ICAR-ATARI, Pune

DETAILS OF ANNUAL PROGRESS REPORT OF KVKs DURING 2022

(January 2023 to December 2023)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address with PIN code	Telephone		E mail	Website address & No. of visitors (hits)
	Office	FAX		
Krishi Vigyan Kendra, Junagadh Agricultural University, Targhadia-360 023, Rajkot-I, Dist.: Rajkot, Gujarat State	(0281) 2784170	(0281) 2784170	kvkrajkot@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, Junagadh (Gujarat)	(0285) 2672080	(0285) 2672653	dee@jau.in	www.jau.in

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

Name	**Telephone / Contact**		
	Office	**Mobile**	**Email**
Dr. G.V. Marviya	(0281) 2784170	9825554434	gvmaravia@jau.in

1.4. Date and Year of sanction: September – 2004

1.5. Staff Position (as on December, 2023)

Sl. No.	Sanctioned post	Name of the incumbent	Mobile No.	Discipline	If Permanent, Please indicate		Date of joining	If Temporary, pl. indicate the consolidated amount paid (Rs./month)
					Current Pay Band	Current Grade Pay		
1.	Senior Scientist and Head	Dr. G. V. Marviya	9825554434	Bio-chemistry	131400-217100 (UL-13A)	139400/-	1-1-2022	
2.	Subject Matter Specialist	Dr. M. M. Tajpara	9427667135	Animal Science	68900-205500 (UL-11)	99300/-	4-8-2015	
3.	Subject Matter Specialist	Dr. J. H. Chaudhary	9978303111	Agronomy	57700-182400 (UL-10)	68800/-	1-8-2017	
4.	Subject Matter Specialist	Vacant	-	Plant Protection	-	-	-	
5.	Subject Matter Specialist	Dr. J. N. Thaker	9824224247	Horti-culture	79800-211500 (UL-12)	101100/-	1-04-2023	
6.	Subject Matter Specialist	Shri D. P. Sanepara	9426449712	Agril. Engg.	68900-205500 (UL-11)	107300/-	1-11-2016	
7.	Subject Matter Specialist	Smt. H. H. Padsumbiya	9979673732	Home Science	68900-205500 (UL-11)	98300/-	17-2-2022	
8.	Programme Assistant	Vacant	-	-	-	-	-	
9.	Computer Programmer	Miss. R. T. Padaliya	9979027064	Computer	44900-142400 (L-8)	53600/-	3-1-2009	
10.	Farm Manager	S. R. Rathva	9712313538	Plant Breeding	39900-126600 (L-7)	39900/-	30-7-2018	
11.	Accountant/ Superintendent	M. D. Vachhani	9825066876	-	-	-	-	
12.	Stenographer	Vacant	-	-	-			
13.	Driver 1	Vacant	-	-	-	-	-	

14.	Driver 2	Vacant	-	-	-	-	-	
15.	Supporting staff 1	Vacant	-	-	-	-	-	
16.	Supporting staff 2	Vacant	-	-	-	-	-	

1.6. Total land with KVK (in ha):

S. No.	Item	Area (ha)
1	Under Buildings	2.87
2.	Under Demonstration Units	0.50
3.	Under Crops	13.80
4.	Horticulture	0.50
5.	Pond	0.48
6.	Others if any (Specify)	1.85
	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.)	Starting year	Plinth area (Sq. m)	Status of construction
1.	Administrative Building	KVK	31-3-2011	550	5500000	-	-	-
2.	Farmers Hostel	KVK	31-3-2011	305	3000000	-	-	-
3.	Staff Quarters (6)	KVK	31-3-2011	400	4000000	-	-	-
4.	Fencing/ Farm wall					-	-	-
5.	Rain Water harvesting system: (5)							
	Farm pond-1	KVK	2012	9000 cu.m capacity	105000	Runoff is collecting from 12 ha agricultural land		
	Farm pond-2	KVK	2010	850 cu.m capacity	-	Runoff is collecting from 2 ha agricultural land and 3 ha building area		
	Roof water harvesting tank	KVK	2017	Size: L: 6.10 m W: 3.10 m H: 2.50 m	204285	Rain water harvesting in underground tank (Cap: 50000 lt.) from 300 sq.m office roof area		

	Open well recharging structure	KVK	2013	Size: L: 2.0 m W: 2.0 m H: 1.5 m	9500	Runoff from 5 ha area for open well recharging		
	Bore well recharging structure	KVK	2018	Size: L: 1.5 m W: 1.0 m H: 1.0 m	12500	Rain water harvesting from 190 sq.m roof area for bore well recharging		
6.	Threshing floor	-	-	-	-	-	-	-
7.	Farm godown	KVK	2012	-	400000	-	-	-
8.	Soil and water testing lab	KVK	Under Administrative Building					
9.	Mini soil testing Kit	KVK	1 (No.)					
10.	Sell Contour	-	-	-	-	-	-	-
11.	Demonstration Units: (8)					-	-	-
	Solar water pumping system	ATIC	2019	7.5 HP	262500	-	-	-
	Bio gas plant	RKVY	2007	10 cu.m	42000	-	-	-
	Farm implement demo.	RKVY	2009	Diff. farm implements	-	-	-	-
	Vermi-compost unit	KVK	2018	-	-	-	-	-
	Farm waste compositing	KVK	2019	7 m x 5 m	-	-	-	-
	Entomophagous park	KVK	2018	0.10 ha	-	-	-	-
	Crop cafeteria	KVK	2012	0.10 ha	-	-	-	-
	Kitchen garden	KVK	2018	0.05 ha	-	-	-	-
12.	Seed hub godown	ICAR	2019	196.80	3500000	-	-	-
13.	ICT lab	-	-	-	-	-	-	-
14.	Solar Panel							
15.	Counter seal	-	-	-	-	-	-	-
16.	Other							
	Store room	RKVY	9-2-10	70.61	454500	-	-	-
	Training hall	RKVY	11-2-10	190.99	1395800	-	-	-
	Processing unit	RKVY	11-2-10	197.31	1536400	-	-	-
	Implement shed	RKVY	9-2-10	77.33	297800	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Running	Present status
Jeep (Bolero Neo) (GJ-3GA-1805)	2022	830000	50640	Working
Motorcycle (GJ-3DF-5781)	2010	50000	57525	Working
Tractor (Mahindra 39 HP) (GJ-3CL-7668)	2011	440000	-	Working

C) Equipment & AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Generator set	2002	24900	Working
Color TV (Akai)	2002	13850	Working
LCD Project (Panasonic PT LC 50)	2002	164368	Working
PA Audio Vision System	2002	20000	Working
Computer System (Intel Pentium IV)	2003	32000	Working
Computer Genius Desktop (Wipro Super)	2006	-	Working
Refrigerator (Electronic Kelvinator)	2006	10,500	Working
Solar steel digital water plant	2006	45000	Working
Balaji Bio Gas Plant	2007	32000	Working
Tractor Mounted Sprayer (Aspee)	2007	32000	Working
Laptop Computer (HCL)	2008	47500	Working
Air Assisted Blower type Sprayer	2009	98750	Working
Photo Copier Machine (Richo)	2009	115300	Working
LCD Projector (PT-CB50NTE-2GA - Panasonic)	2009	92155	Working
DVD Home theater system with Speaker (HCL)	2009	28000	Working
LCD TV 22” (Model- 22LG30 - L. G.)	2009	27287	Working
Cotton Stalk Shredder	2009	121000	Working
Groundnut Digger-Tractor Operated	2009	78500	Working
Cultivator cum Rotavator	2009	90000	Working
Groundnut Decorticator	2009	95850	Working
Multi Crop Thresher	2009	114000	Working
Processing Unit	2009	1685000	Working
Plantar – Tractor operator	2009	44000	Working
Digital Camera (Nikon) P- 90 12.1	2010	24300	Working
Desktop Veriten PC (Acer)	2016	46032	Working
Digital Xerox Machine with Printer	2016	144391	Working
K-yan Pro standerd	2016	110644	Working
Home UPS inverters system	2016	79000	Working
Smart Television (LG)	2021	189975	Working

Portable Sound System (AHUJA)	2022	17000	Working
Desktop computer (Dell)	2022	25000	Working
Laptop (HP)	2022	40000	Working
Air Conditioner -1.5 ton (Haier)	2022	37500	Working
Air Conditioner -1.5 ton (Haier)	2022	37500	Working
Air Conditioner -1.5 ton (Haier)	2022	37500	Working
Air Conditioner -1.5 ton (Haier)	2022	37500	Working
Desktop computer (Lenovo)	2022	63690	Working
Desktop computer (Lenovo)	2022	63690	Working
Desktop computer (Lenovo)	2022	63690	Working
Power Generator DG set of 45 kVA	2023	485000	Working
Tokary type Multi-crop Thresher	2023	300000	Working
Erecting 15 kW Solar Roof Top System (2 No.)	2023	1294431	Working

1.8. Details of SAC meeting conducted in the year: 2022

Date	Name and Designation of Participants	Salient Recommendations	Action taken
06/02/ 2023	Dr. V. P. Chovatia, Hon'ble Vice Chancellor, JAU, Junagadh.	**1.** More training should be planned on "Natural Farming". **2.** Seed production should be panned for other pulse crop along with chickpea under Seed-hub project, if possible. **3.** Agri-drone demonstration should be arranged at KVK, Targhadia as well as farmer's field for suitable crops using Agri-drone purchased by FMPE Dept, CAET, JAU, Junagadh. **4.** To add milk fat observation parameter in new OFT entitled "Chelated mineral mixture, Bypass protein and Bypass fat for dairy buffalo". **5.** The training should be conducted on "Application and use of sexed semen in dairy cattle".	All Suggestion Accepted & Implemented
	Dr. H. M. Gajipara, Director of Extension Education & Director of Research, JAU, Junagadh		
	Dr. D. S. Hirpara, ADR & Research Scientist (DF), MDFRS, JAU, Targhadia		
	Dr. R. M. Satasiya, Principal, Polytechnic in Agril. Engg., JAU, Targhadia		
	Dr. G. V. Marviya, Senior Scientist & Head, KVK, JAU, Targhadia, Dist: Rajkot		
	Dr. N. B. Jadav, Senior Scientist & Head, KVK, JAU, Pipalia (Dhoraji)		
	Dr. L. L. Jivani, Senior Scientist & Head, KVK, Gorkhijadiya, Dist.: Morbi		
	Shri N. M. Kamariya, Asstt. Director of Agriculture (Extension), Rajkot		
	Shri G. J. Kataria, Asstt. Director of Horticulture, Rajkot		
	Ms. Seemaben J. Sharma, Asstt. Director of Agriculture, District Panchayat, Rajkot		
	Mr. Piyush Vadodariya, Gujarat Agro-industries Corporation Ltd., Rajkot		
	Mr. Dharmendra Chauhan, General Manager, NABARD, Rajkot		

	Mr. Bhavesh H. Chandravadia Regional Training Centre, WALMI, Rajkot	**6.** Training on "Value addition in Aonla (*Amla*)" should be conduct during end of November instead of December. **7.** Effort should be made to arrive a greater number of farmers during technology week at KVK. **8.** Efforts should be made to popularize GJG-6 variety of chickpea through FLDs and OFTs. **9.** To study the spread of technology among the farmers through FLDs given by KVK and it should be included in the report.	
	Dr. H. C. Chhodvadia, Asso. Extn. Educationist, DEE office, JAU, Junagadh		
	Dr. R. B. Singh, Deputy Director, NHRDF, Naranka, Rajkot		
	Dr. S. K. Tiwari, Technical Officer, NHRDF, Naranka, Rajkot		
	Shri Kiran Patel, Reliance Foundation, Jasdan, Dist: Rajkot		
	Kajalben Zala, Centre for Environment Education, Jasdan, Dist: Rajkot		
	Devendrabhai S. Moliya, Village: Targhadi, Ta: Paddhari, Dist: Rajkot		
	Hiteshbhai Kiyada, Village: Rafala, Ta: Rajkot, Dist: Rajkot		
	Shri Kalyanbhai C. Ramani Village: Lilapur, Ta: Jasdan, Dist.: Rajkot		
	Sureshbhai B. Makwana, Village: Bhoyra, Ta: Vinchhiya, Dist: Rajkot		
	Hareshbhai Bholabhai Kakadiya Village: Bhadla, Ta: Rajkot, Dist: Rajkot		
	Dineshbhai J. Rathod, Village: Nani Lakhavad, Ta: Jasdan, Dist: Rajkot		
	Lilaben Chhaganbhai Lakhatariya, Village: Lalavadar, Ta: Vinchhiya, Dist: Rajkot		
	Jamnaben Mohanbhai Dabhi, Village: Barvada, Ta: Jasdan, Dist: Rajkot		

2. DETAILS OF DISTRICT / JURISDICTION AREA OF KVK

2.1. Major farming systems/enterprises

S. No	Farming system/enterprise
1	Groundnut – Wheat/ Cumin/ Chick pea, Cotton – Summer Groundnut/ Sesame/ Pulses
2	Dairy product
3	Farm waste management specially for cotton stalk
4	Fruit and vegetable preservation
5	Value addition in groundnut, sesame, gram, etc.

