

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

**1. GENERAL INFORMATION ABOUT THE KVK**

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

Address with PIN code	Telephone		E mail	Website address & No. of visitors (hits)
	Office	FAX		
Krishi Vigyan Kendra Navsari Agricultural University Athwa Farm, Surat Dist. Surat, Gujarat-395007	(0261) -2655565	(0261) 2668045 pp	<a href="mailto:kvksurat@nau.in">kvksurat@nau.in</a>	www.nau.in kvk.icar.gov.in

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

Address	Telephone		E mail	Website address
	Office	FAX		
Director of Extension Education Navsari Agricultural University Navsari	(02637) 282026	(02637) 282706	dee@nau.in	www.nau.in

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. J. H. Rathod	0261 655565	81286867 20	<a href="mailto:hariom.janaksinh@gmail.com">hariom.janaksinh@gmail.com</a>

**1.4. Date and Year of sanction: 2012**

**1.5. Staff Position (as on December, 2021)**

Sl. No.	Sanctioned post	Name of the incumbent	Mobile No.	Discipline	If Permanent, Please indicate		Date of joining	If Temporary, pl. indicate the consolidated amount paid (Rs./month)
					Current Pay Band	Current Grade Pay		
1.	Senior Scientist and Head	Dr. J. H. Rathod	8128686720	Entomology	13140-217100	--	16.11.16	Temporary (189994)
2.	Subject Matter Specialist	Dr. R. K. Patel	9979892927	Crop Protection	68900-20550	--	01.02.19	Temporary

				on	0			(103059)
3.	Subject Matter Specialist	--		Animal Husbandry	Vacant	--		
4.	Subject Matter Specialist	Mr. S. J. Trivedi	9429018082	Agronomy	68900-205500	--	01.06.18	Temporary (112158)
5.	Subject Matter Specialist	Smt. B. B. Panchal	9662431848	Horticulture	57700-182400	--	20.01.17	Temporary (78834)
6.	Subject Matter Specialist	Smt. G. J. Bhimani	8511178903	Home Science	68900-205500	--	05.02.16	Temporary (100059)
7.	Subject Matter Specialist	--		Extension	Vacant			
8.	Programme Assistant	Mr. A. T. Patel	9687614098	--	39900-126600	--	12.07.12	Temporary (54880)
9.	Computer Programmer	Mr. C. G. Lad	9979393220	--	39900-126600	--	10.08.15	Temporary (54880)
10.	Farm Manager	Mr. Y. D. Patel	9586383403	--	39900-126600	--	10.08.15	Temporary (56501)
11.	Accountant/Superintendent	Mrs. B. C. Patel	9925269266	--	35400-112400	--	01.07.17	Temporary (61455)
12.	Stenographer	Mrs. J. M. Verma	9426760841	--	25500-81100	--	19.08.15	Temporary (30375)
13.	Driver 1	Vacant		--	--	--	--	--
14.	Driver 2	Vacant		--	--	--	--	--
15.	Supporting staff 1	Vacant		--	--	--	--	--
16.	Supporting staff 2	Vacant		--	--	--	--	--

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

S. No.	Item	Area (ha)
1	Under Buildings	1.73
2	Under Demonstration Units	1.00
3	Under Crops	10.80
4	Horticulture	0.75
5	Pond	--
6	Others if any (Specify)	--

#### 1.7. Infrastructural Development:

##### A) Buildings

S. No.	Name of building	Source of	Stage	
			Complete	Incomplete

		funding	Completion Year	Plinth area (Sq. m)	Expenditure (Rs.)	Starting year	Plinth area (Sq. m)	Status of construction
1.	Administrative Building	--	Under Construction	--	--	--	--	--
2.	Farmers Hostel	--		--		--	--	--
3.	Staff Quarters (6)	--	--	--	--	--	--	--
4.	Demonstration Units (2)	--	--	--	--	--	--	--
5.	Fencing	--	--	--	--	--	--	--
6.	Rain Water harvesting system	--	--	--	--	--	--	--
7.	Threshing floor	--	--	--	--	--	--	--
8.	Farm godown	--	--	--	--	--	--	--
9.	ICT lab	--	--	--	--	--	--	--
10.	Other	--	--	--	--	--	--	--

#### B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Running	Present status
Jeep (Tata)	2012	599999	220000	Working
Tractor	2012	549900	1027(h)	Working

#### C) Equipments & AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Cultivator	2012-13	22500	Working
Plough	2012-13	22500	Working
Lenovo Computer with printer- 4	2015-16	162816	Working
Canon printer- 4	2015-16	34704	Working
Canon Copier machine	2015-16	47565	Working
Multi- media projector-2	2015-16	103691	Working
DSLR Camera	2015-16	39555	Working
Digital camera	2015-16	10305	Working
Multicrop Thresher	2016-17	180000	Working
Rotavetor	2016-17	67210	Working
Disc Harrow	2016-17	95000	Working
Multicrop seed cum fertilizer drill	2016-17	42000	Working
Bund former	2016-17	18000	Working
Cage wheel	2016-17	30450	Working
Ridger (with danti)	2016-17	13125	Working
Hydraulic luggage box	2016-17	16800	Working
V Ditcher	2016-17	12600	Working
Plank	2016-17	32550	Working
RO water purifier with cooler	2016-17	78000	Working

Mrida Parikshak Soil Testing minilab-kit	2016-17	86000	Working
A/C-2	2016-17	80,000	Working
Tractor mounted sprayer	2018-19	13806	Working
Brush cutter	2018-19	24632	Working

### **1.8. Details of SAC meeting conducted in the year:**

#### **Proceeding of 10<sup>th</sup> Scientific Advisory Committee Virtual Meeting of Krishi Vigyan Kendra, NAU, Surat held on 25/01/2022 at 03:30 p.m.**

The Tenth Scientific Advisory Committee Meeting of Krishi Vigyan Kendra, NAU, Surat was held at KVK, Surat on 25<sup>th</sup> January, 2021 on virtual mode to review the progress made by KVK during last year (01-01-2021 to 31-12-2021) and to discuss the future action plan for the next year (January-2022 to December-2022). The meeting was chaired by Dr. Z. P. Patel, Hon'ble Vice Chancellor, Navsari Agricultural University, Navsari, Dr.T.R.Ahlawat, Director of Research and Dean PG studies, NAU, Navsari, Dr. C. K. Timbadia, Director of Extension Education, NAU, Navsari, Dr.Lakhansinh, Director, ATARI-Pune and Mr. K. S. Patel, Joint Director of Agriculture, Surat grace the meeting. Dr. J. H. Rathod, Member Secretary & Senior Scientist and Head, Krishi Vigyan Kendra, Surat welcomed all the dignitaries, committee members, farmers and other invitees. He presented overall activities and achievements made by the KVK during the mentioned year. Scientists also presented the discipline wise activities & achievements made by them. Activities done by KVK, Surat was appreciated by the house and congratulated the Senior Scientist and Head and his team for addressing the key issues as per the need of the farmers of Surat district. The Action Plan for the next year was also presented before the house and it was approved by the house.

Dr. C. K. Timbadia, Director of Extension Education, NAU, Navsari congratulated team of KVK for good work done during the last year and gave suggestions to give more emphasis on organic/ natural farming during training and to add organic inputs as one of the components of FLD. He also appreciated the collaboration of Krishi Vigyan Kendra, Surat with other line departments.

Dr.Lakhansinh, Director, ATARI-Pune also emphasized the need for documentation of natural farming and one acre demonstration of natural farming plot at each KVK.

Dr. Z. P. Patel, Hon'ble Vice Chancellor appreciated the activities of Krishi Vigyan Kendra, Surat. He wish that Surat-KVK should become model KVK of the country. He advised Scientists to work for urban people also.

### **9.1 Approval of the minutes of Ninth Scientific Advisory Committee.**

The action taken report of the minutes of ninth SAC meeting (Held on 18.12.2020) was presented before the house and it was approved by the Scientific Advisory Committee.

### **9.2 Progress made by KVK during 01-02-2021 to 31-12-2021**

Senior Scientist and Head and all Scientists of the KVK, NAU, Surat presented the report on progress made by KVK, for the period of 01-01-2021 to 31-12-2021. The committee was satisfied with the activities and achievements made by the KVK.

### **10.3 Action plan for the period of January 2022 to December 2022.**

Discussion was made on the Action Plan for the period of January 2022 to December 2022 which was approved by the house. However, few suggestions were made by the house to strengthen the action plan.

<b>10.3.1</b>	Give FLD on high yielding variety of grain & fodder sorghum.
<b>10.3.2</b>	Include sorghum in natural farming plot
<b>10.3.3</b>	Soil quality parameters especially organic carbon should be measure of natural farming plot.
<b>10.3.4</b>	Entrepreneurship development activity like vermicompost, mushroom, honeybee should be done
<b>10.3.5</b>	Work on nutritional garden.

<b>10.3.6</b>	Activities regarding peri-urban agriculture/ olericulture/ floriculture/ ornamental/ vertical gardening.
<b>10.3.7</b>	Provide marketing support to farmers for natural/organic agricultural products.
<b>10.3.8</b>	Mention number of beneficiaries and area in organic inputs.
<b>10.3.9</b>	Support NABARD in FPO formation.
<b>10.3.10</b>	Organize innovative farmers meet.

The meeting was ended with vote of thanks by Dr. J. H. Rathod, Senior Scientist & Head, KVK, NAU, Surat.

**Member Secretary & Senior Scientist and Head  
Krishi Vigyan Kendra, Athwa Farm, Surat**

**Chairman SAC and Vice – Chancellor  
Navsari Agricultural University  
Navsari**

**Following members and invitees were remained present in 10<sup>th</sup> Scientific Advisory Committee meeting.**

1	Dr. Z. P. Patel	Hon'ble Vice Chancellor, NAU, Navsari	Chairman
2	Dr. Lakhansinh	Director, ATARI-Pune	Member
3	Dr. T. R. Ahlawat	Director of Research and Dean PG Studies, NAU, Navsari	Member
4	Dr. C. K. Timbadia	Director of Extension Education, NAU, Navsari	Member
5	Shri. K. S. Patel	Joint Director of Agriculture, Surat	Member
6	Dr. Anil R. Chinchmalatpure,	Head, CSSRI (ICAR), RRS, Bharuch	Member
7	Dr. V. P. Usdadia	Professor & Head, Dept. of Agronomy, NMCA, Navsari	Member
8	Dr. D. R. Bhanderi	Professor and Head, Department of Horticulture, NMCA, NAU, Navsari	Member
9	Representative	Research Scientist, LRS, NAU, Navsari	Member
10	Shri. N. K. Gabani	Project Director, ATMA, Surat	Member
11	Mrs. Kuntal Surati	DDM, NABARD, Surat	Member
12	Mr. N. G. Gamit	District Agriculture Officer & Dy. Director of Agriculture, Surat	Member
13	Representative	District Horticulture Officer, Surat Represented by Priti R. Desai, ADH, Surat	Member
14	Dr. Navin M. Patel	Deputy Director of Animal Husbandry, Surat	Member
15	Representative	Deputy Director of Fisheries, Surat	Member
16	Mr. A. M. Bharada	Prayojana Vahivatdar, Tribal Sub Plan, Mandvi, Dist: Surat	Member
17	Mr. Ashwin Desai	Managing Director, Sumul Dairy, Surat	Member
18	Mr. Ramkumar Singh	Director and Managing trustee, Suruchi Centre, Bardoli	Member
19	Mr. Bharat Patel	Reliance Foundation, Surat	Member
20	Mr. Chaudhary	Lead District Manager, Bank of Baroda, Surat	Member
21	Dr. Santosh	Scientist, Regional Fodder Station, P.O.-Dhamrod, Tal: Mangrol, Dist: Surat	Member
22	Dr. M. C. Patel	Research Scientist (Cotton), Main Cotton Research Station, NAU, Surat	Special Invitee
23	Dr. B. K. Davda	Research Scientist (Sorghum), Main Sorghum Research Station, NAU, Surat	Special Invitee
24	Dr. J. H. Rathod	Senior Scientist and Head, KVK, Surat	Member Secretary
25		All 4 Scientists, KVK, Surat	

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

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

S. No	Farming system/enterprise
1	Crop production
2	Crop production and Horticulture
3	Crop production and Livestock
4	Crop production, Horticulture and Livestock

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

#### a) Soil type

Taluka (AES)	Soil texture	Rainfall (mm)	Crops	Features
(AES-1) Mandvi (30%), Mangrol (40%), Umarpada	Hilly and highly undulating fine texture, highly erosive	< 1100	Paddy, Maize, Cotton, Sorghum, Pulses	Highly erosive Shallow to medium in depth Poor permeability Low to medium N & P content
(AES-2) Bardoli, Choryasi (75%), Kamrej, Palasana, Surat and Mahuva	Leveled, deep, fine textured	> 1450	Sugarcane, Paddy, Sorghum, Pulses, Orchards	Poor drainage Water logging Very poor permeability Poor soil physical condition Low to medium in N & P content
(AES-3) Mandvi (70%), Mangrol (60%), Olpad (70%)	Deep to medium black	1000 – 1250	Sorghum, Pulses, Paddy, Cotton, Oil Seeds	Moderate to severe erosive Poor soil fertility Poor irrigation facility
(AES-4) Choryasi (25%), Olpad (30%)	Coastal plain, deep, fine texture, salt affected	900-1000	Paddy - Cotton, Sorghum, Pulses, Wheat	High salt accumulation Poor soil physical condition High water table Water logging condition

#### b) Topography

S. No.	Agro ecological situation	Characteristics
1	(AES-1)	Hilly and highly undulating fine texture, highly erosive
2	(AES-2)	Leveled, deep, fine textured
3	(AES-3)	Deep to medium black
4	(AES-4)	Coastal plain, deep, fine texture, salt affected

### 2.3 Soil Types

S. No	Soil type	Characteristics	Area in ha
1	Inceptisols	Inceptisols are found on the hilly areas as well as along the hill slopes. These soils are shallow to moderately deep	

		and highly eroded. Their texture varies from loamy to clay. Their water holding capacity is moderate. They are moderate to high in nitrogen, low in phosphoric acid and high in potash content.
2	Vertisols	Vertisols are found in the midlands and flood plains. These soils are very deep and silty to clay in texture. Their water holding capacity varies with clay content. These soils crack on drying and have poor drainage characteristics. These are moderate in nitrogen, low to medium in phosphoric acid and high in potash content
3	Coastal saline soils	The soils are sandy clay loam to clay in texture. The soil reaction varies with situation ranging from neutral to highly alkaline. These soils are normally medium in fertility.

