



# REPORT ON 14<sup>th</sup> SCIENTIFIC ADVISORY COMMITTEE MEETING



TO BE HELD ON  
25-01-2022 AT 10:00 A.M.



**KRISHI VIGYAN KENDRA**  
**Navsari Agricultural University**  
**Navsari – 396450**

**SCIENTIFIC ADVISORY COMMITTEE  
OF KRISHI VIGYAN KENDRA, NAVSARI**

<b>Sr. No</b>	<b>Name</b>	<b>Designation</b>	<b>Committee status</b>
1	Dr.Z.P.Patel	Hon. Vice-Chancellor, NAU, Navsari.	Chairperson
2	Dr. C.K.Timbadia	Directorate of Extension Education, N.A.U., Navsari.	Member
3	Dr. Lakhan Singh	Director, ICAR- ATARI, Zone-VIII, College of Agriculture Campus, PUNE - 411005 (Maharashtra)	Member
4	Dr. T. R. Ahalavat	Directorate of Research, N.A.U., Navsari.	Member
5	Dr. V.R.Naik	Assistant Director Research NAU, Navsari	Member
6	Dr. P.K.Shrivastav	I/C Principal, ASPEE College, NAU, Navsari	Member
7	Dr. D.B.Patel	Scientist (LRS), NAU, Navsari	Member
8	Dr. R.V. Borichangar	Associate Professor, College of Fisheries Science, NAU, Navsari	Member
9	Dr.Atul Gajera	District Agriculture Officer, Dist. Navsari	Member
10	Mr.B.K. Rai Samant	Assistant General Manager, NABARD, Navsari	Member
11	Dr. Dineshbhai Padaliya	Deputy Director of Horticulture, Dist. Navsari	Member
12	Mr. Uttam Patel	Exe. Eng. (Drainage), Ambika Division, Dist. Navsari	Member
13	Dr. D.B.Thakur	Deputy Director of Animal Husbandry, Dist. Navsari	Member
14	Shri C.R.Patel	PD, ATMA, Navsari	Member
15	Mr. Mohit Sangani	Assistant Director of Fisheries, Dist. Navsari	Member
16	Shri. Hemantbhai Patel	Progressive Farmer, Village- Sadlav, Ta.Navsari	Member
17	Smt.Madhuriben Patel	Progressive Farm Woman, Village- Vasan, Ta.Gandevi	Member
18	Shri Surajbhai D. Savalia	Agri-entrepreneur, Village : Ganesh Sisodra, Dist : Navsari.	Member
19	Shri P. R. Barot	Lead District Manager, Navsari	Member
20	Dr. C.K. Timbadia	Senior Scientist & Head, KVK, Navsari	Member Secretary
21	Shri Praganeshbhai Naik	Progressive Farmer, Village- Mohanpur, Ta-Jalalpore	Member Invitee
22	Shri Belaben Patel	Progressive Farm Woman, Village- Abrama, Ta-Jalalpore	Member Invitee
23	Shri Dharmeshbhai Rakholiya	Convener of LAC & Director BSVS, RSETI-Navsari	Member Invitee
24	Mrs. Rishida Thakor	Tapsiya Nari Charitable Trust, Navsari	Member Invitee

## Agenda for 14<sup>th</sup> Scientific Advisory Meeting of Krishi Vigyan Kendra

Schedule to be held on 25<sup>th</sup> January 2022 at 10:00 am

Item No.	Agenda
12.1	Review of previous 13 <sup>th</sup> SAC Meeting Minutes.
12.2	Review of KVK activities held during January-2021 to December-2021.
12.3	Presentation on Action Plan of January-2022 to December-2022.
12.4	Presentation of Budget Position.
12.5	Suggestions and discussion to make Krishi Vigyan Kendra, Navsari more effective.
12.6	Any other related matters with the permission of the chairperson.

**11.1 Action Taken Report on minutes of 14<sup>th</sup> SAC meeting to be held on 25/01/2022**

<b>Action Taken Report on minutes of 13<sup>th</sup> SAC meeting held on 16/12/2020</b>		
<b>Sr. No</b>	<b>Suggestions</b>	<b>Action taken</b>
1. During the 13 <sup>th</sup> Scientific Advisory Committee meeting following suggestions are made by the experts		
13.2.1	Video Clip of different agricultural technology should be upload on You tube.	Video clip (10) of different technologies are uploaded viz. 1.Harmful effects of Parthenium and its contact 2.SRI technology in paddy 3. Stem borer pest management in paddy 4. Bacterial leaf blight disease management in paddy 5. Whitefly pest management in sugarcane, 6. False smut management in rice and 7. Kitchen garden.
13.2.2	Organize collaborative training on value addition with Horticulture Department, Navsari	Three Trainings has been conducted with Horticulture department, Navsari on value addition in collaboration with PHT, NAU, Navsari
13.2.3	Prepare IFS model at KVK farm and to conduct more activities on this subject	Plan scheme entitled "Establishment of demonstration cum training centre in Inland Fisheries at Navsari has been transferred to Kamdhenu University. So to establish IFS model of KVK with main fisheries component we will propose IFS plan scheme next year.
13.2.4	Organize training and other programme on Animal husbandry	One training has been conducted on Animal health checkup
13.2.5	To conduct more FLD on both sugarcane and tuber crop.	FLD's on Sugarcane and tuber crop conducted on more than 25 farmer's field, besides 6 OFT and regular FLDs.
13.2.6	To organize demonstration on biofortified crop varieties	FLD's on bio fortified Paddy crop cv., GR-15 conducted on 25 Farmers field.
13.2.7	More popularize the micro irrigation system or sensor base technology	In each and every training and extension programme highlighting on MIS to save water and improve the productivity.

મુદ્દા નં. ૧	બેઠક દરમ્યાન સભ્યશ્રીઓ દ્વારા નીચે મુજબનાં સૂચનો કરાયા.	
મુદ્દા નં ૧૩.૨.૧	કૃષિ વિષયક તાંત્રિક માર્ગદર્શન માટે જુદા જુદા વિષયોની વિડીયો કલીપ બનાવી યુ ટ્યુબ પર અપલોડ કરવી.	<ul style="list-style-type: none"> <li>જુદી જુદી કૃષિ તાંત્રિકોઓની ૧૦ વીડીયોકલીપ અપલોડ કરાયેલ છે. જેવી કે ૧. ગાજરઘાસનાં સંપર્કથી થતી હાનિકારક અસરો ૨. ડાંગરમાં 'શ્રી' પધ્ધતિ ૩. ડાંગરમાં ગાભમારાની ઈયળનું જીવાત નિયંત્રણ ૪. ડાંગરમાં પાનના સુકારાના રોગનું નિયંત્રણ ૫. શેરડીમાં સફેદ માખીનું જીવાત નિયંત્રણ ૬. કિચનગાર્ડન અને ડાંગરમાં ગલત અંગારીયો નિયંત્રણ ની વિડીયો કલીપ</li> </ul>
મુદ્દા નં ૧૩.૨.૨	કૃષિ પેદાશોના મૂલ્યવર્ધનની તાલીમો જીલ્લા બાગાયત વિભાગ સાથે યોજવી.	<ul style="list-style-type: none"> <li>ત્રણ તાલીમો નવસારી જીલ્લા બાગાયત વિભાગ અને પોસ્ટ હાર્વેસ્ટ ટેકનોલોજી વિભાગ ન.કૃ.યુ., નવસારી સાથે કરાયેલ છે.</li> </ul>
મુદ્દા નં. ૧૩.૨.૩	સંકલિત ખેતી પધ્ધતિનું મોડેલ કેન્દ્ર ખાતે તૈયાર કરવું અને સંકલિત ખેતી વિષયક પ્રવૃત્તિઓ વધારે કરવી.	<ul style="list-style-type: none"> <li>"એસ્ટાબ્લીશમેન્ટ ઓફ ડેમોસ્ટ્રેશન કમ ટ્રેનીંગ સેન્ટર ઈન ઈનલેંડ ફીશરીશ કામધેનુ યુનિવર્સિટીને આપી દેવાતા મત્સ્યપાલન વિષય હેઠળ સંકલિત ખેતી માટેની પ્લાન યોજનાની દરખાસ્ત કરાયેલ છે. જે અંતર્ગત આવતા વર્ષે મોડેલ તૈયાર કરવામાં આવનાર છે.</li> </ul>
મુદ્દા નં ૧૩.૨.૪	પશુપાલનની પ્રવૃત્તિઓ કરાવવી.	<ul style="list-style-type: none"> <li>પશુપાલનને લગતી એક તાલીમ કરાયેલ છે.</li> </ul>
મુદ્દા નં ૧૩.૨.૫	શેરડી/ કંદમૂળ, શકકરીયા, સૂરણ અને રતાળુ (ટયુબર) પાકનાં નિદર્શનો વધુ ગોઠવવા.	<ul style="list-style-type: none"> <li>શેરડી અને કંદમૂળ પાકોમાં અગ્રીમ હરોળ નિદર્શનો ખેડૂતનાં ખેતરે તેમજ કેવિકે ફાર્મ ખાતે ગોઠવવામાં આવેલ છે.</li> </ul>
મુદ્દા નં ૧૩.૨.૬	બાયોફોર્ટીફાઈડ વિવિધ પાકનાં નિદર્શનો યોજવા.	<ul style="list-style-type: none"> <li>ડાંગરની જી.એન.આર.-૧૫ બાયો ફોર્ટીફાઈડ જાતનાં ૨૫ નિદર્શનો ગોઠવવામાં આવેલ છે.</li> </ul>
મુદ્દા નં ૧૩.૨.૭	સૂક્ષ્મ પિયત પધ્ધતિ/સેન્સર બેઈઝડ ટેકનોલોજીનો વ્યાપ વધારવો.	<ul style="list-style-type: none"> <li>કેન્દ્ર દ્વારા યોજાતા કૃષિ તાલીમવર્ગો અને કૃષિ વિસ્તરણ કાર્યક્રમોમાં સૂક્ષ્મ પિયત પધ્ધતિ અને સેન્સર આધારીત પિયત પધ્ધતિના ઉપયોગ દ્વારા પાણી બચત સાથે ઉત્પાદકતા વધારા અંગે માર્ગદર્શન આપવામાં આવે છે.</li> </ul>

