mulch and drip irrigation, he got Rs. 3,67,000/- gross outcome and Rs. 2,51,000/- net-income, due to good quality production and nearby market availability.	

Success story V

Name	**:**	Chhunnibhai Vamja	
Address	**:**	At- Saladi, Taluka- Amreli, Dist.-Amreli	
Age	**:**	60	
Contact No.	**:**	9925647260	
Land	**:**	1.2 ha	
Interventions	**:**	The farmer was earlier cultivated cotton and groundnut crop. After he inspired by horticultural crop production and started lemon cultivation in 0.5 ha area with plastic mulch and drip irrigation.	
Economic Gain	**:**	The farmer has cultivated local variety of lemon organically with plastic mulch and drip irrigation system. Yearly he earned Rs. 80,000/- as net income by selling lemon in the village and local market.	

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

Sr. No.	Crop/ Enterprise	Innovative Technology
1	Cumin	Line sowing instead of broadcasting
2	Cotton	Irrigation in alternate furrow
		Application of fertilizer in nitrogenous form
3	Groundnut	Application of fertilizer in SSP and Ammonium Sulphate form
4	Wheat	Spraying of DiEthane M-45 at milking stage to avoid diseases.

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

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1.	All Line sowing crops	Manually operated seed drill	Sowing purpose
2.	Groundnut/Cotton	Sprayer operating by Bicycle	Spraying purpose
3.	Cotton	Extraction of cow urine with dhatura and desi akda	For the control of sucking pest of cotton
4.	Cotton	Fermented Bajra extract	Larvae of cotton pest
5.	Pulses and cereals	Use of Neem leaves	Storage purpose
6.	Castor	Use of milk of Castor	Stem rot of castor
7.	Wheat	Extraction of custard apple leaves, neem, karmariya, ankdo, cow urine, butter milk (Parshotambhai Shambhubhai Hirpara, village: Khadkhd)	Root strengthening and good feeling grain of wheat crop
8.	All crops	Extract mix of onion, garlic, ankdo, cow urine (Arvindbhai Popatbhai Bhesania, village: Khadkhad)	Control of sucking pests.
		Extract of asefatida, turmeric, and ajma (Hasmukhbhai Mohanbhai Kyada, village: Khicha)	
9.	All crops	Extract of ankdo, neem, custard apple, bilipatra, dhaturo and cow urine. (Jayantibhai Dabhi, village: Kariyana)	Insects infestations
10.	All crops	Extract of akdo, water and cow urine. (Bhanubhai Shambhubhai Hirpara, village: Khadkhad)	Sulpher and potash deficiency in crops
11.	All crops	Mixture of milk, jaggary and water (Yogeshbhai Pandya , village: Vavdi)	Crop growth
12.	All crops	Mixture of coconut water and water (Yogeshbhai Pandya , village: Vavdi)	Increasing number of flowers

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

A. Practicing Farmers

a) Power point presentation
b) Posters
c) Live samples

B. Rural Youth

a) Power point presentation
b) Posters
c) Live samples
d) Film/ video show

C. In-service personnel

a) Power point presentation
b) Posters
c) Live samples

5.2. Indicate the methodology for identifying OFTs/FLDs

For OFT:

i) PRA
ii) Field level observations
iii) Farmer group discussions

For FLD:

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

5.3. Field activities

Name of villages identified/adopted with Amreli block name (from which year)	**No. of farm families selected per village**	**No. of survey/ PRA conducted**	**No. of technologies taken to the adopted villages**	**Name of the technologies found suitable by the farmers of the adopted villages**	**Impact (production, income, employment, area/technologicalhorizontal/vertical)**	**Constraints if any in the continued application of these improved technologies**
Hathigadh	Whole village	15	07	• New varieties of various crops like groundnut, cotton, sesame, wheat etc. • INM • IPM • IDM • Natural resource conservation • New farm machineries • Animal feed management	• Overall increase in production of crops and income of farmers. • Due to good results of crop demonstration adoption of new varieties increased and area under crop increased.	Getting farmers convinced about new technology adoption.
Jasvantgadh						
Randhiya						
Ingorala						
Devgam						
Rikadiya						
Kuvargadh						
Ramgadh						
Dhajda						
Jambarvada						
KhadKhad						
Rafala						
Sukhpar						
Fachariya						
Sekhpipariya						

6. LINKAGES

A. Functional linkage with different organizations

Name of organization	Nature of linkage
Dy. Director of Agriculture.	Conducting training programmes
Dy. Director of Agril. Extension (FTC)	Conducting training programmes
Dy. Director of Horticulture	Conducting training programmes
Dy. Director of Animal Husbandry	Conducting training programmes
Dy. Director of Soil Conservation	Conducting training programmes
Dy. Director of Social Forestry	Conducting training programmes
Amreli Jilla Madhya sahakari bank	Conducting training programmes
Milk Co-Operative Society	Conducting training programmes
State Bank of India	Conducting training programmes
National Bank for Agriculture & Rural Development (NABARD)	Conducting training programmes
NHRDF	Conducting training programmes
Doordarshan Kendra	Conducting training programmes
All India Radio	Conducting training programmes
District Rural Development Agency	Conducting training programmes
ATMA	Conducting training programmes
Mahindra & Mahindra Co. Ltd.	Conducting training programmes
GGRC	Conducting training programmes

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.)
Agricultural Technology Information Centre (ATIC)	2005-06	State Government	850000
Cluster base FLD of Rabi Pulses under NFSM	2015-16	ICAR, New Delhi	780896
National Mission on Oilseeds and Oil Palm (NMOOP)	2015-16		137204
Attracting and Retaining Youth in Agriculture (ARYA)	2019-20		1506628
DAMU	2019-20		621057

C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes/No

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

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**	Field day	2	-	-
02	**Research projects**	-	-	-	-
03	**Training programmes**	15	5	10	-
04	**Demonstrations**				
05	**Extension Programmes**				
	Special day celebration	4	-	4	-
06	**Publications**	-	-	-	-
07	**Other Activities**				
	Farmers field visit	16			ATMA & KVK combined activity
	Best farmer award visit	25			
	ATMA AMC/GB/ KVK SAC meeting	4			
	ATMA & KVK combine planning meeting	8			

D. Give details of programmes implemented under National Horticultural Mission: NIL

E. Nature of linkage with National Fisheries Development Board: NIL

F. Details of linkage with RKVY: NIL

G. Details of linkage with PKVY (Paramparagat Krishi Vikas Yojana): NIL

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	Trainings and FLDs	Trainings and FLDs	780896/-	204633/-	-

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

7. Convergence with other agencies and departments: NIL

8. Innovative Farmers Meet

Sl.No.	Particulars	Details
1.	Have you conducted Farm Innovators meet in your district?	No

9. Farmers Field School (FFS): NIL

10.1. Technical Feedback from the KVK Scientists (Subject wise) to the research institutions/universities: We have presented in ZREAC and AGRESCO meetings of university.