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

### 2.4.1 Field Crops cultivated in the district:

S. No	Crop	Area (ha)	Production (MT.)	Productivity (Qt./ha)
<b>Kharif crops</b>				
1	Paddy Irrigated	32907	113858	3460
2	Paddy rainfed	5701	9349	1640
3	Kh. Sorghum	11052	14091	1275
4	Kh. Maize	1245	1942	1560
5	Pigeon pea irrigated	916	1032	1127
	Pigeon pea- rainfed	9506	7224	760
6	Green gram	944	690	651
7	Urid	1587	415	658
8	Other pulses	347	183	530
9	Ground nut	530	816	1540
10	Sesame	26	11	435
11	Castor	30	50	1667
12	Cotton	2352	4515	1920
13	Soybean	9830	8620	877
14	Vegetables	31991	0	--
15	Fodder	7164	0	--
16	Green manuring	7616	0	--
	<b>Total</b>	<b>123796</b>	<b>0</b>	<b>--</b>
<b>Rabi-summer crops</b>				
1	Paddy ( Summer)	2732	12594	4610
2	Wheat	6305	24570	3942
3	Sorghum	6305	10863	1723
4	Maize	862	1873	2174
5	Bean	824	717	871
6	Pigeonpea	1085	1334	1230
7	Greengram summer	2041	1353	663
8	Gram	1453	1275	878
9	Groundnut Summer	409	889	2176

10	Sugarcane	84464	7816298	92540
11	Castor	43	78	1823
12	Mustard	79	93	1186
13	Fodder	2675	--	-
14	Vegetables	9368	-	-
	<b>Total</b>	<b>118911</b>		

Source: District agriculture department.

#### 2.4.2 Fruit crops cultivated in the district

Crop	Area (Ha.)	Production (MT)	Productivity (MT)
Mango	10049	64615	6.43
Sapota	1820	20092	11.04
Citrus	102	794	7.78
Ber	11	82	7.45
Banana	8692	613829	70.62
Guava	95	1260	13.26
Pomegranate	5	31	6.2
Date Palm	3	4	1.33
Papaya	209	12352	59.10
Custard Apple	8	64	8
Cashew Nut	20	8	0.4
Coconut	243	1946	8.01
Other Fruits	100	894	8.94
<b>Total</b>	<b>21114</b>	<b>714025</b>	<b>33.82</b>

Source: DDH, Surat

#### 2.4.3 Vegetable Crops in the district

Crop	Area (Ha.)	Production (MT)	Productivity(MT)
Onion	128	2693	21.04
Brinjal	5268	112050	21.27
Cabbage	758	15425	20.35
Okra	13355	188840	14.14
Tomato	1260	27090	21.50
Cauliflower	1285	27203	21.17
Cluster Bean	1945	15521	7.98
Cowpea	1639	20291	12.38
Cucurbitaceae	6421	93275	
Vegetables			14.53
Other Vegetables	5724	97651	17.06
<b>Total</b>	<b>37783</b>	<b>600039</b>	<b>15.88</b>

Source: DDH, Surat

#### Area and Production of other Vegetable Crops in the district

Crop	Area (Ha.)	Production (MT)	Productivity(MT)
Greater Yam	14.42	219	5116
Sugarbeet	24.17	159	3930
Carrot	12.11	213	3453
Sweet Potato	7.22	212	3970
Spinach	16.00	218	3567
Radish	15.91	486	8619
Amaranthus	10.04	345	3608
Moringa	9.77	148	1770
Capsicum	12.79	634	9701
Fenugreek	10.30	197	2309



Pea	10.85	68	796
Elephant Foot Yam	14.99	1002	16967
Green Chilli	28.23	1677	31360
Mallet/Mogri	21.56	23	546
Allocaasia	9.20	123	1939
<b>Total</b>	<b>17.85</b>	<b>5724</b>	<b>97651</b>

Source: DDH, Surat

#### 2.4.4 Flower Crops in the district

Crop	Area(Ha.)	Production (MT)	Productivity(MT)
Rose	63	582	9.24
Marigold	218	2170	9.95
Jasmine (Mogra)	6	26	4.33
Lily	58	570	9.83
Other Flowers	71.80	659	9.18
<b>Total</b>	<b>416.8</b>	<b>4007</b>	<b>9.61</b>

Source: DDH, Surat

#### 2.4.5 Spices Crops in the district

Crop	Area (Ha.)	Production (MT)	Productivity (MT)
Dry Chilli	98	145	1.48
Garlic	10	52	5.20
Coriander	36	54	1.50
Ginger	112	1956	17.46
Turmeric	418	9104	21.78
Fenugreek	107	205	1.92
Ajwain	5	5	1.00
Dilseed	7	8	1.14
<b>Total</b>	<b>793</b>	<b>11529</b>	<b>14.54</b>

Source: DDH, Surat

### 2.5. Weather data (2021)

Month	Rainfall (mm)	Temperature ( <sup>0</sup> C)		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
January 2021	0	29.4	15.3	89	60
February 2021	0	32.9	17.1	78	46
March 2021	0	36.3	21.2	80	45
April 2021	0	37.2	25.8	89	31
May 2021	151.5	35.9	27.9	87	45
June 2021	333.5	33.8	27.1	93	64
July 2021	194.5	32.5	26.6	92	70
August 2021	196.0	31.4	24.9	96	72
September 2021	642.0	31.0	25.9	99	77
October 2021	22.0	34.0	22.6	95	46
November 2021	4.5	33.7	22.6	70	35
December 2021	56.0	29.2	18.2	86	43
<b>Total</b>	<b>1600</b>	<b>397.32</b>	<b>275.20</b>	<b>1054</b>	<b>634</b>

Source: AWS, Surat (2021)

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

Category	Population	Production	Productivity
<b>Cattle</b>			
Crossbred	289402	134000	7.9 liters

Indigenous	289402	44000	3.8 liters
Buffalo	300282	192000	4.6 liters
Sheep	1936	-	-
Goats	150464	5000	-
Pigs			
Crossbred	94000	-	-
Indigenous	68000	-	-
Rabbits	-	-	-
Poultry			
Hens	204000	55100	-
Desi	10000	-	-
Category		Production (Q.)	Productivity
Fish (Reservoir)	5	10414	-

Source: DAH, Surat

## 2.7. Details of Operational area / Villages

<b>Taluka</b>	<b>Name of the block</b>	<b>Name of the village</b>	<b>Major crops &amp; enterprises</b>	<b>Major problems identified</b>	<b>Identified Thrust Areas</b>
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				<p>1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation</p> <p>2. Okra, brinjal and creepers are important crops but the productivity is very low, problem of insect pests and disease No technical knowhow regarding green house net house technology and crops</p> <p>Lack of technical knowhow about mango orchards plantation and management.</p> <p>3.High use of water in canal command area and water scarcity in hilly area</p> <p>4.Lack of knowledge about Insect pests and diseases and their management and nutrient management in crops like paddy sugar cane, okra, creepers etc, Injudicious use of fertilizers and pesticides High incidence of wilt and parval vine borer in pointed gourd.</p> <p>5.Low milk productivity High calf mortality Problem of anoestrus Lack of awareness about Feeds and fodder management</p> <p>6.Lack of knowledge of small scale agricultural base enterprises, value addition etc.</p> <p>7. Drudgery reduction through improved hand tools.</p>	<p>1. Increase productivity of major crops e.g. Paddy, sugarcane</p> <p>2. Dissemination of production technology of fruits and vegetables and their post harvest management as well promotion of precision farming.</p> <p>3.Management of natural resource, including salinity management</p> <p>4. Popularize eco-friendly crop production with special reference to IPDM &amp; INM.</p> <p>5. Increasing milk production by dissemination of latest technologies.</p> <p>6. Imparting skill oriented training to the tribal women for sustaining their livelihood.</p> <p>7. Promotion of small scale farm mechanization in tribal area.</p>
	Mahuva	<p>1. Umra</p> <p>2. Vasrai</p> <p>3. Dhundhesa</p> <p>4. Vadia</p>	<p>Paddy, Sugarcane, Pointed gourd, Okra, Brinjal, Vegetables, Mango</p> <p>Crop production- Horticulture-Livestock</p>		

				<p>1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation</p> <p>2. Brinjal and okra are important crops but the productivity is very low, problem of insect pests and disease</p> <p>No technical know how regarding green house net house technology and crops</p> <p>Lack of technical knows how about mango orchards plantation and management.</p> <p>3.High use of water in canal command area and water scarcity in hilly area</p> <p>4.Lack of knowledge about Insect pests and diseases and their management and nutrient management in crops like paddy sugar cane, okra, creepers etc, Injudicious use of fertilizers and pesticides High incidence of wilt and fruit and shoot borer in brinjal</p> <p>5.Low milk productivity High calf mortality Problem of anoestrus Lack of awareness about Feeds and fodder management</p> <p>6.Lack of knowledge of small scale agricultural base enterprises, value addition etc.</p> <p>7.Drudgery reduction through improved hand tools.</p>	<p>1. Increase productivity of major crops e.g. Paddy, sugarcane, Soybean</p> <p>2. Dissemination of production technology of fruits and vegetables and their post harvest management as well promotion of precision farming.</p> <p>3.Management of natural resource, including salinity management</p> <p>4. Popularize eco-friendly crop production with special reference to IPDM &amp; INM.</p> <p>5. Increasing milk production by dissemination of latest technologies.</p> <p>6 .Imparting skill oriented training to the tribal women for sustaining their livelihood.</p> <p>7. Promotion of small scale farm mechanization in tribal area.</p>
	Mandvi	<ol style="list-style-type: none"> <li>1. Amba</li> <li>2. Parvat</li> <li>3. Uteva</li> <li>4. Titoi</li> </ol>	<p>Paddy, Sugarcane, Brinjal, Okra, Cluster bean , Vegetables, Pulses, Soybean, Groundnut</p> <p>Crop production- Horticulture-Livestock</p>		

	Umarpada	<ol style="list-style-type: none"> <li>1. Kadvali</li> <li>2. Kadavidadra</li> <li>3. Vadpada</li> <li>4. Khotarampura</li> </ol>	<p>Paddy, Brinjal, Okra, Cotton, Pulses, Soybean, Groundnut</p> <p>Crop production - Livestock</p>	<p>1. The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation</p> <p>2. Indian bean is an important crops but the productivity is very low, problem of insect pests and disease</p> <p>Lack of technical knowhow about orchards plantation and management.</p> <p>3. Water scarcity in rabi / summer due hilly area</p> <p>4. Lack of knowledge about Insect pests and diseases and their management and nutrient management in crops like paddy vegetables etc, No use of bio fertilizers</p> <p>5. Low milk productivity High calf mortality Problem of anoestrus Lack of awareness about Feeds and fodder management Large no of non descript animals</p> <p>6. Lack of knowledge of small scale agricultural base enterprises, value addition etc.</p> <p>7. Drudgery reduction through improved hand tools.</p>	<ol style="list-style-type: none"> <li>1. Increase productivity of major crops e.g. Paddy, cotton, sorghum, pigeon pea</li> <li>2. Dissemination of production technology of fruits and vegetables and their post harvest management as well promotion of precision farming.</li> <li>3. Management of natural resource, including salinity management</li> <li>4. Popularize eco-friendly crop production with special reference to IPDM &amp; INM.</li> <li>5. Increasing milk production by dissemination of latest technologies.</li> <li>6. Imparting skill oriented training to the tribal women for sustaining their livelihood.</li> <li>7. Promotion of small scale farm mechanization in tribal area.</li> </ol>
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	Mangro l	1. Balethi 2. Mandan 3. Ghodba r	Paddy, Sorghum, Cotton, Pulses, Groundnut  Crop production- Livestock	<p>1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation</p> <p>2. Okra, brinjal and creepers are crops but the productivity is very low, problem of insect pests and disease No technical knowhow regarding net house technology and crops Lack of technical knowhow about plantation and management.</p> <p>3.Water scarcity in hilly area and rain fed farming</p> <p>4.Lack of knowledge about Insect pests and diseases and their management and nutrient management in crops like paddy sugar cane, okra, creepers etc, Injudicious use of fertilizers and pesticides High incidence of wilt and parval vine borer in pointed gourd.</p> <p>5.Low milk productivity High calf mortality Problem of anoestrus Lack of awareness about Feeds and fodder management</p> <p>6. Lack of knowledge of small scale agricultural base enterprises, value addition etc.</p> <p>7. Drudgery reduction through improved hand tools.</p>	<p>1. Increase productivity of major crops e.g. Paddy, cotton, sorghum</p> <p>2. Dissemination of production technology of fruits and vegetables and their post harvest management as well promotion of precision farming.</p> <p>3.Management of natural resource, including salinity management</p> <p>4. Popularize eco-friendly crop production with special reference to IPDM &amp; INM.</p> <p>5. Increasing milk production by dissemination of latest technologies.</p> <p>6 .Imparting skill oriented training to the tribal women for sustaining their livelihood.</p> <p>7. Promotion of small scale farm mechanization in tribal area.</p>
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				<p>1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation</p> <p>2. Okra and creepers are important crops but the productivity is very low, problem of insect pests and disease No technical knowhow regarding green house net house technology and crops Lack of technical knowhow about fruit crops cultivation.</p> <p>3.High use of water in canal command area and salinity problem in coastal area</p> <p>4.Lack of knowledge about Insect pests and diseases and their management and nutrient management in crops like paddy sugar cane, okra, creepers etc, Injudicious use of fertilizers and pesticides High incidence of wilt and parval vine borer in pointed gourd.</p> <p>5. Low milk productivity High calf mortality Problem of anoestrus Lack of awareness about Feeds and fodder management</p> <p>6. Lack of knowledge of small scale agricultural base enterprises, value addition etc.</p>	<p>1. Increase productivity of major crops e.g. Paddy, sugarcane</p> <p>2. Dissemination of production technology of fruits and vegetables and their post harvest management as well promotion of precision farming.</p> <p>3.Management of natural resource, including salinity management</p> <p>4. Popularize eco-friendly crop production with special reference to IPDM &amp; INM.</p> <p>5. Increasing milk production by dissemination of latest technologies.</p> <p>6 .Imparting skill oriented training to the tribal women for sustaining their livelihood.</p>
	Olpad	<p>1. Mandro i</p> <p>2. Bhatgam</p>	<p>Paddy, Sugarcane, Pointed gourd, Okra, vegetables</p> <p>Crop production- Livestock</p>		



