

## ICAR-ATARI, Pune

### DETAILS OF ANNUAL PROGRESS REPORT OF KVKs DURING 2021 (January 2021 to December 2021)

#### 1. GENERAL INFORMATION ABOUT THE KVK

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

Address with PIN code	Telephone		E mail	Website & No. of visitors (hits)
	Office	FAX		
Krishi Vigyan Kendra, AMBHETI Ta. Kaparada Di. Valsad Via. Vapi Gujarat Pin. 396 191	Office	FAX	<a href="mailto:kvkvalsad@gmail.com">kvkvalsad@gmail.com</a>	<a href="http://www.kvkvalsad.org">www.kvkvalsad.org</a> 1117397
	--	--		

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

Address	Telephone		E mail	Website address
	Office	FAX		
Gujarat Vidyapith Ashram road AHMEDABAD Pin. 380 014	(1) 079 2754 5044 (2) 079 2754 1148	079 2754 25 47	<a href="mailto:registrar@gujaratvidyapith.org">registrar@gujaratvidyapith.org</a>	<a href="http://www.gujaratvidyapith.org">www.gujaratvidyapith.org</a>

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. R.F.Thakor	--	94271 29451	<a href="mailto:rthakor1965@yahoo.co.in">rthakor1965@yahoo.co.in</a>

##### 1.4. Year of sanction: Sanction letter F. No. 5 (108) / 90 - KVK 28<sup>th</sup> March 1991

Year of Establishment : 21th Sept., 1992

1.5. Staff Position (as on 31<sup>st</sup> December, 2021)

Sl. No.	Sanctioned post	Name of the incumbent	Mobile No.	Discipline	If Permanent, Please indicate		Date of joining	If Temporary, pl. indicate the consolidated amount paid (Rs./month)
					Current Pay Band	Current Grade Pay		
1.	Senior Scientist and Head	Dr. R.F.Thakor	9427129451	Ext . Edu.	37400-67000	10000	19/05/01	
2.	Subject Matter Specialist	Sh. K.A.Patel	9426889148	Pl. Prot.	15600-39100	7600	28/02/94	
3.	Subject Matter Specialist	Sh. A.R.Patel	9428381449	Ext . Edu.	15600-39100	7600	23/01/96	
4.	Subject Matter Specialist	Sh. L.T.Kapur	8980619497	Soil Science	15600-39100	7600	16/12/06	
5.	Subject Matter Specialist	Sh. M.M.Gajjar	9909761181	Agronomy	15600-39100	6600	17/09/13	
6.	Subject Matter Specialist	--		Horti.	--		--	
7.	Subject Matter Specialist	Smt. P.R.Ahir	9429450875	Home Sci.	9300-34800	5400	01/05/01	
8.	Programme Assistant	Sh. B.M.Patel	9427141759	Ani .Sci.	9300-34800	5400	02/12/02	
9.	Computer Programmer	Sh. P.J.Joshi	9426816616	Agri. Engg.	9300-34800	4600	23/12/02	
10.	Farm Manager	Sh. P.R.Patel	9687636758	Farm manager	9300-34800	5400	01/05/01	
11.	Acc./Superintendent	Sh. C.D.Patel	9727928272	O.S	9300-34800	4200	27/09/13	
12.	Stenographer	Sh.V.B.Patel	9429118438	Accountant	5200-20200	2800	01/11/99	
13.	Driver 1	Sh. R.D.Rohit	9726925033	Driver	5200-20200	2800	16/06/08	
14.	Driver 2	Sh. H.G.Valand	7990870661	Driver	5200-20200	2400	01/08/09	
15.	Supporting staff 1	Sh. A.R.Patel	9537558272	Attendant	5200-20200	1900	01/11/99	
16.	Supporting staff 2	--		Farm Attendant	5200-20200	--	--	

## 1.6. Total land with KVK (in ha) : 20 ha

S. No.	Item	Area (ha)
1	Under Buildings	2.0 ha.
2.	Under Demonstration Units	1.0 ha
3.	Under Crops	8.0 ha
4.	Horticulture	6.0 ha
5.	Pond	--
6.	Others if any	3.0 ha.

### 1.7. Infrastructural Development:

#### A) Buildings

Sr. No.	Name of building	Source of Funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting year	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR /GVP	1998	720 Sq.mt	2874422	--	--	--
2.	Farmers Hostel	ICAR		138 Sq.mt		--	--	--
3.	Staff Quarter	ICAR	1999	154 Sq.mt	1585055	--	--	--
4.	Demonstration Units -- Dairy Demo. Unit	ICAR , TSP ,Valsad	2006	100 Sq.mt	204312	--	--	--
5	Fencing	--		--		--	--	--
6	Bore well	ICAR	2012	300 ft	497095	--	--	--
7	Threshing floor	ICAR	2006	100 Sq.mt	123818	--	--	--
8	Farm godown	ICAR	2010	100 Sq.mt	373168	--	--	--
9	Implement shed	ICAR	2011	140 Sq.mt	300000	--	--	--
10	Soil-water testing lab.	ICAR	2007	--	612387	--	--	--
11	Plant Health Clinic	ICAR	2012	--	999953	--	--	--

#### B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tractor	2019	6,50,000	325 hrs.	Working condition.
Tractor Trolley	2019	1,50,000	--	Working condition.
Jeep (Bolero)	2010	477058	259924	Working condition.
Power tiller	2010	1,55,500	--	Working condition.
Motor Cycle	2011	49995	22655	Working condition.

**C) Equipments & AV aids**

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Computer -2	2007 & 2010	1,02,270 +50,000	Working condition.
L C D	2007	75,400	Working condition.
Lap Top -2	2007 & 2012	51,750	Not working. Needs replacement/ Later in Working condition.
P A S system	2009	28057	Working condition.
Handicam	2009	12990	Working condition.
Generator set	2009	37972	Working condition.
LED -Sony TV	2015	52000	Working condition.

**1.8. Details SAC meeting conducted in the year.** –No SAC meeting conducted during the year under report.

**2. DETAILS OF DISTRICT**

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

Sr. No.	Farming systems / enterprises
1	Agriculture farming systems
2	Agri - Horti farming systems
3	Agri – Horti -Dairy farming systems
4	Agri - Silviculture farming systems

**2.2 Description of Agro-Climatic zone and major agro ecological situations (based on the soil and topography)**

**a) Soil type**

Sr. No.	Agro-Climatic zone	Characteristics
1	South Gujarat Heavy Rainfall Zone -I	Annual Average rainfall 2000-2200 mm
		Black to medium black soil.
		Sticky and Heavy soil.
		Stip slopes cause heavy runoff of rain water resulting into soil erosion.

**b) Topography**

Sr. No.	Agro-ecological situation	Characteristics
---------	---------------------------	-----------------

1	Agro-ecological situation – I & II	- Costal belt - Western part
		- Medium black to black soil
		- Hilly ,Shallow ,Undulating land – Eastern part

### 2.3 Soil types

Sr. No.	Soil type	Characteristics	Area in ha.
1	Shallow soil	- Poor fertility & water holding capacity.	--
2	Medium black to black soil	- Sticky and Heavy in nature.	--
3	Hilly ,Shallow ,Undulating land	- Non fertile and mostly non agril land	--
			<b>2,94,412 ha.</b>

### 2.4. Area, Production and Productivity of major crops cultivated in the area of jurisdiction of KVK (2021)

Sr. No.	Crops	Area ( ,000 ha.)	Production (,000 tones.)	Productivity ( Kgs / ha.)
1	<b>Food grains</b>			
	Paddy (irrigated)	21.184	69.9072	3300
	Paddy (Unirrigated)	51.572	133.055	2580
	<b>Total Paddy</b>	<b>72.756</b>	<b>202.962</b>	<b>2789</b>
	Ragi (Finger millet)	4.304	4.304	1000
	Jowar	0.059	0.068	1156
	Pigeon Pea	7.800	5.300	687
	Urid	6.400	4.100	641
	Mung	0.400	0.213	532
	Val	2.808	2.017	718
	Gram	2.000	1.960	978
	Groundnut	0.300	0.114	375
	Niger	3.588	1.5966	440
	Sugarcane	7.280	540.72	74275
	<b>Total Field crops</b>	<b>108.054</b>	<b>228.49</b>	
2	<b>Fruit crops</b>			
	Mango	26.250	157.50	6000
	Chiku	3.345	32.513	9720
	Banana	0.770	43.274	56200
	Papaya	0.145	6.254	43130

	Cashewnut	5.590	18.11	3240
	Coconut	2.930	29.30	10000
	Total	<b>39030</b>	<b>286.94</b>	
3	<b>Vegetables</b>			
	Brinjal	1.625	26.00	16000
	Okra	1.620	16.20	10000
	Tomato	1.405	29.50	21000
	Cucurbits	2.831	62.28	22000
	Chilly	0.1	1.14	11400
	Total	<b>7.575</b>	<b>135.12</b>	

Source: District agriculture department.

## 2.5. Weather data (2021)

Month	Rainfall (mm)	Rainy days	Temperature C		Relative Humidity (%)	
			Maximum	Minimum	Maximum	Minimum
January	--	--	30.4	10.0	81.5	47.9
February	--	--	33.9	12.2	77	34
March	--	--	37.4	15.1	83	45.3
April	--	--	39	20.7	95.6	25.9
May	142	--	36.6	24.2	97.4	44.6
June	364.43	17	33.8	25.1	99.2	64.9
July	883.33	23	32.5	25.7	99.9	71.6
August	681.55	22	31.7	24.7	100	75.13
September	390.39	25	30.8	24.72	100	81.1
October	39.326	6	35.09	21.4	100	50.6
November	7	--	35.02	19.3	99.9	42.1
December	76.5	-	15.4	31.05	100	47.6
Total	2584.53	93	--			

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

Category	Population	Production	Productivity
Cattle	247601	69.93	--
Crossbred	38869	26.31	6.137
Indigenous	208732	43.62	1.884
Buffalo	96487	35.45	3.014
Sheep	3433	--	--
Goats	105094	--	--
Poultry	773599	--	--

Source :District Panchayat,Valsad

## 2.7 Details of Operational area / Villages

Name of Taluka	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Kaparada	Kakadkopar, Ambheti, Arnai, Amdha, Khutali, Dhodhadkuva, Ozar, Panas, Ozarada ,Karjun, nandgam, Niloshi	Paddy ,Fingermillet, Pulses, Mango, Cashewnut Vegetables , Micro irrigation & Dairy.	Low productivity in all crops. Non availability of improved seeds. Shortage of labour. Heavy infestation of weeds. Water scarcity. Poor milk production	ICM ,INM, IPM, IWM Feed & fodder mgt. Integrated livestock mgt.
Dharampur	Sadadvera, Nanivahiyal, Samarsingi, Panva, Hanmatmal, Mamabhacha	Paddy , Mango, Pulses, Cashewnut Vegetables & Dairy .	Low productivity in all crops. Non availability of improved seeds.Heavy infestation of weeds. Water scarcityPoor milk production	ICM ,INM, IPM, IWM Feed & fodder mgt. Integrated livestock mgt.
Pardi-Vapi	Asma, Chival, Ambach, Pati, SamarpadaKherlav, Lakhmapore, Nevri, Panchlai	Paddy ,Sugarcane, Pulses, Vegetables , Mango &Dairy.	Low productivity in all crops. Non availability of improved seeds.Shortage of labour. Heavy infestation of weeds. Poor milk production	ICM ,INM, IPM, IWM Feed & fodder mgt. Integrated livestock mgt.
Umargam	Saronda, BorigamMaroli	Paddy ,Mango, Sugarcane& Vegetable.	Low productivity in all crops. Non availability of improved seeds.Shortage of labour. Water scarcity Soil salinity	ICM ,INM, IPM, IWM
Valsad	Ozar, Juzva, Ronvel	Paddy ,Mango, Sugarcane, Pulses & Vegetable.	Low productivity in all crops. Non availability of improved seeds. Heavy infestation of weeds. Shortage of labour.Soil salinity, Poor milk production	ICM ,INM, IPM, IWM Feed & fodder mgt. Integrated livestock mgt.