11. Technology Week celebration during 2021: Yes

Period of observing Technology Week: **From 14/09/2021 to 18/09/2021**
Online / Offline: **Offline**
Total number of farmers visited : **291**
Total number of agencies involved **: 04**
Number of demonstrations visited by the farmers within KVK campus: **08**

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies	5	87	--
Lectures organized	25	291	--
Exhibition	5	291	--
Film show	5	291	--
Fair	1	291	--
Farm Visit	5	291	--
Diagnostic Practical's	-	-	--
Supply of Literature (No.)	5	291	--
Supply of Seed (q)	-	-	--
Supply of Planting materials (No.)	2	60	--
Bio Product supply (Kg)	-	-	--
Bio Fertilizers (q)	-	-	--
Supply of fingerlings	-	-	--
Supply of Livestock specimen (No.)	-	-	--
Total number of farmers visited the technology week		291	--

12. Interventions on drought mitigation (if the KVK included in this special programme): NIL
13. IMPACT
A. Impact of KVK activities (Not to be restricted for reporting period).
INTRODUCTION

The Education Commission (1964-66) recommended that a vigorous effort be made to establish specialized institutions to provide vocational education in agriculture and allied fields at the pre and post matriculate levels to cater the training needs of a large number of boys and girls coming from rural areas. The Commission, further, suggested that such institutions be named as 'Agricultural Polytechnics'. The recommendation of the Commission was thoroughly discussed: during 1966-72 by the Ministry of Education, Ministry of Agriculture, Planning Commission, ICAR and other allied institutions. Finally, the ICAR mooted the idea of establishing Krishi Vigyan Kendras (Agricultural Science Centres) as innovative institutions for imparting vocational training to the practicing farmers, school dropouts and field level extension functionaries. The ICAR Standing Committee on Agricultural Education, in its meeting held in August, 1973, observed that since the establishment of KVKs was of national importance which would help in accelerating the agricultural production as

also in improving the socio-economic conditions of the farming community, the assistance of all related institutions should be taken in implementing this scheme. The ICAR, therefore, constituted a committee in 1973 headed by Dr. Mohan Singh Mehta of Seva Mandir, Udaipur (Rajasthan), for working out a detailed plan for implementing this scheme. The Committee submitted its report in 1974.The first KVK, on a pilot basis, was established in 1974 at Puducherry (Pondicherry) under the administrative control of the Tamil Nadu Agricultural University, Coimbatore.

Krishi Vigyan Kendra, an Institutional Innovation inspiring the World in 21st Century also known as Farm Science Centre, a grass root level scheme has been designed and nurtured by the ICAR for the past four decades. Since 1974 when the first KVK was established at Pondicherry, so far, ICAR has established 694 KVKs across the country under different host organization like State Agricultural Universities, ICAR Institutes, Central Institutes/Deemed Universities, State Governments, Public Undertakings and Governmental Organization. Gujarat state is having 30 KVKs of which, 07 KVKs are under Junagadh Agricultural University and Amreli is one of them, established in March, 2005**.**

Gujarat farmers are really very hard working. It is the only state in the country which consistently maintains the highest annual growth rate of agricultural than the national average. It is one of five top five state of India. Gujarat gives the maximum adoration in agricultural technology and being a key institution at district level the KVKs play an important role in transfer of technology. KVK contribute all three dimensional activity like aware the farmers though all possible medium such as folder, leaf late, social media etc second imparting knowledge through on and off campus training with use of different PPT, video, exhibition and by exposure visit etc third one increase adoption of technology through personal contact, CFLD and OFT etc for betterment of farming community. Here very important things do by the scientist to maintain rapport with farming community.KVK must work on the basis of felt and un felt need of farming community understanding their level of knowledge and availability of resources they have, all this to increase adoption of technology.KVK also imparting knowledge in vernacular language for easy understanding of farmers and also motivated them for entrepreneurship through skill development training. Considering these facts, a study entitled **"Image and impact of KVK''** was conducted.

Objectives

1. To study the profile of beneficiaries of villages adopted by Krishi Vigyan Kendra, Amreli
2. To find out the image and impact of Krishi Vigyan Kendra, Amreli on the beneficiaries of adopted villages.
3. To assess the association between profile of beneficiaries farmers and image Krishi Vigyan Kendra.

Methodology

The present investigation was conduct in adopted villages of KVK Amreli of North saurashtra region of Gujarat. An ex-post facto design was used for this study. For the selection of respondents, a comprehensive list of beneficiaries and villages adopted by Krishi Vigyan Kendra were identified purposively with discuss with senior scientist and scientist of KVK, Amreli.

Table 1 - Name of selected villages adopted by KVK, Amreli

Sr. No.	Selected District	Selected Villages	Selected size of Respondents
1	Amreli	Nesadi	20
		Oliya	20
		Shedubhar	20
		Saldi	20
		Babapur	20
		Lunidhar	20
		Kerala	20
		Ditla	20
		Lakhapadar	20
		Halariya	20
		Total	**200**

Twenty respondents from each selected village were randomly selected. Thus the total sample size for the study was 200. The interview schedule was developed keeping in view the specific objectives of the study and the data was collected by survey method during 2019-20.

Image of KVK

To measure the image of KVK, Amreli. Twenty questions about its objectives, activities, and usefulness, helpfulness of the officials, benefit gained by the farmers and general and overall impressions of the centre were asked to the respondents.

The answers of the respondents to each question were marked yes or no. A score of one was assigned to yes answer of response and zero to a no answer or response.

Impact of KVK

For this study the resultant changes occurred due to adoption of recommended agricultural technologies which are transmitted by KVKs in the form of changes have been taken account as impact of KVKs. It is finally defined as the resultant changes occurred due to adoption of recommended agricultural technologies which are transmitted by KVKs in the form of changes those prospered within beneficiary farmers of adopted villages of KVKs.

The change was measured in terms of eight aspects

1) Change in area under field crops
2) Change in use of improved varieties
3) Change in crop production
4) Change in annual income
5) Change in household possession
6) Change in food habit
7) Change in clothing pattern
8) Change in savings and expenditures

1) Change in area under field crops

It refers to the increase in area under field crops after adoption of recommended agricultural technologies which are transmitted by KVKs. Actual area increased in hectare(s) under field crops was taken as a change. The increase in area was statistically measured by using paired "t" test

2) Change in use of improved varieties

It refers to the increase in use of improved varieties after adoption of recommended agricultural technologies which are transmitted by KVKs. The addition found in use of improved varieties of different crops was considered as change. One score was assigned to each new improved variety which was adopted by the farmers after adoption of recommended agricultural technologies which are transmitted by KVKs. The paired "t" test was applied to know whether the difference found in use of improved varieties was significant.

