

**ANNUAL ZONAL WORKSHOP** 

## ANNUAL PROGRESS REPORT JANUARY - 2021 TO DECEMBER - 2021

To be presented in Annual Zonal Workshop will be held on 7-9 July, 2022 at Anand (Online)



Senior Scientist & Head Krishi Vigyan Kendra Junagadh Agricultural University Gorkhijadia - Morbi



#### ICAR-ATARI, Pune DETAILS OF ANNUAL PROGRESS REPORT OF KVK MORBI DURING 2021 (January 2021 to December2021)

#### 1. GENERAL INFORMATION ABOUT THE KVK

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

Address with PIN code	Telephone		E mail	Website address & No. of visitors (hits)
Krishi Vigyan Kendra,	Office	FAX		
Junagadh Agricultural University, Morbi			kvkmorbi@gmail.com	www.jau.in
Dist: Morbi	-	-	Kvkinoibi@gmail.com	www.jau.iri
(Gujarat) – 363641				

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

Address	Teleph	one	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. L. L. Jivani	02822-224853	94269 72590	lljivani@gmail.com	

#### 1.4. Year of sanction: 2017 (Grant & Staff from March-2017)

#### 1.5. Staff Position (as on 31 December, 2021)

					If Permanent, I	Please indicate		If Temporary,
No	Sanctioned post	Name of the incumbent	Mobile No.	Discipline	Current Pay Band	Current Grade Pay	Date of joining	pl. indicate the consolidated amount paid (Rs./month)
1.	Senior Scientist and Head	Dr. Lalji L. Jivani	9426972590	Genetics & Plant Breeding	131400 - 217100	UL-13A	01/12/20	-
2.	Subject Matter Specialist	D. A. Saradava	9426784628	Plant Protection	57700 - 182400	UL-10	01/03/17	-
3.	Subject Matter Specialist	Smt. Hetal H. Padsumbiya	9979673732	Home Science	57700 - 182400	UL-10	01/04/21	-

4.	Subject Matter Specialist	Vacant	-	-	-	-	-	-
5.	Subject Matter Specialist	Vacant	-					
6.	Subject Matter Specialist	Vacant	-	-	-	-	-	-
7.	Subject Matter Specialist	Vacant	-	-	-	-	-	-
8.	Agriculture Officer	Gamansinh S. Zala	8780953478	B.Sc. Agri.	Fix Pay	Fix Pay	03/08/18	-
9.	Programme Assistant	Vacant	-	-	-	-	-	-
10.	Computer Programmer	R. R. Sida	-	B.C.A.	Fix Pay	Fix Pay	01/04/19	-
11.	Farm Manager	Vinuji V. Thakor	8155049089	B.Sc. Agri.	Fix Pay	Fix Pay	31/07/18	-
12.	Accountant / Superintendent	Niraj P. Vaidya	9377748176	B.Sc.	39900 - 126600	L - 7	01/03/20	-
13.	Stenographer	Vacant	-	-	-	-	-	-
14.	Driver 1	Vacant	-	-	-	-	-	-
15.	Driver 2	Vacant	-	-	-	-	-	-
16.	Supporting staff 1 & 2	Vacant	-	-	-	-	-	-

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

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

#### Infrastructural Development: Buildings 1.7.

#### A)

	Nome of building	Source of	Stage					
S.		funding	Complete			Incomplete		
No.	Name of building		Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting year	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	KVK	2019-20	575.32	143.00 Lacs	-	-	-
2.	Farmers Hostel	KVK	2019-20	443.96	61.00 Lacs	-	-	-
3.	Staff Quarters (6)	-	-	-	-	-	-	-
4.	Demonstration Units (2)	SAU	2019-20	18.0	10000/-	-	-	-
5	Fencing	JAU	2017-18	4535	7,95,480/-	-	-	-
6	Rain Water harvesting system	-	2018-19	-	2,00,000/-	-	-	-
7	Threshing floor	JAU	2020-21	400	3,15,838/-	-	-	-
8	Farm godown	-	-	-	-	-	-	-
9	ICT lab	-	-	-	-	-	-	-
10	Other	SAU	2019-20	1.40 lac ltr.	4.6 Lacs	-	-	-
D)	Vahialaa							

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tractor Mini Captain 9.5 H.P.	2005	165000/-	-	Working
Mahindra Bolero	2019	800000/-	29200 kms	Working

#### C) Equipments& AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Computer System Acer 18.5	2017	34115/-	Working
Computer System Acer 18.5	2017	34115/-	Working
Printer MF 3010 canon	2017	10266/-	Working
Printer LBP 6230 canon	2017	8761/-	Working
Computer System SIS Agiledag-2277 LG	2010	24210/-	Working
Computer System Intel core i3 processor HCL		34596/-	Working
Printer MF 4350d canon		14327/-	Working
Xerox Machine RICHO Digital	2013	113755/-	Working
Computer system Acer	2009	31635/-	Working
Computer system Acer	2010	32270/-	Working
Printer Samsung	2013	4579/-	Working
Computer system Acer	2009	30968/-	Working
LG smart television	2021	189975/-	Working

1.8. Details of SAC meeting conducted in the year 2021

Date	Name and Designation of Participants	Salient Recommendations	Action taken
10/02/2021	Dr. V. P. Chovatia, Honorable Vice Chancellor, JAU, Junagadh.	Add quantity per trial 1kg of each pulse in OFT on "Preservation techniques of different pulses with organic methods".	One kilogram of pulses is given in each trial in this year
	Dr. H. M. Gajipara, Directorate of Extension Edn., JAU, Junagadh	More emphasis should be given to trainings on soil health and analysis of soil and water samples	Total 3 training organized in this year and total 200 soil sample tested and included in the action plan of year 2022
	Dr. D. S. Hirpara, Res. Sci. (DF), DFRS, JAU, Targhadia, Dist: Rajkot		
	Dr. G. R. Sharma, Principal, Polytechnic in Agril. Engg., JAU, Targhadia, Dist: Rajkot		
	Dr. B. B. Kabaria, Senior Scientist & Head, KVK, JAU, Targhadia, Dist: Rajkot		
	Dr. N. B. Jadav, Senior Scientist & Head, KVK, JAU, Pipalia (Dhoraji), Dist. Rajkot		
	Dr., L. L. Jivani, Senior Scientist & Head, KVK, JAU, Morbi, Dist. Morbi		
	Dr. H. C. Chhodvadia, Asstt. Extension Educationalist, DEE office, JAU, Junagadh		

Dr. Vikramsinh Chauhan	
District Agriculture Officer, Morbi, Dist. Morbi	
Dr. H. D.Mehta	
Subject Matter Specialist, KVK- Morbi, Dist. Morbi	
Prof. D. A.Saradava	
Subject Matter Specialist, KVK- Morbi, Dist. Morbi	
Prof. Pinky Sharma,	
AEE, DEE office, JAU, Junagadh	
Shri Kiran Patel, Reliance Foundation, Jasadan	
Dr. B. K. Dubey, Deputy Director, NHRDF, Naranka, Rajkot	
Dr. S. K. Tiwari, Technical Officer, NHRDF, Naranka, Rajkot	
Ghansyamsinh J. Jadeja, Farmer, Khanpar, Morbi	
Jethalal Amarshibhai Jetpariya, Farmer, Nasitpar, Morbi	

#### 2. DETAILS OF DISTRICT / JURISDICTION AREA OF KVK MORBI

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

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

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

SI. No.	Agro-climatic Zone	Characteristics
1	North Saurashtra Agro Climatic Zone	Semi arid – region with annual rainfall 550 - 600 mm.
	Morpi Wankaper and Lankara (Adro –	Maximum temp – 44°C, Minimum range – 5 to 12°C & high evaporation
	eco-situation –No.7)	Maximum temp – 44 C, Minimum range – 5 to 12 C & high evaporation
2	North west agro climatic Zone- 5 Maliya	Arid to semi arid region with annual rain fall – 500 to 550 mm maximum temp - 45°C, Minimum range – 3 to 12°C & high evaporation
	(mi) and Halvad block	And to seril and region with annual rain rain - 500 to 550 min maximum temp - 45 C, Minimum range – 5 to 12 C & high evaporation

#### b)Topography

S. No.	Agro ecological situation	Characteristics		
1	Situation No. 7	Plain & hilly areas in Wankaner Tehsil.		
2	Situation No. 5	Plain costal region (saline) affected with desertification		

#### 2.3 Soil Types

S. No	Soil type	Characteristics				
1	Medium black clayey	Medium black clayey Low in organic carbon, heavy cracking and clod formation				
2	Alluvial Soil	Low fertility status, high infiltration rate	91.8			
	(sand-loam lomy)		91.0			
3	Hilly Soil (light)	Undulating topography, low fertility eroded soil	13.6			
4	Silty Soil (loomy)	Low infiltration rate, water logging, difficult to cultivate	5.5			

S. No	Сгор	Area (ha)	Production (MT)	Productivity (q /ha)
1	Groundnut	89348	199968	1800
2	Cotton (Bt)	158027	251615	1497
3	Sesame	17652	8378	470
4	Castor	6585	17020	2154
5	Green gram	2116	1045	650
6	Black gram	1315	843	738
7	Vegetable	1942	44893	21501
8	Fodder	10165	234685	21721
9	Wheat	36040	168994	4441
10	Gram	42315	90188	1906

#### 2.4. Area, Production and Productivity of major crops cultivated in the area of jurisdiction of KVK (2020)

Source: District agriculture department.

#### 2.5. Weather data (2021)

Month	Rainfall (mm)	Temp	erature 0 C	Relative H	umidity (%)
Month	Kainian (inin)	Maximum	Minimum	Maximum	Minimum
January	0	27.7	9.9	67.9	37.9
February	0	32.9	13.3	70.9	28.6
March	0	38.5	19.3	70.1	25.6
April	0	40.4	22.4	74.0	21.1
May	0	40.3	24.8	77.4	34.9
June	28	38.1	25.9	79.9	51.6
July	235.8	34.9	25.5	83.2	62.9
August	13	33.8	23.9	84.9	61.1
September	270.1	31.2	24.1	91.8	79.8
Öctober	0	33.1	20.1	74.2	44.6
November	0	32.1	16.2	57.5	38.6
December	0	26.9	11.9	73.2	45.6
Total	546.9				

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

Category	Population	Production	Productivity
Cattle			

Crossbred	140476		12 lit/Day
Indigenous		Ι	
Buffalo	173285		17 lit/Day
Sheep	93747		
Goats	65880		
Pigs			
Crossbred			
Indigenous			
Rabbits	79		
Poultry			
Hens	1000000		3 kg/Bird
Desi			
Category Fish (Reservoir)		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
Morbi	Chakampar Jivapar	<b><u>Crops</u>:</b> Groundnut, Cotton,Sesame, Wheat,Cumin, Chickpea,Onion, Garlic	<ul><li>(1) Pink ball worm in cotton</li><li>(2) Heavy infestation of sucking pests in</li></ul>	<ul><li>(1) IPM and INM in major crops of this area</li><li>(2) Increase drainage of soil</li></ul>
	Dharampur Thorala Andarana	Enterprises: Dairy business, Vermi composting. Preparation of roasted groundnut and chikki from groundnut seeds	<ul> <li>cotton</li> <li>(3) <i>Phytopthora</i>disease in sesame</li> <li>(4) White grubs infestation in groundnut</li> <li>(5) Stem rot infestation in groundnut</li> <li>(6) Wilt and blight in cumin</li> </ul>	<ul> <li>(3) Motivate to farmers for arid horticultural crops</li> <li>(4) Efficient use of irrigation water</li> <li>(5) Judicious use pesticides</li> </ul>
Tankara	Otala Saraya Neknam Lakhdhirgadh Bhutkotda	Crops: Groundnut, Cotton, Sesame, Wheat,Cumin, Chickpea,Onion, Garlic Enterprises: Vermi composting. Preparation of roasted groundnut and chikki from groundnut seeds	<ul> <li>(1) Pink ball worm in cotton</li> <li>(2) Heavy infestation of sucking pests in cotton</li> <li>(3) <i>Phytopthora</i>disease in sesame</li> <li>(4) White grubs infestation in groundnut</li> <li>(5) Stem rot infestation in groundnut</li> <li>(6) Wilt and blight in cumin</li> <li>(7) Nutritional deficiency in animal feed and fodder</li> <li>(8) Less area under horticultural crops</li> </ul>	<ul> <li>(1)IPM and INM in major crops of this area</li> <li>(2) Increase the drainage of soil</li> <li>(3) Efficient use of irrigation water</li> <li>(4) Judicious use pesticides</li> </ul>