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

S. No.	Agro-climatic Zone (Planning Commission)	Characteristics
1	North Saurashtra Agro Climatic Zone (VI)	The total geographical area of North Saurashtra Agro Climatic Zone is 35.2 Lacs ha. Out of total area, 73.40 per cent area falls under arid and semi-arid region. The soils of this zone are shallow to moderately deep. The soils of Rajkot district are low in their availability of nitrogen while medium in phosphorus and high in available potash except the available phosphorus and potash is in medium category in adopted villages. Monsoon commences usually by the end of June and withdraws by middle of September. Average annual rainfall of district is 648 mm while 587.5 mm during 2023.

a) Topography

S. No.	Agro ecological situation	Characteristics
1	Situation No. 4	Shallow black soil with 500-600 mm Rainfall
2	Situation No. 14	Hilly Soils with 500-600 mm Rainfall

2.3 Soil Types

S. No	Soil type	Characteristics
1	Clay to clay loam	Medium black calcareous soil
2	Sandy Clay Loam to Clayey	Well drained soil with rapid permeability
3	Sandy to Sandy loam 10 cm, Calcareous	Well drained soils

2.4. Area, Production and Productivity of major crops cultivated in the area of jurisdiction of KVK (2022-23)

S. No	Crop	Area (ha)	Production (000 T)	Productivity (Kg/ha)
	Major Field crops			
1	Groundnut	242497	614268	2533
2	Cotton	233606	530299	2270
3	Sesamum	1295	1215	938
4	Castor	6367	14083	2212
5	Pearl millet	230	49	213
6	Green gram	1941	1861	959
7	Black gram	1017	1067	1049
8	Pigeon pea	3072	5779	1881
9	Wheat	90102	350150	3886
10	Chick pea	74574	251633	3374
11	Cumin	19091	16016	839
12	Groundnut (Summer)	1850	4438	2399
13	Pearl millet (Summer)	522	1816	3480

Source: District agriculture department

2.5. Weather data (2023)

Month	Normal RF(mm)	Normal Rainy days (number)	Temperature (^{0} C)		Relative Humidity (%)	
			Maximum	Minimum	Maximum	Minimum
January	0.3	0	26.5	10.0	68	30
February	0.0	0	33.1	13.5	67	31
March	34.6	3	35.0	18.7	68	32
April	0.0	0	37.4	21.5	77	27
May	6.1	1	39.3	24.8	77	38
June	256.7	9	36.8	25.6	81	53
July	190.2	11	32.0	25.2	88	75
August	10.4	2	32.0	24.7	83	52
September	71.7	5	33.5	24.1	84	58
October	0.0	0	35.5	20.8	76	34
November	17.5	1	33.1	17.5	59	33
December	0.0	0	29.4	14.3	65	35
Total/Ave.	**587.5**	**32**	**33.6**	**20.1**	**74**	**42**

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

Category	Population (No)	Production (tonne)	Productivity
Cattle			
Crossbred	4,52,000	33,26,900 (Milk)	-
Indigenous	-	-	-
Buffalo	3,62,000	52,84,700 (Milk)	-
Sheep	2,63,400	2,66,810 (Wool)	-
Goats	1,97,000	2,31,240 (Milk)	-
Pigs	1,000	-	-
Crossbred	-	-	-
Indigenous	-	-	-
Poultry Production of eggs (No.)			
Hens (*Crossbred)*	13,400	32,52,000 (Egg)	-
Desi	7,800	3,92,000 (Egg)	-
Category		Production (Q.)	Productivity
Fish (Reservoir)	-	-	-

2.7. Details of Operational area / Villages

Taluka / Block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Rajkot	Gunda	Groundnut, Cotton, Sesame, Wheat, Cumin, Chickpea, Garlic, Onion. * Enterprises are dairy business, Vermi composting, Preparation of roasted groundnut and chikki from groundnut and sesame	Pink ball worm in cotton, Heavy infestation of sucking pest in cotton, Phytopthora disease in sesame and White grub infestation in groundnut, long inter-calving period in buffalo, Nutritional deficiency in animal feed and fodder, Less area under horticultural crops, Anemia problem in adolescent girls	• IPM and INM in major crops of this area • Increase drainage of soil • Reducing the inter-calving period in buffalo • Motivate the farmers for arid horticultural crops • Efficient use of irrigation water • To create the awareness for grading, processing and marketing (value addition)
	Maliyasan			
	Sanosara			
	Kuvadava			
	Lakhapar			
Jasdan	Madava			
	Sitaliya			
	Kanesara			
	Kothi			
	Rajavadla Jam			
Vinchhiya	Sanali			
	Kandhevaliya			
	Revaniya			
	Thoriyali			
	Hathsani			

2.8. Priority thrust areas:

Sl. No	Crop/ Enterprise	Thrust area
1	Groundnut, Sesame etc.	Increasing the productivity of the major crops by adopting the recommended dry farming technologies and to create awareness for value addition.
2	Water conservation	*In situ* soil moisture conservation and rainwater harvesting. Use of cotton stalk for organic manure.
3	Cotton	Motivating cotton growers to adopt IPM and INM practices for reducing the cost of production.
4	Arid Fruits	Promoting the arid horticulture.
5	Livestock production	Enhancing productivity of milch animals by proper feeding and breeding management.
6	Women empowerment	Providing self-employment through skill-oriented income generating activities
7	Agriculture	Developing interest among youth for agriculture as a profession.
8	Horticulture	Value addition in agriculture produces through proper grading, processing, marketing and information technology.
9	PHT	Minimizing the post-harvest losses and to create the awareness for proper storage.
10	Income generating activities	Self-employment among rural youth and skill-oriented income generating activities.
11	Nutrition management	Care and importance of nutrition in children & pregnant women.

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
7	17	7	17	14	14	145	152

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
76	86	1900	2996	-	999	-	20285

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
-	142.25	-	10

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

3.1. B. Operational areas details during 2023

S.No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Intervention (OFT, FLD, Training, extension activity etc.) *
1	Cotton	Low yield of cotton	-	All cluster	OFT, Training
2	Groundnut	Variety	-	All cluster	FLD
		White grub	-	All cluster	FLD and Training
		Stem rot	-	All cluster	FLD and Training
3	Cumin	Wilt in cumin	-	All cluster	FLD, OFT and Training
		Low yield due to sowing method and over irrigation	-	All cluster	
4	Gram	Variety	-	All cluster	FLD and Training

5	Tomato	Variety & Leaf curl	-	All cluster	OFT
6	Brinjal	Variety	-	All cluster	FLD and Training
7	Pearl millet	Variety	-	All cluster	FLD and Training
8	Farm women	Concept of kitchen gardening to combat nutritional issues	-	All cluster	FLD and Training

3.2. Technology Assessment/ refined (Kharif 2023, Rabi 2022-23, Summer 2023)

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management										
Varietal Evaluation					1					1
Integrated Pest Management										
Integrated Crop Management										
Integrated Disease Management				1						1
Small Scale Income Generation Enterprises										
Weed Management										
Resource Conservation Technology				1						1
Farm Machineries										
Integrated Farming System				1						1
Seed / Plant production										
Value addition										
Drudgery Reduction										
Storage Technique										
Mushroom cultivation										
Natural Farming		1								1
Total		**1**		**3**	**1**					**5**

A2. Abstract on the number of technologies assessed/ refined in respect of livestock enterprises

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds						
Nutrition Management	1					1
Disease of Management	1					1
Value Addition						
Production and Management						
Feed and Fodder						
Small Scale income generating enterprises						
TOTAL	**2**					**2**

B. Achievements on technologies Assessed/ refined

B.1. Technologies Assessed/ refined under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trial covering all the Technological Options)
Integrated Nutrient Management					
Varietal Evaluation	Tomato	Response of new release variety of Tomato GT-6 on leaf curl occurrence and yield	1	3	0.4
Integrated Pest Management					
Integrated Crop Management					
Integrated Disease Management	Cumin	Use of *Trichoderma* for wilt disease management in cumin	1	3	0.4
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology	Cumin	Performance of drip irrigation with line sowing method in cumin	1	3	0.4
Farm Machineries					

Integrated Farming System	Cotton	De-topping in Cotton	1	3	0.4
Seed / Plant production					
Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Natural Farming	Groundnut	Natural farming in *Kharif* Groundnut	1	1	0.4
Total			**5**	**13**	**2.0**

B. 2. Technologies assessed/ refined under Livestock & fishery assessment

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds				
Health Management				
Dairy Management2				
Nutrition management	Buffalo	Chelated Mineral mixture, By pass protein, & By pass fat for enhancing milk production in buffalo	2	2
Disease management	Calf	Fortified Health management for reducing calf mortality	2	2
Feed and fodder management				
Processing & Value addition				
Production and management				
Composting fish culture				
Small scale income generating enterprises				
Fish production				
Other				
Total			**4**	**4**

B.3 Technologies assessed under other enterprises : Nil

Name of Enterprises	Name of the technology assessed	No. of trials	No. of farmers
Mushroom			
Apiary			
Vermicompost			
Tailoring			
Nutrition Garden			
Nursery Management			
Production and Management			
Eentrepreneurship development			
Engegy consrvation			
storage techniques			
House hold food security			
organic farming			
Mechanization			
Bee keeping			
Seed production			
post-harvest management			
Other			

B 4.Technologies assessed under Women empowerment assessment : Nil

Name of Enterprises	Name of the technology assessed	No. of trials	No. of farmers
Drudgery Reduction			
Entrepreneurship development			
Health and Nutrition			
value addition			
Kitchen gardening			
nutrition security			
Other			

C. 1. Results of Technologies Assessed/ refined

Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed/Refined	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*
Groundnut	Rainfed	Deteriorate in yield and quality of groundnut due to higher use of chemical fertilizers & Pesticides	Natural farming in *Kharif* Groundnut	**1**	**T1:** Seed treatment through fungicides, Use of chemical fertilizers, Use of Insecticides-Pesticides **(Farmers Practices)**	Yield (Kg/ha), Cost of cultivation and pest infestation (%)					
					T2: FYM @ 10 ton/ha, Use of PSB @ 8g/kg seeds, Use of *Trichoderma viride* @ 2.5 kg/ha, Use of *Beauveria bassiana* @ 80 ml per pump, *Metarhyzium anisopliae* @ 5 kg/ha, *Pseudomonas fluorescens* @ 2.5 kg/ha **(Recommended Practices)**						
					T3: Bijamrut @ 20 lit./100 kg seeds, Ghan Jivamrut @ 200 kg/acre in basal dose and 100 kg at flowering stage, Jivamrut @ 200 lit./acre, Use of Dasparni Ark @ Agniastra and Brahmastra @ 6 to 8 lit. dissolved in 100 to 200 lit. of water and spray in 1 acre, Nimastra @ 200 lit. spray in 1 acre without water **(Interventions)**						
Cotton	Rainfed	Low Yield of Cotton	De-topping in Cotton	3	**T1:** Farmers practices	Seed cotton yield (kg/ha) and No. of bolls/plant					
					T2: De-topping at 75 DAS						
					T3: De-topping of monopodial branches at 75 DAS & 90 DAS						

Tomato	Irrigated	To increase yield of Tomato by decreasing sucking pest infestation by sowing tolerant variety	Response of New Release Variety of Tomato GT-6 on leaf curl occurrence and yield	3	**T1**: Sowing of Local Variety + any Pesticides	Yield Kg/ha and infestation (%)					
					T2: Sowing of GT-6 Variety + foliar sprayings of Acephate 75 WP @ 1.5 g / liter 10 days after transplanting, Fipronil 5 SC @ 1.5 ml / liter 20 DAT, and Imidacloprid 70 WG @ 2g / 15-liter 40 DAT						
					T3: Sowing of Local variety and foliar sprayings of Acephate 75 WP @ 1.5 g / liter 10 days after transplanting, Fipronil 5 SC @ 1.5 ml / liter 20 DAT, and Imidacloprid 70 WG @ 2g / 15 liter 40 DAT						
Cumin	Irrigated	Heavy incidence of wilt disease in cumin	Use of *Trichoderma* for wilt disease management in cumin	3	**T1: No** use of Trichoderma or fungicide at the time of sowing	Yield Kg/ha and infestation (%)					
					T2: Trichoderma @ 5 kg /ha with organic manure @ 500 kg / ha at the time of sowing						
					T3: Application of Trichoderma @ 5 kg /ha along with organic manure @ 500 kg / ha at the time of sowing and second application of Trichoderma @ 5 kg /ha along with organic manure by broadcasting method at 15 days after germination				Very effective against the wilt disease. Germination percentage was increased.		
Cumin	Irrigated	Low yield due to sowing method and over irrigation	Performance of drip irrigation with line sowing method in cumin	3	**T1**: Broad casting method without drip irrigation (Farmer's practices)	Yield Kg/ha and B:C Ratio					
					T2: Line sowing (20 cm) with drip irrigation (Recommended technology)						