3) Change in crop production

It refers to the increase in crop production per unit area after adoption of recommended agricultural technologies which are transmitted by KVKs. The more production attained by the farmers as compared to the production had attained before adoption of recommended agricultural technologies which are transmitted by KVKs. The significance of difference in crop production of before and after use was known by using paired "t" test.

4) Change in annual income

Change in annual income from agriculture and other resources after adoption of recommended agricultural technologies which are transmitted by KVKs was operational as change. The paired "t" test was applied to know whether the difference between annual incomes obtained during study year annual income of base year.

5) Change in household possession

Additional household items purchased by the farmers after adoption of recommended agricultural technologies which are transmitted by KVKs were operationalzed as change. Scoring procedure was followed as under:

Eleven statements regarding change in household possession were prepared. The respondents were asked to give their reply to each statement in form of Yes' or No'. The score assigned for 'Yes' and 'No' was 1 and 0, respectively. The score of each statement was summed up to obtain final score indicating change in household possession.

6) Change in food habit

Eight statements regarding change in food habit were prepared. The respondents were asked to give their reply to each statement in form of Yes' or No'. The score assigned for 'Yes' and 'No' was 1 and 0, respectively. The score of each statement was summed up to obtain final score indicating change in food habit.

7) Change in clothing pattern

Six statements regarding change in clothing pattern were prepared. The respondents were asked to give their reply to each statement in form of Yes' or No. The score assigned for 'Yes' and 'No' was 1 and 0, respectively. The score of each statement was summed up to obtain final score indicating change in clothing pattern.

8) Change in savings and expenditures

Eight statements regarding change in savings and expenditure were prepared. The respondents were asked to give their reply to each statement. The reply to each statement was bipolar i.e. Yes or No.

The score assigned for Yes and No was 1 and 0 respectively. The score of each statement was summed to obtain final score indicating change in savings and expenditure.

RESULT AND DISCUSSION

Personal profile of the beneficiaries of KVK

The data presented in table 2 indicated that majority of the respondents were found in middle age group (59.50 percent), whereas 30.00 per cent and 10.50 per cent of them were in the old age and young age group respectively. The probable reason might be that due to migration very less young farmers associated with farming.

In case of education 36.50 per cent of the respondents were found in secondary education, whereas 33.50 per cent and 13.00 per cent of them were primary education and college and above education respectively. Only 10.00 per cent and 07.00 per cent were illiterate and high education level. The probable reason might be that due to secondary level education easily available at village level.

Majority of the respondents (58.00 per cent) were found in large family followed by 42.00 per cent lived in small family.

Majority of the respondents (60.00 per cent) have farming with animal husbandry occupation, whereas 31.00 per cent have occupation farming. Only 05.50 per cent and 3.00 have Farming +Animal husbandry+ business and Farming + Animal husbandry+ business+ horticulture occupation respectively. The probable reason might be that due to that most of the respondents livelihood totally depended on agricultural and for regular income they keep the milch animal and also might be that majority of the respondents live in large family.

Majority of the respondents (68.00 per cent) have high level of experience in farming whereas, 20.00 per cent and 12.00 per cent of them have middle and low level of experience respectively.

In case of annual income 39.50 per cent of the respondents have annual income above 2 lakh, whereas 35.00 per cent and 25.50 per cent of them have annual income low and medium level of annual income respectively. The probable reason might be that due to a majority of the respondents occupation was farming + animal husbandry.

Majority of the respondents (52.50 per cent) of the respondents have large land holding whereas, 17.50 per cent and 17.00 per cent have of them have medium and marginal land holding respectively. Moreover 13.00 per cent respondents have small land holding.

Majority of the respondents (61.00 per cent) were found in no social participation where as 30.50 per cent and 6.00 percent of them have poor and good social participation. Only 2.50 per cent of the respondents were found in moderate level of social participation. The probable reason might be that most of the respondents were very active in daily agricultural activities and they have no time for any social activity.

Table 2: Distribution of respondents according to their personal profile

Sr. No.	Personal profile	(n=200)	
		Frequency	Per cent
1	**Age**		
	Young age (up to 35 year)	21	10.50
	Middle age (36 to 50 year)	119	59.50
	Old age (above 50 year)	60	30.00
2	**Education**		
	Illiterate	20	10.00
	Primary education	67	33.50
	Secondary education	73	36.50
	High education	14	07.00
	College and above	26	13.00
3	**Family Size**		

	Small (up to 5 member)	84	42.00
	Large (above 6)	116	58.00
4	**Occupation**		
	Farming	62	31.00
	Farming + animal husbandry	121	60.50
	Farming + Animal husbandry+ business	11	05.50
	Farming +Animal husbandry+ business + horticulture	06	03.00
5	**Farming experience**		
	Low level of experience (Up to 5)	24	12.00
	Medium level of experience (05 to 08)	40	20.00
	High level of experience (above 08)	136	68.00
6	**Annual income**		
	Low (up to 1,00,000)	70	35.00
	Medium (1,00,000 to 2,00,000)	51	25.50
	High (above 2, 00, 000)	79	39.50
7	**Land Holding**		
	Marginal farmers (up to 1 ha)	34	17.00
	Small farmers (1.01 to 2 ha)	26	13.00
	Medium farmers (2.01 to 4 ha)	35	17.50
	Large farmers (More than 4 ha)	105	52.50
8	**Social Participation**		
	No social participation	122	61.00
	Poor social participation	61	30.50
	Moderate social participation	5	02.50
	Good social participation	12	06.00
9	**Mass media exposure**		
	Low (Score up to 09)	62	31.00
	Medium (Score 09 to 16)	112	56.00
	High (Score above 16)	26	13.00
10	**Innovativeness**		
	Low level of innovativeness	67	33.50
	Medium level of innovativeness	109	54.50
	High level of innovativeness	24	12.00

Majority of the respondents (56.00 per cent) were found in medium level of mass media exposure group whereas, 31.00 per cent and 13.00 per cent of them found in low and high level of mass media exposure respectively. The probable reason might be compulsion of internet use by society.

Majority of the respondents (54.00 per cent) were found in medium level of innovativeness whereas, 33.50 per cent and 12.00 per cent of them found in low and high level of innovativeness respectively.

Image and Impact of KVK

According to standard dictionary of education, an image means a form of centrally grouped experience bearing resemblance in structure to a perception. Although, images are based on past perception, they are not simple reflections of these perceptions. To measure the image of KVK, Amreli twenty questions about KVKs' objectives, activities, and usefulness, helpfulness of the officials, benefit gained by the farmers and general and overall impressions of the centers were asked to the beneficiaries.