## 11.2 Review of KVK Activities held during January-2021 to December-2021

### (A) Training :

#### 1. Farmers, Farm Women and Rural Youths

Subject	On Campus				Off Campus				Total			
	No.	Beneficiaries			No.	Beneficiaries			No.	Beneficiaries		
		M	F	T		M	F	T		M	F	T
<b>(A) Practicing Farmers /Farm Women</b>												
Crop Production	17	198	397	595	8	205	122	327	25	403	519	922
Horticulture	17	222	276	498	12	330	46	376	29	552	322	874
Plant Protection	10	202	35	237	14	403	373	776	24	605	408	1013
Home Science	4	33	150	183	10	41	242	283	14	74	392	466
Ext.Education	4	83	40	123	4	129	102	231	8	212	142	354
Fisheries	3	88	43	131	-	-	-	0	3	88	43	131
<b>Total (A)</b>	<b>55</b>	<b>826</b>	<b>941</b>	<b>1767</b>	<b>48</b>	<b>1108</b>	<b>885</b>	<b>1993</b>	<b>103</b>	<b>1934</b>	<b>1826</b>	<b>3760</b>
<b>(B) Rural Youth</b>												
Crop Production	3	42	60	102	2	1	46	47	5	43	106	149
Horticulture	3	12	15	27	3	20	20	40	6	32	35	67
Ext.Education	1	49	49	98	1	26	12	38	2	75	61	136
Plant Protection	2	44	-	44	2	37	24	61	4	81	24	105
Home Science	-	-	-	0	1	-	29	29	1	0	29	29
<b>Total (B)</b>	<b>9</b>	<b>147</b>	<b>124</b>	<b>271</b>	<b>9</b>	<b>84</b>	<b>131</b>	<b>215</b>	<b>18</b>	<b>231</b>	<b>255</b>	<b>486</b>
<b>Total A+B</b>	<b>64</b>	<b>973</b>	<b>1065</b>	<b>2038</b>	<b>57</b>	<b>1192</b>	<b>1016</b>	<b>2208</b>	<b>121</b>	<b>2165</b>	<b>2081</b>	<b>4246</b>

## 2. Sponsored Training :

Sr. No.	Date	Beneficiaries			Sponsor Agency
		Male	Female	Total	
1	10/11/21	20	5	25	Dept. of Agri., Navsari
2	11/11/21	20	10	30	
3	5/8/21	32	28	60	BIAF, Lachakadi
4	19/8/21	52	2	54	Dept.of food quality testing, NAU,Navsari
5	5/1/21	24	26	50	Dept. of Agronomy, NMCA,NAU,Navsari
6	25/2/21	21	33	54	
7	10/3/21	26	42	68	
8	6/7/21	0	17	17	
9	20/7/21	53	20	73	Ninja cart, Ahmadabad
10	27/5/21	20	10	30	Reliance Foundation, Ahmedabad
11	30/1/21	0	30	30	Baroda Swarojar Sansthan, Navsari
12	15/3/21	1	24	25	
13	18/3/21	0	22	22	
14	16/3/21	49	9	58	Department Food testing laboratory, NAU., Navsari
	<b>Total</b>	<b>318</b>	<b>278</b>	<b>596</b>	

## 3. In-service Training :

Sr. No.	Subject	Date	Days	Beneficiaries		
				Male	Female	Total
1	Agronomy	23-25/09/2021	3	70	4	74

#### 4. Vocational Training

Sr. No.	Subject	Date	Days	Subject	Beneficiaries		
					Male	Female	Total
1	Plant Protection	12/03/2021	1	Mushroom Cultivation	0	31	31
2	Home Science	1-3/07/2021	3	Masala Preparation	0	113	113
3	Home Science	13-18/09/2021	6	Bamboo Craft	0	26	26
4	Agronomy	01-04/10/2021	4	Vermi compost	0	23	23
<b>Total</b>					<b>0</b>	<b>193</b>	<b>193</b>

#### B. Frontline demonstrations:

#### FLD Results of year 2020-21

Sr. No.	Season	Crop	Variety	Objective	Area (ha)	No. of farmers	Average Production q/ha		% increase
							Demo.	L.C.	
<b>Crop Production</b>									
1	Kharif-2020-21	Pigeon pea	GT-104	To popularize the new high yielding variety	10	68	12.88	10.96	<b>17.52</b>
2	Kharif-2020-21	Pigeon pea	Vaishali	To popularize the new high yielding variety	33	500	8.36	6.76	<b>23.67</b>
3	Rabi-2020-21	Chick pea	GG-5	To popularize the new high yielding variety	20	200	13.78	10.93	<b>26.08</b>
4	Rabi-2020-21	Indian bean	G.Val-2	To popularize the new high yielding variety	4.5	60	7.83	6.22	<b>25.9</b>
5	Rabi-2020-21	Indian bean	GNIB-22	To popularize the new high yielding variety	3.0	30	21.67	17.48	<b>24.0</b>
6	Rabi-2020-21	Fodder Sorghum	PC25/CSV-21F	To popularize the new high yielding variety	1.5	15	322	291	<b>10.7</b>
7	Rabi-2020-21	Wheat	HD-2931	To popularize the new high	1.0	5	32.68	30.12	<b>8.44</b>