Wankaner	Palas Panchdwarka Shekhradi Amarsar Pipaliya raj	<b><u>Crops</u>:</b> Groundnut, Cotton,Sesame, Wheat,Cumin, Chickpea,Onion, Garlic <u>Enterprises:</u> Vermi composting. Preparation of roasted groundnut and chikki from groundnut seeds	<ol> <li>Pink ball worm in cotton</li> <li>Heavy infestation of sucking pests in cotton</li> <li><i>Phytopthora</i>disease in sesame</li> <li>White grubs infestation in groundnut</li> <li>Stem rot infestation in groundnut</li> <li>Stem rot infestation in cumin</li> <li>Nutritional deficiency in animal feed and fodder</li> <li>Long inter calving period in buffalo</li> <li>Less area under horticultural crops</li> </ol>	<ol> <li>(1) IPM and INM in major crops of this area</li> <li>(2) Reducing calving period in buffalo</li> <li>(3) Motivate to farmers for arid horticultural crops</li> <li>(4) Efficient use of irrigation water</li> <li>(5) Judicious use pesticides</li> </ol>
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#### 2.8. Priority thrust areas:

Crop/Enterprise	Thrust area
Groundnut,	Increasing the productivity of the major crops by adopting recommendation of dry farming technologies and to create awareness for value addition.
Sesame etc	increasing the productivity of the major crops by adopting recommendation of dry farming technologies and to create awareness for value addition.
Water conservation	In situ soil moisture conservation and rainwater harvesting. Use of cotton stalk for organic manure.
Cotton	Motivating cotton growers to adopt IPM and INM practices for reducing the cost of production.
Women empowerment	Providing self employment through skill oriented income generating activities
Agriculture	Developing interest among youth for agriculture as a profession.
Horticulture	Value addition in agriculture produces through proper grading, processing, marketing and information technology.
Income generating activities	Self employment among rural youth and skill oriented income generating activities.
Nutrition management	Care and importance of nutrition in children & pregnant women.
Spices crop	Adopt recommended practice of IDM in spices crop i.e. cumin & ajwain.

#### **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		ber of farmers			
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement	
4	4 4 16 16		9	9	80	80		

	Training				Extension Programmes				
	:	3		4					
Num	Number of Courses Num		Number of Participants		Number of Programmes		er of participants		
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement		
50	57	1276	2303	-	158	-	6636		

See	ed Production (Qtl.)	Planting materials (Nos.) 6 Target Achievement		
	5	6 Target Achievement		
Target	Achievement	Target	Achievement	
19.00	19.83		50	

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

#### 3.1. B. Operational areas details during the year 2021

S.No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Intervention (OFT, FLD, Training, extension activity etc.)*
1	Bt. cotton	Sucking Pest, Para Wilt, Pink Boll Worm	1,12,000 ha	Halvad, Tankara, Wakaner, Morbi block	FLD on pink boll worm management.
					Training on pink boll worm management
2	Groundnut	White Grub Stem Root	42,000 ha	Tankara , Halvad block	OFT on White grub management in groundnut. Training on pest and Disease management in groundnut.
3	Cumin	Wilt and Blight	3900 ha	Morbi, Halvad, Maliya	FLD and OFT on Wilt management and also training for IDM in Cumin.
4	Pomegranate	Seed rot and nematode	1000 ha	Morbi, Halvad and Maliya	Training programmed and crop seminar

# 3.2. Technology Assessment (Kharif 2021, Rabi 2020-21, Summer 2021) A1. Abstract on the number of technologies assessed in respect of crops

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

#### A2. Abstract on the number of technologies assessed in respect of livestock enterprises : Nil

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

#### B. Achievements on technologies Assessed

#### B.1. Technologies Assessed under various Crops

Thematic areas	Сгор	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	Sesame	Assessment of new variety of sesame GT-5	3	3	0.4
Integrated Pest Management		Seed treatment with chlorpyriphos 20ec @ 25 ml/kg seed and Soil application of <i>metarhiziumanisoplii</i> @ 5 kg/ha with 300 kg/ha castor cake at the time of sowing	5	5	0.4
Integrated Crop Management					
Integrated Disease Management		Application of Trichoderma @ 5 kg /ha with organic manure @1000 kg / ha at the time of sowing	3	3	0.4
Small Scale Income Generation Enterprises					

Weed Management					
Resource Conservation					
Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Value addition					
Drudgery Reduction					
Storage Technique	Green Gram and Chana dal	Storage with castor oil, Dray Neem leaves and plastic bag	5	5	-
Mushroom cultivation					
Total			16	16	1.2

#### B.2. Technologies assessed under Livestock and other enterprises : Nil

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds				
Nutrition management				
Disease management				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total		·		

#### C1.Results of Technologies Assessed

#### **Results of On Farm Trial**

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Ground nut	Limited irrigation	Heavy infestation of white grub in ground nut	Management of White Grub in Groundnut crop		management of white grub in Groundnut	percentage	Yield 2890 kg/ ha 3170 kg/ ha 3380 kg/ ha and T1 ,T2 , T3 percentage of dry plant 3.7% ,2.8% , 2.5%	9.68 percentage higher yield received over farmer practice in T2 where as 16.95 percentage Higher in T3 over farmer practice.	Application of Metarhizium anisoplii @ 5 kg/ha with 300 kg/ha castor cake at time of sowing is effective to reduce the infestation of white grub.	Nil	Nil
Cumin	Irrigated	wilt disease in cumin	Use of <i>Trichoderma</i> for wilt disease management in cumin		wilt management through <i>Trichoderma</i> treatment	Yield and Percentage of wilted plant	Yield T1 – 912kg/ ha T2 – 1070 kg/ ha T3 – 1090 kg/ha and percentage of wilted/ plant (75 days) T1 –5.98 T2 – 3.09 T3 – 1.56	17.32 percent higher yield obtain in T2 and 19.51 percent higher in T3 than farmer practice.	Trichoderma with compost two application 1 <sup>st</sup> at time of sowing and 2 <sup>nd</sup> 25 DAS sowing is very effective to control the wilt disease	Nil	Nil
Sesame	Irrigated	Low yield of sesame in summer	Assessment of new variety of sesame	3	Assessment of new variety of sesame	Yield and No. of capsules	Yield T1 – 666kg/ ha T2 – 776 kg/ ha T3 – 791 kg/ha and No. of capsules/plant T1-26 T2-31 T3-35	16.51 percent higher yield obtain in T2 and 18.76 percent higher in T3 than farmer practice.	GT – 5 is bold and white seeded and higher yielder (summer).	Nil	Nil

Preservation	Lack of		5	T1 Use of	Insect	In cahna dal	-	Use of castor	-	-
techniques	knowledge F	Preservation		neem leaves	infestation	T1-12		oil is very		
	about phase	techniques		T2 Use of	after 6	T2-3		effective to		
	preservation	of different		castor oil	month	T3-8		storage of		
	(damage	pulses with		T3 use of		And in green gram		different pulses		
	during storage	organic		Plastic bag		T1-8				
	about 30 to 45	method		-		T2-2				
	percent)					T3-6				

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
OFT-1					
Sowing of groundnut without Seed treatment. Farmers adopt drenching of Chlorpyriphos or Quinalphos @ 6 lit/ha with irrigation at initiation of pest incidence. (Farmers practice)	-	2890	kg/ ha	79300	2.21
Seed treatment with Chlorpyriphos 20ec @ 25 ml/kg seed.(GAU Reco.)	Gujarat Agriculture University	3170	kg/ ha	92100	2.38
Application of Metarhiziumanisoplii @ 5 kg/ha with 300 kg/ha castor cake at time of sowing.	Junagadh Agricultural University	3380	kg/ ha	10090	2.48
OFT-2					
Sowing without use of Trichodarma. But they use fungicides viz., Carbendazim, Hexaconazole, Difenconazole, Tebuconazole, Propiiconazole, , etc after initiation of diseases. (Farmers practices.)	-	912	kg/ ha	68200	2.45
Application of Trichoderma @ 5 kg /ha with organic manure @1000 kg / ha at the time of sowing (Recommended practices.)	Gujarat Agriculture University	1070	kg/ ha	85950	2.80
Application of Trichoderma @ 5 kg /ha along with organic manure @1000 kg / ha at the time of sowing and second application of Trichoderma @ 5 kg /ha	-	1090	kg/ ha	87450	2.79

along with organic manure by broadcasting method at 15 days after germination. (Intervention).					
OFT-3					
G Til - 2 or Local (Farmer Practice).		666	kg/ ha	7880	1.17
G Til – 3 (JAU Recommendation for summer)	Junagadh Agricultural University	776	kg/ ha	18232	1.40
G Til – 5 (JAU Recommendation for summer)	Junagadh Agricultural University	791	kg/ ha	19482	1.42

#### C2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details

OFT-1				
	1	Title of Technology Assessed	:	Management of white grub in ground nut crop.
	2	Problem Definition	:	Heavy infestation of white grub in ground nut.
	3	Details of technologies selected for assessment	:	Seed treatment with chlorpyriphos 20 EC.
	4	Source of technology	:	Gujarat Agriculture University.
	5	Production system and thematic area	:	Integrated pest management.
	6	Performance of the Technology with performance		
		Indicators	:	
	7.	Feedback, matrix scoring of various technology		
		parameters done through farmer's participation /		
		other scoring Techniques	:	Matrix scoring is 8 out of 10 done by farmer.
	8	Final recommendation for micro level situation	:	Application of Metarhizium anisoplii $@$ 5 kg/ha with 300 kg/ha castor cake at time of sowing is
				effective to reduce the infestation of white grub
	9	Constraints identified and feedback for research	:	
	10	Process of farmer's participation and their reaction	:	Seed treatment is the best and cheapest method for management of white grub.
OFT-2				
	1	Title of Technology Assessed	:	Use of Trichoderma for wilt disease management.
	2	Problem Definition	:	Heavy incidence of wilt disease in cumin effecting yield loss up to 9
				to 20 percent.

	3	Details of technologies selected for assessment	:	Application of Trichoderma with compost
	4	Source of technology	:	Junagadh Agriculture University, Junagadh
	5	Production system and thematic area	:	Integrated disease management
	6	Performance of the Technology with performance		
		Indicators	:	
	7.	Feedback, matrix scoring of various technology		
		parameters done through farmer's participation /		
		other scoring Techniques	:	7 out of 10 scoring
	8	Final recommendation for micro level situation	:	Application of Trichoderma 5 kg/ ha with compost @ 1000 kg/ ha at
				time of sowing and second application is DAS
	9	Constraints identified and feedback for research	:	Nil
	10	Process of farmer's participation and their reaction	:	Trichoderma application gave good result in suppressing the wilt disease and increase yield.
OFT-3				
	1	Title of Technology Assessed	:	Assessment of new variety of sesame
	2	Problem Definition	:	Low yield of sesame in summer.
	3	Details of technologies selected for assessment	:	New variety of sesame (GT-5)
	4	Source of technology	:	Junagadh Agriculture University, Junagadh
	5	Production system and thematic area	:	Varietal Evaluation
	6	Performance of the Technology with performance		
		Indicators	:	
	7.	Feedback, matrix scoring of various technology		
		parameters done through farmer's participation /		
		other scoring Techniques	:	7 out of 10 scoring
	8	Final recommendation for micro level situation	:	GT – 5 is bold and white seeded and higher yielder (summer).
	9	Constraints identified and feedback for research	:	Nil
	10	Process of farmer's participation and their reaction	:	GT – 5 is bold and white seeded and higher yielder (summer).

