ICAR-ATARI, Pune
DETAILS OF ANNUAL PROGRESS REPORT OF KVKs DURING
(January 2020 to December 2020)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address with PIN code	Telephone		E mail	Website address & No. of visitors (hits)
Krishi Vigyan Kendra Navsari Agricultural University Athwa Farm, Surat Dist. Surat, Gujarat-395007	Office (0261) - 2655565	FAX (0261) 2668045 pp	kvksurat@ nau.in	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	8128686720	**hariom.janaksinh@gmail.com**

1.4. Year of sanction: 2012

1.5. Staff Position (as on 31 December, 2020)

				If Permanent, Please indicate			If Temporary, pl. indicate the consolidated amount paid (Rs./month)
Sl. No	**Sanctioned post**	**Name of the incumbent**	**Discipline**	**Current Pay Band**	**Current GP**	**Date of joining**	
1.	Senior Scientist and Head	Dr. J. H. Rathod	Entomology	131400-217100	--	16.11.16	Temporary (189994)
2.	Scientist	Dr. R. K. Patel	Extension	68900-205500	--	01.02.19	Temporary (103059)
3.	Scientist	--	Animal Husbandry	Vacant	--		
4.	Scientist	Mr. S. J. Trivedi	Agronomy	68900-205500	--	01.06.18	Temporary (112158)
5.	Scientist	Smt. B. B. Panchal	Horticulture	57700-182400	--	20.01.17	Temporary (78834)
6.	Scientist	Smt. G. J. Bhimani	Home Science	68900-205500	--	05.02.16	Temporary (100059)
7.	Scientist	Dr. S. K. Chawda	Crop protection	57700-182400	--	02.04.13	Temporary (86572)
8.	Farm manager	Mr. A. T. Patel	--	39900-126600	--	12.07.12	Temporary (54880)
9.	Computer Programmer	Mr. C. G. Lad	--	39900-126600	--	10.08.15	Temporary (54880)
10.	Programme Assistant	Mr. Y. D. Patel	--	39900-126600	--	10.08.15	Temporary (56501)
11.	Accountant/ Superintendent	Mrs. B. C. Patel	--	35400-112400	--	01.07.17	Temporary (61455)
12.	Stenographer	Mrs. J. M. Verma	--	25500-81100	--	19.08.15	Temporary (30375)
13.	Driver	Vacant	--	--	--	--	--
14.	Driver	Vacant	--	--	--	--	--
15.	Supporting staff	Vacant	--	--	--	--	--
16.	Supporting staff	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	--

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting year	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	--	Under Constructio n	--	-- --	--	--	--
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. Run	Present status
Jeep (Tata)	2012	599999	220000	Working
Tractor	2012	549900	1027(h)	Working

C) Equipment & 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
Hydrulic 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 meetings conducted in the year 2020

Proceeding of 9th Scientific Advisory Committee Meeting of Krishi Vigyan Kendra, NAU, Surat held on 18/12/2020 at 10:00 a.m., at KVK, Surat

The Ninth Scientific Advisory Committee Meeting of Krishi Vigyan Kendra, NAU, Surat was held at KVK, Surat on 18th December, 2020 to review the progress made by KVK during last year (01-02-2020 to 15-12-2020) and to discuss the future action plan for the next year (January-2021 to December-2021). The meeting was chaired by Dr. Z. P. Patel, Hon'ble Vice Chancellor, Navsari Agricultural University, Navsari. Dr. S. R. Chaudhary, Director of Research and Dean PG studies, NAU, Navsari, Dr. C. K. Timbadia, Director of Extension Education, NAU, Navsari 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 the dignitaries, committee members, farmers and other invitees. He presented overall activities and achievements done by the KVK during the mentioned year. Scientists also presented the discipline wise 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 with special reference to tribal of the district.

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 farming during training and to add organic inputs in components of FLD. He also appreciates the collaboration of Krishi Vigyan Kendra, Surat with other line departments.

Dr. Z. P. Patel, Hon'ble Vice Chancellor appreciated the activities of Krishi Vigyan Kendra, Surat. He advised to promote most successful technologies of universities on large scale in particular area. He also suggested for popularizing bean varieties in Umarpada district.

9.1 Approval of the minutes of Eighth Scientific Advisory Committee.

The action taken report of the minutes of eighth SAC meeting (Held on 24.01.2020) was presented before the house and it was approved by the Scientific Advisory Committee.

9.2 Progress made by KVK during 01-02-2020 to 15-12-2020

Senior Scientist and Head and all Scientists of the KVK, NAU, Surat presented the report on progress made by KVK, for the period of 01-02-2020 to 15-12-2020. The committee was satisfied with the activities and achievements made by the KVK.

9.3 Action plan for the period of January 2021 to December 2021.

Discussion was made on the Action Plan for the period of January 2021 to December 2021 which was approved by the house. However, few suggestions were made by the house to strengthen the action plan.

9.3.1	Give more emphasis on organic farming during training and add organic inputs in FLD
9.3.2	Give cluster demonstrations on Fruit fly trap
9.3.3	Conduct trainings on IPM in Sorghum
9.3.4	Conduct trainings & demonstrations of IPDM in Sugarcane crop
9.3.5	Conduct FLD on Elephant foot yam and Greater Yam
9.3.6	Increase number of training in Umarpada, Mandvi and Mangrol block
9.3.7	Conduct training on mushroom cultivation in collaboration with R-CETI, Surat
9.3.8	Conduct demonstrations on Indian bean in Umarpada block
9.3.9	During training programme, aware farmers regarding different banking schemes related to farming
9.3.10	conduct demonstration on KDS 344 variety of Soybean for medium to high rainfall area

The meeting was ended with vote of thanks by Mr. S. J. Trivedi, Scientist, Crop production, KVK, NAU, Surat.

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

Chairman SAC
&
Vice – Chancellor
Navsari Agricultural University
Navsari

Following members and invitees were remained present in 9th Scientific Advisory Committee meeting.

1	Dr. Z. P. Patel	Hon'ble Vice Chancellor, NAU, Navsari	Chairman
2	Dr. S. R. Chaudhary	Director of Research and Dean PG Studies, NAU, Navsari	Member
3	Dr. C. K. Timbadia	Director of Extension Education, NAU, Navsari	Member
4	Shri. K. S. Patel	Joint Director of Agriculture, Surat	Member
5	Dr. D. R. Bhanderi	Professor and Head, Department of Horticulture, NMCA, NAU, Navsari	Member
6	Dr. R. L. Leva	Representative, Professor and Head, Department of Agronomy, NMCA, NAU, Navsari	Member
7	Dr. M. D. Patel	Research Scientist, LRS, NAU, Navsari	Member
8	Mr. N. G. Gamit	District Agriculture Officer, Surat	
9	Shri. N. K. Gabani	Project Director, ATMA, Surat	Member
10	Dr. S. Tejani	Representative, Veterinary Officer, Dept. of Animal Husbandry, Surat	Member
11	Ms. Preeti R. Desai	Representative, Deputy Director of Horticulture, Surat	Member
12	Mr. N. M. Barot	Training course coordinator, WALMI, Surat	Member
13	Mrs. Vajaben Vasava	BOD, Reliance Foundation, Surat	Member
14	Mrs. Nishaben S. Chaudhary	Chairmen, SHG, Village: Parvat, Taluka: Mandvi, Surat	Member
15	Mrs. Anjanaben Sandipbhai Vasava	Progressive Woman Farmer, Village:Chitlada, Taluka:Umarpada, Surat	Member
16	Mr. S. Y. Solanki	Representative, RFS, Dhamrod	Member
17	Dr. R. M. Patel	Principal & Dean, Aspee Shakilam Biotechnology Institute, NAU, Surat	Special Invitee
18	Dr. M. C. Patel	Research Scientist (Cotton), Main Cotton Research Station, NAU, Surat	Special Invitee
19	Dr. B. K. Davda	Research Scientist (Sorghum), Main Sorghum Research Station, NAU, Surat	Special Invitee
20	Dr. Rekha N. Mistry	Faculty of MSW programme, VNSGU, Surat	Special Invitee
21	Mr. Mahendra H. Makavana	Representative, Reliance Foundation, Surat	Special Invitee
22	Mr. Rajak A. Vohara	Representative, Project Director, District Watershed Development Unit, Surat	Special Invitee
23	Mr. Rasik Jethwa,	Lead Bank Manager, Bank of Baroda, Surat	Special Invitee
24	Mrs. Rama Sinh	Joint Director, Suruchi Shikshan Vasahat Trust, Bardoli	Special Invitee
25	Ms. Asha R. Dave	IPP, SGPC, Surat	Special Invitee
26	Mr. Amol L. Gite	Director, Baroda Swarojgar Vikas Sansthan R-CETI, Surat	Special Invitee
27	Shri Ramsingbhai Chaudhri	Representative, Cooperative Leader, Village: Moritha, Taluka: Mandvi ,	Special Invitee

28	Dr. J. H. Rathod	Senior Scientist and Head, KVK, Surat	Member Secretary
29		All 5 Scientists, KVK, Surat	
Following Members couldn't remain present			
1	Director, ATARI, Pune		Member
2	Head, CSSRI (ICAR), RRS, Bharuch		Member
3	Deputy Director of Fisheries, Surat		Member

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 (2018)

2.4.1 Field Crops cultivated in the district

S. No	Crop	Area (ha)	Production (MT.)	Productivity (Qt./ha)
Kharif crops				
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	--
	Total	**123796**	**0**	--
Rabi-summer crops				
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	-	-
	Total	**118911**		

Source: DAO, Surat.