	Kamrej	<ol style="list-style-type: none"> <li>1. Karjan</li> <li>2. Choryasi</li> </ol>	<p>Sugarcane, Banana, Paddy, Vegetables</p> <p>Crop production- Horticulture-Livestock</p>	<ol style="list-style-type: none"> <li>1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation</li> <li>2. Banana is an important crop but the problem of insect pests and disease No technical knowhow regarding green house net house technology and crops</li> <li>3.High use of water in canal command area problem of water logging</li> <li>4.Lack of knowledge about Insect pests and diseases and their management and nutrient management in banana</li> </ol>	<ol style="list-style-type: none"> <li>1. Increase productivity of major crops e.g. sugarcane</li> <li>2. Dissemination of production technology of fruits and vegetables and their post harvest management as well promotion of precision farming.</li> <li>3.Management of natural resource, including salinity management</li> <li>4. Popularize eco-friendly crop production with special reference to IPDM &amp; INM.</li> </ol>
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	Bardoli	<ol style="list-style-type: none"> <li>1. Balda</li> <li>2. Rajvad</li> <li>3. Afva</li> </ol>	<p>Paddy, Sugarcane, Banana, Brinjal, Okra, Vegetables</p> <p>Crop production- Horticulture- Livestock</p>	<ol style="list-style-type: none"> <li>1. The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation</li> <li>2. Okra and creepers are important crops but the productivity is very low, problem of insect pests and disease No technical knowhow regarding green house net house technology and crops Lack of technical knowhow about fruit crops cultivation.</li> <li>3. High use of water in canal command area and salinity problem in coastal area</li> <li>4. Lack of knowledge about Insect pests and diseases and their management and nutrient management in crops like paddy sugar cane, okra, creepers etc, Injudicious use of fertilizers and pesticides High incidence of wilt and parval vine borer in pointed gourd.</li> <li>5. Low milk productivity High calf mortality Problem of anoestrus Lack of awareness about Feeds and fodder management</li> <li>6. Lack of knowledge of small scale agricultural base enterprises, value addition etc.</li> </ol>	<ol style="list-style-type: none"> <li>1. Increase productivity of major crops e.g. Paddy, sugarcane</li> <li>2. Dissemination of production technology of fruits and vegetables and their post harvest management as well promotion of precision farming.</li> <li>3. Management of natural resource, including salinity management</li> <li>4. Popularize eco-friendly crop production with special reference to IPDM &amp; INM.</li> <li>5. Increasing milk production by dissemination of latest technologies.</li> <li>6. Imparting skill oriented training to the tribal women for sustaining their livelihood.</li> </ol>
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	Choryasi	1. Bhatha 2. Bhatpor 3. Budia	Paddy, Pointed gourd, Sorghum, Vegetables Crop production- Livestock	<p>1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation</p> <p>2.No technical knowhow regarding green house net house technology and crops</p> <p>3.High use of water in canal command area problem of water logging</p> <p>4.Lack of knowledge about Insect pests and diseases and their management and nutrient management in banana</p>	<p>1. Increase productivity of major crops e.g. sugarcane</p> <p>2. Dissemination of production technology of fruits and vegetables and their post harvest management as well promotion of precision farming.</p> <p>3.Management of natural resource, including salinity management</p> <p>4. Popularize eco-friendly crop production with special reference to IPDM &amp; INM.</p> <p>5. Imparting skill oriented training to the tribal women for sustaining their livelihood.</p>
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### 2.8. Priority thrust areas:

1. Increase productivity of major crops e.g. Paddy, Cotton, Sorghum, sugarcane, pulses
2. Dissemination of production technology of fruits and vegetables and their post harvest management as well promotion of precision farming.
3. Management of natural resource, including salinity management
4. Popularizing of location specific farming system
5. Popularize eco-friendly crop production with special reference to IPDM & INM.
6. Increasing milk production by dissemination of latest technologies.
7. Imparting skill oriented training to the tribal women for sustaining their livelihood.
8. Promotion of small scale farm mechanization in tribal area
9. Value addition in Fruits, Vegetables & pulses

## 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
8	7	30	40		1957		1957

Training		Extension Programmes	
3		4	

Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
100	138	2500	5598	708	924	5438	81729

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
Paddy- GNR-3:150.00 GR-17: 25.00 Pulse (GM-6): 10.00 Oil Seeds (NRC-37):0.00	GNR-3:84.00 GR-17:162.50 Pulse (GM-6): 5.5 Oil Seeds (NRC-37): 40.00	3000 vegetable seedlings	3525 vegetable seedlings

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

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

S. No.	Major crops & enterprises being practiced in cluster of villages	Prioritized problems in these crops/ enterprise	Extent of area (ha/No.) affected by the problem in the district	Name of Cluster Villages identified for interventions	Interventions (OFT, FLD, Training, extension activity etc.)*
1	Paddy, Sugarcane, Pointed gourd, Okra, Brinjal, Vegetables, Mango Crop production-Horticulture-Livestock	Use of local variety High seed rate, Imbalance use of fertilizers, No use of bio fertilizer	--	Umra Vasrai Dhundhesa Vadia	OFT, FLD, Training, extension activity
2	Paddy, Sugarcane, Brinjal, Okra, Cluster bean , Vegetables, Pulses, Soybean, Groundnut  Crop production- Horticulture-Livestock	Use of local variety in brinjal Imbalance use of fertilizers in crops No use of bio- fertilizers No knowledge about post harvest management and processing Low technical know house regarding green house/ net house and production technology	--	Amba Parvat Uteva Titoi	OFT, FLD, Training, extension activity
3	Paddy, Brinjal, Okra, Cotton, Pulses, Soybean, Groundnut  Crop production – Livestock	Lack of knowledge about disease and insect pest management. Injudicious use of pesticides Lack of knowledge about Bio-fungicides	--	Kadvali Kadavidadra Vadpada Khotarampura	OFT, FLD, Training, extension activity
4	Paddy, Sorghum, Cotton, Pulses, Groundnut  Crop production- Livestock	Poor dairy management Large number of non-descript animals with low milk production Poor availability of fodder in hilly area. Poor cultivation of fodder crops High calf mortality due to poor management	--	Balethi Mandan Ghodbar	OFT, FLD, Training, extension activity
5	Paddy, Sugarcane, Pointed gourd, Okra, vegetables  Crop production-Livestock	In hilly area problem of water conservation In middle canal command area due to excess irrigation problems of water logging and salinity In coastal area salinity problem	--	Mandroi Bhatgam	OFT, FLD, Training, extension activity

6	Sugarcane, Banana, Paddy, Vegetables Crop production-Horticulture-Livestock	Imbalance use of fertilizers lack of awareness about use of bio-fertilizers	--	Karjan Choryasi	OFT, FLD, Training, extension activity
7	Paddy, Sugarcane, Banana, Brinjal, Okra, Vegetables Crop production- Horticulture-Livestock	Lack of knowledge about value addition of locally available materials Lack of knowledge, skills regarding various small scale agricultural based enterprises	--	Balda Rajvad Afva	OFT, FLD, Training, extension activity
8	Paddy, Pointed gourd, Sorghum, Vegetables Crop production-Livestock	Imbalance use of fertilizers lack of awareness about use of bio-fertilizers	--	Bhatha Bhatpor Budia	OFT, FLD, Training, extension activity

\* Support with problem-cause and interventions diagram

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

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management	2	--	--	1	--	1	--	--	--	2
Integrated Pest Management	2	--	--	--	--	--	--	--	--	2
Integrated Disease Management	1	--	--	--	--	--	--	--	--	1
Varietal Evaluation	2	--	1	--	1	--	--	--	--	2
<b>Total</b>	<b>7</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>7</b>

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

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

enterprises						
<b>TOTAL</b>						

## B. Achievements on technologies Assessed

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

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Integrated Nutrient Management	Mango	Assessment of enrich banana sap for yield and quality of mango	2	5	2
	Cotton	Use of KNO <sub>3</sub> and Novel OLN to increase production in Cotton	3	10	3
Integrated Pest Management	Paddy	Assessment of fungicide for the management of grain discoloration in paddy	3	5	2
	Pigeon Pea	Management of pigeonpea pod borer	3	5	1
Integrated Disease Management	Brinjal	Assessment of pheromone trap technology for the management of <i>Leucinodes orbonalis</i> in Brinjal	3	5	2
Varietal Evaluation	Indian Bean	Assessment of different Indian bean varieties	3	5	2
	Green gram	Assessment of different variety of Green gram	3	10	3
<b>Total</b>			<b>20</b>	<b>45</b>	<b>15</b>

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

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

## C. 1. Results of Technologies Assessed

### Results of On Farm Trial

#### Crop Production

#### OFT 1: Effect of Spraying KNO<sub>3</sub> and Novel OLN on yield of Cotton

Treatments: 1) T<sub>1</sub>: No Use of KNO<sub>3</sub> (Farmers practices)

2) T<sub>2</sub>: 3 % KNO<sub>3</sub> Spraying at squaring, flowering and ball formation stage (2010)

3) T<sub>3</sub>: 2 % NOVEL OLN at flowering (2018)

Crop	Variety	No. of farmers	Area (ha)	Yield(q/ha)			% increase Over Check			B : C Ratio		
				KNO <sub>3</sub>	Novel OLN	Check	KNO <sub>3</sub>	Novel OLN	Check	KNO <sub>3</sub>	Novel OLN	Check
<b><i>Kharif-2021</i></b>												
Cotton	G.Cot. Hy-12(Bt)	10	3 (0.1 ha/Plot)	25.22	26.06	21.70	16.2	20.1	--	2.9	3.3	2.8

#### OFT 2: Assessment of different varieties of greengram

Treatments: 1) T<sub>1</sub> : GAM-5: AAU, Anand (2015)

2) T<sub>2</sub> : GAM-6: NAU, Navsari (2016)

3) T<sub>3</sub> : Local (Farmers practices)

Crop	Variety	No. of farmers	Area (ha)	Yield(q/ha)			% increase Over Check			B : C Ratio		
				T1	T2	T3	T1	T2	T3	T1	T2	T3
Greengram (Summer-22)	As per treat.	10	3 (0.1ha/ Plot)	Yet to be conducted								
Greengram (Summer-21)	As per treat.	10	3 (0.1 ha/ Plot)	6.80	7.25	5.90	10.01	24.35	--	2.05	2.18	1.90



## Crop Protection

### OFT 3: Assessment of fungicide for the management of grain discoloration in paddy

Technology option	Infection (%)	Average yield (q/ha)	BCR
T <sub>1</sub> : Farmers practices (No use of fungicide)	14.36 %	45.91	1.69
T <sub>2</sub> : Three spray of Propiconazole 25 EC @ 0.025% (10 ml/ 10 lit. water) First spray - initiation of disease, Second and third spray after 10 days' interval	4.72 %	52.52	1.83

### OFT 4: Assessment of pheromone trap technology for the management of *Leucinodes orbonalis* in Brinjal

<b>Treatments</b>	T <sub>1</sub> : Farmers practices as injudicious and indiscriminate use of chemical pesticides T <sub>2</sub> : Installation of pheromone traps @ 40 traps/ha (AAU, Anand) T <sub>3</sub> : Removal of infected shoots, fruits and installation of pheromone Traps @ 12/ha (TNAU)
<b>Source of Technology</b>	AAU, Anand & TNAU
<b>Season</b>	Rabi 2020-21
<b>No. of farmers</b>	5
<b>Plot Area</b>	1.0 acre/farmer
<b>Critical Inputs Required</b>	Pheromone traps & lures
<b>Observations</b>	1. Per cent infestation of shoots and fruits 2. Yield parameter 3. B:C ratio

### Results:

Technology option	Shoot infestation (%)	Fruit infestation (%)	Average yield (q/ha)	BCR
T <sub>1</sub> : Farmers practices as injudicious and indiscriminate use of chemical pesticides	6.12	7.57	176.17	3.05
T <sub>2</sub> : Installation of pheromone traps @ 40 traps/ha (AAU, Anand)	4.28	4.71	202.61	3.40
T <sub>3</sub> : Remove the infected shoots, fruits and installation of pheromone traps @ 12/ha (TNAU, TN)	2.76	3.63	218.09	3.70