### OFT-4 Preservation techniques of different pulses with organic method **Performance of technology assessed:**

No. of	Name of	Technology ontions	Data on Parameter
110. 01		Technology options	Insect infestation (%)

### **ON FARM TESTING**



Management of white grub in groundnut crop





Wilt Disease Management in Cumin Crop





Assessment of new variety of sesame (GT-5)

Trial	crop		after 6 month
		T1 Use of dry neem leaves	12
		T2 Use of castor oil	3
	Chana dal	T3 Use of airtight plastic bag	8
5		T4 Without any treatment	19
5		T1 Use of dry neem leaves	8
	Groop grom	T2 Use of castor oil	2
	Green gram	T3 Use of airtight plastic bag	6
		T4 Without any treatment	22

#### **3.3. FRONTLINE DEMONSTRATION**

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

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

S.	Crop/	Thematic		Details of popularization methods suggested to the	Horizontal	spread of techno	ology
No	Enterprise	Area*	Technology demonstrated	Extension system	No. of villages	No. of farmers	Area in ha
1	Groundnut	New Variety	New variety of Groundnut /GJG-32	To test yield potentiality of newly released groundnut variety	6	10	4.0
2	Cotton	IPM	Pink ball worm management through MDP	Management of pink ball worm through MDP	5	10	4.0
3	Sesame	New Variety	New variety of GT-5 Summer	To test yield potentiality of newly released groundnut variety	4	10	4.0
4	Cumin	IDM	Management of wilt through Trichoderma	Management of wilt through bio agent	6	10	4.0
5	Chickpea	New Variety	Popularized new variety GG-5	To test yield potentiality of newly released groundnut variety	4	10	4.0
6	Pearl millet	New Variety	Popularization of new variety GHB-538	To test yield potentiality of newly released groundnut variety	6	10	4.0
7	Black gram	New Variety	Popularization of new variety GU-2	To test yield potentiality of newly released black gram variety	5	10	4.0

B. Details of FLDs implemented during 2021(Kharif 2021, Rabi 2020-21, Summer 2021) (Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

SI. No.	Сгор	Thematic area	Technology Demonstrated	Season and year	Area	(ha)	-	lo. of farme lemonstratio	Reasons for shortfall in achievement	
				-	Proposed	Actual	SC/ST	Others	Total	
1	Groundnut	New Variety	Popularization of new variety	Kharif 2021	4.0	4.0	-	10	10	-
2	Black gram	New Variety	Popularization of new variety	Kharif 2021	4.0	4.0	1	9	10	-
3	Cotton	IPM	Pink boll worm management through MDP pest	Kharif 2021	4.0	4.0	2	8	10	-
4	Chickpea	New variety	Popularized new variety GJG-6	Rabi 2020-21	4.0	4.0	1	9	10	-
5	Cumin	IDM	Management of wilt through Tricoderma	Rabi 2020-21	4.0	4.0	2	8	10	-
6	Pear millet	New variety	New variety (for taste), Bio fortified variety	Summer 2021	2.0	2.0	-	5	5	-
7	Pear millet	New variety	New variety (for taste), Bio fortified variety	Summer 2021	2.0	2.0	1	4	5	-
8	Sesamum	New variety	Popularized new variety for summer	Summer 2021	4.0	4.0	2	8	10	-

#### Details of farming situation

Сгор	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			ious crop	Sowing date	/est date	Seasonal rainfall (mm)	of rainy days
	Ō	Fa sit (RF/I	Š	N	Р	к	Previous	Sow	Harv	Seasor	No.
Groundnut	Kharif	RF	Medium Black	Low	Low	High	Cotton	20 <sup>th</sup> to 25 <sup>th</sup> June	12 <sup>th</sup> Oct.	1219.5	-
Cotton	Kharif	RF	Medium Black	Low	Low	High	Cotton	25 <sup>th</sup> to 27 <sup>th</sup> June	15 <sup>th</sup> Dec.	1219.5	-
Cumin	Rabi	Irrigated	Medium Black	Low	Low	High	Groundnut	5 <sup>th</sup> Nov.	5 <sup>th</sup> March	-	-
Chickpea	Rabi	Irrigated	Medium Black	Low	Low	High	Groundnut / Sesame early cotton	20 <sup>th</sup> Nov.	10 <sup>th</sup> March	-	-
Pearl millet	Summer	Irrigated	Medium Black	Low	Low	High	Cotton	20 <sup>th</sup> Feb.	19 <sup>th</sup> May	-	-

#### Technical Feedback on the demonstrated technologies

S. No	Feed Back
1.	Variety GJG – 32 is resistant against tikka and rust disease in heavy rainfall condition as compare to T6-45, GJG – 22, TAG – 24.
2.	Trichoderma harzianium is very useful to suppress the wilt disease in cumin.
3.	Pheromone trap is very useful for mass trapping of pink boll worm moth in cotton crop.
4.	GG-5 chickpea variety is high yielding as well as disease resistant compare to GG-2, GJG-3.
5.	Sesamum GT – 5 is bold and white seeded and higher yielder (summer).

#### Farmers' reactions on specific technologies

S. No	Feed Back
1.	Farmers and Farm Women is very happy with establishment of to the KVK at Morbi.
2.	Pink boll worm problem in cotton.
3.	Para wilting in cotton crop.
4.	White grub problem in ground nut crop.
5.	Sucking pest particularly thrips problem in cotton, onion chilly and garlic crop.
6.	Falls army worm in Maize.
7.	Heavy infestation of wilt and blight in Chickpea.
8.	Heavy infestation of Thrips in Cumin, Garlic and Onion crop.

#### Extension and Training activities under FLD

SI.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	3	August, Sept. and December	93	-
2	Farmers Training	4	January to December	99	-
3	Media coverage	2	-	-	-
4	Training for extension functionaries	2	January to December	61	-

#### 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	Econo	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
Crop						High	Dem Low	o Average	Check	in yield	Gross Cost	Gross Return	Net Return	BCR (R/C)		Gross Return		BCR (R/C)
Sesamum	New variety	Popularized new variety for summer	GT-5	10	4.0	9.30	7.50	8.25	8.00	3.1	45400	67650	22250	1.49	45400	64000	18600	1.41

Croundput New	Popularization		10	4.0	12 50	32.25	35.73	30.18	18.38	65800	183350	117550	2 70	65900 1	56000	91000	2.38
Groundnut Variety	of new variety	GJG-32	10	4.0	42.50	32.20	30.73	30.10	10.30	00000		117550	-	00900 1	20900	91000	2.30

#### Frontline demonstration on pulse crops

	Thematic	technology		No. of	Area		Yiel	d (q/ha)		% Increase		omics of o (Rs.	demonstra /ha)	ation	E		s of checl /ha)	ĸ
Сгор	Area	demonstrated	Variety	Farmers	(ha)	High	Demo Low	Average	Check	in yield	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Chickpea	New variety	Popularized new variety GJG-6	GJG-6	10	4.0	18.80	13.60	16.52	14.81	11.5	40500	91904	51404	2.27	40100	82012	41912	2.05
Black gram	New Variety	Popularization of new variety	GU-2	10	4.0	5.95	3.20	3.83	3.00	27.6	24300	30742	6442	1.26	23700	23820	120	1.00

• Black gram crop has failed due to heavy rainfall

#### FLD on Other crops

Category	Thematic	Name of the	No. of	Area		Yiel	d (q/ha)		% Change		her neters	Ecor	nomics of c (Rs./		tion	Ecoi	nomics of c	check (Rs./	ha)
& Crop	Area	technology	Farmers	(ha)		Demo	)	Check	in Yield	Demo	Check	Gross	Gross	Net	BCR	Gross	Gross	Net	BCR
					High	Low	Average			Demo	CHECK	Cost	Return	Return	(R/C)	Cost	Return	Return	(R/C)
Bajra																			
Pearl millet	New Variety	Popularization of new variety GHB-538	5	2.0	35.60	32.80	34.62	34.60	0.06	-	-	47000	69240	22240	1.47	47000	59850	12850	1.27
Pearl millet	New Variety	Popularization of new variety GHB-1129	5	2.0	36.50	35.50	36.18	34.60	4.56	-	-	47000	72360	25360	1.53	47000	60550	13550	1.29
Cotton										Ball dama	age (%)								
Cotton	IPM	Management of pink ball warm through	10	4.0	19.80	14.40	17.44	16.51	5.6	16	23	54100	143880	89780	2.66	52900	136207	83307	2.57

		MDP	I															
Cumin										nage (%)								
Cumin	IDM	Management of wilt through Trichoderma	4.0	4.0	14.30	11.70	12.82	11.44	3.2	10.3	41300	160250	118950	3.88	40200	143000	102800	3.55

Frontline Demonstration on Nutri cereals :

Gron	Thematic	Technology	Variatu	No. of	Area		Yie	d (q/ha)		% Increase	Econo		demonstra /ha)	ation	Ec		s of chec ./ha)	k
Crop	Area	demonstrated	Variety	Farmers	(ha)	High	Dem Low	o Average	Check	in yield	Gross Cost	Gross Return	Net Return	BCR (R/C)		Gross Return	Net Return	BCR (R/C)
Bajra																		
Pearl millet	New Variety	Popularization of new variety GHB-538	GHB- 538	5	2.0	35.60	32.80	34.62	34.60	0.06	47000	69240	22240	1.47	47000	59850	12850	1.27
Pearl millet	New Variety	Popularization of new variety GHB-1129	GHB- 1129	5	2.0	36.50	35.50	36.18	34.60	4.56	47000	72360	25360	1.53	47000	60550	13550	1.29

#### FLD on Livestock : Nil

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of Units (Animal/ Poultry/ Birds, etc)	Ma parar	ajor neters	% change	 her meter	Econor	nics of o (Rs	demonst s.)	ration	Eco	nomics (Rs	_	ck
		demonstrated			Demo	Check	in major parameter	Check		Gross Return	Net Return			Gross Return		BCR (R/C)
Cattle																
Buffalo											1					
Buffalo Calf								 •			1					
Dairy			T													
Poultry																
Sheep & Goat																
Vaccination																

#### FLD on Fisheries : Nil

	Thematic	Name of the	No. of	No.of	Major pa	irameters	% change	Other pa	rameter	Econ	omics of ( (R		ation	E		s of chec s.)	k
Category	area	technology demonstrated	Farmer	units	Demons ration	Check	in major paramete r	Demons ration	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Common Carps																	

Composi						I			
te fish									
culture									
Feed									
Manage									
ment									

FLD on Other enterprises : Nil

Category	Name of the	No. of	No.of	Maj	or	% change	Other p	arameter	Econ	omics of	demonsti	ration		Economic	s of check	C C
	technology	Farmer	units	param	eters	in major				(Rs.) or	Rs./unit			(Rs.) or	Rs./unit	
	demonstrated			Demo	o Check parame		Demo	Check	Gross	Gross	Net	BCR	Gross	Gross	Net	BCR
									Cost	Return	Return	(R/C)	Cost	Return	Return	(R/C)
Oyster Mushroom																
					-											

FLD on Women Empowerment : Nil

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

#### FLD on Farm Implements and Machinery : Nil

Name of the implement	Сгор	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	File observ (output hou	vation t/man	% change in major parameter	Labor	reductior	n (man da	ys)		Cost red ha or Rs	uction ./Unit etc	:.)
						Demo	Check		Land preparatio n	Sowing	Weedin g	Total	Land preparat ion	Labou r	Irrigati on	Total

#### FLD on Other Enterprise: Kitchen Gardening :

Category and Crop	•	Name of the technology		1	Yield	l (Kg)	% change	Other p	arameters	Econo	omics of o (Rs./		ation	Ec	onomics: (Rs./I)		۲.
		demonstrat ed	r		Demons ration	Check	in yield	Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Vegetable	Nutritional security	Vegetables seed	10	10	-	-	-	-	-	-	-	-	-	-	-	-	-

FLD on Demonstration details on crop hybrids : Nil

	toobaologu	l la de ritel	No. of	A		Yield (q	/ha)		0/ 1	Econom	ics of demo	onstration (	Rs./ha)
Crop	technology demonstrated	Hybrid Variety	No. of Farmers	Area (ha)		Demo		Cheek	% Increase in yield	Gross	Gross	Net	BCR
	uemonstrateu	variety	i annei s	(iia)	High	Low	Average	Check	in yield	Cost	Return	Return	(R/C)
Oilseed crop													