Table 3: Distribution of respondents according to image of KVK Amreli n=200

Sr. No.	Statement	F	%	Rank
1.	KVK organizes short and long term vocational training courses for higher production on farms and for self-employment.	**159**	**79.50**	**VII**
2.	KVK conducts Front Line Demonstration to demonstrate the production potentiality of various crops under the farmer's condition and resources.	**176**	**88.00**	**IV**
3.	Training given by KVK is an important medium to impart latest know-how to the farmers.	**173**	**86.50**	**V**
4.	KVK organizes field days to communicate the innovations to the potential users.	**179**	**89.50**	**III**
5.	KVK provides facility for soil and water testing which helps to assess the fertility status of soil.	**147**	**73.50**	**VIII**
6.	KVK provides knowledge on need based application of fertilizer and pesticides which helps farmers to save expenditure on fertilizers and pesticides.	**190**	**95.00**	**I**
7.	In training programme of KVK communication of field problems to researcher and getting solution is quicker.	**135**	**67.50**	**X**
8.	KVK suggests solution to farmers' problems in view of their economic condition.	**171**	**85.50**	**VI**
9.	KVK gives knowledge of high yielding variety which is beneficial to increase the yield of crops.	**146**	**73.00**	**IX**
10.	KVK personnel, explains the importance of technology in local language through which communication barriers can be avoided.	**186**	**93.00**	**II**

The data presented in table 3 indicated that KVK provides knowledge on need based application of fertilizer and pesticides which help farmers to save expenditure on fertilizers and pesticides (95.00 per cent) and ranked first followed by KVK personnel, explains the importance of technology in local language through which communication barriers can be avoided (93.00 per cent), KVK organizes field days to communicate the innovations to the potential users (89.50 per cent), KVK conducts Front Line Demonstration to demonstrate the production potentiality of various crops under the farmer's condition and resources (88.00 per cent), Training given by KVK is an important medium to impart latest know-how to the farmers (86.50 per cent), KVK suggests solution to farmers' problems in view of their economic condition (85.50 per cent), KVK organizes short and

long term vocational training courses for higher production on farms and for self-employment (79.50 per cent), KVK provides facility for soil and water testing which helps to assess the fertility status of soil (73.50 per cent), KVK gives knowledge of high yielding variety which is beneficial to increase the yield of crops (73.00 per cent) and In training programme of KVK communication of field problems to researcher and getting solution is quicker were ranked II,III,IV,V,VI,VII,VIII,IX,X respectively. The probable reason might be that young and enthusiastic scientist and total number of projects like NICRA, NFSM, ATIC; NMOOP and DAMU run which cover more number of farmers. Also there were good understanding with line department of agriculture and NGO works in Amreli districts.

Table 4: Relationship between respondent and image of KVK n=200

Sr. No.	Independent Variables	Coefficient of correlation (r)
1	Age	0.0049 NS
2	Education	0.1655*
3	Family size	-0.0553 NS
4	Occupation	0.0330
5	Farming experience	0.1889**
6	Land holding	0.0887 NS
7	Annual income	-0.0040 NS
8	Social participation	0.0786 NS
9	Mass media exposure	0.1990**
10	Innovativeness	0.1732*

* = significant at 0.05 level, ** = significant at 0.01 level

The data presented in table 4 revealed that farming experience (0.1889**) and mass media exposure (0.1990**) were positively and highly significantly correlated at 0.01 level of probability with the image of KVK. It can be concluded that farming experience and mass media exposure level of respondents influence image of KVK. The probable reason might be due to mass media exposure respondents regularly in the contact of KVK scientist.

Education (0.1655*) and innovativeness (0.1732*) were positively significantly correlated at 0.05 level of probability with the image of KVK. It can be concluded that education and innovativeness level of respondents influence image of KVK. The probable reason might be educated respondent easy to understand technology and innovative farmers ready to adopt this technology first.

Age (0.0049 NS), land holding (0.0887 NS), Social participation (0.0786 NS) were positively and family size (-0.0553 NS), annual income (-0.0040 NS) were negatively but not significantly correlated with image of KVK.

Impact of KVK

Webster describes the impact as the force, impressions or operations of one thing on another, affect a forceful control and collusion. In simple words, it is the effect of one on the other.

For this study, the resultant changes occurred due to adoption of recommended agricultural technologies in the form of changes have been taken as impact of KVKs. It is finally defined as the resultant changes occurred due to adoption of recommended agricultural technologies in the form of changes that prospered within beneficiary farmers of adopted villages of Amreli KVKs. An effort has been made to asses such resultant changes in terms of 8 aspects, *viz.,* Change in area under field crops, change in use of improved varieties, change in crop production, change in annual income, change in household possession, change in food habit , change in clothing pattern, change in savings and expenditures.

Table 5: Aspect wise change occurred as a result of KVK activities n=200

Sr. No.	Particulars	Mean Difference	"t" value
1	Area under field crops	0.8826	1.7451 *
2	Use of improved varieties	2.5075	19.3999**
3	Crop production	28.5124	16.1258**
4	Annual income	0.2851	11.4824**
5	Household possession	1.6069	11.3950**
6	Food habit	0.7960	5.5643**
7	Clothing pattern	0.3333	02.7022**
8	Savings and expenditures	1.3284	13.3788**
Over all change		4.5784	10.7833**

* = significant at 0.05 level, ** = significant at 0.01 level

The data presented in table 5 revealed that change in use of improved varieties, change in crop production, change in annual income, change in household possession, change in food habit , change in clothing pattern, change in savings and expenditures were highly significant at 0.01 level of probability. This result gives indication that, these seven aspects were increased /improved after adoption of villages by KVKs. The probable reason for increase in use of improved varieties might be its easy availability at university and Gurabini. Moreover, due to different project like NICRA, NMOOP and NFSM varieties like GG-5, GJG-3, GJG-22, GJP-1,Vaishali , GT-3, GT-4,GCH-7,GCH-9, GW-366 and GW496 and GW-173 very popular among the farmers because regular field day conducted by KVK Amreli and this varieties have own potentiality to gives high returns to the

respondents. Crop production increased might be due to the adoption of crop production technology and regular suggestion adopted from KVK scientist. The annual income was increased due to more farm production and decrease in crop production crop. It was also due to majority of the respondents have occupation were animal husbandry and farming.

The improvement found in household possession, food habit and clothing pattern might be due to that the respondents have increased their annual income of respondent and also influence of mass media in the society.

The improvement found in savings and expenditures might be due to that the farmers have awareness about economic security and now governments gives all their benefits to farming community directly on their account.

Changes in area under field crops were significant at 0.01 level of probability. The improvement found in area under field crop might be due to the respondents have started intercropping specially grown pulse crops in area because of influence of CFLDs under NFSM.

. The findings lead to conclude that positive and effective impact occurred in adopted villages due to large scale activities likes training, diagnostic visit, and FLDs given by KVK, Amreli. Thus, KVK played an important role in accelerating agricultural production and affecting a positive change in daily routine life of farmers.