**OFT 5: Management of pigeonpea pod borer**

<b>Treatments</b>	T <sub>1</sub> : Farmers practices as injudicious and indiscriminate use of pesticides at irregular time interval T <sub>2</sub> : Two sprays of Chlorantraniliprole 18.5% SC @ 0.006% (3 ml/10 lit of water) first at 50 per cent flowering stage and second at 50 per cent pod formation stage
<b>Source of Technology</b>	NAU, Navsari, 2012
<b>Season</b>	<i>Kharif</i> 2021
<b>No. of farmers</b>	5
<b>Plot Area</b>	1.0 acre/farmer
<b>Critical Inputs Required</b>	Chlorantraniliprole 18.5% SC
<b>Observations</b>	1. Pod borer infestation (%) 2. Pod fly infestation (%) 3. Grain yield 4. B:C ratio

**Results:**

<b>Technology option</b>	<b>Pod borer infestation (%)</b>	<b>Pod fly infestation (%)</b>	<b>Grain yield (q/ha)</b>	<b>BCR</b>
T <sub>1</sub> : Farmers practices as injudicious and indiscriminate use of pesticides at irregular time interval	9.40	7.85	10.16	2.065
T <sub>2</sub> : Two sprays of Chlorantraniliprole 18.5% SC @ 0.006% (3 ml/10 lit of water) first at 50 per cent flowering stage and second at 50 per cent pod formation stage	2.60	4.15	14.72	2.560

**Horticulture:****OFT: 6 Assessment of Indian Bean varieties**

<b>Technology Option</b>	<b>No. of trials</b>	<b>Yield (t/ha)</b>	<b>BCR</b>
T <sub>1</sub> : Local Variety (Farmers practices)	5	29.2	3.12
T <sub>2</sub> : GNIB-21(2014)		40.17	4.95
T <sub>3</sub> : GJIB-11 (2018)		32.40	3.65

**OFT: 7 Assessment of enrich banana sap for yield and quality of mango**

<b>Treatments</b>	<b>T<sub>1</sub></b> : Farmers method <b>T<sub>2</sub></b> : Spraying of 1.5 % banana sap at flowering and pea stage
<b>Source of Technology</b>	NAU, Navsari (2012)
<b>Season</b>	Rabi, 2019-20
<b>No. of farmers</b>	5
<b>Critical Inputs Required</b>	Organic Liquid Nutrient (NOVEL)
<b>Cost of Critical Inputs</b>	3000 Rs
<b>Observations</b>	1. Yield parameter 2. B:C ratio
<b>Farmers reactions / Feedback :</b>	Application of Novel Organic liquid nutrient on mango inflorescence, increases the flower & fruit setting and ultimately the yield

<b>Technology Option</b>	<b>No. of trials</b>	<b>Yield (t/ha)</b>	<b>BCR</b>
<b>T<sub>1</sub></b> : Farmers method	5	11.50	2.65
<b>T<sub>2</sub></b> : Spraying of 1.5 % banana sap at flowering and pea stage		14.10	3.21

### 3.3. FRONTLINE DEMONSTRATION

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

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

S. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
<b>Cereal crops</b>							
1	Paddy (GNRH-2)	ICM	New variety	FLDs	7	13	5
2	Paddy (GR-17-Sardar)	ICM	New variety	FLDs	1	10	5
3	Paddy (GNR – 6)	ICM	New variety	FLDs	2	10	5
4	Paddy (GNR – 7)	ICM	New variety	FLDs	1	10	5
5	Paddy (GR-16 Tapi)	ICM	New variety	FLDs	1	5	5
6	Sorghum (GNJ-1)	ICM	New variety	FLDs	5	15	5
7	Paddy	IPDM	-	FLDs		10	4
<b>Oilseed and Pulses crops</b>							
8	Pigeonpea (GNP-2)	ICM	New variety	FLDs	4	6	3
9	Pigeonpea (GT-104)	ICM	New variety	FLDs	1	5	2.5
10	Pigeonpea (GT-105)	ICM	New variety	FLDs	1	5	2.5
11	Black gram (GU-3)	ICM	New variety	FLDs	2	1	0.4
12	Soybean (NRC-37)	ICM	New variety	FLDs	2	13	6
<b>Fiber crops</b>							
13	Cotton (G cot- Hy-12 Bt)	ICM	New variety	FLDs	1	12	5
<b>Rabi-20-21</b>							
14	Sorghum (Phule Raveti)	ICM	New variety	FLDs	-	13	5

<b>Summer-21</b>							
15	Greengram (GAM-6)	ICM	New variety	FLDs	-	12	5
<b>Horticulture crops</b>							
16	Banana	INM	Biofertilizers and OLF novel	FLDs	1	10	4
17	Brinjal	INM	Biofertilizers and OLF novel	FLDs	1	10	4
18	Pointed gourd	INM	Biofertilizers and OLF novel	FLDs	1	10	4
19	Okra	INM	Biofertilizers and OLF novel	FLDs	1	10	4
20	Little gourd	ICM	New Variety	FLDs	1	10	0.5
21	Elephant gourd	ICM	New Variety	FLDs	1	5	1
22	Indian bean	ICM	New Variety	FLDs	1	10	4
23	Sweet potato	ICM	New Variety	FLDs	1	5	1
24	Banana	IPDM	IPDM	FLDs		10	4
25	Pointed Gourd	IPDM	IPDM	FLDs		10	4
26	Brinjal	IPDM	IPDM	FLDs		10	4
27	Okra	IPDM	IPDM	FLDs		10	4
<b>Home Science</b>							
28	Wheel hoe	Drudgery deduction	Labour saving	FLDs	2	20	--
29	Kitchen garden kit	Nutrition Management	Seed & Seedling	FLDs	5	100	--
30	Rake for collecting garbage/ harvesting	Drudgery deduction	Labour saving	FLDs	10	100	--
<b>FLDs of Other Agency</b>							
<b>Crop production</b>							
<b>CFLD (NMOOP)</b>							
1	Soybean (KDS-344)	ICM	New variety	FLDs	4	50	20
<b>CFLD (NFSM)</b>							
2	Gram (GG-5)	ICM	New variety + ST+INM	FLDs	-	75	30
<b>CFLD (NMOOP)</b>							
3	Sesame	New Variety+ ST+INM+IPDM	GT-5	FLDs	-	25	10
4	Groundnut	ICM	GG-34	FLDs	-	25	10
<b>CFLD (NFSM)</b>							
5	Green gram	New Variety+	GAM-6	FLDs	-	75	30

		ST+INM+IPDM					
<b>CFLD (NFSM &amp; NMOOP):2019-20</b>							
6	Sesame	New Variety+ ST+INM+IPM	GT-4	FLDs	3	25	10
7	Groundnut	New Variety+ ST+INM	TG37A	FLDs	3	25	10
8	Greengram (GAM-6)	ICM	New variety+ ST+INM+IPDM	FLDs	10	75	30
<b>TSP – ICAR (Mega Seed)</b>							
1	Gram (GG-5)	ICM	Seed	FLDs	1	15	2
<b>Other FLDs by Sorghum Research Station-Dhamrod Surat</b>							
1	Sorghum fodder	Improved variety	PC-23	FLDs	5	25	4
<b>Adaptive Trials</b>							
1	Paddy GR-17-Sardar	ICM+INM+IPDM	New variety	FLDs	10	70	28
2	Sorghum (GNJ-1)	ICM	New variety	FLDs	1	04	10
3	Pigeonpea (GT-104)	ICM	New variety	FLDs	1	10	04
4	Soybean (NRC-37)	ICM	New variety	FLDs	1	04	1.6
5	Paddy	IPDM	IPDM	FLDs		30	12
6	Banana	INM	Cone Feeding	FLDs	1	10	4
7	Pointed Gourd	ICM	GNPG-1	FLDs	1	05	--
8	Drum stick	ICM	PKM-1	FLDs	7	150	--
9	Tindola	ICM	GNLG-1	FLDs	1	10	--
10	Indian bean	ICM	GNIB-22	FLDs	5	12	--
11	Banana	IPDM	IPDM	FLDs		30	12
12	Chickpea ( GG-5 )	ICM+ST+INM+IPM	New variety	FLDs		30	12
13	Kitchen garden kit	Nutritional Management	Seeds & Seedlings	FLDs	5	100	---
14	Brinjal	INM	Novel Plus	FLDs	2	30	12
15	Okra	INM	Novel Plus	FLDs	2	30	12
16	Brinjal	--	Hybrid	FLDs	1	20	---
17	Cluster bean	INM	Novel Plus	FLDs	2	30	12
18	Brinjal	IPDM	IPDM	FLDs	4	30	12
19	Okra	IPDM	IPDM	FLDs	4	30	12

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.**)

S. N.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
<b>KVK:2021</b>										
<b><i>Kharif-21</i></b>										
<b>Cereal crops</b>										
1	Paddy (GNRH-2)	ICM	New hybrid	<i>Kharif -21</i>	5	5	13	0	13	--
2	Paddy (GR-17-Sardar)	ICM	New variety	<i>Kharif -21</i>	5	5	10	0	10	--
3	Paddy (GNR – 6)	ICM	New variety	<i>Kharif -21</i>	5	5	10	0	10	--
4	Paddy (GNR – 7)	ICM	New variety	<i>Kharif -21</i>	5	5	10	0	10	--
5	Paddy (GR–16 Tapi)	ICM	New variety	<i>Kharif -21</i>	5	2	13	0	13	--
6	Sorghum (GNJ-1)	ICM	New variety	<i>Kharif -21</i>	5	6	15	0	15	--
7	Sorghum (GJ-38)	ICM	New variety	<i>Kharif -21</i>	5	5	12	0	12	
8	Paddy	IPDM	-	<i>Kharif -21</i>	4	4	-	10	10	--
<b>Oilseed and Pulses crops</b>										
9	Pigeonpea (GNP-2)	ICM	New variety	<i>Kharif -21</i>	2	2.5	5	0	5	--
10	Pigeonpea (GT-104)	ICM	New variety	<i>Kharif -21</i>	2	2.5	5	0	5	--
11	Pigeonpea (GT-105)	ICM	New variety	<i>Kharif -21</i>	2	2.5	5	0	5	--
12	Black gram (GU-3)	ICM	New variety	<i>Kharif -21</i>	2	0	0	0	0	Seed unavailability
13	Soybean (NRC-37)	ICM	New variety	<i>Kharif -21</i>	15	15	38	0	38	--
<b>Fiber crops</b>										
14	Cotton (G cot- Hy-12 Bt)	ICM	New variety	<i>Kharif -21</i>	4	4	12	0	12	--
<b>Rabi-21-22</b>										
15	Sorghum (Phule Raveti)	ICM	New variety	<i>Rabi-21-22</i>	5	5	12	0	12	--

<b>Summer-21</b>										
16	Greengram (GAM-6/7)	ICM	New variety	Summer-21	5	5	12	0	12	Yet to be implemented
<b>Horticulture crops</b>										
17	Banana	INM	OLN- Novel	Kharif-21	4	4	0	10	10	--
18	Brinjal	INM	Biofertilizers and OLF novel	Rabi - 21	4	4	0	10	10	--
19	Pointed gourd	ICM	New Variety	Kharif-21	2	2	0	10	10	--
20	Okra	INM	Biofertilizers and OLF novel	Kharif-21	4	4	10	0	10	--
21	Little gourd	ICM	New Variety	Kharif-21	2	2	15	0	15	--
22	Elephant gourd	ICM	New Variety	Summer-21	1	1	5	0	5	--
23	Indian bean	ICM	New Variety	Kharif-21	4	4	10	0	10	--
24	Sweet potato	ICM	New Variety	Rabi-21	2	2	5	0	5	--
25	Cluster bean	INM	OLN-Novel	Summer-22	4	4	0	10	10	--
26	Mango	INM	OLN-Novel	Rabi-21	4	4	10	0	10	--
27	Banana	IPDM	IPDM	Kharif-21	4	4	0	10	10	--
28	Sugarcane	IPDM	IPDM	Rabi-21	4	4	10	0	10	--
29	Brinjal	IPDM	IPDM	Rabi-21	4	4	0	10	10	--
30	Mango	IPDM	IPDM	Rabi-21	8	8	10	10	20	--
31	Okra	IPDM	IPDM	Summer-22	4	4	10	0	10	--
<b>Home Science</b>										
32	Twin Wheel hoe	Drudgery Reduction	Labour saving	Rabi-21	--	--	20	0	20	--
33	Kitchen garden kit	Nutrition Management	Seed & Seedling	Rabi-21	--	--	200	0	200	--
34	Rake for collecting garbage/ harvesting	Drudgery Reduction	Labour saving	Rabi-21	--	--	100	0	100	--
35	Stalk puller for uprooting crop stalk	Drudgery Reduction	Labour saving	Rabi-21	--	--	50	0	50	--
<b>TOTAL</b>					<b>131</b>	<b>128.5</b>	<b>627</b>	<b>80</b>	<b>707</b>	<b>0</b>
<b>FLDs of Other Agency: 2021</b>										
<b>Crop production :</b>										
<b>CFLD(NMOOP)</b>										
1	Soybean (NRC-37)	ICM+INM+IPDM	New variety + ST+INM+IPDM	Kharif-21	10	10	25	0	25	--