## 2.8 Priority thrust areas

Crop/Enterprise	Thrust area
Paddy	Varietal evaluation ,ICM, IWM, INM, IPM
Fingermillet	Varietal evaluation ,ICM, IWM, INM, IPM
Sweetpotato	Varietal evaluation ,ICM, IWM, INM, IPM
Greengram, Chickpea, Indianbean, Pigeonpea	Varietal evaluation ,ICM, IWM, INM, IPM
Cucurbits	Varietal evaluation, Integrated Pest & Disease Management, INM.
Sugarcane	Varietal evaluation ,ICM, IWM, INM, IPM
Brinjal, Chilli	Varietal evaluation ,ICM, IWM, INM, IPM
Fodder crops	Varietal evaluation ICM, IWM, INM, IPM
Livestock	Feed & fodder mgt., Integrated livestock mgt.
Income generation	Vocational training

## 3. TECHNICAL ACHIEVEMENTS

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

OFT				FLD			
1				2			
Number of OFTs		Number of Farmers		Number of FLDs		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
06	06	90	100	122.75 ha	108.11	730	838

Training					Extension Programmes				
3					4				
Number of Courses			No. of Participants		Name of activities	Number of activities		No. of participants	
Clientele	Targets	Achievement	Targets	Achievement		Target	Achievement	Target	Achievement
Farmers	60	97	1520	2779	Field day	08	07	400	331
Rural youth	02	03	50	70	Kisangosthi	15	24	750	880
Extension Functionaries	04	04	100	107	Exhibition	012	00	1200	00
Farmers (Sponsored )	06	00	150	00	Farmers Seminar	08	12	480	2017

ASCI	01	01	20	20	Farmers exposure	05	04	200	101
Total	73	105	1840	2976	Field Visits	30	19	150	174

Seed Production (Qt.)			Planting material (Nos.)		
Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers
Paddy – 80.00	63 qt.	825	Sugarcane - 700.00 qt.	162.25qt	14
Pigeonpea-1.00	0.76	36	Veg. seedlings - 1,10,000 nos	29300 no.	155
			Fodder Toussecks - 50,000 nos.	65200 nos.	403

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
Target	Achievement	Target	Achievement
--	--	Fruitfly trap ( Mango) - 1000 no	799 no.
		Vermicompost - 20000kg	26430 kg.

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

S.No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (Ha / No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Proposed Intervention (OFT, FLD, Training, extension activity etc.)*
1	Paddy	Non availability of improved seeds. Infestation of stem borer & cutworm	--	Amdha, Dhodhadkuva, Pati , Panchalai, Asma, Pindval	FLD, OFT, Training
2	Gram	Non availability of improved seeds. Heavy infestation of weeds	--	Pati, Dhodhadkuva, Panchalai, Sadadvera, Khuntli, Amdha	FLD, Training
3	Pigeon pea	Non availability of improved seeds. Heavy infestation of weeds	--	Sadadvera , Khuntli, Amdha,	FLD, OFT, Training
4	Mango	Heavy infestation of fruit fly	--	Ambach, Kherlav, lakhmapore	FLD, Training
5	Sugarcane	Non availability of improved seeds. Shortage of labour	--	Kharedi, Motivahiyal	FLD, Training
6	Livestock production	Low milk yield Mastitis disease Shortage of green fodder	--	Sukhala, Khuntli, Amdha , Chival, Panas, Pati	FLD, OFT, Training,
7	Finger millet	Non availability of improved seeds. INM	--	Kolvera, Niloshi, Rajpuri, SARvartati	FLD, OFT, Training

8	Brinjal, Chilli, Cucurbits	Non availability of improved seeds. Heavy infestation pest & diseases	--	Varoli, Kaparada, Ozarada	FLD, OFT, Training
---	----------------------------	--	----	---------------------------	--------------------

### 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
Varietal Evaluation	01	--		--	--	--	--	--	--	01
Integrated Nutrient Management	03			--	--	--	--	--	--	03
Integrated Pest Management	--	--		--	01	--	--	--	--	01
<b>TOTAL</b>	<b>04</b>	--		--	01	--	--	--	--	<b>05</b>

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

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Nutrition Management	01	--	-	-	-	01
<b>TOTAL</b>	<b>01</b>	-	--	-	-	<b>01</b>

### B. Achievements on technologies Assessed

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

Ss. no	Thematic areas	Crop	Name of the technology assessed	No. of trials	No. of farmer	Area in ha
1	Integrated Nutrient Management	Paddy	Assessment of growth promoter thiourea on yield of summer paddy	20	20	3.00
2		Fingermillet	Assessment of zinc application in Fingermillet crop	20	20	4.00
3		Paddy	Assessment of efficiency Nauroji LBF and AAU developed Liquid manure	20	20	3.00
4	Varietal Evaluation	Paddy	Assessment of paddy variety for Kharif cultivation	10	10	3.00
5	Integrated Pest Management	Brinjal	Assessment of diff. pesticides for mgt. of red mite in Brinjal	10	10	1.50
	<b>Total</b>			<b>80</b>	<b>80</b>	<b>14.50</b>

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

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
----------------	----------------------------------	---------------------------------	---------------	----------------

Nutrition Management	01	Assessment of Cost effective feed for crossbred calf	20	20
<b>Total</b>			<b>20</b>	<b>20</b>

## C1.Results of Technologies Assessed

### Results of On Farm Trial - 01

#### A. Technology Assessment - Assessment of growth promoter thiourea on yield of summer paddy

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
1	2	3	4	5	6	7	8	9	10
Paddy	Irrigated	Low yield of summer paddy	Assessment of growth promoter thiourea on yield of summer paddy.	20	T <sub>1</sub> -Farmer practice (No use of thiourea) (177:86:00 kg NPK/ha)  T <sub>2</sub> -Recommended Dose of Fertiliser ( 100:30:00 kg NPK/ha)  T <sub>3</sub> - RDF + Seed treatment and foliar application of Thiourea @ 1000 ppm (1gm/1 lit)	1. Productive tillers/hill 2. Grain yield (kg/ha) 3. Straw yield (kg/ha)  1. Productive tillers/hill 2. Grain yield (kg/ha) 3. Straw yield (kg/ha)  1. Productive tillers/hill 2. Grain yield (kg/ha) 3. Straw yield (kg/ha)	9.1 3240 3564  9.7 3520 3450  10.5 3642 3740	KVK-Valsad conducted on farm testing to assess growth promoter thiourea on yield of summer paddy. The result of trials revealed that Seed treatment and foliar application of Thiourea @ 1000 ppm gave higher yield compare to farmer practice. B:C ratio also found higher( 1.90 - T <sub>3</sub> ) as compare to local check (1.66 - T <sub>1</sub> ).	- Thiourea increases tillering - Thiourea improves stress capacity of plant - Thiourea increases yield

Technology Assessed	Source of Technology	Production (kg/ha)	Please give the unit (kg/ha, t/ha, lit/animal,)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14	15	16
T1 - Farmer's practices (177:86:00 kg NPK/ha)	Private co.	Grain Yield– 3240 Straw Yield - 3564	Kg/ha	23469	1.66
T2 - NAU Rec. 100:30:00 kg NPK/ha	N.A.U., Navsari	Grain Yield– 3520 Straw Yield – 3450	Kg/ha	29410	1.87
T <sub>3</sub> - RDF + Seed treatment and foliar application of Thiourea @ 1000 ppm (1gm/1 lit)	N.A.U., Navsari	Grain Yield– 3642 Straw Yield - 3740	Kg/ha	31143	1.90

## C2. Details of On Farm Trial for assessment –

1	Title of Technology Assessed	:	Assessment of growth promoter thiourea on yield of summer paddy..									
2	Problem Definition	:	Low yield of summer paddy									
3	Details of technologies selected for assessment	:	T <sub>1</sub> -Farmer practice (No use of thiourea) (177:86:00 kg NPK/ha) T <sub>2</sub> -Recommended Dose of Fertiliser ( 100:30:00 kg NPK/ha) T <sub>3</sub> - RDF + Seed treatment and foliar application of Thiourea @ 1000 ppm (1gm/1 lit) .									
4	Source of technology	:	NAU, Navsari.									
5	Production system	:	Rain fed cereal based system ( paddy based cropping system)									
6	Thematic area	:	Integrated Nutrient management									
7	Performance of the Technology with performance indicators	:	<b>Treatments</b>	<b>No. of Tillers/hill</b>	<b>Seed yield (kg/ha)</b>	<b>Straw yield (kg/ha)</b>	<b>Gross Income (Rs./ha)</b>	<b>Cost of cultivation (Rs./ha)</b>	<b>Net Return(Rs./ha)</b>	<b>Increase in net profit(%)</b>	<b>Increase in seed yield (%)</b>	<b>BCR</b>
			<b>T<sub>1</sub></b>	<b>9.1</b>	<b>3240</b>	<b>3564</b>	<b>59292</b>	<b>35823</b>	<b>23469</b>	<b>0.0</b>	<b>0.00</b>	<b>1.66</b>
			<b>T<sub>2</sub></b>	<b>9.7</b>	<b>3520</b>	<b>3450</b>	<b>63149</b>	<b>33739</b>	<b>29410</b>	<b>25.3</b>	<b>8.64</b>	<b>1.87</b>
			<b>T<sub>3</sub></b>	<b>10.5</b>	<b>3642</b>	<b>3740</b>	<b>65850</b>	<b>34707</b>	<b>31143</b>	<b>32.7</b>	<b>12.41</b>	<b>1.90</b>
8	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	- Thiourea increases tillering - Thiourea improves stress capacity of plant Thiourea increases yield									
9	Final recommendation for micro level situation	:	Under trial									
10	Constraints identified and feedback for research	:	- Lack of awareness									
11	Process of farmers participation and their reaction	:	Farmers were involved and actively participated at every level i.e. Group discussion, planning, execution, monitoring, evaluation of the trial. Farmers evaluated that application of Thiourea in summer paddy increasestillering and stress capacity of plant with more yield.									

## Results of On Farm Trial – 02

### A. Technology Assessment- Assessment of zinc application in fingermillet crop

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology assessed	Parameters of assessed	Data on the parameter			Results of assessed	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8			9	10	11	12
Fingermillet	Rainfed	Low yield of fingermillet crop	Assessment of zinc application in fingermillet crop	20	T <sub>1</sub> - Farmer Practice (46 kg N per ha+ No application of Micronutrient)  T <sub>2</sub> : RDF 40:20:00 kg NPK per ha. + 25 kg ZnSO <sub>4</sub> as Basal dose  T <sub>3</sub> : RDF + Seed treatment with ZnO <sub>2</sub> @ 10ml/kg seed + Seedling treatment @ 0.5 % ZnSO <sub>4</sub>	Yield(kg/ha)  Gross Income (Rs./ha)  Gross cost (Rs./ha)  Net profit (Rs./ha)  BCR	T <sub>1</sub> 875  30250  17550  12700  1.72	T <sub>2</sub> 1050  35500  19870  15630  1.79	T <sub>3</sub> 1108  37240  20120  17120  1.85	T <sub>3</sub> increased 26.63% grain yield and 34.80% net profit compare to farmer practice. with highest BCR (1.85)	- Method of application of zinc with seed and seedling treatment improved growth and yield  - Less infestation of pest and disease	--	--

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
T <sub>1</sub> - Farmer Practice (46 kg N per ha+ No application of Micronutrient)	--	Seed yield- 875 Straw yield-962	kg/ha	12700	1.72
T <sub>2</sub> : RDF 40:20:00 kg NPK per ha. + 25 kg ZnSO <sub>4</sub> as Basal dose	N.A.U., Navsari	Seed yield-1050 Straw yield- 1155	kg/ha	15630	1.79
T <sub>3</sub> : RDF + Seed treatment with ZnO <sub>2</sub> @ 10ml/kg seed + Seedling treatment @ 0.5 % ZnSO <sub>4</sub>	N.A.U., Navsari	Seed yield- 1108 Straw yield- 1218	kg/ha	17120	1.85