				yielding IARI variety					
<b>Horticulture</b>									
8	Kharif-19	Mango	Sonpari	New variety	5	500	Continue.....		
9	Kharif-20	Mango	Available	Use of PSB, KMB, Azatobactor bio fertilizer	38	96	96.8	83.9	<b>15.38</b>
10	Kharif-20	Sapota	Available	Use of PSB, KMB, Azatobactor bio fertilizer	12	33	87	80	<b>8.75</b>
11	Kharif-20	Little Gourd	GNLG-1	Introduction of new variety	1	36	168	148	<b>13.51</b>
12	Kharif-20	pointed Gourd	GNPG-1	Introduction of new variety	0.2	6	94	82	<b>14.63</b>
13	Kharif-20	Drum stick	PKM-1	Introduction of new variety	0.14	28	40	30	<b>33.33</b>
14	Kharif-20	Dragon fruit	Red	Introduction of new variety	1	96	16	12	<b>33.33</b>
15	Kharif-Rabi-20	Kitchen garden	Available	Pesticide residue free nutritious food	0.1	557	2.4	1.8	<b>33.33</b>
16	Kharif-20	Elephant foot yam (Suran)	Gajendra	Introduction of new variety	0.05	3	185	170	<b>8.82</b>
<b>Fisheries</b>									
17	Oct-19 to Nov-20	Fresh water fish farming	Pangasius fish	To encourage Pangasius cage farming in IMC pond	2 cage (4 x 6m)	12	2200/c age	1980	<b>11.11</b>
18	Kharif-20	Fresh water fish farming	Catla, Rohu, Mrigal, Grass carp	Stocking density & feeding management	7 (14.16)	90	2630	1780	<b>47.75</b>
19	Kharif-20	Fresh water fish farming	Catla, Rohu, Mrigal, Grass carp	Seed rearing	20 (5.96)	5	1140	690	<b>65.22</b>
20	Kharif-20	Fresh water fish farming	<i>Pungasius</i>	High stocking density in cage farming	2 cage (6 mt.X4 mt.)	10	387	179	<b>116.20</b>
<b>Plant Protection</b>									
21	Kharif-20	Pigeonpea	Vaishali	Use of bio pesticides in pest & diseases	5	20	10.71	8.4	<b>19.80</b>
22	Rabi-20	Mango	Available	Fruit fly management nauroji fruit fly trap	5	20	96.8	83.9	<b>15.38</b>

<b>Total</b>	<b>164.61</b>	<b>2390</b>			
--------------	---------------	-------------	--	--	--

### FLD on Women Empowerment

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check
Home Science	Natural Resource Conservation Technology-solar cooker	10	Fuel cost saving per year	2750 (Rs./year)	5950 (Rs./Year)

Note : Average 7 gas cylinder used/ family/year

Cylinder market rate 850/- one cylinder

### FLD on Farm Implements and Machinery

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit etc.)			
						De mo	Ch eck		Land preparation	So wing	We edi ng	Tot al	Land preparation	La bo ur	Irr iga tio n	To tal
Twin wheel hoe	Green gram	Twin wheel hoe for weeding operation	25	0.25	Labour saving hours	32 hr.	160 hr.	80%	-	-	16	16-	-	2848/ha.	-	2848/ha.

Note : Labor wages calculated as per NAU University rate. (178/- ) Year-2020-21

**FLD January December-2021**

Sr. No.	Season	Crop	Variety	Objective	Area (ha)	No. of farmers	Average Production qt/ha		Percent increase
							Demo.	L.C.	
<b>Crop Production</b>									
1	Summer-21	Green Gram	GM-6	To popularize the new high yielding variety	18.60	114	9.34	6.62	<b>25.98</b>
2	Kharif-21	Paddy	GNR-3	To popularize the new high yielding variety	54	187	47.78	41.08	<b>16.31</b>
3	Kharif-21	Paddy	GNR-5	To popularize the new high yielding variety	5	35	44.24	39.32	<b>12.77</b>
4	Kharif-21	Paddy	GNR-7	To popularize the new high yielding variety	38.8	162	46.94	40.24	<b>16.56</b>
5	Kharif-21	Paddy	GR-15	To popularize the new high yielding variety	5	25	44.76	41.08	<b>8.96</b>
6	Kharif-21	Paddy	GR-18	To popularize the new high yielding variety	8	34	43.78	39.32	<b>11.34</b>
7	Kharif-21	Paddy	GR-19	To popularize the new high yielding variety	4	17	42.19	38.32	<b>10.10</b>
8	Kharif-21	Paddy	NAUR-1	To popularize the new high yielding variety	8	27	45.82	40.27	<b>13.78</b>
9	Kharif-21	Paddy	GR-17	To popularize the new high yielding variety	10	50	48.94	14.08	<b>19.13</b>
10	Kharif-21	Paddy	GRH-2	To popularize the new high yielding variety	12	60	53.86	46.54	<b>13.01</b>
11	Kharif-21	Pigeon pea	GT-104	To popularize the new high yielding variety	12	560	Continue.....		
12	Rabi-21	Chick pea	GG-5	To popularize the new high yielding variety	4	40	Continue.....		
13	Rabi-21	Indian bean	G.Val.-2	To popularize the new high yielding variety	0.7	9	Continue.....		
14	Rabi-21	Sorghum	Cofs-29	To popularize the new	5	43	Continue.....		

				high yielding variety					
				<b>Total</b>	<b>185.1</b>	<b>1363</b>			
<b>Home Science</b>									
1	Rabi-21	-	Solar Cooker	Natural resource conservation technology	-	15	Continue.....		
2	Rabi-21	Pulses	Twin wheel hoe	Twin wheel hoe (Drudgery reduction)	-	25	Continue.....		
				<b>Total</b>	<b>-</b>	<b>40</b>			
<b>Plant Protection</b>									
1	Kharif-21	Paddy	Available	IPDM Technologies	10	20	48.34	42.26	<b>14.39</b>
2	Kharif-21	Pigeon pea	Available	Use of bio pesticides in pest & diseases	5	10	10.85	8.90	<b>19.00</b>
3	Rabi-21	Mango	Available	Fruit fly management Use Nauroji fruit fly trap	5	20	Continue.....		
				<b>Total</b>	<b>20</b>	<b>50</b>			
<b>Horticulture</b>									
1	Summer-21	Yam	Hemlata	Introduction of new variety Hemlata	0.30	22	225	200	<b>13</b>
2	Summer-21	Mango	-	Novel Spray	50	114	Continue.....		
3	Kharif-21	Elephant Foot Yam (Suran)	Gajendra	Introduction of new variety	0.30	3	390	350	<b>11</b>
4	Summer-21	Mango ginger	NMG2 (Jyoti)	Introduction of new variety	0.30	30	290	250	<b>16</b>
5	Summer-21	Mango ginger	Amravanti	Introduction of new variety	0.25	21	70	60	<b>17</b>
6	Kharif-21	Mango	Available	Use of PSB, KMB, Aztobactor bio fertilizer	66.40	166	Continue.....		
7	Kharif-21	Sapota	Available	Use of PSB, KMB, Aztobactor bio fertilizer	40.00	100	Continue.....		

8	Kharif-21	Mango	Sonpari	Introduction of new variety	0.79	17	Continue.....		
9	Kharif-21	Little Gourd	GNLG-1	Introduction of new variety	2	39	Continue.....		
10	Kharif-21	Drum stick	PKM1	Introduction of new variety	0.69	264	Continue.....		
11	Kharif-21	Dragon fruit	Red	Introduction of new variety	0.11	105	Continue.....		
12	Kharif-21	Dragon fruit	White	Introduction of new variety	0.38	296	Continue.....		
13	Kharif-21	Kitchen garden	Available	Pesticide residue free nutritious food	5.5	557	Continue.....		
<b>Total</b>					<b>167.02</b>	<b>1734</b>			
<b>Fisheries</b>									
1	Fisheries	Fresh water fish farming	Catla, Rohu, Mrigal, Grass carp	Freshwater fish farming in village tanks, khet talavadi (Stocking density & species ratio) feeding management	8	42	28.90	17.60	64.20
2	Fisheries	Fresh water fish farming	Pangasius fish	pangasius culture through cage in carp pond	1	6	2600	2100	23.80
3	Fisheries	Fresh water fish farming	Gift Tilapia	Tilapia culture through 100 cost PVC cages (2mx2mx1.20m) in carp pond at KVK	0.30		Continue.....		
<b>Total</b>					<b>9.30</b>	<b>48</b>			
<b>Grand Total</b>					<b>381.42</b>	<b>3235</b>			