Buffalo		Low milk production & infertility problems in dairy Buffalo	Chelated Mineral mixture, By pass protein, & By pass fat for enhancing milk production in buffalo	2	**T1:** Farmers practices (Control)	Milk Yield (Lit/day), Milk fat (%) and Estrus after calving (days)					
					T2: Buffalo Fed with 50 gm/day chelated mineral mixture supplementation						
					T3: T2 + by pass protein (5 kg/day)						
					T4: T3 + by pass fat (100 gm/day)						
Calf		During winter season calf mortality due to Pneumonia, diarrhea & low body weight	Fortified Health management for reducing calf mortality	2	**T1**: Colustrum after birth upto 3 days	Calf survival rate (%) and Body weight (%)					
					T2: T1+ Antibiotics (Oxytetracyclin) after 5-7 days						
					T3: T1+ deworming (Panacure) (1st dose -21 days and 2nd dose -42 days)						
					T4: T1 +T2+T3 (colostrum feeding + Antibiotic + deworming)						

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	BC Ratio
13	*14*	*15*	*16*	*17*	*18*
Natural farming in *Kharif* Groundnut					
T1: Seed treatment through fungicides, Use of chemical fertilizers, Use of Insecticides-Pesticides **(Farmers Practices)**	*Prakrutik Krushi* Book by Acharya Devvrat, Hon'ble Governor of Gujarat and Junagadh Agricultural University	1650 (30)	Kg/ha (% Infestation of white grub)	27,500	3.3
T2:FYM @ 10 ton/ha, Use of PSB @ 8g/kg seeds, Use of *Trichoderma viride* @ 2.5 kg/ha, Use of *Beauveria bassiana* @ 80 mi per pump, *Metarhyzium anisopliae* @ 5 kg/ha, *Pseudomonas fluorescens* @ 2.5 kg/ha **(Recommended Practices)**		1500 (45)	Kg/ha (% Infestation of white grub)	23,100	2.6
T3: Bijamrut @ 20 lit./100 kg seeds, Ghan Jivamrut @ 200 kg/acre in basal dose and 100 kg at flowering stage, Jivamrut @ 200 lit./acre, Use of Dasparni Ark @ Agniastra and Brahmastra @ 6 to 8 lit. dissolved in 100 to 200 lit. of water and spray in 1 acre, Nimastra @ 200 lit. spray in 1 acre without water **(Interventions)**		1350 (55)	Kg/ha (% Infestation of white grub)	20,000	2.2
De-topping in Cotton					
T1: Farmers Practices	Junagadh Agricultural University, Junagadh	3400 (30.00)	Kg/ha (No. of bolls/plant	238680	3.03
T2: De-topping at 75 DAS		3550 (32.00)	Kg/ha (No. of bolls/plant)	249210	3.80
T3: De-topping of monopodial branches at 75 DAS & 90 DAS		3800 (38.00)	Kg/ha (No. of bolls/plant)	266760	4.01
Response of New Release Variety of Tomato GT-6 on leaf curl occurrence and yield					
T1: Sowing of Local Variety + any Pesticides.	Junagadh Agricultural University, Junagadh	18000 (10 to 15)	Kg/ha (% plant infestation)	100000	2.22
T2: Sowing of GT-6 Variety + foliar sprayings of Acephate 75 WP @ 1.5 g / liter 10 days after		22500 (1 to 2)		140000	2.64

T3: Sowing of Local Variety and foliar sprayings of Acephate 75 WP @ 1.5 g / liter 10 days after transplanting, Fipronil 5 SC @ 1.5 ml / liter 20 DAT, and Imidacloprid 70 WG @ 2g / 15 liter 40 DAT		19800 (5 to 6)		114500	2.37
Use of *Trichoderma* for wilt disease management in cumin					
T1: No use of *Trichoderma* or fungicide at the time of sowing	Junagadh Agricultural University, Junagadh	772 (15 to 18)	Kg/ha (% plant infestation)	150367	5.32
T2: Application of *Trichoderma* @ 5 kg /ha with organic manure @ 500 kg / ha at the time of sowing		965 (10 to 12)	Kg/ha (% plant infestation)	195167	6.35
T3: Application of *Trichoderma* @ 5 kg /ha along with organic manure @ 500 kg / ha at the time of sowing and second application of *Trichoderma* @ 5 kg /ha along with organic manure by broadcasting method at 15 days after germination.		1132 (5 to 6)	Kg/ha (% plant infestation)	232533	6.95
Performance of drip irrigation with line sowing method in cumin					
T1: Broad casting method without drip irrigation (Farmer's practices)	RTTC, JAU, Junagadh	950	Kg/ha	200500	5.42
T2: Line sowing (20 cm) with drip irrigation (Recommended technology)		1175	Kg/ha	251750	5.99
Chelated Mineral mixture, By pass protein, & By pass fat for enhancing milk production in buffalo					
T1: Farmers practices (Control)	NDRI, Kernal, Hariyana	8.3lit, 6.4% and 138 days	Milk yield (Lit/day), Milk fat (%) and Estrus after calving (days)	-	-
T2: Buffalo fed with 50 gm/day chelated mineral mixture supplementation		9.4 lit, 7.0% and 113 days	Milk yield (Lit/day), Milk fat (%) and Estrus after calving (days)	-	-
T3: T2 + by pass protein (5 kg/day)		10.2 lit,7.4% and 99 days	Milk yield (Lit/day), Milk fat (%) and Estrus after calving (days)	-	-

T4: T3 + by pass fat (100 gm/day)		11.1 lit, 7.9% and 89 days	Milk yield (Lit/day), Milk fat (%) and Estrus after calving (days)		
Fortified Health management for reducing calf mortality					
T1: Colustrum after birth upto 3 days	IVRI, Izzatnagar	41 and 10	Calf survival rate (%) and Body weight (%)		
T2: T1+ Antibiotics (Oxytetracyclin) after 5-7 days		70 and 13	Calf survival rate (%) and Body weight (%)		
T3: T1+ Deworming (Panacure) (1st dose -21 days and 2nd dose -42 days)		68 and 19	Calf survival rate (%) and Body weight (%)		
T4: T1 +T2+T3 (colostrum feeding + Antibiotic + deworming)		88 and 19	Calf survival rate (%) and Body weight (%)		

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

OFT-1

1. Title of Technology Assessed: **Natural farming in *Kharif* Groundnut**
2. Problem Definition: Deteriorate in yield and quality of groundnut
3. Details of technologies selected for assessment:
    1. Seed treatment through fungicides, Use of chemical fertilizers, Use of Insecticides-Pesticides (**Farmers Practices)**
    2. FYM@ 10 ton/ha, Use of PSB @ 8g/kg seeds, Use of *Trichoderma viride* @ 2.5 kg/ha, Use of *Beauveria bassiana* @ 80 mi per pump, *Metarhyzium anisopliae* @ 5 kg/ha, *Pseudomonas fluorescens* @ 2.5 kg/ha **(Recommended Practices)**
    3. Bijamrut @ 20 lit./100 kg seeds, Ghan Jivamrut @ 200 kg/acre in basal dose and 100 kg at flowering stage, Jivamrut @ 200 lit./acre, Use of Dasparni Ark @ Agniastra and Brahmastra @ 6 to 8 lit. dissolved in 100 to 200 lit. of water and spray in 1 acre, Nimastra @ 200 lit. spray in 1 acre without water (**Interventions)**
4. Source of technology: *Prakrutik Krushi* Book by Acharya Devvrat, Hon'ble Governor of Gujarat and JAU, Junagadh

5. Production system and thematic area: NRM
6. Performance of the Technology with performance indicators:

No	Name of the farmer	Name of the Village	Yield (Kg/ha)		
			T1	T2	T3
1	KVK Farm	Targhadia	1650	1500	1350
Average			**1650**	**1500**	**1350**

Note: In T3 Treatment due to heavy Infestation of white grub, plant population was reduced to 50%

7. Feedback, matrix scoring of various technology parameters recorded through farmer's participation / other scoring techniques: Farmers practices has given higher production as compare to recommended practices and interventions.
8. Final recommendation for micro level situation: Yield can be increased and stem rot infestation can be reduced with use of *Trichoderma* in mixture with castor cake.
9. Constraints identified and feedback for research: - White grub infestation was observed more in recommended practices and interventions treatment.
10. Process of farmers participation and their reaction: The farmers participation in natural farming awareness and training programme enhanced day by day and they are adopting natural farming on their fields also.

OFT-2

1. Title of Technology Assessed: **De-topping in Cotton**
2. Problem Definition: Low Yield of Cotton
3. Details of technologies selected for assessment:
    1. Farmers Practices
    2. De-topping at 75 DAS
    3. De-topping of monopodial branches at 75 DAS & 90 DAS
4. Source of technology: JAU
5. Production system and thematic area: NCM
6. Performance of the Technology with performance indicators:

No	Name of the farmer	Name of the Village	Unit	Result		
				T1	T2	T3
1	Devabhai Dodiya	Anadpar (Ta: Rajkot)	Yield (Kg/ha)	3300	3550	3800
2	Kalpeshbhai Dodiya			3550	3650	3850
3	Manojbhai Dodiya			3350	3450	3750
Average yield				**3400**	**3550**	**3800**

7. Feedback, matrix scoring of various technology parameters recorded through farmer's participation / other scoring techniques: Interventions treatment has given higher production as compare to farmers practice and recommended treatment.
8. Final recommendation for micro level situation: Yield can be increased through De-topping of monopodial branches at 75 DAS & 90 DAS
9. Constraints identified and feedback for research: - De-topping is much laborious work and taking time for operation.
10. Process of farmers participation and their reaction: Farmers are aware about de-topping in cotton and adopting this technology in their fields.

OFT-3

1. Title of Technology Assessed: **Response of new release variety of Tomato GT-6 on leaf curl occurrence and yield**
2. Problem Definition: Low yield of Tomato and Heavy Infestation of leaf Curl Virus
3. Details of technologies selected for assessment:
   T1: Sowing of Local Variety + any Pesticides.
   T2: Sowing of GT-6 Variety + foliar sprayings of Acephate 75 WP @ 1.5 g / liter 10 days after transplanting, Fipronil 5 SC @ 1.5 ml / liter 20 DAT, and Imidacloprid 70 WG @ 2g / 15 liter 40 DAT
   T3: Sowing of Local variety and foliar sprayings of Acephate 75 WP @ 1.5 g / liter 10 days after transplanting, Fipronil 5 SC @ 1.5 ml / liter 20 DAT, and Imidacloprid 70 WG @ 2g / 15 liter 40 DAT
4. Source of technology: JAU
5. Production system and thematic area: IPM
6 Performance of the Technology with performance indicators:

No	Name of the farmer	Name of the Village	Unit	Result		
				T1	T2	T3
1	Vastabhai Ramabhai Raghavani	Ori (Ta: Jasdan)	Yield (Kg/ha)	18300	22800	20100
2	Vinodbhai Gobarbhai Gohil	Ori (Ta: Jasdan)		17700	22200	19700
3	Mohanbhai Limbahbai Jamod	Ori (Ta: Jasdan)		18000	22500	19600
Average yield				**18000**	**22500**	**19800**
(% plant infestation)				**10 to 15**	**1 to 2**	**5 to 6**

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: Interventions (GT-6 variety) has given higher production as compare to Farmers practices and recommended practices.
8. Final recommendation for micro level situation: Farmers should grow latest variety of Tomato GT-6 and carried out foliar sprayings of Acephate 75 WP @ 1.5 g / liter 10 days after transplanting, Fipronil 5 SC @ 1.5 ml / liter 20 DAT, and Imidacloprid 70 WG @ 2g / 15 liter 40 DAT
9. Constraints identified and feedback for research: Farmers are less aware about latest technologies.
10. Process of farmers participation and their reaction: Farmers getting trainings and knowledge for latest technologies for better production in tomato.

OFT-4

1. Title of Technology Assessed: **Use of *Trichoderma* for wilt disease management in cumin**
2. Problem Definition: Heavy incidence of wilt disease in cumin
3. Details of technologies selected for assessment:
   T1: No use of *Trichoderma* or fungicide at the time of sowing
   T2: Application of *Trichoderma* @ 5 kg /ha with organic manure @500 kg / ha at the time of sowing.
   T3: Application of *Trichoderma* @ 5 kg /ha along with organic manure @500 kg / ha at the time of sowing and second application of *Trichoderma* @ 5 kg /ha along with organic manure by broadcasting method at 15 days after germination.
4. Source of technology: JAU
5. Production system and thematic area: IDM
6. Performance of the Technology with performance indicators:

No	Name of the farmer	Name of the Village	Unit	Result		
				T1	T2	T3
1	Bhavanbhai Kurjibhai Handa	Kanesara	Yield (Kg/ha)	745	880	1070
2	Vijaybhai Popatbhai Meniya			780	935	1155
3	Maheshbhai Rameshbhai Meniya			790	1080	1170
Average yield				**772**	**965**	**1132**
(% plant infestation)				**15 to 18**	**10 to 12**	**5 to 6**

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: T3 has given higher production as compare to T1 & T2
8. Final recommendation for micro level situation: Application of *Trichoderma* @ 5 kg /ha along with organic manure @500 kg / ha at the time of sowing and second application of *Trichoderma* @ 5 kg /ha along with organic manure by broadcasting method at 15 days after germination gave higher yield and lower plant infestation % as compared to T1 and T2.
9. Constraints identified and feedback for research: T3 has given higher production as compare to T1& T2
10. Process of farmers participation and their reaction: From the selected villages of KVK, Rajkot-I, progressive farmers who willing to adopt the new technologies were identified and selected to perform the OFT on their field. During the season guidance provided to them and data collected by the KVK scientist. Farmers are happy and agreed with the result found after completion of the OFT and ready to adopt the technology in whole farm in next season.