<b>CFLD(NFSM)</b>										
2	Gram (GG-5)	ICM+INM+IPDM	New variety + ST+INM+IPDM	Rabi-21-22	20	20	50	0	50	--
<b>CFLD(NMOOP)</b>										
3	Sesame (GT-5)	ICM+INM+IPDM	New variety+ ST+INM+IPDM	Summer-22	10	10	25	0	25	--
4	Groundnut (GG-34)	ICM+INM+IPDM	New variety+ ST+INM	Summer- 22	10	10	25	0	25	--
<b>CFLD(NFSM)</b>										
5	Greengram (GAM-6)	ICM+INM+IPDM	New variety+ ST+INM+IPDM	Summer- 22	10	10	25	0	25	--
<b>CFLD(NFSM &amp; NMOOP): Summer-21</b>										
6	Sesame (GT-5)	ICM+INM+IPDM	New variety+ ST+INM+IPDM	Summer- 21	20	20	50	0	50	--
7	Groundnut (GG-34)	ICM+INM+IPDM	New variety+ ST+INM	Summer- 21	20	20	50	0	50	--
8	Greengram (GAM-6)	ICM+INM+IPDM	New variety+ ST+INM+IPDM	Summer- 21	30	30	75	0	75	--
<b>TSP – ICAR (Mega Seed)</b>										
9	Green Gram (GM-5)	ICM	Seed + Biofertilizers + OLN-Novel	Summer – 22	15	15	30	0	30	--
<b>Other FLDs by Sorghum Research Station-Dhamrod Surat</b>										
10	Sorghum fodder	Improved variety	Cofs-29	Kharif-21	4	4	25	0	25	--
<b>TOTAL</b>					<b>149</b>	<b>149</b>	<b>380</b>	<b>0</b>	<b>380</b>	<b>0</b>
<b>Adaptive Trials</b>										
<b>Kharif- 2021</b>										
1	Paddy GNR-3	ICM	New variety	Kharif-21	0	175	40	310	350	--
2	Paddy GR-15 (Bio-fortified)	ICM	New variety	Kharif-21	5	5	0	10	10	--
3	Paddy	IPDM	IPDM	Kharif-21	12	12	0	30	30	--
4	Banana	ICM	New Variety	Kharif -21	1	1	20	0	20	--
5	Brinjal	ICM	New variety	Rabi-21	4.5	4.5	20	0	20	--
6	Bottle gourd	ICM	New Variety	Summer-22	1	1	15	0	15	--
7	Drum stick	ICM	ODC-3	Kharif -21	--	--	200	0	200	--

8	Tindola	ICM	GNLG-1	<i>Kharif -21</i>	1	1	15	0	15	--
9	Banana	IPDM	IPDM	<i>Kharif -21</i>	12	12	0	30	30	--
10	Pointed gourd	IPDM	IPDM	<i>Kharif -21</i>	12	12	0	30	30	--
<b>Rabi- 2021-22</b>										
11	Chickpea ( GG-5 )	ICM+ST+INM+IPDM	New variety	<i>Rabi-21-22</i>	12	12	30	--	30	--
12	Sugarcane	IPDM	IPDM	<i>Rabi-21</i>	12	12	30	0	30	--
13	Brinjal	IPDM	IPDM	<i>Rabi-21</i>	12	12	10	20	30	--
14	Mango	IPDM	IPDM	<i>Rabi-21</i>	12	12	10	20	30	--
15	Okra	IPDM	IPDM	Summer-22	12	12	10	20	30	--
<b>Total</b>					<b>108.5</b>	<b>283.5</b>	<b>400</b>	<b>470</b>	<b>870</b>	<b>0</b>
<b>Grand Total</b>					<b>388.5</b>	<b>561</b>	<b>1407</b>	<b>550</b>	<b>1957</b>	<b>0</b>

#### Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Paddy	<i>Kharif</i>	Irrigated	Medium black	Low	Medium	High	Green Gram	07-15/02/21	15-20/05/21	1600.50	66
GR-17								19-22/07/21	01-09/11/21		
GNR-3								13-15/07/21	27-31/10/21		
Soybean (NRC-37)								28-05/07/21	16-27/10/21		



## Extension and Training activities under FLD

Activity	No. of activities organized	Date	Number of participants	Remarks
<b>Field days</b>				
Gram	1	04-01-2021	25	Parvat(Mandvi)
Gram	1	04-01-2021	31	Zummavadi(Umarpada)
Sesame	1	03-04-2021	25	Uteva(Mandvi)
Greengram	1	03-04-2021	25	Parvat(Mandvi)
Groundnut	1	05-04-2021	22	Panchamba(Umarpada)
Sesame	1	07-04-2021	22	Kansali(Mangrol)
Greengram	1	07-04-2021	19	Kansali(Mangrol)
Paddy	1	20-09-2021	24	Pardi Zankhari (Olpad)
Soybean	1	12-10-2021	35	Parvat(Mandvi)
Soybean	1	16-10-2021	34	Mandan (mangrol)
Okra-INM	1	05-01-2021	15	Saddapani (Umarpada)

## C. Performance of Frontline demonstrations

### Frontline demonstrations on oilseed crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Soybean		ICM	NRC-37	38	15	12.78	8.80	10.01	8.30	20.60	26850	42042	15192	1.57	26210	34840	8630	1.33

\* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

\*\* BCR= GROSS RETURN/GROSS COST

### Frontline demonstration on pulse crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Pigeonpea		ICM	GNP-2	5	2.5	17.20	12.10	13.77	11.50	19.70	27500	68850	41350	2.5	25250	57500	32250	2.28

	ICM	GT-104	5	2.5	22.35	17.90	19.82	16.50	20.10	27500	99100	71600	3.6	25250	82500	57250	3.27
	ICM	GT-105	5	2.5	22.40	16.80	18.16	15.75	15.30	27520	90800	63280	3.3	25250	78750	53500	3.12

\* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

\*\* BCR= GROSS RETURN/GROSS COST

### FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					High	Demo Low	Average	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
<b>Cereals</b>																			
Paddy	GNRH-2	ICM	13	5	63.00	45.15	49.59	41.50	19.50	2.7	2.4	31425	84303	52878	2.9	33350	78850	45500	2.4
	GR-17	ICM	10	5	58.25	42.75	49.39	42.50	16.20	2.9	2.3	30800	88902	58102	2.9	31200	72250	41050	2.3
	GNR-6	ICM	10	5	49.50	40.25	44.47	38.50	15.50	2.5	1.9	31940	80046	48106	2.5	31940	61600	29660	2.0
	GNR-7	ICM	10	5	57.20	42.40	45.97	40.15	14.50	2.9	2.3	31520	91940	60420	2.9	31520	72270	40750	2.3
	GR-16 Tapi	ICM	10	4	29.90	19.75	21.46	18.50	16.00	1.2	1.0	20990	32190	11200	1.5	20990	27750	6760	13
	Paddy	IPDM	10	4	61.74	47.83	53.39	47.30	12.88	1.824	1.657	43913	80085	36172	1.824	42826	70950	28124	1.657
<b>Vegetables</b>																			
Brinjal	INM	Surti	10	4	196.32	152.23	162.35	153.26	5.93	--	--	55000	196444	141444	3.572	57200	185445	128245	3.242
Pointed gourd	INM	Local	10	4	190.23	164.56	174.56	152.32	14.60	--	--	120000	436400	316400	3.637	117000	380800	263800	3.255
Okra	INM	Hybrid	10	4	193.23	155.63	173.58	154.23	12.55	--	--	51200	230349	179149	4.499	54200	199450	145250	3.680
Little gourd	ICM	GNLG-1	10	0.5	218.70	187.50	203.56	172.56	17.96	--	--	61000	203560	142560	3.337	63000	172560	109560	2.739
Elephant foot yam	ICM	Gajendra	5	1	319.78	189.57	265.43	229.96	15.42	--	--	50120	291973	241853	5.825	51200	252956	201756	4.941

Indian bean	ICM	GNIB-22	10	4	36.56	29.87	31.28	24.89	25.67	--	--	35000	109480	74480	3.128	31500	89604	58104	2.845
Sweet potato	ICM	C-71	5	1	289.56	156.00	219.16	192.56	13.81	--	--	44000	164370	120370	3.736	49000	144420	95420	2.947
Pointed gourd	IPDM	Local	10	4	193.04	162.61	177.30	160.96	10.15	--	--	127500	443250	315750	3.476	125000	402400	277400	3.219
Brinjal	IPDM	Local	10	4	238.26	174.78	195.91	171.56	14.19	--	--	73900	244887.5	170988	3.314	72300	214450	142150	2.966
Okra	IPDM	Hybrid	10	4	201.74	157.39	175.30	152.09	15.26	--	--	70434	236655	166221	3.360	73695	205322	131627	2.786
<b>Fruit crops</b>																			
Banana	INM	Grand Nain	10	4	749.96	590.54	630.78	582.35	8.32	--	--	105000	441546	336546	4.205	104500	407645	303145	3.901
Mango	IPM	-	10	4	102.61	83.48	88.61	82.96	6.81	--	--	46100	177220	131120	3.844	45400	165920	120520	3.655
<b>Banana</b>	<b>Novel-OLN (G-9)</b>	<b>IPDM</b>	<b>10</b>	<b>4</b>	<b>772.17</b>	<b>635.65</b>	<b>686.52</b>	<b>627.82</b>	<b>9.35</b>	<b>--</b>	<b>--</b>	<b>116200</b>	<b>480564</b>	<b>364364</b>	<b>4.136</b>	<b>113000</b>	<b>439474</b>	<b>326474</b>	<b>3.889</b>
<b>Commerical Crops</b>																			
Cotton	G. cot. Hy-12 (Bt)	ICM	10	4	26.30	19.15	23.22	18.80	23.50	--	--	44560	127710	83150	2.9	42960	83150	40190	1.9
<b>TSP – ICAR (Mega Seed)</b>																			
	Green Gram-GM6	ICM	20	1	868.00	605.00	712.00	583.20	22.08	--	--	22100	49000	26900	2.217	20500	40900	20400	1.995
	Gram GG-5	ICM	15	1	1140.00	728.00	852.00	719.00	18.50	--	--	19500	43500	24000	2.231	19200	35150	15950	1.831

\* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

\*\* BCR= GROSS RETURN/GROSS COST

### Frontline Demonstration on Nutri cereals

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)	% Increase	Economics of demonstration (Rs./ha)	Economics of check (Rs./ha)
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						Demo			Check	in yield	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Sorghum	Fodder crop	Improved Variety - PC 23	25	4	440	300	308.8	302.4	25.93		18000	33200	15200	1.84	16500	28580	12080	1.73
	ICM		GNJ-1	12	5	26.30	18.80	19.85	16.75	18.50	18380	53595	35215	2.9	17960	45250	27290	2.5
	ICM		GJ-38	12	5	25.40	18.20	23.22	19.35	20.00	18380	62694	44314	3.4	17960	42245	24285	2.4
	ICM		Phule revti	25	10			22.3	19.5	14.36	17400	66900	49500	3.8	17000	58500	41500	3.4

**FLD on Livestock: Nil**

**FLD on Fisheries: Nil**

**FLD on Other enterprises: Nil**

**FLD on Women Empowerment: Nil**

#### FLD on Farm Implements and Machinery

Name of the implement	Crop	Technology demonstrated	No. of Farm women	Area (ha)	Major Parameter	Field observation (ha/man hour)		% change in major parameter	Labor reduction (man days) (man-h/ha)				Cost reduction (Rs./ha/day) Labour**	
						Demo	Check		Harvesting		Weeding		Demo	Check
									Demo	Check	Demo	Check		
Twin wheel hoe weeder* for weeding	Vegetables/Pulses	Women drudgery reduction	20	-	Field observation (ha/hr) -Labour requirement (Man hours/ha) -Cost of operation	0.017 ha (0.136 ha/day)	0.011 ha (0.088 ha/day)	58	-	-	59	91	1971	3045

Rake for collecting garbage/harvesting	Dry matter of crops/Harvesting/garbage	Women drudgery reduction	100	-	1. Field observation 2. Drudgery parameters like physical hazards, muscle stress, fatigue	0.044 (0.352ha/day)	0.028 (0.224ha/day)	58.5	-	-	23	36	761	1196
Stalk Puller for uprooting crop stalks	Concerned crops	Women drudgery reduction	50	-	-Field observation -Drudgery parameters like physical hazards, muscle stress, fatigue	0.032 ha (0.256 ha/day)	0.020 ha (0.16 ha/day)	60.15	-	-	31	50	1047	1675

\*Twin wheel hoe technology recommended by CIAE, Bhopal-MP

\*\*Cost of operation is calculated as per NAU labour wages

**Technical feedback:**

1. Twin wheel hoe weeder reduces women drudgery in terms of time and physical hazards (finger injuries, wrist pain, muscle stress etc.)
2. During weeding, field capacity per farm woman is increased up to 58% by using twin wheel hoe weeder as compared to local sickle.

**Farm women's reaction:**

1. Twin wheel hoe weeder increases working efficiency in short period of time i.e. time saving.
2. Twin wheel hoe weeder reduces fatigue, muscle stress, wrist pain as compared to local sickle.
3. It avoids the bending/squatting posture that is generally adopted in traditional method of weeding.