Table 6: Distribution of respondents according to their constraints n=200

Sr.	Constraints	F	%	Rank
1	Don't provide improved seed materials	97	48.50	VII
2	Suggest technology unavailable at local market	69	34.50	VIII
3	Limited veterinary service	120	60.50	V
4	Only focused on university technology	147	73.50	III
5	Limited information regarding market	164	82.00	I
6	Less number of village training	103	51.50	VI
7	No any kind of exposure visit	152	76.50	II
8	Don't provide transport facility in on campus training	138	69.00	IV

Table 6 shows that major constraints faced by respondents were limited information regarding market (82.00 percent) and first rank followed by no any kind of exposure visit (76.50 percent), Only focused on university technology (73.50 percent), Don't provide transport facility in on campus training (69.00 percent), Limited veterinary service (60.50 percent), Less number of village training (51.50 percent), Don't provide improved seed materials (48.50 percent) and Suggest technology unavailable at local market (34.50 percent) were ranked II,III,IV,V,VI,VII and VIII.

The data presented in Table 7 indicated that major suggestions given by respondents were market information and analysis provided to farmers (83.00 percent) and ranked first followed by transport facility provided to the farmers (76.00 percent), government providing set up for availability of technology at cheaper rate in KVK (71.00 percent), Providing veterinary service

(61.00 percent), exposure visit should be arranged(60.00 percent), increase village training (47.50 percent), Improve seed should be available (46.00 percent) were ranked II,III,IV,V,VI and VII.

Table 7: Distribution of respondents according to their suggestions n=200

Sr. No.	Suggestion	F	%	Rank
1	Improve seed should be available	92	46.00	VII
2	Providing veterinary service	122	61.00	IV
3	Transport facility provided to the farmers	152	76.00	II
4	Market information and analysis provided to farmers	166	83.00	I
5	Government providing set up for availability of technology at cheaper rate in KVK	142	71.00	III
6	Increase village training	95	47.50	VI
7	Exposure visit should be arranged	120	60.00	V

Conclusion

From above study it can be concluded that major image made activities done by KVK were KVK provides knowledge on need based application of fertilizer and pesticides which help farmers to save expenditure on fertilizers and pesticides and ranked first followed by KVK personnel, explains the importance of technology in local language through which communication barriers can be avoided, KVK organizes field days to communicate the innovations to the potential users , KVK conducts Front Line Demonstration to demonstrate the production potentiality of various crops under the farmer's condition and resources and the major factor influence image of KVK were farming experience, mass media exposure ,education and innovativeness. In case of impact effective changes occurred in all eight aspect for impact analysis.

Moreover, major constraints faced by respondents were limited information regarding market, no any kind of exposure visit, Only focused on university technology , Don't provide transport facility in on campus training, limited veterinary service and major suggestions given by respondents were market information and analysis provided to farmers and ranked first followed by transport facility provided to the farmers, government providing set up for availability of technology at cheaper rate in KVK, Providing veterinary service.

B. Cases of large scale adoption: -

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

14. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
Jan 2021	-	-	-
Feb 2021	1	85881	-
March 2021	-	-	-
April 2021	1	85881	
May 2021	1	85881	
Jun 2021	-	-	-
Jul 2021	1	85881	
Aug 2021	-	-	
Sept 2021	-	-	-
Oct 2021	-	-	-
Nov. 2021	-	-	-
Dec. 2021	-	-	-

Name of KVK	Message Type	Type of Messages
		Crop
KVK, JAU, Amreli	Text only	4
	Total Messages	**85881**
	Total farmers Benefitted	**85881**

15. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1.	Herbal Garden	May-2007	0.5	40	-	-	-	-	Demonstration purpose
2.	Orchard Unit	2008	0.5	62	-	-	-	-	
3.	Net House	2009	0.15	-	-	-	-	-	

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

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Wheat	09/11/2020	08-10/03/20211	1	GJW-463	Truthful	4780 kg	60000	157373	
Pulses									
Chickpea	20/11/2020	04-06/03/2021	1	GJG-6	Truthful	1710 kg	50000	155600	
Oilseeds									
Groundnut	21 & 29-30/06/2021	25-29/10/2021	11	GJG-22	Foundation	10445 kg	440000	Pending	

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

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

E. Utilization of hostel facilities

Accommodation available (No. of beds): 25

Months	No. of trainees stayed	Trainee days (days stayed)
January **2021**	---	---
February **2021**	---	---
March **2021**	---	---
April **2021**	---	---
May **2021**	---	---
June **2021**	---	---
July **2021**	---	---
August **2021**	17	17
September **2021**	34	05
October **2021**	32	05
November **2021**	--	--
December **2021**	31	06

F. Database management

S. No	Database target	Database created
1.	**-**	5731

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 Demonstration s	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		
-	-	-	36	20	0	921	0	-	-

H. Performance of Nutritional Garden at KVK farm
If Nutritional Garden developed at KVK farm/Village Level- 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
-	Vegetable crops	07	1023
-	Fruit crops	-	-
-	Others if any	-	-

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

No. of Villages covered	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers covered
-	Vegetable crops	13	200
--	Fruit crops	0	0
-	Others if any	0	0

H. Details of Skill Development Trainings organized: NIL

17. FINANCIAL PERFORMANCE

A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	State Bank of India	Agril campus, Junagadh	-	-	-	-	-
With KVK		Amreli (Current A/C) Amreli (Saving A/C)	0312	KVK Fund A/c	10837874780 10837877690	365002601	SBIN0000312

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

Sr. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	95.00	78.47	68.40
2	Traveling allowance	1.00	8.68	0.24
3	Contingencies	12.00		9.64
	Total (A)	**108.00**	**87.15**	**78.28**
B. Non-Recurring Contingencies				
1	Equipments including SWTL & Furniture/Vehicle/Library	00	00	00
	Total (B)	**00**	**00**	**00**
C.	**Revolving fund**	00	00	9.56
	GRAND TOTAL (A+B+C)	**108.00**	**87.15**	**87.84**

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2018 to March 2019	44,32,715	19,93,508	10,04,278	54,42,575
April 2019 to March 2020	54,42,575	21,30,032	19,80,100	55,92,507
April 2020 to March 2021	55,92,507	11,59,196	1,01,4207	57,37,496
April 2021 to December, 2021	57,37,496	8,44,517	9,56,494	56,25,519