### 3. Demonstration conducted under NFSM project 2020-21 and 2021-22

#### 1. FLD Organized

Sr. No	Fld organized			Area (ha)	Beneficiaries		
	Crop	Variety	Season		SC/ST	Others	Total
1	Pigeon pea	GT-104	Kharif 2020	10	40	28	<b>68</b>
2	Chick pea	GG-5	Rabi-2020	20	157	43	<b>200</b>
3	Green Gram	GM-6	Summer-21	10	77	23	<b>100</b>
TOTAL				<b>40</b>	<b>274</b>	<b>94</b>	<b>368</b>

#### 2. Training on CFLDs on Pulses (2020-21)

Sr. No.	Date	Title of Training	No. of Beneficiaries						Grand Total
			SC/ST		Other		Total		
			M	F	M	F	M	F	
<b>A: Kharif Pulses (Off campus)</b>									
1	09/06/20	Scientific cultivation practices of Pigeon pea crop	0	23	0	0	0	23	<b>23</b>
2	09/06/20		9	12	0	0	9	12	<b>21</b>
3	19/06/20		0	0	17	19	17	19	<b>36</b>
4	19/08/20	Webinar on Scientific cultivation practices of Pigeon pea crop	08	02	14	06	22	08	<b>30</b>
<b>Sub-total (A)</b>			<b>17</b>	<b>37</b>	<b>31</b>	<b>25</b>	<b>48</b>	<b>62</b>	<b>110</b>
<b>B : Rabi Pulses (On campus)</b>									
5	20/10/20	Key steps to increase the production and productivity of chickpea	2	70	0	0	2	72	<b>72</b>
6	21/10/20		4	62	0	0	4	62	<b>66</b>
7	22/10/20	Scientific cultivation practices of Rabi pulses	29	36	0	0	29	36	<b>65</b>
8	26/10/20		17	4	0	2	17	6	<b>23</b>
9	29/10/20		0	0	8	26	8	26	<b>34</b>
10	04/11/20		22	0	0	0	22	0	<b>22</b>
<b>Sub-total (B)</b>			<b>74</b>	<b>172</b>	<b>8</b>	<b>28</b>	<b>82</b>	<b>202</b>	<b>282</b>
<b>C : Summer Pulses (On campus)</b>									
11	05/01/21	Importance of Bio-fortification in Pulses crops	24	26	0	0	24	26	<b>50</b>
12	27/01/21	Scientific cultivation practices of Summer Green gram	5	58	3	0	8	58	<b>66</b>
13	29/01/21	Scientific cultivation practices of Summer pulses	9	39	2	0	11	39	<b>50</b>

14	03/02/21	Scientific cultivation practices of Summer Green gram	6	53	0	0	6	53	<b>59</b>
		<b>Sub-total (C)</b>	<b>44</b>	<b>176</b>	<b>5</b>	<b>0</b>	<b>49</b>	<b>176</b>	<b>225</b>
		<b>Gran Total (A+B+ C)</b>	<b>135</b>	<b>385</b>	<b>44</b>	<b>53</b>	<b>179</b>	<b>440</b>	<b>617</b>

### 3. Field Day organized on Pulses

Sr. No.	Date	Name of village	No. of Beneficiaries						Grand total
			SC/ST		Other		Total		
			M	F	M	F	M	F	
<b>A: Rabi pulse 2020-21 (Chick pea )</b>									
1	27/01/21	Sindhai, and Kukada	5	58	3	0	8	58	<b>66</b>
2	29/01/21	Mohanpor and Abrama	0	6	9	39	9	39	<b>48</b>
3	03/02/21	Satimal, Unai, Kharjai	4	50	0	0	4	50	<b>54</b>
4	02/03/21	Kedkachha	0	20	0	0	0	20	<b>20</b>
		<b>Grand Total (A)</b>	<b>9</b>	<b>134</b>	<b>12</b>	<b>39</b>	<b>21</b>	<b>167</b>	<b>188</b>



**Field Day on Chick pea**



**Field Day on Chick pea**

#### 4. Field visit of CFLDs of Pulses

Sr. No.	Date	Name of village	No. of plots visited	No. of Beneficiaries						Grand total
				SC/ST		Other		Total		
				M	F	M	F	M	F	
<b>A: Summer 2020 (Green gram)</b>										
1	01/4/20	Mandir	2	0	0	0	2	0	2	2
2	11/5/20	Vedccha	3	0	0	1	2	1	2	3
3	11/5/20	Aat	2	0	0	0	2	0	2	2
4	13/5/20	Mohanpur	2	0	0	1	2	1	2	3
5	15/4/20	Hansapore	2	0	0	0	2	0	2	2
<b>Sub Total-A</b>			<b>11</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>10</b>	<b>2</b>	<b>10</b>	<b>12</b>
<b>B: Kharif 2020 (Pigeon pea)</b>										
6	15/09/20	Chundha	3	3	0	0	0	0	0	3
7	19/09/20	Limzar	6	0	6	0	0	0	0	6
8	28/09/20	Limzar	5	0	5	0	0	0	5	5
9	28/09/20	Bartad	3	0	3	0	0	0	3	3
10	29/09/20	Bhinar	4	5	0	0	0	5	0	5
11	02/10/20	Sindhari	1	1	0	0	0	1	0	1
12	04/01/21	Chaundha	3	3	0	0	0	3	0	3
13	20/02/21	Bhinar	4	4	0	0	0	4	0	4
<b>Sub Total-B</b>			<b>29</b>	<b>16</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>8</b>	<b>30</b>



<b>C: Rabi 2020 -21 (Chick pea)</b>										
14	01/02/21	Kukada	3	3	3	0	0	3	3	<b>6</b>
15	05/01/21	Sindhai	3	1	3	0	0	1	3	<b>4</b>
16	05/01/21	Dharampuri	3	0	4	0	0	0	4	<b>4</b>
17	04/01/21	Satimal	4	3	3	0	0	3	3	<b>6</b>
18	04/01/21	Chaundha	4	4	0	0	0	4	0	<b>4</b>
19	26/02/21	Dambhar	4	0	0	3	4	3	4	<b>7</b>
20	02/03/21	Dharampuri	3	0	5	0	0	0	5	<b>5</b>
<b>Sub Total-C</b>			<b>24</b>	<b>11</b>	<b>18</b>	<b>3</b>	<b>4</b>	<b>14</b>	<b>22</b>	<b>36</b>
<b>D: Summer 2021 (Green gram)</b>										
21	02/03/21	Kukada	1	1	1	0	0	1	1	<b>2</b>
22	09/03/21	Satimal	1	2	2	0	0	2	2	<b>4</b>
<b>Sub Total-D</b>			<b>2</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>6</b>
<b>Grand Total (A+B+C+D)</b>			<b>66</b>	<b>30</b>	<b>35</b>	<b>5</b>	<b>14</b>	<b>32</b>	<b>43</b>	<b>84</b>



**CFLDs Plots of Green gram (GM-6) (2020)**



**CFLDs Plots of Green gram (GM-6) (2020)**



**CFLDs Plots of Green gram (GM-6) (2020)**



**CFLDs Plots of Pigeon pea (GT-104) (2020)**

LAT 20°49'26" N TUESDAY 09.29.2020  
 LONG 73°20'43" E LOCAL TIME 12:38:3  
 Unnamed Road, Gujarat 396580, India, Gujarat, India, 396580





CFLDs Plots of Pigeon pea (GT-104) (2020)



CFLDs Plots of Pigeon pea (GT-104) (2020)



CFLDs Plots of Chickpea (GG-5) (2020)



CFLDs Plots of Chickpea (GG-5) (2020)

### Successful Case or Success Story of Green gram (2020-21)

Profile			
<b>Name</b>	: Patel Rekhaben	<b>Age</b>	: 47
<b>Village</b>	: Abrama	<b>Education</b>	: 12 <sup>th</sup> Pass
<b>Taluka</b>	: Jalalpure	<b>Land holding</b>	: 3.2 ha
<b>Dist.</b>	: Navsari	<b>Farming Experience</b>	: 22 year
<b>Mo. no</b>	: 9879629329	<b>Crops grown</b>	: Paddy, Mango, Sugarcane, Vegetable and Green Gram

#### BEFORE CONTACT WITH KVK

She has been cultivating green gram since 10 years, normally she used to adopt traditional practices while cultivating green gram, hence she incurred huge yield losses due to abiotic and biotic stress thereby increased cost of cultivation and low profit concern her farming.