**Rake for collecting garbage/ harvesting**

\* Rake for collecting garbage/ harvesting technology is recommended by CSKHPKV, Palampur

\*\*Cost of operation is calculated as per university labour wages

**Farm women's reaction:**

1. Rake for collecting garbage/ harvesting increases working efficiency as compared to traditional method.

\*Stalk puller is recommended by National Research Centre for Women in Agriculture Sub center, CIAE, Bhopal

\*\*Cost of operation is calculated as per university labour wages

**Farm women's reaction:**

1. Stalk puller increases working efficiency as compared to traditional method.
2. Stalk puller reduces fatigue, backache, muscle stress, wrist pain and pain in shoulders as compared to traditional method

**FLD on Other Enterprise: Kitchen Gardening**



No. of Farm women: 100 No. of Demonstration: 100

1. Guntha/demo.

Season: Rabi-2020

Name of Enterprise	Crop yield (Kg.) per demonstration								
	Chilli	Tomato	Brinjal	Cabbage	Cauliflower	Cow pea	Indian Bean	Okra	Cluster bean
1	2	3	4	5	6	7	8	9	10
Kitchen Garden	3.1	18.3	14.0	8.8	12.4	4.0	5.7	11.8	13.4
Crop yield (Kg.) per demonstration					Total Production (Kg.)	Average rate (Rs./Kg)	Gross return (Rs.)		
Radish	Spinach	Bottle gourd	Ridge gourd	Carrot			Before FLD	After FLD	
11	12	13	14	15	16	17	18	19	
5.9	4.7	7.9	9.2	5.4	124.6	50	1000	6230 along with Domestic consumption	

**Feed Back:**

1. Kitchen gardening gives continuous supply of fresh vegetables.
2. Income is generated by selling extra vegetables grown in kitchen garden.
3. Farm women are not applying any pesticides in kitchen garden so they get organic vegetables

**\*check maybe family adopting different Nutrition garden model/ no adoption of Nutrition garden model**

**Savings from produce of Nutrition garden used for home consumption**

**FLD on Demonstration details on crop hybrids: Nil**





























Others (pl specify)										
<b>Total</b>	<b>20</b>	<b>485</b>	<b>230</b>	<b>715</b>	<b>339</b>	<b>161</b>	<b>500</b>	<b>824</b>	<b>391</b>	<b>1215</b>
<b>VIII Fisheries</b>										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
<b>Total</b>										
<b>IX Production of Inputs at site</b>										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
<b>Total</b>										
<b>X Capacity Building and Group Dynamics</b>										
Leadership development	2	0	0	0	80	55	135	80	55	135















Fruit Plants	1	45	0	45	0	0	0	45	0	45
Ornamental plants										
Spices crops										
Soil health and fertility management										
Production of Inputs at site										
Methods of protective cultivation										
Others (pl. specify)	1	0	0	0	5	17	22	5	17	22
<b>Total</b>										
<b>Post harvest technology and value addition</b>										
Processing and value addition										
Others (pl. specify)										
<b>Total</b>										
<b>Farm machinery</b>										
Farm machinery, tools and implements										
Others (pl. specify)										
<b>Total</b>										
<b>Livestock and fisheries</b>										
Livestock production and management										
Animal Nutrition Management										
Animal Disease Management										
Fisheries Nutrition										
Fisheries Management										
Others (pl. specify)										
<b>Total</b>										
<b>Home Science</b>										
Household nutritional security										
Economic empowerment of women	4	0	30	30	0	85	85	30	85	115
Drudgery reduction of women										
Others (pl. specify)										
<b>Total</b>										
<b>Agricultural Extension</b>										
CapacityBuilding and Group Dynamics										
Others (pl. specify)										
<b>Total</b>										
<b>GRAND TOTAL</b>	<b>13</b>	<b>45</b>	<b>30</b>	<b>105</b>	<b>115</b>	<b>148</b>	<b>281</b>	<b>195</b>	<b>180</b>	<b>375</b>

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



etc.										
Agril. para-workers, para-vet training										
Others (pl. specify)										
<b>Total</b>										
<b>Agricultural Extension</b>										
Capacity building and group dynamics										
Others (pl. specify)										
<b>Total</b>										
<b>Grand Total</b>	<b>5</b>	<b>47</b>	<b>58</b>	<b>105</b>	<b>14</b>	<b>58</b>	<b>72</b>	<b>61</b>	<b>116</b>	<b>177</b>

### 3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services (Other than KMAS)	-	-	-	-
Kisan Gosthi	7	242	154	396
Khedut Shibir	5	484	308	792
Field day	10	199	57	256
Mahila Shibir	3	0	601	601
SHG Mahila meeting	3	0	43	43
Mahila Meeting	4	0	84	84
Film Show	53	911	1251	2162
Method Demonstration	33	399	1277	1676
Meeting attended	54	1633	584	2217
Special programme	14	1846	2179	4025
Special day celebration	36	1512	1117	2629
Lectures delivered as resource persons	70	2234	1393	3627
Newspaper coverage	5	2635	1365	4000
Advisory Services/ Telephone	44	2680	720	3400
What's app and other ICT tools advisory	17	22957	16067	39024
Scientist visitto farmers field	66	276	103	379
Farmers visitto KVK	90	175	37	212
Diagnostic visits	123	365	157	522
Exposure visit	5	113	14	127
Swachhhta related activities-2-31/10/21	16	271	189	460
Swachhhta related activities-16-31/12/21	15	267	154	421
Exhibition	2	358	372	730
FLD Visit	6	24	9	33
Sample Diagnosed	4	4	1	5



Online Webinar/ Workshops/ Meetings	37	5965	2890	8855
Other	282	2577	2383	4960
RAWE Students visit	1	8	2	10
Total	<b>1005</b>	<b>48135</b>	<b>33511</b>	<b>81646</b>

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

#### Details of other extension programmes:

Particulars	Number
Electronic Media (CD./DVD)	10
Extension Literature	3
Newspaper coverage	15
Popular articles	2
Radio Talks	0
TV Talks	1
Social Media (No. of platforms Used)	5
<b>Total</b>	<b>36</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				
1	Farmers training	Audio Conferencing	Dial-out training on Integrated Pest and Disease Management in Paddy	1	77
6	Farmers training	Google meet	Basics of kitchen gardening	1	<b>36</b>
7	Farmers training	Google meet	<b>Terrace/kitchen gardening</b>	1	143
8	School Students	Google meet	<b>Terrace/kitchen gardening with school students</b>	1	<b>72</b>
9	Farmers training	Google meet	<b>Scientific cultivation of mango</b>	1	<b>279</b>
10	Farmers training	Audio Conferencing	<b>Dial out- Scientific cultivation of Vegetable crops</b>	1	<b>70</b>
11	Farmers training	Google meet	<b>Webinar on Kitchen gardening</b>	1	<b>275</b>

12	Farmers training	Google meet	<b>Webinar on terrace/kitchen gardening</b>	1	95
13	Farmers training	Google meet	<b>Scientific Cultivation of Paddy</b>	1	35
14	Farmers training	Google meet	<b>Scientific Cultivation of Cotton</b>	1	46
			<b>Total</b>	10	1128
B	Farmers scientist's interaction programme	0	0	0	0
	<b>Total</b>	0	0	0	0
C	Farmers seminars	0	0	0	0
	<b>Total</b>	0	0	0	0
D	Expert lectures		0	0	0
			<b>Total</b>	0	0
E	Any other (Pl. specify)	0	0	0	0
	<b>Total</b>				
			<b>Grand Total (A+B+C+D+E)</b>	<b>10</b>	<b>1128</b>

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

#### Production of seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals	Paddy	GNR-3		84	262080	--
		GR-17 (Sardar)		162.50	505440	--
	Straw	--		200	80000	--
	Soybean	NRC-37		40	240000	--
	Green Gram	GM-6		5.50	55000	--
<b>Total</b>	--	--	--	<b>492.00</b>	<b>11,42,520</b>	--

#### Production of planting materials by the KVK

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number q/ha	Value (Rs.)	Number of farmers
Vegetable seedlings	Drum Stick	ODC-3	--	3525	105750	200
<b>Total</b>				<b>3525</b>	<b>105720</b>	<b>200</b>

#### Production of Bio-Products: Nil

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

<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Production of livestock materials:Nil**

<b>Particulars of Live stock</b>	<b>Name of the breed</b>	<b>Number</b>	<b>Value (Rs.)</b>	<b>No. of Farmers</b>
<b>Dairy animals</b>				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
<b>Poultry</b>				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
<b>Piggery</b>				
Piglet				
Others (Pl.specify)				
<b>Fisheries</b>				
Indian carp				
Exotic carp				
Others (Pl. specify)				
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

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

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

B. Literature developed/published

Item	Title	Authors name	Number
Research papers	Knowledge and adoption of kitchen gardening by urban women	Bhimani, Gita J., Bariya, M. K. and Panchal, Bhakti B.	<i>Guj. J. Ext. Edu.</i> , 31(2):16-20.
	Knowledge regarding food and nutrition among farm women	Gita J. Bhimani, M. K. Bariya and J. H. Rathod	<i>Guj. J. Ext. Edu.</i> ,; Volume - 31 18-21
	Evaluation of various combi product fungicides for the control of wilt (FOV) disease of cotton under <i>in vitro</i> condition of south Gujarat (India).	Patel, B. K., Sandipan, P. B., Chawada, S. K. and Patel R. K.	<i>Int. J. Chem. Stud.</i> , <b>9</b> (1): 2992-2995.
	Screening of different fungicides and biocontrol agents against <i>Fusarium oxysporum</i> f. sp. <i>vasinfectum</i> (FOV) under pot condition.	Patel, B. K., Sandipan, P. B., Patel R. K. and Chawada, S. K.	<i>Int. J. Chem. Stud.</i> , <b>9</b> (1): 1005-1007.
	Evaluation of different biocontrol agents against <i>Fusarium oxysporum</i> f. sp. <i>vasinfectum</i> (FOV) under <i>in vitro</i> condition of South Gujarat.	Patel, B. K., Sandipan, P. B., Chawada, S. K. and Patel R. K.	<i>Int. J. Chem. Stud.</i> , <b>9</b> (1): 998-1000.
	Wilt: An important fungal disease of cotton under South Gujarat region of India.	Patel, B. K., Sandipan, P. B., Patel R. K. and Chawada, S. K.	<i>Int. J. Chem. Stud.</i> , <b>9</b> (1): 269-271
	Screening of different non systemic and systemic fungicides for the wilt disease of cotton under <i>in vitro</i> condition of South Gujarat.	Patel, B. K., Sandipan, P. B., Patel R. K. and Chawada, S. K.	<i>Int. J. Curr. Microbiol. App. Sci.</i> , <b>9</b> (12): 820-825.
	Morphological and cultural characteristic of <i>Fusarium oxysporum</i> f. sp. <i>vasinfectum</i> (FOV) under South Gujarat	Patel, B. K., Sandipan, P. B., Chawada, S. K. and Patel R. K.	<i>Int. J. Curr. Microbiol. App. Sci.</i> , <b>9</b> (12): 814-819.
Technical reports	AGRESKO, ZREAC, SAC, AAP, APR, MPR, QPR	--	Periodically
News letters	0	0	0
Technical bulletins	0	0	0
Popular articles	Physiological Basis of Growth, Yield and Quality of Vegetable Influenced by Chemicals or PGRs.	Panchal Bhakti B. and Prof. S. J. Trivedi (2021).	<i>Agriculture &amp; food e-newsletter</i> , <b>3</b> (1): 123-126.
	Vegetable Production Using Zero Land for Food and Nutrition	Bhakti B. Panchal	<i>Agriculture &amp; food e-newsletter</i> , <b>3</b> (6): 250-251.
	<i>Chana nee jivato nu jaivik niyantran.</i>	Patel, R. K., Patel, C. J., Gajjar, S. N. and	State level seminar on "Maintenance

		Chauhan, H. R.	of the quality and safety of horticultural and food crops through biological control of pests and diseases" at Navsari Agricultural University, Navsari on December 30, 2021, pp.112.
Extension literature	0	0	0
Others (Pl. specify)	0	0	0
<b>TOTAL</b>			

**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	1	14
2	Facebook page/ Account	1	
3	Mobile Apps	-	-
4	WhatsApp groups	11	2000
5	Twitter Account	1	25
6	Any other (Pl. Specify)	Telegram	410

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

**Horticulture**

**Success Story- 1**

1	Name of Farmer	Shaileshbhai Ranchhodbhai Sailor
2	Father's Name	Ranchhodbhai Sailor
3	Date and Place of birth	29/06/1966, Rander, Surat(Gujarat)
4	Postal Address	A-2, Ranchhod Park Society, Near Sai Pujan Apartment, Jahangirapura - Olpad Road, Surat, Gujarat-395005
5	Mobile No.	98791 27205
6	Email Id	
7	Educational qualification	SSC fail
8	Total land	10 ha