### **FROTLINE DEMONSTRATIONS**



FLD on new variety GJG-32 of groundnut



FLD on pearlmillet variety GHB-538



FLD on new variety GJG-6 of chickpea



FLD on new variety GU-2 of blackgram



FLD on pearlmillet variety GHB-1129



Management of pink boll worm through MDP



Management of wilt through *Trichoderma* 



FLD on new variety GT-5 of sesame

Thematic area	No. of				F	Participant	S			
	courses		Others			SC/ST			Grand Tota	
L Crop Droduction		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production Weed Management				0			0	0	0	0
Resource Conservation Technologies				0			0	0	0	0
Cropping Systems	1	45	2	47			0	45	2	47
Crop Diversification		10		0			0	0	0	0
Integrated Farming	1	25		25	5		5	30	0	30
Micro Irrigation/irrigation				0			0	0	0	0
Seed production				0			0	0	0	0
Nursery management				0			0	0	0	0
Integrated Crop Management	1	40		40	3		3	43	0	43
Soil & water conservatioin				0			0	0	0	0
Integrated nutrient management	1	44		44	6		6	50	0	50
Production of organic inputs				0			0	0	0	0
Others (pl specify) Total	4	154	2	156	14	0	14	<b>168</b>	0 2	170
Il Horticulture	4	134	2	0	14	U	0	0	0	0
a) Vegetable Crops				0			0	0	0	0
Production of low value and high valume							0	0	0	
crops				0			0	0	0	0
Off-season vegetables	1	32		32	1		1	33	0	33
Nursery raising	1	39		39	4		4	43	0	43
Exotic vegetables				0			0	0	0	0
Export potential vegetables				0			0	0	0	0
Grading and standardization				0			0	0	0	0
Protective cultivation				0			0	0	0	0
Others (pl specify)	1	49	2	51	2		2	51	2	53
Total (a)	3	120	2	122	7	0	7	127	2	129
b) Fruits Training and Pruning				0			0	0	0	0
Layout and Management of Orchards				0			0	0	0	0
Cultivation of Fruit	1	51		51	7		7	58	0	58
Management of young plants/orchards		0.		0			0	0	0	0
Rejuvenation of old orchards				0			0	0	0	0
Export potential fruits				0			0	0	0	0
Micro irrigation systems of orchards				0			0	0	0	0
Plant propagation techniques				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total (b)	1	51		51	7		7	58	0	58
c) Ornamental Plants Nursery Management				0			0	0	0	0
Management of potted plants				0			0	0	0	0
Export potential of ornamental plants				0			0	0	0	0
Propagation techniques of Ornamental				Ŭ			Ŭ	Ŭ		Ŭ
Plants				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total ( c)				0			0	0	0	0
d) Plantation crops				0			0	0	0	0
Production and Management technology				0			0	0	0	0
Processing and value addition				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total (d) e) Tuber crops				0			0	0	0	0
Production and Management technology				0			0	0	0	0
Processing and value addition	1	1		0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total (e)	1	1	1	0	1	1	0	0	0	0
f) Spices				0			0	0	0	0
Production and Management technology				0			0	0	0	0
Processing and value addition				0			0	0	0	0
Others (pl specify)	1	94		94	6		6	100	0	100
Total (f)	1	94		94	6		6	100	0	100
g) Medicinal and Aromatic Plants			23	0			0	0	0	0

Thematic area	No. of											
	courses		Others			SC/ST			Grand Tota			
Nuroen/monogement		Male	Female	<b>Total</b>	Male	Female	Total 0	Male 0	Female 0	Total 0		
Nursery management Production and management technology				0			0	0	0	0		
Post harvest technology and value				0			0	0	0	0		
addition				0			0	0	0	0		
Others (pl specify)				0			0	0	0	0		
Total (g)				0			0	0	0	0		
GT (a-g)	5	265	2	267	20	0	20	285	2	287		
III Soil Health and Fertility												
Management				0			0	0	0	0		
Soil fertility management				0	-		0	0	0	0		
Integrated water management Integrated Nutrient Management				0			0	0	0	0		
Production and use of organic inputs				0			0	0	0	0		
Management of Problematic soils				0			0	0	0	0		
Micro nutrient deficiency in crops				0			0	0	0	0		
Nutrient Use Efficiency				0			0	0	0	0		
Balance use of fertilizers				0			0	0	0	0		
Soil and Water Testing				0			0	0	0	0		
Others (pl specify)				0			0	0	0	0		
Total IV Livestock Production and				0			0	0	0	0		
Management				0			0	0	0	0		
Dairy Management				0			0	0	0	0		
Poultry Management				0			0	0	0	0		
Piggery Management				0			0	0	0	0		
Rabbit Management				0			0	0	0	0		
Animal Nutrition Management				0			0	0	0	0		
Disease Management				0			0	0	0	0		
Feed & fodder technology				0			0	0	0	0		
Production of quality animal products Others (pl specify)				0			0	0	0	0		
Total				0			0	0	0	0		
V Home Science/Women				0			0	0	0	0		
empowerment				0			0	0	0	0		
Household food security by kitchen												
gardening and nutrition gardening	2		89	89		5	5	0	94	94		
Design and development of		_		10				-	45	50		
low/minimum cost diet Designing and development for high	1	5	41	46		4	4	5	45	50		
nutrient efficiency diet				0			0	0	0	0		
Minimization of nutrient loss in								Ŭ		Ĵ		
processing				0			0	0	0	0		
Processing and cooking				0			0	0	0	0		
Gender mainstreaming through SHGs				0			0	0	0	0		
Storage loss minimization techniques		-	4.4	0		0	0	0	0	0		
Value addition Women empowerment	1	3	44 25	47 25		3	3	3	47 25	50 25		
Location specific drudgery reduction	1		20	20			0	0	20	20		
technologies				0			0	0	0	0		
Rural Crafts				0			0	0	0	0		
Women and child care				0			0	0	0	0		
Others (pl specify)	1		28	28		2	2	0	30	30		
Total	6	8	227	235	0	14	14	8	241	249		
VI Agril. Engineering				0			0	0	0	0		
Farm Machinary and its maintenance Installation and maintenance of micro				0			0	0	0	0		
irrigation systems				0			0	0	0	0		
Use of Plastics in farming practices				0			0	0	0	0		
Production of small tools and	1	ł			1		Ť		Ť	Ť		
implements				0			0	0	0	0		
Repair and maintenance of farm				_			-	-	-	_		
machinery and implements				0			0	0	0	0		
Small scale processing and value addition				_			0	_	0	_		
Post Harvest Technology				0			0	0	0	0		
r oornarvoorreonnology	I	1	1	0	1	l	0	0	0	U		

Thematic area	No. of											
	courses		Others			SC/ST			al			
		Male	Female	Total	Male	Female	Total	Male	Female	Total		
Others (pl specify)				0			0	0	0	0		
Total VII Plant Protection				0			0	0	0	0		
Integrated Pest Management	2	77		77	8		8	85	0	85		
Integrated Disease Management	2	67		67	0		0	67	0	67		
Bio-control of pests and diseases	2	81	2	83	8		8	89	2	91		
Production of bio control agents and bio		0.		00				00		01		
pesticides				0			0	0	0	0		
Others (pl specify)	3	92		92	9		9	101	0	101		
Total	9	317	2	319	25	0	25	342	2	344		
VIII Fisheries				0			0	0	0	0		
Integrated fish farming				0			0	0	0	0		
Carp breeding and hatchery management				0			0	0	0	0		
Carp fry and fingerling rearing				0			0	0	0	0		
Composite fish culture				0			0	0	0	0		
Hatchery management and culture of				Ű				Ű		<u> </u>		
freshwater prawn				0			0	0	0	0		
Breeding and culture of ornamental												
fishes				0			0	0	0	0		
Portable plastic carp hatchery				0			0	0	0	0		
Pen culture of fish and prawn		<b> </b>		0			0	0	0	0		
Shrimp farming				0			0	0	0	0		
Edible oyster farming Pearl culture				0			0	0	0	0		
Fish processing and value addition				0			0	0	0	0		
Others (pl specify)				0			0	0	0	0		
Total				0			0	0	0	0		
IX Production of Inputs at site				0			0	0	0	0		
Seed Production				0			0	0	0	0		
Planting material production				0			0	0	0	0		
Bio-agents production				0			0	0	0	0		
Bio-pesticides production				0			0	0	0	0		
Bio-fertilizer production Vermi-compost production				0			0	0	0	0		
Organic manures production				0			0	0	0	0		
Production of fry and fingerlings				0			0	0	0	0		
Production of Bee-colonies and wax				Ŭ			Ŭ	Ŭ		Ŭ		
sheets				0			0	0	0	0		
Small tools and implements				0			0	0	0	0		
Production of livestock feed and fodder				0			0	0	0	0		
Production of Fish feed				0			0	0	0	0		
Mushroom Production				0			0	0	0	0		
Apiculture				0	-		0	0	0	0		
Others (pl specify) Total				0			0	0	0	0		
X CapacityBuilding and Group				0			0	0	0	0		
Dynamics				0			0	0	0	0		
Leadership development				0			0	0	0	0		
Group dynamics				0			0	0	0	0		
Formation and Management of SHGs				0			0	0	0	0		
Mobilization of social capital				0			0	0	0	0		
Entrepreneurial development of				_			~	_	_	_		
farmers/youths		<b> </b>		0			0	0	0	0		
WTO and IPR issues Others (pl specify)				0			0	0	0	0		
Total				0			0	0	0	0		
XI Agro-forestry				0			0	0	0	0		
Production technologies				0			0	0	0	0		
Nursery management	1	1	1	0	1	1	0	0	0	0		
Integrated Farming Systems				0			0	0	0	0		
Others (pl specify)				0			0	0	0	0		
Total				0			0	0	0	0		
GRAND TOTAL	24	744	233	977	59	14	73	803	247	1050		

#### Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of				F	Participant	S				
	courses	Others				SC/ST		Grand Total			
	-	Male	Female	Total	Male	Female	Total	Male	Female	Total	
I Crop Production											
Weed Management				0			0	0	0	0	
Resource Conservation Technologies	1	29		0 29			0	0 29	0	0 29	
Cropping Systems Crop Diversification	1	29		29			0	29	0	29	
Integrated Farming	1	36		36	3		3	39	0	39	
Micro Irrigation/irrigation	1	- 50		0	5		0	0	0	0	
Seed production				0			0	0	0	0	
Nursery management				0			0	0	0	0	
Integrated Crop Management			-	0			0	0	0	0	
Soil & water conservatioin				0			0	0	0	0	
Integrated nutrient management	1	21		21	5		5	26	0	26	
Production of organic inputs				0			0	0	0	0	
Others (pl specify)				0			0	0	0	0	
Total	3	86	0	86	8	0	8	94	0	94	
II Horticulture				0			0	0	0	0	
a) Vegetable Crops				0			0	0	0	0	
Production of low value and high valume				0			0	0	0	_	
crops Off-season vegetables				0			0	0	0	0	
Nursery raising	1	101		101	18		18	119	0	119	
Exotic vegetables	1	101		0	10		0	0	0	0	
Export potential vegetables				0			0	0	0	0	
Grading and standardization				0			0	0	0	0	
Protective cultivation	1	36	-	36			0	36	0	36	
Others (pl specify)				0			0	0	0	0	
Total (a)	2	137	0	137	18	0	18	155	0	155	
b) Fruits				0			0	0	0	0	
Training and Pruning				0			0	0	0	0	
Layout and Management of Orchards				0			0	0	0	0	
Cultivation of Fruit	1	52		52	7		7	59	0	59	
Management of young plants/orchards				0			0	0	0	0	
Rejuvenation of old orchards				0			0	0	0	0	
Export potential fruits				0			0	0	0	0	
Micro irrigation systems of orchards				0			0	0	0	0	
Plant propagation techniques Others (pl specify)				0			0	0	0	0	
Total (b)	1	52		52	7		7	59	0	59	
c) Ornamental Plants	•	52		0			0	0	0	0	
Nursery Management				0			0	0	0	0	
Management of potted plants				0			0	0	0	0	
Export potential of ornamental plants				0			0	0	0	0	
Propagation techniques of Ornamental											
Plants				0			0	0	0	0	
Others (pl specify)				0			0	0	0	0	
Total ( c)				0			0	0	0	0	
d) Plantation crops				0			0	0	0	0	
Production and Management technology				0			0	0	0	0	
Processing and value addition	-			0			0	0	0	0	
Others (pl specify)				0			0	0	0	0	
Total (d)				0			0	0	0	0	
e) Tuber crops	+	<u> </u>		0			0	0	0	0	
Production and Management technology Processing and value addition				0			0	0	0	0	
Others (pl specify)	+	<u> </u>		0			0	0	0	0	
Total (e)				0			0	0	0	0	
f) Spices				0			0	0	0	0	
Production and Management technology	1	48		48	2		2	50	0	50	
Processing and value addition	† '			40			0	0	0	0	
Others (pl specify)		1		0			0	0	0	0	
Total (f)	1	48		48	2		2	50	0	50	
						-					
g) Medicinal and Aromatic Plants				0			0	0	0	0	