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 (Online/ Offline)	Dates
Dr. N.S. Joshi	Senior Scientist and head	Annual Action Plan of KVK, Amreli	ICAR	Online	18/02/2021
		Useful for extension activities	JAU	Online	9 to 10/03/2021
		Zonal workshop	ICAR	Online	4 to 6/08/2021
Dr. P. S Jayswal	Scientist (Agril. Engg.)	Aquifer Mapping and Groundwater Management	CGWB New Delhi, India	Online	28/12/2021
		Presentation skills for professional excellence	DEE, JAU, Junagadh	Offline	1 to 03/12/2021
		Use of mass media for transfer of technology	EEI, AAU, Anand, JAU, Junagadh	Online	1 to 03-09-2021
		Participatory Programme Planning, Monitoring and Evaluation	EEI, AAU, Anand, JAU, Junagadh	Online	9 to 10/03/2021
		IT Applications in Precision Irrigation	Mahatma Phule Krishi Vidyapeeth (Agricultural University), Rahuri (On line training programme)	Online	26/04/2021 to 16/05/2021
Dr. Neha Tiwari	Scientist (Home Science)	Participatory prog. Planning monitory and evaluation	EEI Anand, JAU, Junagadh	Online	09/03/2021 to 10/03/2021
		Uses of mass media for transfer of Technology	EEI Anand, JAU, Junagadh	Online	01-09-2021 to 03-09-2021
		Online Orientation programme of newly recruited SMS of KVKs	EEI Anand, JAU, Junagadh	Online	03/05/2021 to 05/05/2021
Mr. N.M. Kachhadiya	Scientist (Plant Protection)	International webinar on Desert locust Schistocera Gregaria (Forskal) International Scenario and a potential threat to india	NIPHM, Hyderabad	Online	02-07-2021
		Uses of mass media for transfer of Technology	EEI Anand, JAU, Junagadh	Online	01-09-2021 to 03-09-2021

		PPAG seminar on maintenance of quality and safety of horticultural amd food crops through biological control of pests and disease	NAU, Navasari	Offline	30-12-2021
Mr. P. J. Prajapati	Scientist (Agronomy)	Integrated nutrient management	Zoom, Department of Agronomy, JAU, Junagadh	Online	08/02/2021 to 12/02/2021
		Participatory Programme Planning, Monitoring and Evaluation	EEI, AAU, Anand	Online	09/03/2021 to 10/03/2021
		Presentation skills for professional excellence	DEE, JAU, Junagadh	Online	01/12/2021 to 03/12/2021
Mr. V. S Parmar	Scientist (Agril. Ext.)	Reorienting Extension Education and Advisory Services for Sustainable Development of Farming Community	EEI, AAU, Anand	Online	08/07/2021 to 28/07/2021
		Use of mass media for transfer of technology	AAU, Anand	Online	01-09-2021 to 03-09-2021
		Online orientation programme on newly requited SMS	NIPHM, Hydrabad	Online	03/05/2021 to 05/05/2021

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

Name of the village	**Total No. of families surveyed**	**Key interventions implemented**	**No. of farmers covered in each intervention**	**Change in income (Rs/unit)**	
				Before (base year)	**After (current year)**
Karjala	25	Organic farming, custom hiring center, improved varities, value addition	20	1,00,000/-	1,50,000/-
Nesdi	25		20	98,000/-	1,35,000/-

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

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

20. Details of Progress of ARYA Project

Name of Enterprise	No of Training Conducted	No of Beneficiaries	No of Extension Activities	No of Beneficiaries	No of Unit established	Change in income		No. Of Groups Formed
						Before	After	
Dal mill	3	96	1	150	2	Results are awaited		1
Masala making	2	70	1	37	2			1
Mava making	2	181	2	64	2			1

21. Details of SAP

S. No.	*Types of major Activity conducted- Swachhta Pakhwada, Cleaning, Awareness Workshop, Microbial based Agricultural Waste Management by Vermicomposting etc.*	No. of Programmes conducted	No. of Participants
1.	Plantation of trees	03	54
2.	Cleaning of offices, corridors and premises	03	44
3.	Cleanliness and sanitation drive in the villages adopted under the MeraGaonMeraGaurav	02	32
4.	Cleanliness and sanitation drive within campuses and surroundings	1	44
5.	Utilization of organic wastes/ generation of wealth from waste, polythene free status	1	32
6.	Technology demonstrations on agricultural technologies for conversion of waste to wealth, safe disposal of all kinds of wastes	1	49
7.	Celebration of Special Day- KisanDiwas (Farmer's Day)-23 December inviting farmers.	1	52
8.	Cleaning of public places	05	63
9.	Awareness on waste management	1	31
10.	Awareness on recycling of waste water, water harvesting for agriculture	1	55

22 Other Schemes Activities

22.1 Agriculture Technology Information Centre Activities (ATIC) (January 2021- December 2021):

I. Trainings:

Sr. No.	Types of training	No. of Training	No. of participants
1	On Campus	9	346
2	Off Campus	15	768
	Total	**24**	**1114**

Sr. No.	Crop	Season	Component /Variety	No of FLD	Area (ha)	Average yield (q/ha)		% increase in productivity over local check
						Demo	Local check	
1	Onion	Rabi 2020-21	IDM	10	2.5	346.9	295.6	18.0
2	Chickpea		IDPM	25	6.25	33.9	30.1	12.8
3	Chickpea		(GJG-6)	25	6.25	34.95	32.90	6.39
4	Wheat		GW-451	24	6	56.0	51.8	8.2
5	Groundnut	Kharif 21	IPM (Metarhizium, Beauveria, Azadirechtin chloropyriphos	20	5	23.18	21.05	10.14
6	Cotton	Kharif 21	IPM (Cotton Inputs Beauveria, Azadirechtin, Pheromone trap)	20	5	22.24	20.13	10.50
7	Groundnut	Kharif 21	GJG-32	20	5	29.54	26.31	12.27
8	Sesame	Kharif 21	GT-4	10	4	2.37	2.05	16.09
9	Cotton	Kharif 21	MDT tube	10	2.5	21.3	18.1	17.50
			Toatal	**164**	**42.5**			

III. Economic Impact of FLDs (ATIC)

Crop	Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Cost Ratio (Gross Return / Gross Cost)	
	Demo	Local Check	Demo	Local Check	Demo	Local Check	Demo	Local Check
Onion	97205	98640	254984	217125	157779	217124	2.62	2.21
Chickpea	23151	24060	157990	140263	134839	140262	6.85	5.86
Chickpea	23522	24432	161808	150653	138286	150652	6.91	6.19
Wheat	25536	26446	98421	91008	72884	91008	3.87	3.46
Groundnut	31944	34282	120709	109486	88765	75204	3.78	3.20
Cotton	38621	41029	190777	168962	152156	127933	4.97	4.16
Groundnut	30238	32926	151646	134957	121409	102031	5.08	4.15
Sesame	10227	11202	19702	16933	9474	5731	1.91	1.51
Cotton	40063.8	41293.4	182348.3	149983.3	142284.5	108689.9	4.57	3.64