## C2. Details of On Farm Trial for assessment –

1	Title	:	Assessment of zinc application in fingermillet crop																		
2	Problem diagnose/defined	:	Low yield of fingermillet crop																		
3	Details of technologies selected for assessment	:	<b>T<sub>1</sub></b> : Farmer Practice(46 kg N per ha+ No application of Micronutrient) <b>T<sub>2</sub></b> : RDF 40:20:00 kg NPK per ha. + 25 kg ZnSO <sub>4</sub> as Basal dose <b>T<sub>3</sub></b> : RDF + Seed treatment with ZnO <sub>2</sub> @ 10ml/kg seed + Seedling treatment @ 0.5 % ZnSO <sub>4</sub>																		
4	Source of technology	:	NAU, Navsari / Progressive farmer																		
5	Production system	:	Rainfed cereal based system ( Cereal-pulse-Cereal)																		
6	Thematic area	:	Nutrient Management																		
7	Performance of the Technology with performance indicators	:																			
			<b>Treat ment</b>	<b>Plant height at harvest (cm)</b>	<b>No. of Tillers / plant</b>	<b>Grain yield (kg/ha)</b>	<b>Straw yield (kg/ha)</b>	<b>Gross Income (Rs./ha)</b>	<b>Total cost of Cultivation (Rs./ha)</b>	<b>Net profit (Rs./ha)</b>	<b>Increase in net profit (%)</b>	<b>Increase in grain yield (%)</b>	<b>BCR</b>								
			<b>T<sub>1</sub></b>	97.8	2.3	875	962	30250	17550	12700	-	-	1.72								
			<b>T<sub>2</sub></b>	107.6	2.7	1050	1155	35500	19870	15630	23.07	20.00	1.79								
			<b>T<sub>3</sub></b>	109.4	2.9	1108	1218	37240	20120	17120	34.80	26.63	1.85								
8	Final recommendation for micro level situation	:	Need to continue for next year																		
9	Constraints identified and feedback for research	:	Trial is going on																		
10	Process of farmers participation and their reaction	:	KVK scientist selects a village and farmers who cultivate fingermillet crop. Information pertaining to cultivation of fingermillet followed by farmers was collected. The problems faced by them was also discussed and prioritized by them. Then problem-causes analysis also has done with their active participation. Treatments were thoroughly discussed with them and lastly according to their suggestions treatments were finalized. From among these farmers twenty farmers were selected for testing the technology on their farm. The technological backstopping were provided by the KVK scientist as a facilitator as when required by the farmers. Farmers were involved and actively participated at every level i.e. planning, execution, monitoring, evaluation of the trial. PRA and Group Discussion.																		

### Results of On Farm Trial – 03

#### Technology Assessment - Assessment of efficiency Nauroji LBF and AAU developed Liquid manure in paddy

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology assessed	Parameters of assessed	Data on the parameter				Results of assessed	Feedback from the farmer	Any refinement needed	Justification for refinement
							T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>	T <sub>4</sub>				
1	2	3	4	5	6	7	8				9	10	11	12
Paddy	Rainfed	Low yield of kharif paddy	Assessment of efficiency Nauroji LBF and AAU developed Liquid manure in paddy.	20	<p><b>T<sub>1</sub></b>- Farmer practice (177:86:00 kg NPK/ha)</p> <p><b>T<sub>2</sub></b>- Recommended Dose of Fertiliser (RDF)( 100:30:00 kg NPK/ha)</p> <p><b>T<sub>3</sub></b> – RDF + Nauroji LBF i.eAzoto. and PSB @ 1.25 lit/ha as seedling treatment and soil application</p> <p><b>T<sub>4</sub></b> - RDF + AAU developed Liquid manure @ 500 lit/ha as soil application at 30 &amp; 45 DAP</p>	<p>No. of tillers/hill</p> <p>Grain yield(kg/ha)</p> <p>Straw yield(kg/ha)</p> <p>Gross Income (Rs./ha)</p> <p>Total cost of cultivation (Rs./ha)</p> <p>Net profit (Rs./ha)</p> <p>BCR</p>	8.46	8.79	9.04	9.19	<p>T<sub>4</sub> increased 6.94 % grain yield and 22.0% net profit compare to farmer practice. with highest BCR (2.13)</p>	<p>- Liquid manure can be prepared at home, helps to be self dependent</p> <p>- Tillering and growth of plant improved Increase in yield</p>	--	--

Cont...

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha,)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14	15	16
T <sub>1</sub> - Farmer practice (177:86:00 kg NPK/ha)	-	Seed yield- 3413 Straw yield- 3754	kg/ha	29107	1.87
T <sub>2</sub> - Recommended Dose of Fertiliser (RDF) (100:30:00 kg NPK/ha)	NAU, Navsari	Seed yield- 3512 Straw yield-3161	kg/ha	32414	2.09
T <sub>3</sub> – RDF + Nauroji LBF i.eAzoto. and PSB @ 1.25 lit/ha as seedling treatment and soil application	NAU, Navsari	Seed yield- 3549 Straw yield- 3443	kg/ha	33614	2.12
T <sub>4</sub> - RDF + AAU developed Liquid manure @ 500 lit/ha as soil application at 30 & 45 DAP	AAU, Anand	Seed yield-3650 Straw yield- 4088	kg/ha	35515	2.13

## C2. Details of On Farm Trial for assessment –

1	Title of Technology Assessed	:	Assessment of efficiency Nauroji LBF and AAU developed Liquid manure in paddy.									
2	Problem Definition	:	Low yield of kharif paddy									
3	Details of technologies selected for assessment	:	<b>T<sub>1</sub></b> - Farmer practice (177:86:00 kg NPK/ha) <b>T<sub>2</sub></b> - Recommended Dose of Fertiliser (RDF) (100:30:00 kg NPK/ha) <b>T<sub>3</sub></b> – RDF + Nauroji LBF i.eAzoto. and PSB @ 1.25 lit/ha as seedling treatment and soil application <b>T<sub>4</sub></b> - RDF + AAU developed Liquid manure @ 500 lit/ha as soil application at 30 & 45 DAP									
4	Source of technology	:	NAU, Navsari and AAU, Anand									
5	Production system	:	Rainfed cereal based system ( Cereal-pulse-Cereal)									
6	Thematic area	:	Nutrient Management									
7	Performance of the Technology with performance indicators	:	<b>Treatments</b>	<b>No. of Tillers/hill</b>	<b>Grain yield (kg/ha)</b>	<b>Straw yield (kg/ha)</b>	<b>Gross Income (Rs./ha)</b>	<b>Cost of cultivation (Rs./ha)</b>	<b>Net Return (Rs./ha)</b>	<b>Increase in net profit(%)</b>	<b>Increase in seed yield (%)</b>	<b>BCR</b>
			<b>T<sub>1</sub></b>	<b>8.46</b>	<b>3413</b>	<b>3754</b>	<b>62457</b>	<b>33351</b>	<b>29107</b>	<b>0.0</b>	<b>0.00</b>	<b>1.87</b>
			<b>T<sub>2</sub></b>	<b>8.79</b>	<b>3512</b>	<b>3161</b>	<b>62162</b>	<b>29749</b>	<b>32414</b>	<b>11.4</b>	<b>2.90</b>	<b>2.09</b>
			<b>T<sub>3</sub></b>	<b>9.04</b>	<b>3549</b>	<b>3443</b>	<b>63562</b>	<b>29949</b>	<b>33614</b>	<b>15.5</b>	<b>3.98</b>	<b>2.12</b>
			<b>T<sub>4</sub></b>	<b>9.19</b>	<b>3650</b>	<b>4088</b>	<b>67014</b>	<b>31499</b>	<b>35515</b>	<b>22.0</b>	<b>6.94</b>	<b>2.13</b>

8	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	- Liquid manure can be prepared at home, helps to be self dependent - Tillering and growth of plant improved - Increase in yield
9	Final recommendation for micro level situation	:	Need to continue for next year
10	Constraints identified and feedback for research	:	Trial is going on
11	Process of farmers participation and their reaction	:	KVK scientist selects a village and farmers who cultivate paddy crop. Information pertaining to cultivation of paddy followed by farmers was collected. The problems faced by them was also discussed and prioritized by them. Then problem-causes analysis also has done with their active participation. Treatments were thoroughly discussed with them and lastly according to their suggestions treatments were finalized. From among these farmers twenty farmers were selected for testing the technology on their farm. The technological backstopping were provided by the KVK scientist as a facilitator as when required by the farmers. Farmers were involved and actively participated at every level i.e. planning, execution, monitoring, evaluation of the trial. PRA and Group Discussion.

## Results of On Farm Trial – 04

## Technology Assessment - Assessment of paddy variety for Kharif cultivation .

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology assessed	Parameters of assessed	Data on the parameter			Results of assessed	Feedback from the farmer
							T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>		
1	2	3	4	5	6	7	8	9	10		
Paddy	Rainfed	Low yield of Kharif Paddy	Assessment of paddy variety for Kharif cultivation.	10	T <sub>1</sub> - Use of Hybrid variety (US-312) with local practices  T <sub>2</sub> - Use of GAR-13 Variety with improved practices  T <sub>3</sub> - Use of GRH-2 Variety with improved practices	1. Productive tillers/hill  2. Days of 50% flowering  3. Grain Yield (kg/ha)  4. B:C ratio	9.58  92.00  3979  1.93	9.45  88.90  3967  2.14	10.30  91.70  4199  2.26	The results of the trial indicated that improved variety of paddy GRH-2 earned the maximum net returns (Rs 42248/- yielding 4199 kg/ha with B:C ratio 2.26 ) as compare to T <sub>1</sub> (Rs 34592/- yielding 3979 kg/ha with B:C ratio 1.93).	Paddy variety GAR-13with potash culture reduces fertilizer cost, mature early (7-10 days than check) ,lodging resistant with good cooking quality and GRH-2 earned the maximum yield.

Cont...

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha,)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14	15	16
T <sub>1</sub> - Use of Hybrid variety (US-312) with local practices	Private company	Grain Yield– 3979	kg/ha	34592	1.93
T <sub>2</sub> - Use of GAR-13 Variety with improved practices	NAU, Navsari	Grain Yield – 3967	kg/ha	38155	2.14
T <sub>3</sub> - Use of GRH-2 Variety with improved practices	NAU, Navsari	Grain Yield– 4199	kg/ha	42248	2.26