Thematic area	No. of	Participants										
	courses		Others			SC/ST			Grand Tota			
Draduction and management technology		Male	Female	Total	Male	Female	Total	Male	Female	Total		
Production and management technology Post harvest technology and value				0			0	0	0	0		
addition				0			0	0	0	0		
Others (pl specify)				0			0	0	0	0		
Total (g)				0	0		0	0	0	0		
GT (a-g)	4	237	0	237	27	0	27	264	0	264		
III Soil Health and Fertility												
Management				0			0	0	0	0		
Soil fertility management				0			0	0	0	0		
Integrated water management				0			0	0	0	0		
Integrated Nutrient Management				0			0	0	0	0		
Production and use of organic inputs Management of Problematic soils				0			0	0	0	0		
Micro nutrient deficiency in crops				0			0	0	0	0		
Nutrient Use Efficiency				0			0	0	0	0		
Balance use of fertilizers	1	51		51	8		8	59	0	59		
Soil and Water Testing	1	25		25	1		1	26	0	26		
Others (pl specify)	1	25		25			0	25	0	25		
Total	3	101	0	101	9	0	9	110	0	110		
IV Livestock Production and												
Management				0			0	0	0	0		
Dairy Management				0			0	0	0	0		
Poultry Management				0			0	0	0	0		
Piggery Management				0			0	0	0	0		
Rabbit Management Animal Nutrition Management				0			0	0	0	0		
Disease Management				0			0	0	0	0		
Feed & fodder technology				0			0	0	0	0		
Production of quality animal products				0			0	0	0	0		
Others (pl specify)				0			0	0	0	0		
Total				0			0	0	0	0		
V Home Science/Women												
empowerment				0			0	0	0	0		
Household food security by kitchen				0			0	0	0	0		
gardening and nutrition gardening Design and development of				0			0	0	0	0		
low/minimum cost diet	1		10	10			0	0	10	10		
Designing and development for high	1		10	10			0	0	10	10		
nutrient efficiency diet	1		16	16		1	1	0	17	17		
Minimization of nutrient loss in												
processing	1		15	15			0	0	15	15		
Processing and cooking				0			0	0	0	0		
Gender mainstreaming through SHGs	1		24	24		3	3	0	27	27		
Storage loss minimization techniques				0			0	0	0	0		
Value addition	1		0	0 28		2	0	0	0 30	0		
Women empowerment Location specific drudgery reduction	1		28	28			2	0	30	30		
technologies				0			0	0	0	0		
Rural Crafts	2	1	58	58		11	11	0	69	69		
Women and child care	2		84	84		7	7	0	91	91		
Others (pl specify)		1		0			0	0	0	0		
Total	9	0	235	235	0	24	24	0	259	259		
VI Agril. Engineering				0			0	0	0	0		
Farm Machinary and its maintenance				0			0	0	0	0		
Installation and maintenance of micro				~			_	_	_	_		
irrigation systems				0			0	0	0	0		
Use of Plastics in farming practices Production of small tools and				0			0	0	0	0		
implements				0			0	0	0	0		
Repair and maintenance of farm				0				0	0	0		
machinery and implements				0			0	0	0	0		
Small scale processing and value												
addition				0			0	0	0	0		
										-		
Post Harvest Technology Others (pl specify)				0			0	0	0	0		

Thematic area	No. of												
	courses		Others			SC/ST		(	al				
		Male	Female	Total	Male	Female	Total	Male	Female	Total			
Total				0			0	0	0	0			
VII Plant Protection	-	4.04		0	47		0	0	0	0			
Integrated Pest Management	2	101		101	17		17	118	0	118			
Integrated Disease Management Bio-control of pests and diseases	2	65 56		65 56	10 5		10 5	75 61	0	75 61			
Production of bio control agents and bio	2	00		00	5		5	01	0	61			
pesticides				0			0	0	0	0			
Others (pl specify)	4	148		148	10		10	158	0	158			
Total	10	370	0	370	42	0	42	412	Ů	412			
VIII Fisheries			_	0		-	0	0	0	0			
Integrated fish farming				0			0	0	0	0			
Carp breeding and hatchery													
management				0			0	0	0	0			
Carp fry and fingerling rearing	_			0			0	0	0	0			
Composite fish culture				0			0	0	0	0			
Hatchery management and culture of				0			0	0	0	0			
freshwater prawn Breeding and culture of ornamental				0			0	0	0	0			
fishes				0			0	0	0	0			
Portable plastic carp hatchery				0			0	0	0	0			
Pen culture of fish and prawn				0			0	0	0	0			
Shrimp farming				0			0	0	0	0			
Edible oyster farming				0			0	0	0	0			
Pearl culture				0			0	0	0	0			
Fish processing and value addition				0			0	0	0	0			
Others (pl specify)				0			0	0	0	0			
Total				0			0	0	0	0			
IX Production of Inputs at site				0			0	0	0	0			
Seed Production				0			0	0	0	0			
Planting material production	_			0			0	0	0	0			
Bio-agents production				0			0	0	0	0			
Bio-pesticides production Bio-fertilizer production	_			0			0	0	0	0			
Vermi-compost production				0			0	0	0	0			
Organic manures production				0			0	0	0	0			
Production of fry and fingerlings				0			0	0	0	0			
Production of Bee-colonies and wax				-			-	-					
sheets				0			0	0	0	0			
Small tools and implements				0			0	0	0	0			
Production of livestock feed and fodder				0			0	0	0	0			
Production of Fish feed				0			0	0	0	0			
Mushroom Production				0			0	0	0	0			
Apiculture	_			0			0	0	0	0			
Others (pl specify) Total				0			0	0	0	0			
X Capacity Building and Group	-			0			0	0	0	0			
Dynamics				0			0	0	0	0			
Leadership development				0			0	0	0	0			
Group dynamics				0			0	0	0	0			
Formation and Management of SHGs		1		0			0	0	0	0			
Mobilization of social capital				0			0	0	0	0			
Entrepreneurial development of													
farmers/youths				0			0	0	0	0			
WTO and IPR issues				0			0	0	0	0			
Others (pl specify)				0			0	0	0	0			
Total				0			0	0	0	0			
XI Agro-forestry				0			0	0	0	0			
Production technologies Nursery management				0			0	0	0	0			
Integrated Farming Systems		}		0			0	0	0	0			
Others (pl specify)				0			0	0	0	0			
Total				0			0	0	0	0			

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

Thematic area	No. of				F	Participant	S				
	courses		Others			SC/ST			Grand Tota	1	
		Male	Female	Total	Male	Female	Total	Male	Female	Total	
I Crop Production											
Weed Management				0			0	0	0	0	
Resource Conservation Technologies		74	-	0			0	0	0	0	
Cropping Systems	2	74	2	76			0	74	2	76	
Crop Diversification		0.4		0	0		0	0	0	0	
Integrated Farming	2	61		61	8		8	69	0	69	
Micro Irrigation/irrigation				0			0	0	0	0	
Seed production				0			0	0	0	0	
Nursery management		10		0	0		0	0	0	0	
Integrated Crop Management	1	40		40	3		3	43	0	43	
Soil & water conservatioin				0			0	0	0	0	
Integrated nutrient management	2	65		65	11		11	76	0	76	
Production of organic inputs				0			0	0	0	0	
Others (pl specify)				0			0	0	0	0	
Total	7	240	2	242	22	0	22	262	2	264	
II Horticulture				0			0	0	0	0	
a) Vegetable Crops				0			0	0	0	0	
Production of low value and high valume								-			
crops				0			0	0	0	0	
Off-season vegetables	1	32		32	1		1	33	0	33	
Nursery raising	2	140		140	22		22	162	0	162	
Exotic vegetables				0			0	0	0	0	
Export potential vegetables				0			0	0	0	0	
Grading and standardization				0			0	0	0	0	
Protective cultivation	1	36		36			0	36	0	36	
Others (pl specify)	1	49	2	51	2		2	51	2	53	
Total (a)	5	257	2	259	25	0	25	282	2	284	
b) Fruits				0			0	0	0	0	
Training and Pruning				0			0	0	0	0	
Layout and Management of Orchards				0			0	0	0	0	
Cultivation of Fruit	2	103		103	14		14	117	0	117	
Management of young plants/orchards				0			0	0	0	0	
Rejuvenation of old orchards				0			0	0	0	0	
Export potential fruits				0			0	0	0	0	
Micro irrigation systems of orchards				0			0	0	0	0	
Plant propagation techniques				0			0	0	0	0	
Others (pl specify)				0			0	0	0	0	
Total (b)	2	103		103	14		14	117	0	117	
c) Ornamental Plants				0			0	0	0	0	
Nursery Management				0			0	0	0	0	
Management of potted plants				0			0	0	0	0	
Export potential of ornamental plants				0			0	0	0	0	
Propagation techniques of Ornamental											
Plants				0			0	0	0	0	
Others (pl specify)				0			0	0	0	0	
Total ( c)				0			0	0	0	0	
d) Plantation crops				0			0	0	0	0	
Production and Management technology				0			0	0	0	0	
Processing and value addition				0			0	0	0	0	
Others (pl specify)				0			0	0	0	0	
Total (d)				0			0	0	0	0	
e) Tuber crops				0			0	0	0	0	
Production and Management technology				0			0	0	0	0	
Processing and value addition				0			0	0	0	0	
Others (pl specify)				0			0	0	0	0	
Total (e)				0			0	0	0	0	
f) Spices				0			0	0	0	0	
Production and Management technology	1	48		48	2		2	50	0	50	
Processing and value addition		1		0	1		0	0	0	0	
Others (pl specify)	1	94		94	6		6	100	0	100	
Total (f)	2	142	0	142	8	0	8	150	Ŭ Û	150	
g) Medicinal and Aromatic Plants	-		Ť	0	Ŭ		0	0	0	0	
	1	1	1		1			U		0	

Thematic area	No. of												
	courses		Others			SC/ST			Frand Tota				
Draduction and more remark to shaple my		Male	Female	Total	Male	Female	Total	Male	Female	Total			
Production and management technology Post harvest technology and value				0			0	0	0	0			
addition				0			0	0	0	0			
Others (pl specify)				0			0	0	0	0			
Total (g)				0			0	0	0	0			
GT (a-g)	9	502	2	504	47	0	47	549	2	551			
III Soil Health and Fertility													
Management				0			0	0	0	0			
Soil fertility management				0			0	0	0	0			
Integrated water management				0			0	0	0	0			
Integrated Nutrient Management Production and use of organic inputs				0			0	0	0	0			
Management of Problematic soils				0			0	0	0	0			
Micro nutrient deficiency in crops				0			0	0	0	0			
Nutrient Use Efficiency				0			0	0	0	0			
Balance use of fertilizers	1	51		51	8		8	59	0	59			
Soil and Water Testing	1	25		25	1		1	26	0	26			
Others (pl specify)	1	25		25			0	25	0	25			
Total	3	101	0	101	9	0	9	110	0	110			
IV Livestock Production and													
Management				0			0	0	0	0			
Dairy Management				0			0	0	0	0			
Poultry Management				0			0	0	0	0			
Piggery Management Rabbit Management				0			0	0	0	0			
Animal Nutrition Management				0			0	0	0	0			
Disease Management				0			0	0	0	0			
Feed & fodder technology				0			0	0	0	0			
Production of quality animal products				0			0	0	0	0			
Others (pl specify)				0			0	0	0	0			
Total				0			0	0	0	0			
V Home Science/Women													
empowerment				0			0	0	0	0			
Household food security by kitchen	0		00	00		_	-	0	0.4	0.4			
gardening and nutrition gardening Design and development of	2		89	89		5	5	0	94	94			
low/minimum cost diet	2	5	51	56		4	4	5	55	60			
Designing and development for high	2		01					<u> </u>		00			
nutrient efficiency diet	1		16	16		1	1	0	17	17			
Minimization of nutrient loss in													
processing	1		15	15			0	0	15	15			
Processing and cooking				0			0	0	0	0			
Gender mainstreaming through SHGs	1		24	24		3	3	0	27	27			
Storage loss minimization techniques				0			0	0	0	0			
Value addition	1	3	44	47		3	3	3	47	50			
Women empowerment	2		53	53		2	2	0	55	55			
Location specific drudgery reduction technologies				0			0	0	0	0			
Rural Crafts	2		58	58		11	11	0	69	69			
Women and child care	2	<u> </u>	84	84		7	7	0	91	91			
Others (pl specify)	1		28	28		2	2	0	30	30			
Total	15	8	462	470	0	38	38	8	500	508			
VI Agril. Engineering				0			0	0	0	0			
Farm Machinary and its maintenance				0			0	0	0	0			
Installation and maintenance of micro													
irrigation systems	ļ	ļ		0			0	0	0	0			
Use of Plastics in farming practices				0			0	0	0	0			
Production of small tools and				^			_	_	_	_			
implements Repair and maintenance of farm				0			0	0	0	0			
machinery and implements				0			0	0	0	0			
Small scale processing and value	1	<u> </u>		0			0	0	0	0			
addition				0			0	0	0	0			
Post Harvest Technology		1		0	1		0	0	0	0			