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
Total	**21114**	**714025**	**33.82**

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 Vegetables	6421	93275	14.53
Other Vegetables	5724	97651	17.06
Total	**37783**	**600039**	**15.88**

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
Allocasia	9.20	123	1939
Total	**17.85**	**5724**	**97651**

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
Total	**416.8**	**4007**	**9.61**

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
Total	**793**	**11529**	**14.54**

Source: DDH, Surat

2.5. Weather data (2020)

Month	Rainfall (mm)	Temperature 0 C		Relative Humidity (%)	
		Maximum	Minimum	Morning	Evening
January 2020	-	27.2	11.6	67.4	55.0
February 2020	-	31.5	16.7	68.5	63.75
March 2020	-	35.8	20.1	68.2	61.7
April 2020	-	38.0	24.1	55.8	51.4
May 2020	-	37.5	28.2	64.5	53.7
June 2020	219.5	32.1	27.5	73.2	65.0
July 2020	705	30.7	27.6	82.6	78.8
August 2020	296	30.1	26.2	86.5	81.7
September 2020	356	29.7	25.5	84.0	82.5
October 2020	44	33.0	24.8	75.8	67.6
November 2020	14	33.0	21.9	75.7	66.5
December 2020	-	26.9	18.4	74.5	71.5

Source: MCRS, Surat

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

Category	Population	Production	Productivity
Cattle			
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

Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problems identified	Identified Thrust Areas
	Mahuva	1. Umra 2. Vasrai 3. Dhundhesa 4. Vadia	Paddy, Sugarcane, Pointed gourd, Okra, Brinjal, Vegetables, Mango Crop production-Horticulture-Livestock	1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation 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 Lack of technical knowhow about mango orchards plantation and management. 3.High use of water in canal command area and water scarcity in hilly area 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. 5.Low milk productivity High calf mortality Problem of anoestrus Lack of awareness about Feeds and fodder management 6.Lack of knowledge of small scale agricultural base enterprises, value addition etc. 7. Drudgery reduction through improved hand tools.	1. Increase productivity of major crops e.g. Paddy, sugarcane 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. Popularize eco-friendly crop production with special reference to IPDM & INM. 5. Increasing milk production by dissemination of latest technologies. 6. Imparting skill oriented training to the tribal women for sustaining their livelihood. 7. Promotion of small scale farm mechanization in tribal area.

	Mandvi	1. Amba 2. Parvat 3. Uteva 4. Titoi	Paddy, Sugarcane, Brinjal, Okra, Cluster bean , Vegetables, Pulses, Soybean, Groundnut Crop production- Horticulture-Livestock	1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation 2. Brinjal and okra are important crops but the productivity is very low, problem of insect pests and disease No technical know how regarding green house net house technology and crops Lack of technical knows how about mango orchards plantation and management. 3.High use of water in canal command area and water scarcity in hilly area 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 5.Low milk productivity High calf mortality Problem of anoestrus Lack of awareness about Feeds and fodder management 6.Lack of knowledge of small scale agricultural base enterprises, value addition etc. 7.Drudgery reduction through improved hand tools.	1. Increase productivity of major crops e.g. Paddy, sugarcane, Soybean 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. Popularize eco-friendly crop production with special reference to IPDM & INM. 5. Increasing milk production by dissemination of latest technologies. 6 .Imparting skill oriented training to the tribal women for sustaining their livelihood. 7. Promotion of small scale farm mechanization in tribal area.

	Umarpada	1. Kadvali 2. Kadavidadra 3. Vadpada 4. Khotarampura	Paddy, Brinjal, Okra, Cotton, Pulses, Soybean, Groundnut Crop production - Livestock	1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation 2. Indian bean is an important crops but the productivity is very low, problem of insect pests and disease Lack of technical knowhow about orchards plantation and management. 3. Water scarcity in rabi / summer due hilly area 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 5.Low milk productivity High calf mortality Problem of anoestrus Lack of awareness about Feeds and fodder management Large no of non descript animals 6. Lack of knowledge of small scale agricultural base enterprises, value addition etc. 7. Drudgery reduction through improved hand tools.	1. Increase productivity of major crops e.g. Paddy, cotton, sorghum, pigeon pea 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. Popularize eco-friendly crop production with special reference to IPDM & INM. 5. Increasing milk production by dissemination of latest technologies. 6 .Imparting skill oriented training to the tribal women for sustaining their livelihood. 7. Promotion of small scale farm mechanization in tribal area.

	Mangrol	1. Balethi 2. Mandan 3. Ghodbar	Paddy, Sorghum, Cotton, Pulses, Groundnut Crop production- Livestock	1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation 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. 3.Water scarcity in hilly area and rain fed farming 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. 5.Low milk productivity High calf mortality Problem of anoestrus Lack of awareness about Feeds and fodder management 6. Lack of knowledge of small scale agricultural base enterprises, value addition etc. 7. Drudgery reduction through improved hand tools.	1. Increase productivity of major crops e.g. Paddy, cotton, sorghum 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. Popularize eco-friendly crop production with special reference to IPDM & INM. 5. Increasing milk production by dissemination of latest technologies. 6 .Imparting skill oriented training to the tribal women for sustaining their livelihood. 7. Promotion of small scale farm mechanization in tribal area.

	Olpad	1. Mandroi 2. Bhatgam	Paddy, Sugarcane, Pointed gourd, Okra, vegetables Crop production-Livestock	1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation 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. 3.High use of water in canal command area and salinity problem in coastal area 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. 5. Low milk productivity High calf mortality Problem of anoestrus Lack of awareness about Feeds and fodder management 6. Lack of knowledge of small scale agricultural base enterprises, value addition etc.	1. Increase productivity of major crops e.g. Paddy, sugarcane 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. Popularize eco-friendly crop production with special reference to IPDM & INM. 5. Increasing milk production by dissemination of latest technologies. 6 .Imparting skill oriented training to the tribal women for sustaining their livelihood.

	Kamrej	1. Karjan 2. Choryasi	Sugarcane, Banana, Paddy, Vegetables Crop production-Horticulture-Livestock	1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation 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 3.High use of water in canal command area problem of water logging 4.Lack of knowledge about Insect pests and diseases and their management and nutrient management in banana	1. Increase productivity of major crops e.g. sugarcane 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. Popularize eco-friendly crop production with special reference to IPDM & INM.

	Bardoli	1. Balda 2. Rajvad 3. Afva	Paddy, Sugarcane, Banana, Brinjal, Okra, Vegetables Crop production- Horticulture-Livestock	1. The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation 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. 3.High use of water in canal command area and salinity problem in coastal area 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. 5.Low milk productivity High calf mortality Problem of anoestrus Lack of awareness about Feeds and fodder management 6.Lack of knowleged of small scale agricultural base enterprises, value addition etc.	1. Increase productivity of major crops e.g. Paddy, sugarcane 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. Popularize eco-friendly crop production with special reference to IPDM & INM. 5. Increasing milk production by dissemination of latest technologies. 6 .Imparting skill oriented training to the tribal women for sustaining their livelihood.

	Choryasi	1. Bhatha 2. Bhatpor 3. Budia	Paddy, Pointed gourd, Sorghum, Vegetables Crop production-Livestock	1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation 2.No technical knowhow regarding green house net house technology and crops 3.High use of water in canal command area problem of water logging 4.Lack of knowledge about Insect pests and diseases and their management and nutrient management in banana	1. Increase productivity of major crops e.g. sugarcane 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. Popularize eco-friendly crop production with special reference to IPDM & INM. 5. Imparting skill oriented training to the tribal women for sustaining their livelihood.

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	6	30	40	25	28	450	912

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**
87	98	1910	3457	708	762	5438	139893

Seed Production (Qtl.)		**Planting materials (Nos.)**	
5		**6**	
Target	**Achievement**	**Target**	**Achievement**
Paddy- GNR-3:150.00 GR-17: 25.00	GNR-3:154.00 GR-17:21.00	50000 vegetable seedlings	60000 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 the year 2020

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	In hilly area problem of water conservation	--	Mandroi Bhatgam	OFT, FLD, Training, extension activity

	Crop production-Livestock	In middle canal command area due to excess irrigation problems of water logging and salinity In coastal area salinity problem			
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 2020, Rabi 2019-20, Summer 2020)

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	1	--	--	--	--	1	--	--	--	2
Integrated Pest Management	1	--	--	--	--	--	--	--	--	1
Integrated Disease Management	1	--	--	--	--	--	--	--	--	1
Varietal Evaluation	1	--	--	--	1	--	--	--	---	2
Total	**1**	**--**	**--**	**--**	**--**	**2**	**--**	**--**	**--**	**6**

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 KNO3 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
2Integrated Disease Management	Brinjal	Assessment of pheromone trap technology for the management of *Leucinodes orbonalis* 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
Total			**17**	**40**	**14**

C1.Results of Technologies Assessed

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

Crop Production

OFT 1: Effect of Spraying KNO_3 and Novel OLN on yield of Cotton

Treatments: 1) T_1: No Use of KNO_3 (Farmers practices)

2) T_2: 3 % KNO_3 Spraying at squaring, flowering and ball formation stage (2010)

3) T_3: 2 % NOVEL OLN at flowering (2018)