## C2. Details of On Farm Trial for assessment –

1	Title of Technology Assessed	:	Assessment of paddy variety for Kharif cultivation .																																																			
2	Problem Definition	:	Low yield of Kharif paddy																																																			
3	Details of technologies selected for assessment	:	<b>T1</b> - Use of Hybrid variety (US-312) with local practices <b>T2</b> - Use of GAR-13 Variety with improved practices <b>T3</b> - Use of GRH-2 Variety with improved practices																																																			
4	Source of technology	:	NAU, Navsari.																																																			
5	Production system	:	Rain fed cereal based system ( paddy-pulse cropping system)																																																			
6	Thematic area	:	Varietal evolution																																																			
7	Performance of the Technology with performance indicators	:	<table border="1"> <thead> <tr> <th>Treatment</th> <th>Productive tillers/hill</th> <th>Days of 50% flowering</th> <th>Grain Yield (kg/ha)</th> <th>Straw Yield (kg/ha)</th> <th>Income Grain (Rs./ha)</th> <th>Income Straw (Rs./ha)</th> <th>Expenditure (Rs/ha)</th> <th>Gross Income (Rs/ha)</th> <th>Net Profit (Rs/ha)</th> <th>B:C Ratio</th> </tr> </thead> <tbody> <tr> <td>T<sub>1</sub></td> <td>9.58</td> <td>92</td> <td>3979</td> <td>4775</td> <td>59685</td> <td>11937</td> <td>37030</td> <td>71622</td> <td>34592</td> <td>1.93</td> </tr> <tr> <td>T<sub>2</sub></td> <td>9.45</td> <td>88.90</td> <td>3967</td> <td>4800</td> <td>59505</td> <td>12000</td> <td>33350</td> <td>71505</td> <td>38155</td> <td>2.14</td> </tr> <tr> <td>T<sub>3</sub></td> <td>10.3</td> <td>91.70</td> <td>4199</td> <td>5164</td> <td>62978</td> <td>12910</td> <td>33640</td> <td>75888</td> <td>42248</td> <td>2.26</td> </tr> </tbody> </table>								Treatment	Productive tillers/hill	Days of 50% flowering	Grain Yield (kg/ha)	Straw Yield (kg/ha)	Income Grain (Rs./ha)	Income Straw (Rs./ha)	Expenditure (Rs/ha)	Gross Income (Rs/ha)	Net Profit (Rs/ha)	B:C Ratio	T <sub>1</sub>	9.58	92	3979	4775	59685	11937	37030	71622	34592	1.93	T <sub>2</sub>	9.45	88.90	3967	4800	59505	12000	33350	71505	38155	2.14	T <sub>3</sub>	10.3	91.70	4199	5164	62978	12910	33640	75888	42248	2.26
Treatment	Productive tillers/hill	Days of 50% flowering	Grain Yield (kg/ha)	Straw Yield (kg/ha)	Income Grain (Rs./ha)	Income Straw (Rs./ha)	Expenditure (Rs/ha)	Gross Income (Rs/ha)	Net Profit (Rs/ha)	B:C Ratio																																												
T <sub>1</sub>	9.58	92	3979	4775	59685	11937	37030	71622	34592	1.93																																												
T <sub>2</sub>	9.45	88.90	3967	4800	59505	12000	33350	71505	38155	2.14																																												
T <sub>3</sub>	10.3	91.70	4199	5164	62978	12910	33640	75888	42248	2.26																																												
8	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Paddy variety GAR-13with potash culture reduces fertilizer cost, mature early (7-10 days than check) ,lodging resistant with good cooking quality and GRH-2 earned the maximum yield.																																																			
9	Final recommendation for micro level situation	:	-																																																			
10	Constraints identified and feedback for research	:	<ul style="list-style-type: none"> <li>- Availability of seed</li> <li>- Peacock our national bird damaged crop at early stage</li> <li>- Continuous heavy rain</li> </ul>																																																			
11	Process of farmers participation and their reaction	:	Farmers were involved and actively participated at every level i.e. PRA and Group discussion ,planning, execution, monitoring, evaluation of the trial. Farmers evaluated that paddy variety US312, GAR13 and GRH2 less problem of pest and disease, bold size, good cooking quality and more yield.																																																			

## Results of On Farm Trial – 5

Technology Assessment: Management of Red Mite) *Tetranychus cinnabarinus*( in Brinjal )

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
Brinjal	Irrigated	low yield in brinjal	Management of Red Mite in Brinjal	10	T1 : Farmers practices (No use of acaricide) T2 : Spraying of Spiromesifen 22.29 SC (8.4 ml/ 10 lit. water, 96 g a.i./ha , First spray at fruit setting and second spray at 15 days interval. T3 :Spraying of Propergite57 Ec @ 10 ml/10 lit at the time of infestation and second spray at 15 days interval.	Damage due to infestation of pest (%), Yield	T1 : 17% T2 : 5% T3 : 12%	Damage due to infestation of mite reduced from 17 to 5 % and yield increased by 21.11% in T2 and 15.35 % in T3. .	- Improved quality of fruit -Increase in market value -Increase in yield	--	--

## Contd..

Technology Assessed	Source of Technology	Production	Unit	Net Return in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 : Farmers practices (No use of acaricide)	--	28270	Kg/ha	129250	2.88
Technology option 2 :Spraying of Spiromesifen 22.29 SC (8.4 ml/ 10 lit. water, 96 g a.i./ha , First spray at fruit setting and second spray at 15 days interval.	Recommded by NAU, Navsari, 2018	34240	Kg/ha	168330	3.36
Technology option 2 :Spraying of Propergite57 Ec @ 10 ml/10 lit at the time of infestation and second spray at 15 days interval.	Recommded by NAU, Navsari, 2014	32610	Kg/ha	158720	3.28

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

1	Title of Technology Assessed	:	Management of Red mite in brinjal																																					
2	Problem Definition	:	Low yield in brinjal																																					
3	Details of technologies selected for assessment	:	T1 : Farmers practices (No use of acaricide) T2 : Spraying of Spiromesifen 22.29 SC (8.4 ml/ 10 lit. water, 96 g a.i./ha , First spray at fruit setting and second spray at 15 days interval. T3 :Spraying of Propergite57 Ec @ 10 ml/10 lit at the time of infestation and second spray at 15 days interval.																																					
4	Source of technology	:	NAU, Navsari, 2018																																					
5	Production system	:	Rain fed cereal based system ( paddy-vegetable system)																																					
6	Thematic area	:	Integrated Pest Management																																					
7	Performance of the Technology with performance indicators	:	<table border="1"> <thead> <tr> <th>Technology options</th> <th>Percentage of damage</th> <th>Yield (kg/ha)</th> <th>Increase in Yield (%)</th> <th>Gross return (Rs./ha)</th> <th>Cost of cultivation (Rs./ha)</th> <th>Net profit (Rs./ha)</th> <th>B:C Ratio</th> </tr> </thead> <tbody> <tr> <td>T1 : Farmers practices (No use of acaricide)</td> <td>17</td> <td>28270</td> <td>0</td> <td>197890</td> <td>68640</td> <td>129250</td> <td>2.88</td> </tr> <tr> <td>T2 : Spraying of Spiromesifen 22.29 SC (8.4 ml/ 10 lit. water)</td> <td>5</td> <td>34240</td> <td>21.11</td> <td>239680</td> <td>71350</td> <td>168330</td> <td>3.36</td> </tr> <tr> <td>T3 :Spraying of Propergite57 Ec @ 10 ml/10 lit</td> <td>12</td> <td>32610</td> <td>15.35</td> <td>228270</td> <td>69550</td> <td>158720</td> <td>3.28</td> </tr> </tbody> </table>						Technology options	Percentage of damage	Yield (kg/ha)	Increase in Yield (%)	Gross return (Rs./ha)	Cost of cultivation (Rs./ha)	Net profit (Rs./ha)	B:C Ratio	T1 : Farmers practices (No use of acaricide)	17	28270	0	197890	68640	129250	2.88	T2 : Spraying of Spiromesifen 22.29 SC (8.4 ml/ 10 lit. water)	5	34240	21.11	239680	71350	168330	3.36	T3 :Spraying of Propergite57 Ec @ 10 ml/10 lit	12	32610	15.35	228270	69550	158720	3.28
Technology options	Percentage of damage	Yield (kg/ha)	Increase in Yield (%)	Gross return (Rs./ha)	Cost of cultivation (Rs./ha)	Net profit (Rs./ha)	B:C Ratio																																	
T1 : Farmers practices (No use of acaricide)	17	28270	0	197890	68640	129250	2.88																																	
T2 : Spraying of Spiromesifen 22.29 SC (8.4 ml/ 10 lit. water)	5	34240	21.11	239680	71350	168330	3.36																																	
T3 :Spraying of Propergite57 Ec @ 10 ml/10 lit	12	32610	15.35	228270	69550	158720	3.28																																	
8	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Increase yield due to reduction in damage of mite and also Improved quality of fruit resulting in good market value																																					
9	Final recommendation for micro level situation	:	After completion																																					
10	Constraints identified and feedback for research	:	Nil																																					
11	Process of farmers participation and their reaction	:	Farmers were involved and actively participated at every level i.e. planning, execution, monitoring, evaluation of the trial. PRA and Group Discussion																																					

### 3.3. FRONTLINE DEMONSTRATION

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

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

Sr. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system.	Horizontal spread of Technology		
					No. of villages	No. of farmers	Area (ha)
1	Paddy	Varietal Evaluation	HYVs of Paddy, Line sowing, Seed treatment	Demo. of improved variety seeds	25	345	80
2	Fingermillet	Varietal Evaluation	HYVs of Fingermillet, IPM	Demo. of improved variety seeds	05	80	60
3	Sugarcane	Varietal Evaluation	HYVs of Sugarcane,	Demo. of improved variety planting material	05	38	45
4	Brinjal	Varietal Evaluation	HYVs of Brinjal,	Demo. of improved variety seedlings	12	45	15
5	Sweetpotato	Varietal Evaluation	HYVs of Sweetpotato, turning of veins	Demo. of improved variety seeds	08	120	50
6	Greengram	Varietal Evaluation	HYVs of Greengram, line sowing	Demo. of improved variety seeds	06	65	20
7	Green fodder	Varietal Evaluation	HYVs of Perennial grass	Demo. of improved variety planting material	10	50	20

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.)

Sr. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/Demo.			Reasons for shortfall
					Proposed	Actual	SC/ST	Others	Total	
1	Paddy	ICM	HYV, IPM, INM ,line sowing	Kharif	20	35	175	--	175	--
2	Sugarcane	ICM	HYV, LBF	Rabi	01	01	10	--	10	--
3	Finger millet	ICM	HYV, INM, IPM	Kharif	10	15	75	--	75	--
4	Pigeonpea	ICM	HYV, IPM, LBF	Kharif	10	6.2	62	--	62	--
5	Bittergourd	ICM	HYV, IPM, LBF	Kharif	2.5	2.5	25	--	25	--
6	Chickpea	ICM	HYV, IPM, LBF	Rabi	10	10	25	--	96	--
7	Indianbean	ICM	HYV, IPM, LBF	Rabi	10	9.71	97	--	97	--
8	Brinjal	INM	Micronutrient	Rabi	5.0	7.00	25	--	35	

9	Greengram	ICM	HYV,INM, IPM	Summer	05	10	25	--	25	--
10	Fodder sorghum	ICM	HYV	Rabi	05	08	87	--	87	--
11	Drumstick	ICM	HYV	Kharif	--	-	65	--	65	
12	Paddy	INM	Green Manuring	Kharif	02	02	20	--	20	--
13	Paddy	ICM	Depog method of seedling raising	Kharif	02	1.50	20	--	20	--
14	Mushroom	ICM	Improved variety Seed	Rabi	--	--	48	--	48	--
15	Kitchen garden	ICM	Improved variety Seed & seedlings	Rabi	0.2	0.21	21	--	21	--
16	Vermicompost	ICM	Vermibed& Culture	Rabi	--	--	20	--	20	
17	Plug Nursery	ICM	Nursery Tray	Rabi	--	--	22	--	22	

#### Details of farming situation

Sr. no.	Crop	Season	Farming situation	Type of soil	Status of soil			Previous crop	Sowing date	Harvest Date	Seasonal Rainfall	No of Rainy days
					N	P	K					
1	Paddy	Kharif	Rainfed	Medium black	Low	Medium	High	Pulses	June-21	Oct-21	2584.53	93
2	Sugarcane	Rabi	Irrigated	Medium black	Low	Medium	High	Paddy	Nov-20	Dec-21	2584.53	93
3	Finger millet	Kharif	Rainfed	Medium black	Low	Medium	High	Pulses	June-21	Oct-21	2584.53	93
4	Pigeonpea	Kharif	Rainfed	Medium black	Low	Medium	High	Pulses	June-21	Oct-21	2584.53	93
5	Bittergourd	Kharif	Irrigated	Hilly, Laterite	Low	Medium	High	Paddy	June-21	Oct-21	2584.53	93
6	Chickpea	Rabi	Irrigated	Medium black	Low	Medium	High	Paddy	Dec-20	March-21	--	--
7	Indianbean	Rabi	Irrigated	Medium black	Low	Medium	High	Paddy	Nov-20	March-21	--	--
8	Brinjal	Rabi	Irrigated	Medium black	Low	Medium	High	Paddy	Nov-20	March-21	--	--
9	Greengram	Summer	Irrigated	Medium black	Low	Medium	High	Paddy	Feb-21	May- 21	--	--
10	Fodder sorghum	Rabi	Irrigated	Medium black	Low	Medium	High	Paddy	Jan-21	May-21	--	--
11	Drumstick	Kharif	Irrigated	Medium black	Low	Medium	High	Paddy	Aug-21	Oct-21	2584.53	93
12	Paddy	Kharif	Rainfed	Medium black	Low	Medium	High	Pulses	June-21	Oct-21	2584.53	93
13	Paddy	Kharif	Rainfed	Medium black	Low	Medium	High	Pulses	June-21	Oct-21	--	--
14	Mushroom	Rabi	Irrigated	Medium black	Low	Medium	High	--	Aug-21	Oct-21	--	--
15	Kitchen garden	Rabi	Irrigated	Medium black	Low	Medium	High	Paddy	Jan-21	April-21	--	--
16	Vermicompost	Rabi	Irrigated	Medium black	Low	Medium	High	Paddy	Jan-21	April-21	--	--

17	Plug Nursery	Rabi	Irrigated	Medium black	Low	Medium	High	Paddy	Jan-21	April-21	--	--
----	--------------	------	-----------	--------------	-----	--------	------	-------	--------	----------	----	----

Technical feedback on the demonstrated technologies.