OFT-5

1. Title of Technology Assessed: **Performance of drip irrigation with line sowing method in cumin**
2. Problem Definition: Low yield due to sowing method and over irrigation
3. Details of technologies selected for assessment:

T1: Broad casting method without drip irrigation (Farmer's practices)
T2: Line sowing (20 cm) with drip irrigation (Recommended technology)

4. Source of technology: RTTC, JAU, Junagadh
5. Production system and thematic area: Resource Conservation Technology
6. Performance of the Technology with performance indicators:

No	Name of the farmer	Name of the Village	Yield (kg/ha)	
			T1	T2
1	Kanubhai Kurjibhai Meniya	Gokhlana (Ta: Jasdan)	945	1170
2	Manubhai KUrjibhai Meniya	Gokhlana (Ta: Jasdan)	930	1130
3	Babubhai Devabhai Ramani	Khorana (Ta: Rajkot)	975	1225
Average			**950**	**1175**

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: Line sowing with drip irrigation gave higher production of cumin as compare to broad casting method with flood irrigation.
8. Final recommendation for micro level situation: Yield can be increased and disease infestation can be reduced with use of drip irrigation in line sowing of cumin.
9. Constraints identified and feedback for research: -
10. Process of farmers participation and their reaction: Low disease infestation and increased yield in line sowing cumin crop with controlled irrigation (i.e. drip irrigation)

OFT-6

1. Title of Technology Assessed: **Chelated mineral mixture, by pass protein and by pass fat for enhancing milk production in dairy buffalo**
2. Problem Definition: Low milk production & infertility problems in dairy cow
3. Details of technologies selected for assessment:
    1. Farmers practices (Control)
    2. Buffalo Fed with 50 gms/day chelated mineral mixture supplementation
    3. Buffalo fed with 50 gms/day chelated mineral mixture, 5 kg by pass protein
    4. Buffalo fed with 50 gms/day chelated mineral mixture, 5 kg by pass protein, 100 gm by pass fat
4. Source of technology: NDRI, Kernal, Hariyana
5. Production system and thematic area: Nutrition Management
6. Performance of the Technology with performance indicators:

No	Name of the farmer	Name of the Village	Unit	Result			
				T1	T2	T3	T4
1	Jigneshbhai Karsanbhai Kakdiya	Kuvadva	Milk Yield (Lit/day)	8.3	9.4	10.2	11.1
2	Kishorbhai Narshibhai Pansuriya	Maliyasan	Milk Fat (%)	6.4	7.0	7.4	7.9
			Estrus after calving (days)	138	113	99	89

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: T4 treatment has given higher production as compare to T1, T2& T3
8. Final recommendation for micro level situation: This is first year of trial, final result will be obtained after two-year trial
9. Constraints identified and feedback for research: - Milk Yield, Milk fat can be increased and estrus after calving can be reduced with use of chelated mineral mixture, bypass protein and bypass fat
10. Process of farmers participation and their reaction: This was first year of trial for experimentation and it will be improved and repeated next year.

OFT-7

1. Title of Technology Assessed: **Fortified health management for reducing calf mortality**
2. Problem Definition: During winter season calf mortality due to Pneumonia, diarrhea & low body weight
3. Details of technologies selected for assessment:
   T1: Colustrum after birth upto 3 days
   T2: T1+ Antibiotics (Oxytetracyclin) after 5-7 days
   T3: T1+ deworming (Panacure) (1st dose -21 days and 2nd dose -42 days)
   T4: T1 +T2+T3 (colostrum feeding + Antibiotic + deworming)
4. Source of technology: IVRI, Izzatnagar
5. Production system and thematic area: Disease Management
6. Production system and thematic area: Health Management
7. Performance of the Technology with performance indicators:

No	Name of the farmer	Name of the Village	Unit	Result			
				T1	T2	T3	T4
1	Bhaveshbhai Radhubhai Sojitra	Kuvadva	Calf survival rate (%)	41%	70%	68%	88%
2	Bhaveshbhai Hanshrajbhai Parsana	Sanosara	Body weight (%)	10%	13%	19%	19%

8. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: T4 has given higher calf survival rate than T1, T2, T3 and higher body weight gain as compare to T1 & T2
9. Final recommendation for micro level situation: This is second year of trial, final result will be obtained after three-year trial
10. Constraints identified and feedback for research: - T4 has given higher calf survival rate as compare to T1, T2 & T3
11. Process of farmers participation and their reaction: This was second year of trial for experimentation and it is waited for farmer participation & reaction.

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 2023 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		
1	Groundnut	ICM	Varietal + INM+IDM + IPM	To test yield potentiality of newly released groundnut variety	20	120	150
2	Groundnut	IPM	Varietal evaluation+ IPM through Chlorpyriphos	Management of white grub through seed treatment	25	160	125
3	Chickpea	ICM	Varietal+ INM+IDM+IPM	To test yield potentiality of newly released gram variety	18	185	325
4	Wheat	ICM	INM		7	30	45
5	Cumin	ICM	IPM	Bio control in pest management	8	65	67
6	Cumin	ICM	Line sowing	Management of pest & disease	10	90	130
7	Seasonal egetables	Nutritional Security	Kitchen garden		15	45	-
8	Pear millet	ICM	Varietal evaluation	To test yield potentiality of newly released variety	5	45	
9	Brinjal	ICM	Varietal evaluation	To test yield potentiality of newly released variety	15	32	17
10	Buffalo	Nutrient Management	Bypass Protein (22%)	Increased milk production	13	36	-

11	Buffalo	Nutrient Management	By Pass Fat	Increased milk production	17	41	-
12	Buffalo	Nutrient Management	Chelated Mineral Mixture	Increased milk fat %	13	33	-
13	Fodder	Fodder Management	Fodder management	Increased milk production	14	38	-

B. Details of FLDs implemented during 2023 **(Kharif 2023, Rabi 2022-23, Summer 2023)** (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops**.)

Oilseeds :

Sl. No.	**Crop**	**Thematic area**	**Technology Demonstrated**	**Season and year**	**Area (ha)**		**No. of farmers/ demonstration**			**Reasons for shortfall in achievement**
					Proposed	**Actual**	**SC/ST**	**Others**	**Total**	
1	Groundnut	NRM	Varietal + INM + IDM + IPM	*Kharif* 2023	4.0	4.0	1	9	10	-
2	Groundnut	ICM	IPM Chlorpyriphos	*Kharif* 2023	4.0	4.0	-	10	10	-

Pulses:

Sl. No.	**Crop**	**Thematic area**	**Technology Demonstrated**	**Season and year**	**Area (ha)**		**No. of farmers/ demonstration**			**Reasons for shortfall in achievement**
					Proposed	**Actual**	**SC/ST**	**Others**	**Total**	
1	Chickpea	ICM	Varietal+ INM+IDM+ IPM	*Rabi* 2022-23	4.0	4.0	2	8	10	-

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Cereals:

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Wheat	ICM	INM	*Rabi* 2022-23	2.0	2.0	1	4	5	-
2	Pear millet	ICM	Varietal evaluation	Summer *2023*	2.0	2.0	1	4	5	-

Vegetable:

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Brinjal	ICM	Varietal evaluation	*Rabi* 2022-23	4.0	4.0	-	10	10	--

Others:

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Cumin	ICM	IPM	*Rabi* 2022-23	4.0	4.0	0	10	10	-
2	Cumin	ICM	Line sowing	*Rabi* 2022-23	2.0	2.0	0	5	5	-
3	Buffalo	Nutrient management	Bypass Protein (22%)	2023	-	-	3	17	20	-
4	Buffalo	Nutrient management	By Pass Fat	2023	-	-	2	18	20	-
5	Buffalo	Nutrient management	Chelated Mineral Mixture	2023	-	-	2	18	20	-
6	Fodder	Fodder management	Fodder management	-	-	-	1	9	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					
Groundnut	*Kharif*	RF	M. B.	L	M	H	Wheat/ Cumin	11/6/2023	16/10/2023	587.5 mm	-
Groundnut	*Kharif*	RF	M. B.	L	M	H	Wheat/ Cumin	17/6/2023	12/10/2023	587.5 mm	-
Brinjal	*Rabi*	Irrigated	M. B.	L	M	H	G'nut / Cotton	2/11/2022	15/2/2023	-	-
Chickpea	*Rabi*	Irrigated	M. B.	L	M	H	G'nut / Cotton	16/11/2022	21/2/2023	-	-
Wheat	*Rabi*	Irrigated	M. B.	L	M	H	G'nut / Cotton	24/11/2022	20/2/2023	-	-
Cumin	*Rabi*	Irrigated	M. B.	L	M	H	G'nut / Cotton	20/11/2022	15/2/2023	-	-
Cumin	*Rabi*	Irrigated	M. B.	L	M	H	G'nut / Cotton	16/11/2022	21/2/2023	-	-
Pear millet	Summer	Irrigated	M. B.	L	M	H	Chickpea/ Wheat	15/02/2023	25/05/2023	587.5 mm	-

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Recently developed certified varieties of different crops give higher yield.
2	Use of fertilizers, irrigation, insecticides and fungicide as per recommendation reduce the production cost.
3	Low disease infestation and increase in the yield in line sowing method of cumin with use of drip irrigation
4	Stem rot infestation can be reduced with use of *Trichoderma* in mixture with castor cake
5	Yield of cotton can be increased through De-topping of monopodial branches at 75 and 90 DAS
6	Recently developed certified varieties of different vegetable crops give higher yield.

Farmers' reactions on specific technologies

S. No	Feed Back
1.	Groundnut variety GJG-32 gave higher yield and low disease infestation as compared to other variety but it required a greater number of days for maturity. It also has bitter test.
2.	Yield of cotton can be increased through De-topping but De-topping practice is much laborious work and taking time for operation.
3.	Application of *Trichoderma* reduce wilt disease occurrence in cumin crop
4.	Application of *Trichoderma* reduce stem rot infestation in groundnut
5.	Low infestation of pest & disease in line sowing of cumin

6.	Research needed for control of insect-pests and diseases in organic/natural farming
7.	Improve nutritional status of cattle and increase productivity of milch animal through feeding bypass fat and bypass protein
8.	Fresh vegetable available at doorstep and at a time with minimum cost in kitchen gardening
9.	Size, color, shape and shining of the fruits (Brinjal GRB-7) are attractive.

Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	6	Jan. to Dec. 2023	168	-
2	Farmers Training	5		132	-
3	Media coverage	1		-	-
4	Training for extension functionaries	1		49	-

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										
Groundnut																		
Groundnut	NRM	Varietal + INM+IDM + IPM	GJG-32	10	4.0	23.00	15.00	19.00	16.00	18.75	41500	105000	63500	**2.53**	39500	85800	46300	**2.17**
Groundnut	ICM	IPM Chlorpyriphos	GJG-32	10	4.0	25.00	21.50	23.00	19.38	18.90	42000	138000	96000	3.29	41000	116250	75250	2.84

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

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										
Chickpea																		
Chickpea	Varietal evaluation	Varietal+ INM+IDM+IPM	GJG-6	10	4.0	24.00	16.00	20.00	18.00	**11.11**	27000	101300	74300	**3.75**	24500	90000	65500	**3.67**

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																			
Paddy																			
Waterlogged Situation																			
Coarse Rice																			
Scented Rice																			
Wheat																			
Wheat (GW-451)	ICM	INM	5	2.0	45.00	33.00	39.00	36.00	**8.33**	-	-	32000	98500	66500	**3.07**	30100	91500	61400	**3.03**
Wheat Timely sown																			
Wheat Late Sown																			
Mandua																			
Barley																			
Maize																			
Amaranth																			
Millets																			
Jowar																			

Bajra																			
Barnyard millet																			
Finger millet																			
Vegetables																			
Bottlegourd																			
Bittergourd																			
Cowpea																			
Spongegourd																			
Petha																			
Tomato																			
Frenchbean																			
Capsicum																			
Chilli																			
Brinjal																			
Brinjal	Varietal	GRB-7	10	4	295	225	260	215	20.93			75000	234000	159000	3.12	70000	193000	123500	2.76
Vegetable pea																			

Softgourd																		
Okra																		
Colocasia (Arvi)																		
Broccoli																		
Cucumber																		
Onion																		
Coriender																		
Lettuce																		
Cabbage																		
Cauliflower																		
Elephant fruit																		
Any other (Pl specify)																		
Flower crops																		
Marigold																		
Bela																		
Tuberose																		

Gladiolus																			
Any other (Pl. specify)																			
Fruit crops																			
Mango																			
Strawberry																			
Guava																			
Banana																			
Papaya																			
Muskmelon																			
Watermelon																			
Any other (Pl. specify)																			
Spices & condiments																			
Ginger																			
Garlic																			
Turmeric																			
Any other (Pl. specify)																			
Cumin	IPM	GC-4 + Beuveria	10	4	12.40	9.90	10.90	7.80	39.74	4%	16%	36200	261600	225400	7.23	34000	187200	153200	5.51
Cumin	IDM	Line sowing for minimizing	5	2	12.10	9.20	10.10	8.00	26.25	6%	15.3%	35800	242400	206600	6.77	33500	192000	158500	5.73

		the disease intensities																	
Commercial Crops																			
Sugarcane																			
Potato																			
Cotton																			
Any other (Pl. specify)																			
Medicinal & aromatic plants																			
Mentholment																			
Kalmegh																			
Ashwagandha																			
Any other (Pl. specify)																			
Fodder Crops																			
Sorghum (F)																			
Cowpea (F)																			
Maize (F)																			
Lucern																			
Berseem																			
Oat (F)																			
Napier																			
Grasses																			
Fodder (Jinjvo)	Fodder Management		10	1			85	72	18.05			82300	123000	40700	2.49	73000	108000	35000	1.48