#### AFTER KVK GUIDANCE ADOPTED TECHNOLOGY

Area	-	0.2 ha
Variety	-	Green Gram – GM-6
Spacing	-	45 x10 cm
Seed Treatment	-	Thiram @ 3 gm/kg seed Rhizobium, PSB and KMB each @ 10-20 ml/kg seed
Seed rate	-	25 kg/ha
Nutrient management	-	20:40:00 kg NPK/ha
Weeding	-	2 time hand weeding





- **After KVK intervention**
  - Adoption of *summer* green gram recently released good high yielding variety
  - Integrated nutrient management in crop
  - Carried out Scientific method of cultivation
- **Area of adaptive of technology**
  - Started Green gram cultivation approximate 1.0 Vigha (0.20 ha)
- **Result of this technology**
  - ✓ Low seed rate
  - ✓ Plant growth is improved
  - ✓ Yield is greater than before
  - ✓ About 31.42 % additional income
- **Yield performance of Green Gram Plot**

Yield ( kg/ha)		% increase over check
Demo.	Check	
912	708	28.81

- **Income from this**
  - Total income of Rs. 74890/ha during 75-80 days only.
- **Horizontal spread**
  - About 62 farm families in the village and surrounding villages adopted this technology.



Green Gram plot of Rekhaben Patel



Green Gram plot of Rhekhaben Patel

## Successful Case or Success Story of Chick pea (2020-21)

Profile			
<b>Name</b>	: Ranjanben Patel	<b>Age</b>	: 42
<b>Village</b>	: Mohanpor	<b>Education</b>	: 12 <sup>th</sup> Pass
<b>Taluka</b>	: Gandevi	<b>Land holding</b>	: 1.2 ha
<b>Dist.</b>	: Navsari	<b>Farming Experience</b>	: 20 year
<b>Mo. no</b>	: 9925607955	<b>Crops grown</b>	: Paddy, Chick pea, Mango and Sapota

### BEFORE CONTACT WITH KVK

Wilt disease was the major hurdle for her chickpea yield. Since 8 years repeated use of chick pea in the same area without any plant protection measures she harvested minimum yield. Once it happened visit demo plot at KVK then she made her mind to follow the guideline.

### AFTER KVK GUIDANCE ADOPTED TECHNOLOGY

Area	-	1 vigha (0.2 ha)
Variety	-	Gujarat Chick Pea - 5
Spacing	-	30 cm
Seed Treatment	-	Thiram @ 3 gm/kg seed Rhizobium, PSB and KMB each @ 10-20 ml/kg seed
Seed rate	-	60 – 70 kg/ha
Nutrient management	-	20:40:00 kg NPK/ha
Weeding	-	2 time hand weeding



- **After KVK intervention**
  - Adoption of short durations and wilt resistance high yielding variety
  - Integrated nutrient management in crop
  - Scientific method of cultivation practices adopted
- **Area of adaptive of technology**
  - Started chickpea cultivation 1 vigha (0.2 ha)
- **Result of this technology**
  - Low seed rate
  - Yield is greater than before
  - Minimum Mortality of plant observed
  - About 24.36 % additional income

- **Yield performance of Chick Pea Plot (GG-5)**

Yield ( kg/ha)		% increase over check
Demo.	Check	
1257	1063	18.25

- **Income from this**

- Total income of Rs. 69070 /ha during 115 days only.

- **Horizontal spread**

- About 43 farm family in the village and surrounding village adopted this technology.



Chick Pea plot of Ranjanben Patel



Chick Pea plot of Ranjanben Patel

## Year 2021-22

### 1. FLD Organized

Sr. No	FLD organized			Area (ha)	Beneficiaries		
	Crop	Variety	Season		SC/ST	Others	Total
1	Pigeon pea	GT-104	Kharif 2021	10	50	10	<b>60</b>
2	Chick pea	GG-5	Rabi-2021	20	63	137	<b>200</b>
TOTAL				<b>30</b>	<b>113</b>	<b>147</b>	<b>260</b>

### 2. CFLDs Training on Pulses (2020-21)

Sr. No.	Date	Title of training	No. of Beneficiaries						Grand Total
			SC/ST		Other		Total		
			M	F	M	F	M	F	
<b>A: Kharif pulses (Off campus)</b>									
1	17/06/21	Webinar on Scientific cultivation practices of Pigeon pea	9	6	0	0	9	6	<b>15</b>
2	21/06/21		25	32	0	0	25	32	<b>57</b>
<b>Sub-total (A)</b>			<b>34</b>	<b>38</b>	<b>0</b>	<b>0</b>	<b>34</b>	<b>38</b>	<b>72</b>
<b>B : Kharif Pulses (On campus)</b>									
3	03/06/21	Key steps to increase the production and productivity of chickpea	32	34	6	2	38	36	<b>74</b>
4	04/06/21		0	0	17	1	17	1	<b>18</b>
<b>Sub-total (B)</b>			<b>32</b>	<b>34</b>	<b>23</b>	<b>3</b>	<b>55</b>	<b>37</b>	<b>92</b>
<b>C : Rabi Pulses (On campus)</b>									
5	25/10/21	Scientific cultivation practices of Chick pea	16	48	2	1	18	49	<b>67</b>
6	27/10/21		38	19	0	0	38	19	<b>57</b>
7	28/10/21	Important steps to increase the production and productivity of Chickpea	0	0	16	39	16	39	<b>55</b>
8	29/10/21		38	30	0	0	38	30	<b>68</b>
<b>Sub-total (C)</b>			<b>92</b>	<b>97</b>	<b>18</b>	<b>40</b>	<b>110</b>	<b>137</b>	<b>247</b>
<b>Gran total (A+B+C)</b>			<b>158</b>	<b>169</b>	<b>41</b>	<b>43</b>	<b>199</b>	<b>212</b>	<b>411</b>

### 3. Field visit of CFLDs of Pulses

Sr. No.	Date	Name of village	No. of plots visited	No. of Beneficiaries						Grand total
				SC/ST		Other		Total		
				M	F	M	F	M	F	
<b>A: Summer 2021 (Green gram)</b>										
1	22/04/21	Abrama	3	0	0	2	2	2	2	<b>4</b>
2	27/04/21	Kalamtha	3	0	0	1	2	1	2	<b>3</b>



3	25/05/21	Dharampuri Kedkachha	5	2	6	0	0	2	6	<b>8</b>
4	20/05/21	Mohanpor	3	0	0	2	2	2	2	<b>4</b>
<b>Sub Total-A</b>			<b>14</b>	<b>2</b>	<b>6</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>12</b>	<b>19</b>
<b>B: Kharif 2021 (Pigeon pea)</b>										
5	08/10/21	Kukada	3	2	2	0	0	2	2	<b>4</b>
6	16/10/21	Kedkachha	2	3	1	0	0	3	1	<b>4</b>
7	06/12/21	Abrama	2	0	0	1	1	1	1	<b>2</b>
<b>Sub Total-B</b>			<b>7</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>4</b>	<b>10</b>
<b>Grand Total (A+B)</b>			<b>21</b>	<b>7</b>	<b>9</b>	<b>6</b>	<b>7</b>	<b>13</b>	<b>16</b>	<b>29</b>



**CFLDs Plots of Green gram (GM-6) (Summer- 2021)**



**CFLDs Plots of Green gram (GM-6) (Summer- 2021)**



CFLDs Plots of Pigeon pea (GT-104) (Kharif- 2021)



## **Seed Hub Project:**

### **Creation of Seed Hubs for Increasing Indigenous Production of seeds of pulses in India**

1. Separate account opening date as per guidelines: 18/8/17
2. Transfer/deposit of money by host institute (Mention date):
3. Details of seed production and budget allocation for Seed hubs at KVK, Navsari