Sr. No	Feed Back
1	Gram variety GG-6- Early maturity, Bold size, more number of pod per plant
2	Paddy variety Sardar have more tillers , non lodging, Mid late and small seeded
3	GT 104 variety - mid late (150-160 Days) , bold size with white colour, good for Dal making, good cooking quality, less problem of wilt and sterility mosaic virus.
4	Fingermillet (Guj Nagli-6) variety gives good yield in longer rainy season .
5	Greengram variety GAM-5 is found resistant to YMV with bold grain size and uniform maturity.
6	Indianbean variety Guj.Val-2 erect flowering habit , flowering starts from each inter node.
7	Production of sugarcane variety Co-N- 13073 may be reduced in case of late harvesting.
8	Demonstrated variety of Bittergourd gave good yield. The variety also fetched good market price. Mosaic disease incidence was found less
9	Fodder sorghum var.SSG gave good yield with minimum 3 cuttings before heavy rains

Farmers' reactions on specific technologies

Sr. No	Name of Crop/ Commodity	Feed Back
1	Paddy	Mid late variety with small grain size, non lodging, seed rate as well as seedling rate has been reduced to 20-30 % . Grain quality is better for culinary purpose compared to hybrid varieties.
2	Fingermillet	Variety had less incidence of pest- disease compare to local variety.
3	Greengram	GAM-5 variety is found resistant to YMV with bold grain size and uniform maturity. Good yield with attractive shiny grain appearance
4	Gram	Gram variety GG-6- early maturity, bold size with good attractive yellow colour, more number of pod per plant , good yield in rainfed condition
5	Pigeon pea	GT 104 variety – mid late (150-160 Days) , bold size with white colour, good for Dal making, good cooking quality, less problem of wilt and sterility mosaic virus.
6	Bittergourd	Management of fruitfly increased the yield. Size, Shape and quality of fruit preferred by local market
7	Indianbean	More number of pods per branch, early pod setting .
8	Sugarcane	Seed rate has been reduced to 50%.

**Extension and Training activities under FLD**

<b>Sr. No.</b>	<b>Activity</b>	<b>No. of activities organized</b>	<b>Date</b>	<b>Number of participants</b>	<b>Remarks</b>
1	Field days	07	25/2/21 15/3/21 22/5/21 12/7/21 7/10/21 16/10/21 27/10/21	21 12 22 45 65 106 60	
2	Farmers Training	08	19/03/21 09/05/21 06/06/21 14/06/21 15/06/21 11/06/21 17/07/21 07/11/21	20 50 26 46 56 20 24 47	
3	Media coverage	26	--	--	
4	Training for extension functionaries	--	--	--	

### C. Performance of Frontline demonstrations

#### Frontline demonstrations on oilseed crops- Nil

#### Frontline demonstration on pulse crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						H	L	Av.										
Green gram (NFSM) (Summer 2020-21)	ICM	Improved variety + Line sowing + INM + IPM	GM-6	25	10	9.7	6.8	8.52	5.98	42.47	18800	51144	32344	2.72	16280	35856	19576	2.20
Pigeonpea	ICM	Improved variety + Line sowing + INM + IPM	GT- 104	62	6.2	10.3	7.2	8.27	6.16	34.25	23310	45474	22164	1.95	21180	33858	12678	1.60
Indian bean	ICM	Improved variety +Seed treatment + Line sowing + IPM	Guj. Val-2	97	9.7	11.75	9.4	10.33	8.08	27.84	17547	51650	34103	2.97	15300	40400	25100	2.64
Chickpea (NFSM) (Rabi - 2020)	ICM	Improved variety +Seed treatment + Line sowing + IPM	GJG-3	25	10	13.5	10.1	11.94	8.43	41.64	21647	62109	40462	2.87	20120	42160	22040	2.10

#### FLD on Other crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Av.										
<b>Cereals</b>																		
Paddy	ICM	Improved variety + Seed treatment + INM + IPM	Sardar	175	35	46.75	31.0	40.35	32.62	23.69	33788	70301	36513	2.08	35637	56253	20616	1.58

Paddy	ICM	Depog method	Sardar	20	1.5	36.12	31.40	35.70	33.67	6.03	29624	62118	32494	2.10	32654	58585	25931	1.79
Paddy	ICM	Green manuring	Sardar	20	2.0	37.10	32.30	36.25	34.20	5.99	31223	63075	31852	2.02	32383	59508	27125	1.84
<b>Millets</b>																		
Finger millet	ICM	Improved variety, Biopesticides LBF	Guj. Nagli – 6	75	15	10.6	7.50	9.06	8.16	11.03	18500	35710	17210	1.93	17400	32560	15160	1.87
<b>Commercial Crops</b>																		
Sugarcane	ICM	Improved variety, LBF	Co-N-13073	10	1.0	872	740	825	755	9.27	111295	231000	119705	2.08	116375	211400	95025	1.82
<b>Fodder crops</b>																		
Grasses	ICM	Improved plantlets of Perennial fodder	Co-4	27	2.7	26.0	22.5	24.70	21.40	15.42	115500	247000	131500	2.14	102400	214000	111600	2.09

### Frontline Demonstration on Nutri cereals

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Finger millet	ICM	Improved variety, Biopesticides LBF	Guj. Nagli - 5	40	08	11.10	8.35	10.64	8.36	27.27	18970	41240	22270	2.17	17400	33260	15860	1.91

FLD on Livestock – Nil

FLD on Fisheries – Nil

FLD on Other Enterprises – Mushroom production

Category	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.) or Rs./unit				Economics of check (Rs.) or Rs./unit			
				Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Oyster Mushroom	Pleurotus spp	48	48	--	--	--	--	--	1800	11000	9200	6.11	--	-	-	-

FLD on Women Empowerment –Nil

FLD on Farm Implements and Machinery -Nil

FLD on Other Enterprise: Kitchen Gardening

Category and Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units	Yield (Kg)		% change in yield	Other parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Kitchen gardening	Nutritional security	Improved seeds and seedlings of vegetables	21	21	142	98	44.90	--	--	650	3800	3150	5.84	460	2600	2140	5.65

FLD on Demonstration details on crop hybrids

Crop	Technology demonstrated	Hybrid Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average										
Vegetable crops																	
Bittergourd	Improved variety, IPM, LBF	F1 (Akash)	25	2.5	228	208	215.36	177.92	21.04	68350	191670	123320	2.80	65400	153900	88500	2.35

### 3.4. Training Programmes

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

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>I Crop Production</b>										
Integrated water management	4	0	0	0	108	24	132	108	24	132
Weed Management	4	0	0	0	64	22	86	64	22	86
Nursery Management	4	0	0	0	62	10	72	62	10	72
Integrated crop management	12	0	0	0	257	44	301	257	44	301
<b>Total</b>	<b>24</b>				<b>491</b>	<b>100</b>	<b>591</b>	<b>491</b>	<b>100</b>	<b>591</b>
<b>II Horticulture</b>										
<b>III Soil Health and Fertility Mgt.</b>										
Soil and Water Testing	1	0	0	0	34	22	56	34	22	56
Integrated nutrient management	1	0	0	0	16	5	21	16	5	21
Integrated nutrient management	1	0	0	0	20	12	32	20	12	32
<b>Total</b>	<b>03</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>70</b>	<b>39</b>	<b>109</b>	<b>70</b>	<b>39</b>	<b>109</b>
<b>IV Livestock Prod. and Management</b>										
Dairy Management	8	0	0	0	114	222	336	114	222	336
Feed & fodder technology	8	0	0	0	79	165	244	79	165	244
<b>Total</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>193</b>	<b>387</b>	<b>580</b>	<b>193</b>	<b>387</b>	<b>580</b>
<b>V Home Science/Women Empowerment</b>										
Household nutritional security	3	0	0	0	22	50	72	22	50	72
Vermi-compost production	2	0	0	0	0	15	15	0	15	15
Mushroom Production	1	0	0	0	4	39	43	4	39	43
<b>Total</b>	<b>6</b>				<b>26</b>	<b>104</b>	<b>130</b>	<b>26</b>	<b>104</b>	<b>130</b>
<b>VI Agril. Engineering</b>										
Care and maintenance of farm machinery and implements	2	0	0	0	32	0	32	32	0	32
Installation and maintenance of micro irrigation systems	1	0	0	0	25	0	25	25	0	25
<b>Total</b>	<b>3</b>				<b>57</b>	<b>0</b>	<b>57</b>	<b>57</b>	<b>0</b>	<b>57</b>

<b>VII Plant Protection</b>										
Integrated Pest Disease Management	3	0	0	0	27	62	89	27	62	89
<b>Total</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>27</b>	<b>62</b>	<b>89</b>	<b>27</b>	<b>62</b>	<b>89</b>
<b>X Capacity Building and Group Dynamics</b>										
Leadership development	1	0	0	0	24	8	32	24	8	32
Formation and Management of SHGs	1	0	0	0	22	8	30	22	8	30
<b>Total</b>	<b>2</b>				<b>46</b>	<b>16</b>	<b>62</b>	<b>46</b>	<b>16</b>	<b>62</b>
<b>Grand Total</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>910</b>	<b>708</b>	<b>1618</b>	<b>910</b>	<b>708</b>	<b>1618</b>

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

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>I Crop Production</b>										
Weed Management	1	0	0	0	20	4	24	20	4	24
Integrated water management	1	0	0	0	22	3	25	22	3	25
Integrated crop management	2	0	0	0	51	15	66	51	15	66
<b>Total</b>	<b>4</b>				<b>93</b>	<b>22</b>	<b>115</b>	<b>93</b>	<b>22</b>	<b>115</b>
<b>II Horticulture</b>	0	0	0	0	0	0	0	0	0	0
<b>III Soil Health and Fertility Mgt.</b>	0	0	0	0	0	0	0	0	0	0
<b>IV Livestock Production and Management</b>										
Dairy Management	3	0	0	0	14	58	72	14	58	72
Feed & fodder technology	2	0	0	0	43	52	95	43	52	95
<b>Total</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>57</b>	<b>110</b>	<b>167</b>	<b>57</b>	<b>110</b>	<b>167</b>
<b>V Home Science/Women empowerment</b>										
Household nutritional security	3	0	0	0	0	50	50	0	50	50
Mushroom Production	3	0	0	0	11	165	176	11	165	176
Vermi-compost production	1	0	0	0	38	3	41	38	3	41
<b>Total</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>49</b>	<b>218</b>	<b>267</b>	<b>49</b>	<b>218</b>	<b>267</b>
<b>VI Agril. Engineering</b>										
Installation and maintenance of micro irrigation systems	5	0	0	0	96	33	129	96	33	129