Frontline Demonstration on Nutri cereals:

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										
Pear millet	ICM	Varietal (Bio fortified)	GHB 1129 and GHB 1231	5	2.0	31.25	26.50	28.75	26.25	**9.52**	23000	61095	38095	**2.66**	22500	55780	33280	**2.48**

FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of Units (Animal/ Poultry/ Birds, etc)	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Cattle																	
Buffalo																	
Buffalo	Nutrient Management	Bypass Protein (22%)	20	20 animals	1892 kg/lactation	1683 kg/lactation	12.42			37900	85100	47200	2.25	36000	73600	37600	2.04
Buffalo	Nutrient Management	By Pass Fat	20	20 animals	8.1% Fat	6.8% Fat	19.12			35000	92420	57420	2.64	30000	71400	41400	2.38
Buffalo	Nutrient Management	Chelated Mineral mixture	20	20 animals	1648 kg/lactation	1493 kg/lactation	10.38			30000	67234	37234	2.24	27500	59040	31540	2.14
Buffalo Calf																	
Dairy																	
Poultry																	
Sheep & Goat																	
Vaccination																	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

FLD on Fisheries : Nil

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Common Carps																	
Composite fish culture																	
Feed Management																	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

FLD on Other enterprises : Nil

Category	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.) or Rs./unit				Economics of check (Rs.) or Rs./unit			
				Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Oyster Mushroom																
Button Mushroom																
Apiculture																
Maize Sheller																
Value Addition																
Vermi Compost																
Sericulture																

FLD on Women Empowerment : Nil

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check

FLD on Farm Implements and Machinery

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Fodder waste (Kg/animal/day)		% change in major parameter (waste reduction	Labor reduction (man days)				Cost reduction (Rs./animal/day)			
						Demo	Check		Land preparation	Sowing	Weeding	Total	Land preparation	Labour	Irrigation	Total

Agri-drone demonstration

Name of the implement	Season and year	Village Name	Crop	No. of Demo. at farmer's field	Area (Acre)	Critical inputs	No. of farmers participated
Agri-drone	Kharif, 2023	Khorana	Cotton	1	1	Bio-pesticide (i.e. *Beauveria bassiana*)	42
		Jiyana	Cotton	2	2		48
	Rabi, 2023-24	Ranpur	Chickpea	1	1		31
			Cumin	1	1		
	Rabi, 2023-24	Magharwada	Cumin	1	1		40
			Chickpea	1	1		

Farmers actively participated to see the Agri-drone demonstration and gave positive feedback about Agri-drone and interested to adopt the technology. The farmers have expressed their consent to spray pesticide using Agri-drone in their field.

By using Agri-drone technology, large area can be covered in short period of time as well as uniform spraying can be done and pesticide use efficiently is increased. Pesticide can be easily sprayed in standing crop like, cotton, chickpea, cumin, etc.

FLD on Other Enterprise: Kitchen Gardening

Nutrition garden components	Thematic area	Area (sq mt)	No. of Farmer	No. of Units	Yield (Kg)- supply of vegetables, fruits, etc from KG in the year		% change in yield	Household size (number)		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demonstration	Check*		Demo	Check	Gross Cost	Gross Return/Savings*	Net Return	BCR (R/C)	Gross Cost	Gross Return/ Savings*	Net Return	BCR (R/C)
Different vegetables	Nutritive & fresh healthy vegetables	1000	10	10	-	-	-	-	-	-	-	-	-	-	-	-	-

Farm women reaction

-Kitchen gardening gives continues supply of fresh vegetables at lower cost which gives daily nutritious diet
-In kitchen gardening farm women are not applying any agrochemicals so they produce organic vegetables
-Before demonstration, farm women were growing only three to four vegetable crops in their backyard but after demonstration they said that they will grow different vegetable crops through kitchen gardening in scientific way
-They gave extra vegetables to their neighbors
-Farm women said that now we will generate income by selling of extra vegetables because now they are aware about precious organic vegetables
- Due to kitchen gardening children learned to about plant cognization and bio diversity.

FLD on Demonstration details on crop hybrids : Nil

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						
Oilseed crop													
Pulse crop													
Cereal crop													
Vegetable crop													
Fruit crop													
Other (specify)													

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

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										
Weed Management	1	26	0	26	0	0	0	26	0	26
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management	1	25	0	25	5	0	5	30	0	30
Soil & water conservation										
Integrated nutrient management	2	98	14	112	0	0	0	98	14	112
Production of organic inputs	2	30	20	50	5	7	12	35	27	62
Others (pl. specify)	**7**	**198**	**20**	**218**	**26**	**8**	**34**	**224**	**28**	**252**
Total	**13**	**377**	**54**	**431**	**36**	**15**	**51**	**413**	**69**	**482**
II Horticulture										
a) Vegetable Crops										
Production of low value and high value crops										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)	1	0	50	50	0	0	0	0	50	50
Total (a)	**1**	**0**	**50**	**50**	**0**	**0**	**0**	**0**	**50**	**50**
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit	1	31	1	32	7	0	7	38	1	39
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)	1	27	0	27	0	0	0	27	0	27
Total (b)	**2**	**58**	**1**	**59**	**7**	**0**	**7**	**65**	**1**	**66**
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)	1	25	0	25	0	0	0	25	0	25
Total (d)	**1**	**25**	**0**	**25**	**0**	**0**	**0**	**25**	**0**	**25**
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)										

g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Grand Total (a to g)	**4**	**83**	**51**	**134**	**7**	**0**	**7**	**90**	**51**	**141**
III Soil Health and Fertility Management										
Soil fertility management	1	43	0	43	0	0	0	43	0	43
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing										
Others (pl specify)										
Total	**1**	**43**	**0**	**43**	**0**	**0**	**0**	**43**	**0**	**43**
IV Livestock Production and Management										
Dairy Management	2	16	19	35	3	4	7	19	23	42
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management	2	13	38	51	0	11	11	13	49	62
Disease Management	1	16	0	16	2	0	2	18	0	18
Feed & fodder technology	1	18	0	18	2	0	2	20	0	20
Production of quality animal products										
Others (pl specify)	1	17	0	17	4	0	4	21	0	21
Total	**7**	**80**	**57**	**137**	**11**	**15**	**26**	**91**	**72**	**163**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1		17	17		1	1		18	18
Design and development of low/minimum cost diet	1		29	29		1	1		30	30
Designing and development for high nutrient efficiency diet	1		30	30					30	30
Minimization of nutrient loss in processing										
Processing and cooking	1		12	12					12	12
Gender mainstreaming through SHGs										
Storage loss minimization techniques	2		39	39		3	3		42	42
Value addition	1		17	17		2	2		19	19
Women empowerment										
Location specific drudgery reduction technologies										
Rural Crafts	1		34	34		2	2		36	36
Women and child care	1		36	36					36	36
Others (pl specify)										
Total	**9**	**0**	**214**	**214**	**0**	**9**	**9**	**0**	**223**	**223**
VI Agril. Engineering										
Farm Machinery and its maintenance	1	9	0	9	1	0	1	10	0	10
Installation and maintenance of micro irrigation systems	2	45	0	45	2	0	2	47	0	47
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements	1	19	3	22	0	0	0	19	3	22
Small scale processing and value addition	1	16	0	16	2	0	2	18	0	18
Post Harvest Technology	1	18	0	18	1	0	1	19	0	19
Others: Rain water harvesting	1	26	0	26	3	0	3	29	0	29
Others: Efficient use of MIS	2	58	3	61	4	0	4	62	3	65
Total	**9**	**191**	**6**	**197**	**13**	**0**	**13**	**204**	**6**	**210**
VII Plant Protection										

Integrated Pest Management	1	15	1	16	0	0	0	15	1	16
Integrated Disease Management										
Bio-control of pests and diseases	1	31	8	39	0	0	0	31	8	39
Production of bio control agents and bio pesticides										
Others (pl specify)	1	0	42	42	0	8	8	0	50	50
Total	**3**	**46**	**51**	**97**	**0**	**8**	**8**	**46**	**59**	**105**
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
Total										
X CapacityBuilding and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total										
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL	**46**	**820**	**433**	**1253**	**67**	**47**	**114**	**887**	**480**	**1367**

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										
Weed Management	1	18	0	18	2	0	2	20	0	20
Resource Conservation Technologies	2	50	02	52	7	0	7	57	02	59
Cropping Systems										
Crop Diversification										
Integrated Farming										

Micro Irrigation/irrigation	1	25	23	48	5	7	12	30	30	60
Seed production										
Nursery management										
Integrated Crop Management										
Soil & water conservation	1	20	1	21	4	0	4	24	1	25
Integrated nutrient management	1	20	0	20	4	0	4	24	0	24
Production of organic inputs	1	20	0	20	0	0	0	20	0	20
Others (pl specify)										
Total	**7**	**153**	**26**	**179**	**22**	**7**	**29**	**175**	**33**	**208**
II Horticulture										
a) Vegetable Crops										
Production of low value and high value crops	1	25	0	25	0	0	0	25	0	25
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)	1	13	9	22	0	0	0	13	9	22
Total (a)	**2**	**38**	**9**	**47**	**0**	**0**	**0**	**38**	**9**	**47**
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)										
Total (b)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										
f) Spices										
Production and Management technology	1	25	0	25	0	0	0	25	0	25
Processing and value addition										
Others (pl specify)										
Total (f)	**1**	**25**	**0**	**25**	**0**	**0**	**0**	**25**	**0**	**25**
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Grand Total (a to g)	**3**	**63**	**9**	**72**	**0**	**0**	**0**	**63**	**9**	**72**
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management	**2**	**59**	**0**	**59**	**10**	**0**	**10**	**69**	**0**	**69**
Production and use of organic inputs										

Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing										
Others (pl specify)										
Total	**2**	**59**	**0**	**59**	**10**	**0**	**10**	**69**	**0**	**69**
IV Livestock Production and Management										
Dairy Management	3	255	49	304	47	9	56	302	58	360
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management	1	15	0	15	3	0	3	18	0	18
Disease Management	1	64	48	112	3	5	8	67	53	120
Feed & fodder technology	1	109	0	109	11	0	11	120	0	120
Production of quality animal products										
Others (pl specify)										
Total	**6**	**443**	**97**	**540**	**64**	**14**	**78**	**507**	**111**	**618**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet	1		19	19		5	5		24	24
Minimization of nutrient loss in processing										
Processing and cooking	1		18	18		3	3		21	21
Gender mainstreaming through SHGs	1	5	38	43				5	38	43
Storage loss minimization techniques	1		28	28		3	3		31	31
Value addition	1					20	20		20	20
Women empowerment	1		28	28					28	28
Location specific drudgery reduction technologies	1		23	23					23	23
Rural Crafts										
Women and child care										
Others (pl specify)										
Total	**7**	**5**	**154**	**159**	**0**	**31**	**31**	**5**	**185**	**190**
VI Agril. Engineering										
Farm Machinery and its maintenance	1	30	0	30	3	0	3	33	0	33
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices	1	17	2	19	3	0	3	20	2	22
Production of small tools and implements										
Repair and maintenance of farm machinery and implements	1	29	0	29	2	0	2	31	0	31
Small scale processing and value addition										
Post Harvest Technology	1	19	2	21	5	0	5	24	2	26
Others: In-situ moisture conservation practices in dry land agriculture	1	23	0	23	2	0	2	25	0	25
Others: Importance and use of renewable energy in agriculture	1	18	4	22	2	0	2	20	4	24
Total	**6**	**136**	**8**	**144**	**17**	**0**	**17**	**153**	**8**	**161**
VII Plant Protection										
Integrated Pest Management	2	30	5	35	0	0	0	30	5	35
Integrated Disease Management	1	19	6	25	0	0	0	19	6	25
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl specify)										
Total	**3**	**49**	**11**	**60**	**0**	**0**	**0**	**49**	**11**	**60**
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										

Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
Total										
X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total										
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL	**34**	**908**	**305**	**1213**	**113**	**52**	**165**	**1021**	**357**	**1378**

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										
Weed Management	2	44	0	44	2	0	2	46	0	46
Resource Conservation Technologies	2	50	2	52	7	0	7	57	2	59
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation	1	25	23	48	5	7	12	30	30	60
Seed production										
Nursery management										
Integrated Crop Management	1	25	0	25	5	0	5	30	0	30
Soil & water conservation	1	20	1	21	4	0	4	24	1	25
Integrated nutrient management	3	118	14	132	4	0	4	122	14	136
Production of organic inputs	3	50	20	70	5	7	12	55	27	82
Others (pl specify)	**7**	**198**	**20**	**218**	**26**	**8**	**34**	**224**	**28**	**252**
Total	20	530	80	610	58	22	80	588	102	690