Thematic area	No. of			S						
	courses		Others			SC/ST		Grand Total		
PR / 1		Male	Female	Total	Male	Female	Total	Male	Female	Total
Total				0			0	0	0	0
VII Plant Protection	4	470		0	25		0	0	0	0
Integrated Pest Management	4	178 132		178 132	25 10		25 10	203	0	203
Integrated Disease Management Bio-control of pests and diseases	4	132	2	132	10		13	142 150	2	142 152
Production of bio control agents and bio	4	137	2	139	13		13	150	۷.	152
pesticides				0			0	0	0	0
Others (pl specify)	7	240		240	19		19	259	0	259
Total	19	687	2	689	67	0	67	754	2	756
VIII Fisheries				0			0	0	0	0
Integrated fish farming				0			0	0	0	0
Carp breeding and hatchery										
management				0			0	0	0	0
Carp fry and fingerling rearing				0			0	0	0	0
Composite fish culture				0			0	0	0	0
Hatchery management and culture of										
freshwater prawn				0			0	0	0	0
Breeding and culture of ornamental				-			-	-	-	-
fishes				0			0	0	0	0
Portable plastic carp hatchery				0			0	0	0	0
Pen culture of fish and prawn				0			0	0	0	0
Shrimp farming				0			0	0	0	0
Edible oyster farming Pearl culture				0			0	0	0	0
Fish processing and value addition				0			0	0	0	0
Others (pl specify)		ł – – –		0			0	0	0	0
Total				0			0	0	0	0
IX Production of Inputs at site				0			0	0	0	0
Seed Production				0			0	0	0	0
Planting material production				0			0	0	0	0
Bio-agents production				0			0	0	0	0
Bio-pesticides production				0			0	0	0	0
Bio-fertilizer production				0			0	0	0	0
Vermi-compost production				0			0	0	0	0
Organic manures production				0			0	0	0	0
Production of fry and fingerlings				0			0	0	0	0
Production of Bee-colonies and wax				_			_			
sheets				0			0	0	0	0
Small tools and implements				0			0	0	0	0
Production of livestock feed and fodder				0			0	0	0	0
Production of Fish feed Mushroom Production				0			0	0	0	0
Apiculture				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total				0			0	0	0	0
X CapacityBuilding and Group				0				0	0	0
Dynamics				0			0	0	0	0
Leadership development				0			0	0	0	0
Group dynamics		1	1	0			0	0	0	0
Formation and Management of SHGs				0			0	0	0	0
Mobilization of social capital				0			0	0	0	0
Entrepreneurial development of										
farmers/youths				0			0	0	0	0
WTO and IPR issues				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total				0			0	0	0	0
XI Agro-forestry				0			0	0	0	0
Production technologies				0			0	0	0	0
Nursery management				0			0	0	0	0
Integrated Farming Systems				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total										

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

					No. of	Participa	nts				
Area of training	No. of		General			SC/ST		Grand Total			
Area of training	Course s	Male	Femal	Total	Male	Femal	Total	Male	Femal	Total	
	, united and a second s	maic	е	Total	maic	е	Total	maic	е	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											
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			+					1		┨─────	
Cold water fisheries			+					1		┨─────	
Fish harvest and			+								
processing technology Fry and fingerling rearing			+					1		┨─────	
										+	
Any other (pl.specify)					1					+	
TOTAL										L	

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

Area of training	No. of Course s	No. of Participants									
		General			SC/ST			Grand Total			
		Male	Femal e	Total	Male	Femal e	Total	Male	Femal e	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					
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					

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

Area of training	No. of	No. of Participants									
	No. of Course s	General			SC/ST			Grand Total			
		Male	Femal e	Total	Male	Femal e	Total	Male	Femal e	Total	
Nursery Management of					1						
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											
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					

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

	No. of				No. c	of Partici	pants			
Area of training	Cours		General			SC/ST		Grand Total		
	es	Mal	Femal	Tot	Mal	Femal	Tot	Mal	Femal	Tot
		е	е	al	е	е	al	е	е	al
Productivity enhancement in field crops										
Integrated Pest Management	1	16	3	19	2		2	18	3	21
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	1	16	3	19	2		2	18	3	21

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

	No. of				No. c	of Partici	pants			
Area of training	Cours		General			SC/ST		G	and Tot	al
	es	Mal e	Femal e	Tot al	Mal e	Femal e	Tot al	Mal e	Femal e	Tot al
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management	1	31	7	38	7		7	38	7	45
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs	1	18		18				18		18
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	2	49	7	56	7	0	7	56	7	63

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

	No. of	No. of Participants								
Area of training	Cours		General			SC/ST		G	rand Tot	al
	es	Mal	Femal	Tot	Mal	Femal	Tot	Mal	Femal	Tot

		е	е	al	е	е	al	е	е	al
Productivity enhancement in field crops										
Integrated Pest Management	1	16	3	19	2		2	18	3	21
Integrated Nutrient management	1	31	7	38	7		7	38	7	45
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs	1	18		18				18		18
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	3	65	10	75	9	0	9	74	10	84

# Sponsored training programmes

Sponsored training programmes	No. of Courses				No. d	of Particip	oants			
Area of training	Courses		General			SC/ST		(	Grand Tota	al
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Increasing production and productivity of crops	1	30		30				30		30
Commercial production of vegetables	1	32		32	1		1	33		33
Production and value addition										
Fruit Plants										
Ornamental plants										
Spices crops										
Soil health and fertility management	1	46		46	9		9	55		55
Production of Inputs at site										
Methods of protective cultivation	1	95		95	5		5	100		100
Others (pl. specify)										
Total	4	203	0	203	15	0	15	218	0	218
Post harvest technology and value addition										
Processing and value addition										
Others (pl. specify)										
Total										
Farm machinery										
Farm machinery, tools and implements										
Others (pl. specify)										
Total										
Livestock and fisheries										
Livestock production and management										
Animal Nutrition Management										
Animal Disease Management										
Fisheries Nutrition										
Fisheries Management										
Others (pl. specify)										
Total										
Home Science										
Household nutritional security	1		31	31		8	8		39	39
Economic empowerment of women	1		28	28		2	2		30	30
Drudgery reduction of women										
Others (pl. specify)										
Total	2	0	59	59	0	10	10	0	69	69
Agricultural Extension										
CapacityBuilding and Group Dynamics										
Others (pl. specify)										
Total										
GRAND TOTAL	6	203	59	262	15	10	25	218	69	287

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

	No. of				No. of	Participar	nts			
Area of training	Courses		General			SC/ST		Grand Total		
	0001303	Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Commercial floriculture										
Commercial fruit production										
Commercial vegetable										
production										
Integrated crop management										
Organic farming										
Others (pl. specify)										
Total										
Post harvest technology										
and value addition										
Value addition										
Others (pl. specify)										
Total										
Livestock and fisheries										
Dairy farming										
Composite fish culture										
Sheep and goat rearing										
Piggery										
Poultry farming										
Others (pl. specify)										
Total										
Income generation activities										
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.	1		29	29		1	1		30	30
Agril. para-workers, para-vet										
training										
Others (pl. specify)					1	1		1		
Total					1	1		1		
Agricultural Extension										
Capacity building and group							·			
dynamics										
Others (pl. specify)							·			
Total							·			
Grand Total	1		29	29		1	1		30	30

# 3.5. Extension Programmes

Activities	No. of Programmes	No. of Farmers	No. of Extension Personnel	TOTAL
Advisory Services	3	950	-	950
Diagnostic visits	5	46	4	50
Field Day	3	93	2	95
Group discussions	18	102	7	109
KisanGhosthi	18	130	2	132
Film Show	5	434	8	442
Self -help groups meeting	2	60	2	62
KisanMela	-	-	-	-
Exhibition	-	-	-	-

Scientists' visit to farmers field	33	139	7	146
Plant/animal health camps	-	-	-	-
Farm Science Club	-	-	-	-
Ex-trainees Sammelan	1	31	0	31
Farmers' seminar/workshop	2	139	5	144
Method Demonstrations	3	85	0	85
Celebration of important days	14	2301	11	2312
Special day celebration	7	227	5	232
Exposure visits	-	-	-	-
Others (pl.specify)	2	376	5	381
Total	116	4163	58	5271

# Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	-
Extension Literature	-
Newspaper coverage	25
Popular articles	17
Radio Talks	-
TV Talks	-
Animal health amps (Number of animals treated)	-
Social Media (No. of platforms Used)	-
Others (pl. specify)	-
Total	42

# 3.6 Online activities during year 2021

S. No.	Activity Type	Mode of implementation (Video conferencing / Audio Conferencing / Facebook Live / YouTube Live/ Zoom/ Google meet/ Webexetc)	Title of Program	No. of Programmes	No. of Participants/ Views
А	Farmers training				
1	Farmers training	Audio Conferencing	IPM in major crops	2	178
2	Farmers training	Video conferencing	Clean Milk production	1	39
3	Farmers training	Video conferencing	Different crops contribute to bee pollen	1	52
4	Collaboration training	Video conferencing	Importance of organic farming	1	46
	Total			5	315
В	Farmers scientist's interaction programme				
1	Video conferencing	Video conferencing	Plant protection	2	17
2	Video conferencing	Video conferencing	Horticulture	1	11
	Total			3	28
С	Farmers seminars				
	Total				
D	Expert lectures	Audio Conferencing	IPM and IDM in major crops	2	195
	Total			2	195
E	Any other				
	Total				
	Grand Total (A+B+C+D+E)			11	538

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

Production of seeds by the KVKs

# **ON CAMPUS TRAINING**



On campus training for farm women Dt.22/06/2021



On campus- meal plants for a women Dt.22/06/2021



On campus-Raising of vegetable nursery Dt.15/09/2021



On campus: Safe and judicious use of pesticides Dt.26/09/2021

# **OFF CAMPUS TRAINING**



Off campus-Natural Farming Training at Arnitimba Dt.31/12/2021



Off campus training at Amarasar Dt.26/08/2021



Off campus training at Tankara Dt.28/07/2021



Off campus training on natural farming Dt.27/10/2021



Off campus training at Kharachiya village Dt.20/10/2021

Сгор	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals	Pear millet	J2597	-	0.30	2760	3
Oilseeds	Sesame (Breeder)	GJT-5		2.33	54289	-
	Sesame (Labeled)	GJT-5	-	0.91	16380	20
	Groundnut	GJG-22	-	3.76	27600	
Pulses	Black Gram (Labeled)	GU - 2	-	2.12	42400	105
	Chickpea (Labeled)	GG - 5	-	6.25	40000	30
Commercial crops						
Vegetables	Onion (Breeder)	GJWO-3	-	- 0.55	55000	-
Flower crops						
Spices	Cumin (Labeled)	GC - 4	-	5.84	129006	221
	Ajwain (Labeled)	GA - 2	-	1.53	28518	89
Fodder crop seeds						
Fiber crops						
Forest Species						
Others						
Total				19.83	395953	468

# Production of planting materials by the KVK :

Сгор	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Commercial						
Vegetable seedlings	Drumstick	-	-	25	-	25
Fruits	Jambun	-	-	25	-	25
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices						
Tuber						
Fodder crop saplings						
Forest Species						
Others						
Total				50	-	50

# Production of Bio-Products : Nil

	Name of the bio-product	Quantity		
Bio Products		Kg	Value (Rs.)	No. of Farmers
Bio Fertilisers				
Bio-pesticide				
Bio-fungicide				
Bio Agents				