Soil & water conservation	7	0	0	0	181	26	207	181	26	207
Farm Machinery and its maintenance	2	0	0	0	25	40	65	25	40	65
<b>Total</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>302</b>	<b>99</b>	<b>401</b>	<b>302</b>	<b>99</b>	<b>401</b>
<b>VII Plant Protection</b>										
Integrated Pest Management	3	0	0	0	73	5	78	73	5	78
Integrated Disease Management	4	0	0	0	70	13	83	70	13	83
<b>Total</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>143</b>	<b>18</b>	<b>161</b>	<b>140</b>	<b>18</b>	<b>161</b>
<b>X Capacity Building and Group Dynamics</b>										
Group Dynamics and farmers organization	2	0	0	0	50	0	50	50	0	50
<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>0</b>	<b>50</b>	<b>50</b>	<b>0</b>	<b>50</b>
<b>Grand Total</b>	<b>39</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>694</b>	<b>467</b>	<b>1161</b>	<b>694</b>	<b>467</b>	<b>1161</b>

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

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>I Crop Production</b>										
Integrated water management	7	0	0	0	130	27	157	130	27	157
Weed Management	6	0	0	0	84	26	110	84	26	110
Nursery Management	4	0	0	0	62	10	72	62	10	72
Integrated crop management	20	0	0	0	308	59	367	308	59	367
<b>Total</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>584</b>	<b>122</b>	<b>706</b>	<b>584</b>	<b>122</b>	<b>706</b>
<b>II Horticulture</b>										
<b>III Soil Health and Fertility Mgt.</b>										
Soil and Water Testing	1	0	0	0	34	22	56	34	22	56
Integrated nutrient management	1	0	0	0	16	5	21	16	5	21
Integrated nutrient management	1	0	0	0	20	12	32	20	12	32
<b>Total</b>	<b>03</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>70</b>	<b>39</b>	<b>109</b>	<b>70</b>	<b>39</b>	<b>109</b>
<b>IV Livestock Prod. and Management</b>										
Dairy Management	11	0	0	0	128	280	408	128	280	408



Mushroom Production	2	0	0	0	25	23	48	25	23	48
Nursery Management	1	0	0	0	0	22	22	0	22	22
Tractor Operator	1	0	0	0	20	0	20	20	0	20
<b>Total</b>	<b>4</b>				<b>45</b>	<b>45</b>	<b>90</b>	<b>45</b>	<b>45</b>	<b>90</b>

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

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Mushroom Production	2	0	0	0	25	23	48	25	23	48
Nursery Management	1	0	0	0	0	22	22	0	22	22
Tractor Operator	1	0	0	0	20	0	20	20	0	20
<b>Total</b>	<b>4</b>				<b>45</b>	<b>45</b>	<b>90</b>	<b>45</b>	<b>45</b>	<b>90</b>

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Integrated crop management	1	0	0	0	18	2	20	18	2	20
Integrated Pest Management	1	0	0	0	35	5	40	35	5	40
Nursery Management	1	0	0	0	0	21	21	0	21	21
Vermi-compost production	1	0	0	0	14	12	26	14	12	26
<b>Total</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>67</b>	<b>40</b>	<b>107</b>	<b>67</b>	<b>40</b>	<b>107</b>

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

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Integrated crop management	1	0	0	0	18	2	20	18	2	20
Integrated Pest Management	1	0	0	0	35	5	40	35	5	40

Nursery Management	1	0	0	0	0	21	21	0	21	21
Vermi-compost production	1	0	0	0	14	12	26	14	12	26
<b>Total</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>67</b>	<b>40</b>	<b>107</b>	<b>67</b>	<b>40</b>	<b>107</b>

### Sponsored training programmes–Nil

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Income generation activities</b>										
Mushroom Production	2	0	0	0	25	23	48	25	23	48
Nursery Management	1	0	0	0	0	22	22	0	22	22
Tractor Operator	1	0	0	0	20	0	20	20	0	20
<b>Total</b>	<b>4</b>				<b>45</b>	<b>45</b>	<b>90</b>	<b>45</b>	<b>45</b>	<b>90</b>

### 3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services (Other than KMAS)	--	--	--	--
Diagnostic visits	2	12	3	15
Field Day	07	331	5	336
Group discussions	24	880	12	892
KisanGhoshi	12	2017	25	2042
Film Show	6	185	10	195
Self -help groups	0	0	0	0
KisanMela	0	0	0	0
Exhibition	0	0	0	0
Scientists' visit to farmers field	19	174	5	179

Plant/animal health camps	8	386	10	396
Farm Science Club	0	0	0	0
Ex-trainees Sammelan	0	0	0	0
Farmers' seminar/workshop	12	2017	25	2042
Method Demonstrations	13	439	10	449
Celebration of important days	8	630	15	645
Special celebration ( Poshanmaah, Parthenium week, Swaachhatapakhwada)	3	866	15	881
Exposure visits	4	101	0	101
Others (pl.specify)	0	0	0	0
<b>Total</b>	<b>118</b>	<b>8038</b>	<b>135</b>	<b>8173</b>

#### Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	--
Extension Literature	02
Newspaper coverage	27
Popular articles	09
Radio Talks	02
TV Talks	--
Animal health camps (Number of animals treated)	08 (386)
Social Media (No. of platforms Used)	03
Others (pl. specify) Newsletter	02
<b>Total</b>	<b>52</b>

#### 3.6 Online activities during year 2021

S. No.	Activity Type	Mode of implementation (Video conferencing / Audio Conferencing / Facebook Live / YouTube Live/ Zoom/ Google meet/ Webexetc.)	Title of Program	No. of Programmes	No. of Participants/ Views
A	Farmers training	Google meet	Meghdoot and damini application	01	12

B	Farmers scientist's interaction programme	--	--	--	--
C	Farmers seminars	<b>Google meet</b>	ICAR Establishment Day	01	26
D	Expert lectures	<b>Google meet</b>	Care of pregnant women	01	45
	<b>Total</b>				
E	Any other (Pl. specify)	--	--		
	<b>Grand Total (A+B+C+D+E)</b>			<b>03</b>	<b>83</b>

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

#### Production of seeds by the KVK

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals	Paddy	Sardar	--	63.00	189000	825
Pulses	Pigeonpea	GT-104	--	0.76	7600	36
Others	Sugarcane	Co.N-13073	--	162.25	53625	14
<b>Total</b>				<b>226.01</b>	<b>250225</b>	<b>875</b>

#### Production of planting materials by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Vegetable seedlings	Brinjal, Chilli	--	Mukta round Hybrid	23800 5500	23800 8250	155
Fodder crop saplings	Perennial grass	Co-4	--	65200 (tousseks)	32600	403
Drumstick	Drumstick	PKM-1	--	455	6825	65
<b>Total</b>				<b>94955</b>	<b>71475</b>	<b>623</b>

#### Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Nos./Kg	Value (Rs.)	No. of Farmers
Bio Agents	Fruitfly trap ( Mango)	799 no.	27720	59
Others	Vermicompost	26430 kg.	132150	376

	Vermiculture	62.5 kg.	12500	27
--	--------------	----------	-------	----

**Production of livestock materials: nil**

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

A. KVK News Letter - Date of start :January – 2012      Number of copies to be published : 400

**B. Literature developed/published**

Item	Title	Authors name	Number
Research papers	1. Nutri Garden Model for Household Nutritional security in Tribal areas of Valsad	R.F.Thakor, P.R.Ahir&L.T.Kapur,	--
	2. Factors influencing adoption of Mushroom Production in Gujarat	R.F.Thakor, P.R.Ahir&L.T.Kapur,	--
News letters	Half yearly news letter	R.F.Thakor et.al	02
Technical bulletins	--	--	--
Popular articles	1. Dapog - Paddy seedling raising method	L.T.Kapur, R.F.Thakor	--
	2. Important cash crop of South Gujarat - Sugarcane	M,M,Gajjar,R.F.Thakor	
	3. Useful calculation of farming	M,M,Gajjar,R.F.Thakor	
	4. Vermicompost for soil health	M,M,Gajjar,R.F.Thakor	
	5. Crop residual management in farming	M,M,Gajjar,R.F.Thakor	
	6. Mushroom production-success story	P.R.Ahir	
	7. Weather information	P.B.Ratiya	
	8. Agromet advisory	P.B.Ratiya	
	9. Vermicomposting	P.R.Ahir	
Extension literature	1. Training manual for Certificate course on Pesticide mgt.	K.A.Patel&R.F.Thakor	50

**C. Details of Electronic Media Produced- Nil**

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	KVK- Valsad	248
2	Facebook page/ Account	KVK- Abheti-Valsad	933
3	Mobile Apps	--	--
4	WhatsApp groups	KVK Farmers Groups-06	1125
5	Twitter Account	KVK- Valsad	10
6	Any other (Pl. Specify)	www.kvkvalsad.org	--

**E. Success Stories / Case studies, if any (two or three pages write-up on each case with suitable action photographs).**

### **Income and employment generation through vermi compost**

Manjulaben Ramubhai Gavit  
 Village: Amdha, Ta. Kaparada, Di. Valsad  
 Mo. No. 9687872032



#### **Background**

Once Ranjanben Ganeshbhai Gavit attended the farmers shibir on organic farming organized by KVK. She got excited about rearing earthworms and preparing vermicompost. She interacted with the SMS of KVK on different occasion. She admitted that having only one acre of land. Soils are poorly fertile and thus applying higher doses of chemical fertilizers. It has increased the cost of cultivation. However situation started changing when he enrolled his name for training programme on vermicompost preparation in 2014-15.

**Technology:** Vermi compost production from farm waste

#### **Role of KVK:**

Five days skill oriented vocational training programme on vermi compost preparation was organized especially for the farm women having marginal land and desired to opt for composting farm waste using vermin culture. In which participants were taught about collection of dried leaves and other bio mass, spreading the bio mass in layers over the soil, application of worms, water application to maintain humidity, collection of ready compost, etc. KVK also provided all the participants –One vermi bed 12 x 4 x 2.5 ft with 2 kgs of Eudrillus eugenespp of worms. Ranjanben started small unit of vermin compost preparation on his farm. Looking to her entrepreneurial skills and interest, KVK established one movable floating type biogas plant with a capacity of 2.0m<sup>3</sup> made up of HDPE

material on her farm. Use of cow dung slurry to prepare vermi compost is a better option to convert farm waste to organic manure. The cow dung used for cake preparation is now being utilized to feed the biogas plant.

### The Success

Establishment of Biogas plant has inspired her to expand vermin compost production unit. She had initiated with 12 beds in 2014-15 and produced 4800 kg compost. Now a day she is able to managed 40 beds of vermicompost in a cycle, producing more than 20 tonnes of vermin compost per annum. She is the leading vermicompost producers earning average Rs. 50,000 /year from this business. Usually she sale out vermi culture @ Rs. 200-250 per kg and vermicompost (Rs.4-5//Kg) during last two years.

### Outcomes

Ranjanben formed a group of 20 women of the same village. kvk trained them and provided them vermibed and worms were given by Ranjanben Gavit on loan basis. Today more than 37 units are successfully producing vermicompost and are earning very good additional income.

### Economic analysis of vermicompost production

Sr. No.	Year	Bed filled Nos.	Total vermin compost production Kgs	Total vermin culture production Kgs.	Total income Rs.	Total Cost incurred including labour Rs	Net return Rs.
1	2014-15	12	4800	00	9600	12000	00
2	2015-16	13	7600	60	27000	11000	16000
3	2016-17	17	8400	75	40200	12500	27700
4	2017-18	22	11000	95	67750	10500	57250
5	2018-19	29	15400	105	105750	8000	92750
6	2019-20	39	20800	138	108725	12300	106425
	<b>Total</b>	<b>132</b>	<b>68000</b>	<b>473</b>	<b>359025</b>	<b>66300</b>	<b>300125</b>



Practical training on vermin composting farm waste

vermicompost ready for sale

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

- For bittergourd crop farmers use innovative methodology of use of veins cuttings for planting of bittergourd instead of sowing of seeds.