II Horticulture										
a) Vegetable Crops										
Production of low value and high value crops	1	25	0	25	0	0	0	25	0	25
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)	2	13	59	72	0	0	0	13	59	72
Total (a)	**3**	**38**	**59**	**97**	**0**	**0**	**0**	**38**	**59**	**97**
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit	1	31	1	32	7	0	7	38	1	39
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)	1	27	0	27	0	0	0	27	0	27
Total (b)	**2**	**58**	**1**	**59**	**7**	**0**	**7**	**65**	**1**	**66**
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)	1	25	0	25	0	0	0	25	0	25
Total (d)	**1**	**25**	**0**	**25**	**0**	**0**	**0**	**25**	**0**	**25**
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices										
Production and Management technology	1	25	0	25	0	0	0	25	0	25
Processing and value addition										
Others (pl specify)										
Total (f)	**1**	**25**	**0**	**25**	**0**	**0**	**0**	**25**	**0**	**25**
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Grand Total (a to g)	**7**	**146**	**60**	**206**	**7**	**0**	**7**	**153**	**60**	**213**
III Soil Health and Fertility Management										
Soil fertility management	1	43	0	43	0	0	0	43	0	43
Integrated water management										
Integrated Nutrient Management	2	59	0	59	10	0	10	69	0	69
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing										
Others (pl specify)										
Total	3	102	0	102	10	0	10	112	0	112

IV Livestock Production and Management										
Dairy Management	5	271	68	339	50	13	63	321	81	402
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management	3	28	38	66	3	11	14	31	49	80
Disease Management	2	80	48	128	5	5	10	85	53	138
Feed & fodder technology	2	127	0	127	13	0	13	140	0	140
Production of quality animal products										
Others (pl specify)	1	17	0	17	4	0	4	21	0	21
Total	**13**	**523**	**154**	**677**	**75**	**29**	**104**	**598**	**183**	**781**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	17	17	0	1	1	0	18	18
Design and development of low/minimum cost diet	1	0	29	29	0	1	1	0	30	30
Designing and development for high nutrient efficiency diet	2	0	49	49	0	5	5	0	54	54
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0	0	0
Processing and cooking	2	0	30	30	0	3	3	0	33	33
Gender mainstreaming through SHGs	1	5	38	43	0	0	0	5	38	43
Storage loss minimization techniques	3	0	67	67	0	6	6	0	73	73
Value addition	2	0	17	17	0	22	22	0	39	39
Women empowerment	1	0	28	28	0	0	0	0	28	28
Location specific drudgery reduction technologies	1	0	23	23	0	0	0	0	23	23
Rural Crafts	1	0	34	34	0	2	2	0	36	36
Women and child care	1	0	36	36	0	0	0	0	36	36
Others (pl specify)										
Total	**16**	**5**	**368**	**373**	**0**	**40**	**40**	**5**	**408**	**413**
VI Agril. Engineering										
Farm Machinery and its maintenance	2	39	0	39	4	0	4	43	0	43
Installation and maintenance of micro irrigation systems	2	45	0	45	2	0	2	47	0	47
Use of Plastics in farming practices	1	17	2	19	3	0	3	20	2	22
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	2	48	3	51	2	0	2	50	3	53
Small scale processing and value addition	1	16	0	16	2	0	2	18	0	18
Post Harvest Technology	2	37	2	39	6	0	6	43	2	45
Others: Rain water harvesting	1	26	0	26	3	0	3	29	0	29
Others: Efficient use of MIS	2	58	3	61	4	0	4	62	3	65
Others: In-situ moisture conservation practices in dry land agriculture	1	23	0	23	2	0	2	25	0	25
Others: Importance and use of renewable energy in agriculture	1	18	4	22	2	0	2	20	4	24
Total	**15**	**327**	**14**	**341**	**30**	**0**	**30**	**357**	**14**	**371**
VII Plant Protection										
Integrated Pest Management	3	45	6	51	0	0	0	45	6	51
Integrated Disease Management	1	19	6	25	0	0	0	19	6	25
Bio-control of pests and diseases	1	31	8	39	0	0	0	31	8	39
Production of bio control agents and bio pesticides										
Others (pl specify)	1	0	42	42	0	8	8	0	50	50
Total	**6**	**95**	**62**	**157**	**0**	**8**	**8**	**95**	**70**	**165**
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										

Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
Total										
X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total										
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL	**80**	**1728**	**738**	**2466**	**180**	**99**	**279**	**1908**	**837**	**2745**

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**
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										

Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts	1		34	34		2	2		36	36
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl. specify)										
TOTAL	1		34	34		2	2		36	36

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
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements	1	29		29	2		2	31		31
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl. specify)										
TOTAL	1	29		29	2		2	31		31

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
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements	1	29		29	2		2	31		31
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts	1		34	34		2	2		36	36
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl. specify)										
TOTAL	2	29	34	63	2	2	4	31	36	67

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
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										

Management in farm animals										
Livestock feed and fodder production										
Household food security										
Natural Farming	1	27	12	39	5	2	7	**32**	**14**	**46**
Importance and Efficient use of MIS in agriculture	1	40	0	40	0	0	0	40	0	40
TOTAL	**2**	**67**	**12**	**79**	**5**	**2**	**7**	**72**	**14**	**86**

Training programmes for Extension Personnel including sponsored training (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
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
TOTAL										

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
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Natural Farming	1	27	12	39	5	2	7	**32**	**14**	**46**
Importance and Efficient use of MIS in agriculture	1	40	0	40	0	0	0	40	0	40
TOTAL	**2**	**67**	**12**	**79**	**5**	**2**	**7**	**72**	**14**	**86**

Sponsored 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										
Increasing production and productivity of crops										
Commercial production of vegetables										
Integrated Nutrient Management	2	98	14	112	0	0	0	98	14	112
Natural Farming	2	78	0	78	0	0	0	78	0	78
Production and value addition										
Fruit Plants	1	0	50	50	0	0	0	0	50	50
Ornamental plants										
Spices crops										
Vegetable crops	1	27	0	27	0	0	0	27	0	27
Soil health and fertility management	3	102	0	102	10	0	10	112	0	112
Production of Inputs at site										
Methods of protective cultivation										
Others (pl. specify) Honey bee rearing	1	25	0	25	0	0	0	25	0	25
Total	**10**	**330**	**64**	**394**	**10**	**0**	**10**	**340**	**64**	**404**
Post harvest technology and value addition										
Processing and value addition										
Others (pl. specify)										
Total										
Farm machinery										
Farm machinery, tools and implements										
Operation and maintenance of micro irrigation system	1	15	0	15	2	0	2	17	0	17
Importance and Efficient use of drip irrigation system in horticulture crops	1	28	3	31	4	0	4	32	3	35
Total	**2**	**43**	**3**	**46**	**6**	**0**	**6**	**49**	**3**	**52**
Livestock and fisheries										
Livestock production and management	1	0	38	38	0	11	11	0	49	49
Animal Nutrition Management										
Animal Disease Management										
Fisheries Nutrition										
Fisheries Management										
Others (pl. specify)										
Total	**1**	**0**	**38**	**38**	**0**	**11**	**11**	**0**	**49**	**49**
Home Science										
Household nutritional security	1		27	27		3	3		30	30
Economic empowerment of women	1	5	38	43				5	38	43
Drudgery reduction of women										
Others (pl. specify)										
Total	**2**	**5**	**65**	**70**	**0**	**3**	**3**	**5**	**68**	**73**
Agricultural Extension										
CapacityBuilding and Group Dynamics										
Others (pl. specify)										
Total										
GRAND TOTAL	**15**	**378**	**170**	**548**	**16**	**14**	**30**	**394**	**184**	**578**

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
Crop production and management										
Commercial floriculture										
Commercial fruit production										
Commercial vegetable production										
Integrated crop management	1	50		50	5		5	55		55
Organic farming										
Others (pl. specify)										
Total	**1**	**50**		**50**	**5**		**5**	**55**		**55**
Post harvest technology and value addition										
Value addition	2		57	57		4	4		61	61
Others (pl. specify)										
Total	**2**		**57**	**57**		**4**	**4**		**61**	**61**

Livestock and fisheries										
Dairy farming	1		35	35		14	14		49	49
Composite fish culture										
Sheep and goat rearing										
Piggery										
Poultry farming										
Others (pl. specify)										
Total	**1**		**35**	**35**		**14**	**14**		**49**	**49**
Income generation activities										
Vermicomposting										
Production of bio-agents, bio-pesticides,										
bio-fertilizers etc.										
Repair and maintenance of farm machinery										
and implements										
Rural Crafts										
Seed production										
Sericulture										
Mushroom cultivation										
Nursery, grafting etc.										
Tailoring, stitching, embroidery, dying etc.										
Agril. para-workers, para-vet training										
Others (pl. specify)										
Total										
Agricultural Extension										
Capacity building and group dynamics										
Others (pl. specify)										
Total										
Grand Total	**4**	**50**	**92**	**142**	**5**	**18**	**23**	**55**	**110**	**165**

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services (Other than KMAS)	799	1118	5	1123
Diagnostic visits	34	79	10	89
Field Day	6	168	3	171
Group discussions	5	32	0	32
Kisan Ghosthi	6	180	0	180
Film Show	7	1038	9	1047
Self -help groups	-	-	-	-
Kisan Mela (Participant)	2	-	-	-
Exhibition	1	328	11	339
Scientists' visit to farmers field	44	208	10	218
Plant/animal health camps	1	69	2	71
Farm Science Club	-	-	-	-
Ex-trainees Sammelan	-	-	-	-
Farmers' seminar/workshop	1	50	3	53
Method Demonstrations	6	203	3	206
Different activities under SHS	5	234	2	236
Celebration of international women day	1	28	0	28
Live telecast at KVK on International millets conference	1	80	0	80
Celebration of International Yoga Day	1	21	0	21
Celebration of ICAR foundation day	1	107	1	108
Celebration of Parthenium week	1	190	0	190
Celebration of Mahila Kisan Diwas	1	21	0	21
Climate Resilient and Smart Agriculture program	1	174	0	174
Celebration of Technology week	1	328	6	334
Mann Ki Bat Program	1	63	0	63
Mission Life Style for Environment (LiFE)	1	195	3	198
Celebration of World soil health day	1	55	0	55
Celebration of Kishan Diwas	1	397	5	402
Celebration of Poshan Mah	1	136	0	136

Awareness program under celebration of international year of millets	17	2877	5	2882
Celebration of World Environment Day	1	25	0	25
Agro Dron Demonstration at farmers field	4	161	0	161
Rabi Krushi Mahotsav (7 Scientists)	-	-	-	-
Participant in Viksit Bharat Sankalp Yatra	28	11442	112	11554
Total	**980**	**20007**	**190**	**20197**

Note- Advisory services includes social media, website, telephonic calls etc.

Details of other extension programmes:

Particulars	Number
Electronic Media (CD./DVD)	-
Extension Literature	6
Newspaper coverage	7
Popular articles	-
Radio Talks	1
TV Talks	-
Animal health camps (Number of animals treated)	1(69)
Social Media (No. of platforms Used)	4
Others (pl. specify)	-
Total	**19**

3.6 Online activities during year 2023

S. No.	Activity Type	Mode of implementation (Video conferencing / Audio Conferencing / Facebook Live / YouTube Live/ Zoom/ Google meet/ Webex etc.)	Title of Program	No. of Programmes	No. of Participants/ Views
A	Farmers training	-	-	-	-
	Total				
B	Farmers scientist's interaction programme	Audio conf.	INM & Natural farming	9	1308
	Total			**9**	**1308**
C	Farmers seminars	-	-	-	-
D	Expert lectures				
1		Audio conferencing	Natural farming	2	105
	Total			**2**	**105**
E	Any other (Pl. specify)	-	-	-	-
	Grand Total (A+B+C+D+E)			**11**	**1413**

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						
Oilseeds	Groundnut (Breeder)	GJG-32		30.00 (Expected)	437500/-	-
	Groundnut (TF)	GJG-32		88.00 (Expected)	6375000/-	-
Pulses	Chickpea (Breeder)	GG-5	-	24.25	3010000/-	-
Commercial crops						
Vegetables						
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Others						
Total				**142.25**		

Production of planting materials by the KVK : Nil

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Commercial						
Vegetable seedlings						

Fruits						
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices						
Tuber						
Fodder crop saplings						
Forest Species						
Others						
Total						

Production of Bio-Products : Nil

Bio Products	**Name of the bio-product**	**Quantity Kg/Lit**	**Value (Rs.)**	**No. of Farmers**
Bio Fertilizers				
Bio-pesticide				
Bio-fungicide				
Bio Agents				
Others				
Total				

Production of livestock materials : Nil

Particulars of Live stock	Name of the animal / bird / aquatics	Name of the breed	Type of Produce	unit (no./ lit/kg)	Quantity	Value (Rs.)	No. of Farmers
Dairy animals							
Cows							
Buffaloes							
Calves							
Others (Pl. specify)							
Poultry							
Broilers							
Layers							
Duals (broiler and layer)							
Japanese Quail							
Turkey							
Emu							
Ducks							
Others (Pl. specify)							
Piggery							
Piglet							
Others (Pl.specify)							
Fisheries							
Indian carp							
Exotic carp							
Others (Pl. specify)							
Total							