Trichoderma		
Others		
Total		

# Production of livestock materials :Nil

	Name of the breed	Number	Value (Rs.)	No. of Farmers
Particulars of Live stocl	k			
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (PI. specify)				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (PI. specify)				
Piggery				
Piglet				
Others (PI.specify)				
Fisheries				
Indian carp				
Exotic carp				
Others (PI. 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

ltem	Title	Authors name	Number
Research papers	NA		
Technical reports	SAC, Annual, ZEARC, AGRESSCO	-	5
News letters	JAU, news letters	-	4
Technical bulletins	-	-	-
Popular articles	Krushi Kayda-Bharatiy krushi aaitayshik sudharo aek rashtra aek bajar	Dr. Hemangi D. Mehta/ D. A. Saradava	Chakravat news, January 2021
	Krushi Kayda-Bharatiy krushi aaitayshik sudharo aek rashtra aek bajar	Dr. Hemangi D. Mehta/ D. A. Saradava	Sanjog news, January 2021
	Amrut fal Amala ni kheti	Dr. Hemangi D. Mehta/ D. A. Saradava	Sanjog news, January 2021
	Amrut fal Amala ni kheti	Dr. Hemangi D. Mehta/ D. A. Saradava	Chakravat news, January 2021
	Limbadani upayogita	Dr. Hemangi D. Mehta/ D. A. Saradava	Sanjog news, January 2021
	Online nana moklavama sauthi saral ane vishvashpatra aep- Bhim	Dr. Hemangi D. Mehta/ D. A. Saradava	Chakravat news, January 2021
	Tunka gala ma moti kmani	Dr. Hemangi D. Mehta/ D. A.	Chakravat news, January 2021

apato pak- Mashrum	Saradava	
Mashrum kheti karo ane swarojgari melavo	Dr. Hemangi D. Mehta/ D. A. Saradava	Sanjog news, January 2021
Rokadiya pak marchani kheti ane mulyvrudhi kari nanan melavo	Dr. Hemangi D. Mehta	Chakravat news, February 2021
Rokadiya pak marchani kheti ane mulyvrudhi kari nanan melavo	Dr. Hemangi D. Mehta	Krushi prabhat, February 2021
Marchani kheti ane mulyvrudhi	Dr. Hemangi D. Mehta	Sanjog news, February 2021
Paushtik fal chiku-Part-1	Dr. Hemangi D. Mehta	Sanjog news, February 2021
Paushtik fal chiku-Part-1	Dr. Hemangi D. Mehta	Chakravat news, February 2021
Paushtik fal chiku-Part-2	Dr. Hemangi D. Mehta	Sanjog news, February 2021
Paushtik fal chiku-Part-2	Dr. Hemangi D. Mehta	Chakravat news, February 2021
Hal na samay ma aelovera ni khetima lakhoni kmani	Dr. Hemangi D. Mehta	Chakravat news, February 2021
Hal na samay ma aelovera ni khetima lakhoni kmani	Dr. Hemangi D. Mehta	Sanjog news, February 2021
-	-	-
Achievements and Endeavours report of KVK MORBI	Dr. L.L Jivani Shri Dilip A. Saradava Smt. Hetal H. Padsumbiya Smt. Hemangi D. Mehta	100
	Mashrum kheti karo ane swarojgari melavo Rokadiya pak marchani kheti ane mulyvrudhi kari nanan melavo Rokadiya pak marchani kheti ane mulyvrudhi kari nanan melavo Marchani kheti ane mulyvrudhi Paushtik fal chiku-Part-1 Paushtik fal chiku-Part-2 Paushtik fal chiku-Part-2 Hal na samay ma aelovera ni khetima lakhoni kmani Hal na samay ma aelovera ni khetima lakhoni kmani - Achievements and Endeavours report of KVK	Mashrum kheti karo ane swarojgari melavoDr. Hemangi D. Mehta/ D. A. SaradavaRokadiya pak marchani kheti ane mulyvrudhi kari nanan melavoDr. Hemangi D. MehtaRokadiya pak marchani kheti ane mulyvrudhi kari nanan melavoDr. Hemangi D. MehtaRokadiya pak marchani kheti ane mulyvrudhi kari nanan melavoDr. Hemangi D. MehtaMarchani kheti ane mulyvrudhi Marchani kheti ane mulyvrudhiDr. Hemangi D. MehtaPaushtik fal chiku-Part-1Dr. Hemangi D. MehtaPaushtik fal chiku-Part-1Dr. Hemangi D. MehtaPaushtik fal chiku-Part-2Dr. Hemangi D. MehtaHal na samay ma aelovera ni khetima lakhoni kmaniDr. Hemangi D. MehtaAchievementsand CMORPIOF. L.L JivaniShri Dilip A. Saradava Smt. Hetal H. Padsumbiya

#### C. Details of Electronic Media Produced

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

# D. Details of Social Media Platforms Created / Used

S. No.	Type of social media platform	Title of social media	Number of Followers/ Subscribers
1	YouTube Channel	-	-
2	Facebook page/ Account	-	-
3	Mobile Apps	-	-
4	WhatsApp groups	20	1120
5	Twitter Account	@JauKvk	72
6	Any other (PI. 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).

#### (A) New Entrepreneur in Agriculture : Honey bee farming

- Name :- Kamleshbhai Patel
- Village :- Halvad, Tal, Halvad, Dist, Morbi :- 46 years
- Age
- :- 9998868777 Mobile No.
- Education :- B.Com
- Total land :- 3.2 ha.



Kamleshbhai belongs to village Akhivala of Morbi district, he is having farm in his village but the guality of soil & water is very poor. he was cultivating cotton crop under rainfed condition but the returns from the rainfed cotton crop was very less.

He attended a training program on honeybee farming at K.V.K.Morbi and got interested in it. Then he visited many honey producers at Baroda, Himmatnagar & Junagadh then he shifted to a town Halvad. And started honeybee farming. Initially he purchased 50 honeybee boxes & kept them near Ajwain & Funnel farm. He found that he was getting honey of different flavours. Observing good results next year he purchased 150 honeybee boxes and established extraction machine as well as a small filter plant at his home. He started packing with brand name "Navodaya honey" now he is getting good income from honeybee farming as compared to traditional farming.

Sr. No.	Particular of farming	Area	Production Kg	Gross Income	Net Income
1	Cotton (Before honey bee farming)	3.2 ha.	5600	258800/-	139500/-
2	Honey bee rearing	200 Box	2200	1320000/-	595000/-

Selling price of honey Rs. 600/Kg



Name







#### Crop diversification : Date palm farming (B)

- :- Nileshbhai Bapodaria
- Village :- Tikar, Ta. Halvad, Dist. Morbi
- :- 49 years Age
- :- 7069927220 Mobile No.
- Education :- 12
- :- 2.5 ha. Total land



Nileshbhai is an innovative farmer of village Tikar(Morbi). The soil & water quality of his farm (near small desert of kutch) is very poor. He was cultivating only cotton as per his farm condition. Due to continuous mono cropping the productivity of cotton & his net income decreased year by year. As per the suggestion by K.V.K. scientists he planted date palm in 2.5 ha in his farm in 2016. During first 3 years he earned low income by taking black gram , green gram & cumin as intercrop. Since 2020, date palm began to bear fruits yielding 40-50 kg/plant. Due to which returns are good. He also started packing of date palm and selling them with his own brand.

Looking his success, the other farmers of his village started date palm cultivation.

Sr. No.	Particular of farming	Area (ha)	Production Kg	Gross Income	Net Income
1	Cotton (Before)	3	3100	285000/-	141000/-
2	Date palm (Now)	3	17000	850000/-	482000/-

#### (C) Modern approach to vegetable farming farming

- Name . :- Shekh Sikandar M.
- :- Tithva, Ta. Wankaner, Dist. Morbi Village :- 42 years
- Age
- Mobile No. :- 9979597083
- :- 10 Education
- Total land :- 1.7 ha.



Sikandarbhai is a progressive farmer of village Tithava of Wankaner taluka. He was cultivating cotton and vegetable on his farm traditionally. He attended training programs on vegetable cultivation (olericulture) at KVK, Targhadia and Morbi. He decided to grow vegetables scientifically and changed his cropping pattern.

Sikandarbhai installed drip irrigation system at his farm for cultivation of chilly and cucurbits by adopting mulching. He also made mandap system for bitter gourd and telephone system for tomato vegetable crop along with drip irrigation. By adopting these scientific techniques in vegetables, he obtained higher yield and best quality of vegetables by which he earned double income last year as compared to traditional method of cultivation of vegetables. During last year nearly 200 farmers visited his farm and they got encouraged for vegetable farming.

Sr.	Particular of farming	Area (ha)	Production Kg	Gross Income	Net Income
No.					
1	Cotton (Bt.)	0.8	1650	73500	41000
2	Brinjal	0.4	6200	99200	67500
3	Cucumber	0.4	5100	86500	66000
					174500
	After				<u>.</u>
1	Bitter guard (Mandap system)	0.6	16200	212000	151500
2	Chilly (Mulching)	0.6	11900	182000	121500
3	Tomato (Telephonic + drip system)	0.5	12900	216000	122000
					395000



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

- IPM in Cotton-Use of Trap crop, Pheromone trap, MDP etc.
- Minimizing the chemical Fertilizer and Maximizing organic manure.
- Value addition in different agriculture crops like groundnut, sesame 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
---

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

- **A. Practicing Farmers**
- B. Rural Youth

C. In-service personnel

5.2. Indicate the methodology for identifying OFTs/FLDs

For OFT:

- i) Field level observations
- ii) Farmer group discussions

For FLD:

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

# 5.3. Field activities

i. Name of villages identified/adopted with block name (from which year) - 2021

Block	Villages
Morbi	Chakampar
	Jivapar
	Dharampur
	Thorala
	Andarana
Tankara	Otala
	Saraya
	Neknam
	Lakhdhirgadh
	Bhutkotda
Wankaner	Palas
	Panchdwarka
	Shekhradi
	Amarsar
	Pipaliya raj

- 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
Dy. Director of Agril. Extension (FTC)	Committee (SAC) of KVK and have linkage with different
Dy. Director of Horticulture	<ul> <li>activities of KVK viz., Training Programme, Khedut Sibir,</li> <li>Farmers day, Animal treatment Camp, Farmers fair, Film Show,</li> </ul>
Dy. Director of Animal Husbandry	Ex-training meeting and Soil health card etc.
District Agriculture officer	5 5
Jilla Udhyong Kendra	
NHRDF	
Doordarshan Kendra	
All India Radio	
District Rural Development Agency(DRDA)	
АТМА	
District Watershed Development Agency (DWDA)	
GGRC	
Reliance foundation	
GSFC, GNFC	
IFFCCO	
KRIBHCO	
ANANDI NGO	

# 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.)
-	-	-	-

# C. Details of linkage with ATMA

a) Is ATMA implemented in your district

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

Yes, we have prepared the SREP of Morbi district.

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	2	2	1	
02	Research projects				
03	Training programmes	5	6	2	
04	Demonstrations				
05	Extension Programmes				
	KisanMela				
	Technology Week	1		1	
	Exposure visit	1	3		
	Exhibition				
	Soil health camps	1	2	1	
	Animal Health				
	Campaigns				
	Others (Pl. specify)				
06	Publications				
	Video Films				
	Books				
	Extension Literature				
	Pamphlets				
	Others (Pl. specify)				
07	Other Activities (Pl.specify)				
	Watershed approach	1	1		
	Integrated Farm Development				
	Agri-preneurs development				

Yes

#### Coordination activities between KVK and ATMA

# D. Give details of programmes implemented under National Horticultural Mission

s	5. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Constraints if any	
			Nil				

# E. Nature of linkage with National Fisheries Development Board

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

# F. Details of linkage with RKVY

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

G. Deta	G. Details of linkage with PKVY (Paramparagat Krishi VikasYojana)					
S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks	

Nil					
L. Deteile of linkage with NECM					

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

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

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

## 7. Convergence with other agencies and departments: Nil

#### 8. Innovator Farmer's Meet

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

### 9. Farmers Field School (FFS)

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

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

- 1 To enhance the farmers to use recently developed certified varieties of different crops.
- 2 Proper use of fertilizers, Irrigation, insecticides and fungicide as per recommendation to reduce the production cost.