Crop	Variety	No. of farmers	Area (ha)	Yield(q/ha)			% increase Over Check			B : C Ratio		
				KNO_3	Novel OLN	Check	KNO3	Novel OLN	Check	KNO3	Novel OLN	Check
***Kharif*-2020**												
Cotton	G.Cot. Hy-12(Bt)	10	3 (0.1 ha/Plot)	Awaited								
***Kharif*-2019**												
	G.Cot.Hy-12(Bt)	10	3 (0.1 ha/Plot)	23.40	23.71	21.50	8.84	10.28	--	2.68	2.88	2.67

OFT 2: Assessment of different varieties of greengram

Treatments: 1) T_1 : GAM-5: AAU, Anand (2015)
2) T_2 : GAM-6: NAU, Navsari (2016)
3) T_3 : 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-21)	As per treat.	10	3 (0.1ha/ Plot)	**Yet to be conducted**								
Greengram (Summer-20)	As per treat.	10	3 (0.1 ha/ Plot)	637	720	579	10.01	24.35	--	2.06	2.34	1.96

Crop Protection

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

Technology option	% Infestation	Average yield(q/ha)	BCR
T1: Farmers practices (No use of fungicide)	12 %	35.30	2.99
T2: 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	3 %	41.10	3.31

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

Treatments	T_1: Farmers practices as injudicious and indiscriminate use of chemical pesticides T_2: Installation of pheromone traps @ 40 traps/ha T_3: Removal of infected fruit & installation of pheromone traps @ 12/ha(TNAU)
Source of Technology	AAU, Anand & TNAU
Season	Rabi, 2019-20
No. of farmers	5
Plot Area	1.0 acre/farmer
Critical Inputs Required	Pheromone Traps & Lures
Cost of Critical Inputs	4000 Rs
Observations	1. Per cent infestation of fruit and shoots 2. Yield parameter 3. B:C ratio

Results:

Technology option	% Infestation	Average yield (q/ha)	Net Return	BCR
T1: Farmers practices as injudicious and indiscriminate use of chemical pesticides	8.0	165.30	237540	4.96
T2: Installation of pheromone traps @ 40 traps/ha (AAU,Anand)	4.5	185.10	274680	5.70
T3: Remove the infected shoot and fruit + install pheromone traps @ 12/ha (TNAU, TN)	3.0	194.50	291100	5.93

Horticulture:

OFT: 5 Assessment of Indian Bean varieties

Treatments	**T_1:** Local Desi Variety **T_2:** GNIB-22 **T_3 :** GJIB-2
Source of Technology	NAU, Navsari & JAU, Junagadh
Season	Rabi, 2019-20
No. of farmers	5
Critical Inputs Required	Seed
Cost of Critical Inputs	5000 Rs
Observations	1.Yield parameter 2. B:C ratio
Farmers reactions / Feedback :	Both varieties perform good in South Gujrat condition, but GNIB-22 is better than the GJIB-2

Technology Option	No. of trials	Yield (t/ha)	BCR
T_1: Local Variety (Farmers practices)	5	26.2	2.82
T_2: GNIB-21(2014)		38.12	4.65
T_3: GJIB-11 (2018)		33.40	3.85

OFT: 6 Assessment **of enrich banana sap for yield and quality of mango**

Treatments	**T_1:** Farmers method **T_2:** Spraying of 1.5 % banana sap at flowering and pea stage
Source of Technology	NAU, Navsari (2012)
Season	Rabi, 2019-20
No. of farmers	5
Critical Inputs Required	Organic Liquid Nutrient (NOVEL)
Cost of Critical Inputs	3000 Rs
Observations	1.Yield parameter 2. B:C ratio
Farmers reactions / Feedback :	Application of Novel Organic liquid nutrient on mango inflorescence, increases the flower & fruit setting and ultimately the yield

Technology Option	No. of trials	Yield (t/ha)	BCR
T_1: Farmers method	5	10.50	2.05
T_2: Spraying of 1.5 % banana sap at flowering and pea stage		13.40	2.78

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 2020 and recommended for large scale adoption in the district

Sr. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
Cereal crops							
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
Oilseed and Pulses crops							
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

Fiber crops							
13	Cotton (G cot- Hy-12 Bt)	ICM	New variety	FLDs	1	12	5
Rabi-20-21							
14	Sorghum (Phule Raveti)	ICM	New variety	FLDs	-	13	5
Summer-21							
15	Greengram (GAM-6)	ICM	New variety	FLDs	-	12	5
Horticulture crops							
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
Home Science							
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	--
FLDs of Other Agency							
Crop production							

CFLD (NMOOP)							
1	Soybean (KDS-344)	ICM	New variety	FLDs	4	50	20
CFLD (NFSM)							
2	Gram (GG-5)	ICM	New variety + ST+INM	FLDs	-	75	30
CFLD (NMOOP)							
3	Sesame	New Variety+ ST+INM+IPDM	GT-5	FLDs	-	25	10
4	Groundnut	ICM	GG-34	FLDs	-	25	10
CFLD (NFSM)							
5	Green gram	New Variety+ ST+INM+IPDM	GAM-6	FLDs	-	75	30
CFLD (NFSM & NMOOP):2019-20							
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
TSP – ICAR (Mega Seed)							
1	Gram (GG-5)	ICM	Seed	FLDs	1	15	2
Other FLDs by Sorghum Research Station-Dhamrod Surat							
1	Sorghum fodder	Improved variety	PC-23	FLDs	5	25	4
Adaptive Trials							
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		30	12
19	Okra	IPDM	IPDM	FLDs		030	12

B. Details of FLDs implemented during 2020 **(Kharif 2020, Rabi 2019-20, Summer 2020)** (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	
KVK:2020-21										
Kharif-20										
Cereal crops										
1	Paddy (GNRH-2)	ICM	New variety	*Kharif -20*	5	5	13	0	13	--
2	Paddy (GR-17-Sardar)	ICM	New variety	*Kharif -20*	5	5	10	0	10	--
3	Paddy (GNR – 6)	ICM	New variety	*Kharif -20*	5	5	10	0	10	--
4	Paddy (GNR – 7)	ICM	New variety	*Kharif -20*	5	5	10	0	10	--
5	Paddy	ICM	New variety	*Kharif -20*	5	2	5	0	5	Insufficient

	(GR–16 Tapi)									Seed availability
6	Sorghum (GNJ-1)	ICM	New variety	*Kharif -20*	5	6	15	0	15	--
7	Paddy	IPDM	-	*Kharif -20*	4	4	10	-	10	--
Oilseed and Pulses crops										
8	Pigeonpea (GNP-2)	ICM	New variety	*Kharif -20*	2	3	6	0	6	--
9	Pigeonpea (GT-104)	ICM	New variety	*Kharif -20*	2	2.5	5	0	5	--
10	Pigeonpea (GT-105)	ICM	New variety	*Kharif -20*	2	2.5	5	0	5	--
11	Black gram (GU-3)	ICM	New variety	*Kharif -20*	2	0.4	1	0	1	Insufficient Seed availability
12	Soybean (NRC-37)	ICM	New variety	*Kharif -20*	5	6	13	0	13	--
Fiber crops										
13	Cotton (G cot- Hy-12 Bt)	ICM	New variety	*Kharif -20*	5	5	12	0	12	--
Rabi-20-21										
14	Sorghum (Phule Raveti)	ICM	New variety	*Rabi-20-21*	5	5	13	0	13	--
Summer-21										
15	Greengram (GAM-6)	ICM	New variety	*Summer-21*	5	5	12	0	12	--
Horticulture crops										
16	Banana	INM	Biofertilizers and OLF novel	*Kharif-20*	4	4	0	10	10	--
17	Brinjal	INM	Biofertilizers and OLF novel	*Rabi – 20*	4	4	0	10	10	--
18	Pointed gourd	INM	Biofertilizers and OLF novel	*Kharif-20*	4	4	0	10	10	--

19	Okra	INM	Biofertilizers and OLF novel	*Kharif-20*	4	4	10	0	10	--
20	Little gourd	ICM	New Variety	*Kharif-20*	0.5	0.5	10	0	10	--
21	Elephant gourd	ICM	New Variety	*Summer-21*	1	1	5	0	5	--
22	Indian bean	ICM	New Variety	*Kharif-20*	4	4	10	0	10	--
23	Sweet potato	ICM	New Variety	*Rabi-20*	1	1	5	0	5	--
24	Banana	IPDM	IPDM	*Kharif-20*	4	4	0	10	10	--
25	Pointed Gourd	IPDM	IPDM	*Rabi-20*	4	4	10	0	10	--
26	Brinjal	IPDM	IPDM	*Rabi-20*	4	4	10	0	10	--
27	Okra	IPDM	IPDM	*Rabi-20*	4	4	10	0	10	--
Home Science										
28	Wheel hoe	Drudgery deduction	Labour saving	*Rabi-20*	--	--	20	0	20	--
29	Kitchen garden kit	Nutrition Management	Seed & Seedling	*Rabi-20*	--	--	100	0	100	--
30	Rake for collecting garbage/ harvesting	Drudgery deduction	Labour saving	*Rabi-20*	--	--	100	0	100	--
				TOTAL	**100.5**	**99.9**	**430**	**40**	**470**	
FLDs of Other Agency: 2020-21										
Crop production :										
CFLD(NMOOP)										
1	Soybean (KDS-344)	ICM	New variety	*Kharif*-20	20	20	50	0	50	--
CFLD(NFSM)										
2	Gram (GG-5)	ICM	New variety + ST+INM	*Rabi-20-21*	30	30	75	0	75	--
CFLD(NMOOP)										
3	Sesame (GT-5)	ICM	New variety+ ST+INM+INM	*Summer-21*	10	10	25	0	25	--
4	Groundnut (GG-34)	ICM	New variety+ ST+INM	*Summer- 21*	10	10	25	0	25	--