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

A. KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.):

B. Literature developed/published

Item	Citation /Title	Authors name	Name & Number
Research papers/ Abstract	Seroprevalence & detection of the PPR virus of sheep & goat of the saurashtra region of Gujarat (Abstract)	**M.M. Tajpara**, N.M.Shah, H.H.Savsani, B.B.Javia	ISEE National Seminar-2023 Souvenir, 22-24 June 2023, UAS, Bangalore (A-547, Theme 10)
	Comparative efficacy of S-ELISA, N & F gene based reverse transcriptase PCR and cell culture methods for detection of PPR virus in clinical specimens	**M. M. Tajpara** N.M.Shah, D.R.Patel, B.B.Bhanderi	Indian Journal of Animal Health, 62(2): 286-291, December 2023
	Book chapter: "Evaluation of Different Size of Broad Bed and Furrow for Surface Runoff and Soil Loss and Productivity of Groundnut (Arachis hypogea L.) under Rainfed Conditions of Gujarat, India"	P.D. Vekariya **D.P. Sanepara** B.B. Limbasia V.D. Vora D.S. Hirpara	Book Publisher: "Novel Perspectives of Geography, Environment and Earth Sciences Vol. 4", Chapter-4, P:39-52, Print ISBN 978-81-19039-78-4, eBook ISBN 978-81-19039-79-4 https://DOI: 10.9734/bpi/npgees/v4/4023E
	The study on Empowerment of women by Self Help Groups	Manvar H. A., Kathiriya J. B. Rajpura M. R.	International Journal of Novel Research and Development, Volume 8, Issue 7, page: 615-621, July 2023
	Role of Self-Help Group in Socio–Psychological Empowerment of Women	Manvar H. A., Rajpura M. R., Kathiriya J. B.	International Journal of Innovative Science and Research Technology, Volume 8, Issue 7, page: 91-105, July 2023

	Exploring quality assessment of peanut oil for encapsulation	Sachin S. Bhuva, N.K. Dhamsaniya **G. V. Marviya**	*The Pharma Innovation*, **12**(9):888-891.2023
	Effect of different process variables on functional properties of refractance window dried papaya pulp	A. R. Parmar, T. H. Barad, N.K. Dhamsaniya d **G. V. Marviya**	*The Pharma Innovation*, **12**(10):1335-1339,2023
	Nanotechnology: A Smart Agriculture Invention (Review Paper)	Komal Lakhani, Aditi Diwedi, Priyanka N. Timbadiya, **G. V. Marviya** Kirankumar Suthar	*Agriblossom*.**3**(8):25-35,2023
Technical reports	Monthly, quart, Six monthly and Annual	Junagadh Agri. University	19
Extension Literature in Vernacur language	*Prakrutik Krushi:Poshak Tatvono Bhandar*	Dr. G. V. Marviya, Dr. J. H. Chaudhry, Shri D. P. Sanepara, Dr. M. M. Tajpara, Smt. H. H. Padsumbiya, Shri A. B. Dabhi Shri S. R. Rathva	1000 copies
	Prakrutik khetima Pak Sanrakshanna Upayo		1000 copies
	Prakrutik khetima Sendriy Carbannu Mahtva		1000 copies
	Prakrutik khetima Bijamrut, Jivamrut ane Ghanjivamrutnu Mahtva		1000 copies
	Prakrutik Krushi dwara Magfali, Kapas, Ghau ane Chanani Adhunik Kheti Padhdhati		1000 copies
	Prakrutik Krushi Calendar-2023		500 copies
Others			

C. Details of Electronic Media Produced

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

D. Details of Social Media Platforms Created / Used

S. No.	Type of social media platform	No of events (uploaded video/post/story etc.	Title of social media	Number of Followers/ Subscribers
1	YouTube Channel (no of video uploaded)	-	JAU Junagadh	40.2 K
2	Facebook page/ Account (no of Post)	-	Junagadh Agricultural University	7.4 K
3	Mobile Apps	-	JAU iKrushi Sanhita	
4	WhatsApp groups	-	12	1085
5	Twitter Account	12	@krishi_i94206	6
6	Any other (Pl. Specify)	-	-	-

D. Success Stories / Case studies, if any (two or three pages write-up on each case with suitable action photographs. The Success Stories / Case Studies need not be restricted to the reporting period).

Entrepreneurship through Scientific Dairy Farming: A source of livelihood for young farmer

Name of Farmer:	Anilbhai Govindbhai Lunagaria
Village:	Sarpadad
Taluka:	Paddhari
District:	Rajkot
Mo. No.:	9909138752
Age:	38 Years
Education:	10th Pass
Land Holding:	5 Acre
Livestock:	30 animals
Crops Grown:	Cotton, Groundnut, Chickpea

Anilbhai Govindbhai Lunagariya is a progressive livestock owner of the village Sarpadad of Paddhari taluka of Rajkot district. He was doing dairy farming with 3-4 dairy animals through conventional methods. At that time, he was facing the problem like high cost of feeding, low milk production and high maintenance cost of dairy animals. He was not satisfied with his efforts and works in dairy farming with respect to get income and profit from it. At the period of time of 2019, he came into touch of Krishi Vigyan Kendra, Targhadia and got the information about capacity building training programme for becoming successful dairy entrepreneur. He enrolled his participation for training programme.

During training programme he got knowledge and skill for different aspect of scientific animal husbandry practices including selection of dairy animals, scientific feeding management, improvement of breeds, housing management and health management from animal scientist of KVK Targhadia through theory and practical.

Output of Intervention:

After successful completion of training, he has made improvement in his dairy farming adopting newer concept that learn by him during training. This helped him to reduce the cost of production resulting in the higher net return. He started scientific dairy farming by purchase of 20 buffalo under guidance of KVK, Targhadia. He made a comfortable shed, management for animals in modern way. He uses chaff cutter for cutting green and dry grass resulting in 30% saving of animal food and improves digestion. He also uses fogger system for control of temperature and mineral mixture powder to increase milk production and reduction of inter-calving period in animal. He is also carried out timely vaccination and deworming of animal for the control of microbial and parasitic disease in animal.

Year	No of animals	No of lactating animal	Total gross income	Total expenditure	Total Net income	Net income /lactating animal
2019-20	20	13	1092000	547500	544500	41884
2020-21	24	15	1365000	657000	708000	47200
2021-22	30	19	1729000	820000	909000	47842

He also got best innovative farmer award (Dairy farming) in SEEG-2024 at SDAU, Sardar Krushinagar.

Impact of Intervention:

Due to organization of skilled oriented training programme by KVK, Targhadia horizontal spread of technology in Rajkot district is observed through trainees / participants. Dairy farmers from nearby villages are inspired from scientific and modern dairy farm unit of village of Sarpadad, Shri Anilbhai Govindbhai Lunagariya and started a small dairy unit and adopted scientific dairy farming technologies which helped them to uplift their standard of living.

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

- Use of cow urine, butter milk, bajra flour, etc. for insect pest and disease management.
- Use of small or wrinkle seeds of groundnut for sowing purpose.
- Farmers grow maize as a mixed crop in groundnut and inter crop in cotton is best

Practices for sucking pest management by attracting the natural enemies.

- Cotton Stalk Shredder
- Tractor mounted spryer
- Chaff cutter for minimizing the animal fodder waste
- IPM in cotton-Use of Trap crop, Pheromone trap, etc.
- Minimizing the chemical fertilizer and maximizing organic manure.
- Value addition in different agriculture crops like groundnut, guava, onala etc.

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	Groundnut	Farmers maintain a set furrow system and apply manure and fertilizers every year in the same furrow.	To get residual effect of manure and fertilizers in succeeding crop
	Groundnut	Some farmers near the river bed, apply sand in the set furrow for increasing infiltration rate of the soil	To reduce the water Logging condition in the field
	Groundnut	Farmers grow maize as mix crop in groundnut	To increase natural enemies & fodder purpose
2	Kharif crops	Farmer apply lifesaving supplementary irrigation to the crops during moisture stress condition	For life saving irrigation to minimize the risk of crop failure
3	Cotton	Farmers grow maize after 3-4 rows of cotton	To increase the natural enemies and fodder purpose
4	Cotton	After heavy rain, farmer apply irrigation to balance the salt concentration at top of soil	To balance the salt concentration
5	Livestock (Cow, Buffalo)	Use of salt in cotton seed cake	Increase milk production
		Use of calcium carbonate in water tank	For control of bacterial infection and calcium deficiency
		Use of petrol and diesel in wound	For control of maggot wound

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

a) Survey
b) Field survey
c) Group discussion

B. Rural Youth

a) Survey
b) Field survey
c) Group discussion

C. In-service personnel

a) Survey
b) Field survey
c) Group discussion

5.2. Indicate the methodology for identifying OFTs/FLDs

For OFT: i) Field level observations
ii) Farmer group discussions

For FLD: i) New variety/technology
ii) Poor yield at farmer's level
iii) Existing cropping system

5.3. Field activities

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

6. LINKAGES

A. Functional linkage with different organizations

Name of organization	Nature of linkage
Dy. Director of Agriculture.	Most of the Organizations are members of Scientific Advisory Committee (SAC) of KVK and have linkage with different activities of KVK viz., Training Programme, Khedut Sibir, Farmers Day, Animal treatment Camp, Farmers fair, Film Show, Ex-training meeting and Soil health card etc.
Dy. Director of Agril. Extension (FTC)	
Dy. Director of Horticulture	
Dy. Director of Animal Husbandry	
Dy. Director of Social Forestry	
Jilla Udhyong Kendra	
Milk Co-Operative Society (Gopal Dairy)	
Bank of Baroda	
National Bank for Agriculture & Rural Development NABARD)	
NHRDF	
Doordarshan Kendra	
All India Radio	
WALMI	
District Rural Development Agency (DRDA)	
ATMA	
GLDC	
District Watershed Development Agency (DWDA)	
GGRC	
Reliance foundation	
GSFC	
GNFC	
IFFCCO	
KRIBHCO	
Center for Environment Education, Jasdan	

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 Center (ATIC)	2004	Govt. of Gujarat	10,00,000/-
Cluster Frontline Demonstrations on Rabi Pulses under NFSM	2015-16	ICAR-New Delhi	-
Cluster Frontline Demonstrations on Oilseeds under NFSM (NMOOP)	2015-16	ICAR-New Delhi	75,525/-
Attracting and Retaining Youth in Agriculture (ARYA)	2015-16	ICAR-New Delhi	4,00,000
Creation of Seed Hubs for Increasing Indigenous Production of Pulses in India	2016-17	ICAR-New Delhi	-
Swachhta Action Plan	2020-21	ICAR-New Delhi	24,390/-

Out scaling of Natural Farming through KVKs	2022-23	ICAR-New Delhi	1,50,000/-
Targeting Technology to agro ecological zones large scale demonstrations of best practices to enhance cotton productivity	2023-24	ICAR-New Delhi	12,08,050/-

C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

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	Staff meeting	2	-	-
02	Research Projects				-
03	Training Programmes	Farmer training	6	2	-
04	Demonstrations	Technology demonstration	2	2	
05	Extension Programmes				
	KisanMela		-	-	-
	Technology Week		1	1	-
	Exposure visit		-	-	-
	Exhibition		-	-	
	Soil health camps		-	-	-
	Animal Health Campaigns		-	-	-
	Others		-	-	-
06	**Publications**				-
	Video Films				-
	Books				-
	Books chapter				
	Extension Literature				-
	Pamphlets				-
	Others (Pl. specify)				-
07	**Other Activities (Pl.specify)**				
	Watershed Approach				-
	Integrated Farm Development				

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

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

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

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

F. Details of linkage with RKVY : Nil

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

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

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

H. Details of linkage with NFSM

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	**Oilseeds:** CFLDs, Training, Agro Advisory and Literature distribute	District Agri. Department , Rajkot	75,525/-	1,42,500/-	-

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

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

7. Convergence with other agencies and departments:Yes

8. Innovative Farmers Meet

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

9. Farmers Field School (FFS) : Nil

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

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

1 Seed treatment with chlorpyriphos @ 25 ml/kg seed reduced white grub infestation in groundnut

2 Groundnut variety GJG-32 gave higher yield and low disease infestation as compared to other variety but it required a greater number of days for maturity

3 Application of *Trichoderma* spp. found the most efficient for control of stem rot in groundnut

4 De-topping of cotton gave higher yield as compare to control

5 Cumin variety GC-4 is high yielding and good resistant variety against the wilt disease among the other varieties of cumin

6 Application of *Trichoderma* reduce wilt disease occurrence in cumin crop

7 Low disease infestation and increase in the yield in line sowing method of cumin with use of drip irrigation

8 Recently developed certified varieties of different crops and vegetable give higher yield.

9 Balancing dairy ration with Bypass protein gave maximum milk production and Bypass fat increased fat per cent

10 Fresh vegetable available at doorstep and at a time with minimum cost in kitchen gardening

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

1 Yellowing and drying of cotton due to para wilt in large area particularly in light soil
2 Research needed for control of white grub and stem rot in groundnut growing under natural farming
3 Pre-mature drying of square in cotton
4 Yield loss in groundnut observed due to terminal water stress because of long dry spell in monsoon where irrigation facility is not available
5 Heavy infestation of sucking pest in chilly and cotton
6 Wilt disease was found in chickpea
7 Brucellosis problem in Gir cow due to natural breeding
8 Longer inter calving period in buffalo