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

Sr.No.	Crop/Enterprise	ITK Practiced	Purpose of ITK
1	All crops grown by seed sowing.	A white thin thread tied in three lines around the field.	To protect the newly emerged shoots of seeds sown in the field from damage of the Peacock (birds). As they eats the shoots and tender leaves of plants.

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

**A. Practicing Farmers**

- Participatory Rural Appraisal
- Farmer group discussions
- Diagnostic services
- Existing cropping system

**B. Rural Youth**

- Participatory Rural Appraisal
- Farmer group discussions

**C. In-service personnel**

- Existing cropping system
- Feed back from state departments as well as NGOs

## 5.2. Indicate the methodology for identifying OFTs/FLDs

### For OFT:

- i) PRA
- ii) Problem identified from Matrix
- iii) Field level observations
- iv) Farmer group discussions

### For FLD:

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

## 5.3. Field activities

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

Block	Village	Year
Kaparada	Khuntli, Kharedi, Amdha, Ozarada	2012
	Mendha, Kakadkopar, Dhodhadkuva,	2015
Dharampur	Sadadvera , Pindval	2015
	Panva, Kilavani, Mamabhacha	2017
Pardi	Asma, Arnala, PatiPanchalai,	2014
	Lakhmapor, Chival, Samarpada	2015
Valsad	Ozar	2015
Umargam	Borigam ,Saronda	2015

- ii. No. of farm families selected per village : 25
- iii. No. of survey/PRA conducted : 02
- iv. No. of technologies taken to the adopted villages- 15
- v. Name of the technologies found suitable by the farmers of the adopted villages:
  - a) Improved variety of Paddy and Sugarcane crops for cereals.
  - b) Vermi compost preparation at farm level
  - C) Use of methyl eugenol trap in Mango
  - d) Use of plastic tray for vegetable seedling raising

- e) Mushroom production
- f) Improved variety of Pulse crops-Indianbean, Greengram, Pigeonpea,Chickpea
- g) Use of Azolla in paddy
- h) Improved variety of Bittergourd for tuber crops
- i) Perennial fodder grass variety
  - j) Jivamrut and bio pesticides preparation at farm level.
- vi. Impact (production, income, employment, area/technological– horizontal/vertical): Pl see results item no.12
- vii. Constraints if any in the continued application of these improved technologies :
  - a) Non availability of spawn of mushroom
  - b) Unavailability of seeds of improved variety.
  - c) High cost of inputs i.e. chemical of trap, plastic tray etc.

## 6. LINKAGES

### A. Functional linkage with different organizations

Sr. No.	Name of organization	Nature of linkage
1	Navsari. Agril. Uni. Navsari	Provides expertise for latest technology and supply of improved seeds of paddy,greengram,pigeonpea, sugarcane, indianbeanand Trichoderma, LBFand Pseudomonas etc. RAWE Programme
2	ATMA	Training and lectures of kvk experts in organizing farmersshibir.
3	Dept. of Agril. Valsad.	Involvement of kvk experts for delivering lectures, farmers seminars and extension functionaries' trainings.
4	NIPHM	Certificate course for pesticide dealers
5	Dept. of Animal husbandry, Valsad	Joint organization of pashupalanshibir
6	Vasudhara dairy	Joint implementation of farmers, farm women & ext. functionaries training.
7	J. N. Trust, Kaparada	Joint implementation of farmers & ext. functionaries training & seminars.
8	Dept. Social forestry	Farmers shibir
9	Zandu farm	Biotech Kishan hub project &Farmers shibir
10	ICDS	Ext. functionaries training
11	BAIF	Joint implementation of farmers, farm women training.
12	JSS	Joint implementation of ext. functionaries training.
13	Mushroom training centre, Vapi	Joint implementation of mushroom training.

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

### C. Details of linkage with ATMA- a) Is ATMA implemented in your district -- Yes

#### Coordination activities between KVK and ATMA

S. No.	Programme	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks
01	Meetings	4	4	
02	Research projects			
03	Training programmes			
04	Demonstrations			

05	Extension programmes			
	Technology week			
	Exposure visit	3	0	
	Exhibition			
	Soil health camps			
	Animal health campaigns			
	Capacity development			
06	Video films			
	Extension literature		2	

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

**E. Nature of linkage with National Fisheries Development Board – Nil**

**F. Details of linkage with RKVY**

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	ASCI -Training	Training- Tractor Operator	263500	215935	

**G. Details of linkage with PKVY (ParamparagatKrishiVikasYojana)- nil**

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

**H. Details of linkage with NFSM**

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	CLFD-Pulses	Technology demonstration	180000	172000	NFSM Gram&Greengram

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

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

Sr. No.	Name of agencies and departments	Nature of convergence
1	Dept. of Agril. Valsad.	Involvement for delivering lectures, farmers seminars and extension functionaries trainings.
2	Dept. of Animal husbandry, Valsad	Joint organization farmers shibir
3	ATMA, Valsad	Involvement of kvk experts for delivering lectures in training, FFS, seminars, etc.
4	Dept. Social forestry	Farmers shibir

### 8. Innovator Farmer's Meet –Nil

### 9. Farmers Field School (FFS) –Nil

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

Sr. No	Name of Crop/ Commodity	Technical Feedback
1	Paddy	Mid late variety with small grain size, non lodging, seed rate as well as seedling rate has been reduced to 20-30 %. Grain quality is better for culinary purpose compared to hybrid varieties.
2	Fingermillet	Variety had less incidence of pest- disease compare to local variety.
3	Greengram	GAM-5 variety is found resistant to YMV with bold grain size and uniform maturity. Good yield with attractive shiny grain appearance
4	Gram	Gram variety GG-6- early maturity, bold size with good attractive yellow colour, more number of pod per plant, good yield in rainfed condition
5	Pigeon pea	GT 104 variety – mid late (150-160 Days), bold size with white colour, good for Dal making, good cooking quality, less problem of wilt and sterility mosaic virus.
6	Bittergourd	Management of fruitfly increased the yield. Size, Shape and quality of fruit preferred by local market
7	Indianbean	More number of pods per branch, early pod setting.
8	Sugarcane	Seed rate has been reduced to 50%.

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

- Pigeonpea variety which mature early on conserve moisture needed for sloppymuram type soil.
- Early to midlate lodging resistant variety for paddy and finger millet should developed for heavy rainfall area of south Gujarat
- Indian bean variety with red colour seeds needs to be developed

11. Technology week celebration during 2021- No

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

### 13. IMPACT

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

Sr . No.	Name of specific technology/skill transferred	No . of participants	% Adoption	Change in income (Rs.)	
				Before training Rs / unit	After training Rs / unit
1	HYV s of Sugarcane	55	67	102619Rs. / ha.	122460Rs. / ha.
2	HYV s of Paddy	115	80	26076Rs. / ha.	34075Rs. / ha.
3	HYV s of Fingermillet	80	60	12,500 Rs. / ha.	15,400 Rs. / ha.
4	HYV s of Brinjal	40	75	89,500 Rs. / ha.	127,000 Rs. / ha.
5	HYV s of Green fodder	80	100	32,800 Rs. / ha.	44,400 Rs. / ha.
6	Q lure traps IPM in Vegetable crops ( cucurbits)	60	85	44,000 Rs. / ha.	57,000 Rs. / ha.
7	Mushroom Production	48	40	--	115000Rs./farmer

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

**Title :Harvesting Nutrition through Gangama Nutri- garden**

#### Situation analysis

Undernourishment was observed in tribal areas. These tribal people are known as the Adivasi, who were considered as poorest in the country, and are still dependent on agriculture and fishing. The tribal population is at a higher risk of under nutrition because of their dependence on primitive agricultural practices and also transition of occupation as daily wagers and irregularity of food supply. Insufficient food intake leads protein energy malnutrition and chronic energy deficiency.

The backyard areas of majority of small and marginal tribal families remain fallow or unutilized, which is a common phenomenon in tribal areas of Valsad district. There is a scope to bring these backyards under vegetable production through kitchen gardening. This ultimately will play a vital role in ensuring food and nutritional security to the tribal families and also can provide supplementing income to them.

### **Plan, Implementation and Support**

Tribal women farmers, who are interested and having backyard space were chosen for backyard kitchen gardening training . More than 350 tribal women were trained by KrishiVigyan Kendra about kitchen gardening i.e. selection of plot, selection of vegetables, lay out preparation, organic inputs, etc.

### **Demonstration**

KVK popularize Gangamamandal design of nutri garden which enables to produce large no of various types of crops with limited resources like land ,water, labour etc. Mandal is a circular garden 30 feet in diameter, covering less than 800 sq.ft area includes four circles. The diameter of outer circle is 42 sq. ft. The radius of two inner and inner most circles is 4 ft. and 2 ft respectively. The whole circle is divided in to seven equal parts by 1.5 ft pathway. Each circle has approximately 1ft width useful various operations without disturbing adjacent plot/plants. The plants are grown in a circular beds arrayed in the centre as well as on both the sides of the path way. It includes proper combination of short and long duration vegetables, vine crops and herbal medicinal plants. After underwent training, KVK provided her a kit includes... quality seeds and seedlings of vegetables i.e Chilly, Brinjal, Tomato, pulses, vine crops , basils , turmeric, ginger , garlic, drumstick etc Vegetable seeds kits were provided to all the beneficiaries under TSP schemes . Besides, the families were given continuous guidance for regularly nurturing the garden.

### **Output**

From 2017-2018 to 2019-20 during last three years tribal farm families are practicing Organic vegetable production through Gangama Nutri garden layout. On small piece of land in their backyard producing 20-22 types of vegetables crops. They are happy to enhance the nutritional affordability for her family and earn an addition income from sale of surplus produce. It does not only fulfill the requirements of vegetables of her family throughout the year but also increases income of Rs. 10000 to 12500 per annum through sale of fresh organic vegetables.

### **Outcome**

- Looking to her efforts around 130 Kitchen Garden have been prepared in the backyard by tribal women beneficiaries of 18 villages. It decreases expenditure on vegetables, increase the availability of varied vegetables in the diet and increase av. income of Rs. 2300 to 4500 per annum.
- As many as 417 supervisors of Integrated Child Development schemes (ICDS) of valsad district have been trained on this aspect.
- As many as 195 primary teachers of the valsad district have been trained on nutria garden.
- More than 135 schools of the district have prepared the nutrigarden in their school with a view to provide nutritional literacy among tribals.

KVK has supplied more than 4500 plantlets of moringa (moringaoleifera) amongst 615 tribal farm families of the district during last five years

### Impact

The hard work ultimately paid off. All the families were able to turn the neglected spaces of their houses to flourishing gardens. It decreases expenditure on vegetables, increase the availability of varied vegetables in the diet and increase av. income of Rs. 2000 to 2500 per month. The collateral benefit from this model has been the empowerment of farm women through increased participation in cultivation practices in organic vegetables and earnings from selling the excess produce in local markets. In addition the farm families practicing with nutria garden had saved Rs. 8000/- towards the purchase of expenditure of fresh vegetable from the market..



Field day on Nutrigarden

Harvesting nutrition

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

- High yielding varieties were promoted in Paddy - Sardar, Green gram- GM 5, Chickpea- GG-6, Pigeon pea- GT-104, Finger millet- Guj. Nagli-6, Indian bean – Guj. Val-2, Green fodder Co4, Sweetpotato – C-71, Drumstick –PKM-1
- Women entrepreneur development : Mushroom, Vegetable nursery
- Nutritional Security – Kitchen garden (Gangama circle)
- Skill development training -Tractor operator
- Production and Supply of technological inputs- – Paddy (63qt HYVs variety produced and supplied to 825 farmers), Sugarcane 165.25qt HYVs variety produced and supplied to 14 farmers), Vegetable seedlings (29300 HYVs variety produced and supplied to 155farmers)
- More than 400 farmers have adopted HYVs of perennial fodder variety CO-4.
- Bio agent production – Fruit fly traps (About 80 ha. Mango crop area covered.)
- Soil Testing Campaign. ( More than 546 farmers were covered for soil test and provided soil health cards.)
- Adoption of bio pesticides like Neem oil, Pseudomonas, Beuvaria, Pheromone traps, fruit fly traps, etc.
- Promoting organic farming- More than 376 farmers were promoted for use of vermicompost.