9	Area under Crop	(i) Field Crops: 8.40 ha (ii) Horticultural Crops: 1.60 ha (Greenhouse)																																																																														
10	New technologies developed	In NVP system, he has grown gerbera for first two years. After that, he planted the orchid and Strawberry plants in two layer system. In first layer, planting of orchid in coconut husk put on GI stand at the height of 2.5-3.0 feet and 1 meter width. In second layer, planting of strawberry (Soilless cultivation) in turf technology (40-20 cm turf) with help of GI pipe in hanging condition above 2 feet from orchid plant. Fertilizers were applied manually in orchid and through drip irrigation in strawberry.																																																																														
11	Activities wise income, cost benefit ratio, gross and net income year wise for previous five years.	<p><b>Crop : Paddy</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Area (ha)</th> <th>Total production (kg)</th> <th>Total income (Rs.)</th> <th>Total cost (Rs.)</th> <th>Net profit (Rs.)</th> </tr> </thead> <tbody> <tr> <td>2015-16</td> <td>2.0</td> <td>10,445</td> <td>1,56,670</td> <td>70,500</td> <td>86,170</td> </tr> <tr> <td>2016-17</td> <td>2.5</td> <td>13,755</td> <td>2,20,080</td> <td>90,800</td> <td>1,29,280</td> </tr> <tr> <td>2017-18</td> <td>2.5</td> <td>14,365</td> <td>2,22,660</td> <td>92,600</td> <td>1,30,060</td> </tr> <tr> <td>2018-19</td> <td>2.0</td> <td>11,150</td> <td>1,84,000</td> <td>78,400</td> <td>1,05,600</td> </tr> <tr> <td>2019-20</td> <td>2.5</td> <td>14,280</td> <td>2,28,480</td> <td>95,800</td> <td>1,32,680</td> </tr> </tbody> </table> <p><b>Horticulture crops: Gerbera</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Area (ha)</th> <th>Production: no. of flowers/day</th> <th>Production: no. of flowers/year</th> <th>Total income (Rs.)</th> <th>Total cost (Rs.)</th> <th>Net profit (Rs.)</th> </tr> </thead> <tbody> <tr> <td>2015-16</td> <td>0.80</td> <td>7,000</td> <td>25,20,000</td> <td>56,70,000</td> <td>32,76,000</td> <td>23,94,000</td> </tr> <tr> <td>2016-17</td> <td>0.80</td> <td>7,305</td> <td>26,30,000</td> <td>55,23,000</td> <td>36,82,000</td> <td>18,41,000</td> </tr> </tbody> </table> <p><b>Horticulture crops: Orchid</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Area (ha)</th> <th>Total no. of plants</th> <th>Production: no. of spikes/year</th> <th>Total income (Rs.)</th> <th>Total cost (Rs.)</th> <th>Net profit (Rs.)</th> </tr> </thead> <tbody> <tr> <td>2017-18</td> <td>0.80</td> <td>85,000</td> <td>82,000</td> <td>8,20,000</td> <td>2,48,500</td> <td>5,71,000</td> </tr> <tr> <td>2019-20</td> <td>0.80</td> <td>85,000</td> <td>2,48,500</td> <td>29,82,000</td> <td>9,54,000</td> <td>20,28,000</td> </tr> </tbody> </table>	Year	Area (ha)	Total production (kg)	Total income (Rs.)	Total cost (Rs.)	Net profit (Rs.)	2015-16	2.0	10,445	1,56,670	70,500	86,170	2016-17	2.5	13,755	2,20,080	90,800	1,29,280	2017-18	2.5	14,365	2,22,660	92,600	1,30,060	2018-19	2.0	11,150	1,84,000	78,400	1,05,600	2019-20	2.5	14,280	2,28,480	95,800	1,32,680	Year	Area (ha)	Production: no. of flowers/day	Production: no. of flowers/year	Total income (Rs.)	Total cost (Rs.)	Net profit (Rs.)	2015-16	0.80	7,000	25,20,000	56,70,000	32,76,000	23,94,000	2016-17	0.80	7,305	26,30,000	55,23,000	36,82,000	18,41,000	Year	Area (ha)	Total no. of plants	Production: no. of spikes/year	Total income (Rs.)	Total cost (Rs.)	Net profit (Rs.)	2017-18	0.80	85,000	82,000	8,20,000	2,48,500	5,71,000	2019-20	0.80	85,000	2,48,500	29,82,000	9,54,000	20,28,000
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12	What improvement have been effected for productivity, profitability and sustainability - enhancement.	<ul style="list-style-type: none"> <li>The flowers of orchid have high demand in local market.</li> <li>Application of fertilizers and irrigation gives more spike production. In one year, one spikes from one plant which has high demand at marriage time, festivals, which take high profitability than other crop.</li> </ul>																																																																														
13	Any spread effect on Fellow Farmers	<ul style="list-style-type: none"> <li>The cost for greenhouse development of orchid in one acre of area is around Rs. 30-40 lakhs. The total cost for farming of orchid is around Rs. 60 lakhs. So it is very difficult to adopt this technology for common farmer.</li> <li>If farmers get subsidy of Rs. 38-40 lakhs from state government/horticulture department then and then he can start this farming.</li> <li>Mr. Kaushikbhai Sailor also started the same business. He planted orchids in 1 acre green house. Mr. Subhas Patel, Village Jothan, Tal-</li> </ul>																																																																														

Olpad planted Gerbera in 2 acres of Green house.

- Both Mr. Girish Patel & Mr. Ashok Patel started 1 acre greenhouse each at village Varoli Taluka Olpad. They grow capsicum and got good income.
- Mr. Girish Gohil started greenhouse (1 acre) with gerbera and now he shifted to orchid (3 acres)
- Mr. Gomansinh Patel from village Kudadra Tal- Hansot started 1 acre greenhouse with orchid and going to start another 1 acre greenhouse.
- Mr. Haribhai Patel from village Kudadra Tal- Hansot started 1 acre greenhouse with orchid and going to start another 1 acre greenhouse.
- Mr. Ishvarsinh Patel going to start orchid in 2 acres of land.
- Thus eight farmers started greenhouse cultivation with gerbera and orchid as single crop.

#### **Other Activities:**

#### **Innovative interventions inducted in the system of production and management and effects:**

In NVPB system, he has planted the orchid and strawberry plants in two layer system. First layer system, planting of orchid on coconut husk put on GI stand at the height of 2.5-3.0 feet and 1 meter width. In second layer, planting of strawberry (Soilless cultivation) in turf technology (40-20 cm turf) with help of GI pipe in hanging condition.

#### **Extent of publicity of his / her innovations / contributions / success story:**

- Interested farmers of different locations and government officers visited the poly house/greenhouse
- A newsletter was published in a leading newspaper –The Times of India
- An article published in “Majjani Life” in vernacular language- Lokoni demand videshi fulo taraf vadhi : Kaushikbhai Sailor





## Case Study:

### Improve nutritional status through terrace gardening:

Before starting concept of the terrace garden, KVK, Surat participated in Horticulture Fair- 2015. In that, it was suggested to arrange terrace garden training especially for the urban people. More than 750 people do the registrations who were interested for the training of terrace garden. To do the management of training MoU made with other NGO/Institute and it named as SAUAR (Surat Alliance for Urban Agriculture Resilience). Total nine trainings were conducted for the terrace garden and in which 60-70 people participated in each training. Whatsapp group of each training was made. Using this technology, participants can directly contact with concert scientist and solve the problem within short period of time. Participants also share their activities regarding terrace gardening which increase the interest regarding gardening in other participants.

**Back ground information:** In Surat city, mainly urban people do not have own spare space in and around the house. To solve the problem of land, proper utilization of terrace space for gardening. Due to lack of knowledge and proper sources, none of them can properly utilizing the available space. Seeing the interest of people, KVK Surat has started the special training for urban people with objective to popularize and adoption of terrace garden and gets fresh vegetable and increase nutritional status in their daily diet. This also helps to utilize the recycled household waste efficiently for cultivation of crop through composting.

**Intervention:** Krishi Vigyan Kendra, Surat conducted training for terrace garden to increase the awareness as well as to popularize it in Surat city. On terrace garden people grown more than 60 different types of horticultural crops on their terrace and utilize those fresh vegetables for their daily diet and after consumptions they also share their produce with their neighbor.

**Actual output:** From first training, continuous demand came from city people regarding more and more advance trainings related to terrace garden. Number of people in Surat city are start to grow no. of horticultural crops (around 60) on their own terrace and consume fresh organic and nutritional food.

**Actual outcome:** By conducting training to increase awareness/popularizing terrace garden activity, more than 2500 people of urban area are now a day's practicing and app. 1850 people are successfully starting the terrace garden. They can get easily available fresh, organic and nutritious food from their own terrace garden. Better utilization of spare time and space. Improve the health of the families. Most of the gardeners who were using hazardous chemical fertilizers and chemical pesticides are now a day's using biofertilizers, botanicals and biopesticides.

#### Case study : 1

Name : Dr. Mohiniben Pankajbhai Gadhiya  
Village : Surat  
Crop : All types of vegetables  
Area : On Front Balcony  
Mobile no. : 9265229107

Earlier people were not using the balcony space for the cultivation of the daily used vegetable and other ornamental plants. After participation in the training of terrace garden on KVK Surat, She applied this technology on her balcony. Presently, she is growing the vegetables like, brinjal, tomato, okra, chilli, cucurbits, tuber crops yam, suran and other kitchen vegetables. She is also growing the ornamental plants for the beautification of the terrace like, adenium, football lily, rose *etc.* Also sharing the photographs of his activity of the terrace gardening. She is also making kitchen compost from kitchen waste and use in the garden as a fertilizers. Those fresh vegetables used for the daily consumption and take the healthy and organic food.



## Case study: 2

Name : Dr. Rekhaben Nisikant Mistry  
Village : Surat  
Crop : Vegetables and medicinal plants  
Area : On terrace  
Mobile no. : 9879484515

She uses the space of gallery and terrace for the cultivation of vegetables like, brinjal, tomato, chilly, fenugreek, coriander, garlic, curry leaf. Medicinal plants like, tulsi, mint, aloe vera, lili cha, arduzi, long piper, etc. After the training of terrace garden, she motivated to grow vegetables on home which is healthy, without chemical residue, nutritious and organic. She has also utilized the recycled household waste efficiently for cultivation of crop through composting. Mrs. Rekha is a role model to the other people for taking up the modern technology and cultivation practices in the terrace garden.





### Case study: 3

Name : Mrs. Anupama Himnshu Desai  
 Village : Surat  
 Crop : Common vegetables like, brinjal, tomato, chilli, cucumber, gourds and fruit plant  
 Area : On terrace  
 Mobile no. : 9427111881

Mrs. Anupama earlier was not using the terrace space for the growing of the daily used vegetable. After she was participated in the training of terrace garden at KVK, she applied technology on his terrace. Presently, she is growing the vegetables like, brinjal, tomato, okra, chilly and cucurbits in different container. She is also growing the cucurbits on the trellis and support of the stick. In fruit crops, mainly dragon fruit, cherry, mulberry, guava and star apple are growing on terrace. She also made home based pesticides and apply on plants to manage different diseases and pest as mentioned during training. She is sharing the photographs of his activity of the terrace gardening. Those fresh vegetables used for the daily consumption and take the healthy and organic food.



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

Technology transfer – OLN-Novel, Novel plus, Bio-fertilizers and Waste decomposer

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

Sr. No.	Crop/Enterprise	ITK Practiced	Purpose of ITK
1	Caster	Soak seed with sour butter milk overnight to control the catter piller in caster crop and may be used in other crops too.	Plant Protection
2	Paddy	Removed of tips in Paddy and other seedlings to enhance drought tolerance and also sustained to water logging/ flowing condition.	Agronomy

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

#### A. Practicing Farmers

- Group discussion
- Power point presentation
- Method demonstration

#### B. Rural Youth

- a) Group discussion
  - b) Power point presentation
  - c) Method demonstration
- C. In-service personnel**
- a) Group discussion
  - b) Power point presentation
  - c) Method demonstration

**5.2. Indicate the methodology for identifying OFTs/FLDs – As per methodology mentioned in table 2.7**

**5.3 Field activities – As mentioned in Table No. 2.7 and 3.1 B**

**6. LINKAGES**

<b>Name of organization</b>	<b>Nature of linkage</b>
ATMA	Training, Exhibitions, Best ATMA Award Participation
Line departments (Horticulture & Agriculture)	Training and Shibir
Animal Husbandry	Pasupalan Shibir
NABARD	Trainings, FLD distribution
Ambuja Cement Foundation	Trainings, Shibir, Special Day Celebration
Forest	Trainings, Shibir
Reliance foundation	Trainings, Shibir

NB: The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

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

<b>Name of the scheme</b>	<b>Date/ Month of initiation</b>	<b>Funding agency</b>	<b>Amount (Rs.)</b>
-	-	-	-

### C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

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

#### Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	10	10	--	--
02	Research projects	--	--	--	--
03	Training programmes	24	24	--	--
04	Demonstrations	--	--	--	--
05	Extension Programmes	23	23	3	--
	Kisan Mela	1	2	--	--
	Technology Week	--	--	--	--
	Exposure visit	--	--	--	--
	Exhibition	2	2	--	--
	Soil health camps	--	--	--	--
	Animal Health Campaigns	--	--	--	--
	Others (Pl. specify) Best innovative Farmers Award, Women Empowerment Day, Soil Health Day	21	21	3	--
06	Publications				
	Video Films	--	--	--	--
	Books	--	--	--	--
	Extension Literature	--	--	--	--
	Pamphlets	--	--	--	--
	Others (Pl. specify)	--	--	--	--
07	Other Activities (Pl. specify)				
	Watershed approach	--	--	--	--
	Integrated Farm Development	--	--	--	--
	Agri-preneurs development	--	--	--	--

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

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Constraints if any
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#### E. Nature of linkage with National Fisheries Development Board

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

#### 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
--	--	--	--	--	--

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

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 earmarked if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	Gram Rabi 2021-22	Demo:10 ha	90000	119430	--
2	Green gram Summer-2021	Demo:30 ha	270000	100900	--
3	Gram Rabi 2020-21	Demo:30 ha	270000	178500	--

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

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

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

Sr. No.	Name of the sponsoring agency	Type of activity	Role of KVK	No. of farmers benefited
1	ATMA	Training, Exhibitions, Best ATMA Award Participation	As Guest Lecturer in Training	388
2	Bank of Baroda	Exhibitions	Exhibition stall at Bardoli	2340
3	Forest Department	Trainings, Sibir, FLD	As Guest Lecturer in Training	251
4	Baroda Swarojgar Vikas Sansthan	Trainings, Shibir	As Guest Lecturer in Training	58
5	DRDA, Surat	Training	Guest Lecture	330
6	Department of Horticulture, Surat	Training, Shibir, Seminar	Guest Lecture, Diagnostic Visit	749
7	Department of Agriculture, Surat	Training, Shibir, Seminar	Guest Lecture, Diagnostic Visit	810

8	UHRCE, Surat	Training, Seminar	Guest Lecture, Seminar	421
9	ICDS, Mandvi	Training	Guest Lecture	201
10	Community Science Center, Surat	Training, Seminar	Guest Lecture	107
11	Ambuja Cement Foundation	Trainings, Sibir	As Guest Lecturer in Training	1240
12	Reliance foundation	Trainings, Sibir, Special Day Celebration, FLD	As Guest Lecturer in Training, Input distribution,	515
13	Mandvi Rice mill Co-operative Society, Mandvi	Trainings, Sibir, FLD	As Guest Lecturer in Training, Input distribution	157
14	Adani Foundation, Surat	Shibir, Training	As Guest Lecturer in Training	26
15	Mahila Samakhya, Surat	Training, Mahila Shibir	As Guest Lecturer in Training	115
16	Jan Sikshan Sansthan, Surat	Training	As Guest Lecturer in Training	53
17	Unnat Bharat Abhiyan, SVNIT, Surat	Training, Field Visit, Shibir	Diagnostic Visit, Guest lecture	210
18	Care India, Umarpada, Choryasi	Training, Field Visit, Shibir	Diagnostic Visit, Guest lecture	112
19	The southern Gujarat Chamber of Commerce & Industry	Training	Guest lecture	450
20	KVSVS, Surat	Training, Shibir, FLD, Field Visit	FLD Distribution, Guest lecture, Diagnostic Visit	650
21	L&T, Hazira, Surat	Training, Seminar	Guest Lecture, Seminar	255