CFLD(NFSM)										
5	Greengram (GAM-6)	ICM	New variety+ ST+INM+IPDM	*Summer- 21*	30	30	75	0	75	--
CFLD(NFSM & NMOOP): 2019-20										
6	Sesame (GT-5)	ICM	New variety+ ST+INM+IPDM	*Summer- 20*	10	10	25	0	25	--
7	Groundnut (TG-37A)	ICM	New variety+ ST+INM	*Summer- 20*	10	10	25	0	25	--
8	Greengram (GAM-6)	ICM	New variety+ ST+INM+IPDM	*Summer- 20*	30	30	75	0	75	--
TSP – ICAR (Mega Seed)										
1	Gram (GG-5)	ICM	Seed	*Rabi – 20*	2	2	15	0	15	--
Other FLDs by Sorghum Research Station-Dhamrod Surat										
1	Sorghum fodder	Improved variety	PC-23	*Kharif-20*	4	4	25	0	25	--
				TOTAL	**156**	**156**	**415**	**0**	**415**	
Adaptive Trials										
***Kharif*- 2020**										
1	Paddy GR-17-Sardar	ICM+INM+IPDM	New variety	*Kharif-20*	25	28	70	0	70	--
2	Sorghum (GNJ-1)	ICM	New variety	*Kharif-20*	10	10	04	0	04	--
3	Pigeonpea (GT-104)	ICM	New variety	*Kharif-20*	04	04	10	0	10	--
4	Soybean (NRC-37)	ICM	New variety	*Kharif-20*	1.6	1.6	04	0	04	--
5	Paddy	IPDM	IPDM	*Kharif-20*	12	12	30	0	30	--
6	Banana	INM	Cone Feeding	*Kharif -20*	4	4	10	0	10	--
7	Pointed Gourd	ICM	GNPG-1	*Kharif -20*	--	--	05	0	05	--
8	Drum stick	ICM	PKM-1	*Kharif -20*	--	--	100	0	100	--
9	Tindola	ICM	GNLG-1	*Kharif -20*	--	--	10	0	10	--
10	Indian bean	ICM	GNIB-22	*Kharif-20*	--	--	12	0	12	--
11	Banana	IPDM	IPDM	*Kharif -20*	12	12	30	0	30	--

Rabi- 2020-21										
12	Chickpea (GG-5)	ICM+ST+INM+IPM	New variety	*Rabi-20*	12	12	30	--	30	--
13	Kitchen garden kit	Nutritional Management	Seeds & Seedlings	*Rabi-20*	--	--	100	0	100	--
14	Brinjal	INM	Novel Plus	*Rabi-20*	12	12	30	0	30	--
15	Okra	INM	Novel Plus	*Rabi-20*	12	12	30	0	30	--
16	Brinjal	--	Hybrid	*Rabi-20*	--	--	20	0	20	--
17	Cluster bean	INM	Novel Plus	*Rabi-20*	12	12	30	0	30	--
18	Brinjal	IPDM	IPDM	*Rabi-20*	12	12	30	0	30	--
19	Okra	IPDM	IPDM	*Rabi-20*	12	12	30	0	030	--
				Total	**140.6**	**143.6**	**563**	**0**	**563**	
				Grand Total	**401.1**	**403.5**	**1418**	**40**	**1458**	

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	Kharif	Irrigated	Medium black	Low	Medium	High	Green	10-03-2021 to 15-03-2021	01-06-2021 to 01-06-2021	1937.00	70

Technical Feedback on the demonstrated technologies

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	Black gram	GU-3	1.Late maturing in 90-95 days. 2. Bunch type with less hairs. Resistant to YMV. 3.Seeds are shining so good market value
8	Soybean	NRC-37	1.Moderate yield 2.Early maturing 3. Moderately Resistant to Pest & disease
9	Soybean	KDS-344	1.Non-Shattering. 2. Moderately Resistant to smut, YMV, Pod borer & leaf eating caterpillar. 3.Seeds are medium size & light yellow colour.
10	Green gram	GAM-6	1.Moderate Yield 2.Moderately Resistance to YMD
11	Sesame	GT-5	1.Moderate yield 2. Moderately Resistant to Helicoverpa
12	Groundnut	TG-37A	1.Tolent to collar rot, rust and late leaf spot 2. Suitable for summer cultivation
13	Brinjal	INM	1. Increase in yield and quality of fruit 2. Decrease use of chemical fertilizers
14	Banana	INM	1. Increase bunch weight and quality
15	Parvar	INM	1. Increase in yield and quality of fruits 2. Increase fruit setting ratio
16	Okra	INM	1. Increase the production 2. Reduce the use of chemical fertilizers

17	Wheel Hoe	Drudgery reduction	1. Reduced the labour cost and Time saving 2. Increase the work efficiency
18	Paddy	IPDM	1. Increase in yield by decreasing infestation of pest at earlier stages in field. 2. Pheromone trap helps farmer to monitor pest in field. 3. Low intensity of BLB and other diseases. 4. Low incidence of grain discoloration
19	Banana	IPDM	1. Less incidence of wilt 2. Less infestation of weevil in the field.
20	Brinjal	IPDM	1. Less incidence of wilt and other diseases 2. Less infestation of Brinjal fruit and shoot borer and sucking pest 3. Reduce the cost of cultivation by decreasing the use of pesticide
21	Parvar	IPDM	1. Less incidence of wilt and nematodes. *2.* Decrease pollination problem due to awareness regarding botanicals in place of chemical pesticides among farmers.
22	Mango	IPM	1. Less infestation of fruitfly 2. Increase awareness among farmers about fruitfly infestation 3. Good keeping quality during storage
23	Mushroom	-	1. Easy to produce, but tough to do marketing

Farmers' reactions on specific technologies

S. No	Feed Back
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 vine borer and nematodes are increasing day by day in Mandvi and Mahuva block of Surat district. Effective IPM module should be developing.
3	IPDM module for the management of Banana pseudo stem weevil and wilt should be developed.
4	Compatibility study on use of Novel fertilizer with other organic or chemical should be done to cut down the cost of cultivation.

Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	4	28-01-2020, 30-01-2020, 07-09-2020, 28-09-2020	131	Lindiya (Mangrol), Uteva (Mandvi), Saddapani (Umarpada), Amarkui (mangrol)
2	Farmers Training	60	Jan-20-Des-31,2020	2479	
3	Media coverage	14	--	--	--
4	Training for extension functionaries	7	28-29/02 2020, 02-03/03/ 2020, 09/06/2020, 13-14/10/2020, 10-11/11/2020	289	--

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										
Soyabean	ICM	New Variety	NRC-37	13	5	13.85	8.60	10.10	8.50	18.80	25560	40400	14840	1.6	24960	34000	9040	1.40

* 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	New variety	GNP-2	6	3	16.44	11.8	14.10	11.90	18.50	25100	67680	42580	2.7	23200	57120	33920	2.5
	ICM	New variety	GT-104	5	2.5	21.51	17.76	19.70	16.25	21.2	26210	94560	68350	3.6	24050	78000	53950	3.2
	ICM	New variety	GT-105	5	2.5	20.21	17.63	18.40	16.28	13.00	26210	88320	62110	3.4	24050	78144	54094	3.2
Black gram	ICM	New Variety	GU-3	1	0.4	13.40	8.95	10.20	8.70	17.20	19500	63240	43740	3.2	18000	53940	35940	3.0

* 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)			
					Demo			Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average												
Cereals																			
Paddy-GNRH-2	ICM	New variety	13	5	61.50	44.40	50.41	42.82	17.7	-	-	29925	80172	50247	2.7	31760	72900	41140	2.3
Paddy-GR-17	ICM	New variety	10	5	56.10	43.25	48.06	42.44	13.20	-	-	29370	87318	57948	3.0	29745	75780	46035	2.5
Paddy-GNR-6	ICM	New variety	10	5	50.25	37.50	41.10	37.01	11.10	-	-	30425	83718	53293	2.8	30425	71820	41395	2.4
Paddy-GNR-7	ICM	New variety	10	5	58.10	41.30	46.38	40.75	13.80	-	-	30030	87100	57070	2.9	30030	77600	47570	2.6