### 14. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
Jan 2021	01	16423	--
Feb 2021	00	00	--
March 2021	01	16428	--
April 2021	01	16416	--
May 2021	00	00	--
Jun 2021	00	00	--
Jul 2021	02	38272	--
Aug 2021	00	00	--
Sept 2021	01	16438	--
Oct 2021	00	00	--
Nov.2021	00	00	--
Dec.2021	00	00	--

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
Valsad	Text only	01	--	05	-	0	--	06
	Voice only	--	--	--	--	--	--	--
	Voice & Text both	--	--	--	--	--	--	--
	<b>Total Messages</b>	<b>01</b>	<b>--</b>	<b>05</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>06</b>
	<b>Total farmers Benefitted</b>	<b>16416</b>	<b>--</b>	<b>82161</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>98577</b>

## 15. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Vermi compost	2003-04	0.1	Eudriluseugeniae	Vermicompost	26.5 ton	34,000	1,32,500	Farm use & 100 farmers
2		2003-04	0.1	Eudriluseugeniae	Vermiculturw	62.5 kg		12500	
	Dairy	2003-04	0.2	H.F.	Milk	3468lit	344364	110900	
	Dairy	2003-04	0.2	H.F.	FYM	30 tone	--	22500	
	Dairy	2003-04	0.5	Co.-4	Green fodder	65200 no.	25,000	62500	403farmers
	Veg. Nursery	2002-03	0.2	Hy seedling of Brinjal, Chilli, Tomato	Seedling	29300 no.	10000	32650	155
	Mango germplasm demo	2006-07	0.25	Keshar, Alphanso, Amrapali, Rajapuri,	--	--	--	--	
	Bio Agents	2009-10	--	--	ME trap	799 no.	29000	31960	59

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

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Paddy	30/11/2021	10/05/2022	2.5	Sardar	Seed production	6300 kg	105000	18900	
Pulses									
Pigeon pea	30/06/2020	22/10/2020	0.1	GT 104	Seed production	76 kg	2400	7600	
Spices & Plantation crops									
Fruits									
Mango	1999	-	3.0	Kesar, Alphonso	Commercial	2200g	40,000	36,000	
Others (specify)									
Sugarcane	18/12/2020	20/10/2021	0.5	Co.N.-13073	Seed production	162qt	25000	53625	Damage by Pigs
Sugarcane	20/10/2020	--	2.0	Co.N.- 13073	Commercial	100 tone	1,50000	323619	
Fodder	24/11/20	Multicut	0.20	Co.-4	Seed production	65200 tussecks	12,000	65200	
Eucalyptus	2015	--	2	JK-413	Commercial	--	1,35,000	Crop is standing	
Casurina	2021	--	1.0	Clonal CPM-C-5	Commercial	--	65,000	1310000	

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	Fruitfly trap ( Mango)	799 no.	29000	31960	59farmers

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

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Cow	H.F.cross (06)	Milk	3468litres	344364	110900	
			FYM	30 tones	--	22500	Vermin compost
			Sale of animals (Cow)	00	--	00	

**E. Utilization of hostel facilities- Nil Due to Covid-19****F. Database management**

S. No	Database target	Database created
--	--	--

**G. Details on Rain Water Harvesting Structure and micro-irrigation system-Nil****H. Performance of Nutritional Garden at KVK farm**

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

If yes,

**Nutritional Garden developed at KVK farm**

Area under nutritional garden (ha)	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers visited
800 sq.ft	Vegetable crops	Brinjal, Chilli, tomato,Okra, Fennugreek,spinach, coriander, cowpea,clusterbean, carrot, radish, bottlegourd, onion, palak,garlicetc,	162
	Fruit crops	Papaya	
	Others if any	Mint, basil, turmeric	

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

No. of Villages covered	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers covered
	Vegetable crops	Brinjal, Chilli, tomato, Okra, Fennugreek, spinach, coriander, cowpea, clusterbean, carrot, radish, bottlegourd, onion, palak, garlic etc,	122
	Fruit crops	Guava, Papaya,	
	Others if any		

**H. Details of Skill Development Trainings organized**

S.No.	Name of KVKs/SAUs/ICAR Institutes	Name of QP/Job role	Duration (hrs)	No. of participants					
				SCs/STs		Others		Total	
				Male	Female	Male	Female	Male	Female
1	Valsad	Tractor Operator	200	20	00	00	00	20	00

## 16. FINANCIAL PERFORMANCE

### A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	State Bank of India,	Ahmedabad	2628	Gujarat Vidyapith	10295506650	380002006	SBIN0002628
With KVK	State Bank of India, Dena bank	Dehgam Motapondha	07811 ---	Gujarat Vidyapith KrishiVigyanKendra,Ambhti	35719395798 089810003112	396002026 396018505	SBIN0007811 BKDN0240898

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

S. No.	Particulars	Sanctioned	Released	Expenditure
<b>A. Recurring Contingencies</b>				
1	<b>Pay &amp; Allowances</b>	195.00	178.04	212.63
2	<b>Traveling allowances</b>	1.50		0.48
3	<b>Contingencies</b>			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	7.50	13.33	2.44
B	POL, repair of vehicles, tractor and equipments			1.44
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	11.00		1.58
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			0.68
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			4.96
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			0.49
G	Training of extension functionaries			0
H	Maintenance of buildings			1.06
I	Establishment of Soil, Plant & Water Testing Laboratory			0
J	Library			0
<b>TOTAL (A)</b>			<b>191.37</b>	<b>225.76</b>
<b>B. Non-Recurring Contingencies</b>				
1	<b>Works</b>	--	--	--
2	<b>Equipments including SWTL &amp; Furniture</b>	--	--	--
3	<b>Vehicle</b> (Four wheeler/Two wheeler, please specify)	--	--	--
4	<b>Library</b> (Purchase of assets like books & journals)	--	--	--
<b>TOTAL (B)</b>		--	--	--
<b>C. REVOLVING FUND</b>				
<b>GRAND TOTAL (A+B+C)</b>		215.00	191.37	225.76

**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	9296467	1965956	1465292	9797131
April 2020 to March 2021	9797131	1812959	1233826	10376264
April 2021 to Dec 2021	10376264	734395	757817	10352842

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

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
.M.M.Gajjar, L. T. kapur, B.M.Patel , P. R.Patel	SMS	Training on Techniques for Promotion of BPKP	BhaikakaKrushi Kendra, Anand	5-7/3/21
K.A.Patel, A R.Patel, L. T. kapur, B.M.Patel , P. R.Patel	SMA	Natural farming	DEE, NAU, navsari	23-25/9/21
<b>Dr. B. M. Patel</b>	Pro. Asstt.	SPNF	ATMA & Dept. of cooperation	26/11 to 2/12/21

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

Name of the village	Total No. of families surveyed	Key interventions implemented	No. of farmers covered in each intervention	Change in income (Rs/family) (Average)	
				Before	After
Lakhmapor	31	<ul style="list-style-type: none"> <li>• Improved variety and IPDM in Pulse crops</li> <li>• Improved variety and IPDM in Paddy</li> <li>• ICM in mango, sugarcane, banana</li> <li>• ICM in vegetable crops</li> </ul>	86	48572	101501
Khuntali	79		110	70892	143900
			27		
		45			

**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	Trainings	05	Training on Nurserymanagement, Kitchen garden, Mushroom production, value addition in Fingermillet	10	243
2	Group meetings	01	Group discussion	18	18
3	Demonstration	02	Kitchen garden	25	25

**19. Details of Progress of ARYA Project- Nil**

**20. Details of SAP**

S. No.	Types of major Activity conducted- SwachhtaPakhwada, Cleaning, Awareness Workshop, Micoobial based Agricultural Waste Management by Vermicomposting etc.	No. of Programmes conducted	No. of Participants
1	Sawachhata Pledge- PM- Natural farming National Conclave	--	92
2	Office cleaing	3	08
3	Cleaning of offices, corridors and premises.	1	05
4	Collection and Utilization of organic wastes .	1	05
5	Removal of from composting organic in one nearby village	2	05
6	Vermicompost technology demonstrations for conversion of waste to wealth	2	08
7	Celebration of <u>Special Day- KisanDiwas</u>	--	52
8	Swachhata awareness	1	24
9	Cleanliness of Local places	2	12
10	Collection and Utilization of organic wastes .	1	05
11	Awareness on waste management	3	29
12	Water harvesting	7	24
13	Creating awareness on treatment & safe disposal of bio-degradable farm waste .Recycling of farm waste and Jivamrut Preparation	17	24
14	Swachhatawereness at Local places	--	25

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

**POSHAN MAAH CELEBRATION**

<b>Sr. no</b>	<b>Name of Event</b>	<b>No. of Event</b>	<b>Participants</b>
1	Shibir	01	105
2	Tree plantation	01	29
3	Gosthi	03	52
4	Anganwadi visit	05	65
5	Recepiecompitition	01	105
6	Video conference	02	229

## APR SUMMARY

### 1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	96	1604	1165	2769
Rural youths	03	25	45	70
Extension functionaries	04	67	40	107
Sponsored Training	0	0	0	0
Vocational Training	01	20	0	20
<b>Total</b>	<b>104</b>	<b>1716</b>	<b>1250</b>	<b>2966</b>

### 2. Frontline demonstrations

Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	--	--	--
Pulses	280	35.90	280 units
Cereals	290	53.50	290 units
Vegetables	60	9.50	60 units
Other crops (sugarcane)	10	1.00	10 units
Green fodder –fodder sorghum	87	8.00	87 units
<b>Total</b>	<b>727</b>	<b>107.90</b>	<b>727 units</b>
Other enterprises			
Mushroom	48	--	48units
Kitchen gardening	21	0.21	21units
Vermicompost	20	--	20units
Plug Nursery	22	--	22units
<b>Total</b>	<b>111</b>	<b>0.21</b>	<b>99 units</b>
<b>Grand Total</b>	<b>838</b>	<b>108.11</b>	<b>838 units</b>

### 3. Technology Assessment

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
<b>Technology Assessed</b>			
Crops	05	80	80
Livestock	01	20	20
<b>Total</b>	<b>06</b>	<b>100</b>	<b>100</b>
<b>Technology Refined</b>			
Crops	--	--	--
Livestock	--	--	--
Various enterprises	--	--	--
<b>Total</b>	<b>--</b>		
<b>Grand Total</b>	<b>06</b>	<b>100</b>	<b>100</b>

### 4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	118	8173
Other extension activities	07	52
<b>Total</b>	<b>125</b>	<b>8225</b>

### 5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages					Other enterprise	Total
		Crop	Livestock	Weather	Marketing	Awareness		
Valsad	Text only	01	--	05	-	0	--	06
	Voice only	--	--	--	--	--	--	--
	Voice & Text both	--	--	--	--	--	--	--
	<b>Total Messages</b>	<b>01</b>	<b>--</b>	<b>05</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>06</b>
	<b>Total farmers Benefitted</b>	<b>16416</b>	<b>--</b>	<b>82161</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>98577</b>

#### 6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	236.01	250225
Planting material (No.)	94955	71475
Bio-Products (kg)	264.92	144650
Bio Agents - Fruitfly trap ( Mango)	799 no.	27720
Livestock Production (No.)	00	00
Fishery production (No.)	00	00

#### 7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil - 546	544	35230
Water - 81	81	4050
Plant - 57	62	--
<b>Total - 684</b>	<b>687</b>	<b>39280</b>

#### 8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	0
2	Conferences	0
3	Meetings	4
4	Trainings for KVK officials	3
5	Visits of KVK officials	5
6	Book published	-
7	Training Manual	01
8	Book chapters	-
9	Research papers	02
10	Lead papers	-
11	Seminar papers	-
12	Extension folder	1
13	Proceedings	-

14	Award & recognition	-
15	On going research projects	-