State	Nam of the centre	Seed production target (q)			Budget allocation (Rs. In Lakh)		
		2016-17	2017-18	2018-19	Seed processing & storage Infrastructure under (2016-17)	Revolving Fund	
						2016-17	2017-18
Gujarat	KVK, Navsari	450	700	1000	50.00	35.00	65.00

4. Target of quality seed production of pulses by seed-hub (KVK, Navsari) during 2016-17 to 2018-19 is a under

State	Name of the centre	District	Crop / Variety	Quantity of seed production (q)			
				2016-17	2017-18	2018-19	Total
Gujarat	KVK, Navsari	Navsari	Mung bean	150	300	350	2150
			Pigeon pea	300	400	650	
<b>Total</b>				<b>450</b>	<b>700</b>	<b>1000</b>	

5. Infrastructure created:

Sr. No.	Name of items (Like Godown, Processing equipment)	Allotted Fund (in Lakh)	Expense Fund (in Lakh)	Unutilized Fund (in Lakh)
1	For godown construction the fund was transfer to executive engineer	35.00	22.90	12.10
2	Seed processing machinery equipment	15.00	6.56	8.44
	<b>Total</b>	<b>50.00</b>	<b>29.46</b>	<b>20.54</b>



### Latest photograph of infra-structure development



Seed hub godown



Seed processing machinery plant

### 6. Crop wise seed production

Season (s)	Crop(s) / Variety	Seed prod. target (in q)	Seed prod. Achievement (in q)	At KVK/ SAUs/ Institute farm		At farmers field in participatory mode		Seed certification agency	Type of seed (breeder / TFL etc.)
				Area (ha)	Qt. (q)	Area (ha)	Qt. (q)		
Summer-2021	Green gram (GM-6)	200	150.0*	0	0	15	150.0*	GSCA, Ahmadabad	Certified
Kharif - 2021	Pigeon pea (GT-104)	500	80.0**	0.5	5.0	15	80.0*	GSCA, Ahmadabad	Certified

#### Reasons for low yield:

\* Due to Taukte Cyclone, green gram seed of GM-6 will sprout in standing field due to high rainfall and stagnation of water

\*\* Pigeon pea seed is expected to be produced, due to cyclone and climate change during month of November and December, 2021

## 7. Expenditure details

Year	Opening Balance (1 <sup>st</sup> April)	Fund Utilized	Fund Earned (by seeds sale)	Interest gained/ Subsidy received if any	Closing Balance (31st March,)	Remarks (if any)
2018-19	65.92	10.38	3.60	2.34	95.48	34.00 Fund received from ICAR-IIPR Kanpur
2019-20	95.48	17.87	20.36	2.42	100.39	
2020-21	100.39	5.56	2.28	3.07	100.18	
2021-22	100.18	7.66	7.21	0.00	99.73	

### 8.1 Seed hub field plots visit (Year 2020-21)

Sr. No.	Place visited	Date	Crop	No. of Baneberries		Total
				M	F	
<b>2020-21</b>						
1	Karmad	01/01/21	Pigeon pea (GT-104)	4	0	4
2	Karmad	13/03/21	Pigeon pea (GT-104)	5	0	5
3	Karmad	30/03/21	Pigeon pea (GT-104)	3	0	3
4	Netrang	04/05/21	Green gram (GM-6)	4	0	4
	<b>Total</b>			<b>16</b>	<b>0</b>	<b>16</b>

### 8.2 Seed hub field plots visit

Sr. No.	Place visited	Date	Crop	No. of Baneberries		Total
				M	F	
<b>2020-21</b>						
1	Karena and Vadadala	16/06/21	Pigeon pea (GT-104)	8	0	8
2	Devalipada (Vyara)	18/06/21	Pigeon pea (GT-104)	3	0	3
3	Vadadala and Karena	25/06/21	Pigeon pea (GT-104)	4	0	4
	<b>Total</b>			<b>15</b>	<b>0</b>	<b>15</b>

**Photograph of Seed production of Green gram and Pigeon pea under seed hub project**

	
<p><b>Pigeon pea seed production at KVK Farm year 2020-21</b></p>	<p><b>Pigeon pea seed production at farmers field Village:- Karmad Ta.-Jambusar Dist. Bharuch</b></p>
	
<p><b>Seed production of green gram (GM-6) at farmers field (Netrang Ta. Kamrej)</b></p>	
	
<p><b>Pigeon pea seed production at farmers field Village:-Vadadala Ta.-Jambusar Dist. Bharuch Year- 2021- Kharif</b></p>	<p><b>Pigeon pea seed production at farmers field Village:- Karena Ta.-Amod Dist. Bharuch Year -2021 Kharif</b></p>

*\* Due to Taukte Cyclone, green gram seed of GM-6 will sprout in standing field due to high rainfall and stagnation of water*

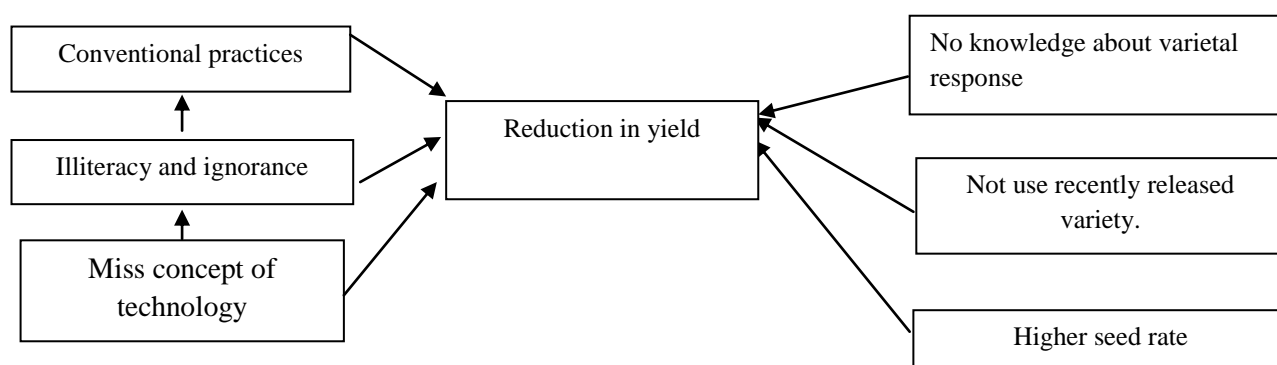
### C. On Farm Testing :

Sr. No.	Particulars	No.	Number of Farmers
<b>Agronomy</b>			
1	New Variety in hybrid rice GRH-2	1	6
2	Use of Liquid Consortia NPK-1(KRIBHCO Poly culture) In Sugarcane Crop.	1	6
<b>Horticulture</b>			
3	New variety in Brinjal (NSRP 1)	1	6
4	Use Of Liquid Consortia NPK-1(KRIBHCO Polyculture) In Mango Crop.	1	6
<b>Plant protection</b>			
5	Sucking pest management in chilly	1	6
<b>Fisheries</b>			
6	To assess stocking density of Pangasius ( <i>Pangasius hypophthalmus</i> ) fish in pond based culture system.	1	20

#### OFT-1

<b>Title of OFT</b>	:	Assessment of newly released hybrid rice variety GRH-2
<b>Description about the problem</b>	:	Farmers of south Gujarat are not adopting recommended rice GRH-2. Generally farmers are sowing new improved rice varieties which are susceptible to many diseases and low yielding hence, farmers get very low yield
<b>Causes of problem</b>	:	Lack of knowledge about hybrid rice which are low yielding as compare to hybrid rice
<b>Treatment</b>	:	T1 : Hybrid Rice (Private) Us-312/6444 T2: GR 3/NAUR-1 (5000 kg/ha) T3: rice GRH-2 Long cylindrical, 1000 seeding 25 gm yield 6000-6500 kg/ha.
<b>Methodology</b>	:	The above assessment will be conducted during kharif-2020. Six numbers of farmers will be selected randomly from adopted villages. The required data will collect and analysis will be done to draw conclusions. The result of OFT will be disseminate to the farmers. All the statistical procedures will be followed in OFT
<b>Observation</b>	:	1. Height of the plant 2. Numbers of tillers and length of spike 3. Yield kg/ha