Paddy-GR-16 Tapi	ICM	New variety	5	2	30.05	19.50	21.25	19.30	10.10	-	-	25700	30745	5045	1.2	25700	28405	2705	1.1
Sorghum GNJ-1	ICM	New variety	15	6	26.00	18.25	21.80	18.05	20.50	-	-	17500	54500	37000	3.1	17100	45125	28025	2.6
Paddy	IPDM	-	10	4	42.10	32.75	34.45	29.65	16.19	-	-	31300	68900	37600	2.20	29700	59300	29600	1.99
Oilseed and Pulses crops																			
Pigeonpea-GNP-2	ICM	New variety	6	3	16.44	11.8	14.10	11.90	18.50	-	-	25100	67680	42580	2.7	23200	57120	33920	2.5
Pigeonpea GT-104	ICM	New variety	5	2.5	21.51	17.76	19.70	16.25	21.2	-	-	26210	94560	68350	3.6	24050	78000	53950	3.2
Pigeonpea-GT-105	ICM	New variety	5	2.5	20.21	17.63	18.40	16.28	13.00	-	-	26210	88320	62110	3.4	24050	78144	54094	3.2
Black gram- GU-3	ICM	New Variety	1	0.4	13.40	8.95	10.20	8.70	17.20	-	-	19500	63240	43740	3.2	18000	53940	35940	3.0
Soybean-NRC-37	ICM	New variety	13	5	13.85	8.60	10.10	8.50	18.80	-	-	25560	40400	14840	1.6	24960	34000	9040	1.40
Other crops																			
Cotton-G.Cot.Hy-12 Bt	ICM	New variety	12	5	25.60	18.60	23.10	18.30	26.2	-	-	42430	127050	84620	3.0	40910	100650	59740	2.5
Rabi-2020-21																			
Sorghum-Phule Ravati	ICM	New Variety	13	5	Awaited														
Summer-2021																			
Green gram-GAM-5	ICM	New Variety	12	5	Awaited														
Green gram-GAM-6	ICM	New Variety	12	5	Awaited														
Horticulture crops																			
Banana	INM	INM	10	4	745.15	585.25	625.15	585.15	6.84	-	-	105000	437605	332605	4.16	104500	409605	305105	3.92
Brinjal	INM	INM	10	4	195.10	155.45	161.25	150.45	7.18	-	-	55000	195113	140112.50	3.54	57200	182044.50	124844.50	3.18
Pointed Gourd	INM	INM	10	4	188.15	165.45	172.45	160.15	7.68	-	-	120000	431125	311125	3.59	117000	400375	283375	3.42

Okra	INM	INM	10	4	189.10	153.15	170.25	152.12	11.84	-	-	51200	230349	179149	4.49	54200	199450	145250	3.68
Little Gourd-GNLG-1	ICM	New Variety	10	0.5	215.30	184.23	201.1	174.15	15.48	-	-	60000	201300	141300	3.355	62000	141300	79300	2.27
Elephant Foot Yam-Gajendra	ICM	New Variety	5	1	Awaited														
Indian Bean-GNIB-22	ICM	New Variety	10	4	34.1	28.96	30.31	25.56	18.58	-	-	35000	106085	71085	3.031	31500	92016	60516	2.92
Sweet potato-C-71	ICM	New Variety	5	1	Awaited														
Brinjal	IPDM	IPDM	10	4	215.15	185.35	195.35	165.45	18.07	-	-	56600	195350	138750	3.451413428	55700	165450	109750	2.970377702
Pointed Gourd	IPDM	IPDM	10	4	221.45	185.75	171.25	145.35	17.82	-	-	127500	411000	283500	3.22	121500	348840	227340	2.87
Mango	IPM	IPM	10	4	91.55	75.65	66.80	65.45	2.06	-	-	43500	146960	103460	3.37	42800	137445	94645	3.21
Banana	IPDM	IPDM	10	4	820.25	750.65	775.22	680.65	13.89	-	-	115000	348849	233849	3.03	118000	306292.5	188292.5	2.59
Okra	IPDM	IPDM	10	4	195.20	165.45	162.25	158.22	2.55	-	-	50500	186587.5	136087.5	3.69	55800	172730	116930	3.09
TSP – ICAR (Mega Seed)																			
Indian Bean-GNIB-22	ICM	Seed	25	2	35.55	27.45	29.15	26.45	10.21	-	-	35000	102025	67025	2.91	36000	96630	60630	2.68
Fodder Crops																			
Sorghum (F)	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

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

FLD on Livestock: NIL

FLD on Fisheries: Nil

FLD on Other Enterprises: 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)	
									Harvesting		Weeding		Labour**	
						Demo	Check		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	0.012 (0.096ha/day)	0.0084 (0.067ha/day)	42.85	-	-	83	119	1780	2670
Rake for collecting garbage/ harvesting	Dry matter of crops/ Harvesting/ garbage	Women drudgery reduction	100	-	-Field observation -Drudgery parameters like physical hazards, muscle stress, fatigue	Result awaited								

FLD on Women Empowerment: NIL

FLD on Other Enterprise: Kitchen Gardening

Category and Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units	Yield (Kg)		% change in yield	Other parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Seeds and seedling	Household food security by kitchen gardening	Kitchen Garden	100	100	89	48	85.42	0	0	585	3115	2550	5.51	370	1680	1310	4.54

FLD on Demonstration details on crop hybrids: Nil

D. Performance of Cluster Frontline Demonstrations (CFLD)

CFLD 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										
Soyabean	ICM	New Variety+ST+INM+IPDM	KDS-344	50	20	15.80	8.95	11.26	8.90	26.50	20360	45040	24680	2.21	19150	35600	16450	1.86
Sesame	ICM	New Variety+ST+INM+IPDM	GT-5	50	20	Awaited												
Groundnut	ICM	New Variety	GG-34	50	20	Awaited												
Sesame	ICM	New Variety+ST+INM+IPM	GT-4	25	10	6.79	5.10	5.95	5.08	17.12	20100	41650	21550	2.07	18800	35560	16760	1.89

Groundnut	ICM	New Variety+ST+INM	TG37A	20	10	18.90	15.35	17.36	15.30	13.45	41700	76500	34800	1.83	41000	67320	26320	1.64

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

CFLD 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										
Gram	ICM	New Variety+ST+INM+IPDM	GG-5	75	30	Awaited												
Green gram	ICM	New Variety+ST+INM+IPDM	GAM-6	75	30	Awaited												
Green gram	ICM	New Variety+ST+INM+IPM	GAM-6	75	30	8.49	5.87	7.02	5.85	20.0	19500	42120	22620	2.16	18000	35100	17100	1.95

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

3.4. Training Programmes

Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management	3	67	22	89	0	0	3	67	22	89
Soil & water conservatioin										
Integrated nutrient management										
Production of organic inputs										
Others (pl specify)										
Total	**3**	**67**	**22**	**89**	**0**	**0**	**3**	**67**	**22**	**89**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops										
Off-season vegetables										
Nursery raising	2	38	23	61	0	0	0	38	23	61
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation	0	0	0	0	0	0	0	0	0	0
Others (pl specify)										
Total (a)	**2**	**38**	**23**	**61**	**0**	**0**	**0**	**38**	**23**	**61**

b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)										
Total (b)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										

Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technol.										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GT (a-g)	**2**	**38**	**23**	**61**	**0**	**0**	**0**	**38**	**23**	**61**
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IV Livestock Production and Management										
Dairy Management										

Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management										
Feed & fodder technology										
Production of quality animal products										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	2	29	54	83	0	0	0	29	54	83
Design and development of low/minimum cost diet	1	0	0	0	48	142	190	48	142	190
Designing and development for high nutrient efficiency diet	1	0	0	0	0	22	22	0	22	22
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	1	0	0	0	0	22	22	0	22	22
Women empowerment	1	0	0	0	0	38	38	0	38	38
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care										
Others (pl specify)										
Total	**6**	**29**	**54**	**83**	**48**	**224**	**272**	**77**	**278**	**355**

VI Agril. Engineering										
Farm Machinary and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
VII Plant Protection										
Integrated Pest Management	3	89	37	126	14	0	14	103	37	140
Integrated Disease Management	3	36	33	69	50	17	67	86	50	136
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl specify)										
Total	**6**	**125**	**70**	**195**	**64**	**17**	**81**	**189**	**87**	**276**
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										

Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics	1	0	0	0	25	14	39	25	14	39
Formation and Management of SHGs										
Mobilization of social capital										

Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total	**1**	**0**	**0**	**0**	**25**	**14**	**39**	**25**	**14**	**39**
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GRAND TOTAL	**18**	**259**	**169**	**428**	**137**	**255**	**395**	**396**	**424**	**820**

Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	2	0	0	0	35	6	41	35	6	41
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management										
Increasing Production and Productivity of Crops	3	0	0	0	50	8	58	50	8	58
Soil & water conservatioin										
Integrated nutrient management	5	0	0	0	90	43	133	90	43	133
Organic farming	3	0	0	0	63	22	85	63	22	85
Production and use of organic inputs	3	0	0	0	144	9	153	144	9	153
Production and management technology	2	0	0	0	90	7	97	90	7	97
Others (pl specify)										
Total	**18**	**0**	**0**	**0**	**437**	**89**	**526**	**437**	**89**	**526**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops	7	0	0	0	109	12	121	109	12	121
Off-season vegetables	1	20	0	20	0	0	0	20	0	20
Nursery raising	2	26	6	32	13	2	15	39	8	47
Exotic vegetables										
Export potential vegetables										

Grading and standardization										
Protective cultivation	1	0	0	0	6	13	19	6	13	19
Others (pl specify) Intercultural operation in vege.										
Total (a)	**11**	**46**	**6**	**52**	**122**	**27**	**155**	**174**	**33**	**207**
b) Fruits										
Training and Pruning	1	0	0	0	12	4	16	12	4	16
Layout and Management of Orchards										
Cultivation of Fruit	2	0	0	0	40	1	41	40	1	41
Management of young plants/orchards	1	0	0	0	2	5	7	2	5	7
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)										
Total (b)	**4**	**0**	**0**	**0**	**54**	**10**	**64**	**54**	**10**	**64**
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GT (a-g)	**15**	**46**	**6**	**52**	**176**	**37**	**219**	**228**	**43**	**271**
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										

Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IV Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management										
Feed & fodder technology										
Production of quality animal products										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	2	0	0	0	0	80	80	0	80	80
Design and development of low/minimum cost diet	1	0	0	0	0	40	40	0	40	40
Designing and development for high nutrient efficiency diet	1	0	0	0	0	27	27	0	27	27
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs	1	0	0	0	0	25	25	0	25	25
Storage loss minimization techniques										