22.2 Activities under National Innovations on Climate Resilient Agriculture (NICRA) (Rabi 2020-2021):

II. Front Line Demonstrations:

Intervention	Description		No. of demos	Area (ha)	Average Yield (q /ha)		
	Crop	Variety (s)			Demo	Local check	% increase over local cheek
Short duration/Late sowing varieties varieties	Wheat	GW-173	10	4.0	33.50	30.63	9.39
Pests and disease resistance varieties	Chickpea	GG-5	10	4.0	49.25	46.13	6.78
Total			**20**	**8.0**			

Crop	Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Cost Ratio	
	Demo	Local Check	Demo	Local Check	Demo	Local Check	Demo	Local Check
Chickpea	22985	23149	157000	143550	134015	120401	6.84	6.21
Wheat	23584	23686	80325	72450	56741	48764	3.41	3.06

22.3 I. Activities-Cluster base Front Line Demonstrations of Rabi and Summer Pulses under NFSM :

Sr. No.	Types of training	No. of training	No. of participants
1	On campus	4	125
2	Off campus	3	80
3	Field Day	6	210
4	Field visit	15	231
5	Sponsored training	2	72
	Total	**30**	**718**

II. Cluster Front Line Demonstrations of Rabi Pulses under NFSM:

Sr. No.	Crop	Season	Component /Variety	No. of FLD	Area (ha)	Average yield (q/ha)		% increase in productivity over local check
						Demo	Local check	
1	Pigeon pea	Kharif 21	GJP-1, Trichoderma, Rhizobium, Beuvaria, PSB	50	20	Standing		
2	Gram	Rabi-2020-21	GJG-6, Trichoderma, HNPV, Beuvaria, pheromen trap	50	20	31.2	18.6	67.74
			Total	**100**	**40**			

22.4. I. ACTIVITIES-CLUSTER BASE FRONT LINE DEMONSTRATIONS OF OILSEED UNDER NMOOP:

Sr. No.	Types of training	No. of training	No. of participants
1	On/Off campus	8	364
2	Field Day	7	135
3	Sponsored training	1	38
	Total	**16**	**537**

II. CLUSTER FRONT LINE DEMONSTRATIONS OF OILSEED UNDER NMOOP:

Sr. No.	Crop	Season	Component /Variety	No of FLD	Area (ha)	Average yield (q/ha)		% increase in productivity over local check
						Demo	Local heck	
1	Groundnut	Kharif-2021	GJG-22, Metarhizium, Rhizobium and PSB	50	20	27.8	26.23	5.99
2	Sesame	Kharif-2021	GT-4 and Beauria, Trichoderma, Azadirectine, Pendimethalin	50	20	2.11	1.91	10.47
			Total	**100**	**40**			

22.5 Activities under MGMG:

I. Detailed Progress:

No. of Team formed	No. of Scientists	No. of Villages selected	No. of Blocks	No. of Districts	Bench Mark Survey conducted (No. of villages)
02	08	10	03	01	10

II. Activities undertaken

Activities undertaken by ICAR Institutes under MGMG

S. No.	Name of activity	No. of activities conducted	No. of farmers benefitted
1	Awareness created	03	300
2	Demonstrations conducted	06	15
3	Interface meeting/ Goshthies	05	95
4	Literature support provided	06	1345
5	Training organized	01	35
6	Visit to village by teams	05	120
7	Mobile based advisories	32	4521
Total		**58**	**6431**

III. Other activities organized by ICAR Institutes/ SAUs under MGMG

Table -2: Other activities organized by ICAR Institutes under MGMG:

S. No.	Activity	Particulars	
1	**Linkages developed with other agencies**	No of Agency (No)	03
		Farmers Benefitted (No)	310

22.7 Activities under DAMU:

I Number of Weather Bulletin prepared from January – December, 2021

District Name	No. of Bulletins
Amreli	104

Block name	No. of Bulletins
Amreli	104
Babra	104
Bagasara	104
Dhari	104
Jafrabad	104
Khambha	104
Kunkavav Vadiya	104
Lathi	104
Liliya	104
Rajula	104
Savarkundla	104
Total No. of Block wise Weather Bulletin	**1144**

II Number of farmers connected

Particular	No. of farmers
Whatsapp Group- 17	2356
Telegram Group - 1	194 Subscribers
Facebook page	1880 followers

III Detail of farmers connected through WhatsApp

Name of the Block	Total Village in Block	No. of WhatsApp Group	No. of Farmers Covered	No. of Villages Covered	No. of Extension Workers at panchayat / village level
Amreli	71	4	694	59	10
Babra	57	2	335	48	7
Bagasara	34	2	286	29	4
Dhari	75	1	162	42	8
Jafrabad	42	1	51	20	5
Khambha	57	1	127	45	3
Kunkavav-Vadia	45	2	261	41	5
Lathi	49	1	100	28	8
Lilia	37	1	78	38	6
Rajula	72	1	120	25	4
Savarkundla	80	2	276	51	15
Total	**619**	**18**	**2490**	**426**	**75**

IV Farmer Awareness Program (FAP) organized by KVK, JAU, Amreli under DAMU

S. No.	FAP/ Farmers meet /Meghdoot Popularization activities	Date	Location		Approx. No. of Farmers attended the Program
			Village	Block	
1	FAP, App.Popularization,	16-01-21	Lilia	Lilia	25
2	FAP, Meghdoot App.Popularization	18-01-21	Halriya	Bagasara	24
3	FAP, Meghdoot App.Popularization,Field visit	20-01-21	Sukhpur	Babra	12
4	FAP, Meghdoot App.Popularization	15/07/2021	Amreli	Amreli	29
5	FAP, Meghdoot App.Popularization	14/09/2021	Mangvapal	Amreli	47
6	FAP, Meghdoot App.Popularization	23/09/2021	Pithadiya	Bagasara	61
				Total	**198**

23. Celebration of Special Events –

- **International Women Day**- On 09/03/2021, International women day was organized for 60 women. The objective and agenda of this international women day was to give women equity, empowerment and entrepreneurship. Looking to the objective all programme was based on same agenda.
- **World Water Day**- On 22/03/2021 World Water Day was celebrated in KVK, Amreli with total number of participants 60. During the event different lecture on water saving method and techniques in agriculture and allied sectors was given by the scientist of KVK and line department members.
- **World Milk Day**- On 01/06/2021 World Milk Day was celebrated in KVK, Amreli by organizing online training progarmme with total number of participants 70. During the event different lecture on world milk day was delivered by the scientist of KVK and other related department members.
- **Fertilizer awareness programme**- On 18/06/2021 Fertilizer awareness programme was celebrated in KVK, Amreli by organizing online webinar with total number of participants 49. During the event different lecture was delivered by the scientist of KVK.
- **Parthenium Awareness week**- As it is known to everyone that 'Parthenium Awareness week' was organized every year since 2004 to make farmers and general public aware about the menace of parthenium, so like every year this year KVK, Amreli also organized several activities from 16/08/2021 to 21/08/2021.Here is the list of activities with photographs.