### Problem cause diagram



### Socio-economic

### Bio-physical

### Results of Technologies Assessed

Technology Assessed	Source of Technology	Production (kg.)	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B C Ratio
<b>US-312/6444</b>	Private company technology	4836	kg/ha	52777	<b>2.06</b>
<b>GR 17/ NAUR-1</b>	Navsari Agricultural University technology	4349	kg/ha	43602	<b>1.92</b>
<b>Hybrid rice GRH-2</b>	Navsari Agricultural University technology	5184	kg/ha	62261	<b>2.30</b>





OFT plot of Paddy GRH-2 Village:-Limzar

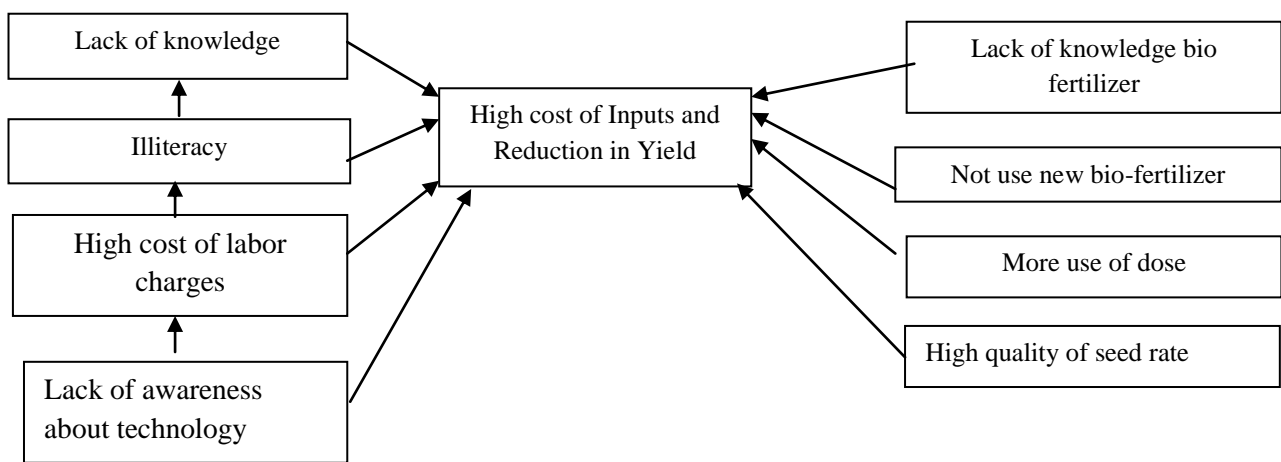


OFT plot of Paddy GRH-2 Village:-Chundha

**OFT- 2**

<b>Title Of OFT</b>	Use of Liquid Consortia NPK-1(KRIBHCO Polyculture) In Sugarcane Crop.
<b>Description About The Problem</b>	Farmers Of South Gujarat Are Not Use Of Polyculture Which Is New Research; Generally Farmers Are Use only Single Culture of Bio Fertilizer Due to that High Cost Of Inputs And Low Production Of Yield.
<b>Cause Of Problem</b>	Lack of Knowledge about the liquid consortia NPK-1(KRIBHCO Polyculture) (NCOF, Ghaziabad)
<b>Treatment</b>	T1-Farmers practice T2- Sugarcane Bud Set treatment In Prepared Solution Of Azotobacter In 10 Ltr Of Water Deep For 30 Minutes And Drenching Of Azotobacter, PSB And KMB With Normal Irrigation @ 1 Ltr/Acre T3 : PSB, Azato, KMB 2 lit/ha at 30 DAS & 90 days soil
<b>Methodology</b>	Above Assessment Conducted During Kharif-2020. With Six Number Of Farmers Will Selected Randomly From Adopted Villages
<b>Observation</b>	1. Height Of Plant 2.Yield /Acre

**Problem cause diagram**



**Socio-economic**

**Bio-physical**

### Results of Technologies Assessed

Technology Assessed	Source of Technology	Production (Quintal)	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B C Ratio
T1:-Farmers practice	--	627.23	q/ha.	120213	<b>2.49</b>
T2:- PSB, Azoto, KMB 2 lit/ha at 30 DAS & 90 days soil	Navsari Agricultural University technology	749.89	q/ha.	157664	<b>2.92</b>
T3:- Sugarcane bud setts treatment in prepared solution of Azotobacter in 10 ltr of water deep for 30 minutes and drenching of Azotobacter, PSB and KMB with normal irrigation @ 1 ltr/acre	Private company technology	722.76	q/ha.	149583	<b>2.83</b>