11. Technology Week celebration during 2023: Yes

Period of observing Technology Week: From to 18th to 22nd September 2023
Online / Offline: Offline
Total number of farmers visited: 328
Total number of agencies involved: 6
Number of demonstrations visited by the farmers within KVK campus: 8

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies	-	-	
Lectures organized	8	328	Farm mechanization – A prime need and Importance of value addition in different crop produces, Scientific dairy development Technologies., Horticultural Crops- Importance and futures and Plant protection Technologies in major crops., Natural and Organic Farming
Exhibition	1	305	Agri equipment and demo unit
Film show	4	328	Crop and livestock technology
Fair	-	-	-
Farm Visit	4	328	Field and Demo unit visit
Diagnostic Practical's	3	48	Groundnut and chilly
Supply of Literature (No.)	-	328	Pamphlet of Agriculture and Natural Farming
Supply of Seed (q)	-	-	
Supply of Planting materials (No.)	-	-	
Bio Product supply (Kg)	-	-	
Bio Fertilizers (q)	-	-	
Supply of fingerlings	-	-	
Supply of Livestock specimen (No.)	-	-	
Total number of farmers visited the technology week	-	328	

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

A. Introduction of alternate crops/varieties

State	Crops/cultivars	Area (ha)	Number of beneficiaries

B. Major area coverage under alternate crops/varieties

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

C. Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No. of participants
Total			

D. Animal health camps organized

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

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

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

F. Large scale adoption of resource conservation technologies

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

G. Awareness campaign

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

13. IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Improved variety of Cumin (GC-4)	265	85	35000	52000
Improved variety of Gram (GJG-6)	198	75	32500	43000
New variety of Groundnut (GJG-32)	355	60	45000	63000
Wheat variety (GW-496, 366)	210	80	32500	38000
Use of *Trichoderma* for the control of stem rot in groundnut	425	75	30200	35000
Use of mineral mixture in buffalo	235	65	39000	44000

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

B. Cases of large-scale adoption

- Adoption of *Trichoderma* for the management of stem rot disease in groundnut.
- Adoption of *Bt.* cotton varieties with INM and IPM concepts.
- Farmers prefer to sow high yielding variety of groundnut i.e. semi spreading variety GG-20 & GJG-22 and bunch variety GJG-32.
- Most of the farmers adopt variety of cumin (GC-4) which is resistant to wilt disease
- Intercropping/mix cropping in groundnut and cotton was adopted for minimize the risk factor in dry land agriculture with preservation of natural enemies.
- Farmers prefer to sow bold seeded variety of chickpea GJG-3
- Farmers are ready to use of rotavator/ cotton shredder/ mobile chopper for increasing the organic matter in soil particularly in *Bt*. Cotton cropping system

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 2023	2	3000	-
Feb 2023	2	3000	-
March 2023	2	3000	-
April 2023	2	3000	-
May 2023	2	3000	-
Jun 2023	2	3000	-
Jul 2023	2	3000	-
Aug 2023	2	3000	-
Sept 2023	2	3000	-
Oct 2023	2	3000	-
Nov. 2023	2	3000	-
Dec. 2023	2	3000	-

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	Total
Rajkot-I	Text only	6	-	24	-	2	-	32
	Voice only							
	Voice & Text both							
	Total Messages							
	Total farmers Benefitted	**3000**		**3000**	**-**	**3000**	**-**	**-**

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	Vermi composting unit	2018	0.05						
2	Nadep composting	2019	7 x 5 m						
3	Crop cafeteria	2012	0.10	Latest variety of different crops					
4	Kitchen garden	2018	0.05	Different vegetable crops					
5	Organic farming unit	2016	1.00						
6	Natural farming	2022	1.00						

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									
Pulses									
Gram	30-10-22	01-03-23	1.00	GG-5	Breeder	2425	-	3010000	
Oilseeds									
Groundnut	05-7-23	19-10-23	1.98	GJG-32	Breeder	3000	-	437500	
Groundnut	06-7-23	08-11-23	11.82	GJG-32	TF	8800	-	6375000	
Fibers									
Spices & Plantation crops									
Floriculture									
Fruits									
Vegetables									
Others (specify)									

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

Sl. No.	Bio Products	Name of the Product	Qty (kg/lit)	Amount (Rs.)		Remarks
				Cost of inputs	Gross income	
	Bio- Fertilizers					
	Bio- Fungicides					
	Bio- pesticides					
	Bio-Agents					

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

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	

E. Utilization of hostel facilities

Accommodation available (No. of beds):

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
January **2023**	-	-	-
February **2023**	-	-	-
March **2023**	-	-	-
April **2023**	-	-	-
May **2023**	-	-	-
June **2023**	-	-	-
July **2023**	-	-	-
August **2023**	-	-	-

September **2023**	-	-	-
October **2023**	-	-	-
November **2023**	-	-	-
December **2023**	-	-	-

F. Database management

S. No	Database target	Database created

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

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.	Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
			No. of Training programmes	No. of Demonstration s	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		
-	-	-	3	2	-	185	2	-	2.00

H. Performance of Nutritional Garden at KVK farm
If Nutritional Garden developed at KVK farm/Village Level? Yes
If yes,

Nutritional Garden developed at KVK farm

Area under nutritional garden (ha)	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers visited
0.1	Vegetable crops	10	230
	Fruit crops	3	
	Others if any	3	

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
5	Vegetable crops	15	5
	Fruit crops	5	
	Others if any	-	

H. Details of Skill Development Trainings organized : Nil

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

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	SBI	Junagadh					
With KVK	SBI	Rajkot	463	TRAINING ORG.KVK.JAU. TARGHADIA	10353003175	360002002	SBIN0000463

B. Utilization of KVK funds during the year 2023-24 (Rs. in lakh) (Till Dec, 2023)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	142.00	114.45	116.96
2	**Traveling allowances**			
3	**Contingencies**	15.50	11.00	10.85
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			
B	POL, repair of vehicles, tractor and Equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
	TOTAL (A)	**15.50**	**11.00**	**10.85**
B. Non-Recurring Contingencies				
1	**Works**			
2	**Equipments including SWTL & Furniture**			
3	**Vehicle** (Four wheeler/Two wheeler, please specify)			
4	**Library** (Purchase of assets like books & journals)			
TOTAL (B)				
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		**157.50**	**125.45**	**127.81**

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 2020 to March 2021	26,54,648	23,54,367	17,89,147	32,19,868
April 2021 to March, 2022	32,19,868	19,58,910	22,27,738	29,51,040
April 2022 to March, 2023	29,51,040	23,75,522	14,39,322	38,87,240
April 2023 to Dec., 2023	38,87,240	7,43,300	23,10,446	23,20,094

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

Name of the staff	Designation	Title of the training programme	Institute were attended	Mode (Online/Offline)	Dates
Dr. J. H. Chaudhary	Scientist (Agronomy)	International Conference on "Pulses: Smart Crops for Agricultural Sustainability and Nutritional Security"	Indian Society of Pulses Research and Development at NASC Complex, New Delhi	Offline	10-12/02/2023
Dr. G. V. Marviya	Senior Scientist and Head	State level seminar on "*Jaminjany Rog-Jivatonu Sankalit Niyantran*"	JAU, Junagadh	Offline	24/02/2023
Shri D. P. Sanepara	Scientist (Agril. Engg.)	Application of Robotics and Drone Technologies in Agriculture	Dept. of Farm Machinery & Power Engineering, DOAET, JAU, Junagadh	Offline	02-03/03/ 2023
Dr. J. H. Chaudhary	Scientist (Agronomy)	21 Days National Orientation Course on "Teaching Learning Evaluation Technology Program (TLETP 2023)"	ATARI, Ludhiana, RVSKVV, Gwalior and NADCL, Baramulla (J&K)	Online	05-25/04/2023
Dr. G. V. Marviya, Dr. M. M. Tajpara	Senior Sci. & Head, Scientist (AH)	Competency skills enhancement for extension professional	DEE, JAU, Junagadh	Offline	24-26/04/ 2023
Dr. J.N.Thaker Dr. J. H. Chaudhary	Scientist	Next Generation Communication and Management Competencies for Inspiring Service Excellence of Extension Professional	Junagadh Agricultural University, Junagadh	Offline	27-29/04/2023
Dr. G. V. Marviya	Senior Scientist and Head	Annual Action Plan Workshop on KVKs of Gujarat & Goa	ICAR-DMAPR-Anand	Offline	15-16/05/2023
Dr. G. V. Marviya Smt. Hetal H. Padsumbiya	Scientist (Home Science)	State level seminar on "Modern Agricultural Practices of Coconut"	JAU, Junagadh	Offline	06/06/2023
Dr. M. M. Tajpara	Scientist (Animal Husbandry)	ISEE National Seminar	UAS Bangalore	Offline	22-24/06/ 2023

Dr. G. V. Marviya	Senior Scientist and Head	Annual Zonal Workshop-2023 of KVKs of ZoneVIII	Aurangabad, Maharashtra	Offline	28-30/07/2023
Dr. J. H. Chaudhary	Scientist (Agronomy)	Two Week National Training on "Natural Farming: Present Status and Future Prospects"	MPUAT, Udaipur	Offline	04-18/09/2023
Dr. J. H. Chaudhary	Scientist (Agronomy)	Short Visit of Organic Farm of Gurukul Kurukshetra (Haryana)	JAU, Junagadh under NAHEP-IDP	Offline	20-22/11/2023
Dr. J.N.Thaker	Scientist	Orientation Training Programme on "Latest technologies in agriculture and allied subjects" for Rabi Krishi Mahotsav-2023	Junagadh Agricultural University, Junagadh	Offline	21/11/2023

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

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)

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

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	
PHT and Value addition	2	44	-	-	-	-	-	-
Nursery management	1	23	-	-	-	-	-	-

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	Sapath taking and lunching of Swachh monitoring system by KVK staff, Cleaning and Sweeping of entire office premises / cleaning of KVK campus, Swachhta Awareness at local level, Cleaning and beautification of surrounding areas, Vermicomposting/Composting of biodegradable waste management& other activities on generate of wealth for waste.	16	1156

Sr. No	Name of KVK	Date	*Activity*	No of VIPs	No of Farmers	Others	Total
1	Rajkot-I	15-09-2023	Sapath taking and lunching of Swachh monitoring system by KVK staff, Cleaning and	-	21		
2		16-09-2023		-	23		
3		21-09-2023		-	14		
4		22-09-2023		-	12		

5		23-09-2023	Sweeping of entire office premises / cleaning of KVK campus, Swachhta Awareness at local level, Cleaning and beautification of surrounding areas, vermicomposting /Composting of biodegradable waste management& other activities on generate of wealth for waste.	-	22		
6		26-09-2023		-	21		
7		27-09-2023		-	13		
8		28-09-2023		-	14		
9		27-10-2023		-	19		
10		Nov.2023		-	22		
11		Aug.2023		-	209		

21. Books published 2023-24: Nil

Title of the Book	Authors	ISBN No (Optional) / Pages No	Description/review of the book (one paragraph/sentence)

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

APR SUMMARY

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	63	1483	617	2100
Rural youths	2	31	36	67
Extension functionaries	2	72	14	86
Sponsored Training	15	394	184	578
Vocational Training	4	55	110	165
Total	**86**	**2035**	**961**	**2996**

2. Frontline demonstrations

Crops/Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	20	8	-
Pulses	10	4	-
Cereals	10	4	-
Vegetables	10	4	-
Other crops	15	6	-
Hybrid crops	-	-	-
Total	**65**	**26**	**-**
Livestock & Fisheries	70	-	70
Other enterprises	17	-	17
Total	**87**		**87**
Grand Total	**152**	**26**	**87**

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	1	3	3
Livestock			
Various enterprises			
Total	**1**	**3**	**3**
Technology Refined			
Crops	4	10	10
Livestock	2	4	4
Various enterprises			
Total	**6**	**14**	**14**
Grand Total	**7**	**17**	**17**

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	980	20197
Other extension activities	19	88
Total	**999**	**20285**

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marketing	Awar e-ness	Other enterprise	Total
Rajkot-I	Text only	6	-	24	-	2	-	32
	Voice only							
	Voice & Text both							
	Total Messages							
	Total farmers Benefitted	3000		3000	-	3000	-	-

6. Seed & Planting Material Production

	Quintal/Number	Value (Rs.)
Seed (q)	142.25	-
Planting material (No.)	-	-
Bio-Products (kg)	-	-
Livestock Production (No.)	-	-
Fishery production (No.)	-	-

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value (Rs.)
Soil	250	-
Water	250	-
Plant	-	-
Total	**500**	**-**

8. HRD and Publications

Sr. No.	Category	Number
1	Abstract	**1**
2	Workshops	2
3	Conferences	1
4	Meetings	
5	Trainings for KVK officials	9
6	Visits of KVK officials	-
7	Book published	-
8	Training Manual	-
9	Book chapters	1
10	Booklet	-
11	Leaflets/ Folder/ Pamphlet	6
12	Research papers	6
13	Technical Bulletin	-
14	Popular article	-
15	Lead papers	-
16	Seminar papers/Seminar	4
17	Extension folder	-
18	Proceedings	1
19	Award & recognition	-
20	On-going research projects	-
21	Other	-