Value addition	2	0	27	27	0	33	33	0	60	60
Women empowerment	1	0	0	0	0	15	15	0	15	15
Location specific drudgery reduction technologies	5	0	0	0	0	128	128	0	128	128
Rural Crafts										
Women and child care	1	0	0	0	0	38	38	0	38	38
Others (Sorghum fodder)	1	0	0	0	25	0	25	25	0	25
Total	**15**	**0**	**27**	**27**	**25**	**386**	**411**	**25**	**413**	**438**
VI Agril. Engineering										
Farm Machinary and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
VII Plant Protection										
Integrated Pest Management	3	12	20	32	55	12	67	67	32	99
Integrated Disease Management	3	0	0	0	44	11	55	44	11	55
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl specify)										
Total	**6**	**12**	**20**	**32**	**99**	**23**	**122**	**111**	**43**	**154**
VIII Fisheries										

Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										

Mushroom Production										
Apiculture										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
X Capacity Building and Group Dynamics										
Leadership development	2	0	0	0	24	5	29	24	5	29
Group dynamics	3	46	41	87	69	5	74	115	46	161
Formation and Management of SHGs	3	56	10	66	22	1	23	78	11	89
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total	**8**	**102**	**51**	**153**	**115**	**11**	**126**	**217**	**62**	**279**
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**62**	**160**	**104**	**264**	**852**	**546**	**1404**	**1018**	**650**	**1668**

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

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	2	0	0	0	35	6	41	35	6	41
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management	3	67	22	89	0	0	3	67	22	89
Increasing Production and Productivity of Crops	3	0	0	0	50	8	58	50	8	58
Soil & water conservatioin										
Integrated nutrient management	5	0	0	0	90	43	133	90	43	133
Organic farming	3	0	0	0	63	22	85	63	22	85
Production and use of organic inputs	3	0	0	0	144	9	153	144	9	153
Production and management technology	2	0	0	0	90	7	97	90	7	97
Others (pl specify)										
Total	**21**	**67**	**22**	**89**	**472**	**95**	**567**	**504**	**111**	**615**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops	7	0	0	0	109	12	121	109	12	121
Off-season vegetables	1	20	0	20	0	0	0	20	0	20
Nursery raising	4	64	29	93	13	2	15	77	31	108
Exotic vegetables										
Export potential vegetables										

Grading and standardization										
Protective cultivation	1	0	0	0	6	13	19	6	13	19
Others (pl specify) Intercultural operation in vege.										
Total (a)	**13**	84	29	113	128	27	155	212	56	268
b) Fruits										
Training and Pruning	1	0	0	0	12	4	16	12	4	16
Layout and Management of Orchards										
Cultivation of Fruit	2	0	0	0	40	1	41	40	1	41
Management of young plants/orchards	1	0	0	0	2	5	7	2	5	7
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)										
Total (b)	**4**	**0**	**0**	**0**	**54**	**10**	**64**	**54**	**10**	**64**
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GT (a-g)	**17**	**84**	**29**	**113**	**182**	**37**	**219**	**266**	**66**	**332**
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										

Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IV Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management										
Feed & fodder technology										
Production of quality animal products										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	4	29	54	83	0	80	80	29	134	163
Design and development of low/minimum cost diet	2	0	0	0	48	182	230	48	182	230
Designing and development for high nutrient efficiency diet	2	0	0	0	0	49	49	0	49	49
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs	1	0	0	0	0	25	25	0	25	25
Storage loss minimization techniques										

Value addition	3	0	27	27	0	55	55	0	82	82
Women empowerment	2	0	0	0	0	53	53	0	53	53
Location specific drudgery reduction technologies	5	0	0	0	0	128	128	0	128	128
Rural Crafts										
Women and child care	1	0	0	0	0	38	38	0	38	38
Others (Sorghum fodder)	1	0	0	0	25	0	25	25	0	25
Total	**21**	**29**	**81**	**110**	**73**	**610**	**683**	**102**	**691**	**793**
VI Agril. Engineering										
Farm Machinary and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
VII Plant Protection										
Integrated Pest Management	6	101	57	158	69	12	81	170	69	239
Integrated Disease Management	6	36	33	69	94	28	122	130	61	191
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl specify)										
Total	**12**	**137**	**90**	**227**	**163**	**40**	**203**	**300**	**130**	**430**
VIII Fisheries										

Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										

Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
X CapacityBuilding and Group Dynamics										
Leadership development	2	0	0	0	24	5	29	24	5	29
Group dynamics	4	46	41	87	94	19	113	140	60	200
Formation and Management of SHGs	3	56	10	66	22	1	23	78	11	89
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total	**9**	**102**	**51**	**153**	**140**	**25**	**165**	**242**	**76**	**318**
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GRAND TOTAL	**80**	**419**	**273**	**692**	**1030**	**807**	**1837**	**1414**	**1074**	**2488**

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

Area of training	**No. of Courses**	**No. of Participants**								
		General			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										

Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other- Capacity build-up training										
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition	1	0	0	0	0	29	29	0	29	29
Small scale processing										
Post Harvest Technology	1	2	13	15	0	0	0	2	13	15
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Shrimp farming										

Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other- Scientific rearing of calf										
Fodder management in milch animals										
TOTAL	**2**	**2**	**13**	**15**	**0**	**29**	**29**	**2**	**42**	**44**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition	1	0	0	0	0	29	29	0	29	29
Small scale processing										
Post Harvest Technology	1	0	0	0	2	13	15	2	13	15
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										

Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	**2**	**2**	**13**	**15**	**0**	**29**	**29**	**2**	**42**	**44**

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

Area of training	**No. of Courses**	**No. of Participants**								
		General			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management	**5**	**104**	**15**	**119**	**8**	**3**	**11**	**112**	**18**	**130**
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care	**1**	**0**	**0**	**0**	**0**	**51**	**51**	**0**	**51**	**51**
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Capacity building for Anganwadi workers	**1**	**0**	**0**	**0**	**0**	**108**	**108**	**0**	**108**	**108**
Any other (pl.specify)										
TOTAL	**7**	**104**	**15**	**119**	**8**	**162**	**170**	**112**	**177**	**289**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management	**5**	**104**	**15**	**119**	**8**	**3**	**11**	**112**	**18**	**130**
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care	**1**	**0**	**0**	**0**	**0**	**51**	**51**	**0**	**51**	**51**
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Capacity building for Anganwadi workers	**1**	**0**	**0**	**0**	**0**	**108**	**108**	**0**	**108**	**108**
Any other (pl.specify)										
TOTAL	**7**	**104**	**15**	**119**	**8**	**162**	**170**	**112**	**177**	**289**

Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Increasing production and productivity of crops										
Commercial production of vegetables										
Production and value addition										
Fruit Plants										

Ornamental plants										
Spices crops										
Soil health and fertility management										
Production of Inputs at site										
Methods of protective cultivation										
Others (pl. specify)										
Total										
Post harvest technology and value addition										
Processing and value addition										
Others (pl. specify)										
Total										
Farm machinery										
Farm machinery, tools and implements										
Others (pl. specify)										
Total										
Livestock and fisheries										
Livestock production and management										
Animal Nutrition Management										
Animal Disease Management										
Fisheries Nutrition										
Fisheries Management										
Others (pl. specify)										
Total										
Home Science										
Household nutritional security	**2**	**0**	**0**	**0**	**0**	**70**	**70**	**0**	**70**	**70**
Economic empowerment of women	**1**	0	0	0	0	25	25	0	25	25
Drudgery reduction of women										
Others (pl. specify)										
Total										
Agricultural Extension										
CapacityBuilding and Group Dynamics										
Others (pl. specify)										
Total	**3**	**0**	**0**	**0**	**0**	**95**	**95**	**0**	**95**	**95**
GRAND TOTAL	**3**	**0**	**0**	**0**	**0**	**95**	**95**	**0**	**95**	**95**

Details of vocational training programmes carried out by KVKs for rural youth

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Commercial floriculture										
Commercial fruit production										
Commercial vegetable production										
Integrated crop management										
Organic farming										
Others (pl. specify)										
Total										
Post harvest technology and value addition										
Value addition										
Others (pl. specify)										
Total										
Livestock and fisheries										
Dairy farming										
Composite fish culture										
Sheep and goat rearing										
Piggery										
Poultry farming										
Others (pl. specify)										
Total										
Income generation activities										
Vermicomposting										
Production of bio-agents, bio-pesticides,										
bio-fertilizers etc.										
Repair and maintenance of farm machinery										

and implements										
Rural Crafts										
Seed production										
Sericulture										
Mushroom cultivation										
Nursery, grafting etc.										
Tailoring, stitching, embroidery, dying etc.										
Agril. para-workers, para-vet training										
Others (pl. specify)										
Total										
Agricultural Extension										
Capacity building and group dynamics										
Others (pl. specify)										
Total										
Grand Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Details of trainings organized under ASCI

Area of training	**No. of Courses**	**No. of Participants**								
		General			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
NIL										

1.5. Extension Programmes

Nature of Extension Activity	**No. of activities**	**Beneficiaries**		
		Male	**Female**	**Total**
Kisan Gosthi	4	66	100	166
Khedut Shibir	2	90	26	116
Field day	8	207	34	241
Mahila Shibir	2	0	180	180
Krishi Mela/Mahotsav participation	1	1581	1588	3169