Date	Name of Activity	Location	No. of Participants
16/08/2021	Lecture delivered on Parthenium uprooting, releasing Mexican beetles	Motabhandariya, College of Agriculture , JAU, Amreli	42
16/08/2021	Awareness programme on composting of uprooted biomass	Motabhandariya, College of Agriculture , JAU, Amreli	42
17/08/2021	Parthenium uprooting in public place	Amreli	10
18/08/2021	Training programme organized on spraying herbicides and composting of uprooted biomass	Village- Mangawapal, Amreli	20
18/08/2021	Training programme on releasing Mexican beetles and Parthenium uprooting	Village-Kachardi, Amreli	25
21/08/2021	Parthenium uprooting in campus	KVK, Amreli	14

- **Technology week celebration**- Technology week has been celebrated from 14/09/2021 to 18/09/2021 at Krishi Vigyan Kendra, Amreli, with a view to create mass awareness among the farmers about the location specific advanced technologies for the sustainable agricultural production. Seminars and demonstrations on advanced technologies in agriculture and allied discipline such as Horticulture, Plant protection, Crop Production, Agriculture engineering,

Agriculture extension and Home science have been conducted during the week. Total 291 participants including 57 farm-women and 234 farmers from about 07 villages of Amreli District were benefitted.

Details of Participants:

Date	Taluka wise Village		No. of participants		
			M	F	T
14/09/2021	Amreli	Mangvapal	2	46	48
15/09/2021	Kukavav	Pithadia	50	11	61
16/09/2021	Amreli	Amreli	55	00	55
17/09/2021	Amreli	Amreli	100	00	100
18/09/2021	Amreli	Varasda, Keriyanagas, Giriya	27	00	27
		Total	**234**	**57**	**291**

- **PM Varieties release-** On 28/09/2021 PM Varieties release progaramme was organized by KVK, Amreli with Online mode. In this programme 65 participants including 14 KVK staff take part.
- **Millet Awareness day and tree plantation-** On 17/09/2021 Millet Awareness day and tree plantation was celebrated by KVK, Amreli with number of participants 52.
- **World Food Day:** World Food Day was celebrated on dt.: 16/10/2021. It was organized for 50 students, in this programme different information and lecture was delivered by KVK, scientist.
- **Minister visit:** On dated 11/11/2021 Honorable Agriculture Minister of Animal Husbandry and Cow breeding Shri Raghavji Patel Sir and Member of Parliament Shri Narayanbhai Kachhadiya sir visited KVK, Amreli and appreciated all the work done by KVK, Amrel. In this programme Dr. N. K. Gontia Hon'ble Vice Chancellor, JAU, Junagadh, Dr. H. M. Gajipara, DEE, JAU, Junagadh and other line dept officers, KVK, JAU, Amreli staff and progressive farmers of Amreli district were remained present.
- **Swacchta Hi Sewa fortnight:** On 16/12/2021 to 31/12/2021 Swacchta Hi Sewa fortnight was celebrated in KVK, by organizing different events as per guideline of ICAR.

The schedule of the whole month programme that was completed in Dec 2021 under SWS was as follows:-

Date	Activities	Palce	Participants
16-Dec-21	Plantation of trees	Amreli	34
17-Dec-21	Cleaning of offices, corridors and premises	KVK, Amreli	22
18-Dec-21	Cleanliness and sanitation drive in the villages adopted under the Mera Gaon Mera Gaurav	Liliya	22
19-Dec-21	Cleanliness and sanitation drive within campuses and surroundings	KVK, amreli	44
20-Dec-21	Utilization of organic wastes/ generation of wealth from waste, polythene free status	KVK, amreli	32
22-Dec-21	Technology demonstrations on agricultural technologies for conversion of waste to wealth, safe disposal of all kinds of wastes	KVK, amreli	49

23-Dec-21	Celebration of Special Day- KisanDiwas (Farmer's Day)-23 December inviting farmers.	KVK, amreli	52
25-Dec-21	Cleaning of public places	Keriya road, Amreli	28
27-Dec-21	Awareness on waste management	FTC, Amreli	31
28-Dec-21	awareness on recycling of waste water, water harvesting for agriculture	KVK, amreli	55

- **Hon'ble Prime Minster Talk:** On 16/12/2021 The hon'ble Prime Minster of India had addressed the farmers on Natural farming for this event KVK, Amreli organized one programme for 62 farmers and 86 farm women.
- **Celebration of Farmers day:** During 23 to 25 December 2021, Farmers day was celebrated by KVK, Amreli During this programme 144 farmers and 136 farm women take a part. Different training programme and lecture was organized for the same occasion.
- **Jal Shakti Abhiyan:** Jal Shakti Abhiyan was celebrated by KVK, JAU, Amreli from April to November 2021. Various online, on campus and off training programmes and various awareness programmes were organized about efficient water utilization in agriculture, micro irrigation system, rainwater harvesting, soil and water conservation, groundwater recharge etc.

Training Programs		**No. Seed Packets distributed**	**No. Saplings distributed**	**Awareness Programs**	
Number	**Total Participants**			**Number**	**Participants**
14	518	199	210	30	1109

APR SUMMARY

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	107	2557	2065	4672
Rural youths	9	97	234	331
Extension functionaries	2	70	20	90
Sponsored Training	15	434	406	840
Vocational Training	2	0	69	69
Total	**135**	**3158**	**2794**	**5952**

2. Frontline demonstrations

Crops/Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	10	4	
Pulses	20	8	
Cereals	10	4	
Vegetables	10	4	
Other crops	20	8	
Hybrid crops	10	4	
Total	80	32	
Livestock & Fisheries	-	-	
Other enterprises	15	12	5
Total	15	12	5
Grand Total	**95**	**44**	**5**

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	5	17	17
Livestock			
Various enterprises	1	5	5
Total	6	22	22
Technology Refined			
Crops			
Livestock			
Various enterprises			
Total			
Grand Total	**6**	**22**	**22**

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	1358	8814
Other extension activities	9	317
Total	**1367**	**9131**

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke-ting	Aware-ness	Other enterprise	Total
	Text only	4	-	-	-	-	-	4
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	**85881**	-	-	-	-	-	**85881**
	Total farmers Benefitted	**85881**	-	-	-	-	-	**85881**

6. Seed & Planting Material Production

	Quintal/Number	Value (Rs.)
Seed (q)	152.25	-
Planting material (No.)	12160	6080

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value (Rs.)
Soil	18	5,400
Water	21	1680
Total	**39**	**7080**

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	18
2	Conferences	
3	Meetings	2
4	Trainings for KVK officials	
5	Visits of KVK officials	
6	Book published	2
7	Training Manual	
8	Book chapters	
9	Research papers	8
10	Lead papers	
11	Seminar papers	
12	Extension folder	2
13	Proceedings	1
14	Award & recognition	
15	On-going research projects	3