### 8. Innovative Farmers Meet

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

### 9. Farmers Field School (FFS)

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

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

S. N.	Crop	Technology demonstrated	Feed back
1	Paddy	GNRH -2	1. Medium slender grain rice 2. It is moderately resistant against bacterial leaf blight, leaf blast, grain discoloration and sheath rot. 3. Tolerant to insect pest like BPH, WBPH, leaf folder and stem borer. 4. Suitable for rice growing areas of South Gujarat
2	Paddy	GR -17(Sardar)	1. Early maturing, Long bold grain 2. Moderately resistant against bacterial leaf blight, leaf blast, grain discoloration, sheath rot, WBPH and leaf folder.. 3. Suitable for transplanted rice growing areas.
3	Paddy	GNR -6	1. Suitable for rainfed transplanted condition 2. With respect to pest and diseases, it was found superior to other cultivated varieties.
4	Paddy	GNR – 7	1. It has short slender grain, high productive tillers and number of grains per panicle with good quality characters. 2. It is moderately resistant against bacterial leaf blight, grain discoloration and sheath rot. 3. It showed tolerant to pest like BPH and moderate resistance against stem borer, leaf folder and sheath mite.
5	Paddy	GR – 16(Tapi)	1. Early maturing upland rice variety 2. Long bold variety with good grain quality, 3. Moderately resistant reaction against leaf blast and insect pest like stem borer and sheath mite. Suitable for upland rice growing areas.
6	Sorghum	GNJ-1	1. High yielding 2. Less incidence of smut, shoot borer and grain mould
7	Sorghum	GJ-38	1. Good grain quality 2. Resistant to shoot-fly, stem-borer and smut disease
8	Soybean	NRC-37	1. Moderate yield      2. Early maturing 3. Moderately Resistant to Pest & disease
9	Green gram	GAM-6	1. Moderate Yield 2. Moderately Resistance to YMD
10	Sesame	GT-5	1. Moderate yield 2. Moderately Resistant to Helicoverpa
11	Groundnut	GG-34	1. Higher yield with bold grain 2. Tolerant to rust and late tikka disease 3. Lower infestation of trips and jassids
12	Cotton	G.Cot.Hy-12(Bt)	1. Higher yield 2. Early maturing 3. Suitable for rainfed area 4. Resistant to pest & diseases
13	Pigeonpea	GNP-2	1. Seed is round, Pods are of light green colour 2. Tolerant to wilt & SMD
14	Pigeonpea	GT-104	1. Resistant to wilt and sterility 2. Red flowers & Pods set in clusters
15	Pigeonpea	GT-105	1. Resistant to sterility, early maturing 2. Yellow flowers
16	Brinjal	INM	1. Increase in yield and quality of fruit 2. Decrease use of chemical fertilizers
17	Tindola	GNLG-1	1. More fruit setting than local cultivar 2. Medium size fruit high market demand
18	Banana	INM	1. Increase bunch weight and quality
19	Parvar	INM	1. Increase in yield and quality of fruits 2. Increase fruit setting ratio
20	Parvar	GNPG-1	1. More production than local variety.
21	Sweet potato	C-71	1. More tuber production and green leaf production.
22	Okra	INM	1. Increase the production



			2. Reduce the use of chemical fertilizers
--	--	--	---

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

1. Huge damage of pig/wild boar in agricultural crops in village of Masma, Mandroi, Asnad, Sarsana, Sandhier, Bharundi, Kareli, Madhar *etc.*
2. The problem of pointed gourd wilt and nematodes are increasing in area of Mahuva and Olpad block of Surat district. Effective IPDM module should be developing.
3. IDM module for the management of Banana wilt should be developed.
4. Compatibility study on use of Novel, Novel plus and Novel prime with other organic or chemical should be done to cut down the cost of cultivation.

## 11. Technology Week celebration during 2021:No

Period of observing Technology Week: From to

Online / Offline:

Total number of farmers visited :

Total number of agencies involved :

Number of demonstrations visited by the farmers within KVK campus:

### Other Details

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

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

A. Introduction of alternate crops/varieties

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

B. Major area coverage under alternate crops/varieties

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

C. Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No. of participants
-------	----------------------	------------------------	---------------------

--	--	--	--
<b>Total</b>	<b>0</b>	<b>00</b>	

#### D. Animal health camps organized

State	Number of camps	No. of animals	No. of farmers
--			
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>

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

State	Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers
--	--	--	--	--
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

#### F. Large scale adoption of resource conservation technologies: Nil

State	Crops/cultivars and gist of resource conservation technologies introduced	Area (ha)	Number of farmers
--	--	--	--
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>

#### G. Awareness campaign: Nil

State	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers
--												
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### 13. IMPACT

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

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

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

#### B. Cases of large scale adoption

(Please furnish detailed information for each case)

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

### 14. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
Jan 2021	0		
Feb 2021	1	7561	
March 2021	1	4641	
April 2021	1	78	
May 2021	2	15326	

Jun 2021	0		
Jul 2021	1	7657	
Aug 2021	-		
Sept 2021	-		
Oct 2021	-		
Nov. 2021	-		
Dec. 2021	-		

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
	Text only	6	-	108	-	-	-	114
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	<b>Total Messages</b>	<b>6</b>	<b>-</b>	<b>108</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>114</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	
--	--	--	--	--	--	--	--	--	--

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

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Pulses									
Oilseeds									
Fibers									
Spices & Plantation crops									
Floriculture									
Fruits									
Vegetables									
Others (specify)									

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

Sl.	Bio	Name of	Qty (kg/lit)	Amount (Rs.)	Remarks
-----	-----	---------	--------------	--------------	---------



--	--	--	--	--	--	--	--	--	--

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

If Nutritional Garden developed at KVK farm/Village Level? 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
	Vegetable crops	--	--
	Fruit crops	--	--
	Others if any	--	--

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

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

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

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

### 17. FINANCIAL PERFORMANCE

#### A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
Current	State Bank Of India	Prakash Society Surat	009166	NAU Krishi Vigyan Kendra, Athwa Farm Surat	32212880883	395002022	SBIN0009166

#### 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	Pay & Allowances	116.00	76.56	84.62
2	Traveling allowances	1.00	0.75	0.27
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			
B	POL, repair of vehicles, tractor and Equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			
D	Training material (posters, charts, demonstration material including chemicals etc.			

	required for conducting the training)			
<i>E</i>	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
<i>F</i>	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
<i>G</i>	Training of extension functionaries			
<i>H</i>	Maintenance of buildings			
<i>I</i>	Establishment of Soil, Plant & Water Testing Laboratory			
<i>J</i>	Library			
		11.00	5.97	6.61
<b>TOTAL (A)</b>		<b>128.00</b>	<b>83.28</b>	<b>128.00</b>
<b>B. Non-Recurring Contingencies</b>				
1	<b>Works</b>	29.00	0	0
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>29.00</b>	<b>0</b>	<b>0</b>
<b>C. REVOLVING FUND</b>				
<b>GRAND TOTAL (A+B+C)</b>		<b>139.00</b>	<b>83.28</b>	<b>91.50</b>

**C. Status of revolving fund (Rs. in lakh) for the Four 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 2018 to March 2019	295591	1024057	603330.8	716317.2
April 2019 to March 2020	716317.2	231061.50	324172.36	737079.00
April 2020 to March 2021	737079	198210	715629	469660
April 2021 to December, 2021	469660	1161990	1046975	76205

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

Sr. No.	Name of the staff	Designation	Title of the training programme	Institute where attended	Mode (Online/Offline)	Dates
1	Dr. R. K. Patel	Scientist (Plant Protection)	Virtual National level higher training on "Sustainable Development of Secondary Agriculture: Economical, Food-Nutritional and Livelihood Perspective"	NAHEF-CAAST, NAU, Navsari	Online	16 January - 5 February 2021 (21 days)
	Shri. S. J. Trivedi	Scientist (Agronomy)				
	Prof. G. J. Bhimani	Scientist (Home Science)				
	Prof. B. B. Panchal	Scientist (Horticulture)				
2.	Shri. S. J. Trivedi	Scientist (Agronomy)	National webinar on "Sustainable agriculture through natural resource management"	College of Agriculture, NAU, Bharuch	Online	January 04-08, 2021 (5 Days)
3.	Prof. G. J. Bhimani	Scientist (Home Science)	National webinar on "Bhumi suposhan jan jagran campaign"	ATARI, Pune	Online	April 15, 2021
4.	Prof. B. B. Panchal	Scientist (Horticulture)	Orientation training for newly recruited subject matter specialists of KVKs	ATARI, Pune & AAU, Anand	Online	May 03-05, 2021
	Shri. S. J. Trivedi	Scientist (Agronomy)				
	Prof. B. B. Panchal	Scientist (Horticulture)				
5.	Dr. R. K. Patel	Scientist (Plant Protection)	Virtual training on management of honeybees	NAU, Navsari	Online	August 24-26, 2021
6.	Dr. J. H. Rathod	Senior Scientist & Head	Workshop on "Capacity building programme for KVK's scientists and technical staff of South Gujarat"	Poicha Swaminarayan Temple, At: Poicha, Taluka: Nandod, District: Narmada	Offline	September 23-25, 2021
	Dr. R. K. Patel	Scientist (Plant Protection)				
	Shri. S. J. Trivedi,	Scientist (Agronomy)				
	Prof. G. J. Bhimani	Scientist (Home Science)				





Nil

## 21. Details of SAP

S. No.	Types of major Activity conducted- Swachhta Pakhwada, Cleaning, Awareness Workshop, Microbial based Agricultural Waste Management by Vermicomposting etc.	No. of Programmes conducted	No. of Participants
1	Swachhata pledge	1	10
2	Cleanliness drive including cleaning of offices, corridors and premises.	1	8
3	Cleanliness and sanitization drive in the villages involving KVK. Guidance on FYM making.	1	11
4	Cleanliness and sanitation drive within campuses and surroundings including residential colonies, common market places.	1	10
5	Polythene free status, composting of kitchen and home waste materials. Promoting clean & green technologies and organic farming practices in kitchen gardens of residential colonies.	1	37
6	Lecture delivered on cleaning of sewerage & water lines, awareness on recycling of waste water, water harvesting for agriculture/ horticulture application/kitchen gardens in residential colonies	1	23
7	Lecture delivered on agricultural technologies - waste decomposure for conversion of waste to wealth, safe disposal of all kinds of wastes	1	27
8	Celebration of Kisan Diwas (Farmer's Day) inviting farmers. Guidance to farmers on Swachhata Pakhwada.	1	32
9	Swachhata awareness campaign at local level	1	19
10	Cleaning of public places and nearby tourist places.	1	26
11	Organising training on cleanliness for village youth.	1	56
12	Awareness on waste management & other activities including utilization of organic wastes/ generation of wealth from waste, polythene free status. Curb the use of Single Use plastic (SUP) and discourage the use of plastic in the office. Composting of kitchen and home waste materials, promoting clean & green technologies and organic farming practices in new area.	1	31
13	Training on kitchen garden and Swachhata camapign	1	32
14	Cleaning and creating awareness on treatment & safe disposal of bio-degradable/ non-bio-degradable wastes to farming community	1	45

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

## APR SUMMARY

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

### 1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	67	1741	1806	3547
Extension functionaries	11	171	172	343
Rural youth and Vocational	5	61	116	177
Sponsored Training	13	167	208	375
FLD Training	33	417	388	805
SPNF Training	10	176	202	378
<b>Total</b>	<b>139</b>	<b>2733</b>	<b>2892</b>	<b>5625</b>

### 2. Frontline demonstrations

Crops/Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	163	65	163
Pulses	130	57.5	130
Cereals	89	39	89
Vegetables	155	55	155
Other crops	10	4	10
Hybrid crops	-	-	-
<b>Total</b>			
Livestock & Fisheries	-	-	-
Other enterprises	370		370
<b>Total</b>			
<b>Grand Total</b>			

### 3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
<b>Technology Assessed</b>			
Crops	7	20	45
Livestock	-	-	-
Various enterprises	-	-	-
<b>Total</b>	<b>7</b>	<b>20</b>	<b>45</b>

### 4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities		1005
Other extension activities		31
<b>Total</b>		<b>10036</b>

### 5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
	Text only	6	-	108				114
	Voice only							
	Voice & Text both							
	<b>Total Messages</b>	<b>6</b>	<b>-</b>	<b>108</b>				<b>114</b>

<b>Total farmers Benefitted</b>	<b>1375</b>	<b>8</b>	<b>-</b>	<b>7651</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2140</b>	<b>9</b>
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#### 6. Seed & Planting Material Production

	Quintal/Number	Value (Rs.)
Seed (q)	492.00	11,42,520
Planting material (No.)	3525	105750
Bio-Products (kg)	--	--
Livestock Production (No.)	--	--
Fishery production (No.)	--	--

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

Samples	No. of Beneficiaries	Value (Rs.)
Soil	5	0
Water	2	0
Plant	0	0
<b>Total</b>	<b>7</b>	<b>0</b>

#### 8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	1
2	Conferences	--
3	Meetings	25
4	Trainings for KVK officials	8
5	Visits of KVK officials	--
6	Book published	--
7	Training Manual	--
8	Book chapters	--
9	Research papers	9
10	Lead papers	--
11	Seminar papers	--
12	Extension folder	--
13	Proceedings	--
14	Award & recognition	--
15	On-going research projects	7