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

- 1. Reduction in white grub problem in groundnut due to adoption of technology
- 2. Reduction in pink boll worm in cotton due to adoption of technology
- 3. Cumin variety GC-4 is high yielding but gradually loosing wilt resistant character
- 4. Heavy infestation of *Thrips* in crops like onion, cotton
- 5. Research needed for control of insect-pests and diseases in organic farming

# 11. Technology Week celebration during2021:No, If Yes

Period of observing Technology Week: From 23<sup>rd</sup> to 28<sup>th</sup> August 2021

Online / Offline: Offline

Total number of farmers visited : 131

Total number of agencies involved : 4

Number of demonstrations visited by the farmers within KVK campus: 2

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies	-	-	-
Lectures organized	18	108	Groundnut/ Cotton/ Black gram
Exhibition	-	-	-
Film show	3	58	IPM technology and value addition
Fair	-	-	-
Farm Visit	6	115	Groundnut/ Black gram
Diagnostic Practicals	2	36	Groundnut and cotton
Supply of Literature (No.)	4	250	IPM, IDM, animal science
Supply of Seed (q)	-	-	-
Supply of Planting materials (No.)	2	30	IPM, IDM, animal science
Bio Product supply (Kg)	-	-	-
Bio Fertilizers (q)	-	-	-
Supply of fingerlings	-	-	-
Supply of Livestock specimen (No.)	-	-	-
Total number of farmers visited the			
technology week		131	

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

A. Introduction of alternate crops/varieties

State	Crops/cultivars	Area (ha)	Number of beneficiaries		
Gujarat	KVK not included in this progra	KVK not included in this programme			

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	Number
			of area	of
			(ha)	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	5	Gosthies	5	Field	days	Farmers	fair	Exhibition	1	Film	show
	No.	No.of	No.	No.of	No.	No.of	No.	No.of	No.	No.of	No.	No.of
		farmers		farmers		farmers		farmers		farmers		farmers
Total												

#### 13. IMPACT

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

Name of specific	No. of	% of adoption	Change in income	(Rs.)		
technology/skill transferred	participants		Before (Rs./Unit)	After (Rs./Unit)		
Only three year completed of KVK so, OFT, FLD and training conducted with limited staf						

B. Cases of large scale adoption

### <u> OFT – 1</u>

OFT on white grub management was conducted for last three years in which Chlorpyriphos 25 E.C. 20 ml/kg seed treatment (GAU recommendation) second treatment of Metarhizium 5 kg + 300 kg castor cake at the time of sowing (JAU recommendation)

- (1) Most of the farmers are adopting seedtreatment for white grub management. in Morbi district white grub problem is observed in Tankara taluka, farmers following university recommendation and other new technical(insecticides) developed recently.
- (2) Metarhizium is best for white grub as well as soil pests damaging groundnut but it is not available in market. most of farmers trust in university bio-product(now not available).

Taluka wise adoption :

Sr No.	Name of Taluka	Sowing without seed treatment T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>
1.	Tankara	40%	59.8%	0.2%
2.	Wankaner	62%	38%	NIL
3.	Halvad	32%	67.9%	0.1%
4.	Morbi	78%	22%	NIL
5.	Maliya	100%	NIL	NIL

(3) Infestation of white grub in Morbi and Maliya taluka is not beyond ETL or severe so farmers of these taluka are not using seed treatment for control of white grub.

#### <u> OFT – 2</u>

#### Wilt management in cumin

> For the management of wilt disease OFT conducted on farm and farmer's field for three years in which Trichoderma was major component with organic manure. Most of farmers sowing cumin without application of Trichoderma where as in  $T_2$  Trichoderma application with organic manure at the time of sowing and in  $T_3$  two applications of Trichoderma at the time of sowing and after one month of germination. The adoption rate of this technology was as under.

#### Study of hundred farmers during field visit and training

Sr No.	Taluka	T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>
1.	Tankara	84%	2%	14% *
2.	Wankaner	92.5%	1.5%	6% *
3.	Halvad	85%	3%	12% *
4.	Morbi	86.5%	2.5%	11% *
5.	Maliya	94%	1%	5% *

\* only one application after germination.

We have conducted on campus and off campus training and also field day creating awareness among farmers community. Even after obtaining good result of Trichoderma application most of farmers not adopting this technology due to shortage of labour, shortage of organic manure and unavailability of university Trichoderma. Farmers do not trust in other company Trichoderma even after showing good result.

#### <u>FLD</u>

#### Varietal FLD

#### <u>GJG-22</u>

Covered 30 % area of semi spreading groundnut area within 3 years.

#### <u>GJG-32</u>

#### Within 2 years sowing in 1800 to 2000 Ha in Tankara taluka where adequate irrigation facility is available. FLD on wilt management through Trichoderma

Most of farmers are aware that treatment of Trichoderma at the time suppress the wilt disease in cumin but only 5 to 12% farmers are using Trichoderma due to unavailability of Trichoderma(University).

#### Chick pea GJG-3 and GG-5

More than 90 % farmers of unirrigated area are adopting GJG-3 chick pea variety whereas in irrigated area 60 % farmers select GJG-3 whereas 40 % farmers select GG-5 variety.

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

13. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent	
May 2021	2	1100	-	
Aug 2021	1	500	-	
Sept 2021	2	1100	-	
Oct 2021	1	450	-	

			Type of Messages							
Name of KVK	Message Type	Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	Total		
	Text only	3		3				6		
	Voice only									
	Voice & Text both							I		
	Total Messages	6						6		
	Total farmers Benefitted	3150						3150		

# 14. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

SI.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amoun	Remark	
No.				Variety	Produce	Qty.	Cost of inputs	Gross income	S
1	Roof Rain water harvesting system	2019-20	1.40 lac ltr.	-	-	-	4.6 lacs	-	-

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

Name	Date of	Date of	a )	Detai	Is of production	on	Amour	nt (Rs.)	
of the crop	sowing	harvest	Area (ha)	Variety	Type of Produce	Qty.	Cost of inputs	Gross income	Remarks
Cereals									
Pear millet			0.01	J2597		0.30	-	2760	
Pulses									
Black Gram			1.3	GU - 2	Labeled	2.12		42400	
Chickpea			0.4	GG - 5	Labeled	6.25		40000	
Oilseeds									
Sesame			1.3	GJT-5	Breeder	2.12		42400	
Sesame			1.3	GJT-5	Labeled	6.25		40000	
Fibers									
Spices & Plant	ation crops	•							•
Cumin			1.8	GC - 4	Labeled	5.84		129006	
Ajwain			0.6	GA - 2	Labeled	1.53		28518	
Floriculture									
Fruits									
Vegetables									
Onion		-	0.3	GJWO-3	Breeder	0.55		55000	
Others (specify)	)								

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

SI.	Bio Products	Name of the		Amou	nt (Rs.)	
No.		Product	Qty (kg)	Cost of inputs	Gross income	Remarks
	Bio- Fertilizers					
	Bio- Fungicides					
	Bio- pesticides					
	Bio-Agents					

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

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

#### E. Utilization of hostel facilities

Accommodation available (No. of beds): 15

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
January to December 2021	-	-	-

#### F. Database management

S. No	Database target	Database created
1	36 farmers per village of 6 villages from Morbi district	36 farmers from 6 villages

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

Amount	Expenditur	Details of		Activities	conducted			Quantity	Area
sanctio n (Rs.)	e (Rs.)	infrastructur e created / micro irrigation system etc.	No. of Training programme s	No. of Demonstratio n s	No. of plant material s produce d	Visit by farmer s (No.)	Visit by official s (No.)	of water harveste d in '000 litres	irrigated / utilizatio n pattern

#### H. Performance of Nutritional Garden at KVK farm : Yes

#### If Nutritional Garden developed at KVK farm/Village Level? Yes

lf yes,

# Nutritional Garden developed at KVK farm

Area under nutritional	Component of Nutritional	No. of species / plants in	No. of farmers visited
garden (ha)	Garden	nutritional garden	
0.5	Vegetable crops	11	436
	Fruit crops	2	
	Others if any	-	

#### Nutritional Garden developed at Village Level

No. of Villages covered	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers covered
10	Vegetable crops	10	10
	Fruit crops	5	
	Others if any		

# H. Details of Skill Development Trainings organized : Nil

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

# 15.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	Morbi	60071	Revolving Fund A/C,KVK,JAU, Morbi	36713882996	363002022	SBIN0060071
With KVK	SBI	Morbi	60071	Senior Scientist & Head , KVK,JAU, Morbi	36713882907	363002022	SBIN0060071

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

No.	Particulars	Sanctioned	Released	Expenditure
A. Re	curring Contingencies			
1	Pay & Allowances	74.00	61.78	58.07
2	Traveling allowances	1.00	0.45	0.22
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	9.0	6.40	7.50
В	POL, repair of vehicles, tractor and equipments			
С	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	7.0	4.50	5.40
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
Е	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			
Н	Maintenance of buildings			
Ι	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
	L (A+B+C+D+E+F+G+H+I+J)	16.0	10.90	12.90
	L Recrring	91.0	73.13	71.19
	n-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)	-	-	-
TOTA			-	-
GRAN	ID TOTAL (A+B)	91.0	73.13	71.19

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

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April of each year
April 2019 to March 2020	4,50,501/-	11,95,154/-	9,10,619/-	7,35,036/-
April 2020 to March 2021	7,35,036/-	5,32,993/-	6,58,431/-	6,09,598/-
April 2021 to December 2021	6,09,598/-	1,58,832/-	41,028/-	7,27,402/-

# 16. Details of HRD activities attended by KVK staff during year

Name of the staff	Designation	Title of the training programme	Institute where attended	Mode (Online/Offline)	Dates	
-------------------	-------------	---------------------------------	--------------------------	--------------------------	-------	--

Mr D. A. Saradava	Scientist (Plant protection)	State Level Annual Action Plan Workshop of KVKs of Gujarat	Online	Online	18/02/2021
Mr D. A. Saradava	Scientist (Plant protection)	Participatory Programme Planning, Monitoring and Evaluation	EEI,Anand (Online)	Online	9-10/03/21
Dr Hemangi Dipakkumar Mehta	Scientist (Home Science)	Participatory Programme Planning, Monitoring and Evaluation	EEI,Anand (Online)	Online	9-10/03/21
Dr L L Jivani	Senior Scientist and Head	Annual Zonal Workshop of KVKs	Online	Online	4-6/08/2021
Dr L L Jivani	Senior Scientist and Head	"Use of Mass Media for transfer of Technology"	EEI,Anand (Online)	Online	1-3/09/2021
Mr D. A. Saradava	Scientist (Plant protection	"Use of Mass Media for transfer of Technology"	EEI,Anand (Online)	Online	1-3/09/2021
Smt. H. H. Padsumbiya	Scientist (Home Science)	"Use of Mass Media for transfer of Technology"	EEI,Anand (Online)	Online	1-3/09/2021
Dr L L Jivani	Senior Scientist and Head	Training on Natural Farming	Adalaj Road, Adalaj, Gujarat, India	Offline	26/11 to 1/12/2021
Smt. H. H. Padsumbiya	Scientist (Home Science)	Presentation Skills for professional excellence	DEE, Junagadh	Offline	1-3/12/2021

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

Name of the village	Total No. of families	Key interventions	No. of farmers covered in each	Change in income (Rs/unit)	
	surveyed	implemented	intervention	Before	After
Jepur, Haripar, Halvad, Tikar, Ranmalpur, Bagthala etc.	110	-	-	-	-

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

S. No.	Name of the programme	No. of villages adopted	Key activities performed	No. of activities carried out	No. of families covered
1	OFT, Training	8	-	39	211

# 19. Details of Progress of ARYA Project : Nil

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

# 20. Details of SAP

S. No.	Types of major Activity conducted- SwachhtaPakhwada, Cleaning, Awareness Workshop, Miccobial based Agricultural Waste Management by Vermicomposting etc.	No. of Programmes conducted	No. of Participants
1	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, Vermi composting and other activities on generate of wealth for waste.	12	506

# 21. 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	47	1465	437	1902
Rural youths	-	-	-	-
Extension functionaries	3	74	10	84
Sponsored Training	6	218	69	287
Vocational Training	1		30	30
Total	57	1757	546	2303

# 2. Frontline demonstrations

Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	20	8.0	-
Pulses	20	8.0	-
Cereals	10	4.0	-
Vegetables	10		10
Other crops	20	8.0	-
Hybrid crops			-
Total	80	28.0	10
Livestock & Fisheries	-	-	-
Other enterprises	-	-	-
Total	-	-	-
Grand Total	80	28.0	10

# 3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	2	8	8
Livestock			
Various enterprises	1	5	5
Total	3		13
Technology Refined			
Crops	1	3	3
Livestock			
Various enterprises			
Total	1		3
Grand Total	4		16

# 4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	116	4224
Other extension activities	42	42
Total	155	4266

# 5. Mobile Advisory Services

		Type of Messages						
Name of KVK	Message Type	Crop	Livestoc k	Weather	Marke- ting	Aware -ness	Other enterpris e	Total
	Text only	3		3				6
	Voice only							
	Voice & Text both							
	Total Messages	3		3				6

Total farmers Benefitted	3150				3150
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# 6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	19.83	368353/-
Planting material (No.)	50	-
Bio-Products (kg)	-	-
Livestock Production (No.)	-	-
Fishery production (No.)	-	-

# 7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	60	3000
Water	30	1500
Plant		
Total	90	4500

# 8. HRD and Publications

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