SHG Mahila meeting	3	0	41	41
Mahila Meeting	2	0	34	34
Farmers Seminar	3	141	163	304
Film Show	123	1517	1536	3053
Method Demonstration	47	532	522	1054
Meeting attended	24	233	70	303
Special programme	14	1846	2179	4025
Special day celebration	7	296	483	779
Lectures delivered asresource persons	46	5334	4539	9873
Newspaper coverage	14	46420	24130	70550
Advisory Services/ Telephone	66	9550	4208	13758
Whats app and other ICT tools advisory	48	22425	7705	30130
Scientist visitto farmers field	107	155	74	229
Farmers visitto KVK	6	535	239	774
Diagnostic visits	214	547	68	609
Exposure visit	1	20	19	39
Swachchhta related activities	20	269	197	466
Total	**762**	**91764**	**48135**	**139893**

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	0
Extension Literature	3
News paper coverage	14
Popular articles	2
Radio Talks	1
TV Talks	1
Total	**21**

3.6 Online activities during year 2020

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 INM & IPM methods in greengram - NMOOP	1	49
2	Farmers training	Audio Conferencing	Dial-out training on INM & IPM methods in Summer groundnut(inclu. scientific cultivation) - NMOOP	1	**52**
3	Farmers training	Audio Conferencing	Dial-out training on INM & IPM methods inSummer Sesame (inclu.scientific cultivation) - NMOOP	1	**52**
4	Farmers training	Audio Conferencing	Dial-out training on Scientific Cultivation of Soybean including INM & IPDM approach	1	**80**
5	Farmers training	Audio Conferencing	Online training on transplanted paddy	1	**17**
6	Farmers training	Google Duo	Basics of kitchen gardening	1	**13**
7	Farmers training	Google Duo	Vegetable cultivation on terrace ardening	1	**11**
8	Farmers training	Zoom	Special Session on Adenium pruning, grafting and flowering	1	**87**

9	Farmers training	Google Duo	Basics of vegetable cultivation	1	**15**
10	Farmers training	Google Duo	Basic concepts of nursery raising	1	**27**
11	Farmers training	Zoom	Kitchen gardening- Home science Students- Vanita Visram	1	**98**
12	Farmers training	Instagram live	Urban kitchen gardening-	1	**35**
13	Farmers training	Google Meet	Kitchen garden- ghar agannai kheti	1	**67**
14	Farmers training	Audio Conferencing	Value Addition In Spices And Condiments	1	**22**
15	Farmers training	Audio Conferencing	Value Addition In Mango	1	**38**
16	Farmers training	Audio Conferencing	Preparation And Preservation Of Fruits And Vegetables Power	1	**26**
17	Farmers training	Live Webinar	Importance Of Kitchen Garden	1	**158**
18	Farmers training	Google Meet	Importance of Balanced Diet and Kitchen Garden	1	**62**
19	Farmers training	YouTube live Programme cum Training	5MQF6G]\ DCtJ VG[T[GF VFWFZE}T :+MTYL SMJL0v!) YL ARFJ	1	**190**
20	Farmers training	Audio Conferencing	Pest and disease management practices in greengram	1	49
21	Farmers training	Audio Conferencing	Integrated pest and disease management in groundnut	1	52

22	Farmers training	Audio Conferencing	Integrated pest and disease management in sesame	1	47
23	Farmers training	Audio Conferencing	Integrated pest and disease management in soybean	1	75
			Total	23	1322
B	Farmers scientist's interaction programme	0	0	0	0
			Total	0	0
C	Farmers seminars				
1	Farmers seminars	1			
			Total		
D	Expert lectures		0	0	0
		Guest lecture	Importance & Management of Kitchen Garden And Terrace Garden	1	**43**
		Guest lecture	Mahilaono Krushi ma Falo	1	**52**
			Total	2	95
E	Any other (Pl. specify)	0	0	0	0
			Total	0	
			Grand Total (A+B+C+D+E)	**25**	**1417**

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	--	154.00	480480	1232
		GR-17	--	21.00	65520	168
	Straw	--	--	217.75	87100	--
			Total	**392.75**	**633100**	**1300**

Production of Planting Materials by the KVK

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Vegetable seedlings	Drumstick	PKM-1	--	3000	60000	150
Total		**PKM-1**	**--**	**3000**	**60000**	**150**

Production of Bio-Products: Nil

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	No. of Farmers
Bio Fertilisers	-	-	-	-
	-	-	-	-
Bio-pesticide	-	-	-	-
	-	-	-	-
Bio-fungicide	-	-	-	-
	-	-	-	-
Bio Agents	-	-	-	-
	-	-	-	-
Others	-	-	-	-
Total	**0**	**0**	**0**	**0**

Production of livestock materials: Nil

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

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	Assessment of yield losses due to mealybug (*Phenacoccus solenopsis* Tinsley) infestation in the cotton farmers' field of south Gujarat.	Bhanderi, G. R., Patel, R. D., Desai, H. R. and Patel, R. K. (2020).	Presented in *J. Ento. Zool. Studies*, **8**(2): 73-79. (**NAAS Score: 5.53**)
	Integrated diseases management (IDM) modules for the management of cotton diseases in natural condition under south Gujarat region of India	Sandipan, P. B., Patel R. K., Faldu G. O. and Patel, D. M. (2019).	Presented in . *Cercetari agronomice in Moldova*, **52**(3(179)): 254-261.
	Adoption of fruits and vegetable preservation technology by farm women of Surat district.	Bhimani, G. J., Prajapati, M. R. and Parmar, H. C. (2019).	Presented in *Guj. J. Ext. Edu*., **30**(1): 23-26((**NAAS Score: 3.86**)
Technical reports	AGRESCO, ZREAC, SAC, AAP, APR, MPR, QPR	--	Periodically
News letters	--	--	--
Technical bulletins	--	--	--
Popular articles	Cassava bioenergy crop.	Panchal Bhakti B. and Rathod J.H. (2020).	*Agriculture & food e-newsletter*, **2**(10): 129-130.
	Regulation of flowering in vegetable crops under protected cultivation.	Panchal Bhakti B. (2020).	*Agriculture & food e-newsletter*, **2**(11): 137-140.
Extension literature	Trivedi, S. J., Davda, B. K., Bhimani, G. J. and Rathod, J. H. 2020). *Juvar ni sudharel vaignanik kheti padhhati*. NAU, Pub. No. 149/2019-20.		
	Bhimani, G. J., Trivedi, S. J. and Rathod, J. H. (2020).*Ahar ma juvar ni agatyata ane tema mulya vardhan*. NAU, Pub. No. 150/2019-20.		
	Trivedi, S. J., Patel, R. K., Bhimani, G. J. and Rathod, J. H. (2020). *Soybean ni vaignanik kheti padhhati*. NAU, Pub. No. 24/2020-21.		

C. Details of Electronic Media Produced

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

D. Details of Social Media Platforms Created / Used

Sr. No.	Type of social media platform	Title of social media	Number of Followers/ Subscribers
1	YouTube Channel	**1**	**5**
2	Facebook page/ Account	**1**	**359**
3	Mobile Apps	**0**	**-**
4	WhatsApp groups	**0**	**-**
5	Twitter Account	**1**	**25**
6	Any other (Pl. Specify)	**-**	**-**

E. 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 NVPH 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.	**Crop :** Paddy

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

Horticulture crops: Gerbera

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

Horticulture crops: Orchid

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

12	What improvement have been effected for productivity, profitability and sustainability -enhancement.	• The flowers of orchid have high demand in local market. • 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.
13	Any spread effect on Fellow Farmers	• 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. • If farmers get subsidy of Rs. 38-40 lakhs from state government/horticulture department then and then he can start this farming. • Mr. Kaushikbhai Sailor also started the same business. He planted orchids in 1 acre green house. Mr. Subhas Patel, Village Jothan, Tal- 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. GirishGohil 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 NVPH 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 "Majjeni 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, ardusi, 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.



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

Technology transfer – Novel, Bio-fertilizers and Waste decomposer

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

Sr. No.	Crop/Enterprise	ITK Practiced	Purpose of ITK
1	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

a) Group discussion
b) Power point presentation
c**)** 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

A. Functional linkage with different organizations

Name of organization	Nature of linkage
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

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

C. Details of linkage with ATMA

a) Is ATMA implemented in your district 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**	14	14	--	--
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
--	--	--	--	--	--

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 VikasYojana)

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

H. Details of linkage with NFSM

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	Gram Rabi-2019-20	Demo:30 ha	270000	224495	--
	Green gram Summer-2020	Demo:30 ha	270000	99000	--

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: Activities may be specified under DAESI, YCMOU study centres and others: --

8. Innovator Farmer's 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.	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	Black gram	GU-3	1.Late maturing in 90-95 days. 2. Bunch type with less hairs. Resistant to YMV. 3.Seeds are shining so good market value
8	Soybean	NRC-37	1.Moderate yield 2.Early maturing 3. Moderately Resistant to Pest & disease
9	Soybean	KDS-344	1.Non-Shattering. 2. Moderately Resistant to smut, YMV, Pod borer & leaf eating caterpillar. 3.Seeds are medium size & light yellow colour.
10	Green gram	GAM-6	1.Moderate Yield 2.Moderately Resistance to YMD
11	Sesame	GT-5	1.Moderate yield 2. Moderately Resistant to Helicoverpa
12	Groundnut	TG-37A	1.Tolent to collar rot, rust and late leaf spot 2. Suitable for summer cultivation
13	Brinjal	INM	3. Increase in yield and quality of fruit 4. Decrease use of chemical fertilizers
14	Banana	INM	2. Increase bunch weight and quality
15	Parvar	INM	3. Increase in yield and quality of fruits 4. Increase fruit setting ratio

16	Okra	INM	3. Increase the production 4. Reduce the use of chemical fertilizers
17	Wheel Hoe	Drudgery reduction	1. Reduced the labour cost and Time saving 2. Increase the work efficiency
18	Paddy	IPDM	5. Increase in yield by decreasing infestation of pest at earlier stages in field. 6. Pheromone trap helps farmer to monitor pest in field. 7. Low intensity of BLB and other diseases. 8. Low incidence of grain discoloration
19	Banana	IPDM	1. Less incidence of wilt 2. Less infestation of weevil in the field.
20	Brinjal	IPDM	4. Less incidence of wilt and other diseases 5. Less infestation of Brinjal fruit and shoot borer and sucking pest 6. Reduce the cost of cultivation by decreasing the use of pesticide
21	Parvar	IPDM	3. Less incidence of wilt and nematodes. 4. Decrease pollination problem due to awareness regarding botanicals in place of chemical pesticides among farmers.
22	Mango	IPM	4. Less infestation of fruitfly 5. Increase awareness among farmers about fruitfly infestation 6. Good keeping quality during storage
23	Mushroom	-	1. Easy to produce, but tough to do marketing

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 vine borer and nematodes are increasing day by day in Mandvi and Mahuva block of Surat district. Effective IPM module should be developing.
3. IPDM module for the management of Banana pseudo stem weevil and wilt should be developed.
4. Compatibility study on use of Novel fertilizer with other organic or chemical should be done to cut down the cost of cultivation.

11. Technology Week celebration during2020: No,
Period of observing Technology Week: From to
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 Practicals	--	--	--
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. 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- full cases may be given at the end as Annexure.
(Please furnish detailed information for each case and)

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

13. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
Jan 2020			
Feb 2020			
March 2020			
April 2020			
May 2020			
Jun 2020			
Jul 2020			
Aug 2020			
Sept 2020			
Oct 2020			
Nov. 2020			
Dec. 2020	2	12293	-

Name of KVK	Message Type	Type of Messages						
		Crop	**Livestock**	**Weather**	**Marke-ting**	**Aware-ness**	**Other enterprise**	**Total**
	Text only	12	-	13	-	-	-	25
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	**12**	**-**	**13**	**-**	**-**	**-**	**25**
	Total farmers Benefitted	**13758**	**-**	**7651**	**-**	**-**	**-**	**21409**

15. PERFORMANCE OF INFRASTRUCTURE IN KVK

A. Performance of demonstration units (other than instructional farm including value added products)

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	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.)

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
--	--	--	--	--	--

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

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

E. Utilization of hostel facilities: Not applicable

Accommodation available (No. of beds):

Months	**No. of trainees stayed**	**Trainee days (days stayed)**	**Reason for short fall (if any)**
January 2020	-	-	-
February 2020	-	-	-
March 2020	-	-	-
April 2020	-	-	-
May 2020	-	-	-
June 2020	-	-	-
July 2020	-	-	-
August 2020	-	-	-
September 2020	-	-	-
October 2020	-	-	-
November 2020	-	-	-
December 2020	-	-	-

F. Database management:

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

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

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

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

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	--	--

15. FINANCIAL PERFORMANCE

A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
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 2020-21 (Rs. in lakh) (Till Dec, 2020)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	**622000**	**622000**	**618772**
2	**Traveling allowances**	**7706000**	**7706000**	**8461851**
3	**Contingencies**	**100000**	**100000**	**28380**
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
TOTAL (A)		**8428000**	**8428000**	**9109003**
B. Non-Recurring Contingencies		**900000**	**900000**	**--**
1	**Works**			
2	**Equipments including SWTL & Furniture**			
3	**Vehicle** (Four wheeler/Two wheeler, please specify)			
4	**Library** (Purchase of assets like books & journals)			
TOTAL (B)		**900000**	**900000**	**--**
C. REVOLVING FUND		**716317.2**	**737079.00**	**382097.0**
GRAND TOTAL (A+B+C)		**10044317**	**10065079**	**9491100**

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2018 to March 2019	295591	1024057	603330.8	716317.2
April 2019 to March 2020	716317.2	231061.50	324172.36	737079.00
April 2020 to December, 2020	737079.0	134210.0	497581.0	382097.0

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

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Shri. S. J. Trivedi,	Scientist (Agronomy)	Training workshop on Subhash Palekar natural farming" (SPNF)	Navsari Agricultural University, Navsari	February 9, 2020 (1 day)
Dr. S. K. Chawda, Scientist	(Plant Protection)	Training workshop on Subhash Palekar natural farming" (SPNF)	Navsari Agricultural University, Navsari	February 9, 2020 (1 day)
Dr. J. H. Rathod,	Senior Scientist & Head	National KVK Conference	New Delhi	February 28-29, 2020 (2 days)
Dr. S. K. Chawda, Scientist	(Plant Protection)	Training programme on communication skills for effective extension services	Virtual (EEI, Anand)	June 11-12, 2020 (2 days)
Prof. G. J. Bhimani, Scientist	(Home Science)	Training on gender in agriculture development	Virtual (MANAGE, Hyderabad, India)	July 27 to August 05, 2020 (10 days)
Dr. R. K. Patel, Scientist	(Extension Education)	Training programme on training methods and training management skills	Virtual (EEI, Anand)	August 06-07, 2020 (2 days)

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

Name of the village	Total No. of families surveyed	Key interventions implemented	No. of farmers covered in each intervention	Change in income (Rs/unit)	
				Before	After
Vadia	125	Crops + Horticulture + Animal Husbandry	23	48000	59800
		Crops + Horticulture	21	42000	52200

		Any other model (Crop + AH)	20	32800	44100
Parvat	160	Crops + Horticulture + Animal Husbandry	25	45000	51600
		Crops + Horticulture	21	32000	44000
		Any other model Crops + Animal Husbandry	24	28000	33200

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

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

19. Details of Progress of ARYA Project

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

20. Details of SAP

S. No.	Types of major Activity conducted- Swachhta Pakhwada, Cleaning, Awareness Workshop, Miccobial based Agricultural Waste Management by Vermicomposting etc.	No. of Programmes conducted	No. of Participants
1	Organization of training for awareness about the Swachh Bharat pakhvada	1	24
2	Involvement of print and electronic media for publicity Krishi Vigyan Kendra, Surat	1	35
3	Visit of community waste disposal sites and awareness about the safe disposal of non bio degradable waste	1	12
4	Cleaning of water lines nearby villages and community	1	8
5	Awareness on waste management & other activities including utilization of organic wastes in new area	1	9
6	Awareness of swachhta in village youth or school children	1	48
7	Cleaning of public place	1	9
8	Community market places	1	8
9	Swachhta awareness at local level with village youth	1	15
10	Webinar-Celebration of Kishan Day	1	61
11	Agricultural technologies for conversion of waste to wealth	1	10
12	Safe disposal of all kinds of wastes	1	8
13	Campaign on cleaning of sewerage & water lines	1	9
14	Composting of kitchen and home waste materials. Organic farming practices in kitchen gardens.	1	9
15	Cleanilinestion and sanitation drive within KVK campuses	1	10
16	Cleanliness in residential colonies	1	9

17	City Cleaning	1	6
18	Digitization of office records	1	3
19	Cleaning of offices, corridors and premises	1	7
20	Weeding out old records	1	2
21	Disposing of old and obsolete furniture	1	4
22	Swachhata pledge	1	13
23	Plantation of trees	1	8

21. Please include any other important and relevant information which has not been reflected above (write in detail). NO

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	60	1414	1065	2479
Rural youths	7	112	177	289
Extension functionaries	2	2	42	44
Sponsored Training	3	0	95	95
FLD Training	26	328	222	550
Total	**98**	**1856**	**1601**	**3457**

2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	208	85	--
Pulses	266	108.4	--
Cereals	86	37	--
Vegetables	190	30.5	--
Other crops	42	17	--
Hybrid crops	--	--	--
Total	**792**	**277.90**	
Livestock & Fisheries	--	--	--
Other enterprises	120	--	--
Total	**120**	--	--
Grand Total	**912**	**277.90**	

3. Technology Assessment

Category	No. of Technology Assessed	No. of Trials	No. of Farmers
Technology Assessed			
Crops	6	**17**	**40**
Livestock	-	-	-
Other	-	-	-
Total	6	**17**	**40**

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	762	139893
Other extension activities	21	-
Total	**783**	139893

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke -ting	Awar e- ness	Other enterpri se	Total
Surat	Text only	12	-	13	-	-	-	25
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	**12**	**-**	**13**	**-**	**-**	**-**	**25**
	Total farmers Benefitted	**13758**	**-**	**7651**	**-**	**-**	**-**	**21409**

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	175	546000
Planting material (No.)	3000	60000
Bio-Products (kg)	-	-
Livestock Production (No.)	-	-
Fishery production (No.)	-	-

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	0	0
Water	0	0
Plant	0	0
Total	**0**	**0**

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	-
2	Conferences	-
3	Meetings	24
4	Trainings for KVK officials	5
5	Visits of KVK officials	6
6	Book published	-
7	Training Manual	-
8	Book chapters	-
9	Research papers	3
10	Lead papers	-
11	Seminar papers	-
12	Extension folder	3
13	Proceedings	-
14	Award & recognition	-
15	On going research projects	-