OFT Plot of Sugarcane Village:-Bodali

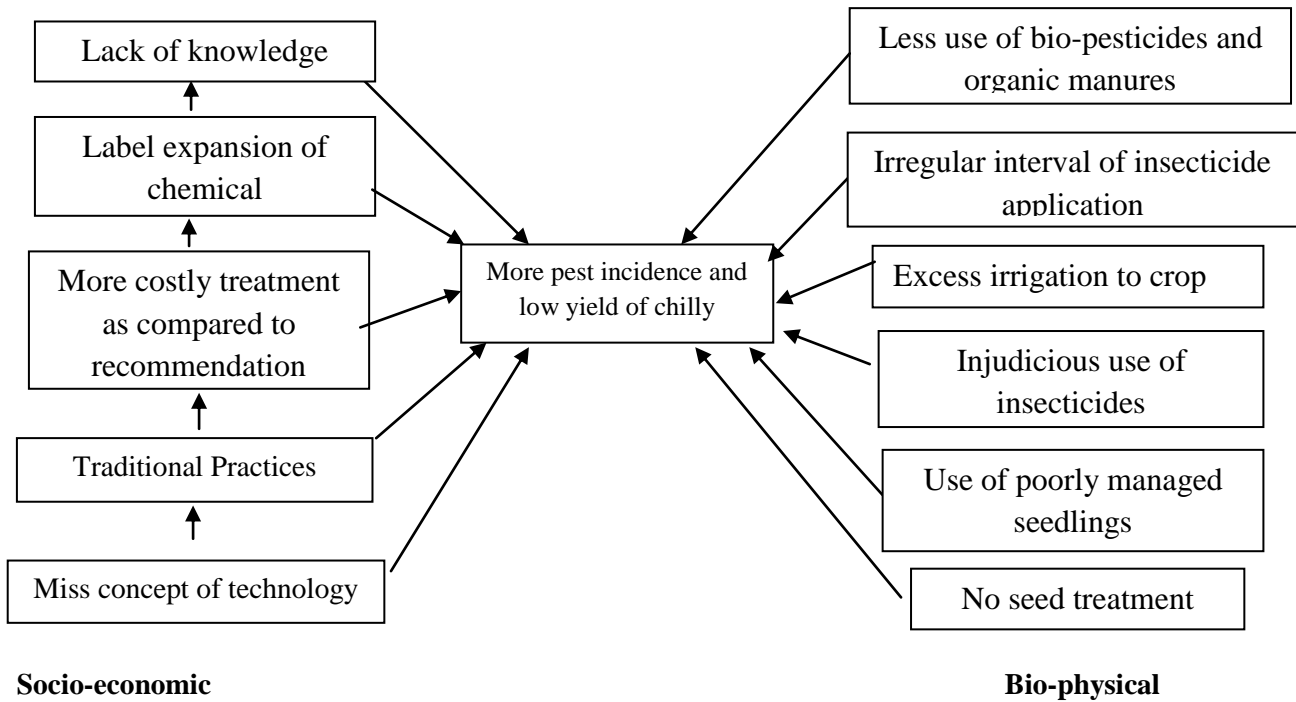


OFT Plot of Sugarcane Village:-Abrama

**OFT-3**

<b>Title of OFT</b>	:	<b>Sucking pest management in chilly</b>
<b>Description about the problem</b>	:	Farmers of south Gujarat are not practicing integrating approach in management of chilly thrips and mites. Many farmers preparing seedling without the seed treatment and transplanting without seedling root dip (either bio or chemical) this results heavy loss of chilly yield in farmer's field.
<b>Causes of problem</b>	:	Lack of knowledge of seed treatment and injudicious use of pesticides are the main cause of pest resurgence
<b>Treatment</b>	:	T1: Farmers practice (Actual practice) no use of seed treatment and traps for the management of sucking pests. T2: seed treatment with Imidacloprid 70%ws @ 400-600 g/100 kg seed and foiliar spray propagate in initial stage of spinosad 45% sc @ 64 ml in 200 lit of water. Before transplanting seedling root dip <i>trichoderma viridae</i> 5 gm/lit for 30 minutes and use of Blue and Yellow sticky traps T3 : Propergite 57 EC @ 2.5 ml/lit & water of mites and spinosad 45% EC @ 64 ml/ in 200 lit of water for sucking as well as borer control in chilli.
<b>Methodology</b>	:	The above assessment will be conduct during kharif-2017. Six numbers of farmers will select randomly from adopted villages. The required data will collect and analysis will be done to draw conclusions. The result of OFT will be disseminate to the farmers. All the statistical procedureds will follow in OFT
<b>Observation</b>	:	1.Observe and count pests all different places on the field 2.Observe and count parasitoid and predators 3. Yield kg/ha 4.Economics of each treatment

**Problem cause diagram**



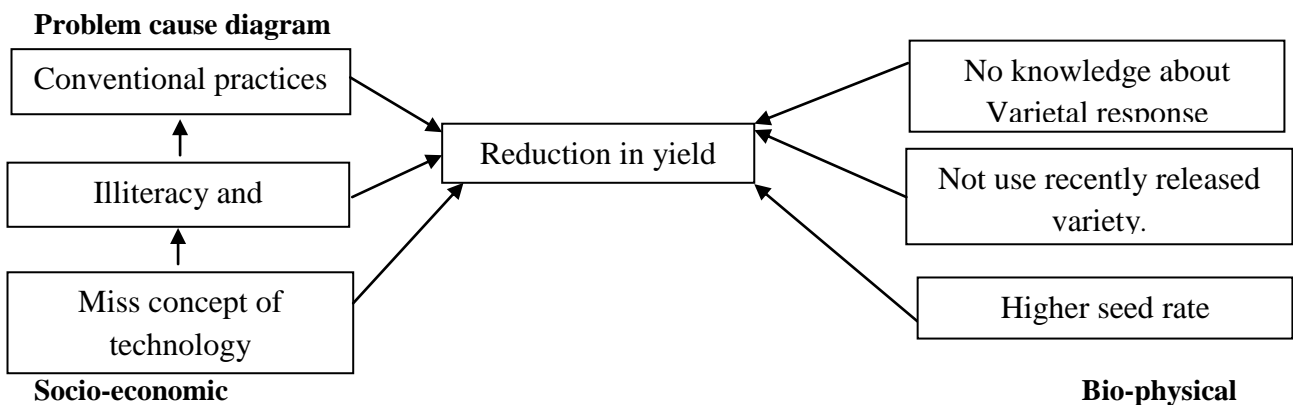
**Results of Technologies Assessed**

Technology Assessed	Source of Technology	Production (kg)	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
Indiscriminate use of pesticide( Cypermethrin +spiromesifen+indoxarb) (Farmer's practice)	Farmers technology	9200	kg/ha	143120	<b>2.07</b>
Seedling treatment with trichoderma viridi+V. lecani + M. anisoplae + B. bassiana@ 5 gm/lit + yellow+ blue sticky trap @15/ha + Spinosad @ 0.3 ml/lit	Navsari Agricultural University technology	10870	kg/ha	203970	<b>2.67</b>



#### OFT-4

<b>Title of OFT</b>	:	New variety in Brinjal (NSRP 1) (Recommendation year- 2016)
<b>Description about the problem</b>	:	Farmers of south Gujarat are not familiar to recommended variety. Generally farmers are sowing old local varieties which is susceptible to many diseases and low yielding hence farmers get very low yield
<b>Causes of problem</b>	:	Lack of knowledge about recommended/new varieties
<b>Treatments</b>	:	T1 : Farmer's practice
		T2 : NSRP-1 Brinjal it gives 23% more yield rather than GJB-3 and GOB-1 respectively
		T3 : NSRP-1 Brinjal + Novel spray
<b>Methodology</b>	:	The above assessment will be conducted in kharif-2017. Six numbers of farmers will select randomly from adopted villages. The required data will collect and analysis will be done to draw conclusions. The result of OFT will be disseminate to the farmers. All the statistical procedures will follow in OFT
<b>Observation</b>	:	1. Height of the plant
		2. Numbers of fruits plant
		3. Yield kg/ha





## Results of Technologies Assessed

Technology Assessed	Source of Technology	Production (Tone)	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B C Ratio
Farmer practice(Local available variety)	NAU Navsari Gujarat	29.2	t/ha	227000	<b>4.49</b>
NSRP-1 Brinjal		30.2	t/ha	237000	<b>4.64</b>
NSRP - 1 Brinjal + Novel spray		32.2	t/ha	253000	<b>4.66</b>

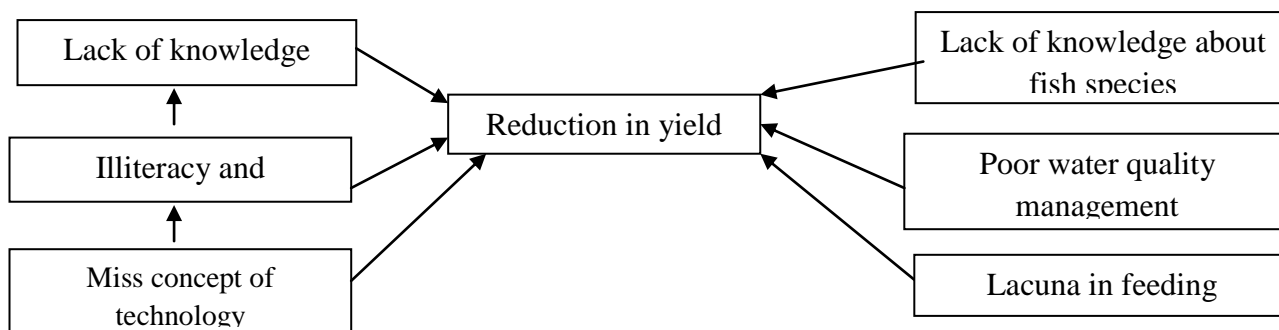


## OFT-5

<b>Title of OFT</b>	:	To assess stocking density of pangasius ( <i>Pangasius hypophthalmus</i> ) fish in pond based culture system.
<b>Description about the problem</b>	:	In Navsari district large numbers of village tanks and small ponds are available and people are interested to rear Pangasius fish as it contains less internal spines and easy to make fillet from it. Vietnam is producing this fish in high quantity and exporting fillets to Europe and America. Looking to the Indian local domestic market demand there is an excellent opportunities to earn livelihood and establish entrepreneurship through Pangasius fish value added products such as Fish fingers, fish sticks, fish cutlets, fish samosa and fish Manchurian. But standard protocols of Pangasius farming need to be established as it feeds voraciously on formulated high protein diet. To maintain standard FCR with higher growth rate standard <b>stocking density</b> need to be assessed as per climatic condition.
<b>Causes of problem</b>	:	Lack of knowledge about culture system of pangasius fish including Feeding, stocking density and water quality management.

<b>Treatments</b>	:	As many scientists recommended 14-15 numbers/ sq.m stocking density in earthen ponds in West Bengal and other parts of south India. But to assess this stocking density higher stocking density need to be checked as many farmers are practicing high stocking density culture system. The stocking fish seeds will be of 100-110 mm of 20-25 g. So there are four treatments viz. T1-10 numbers, T-2 : 15 numbers, T-3: 20 and T-4: 25 numbers of fish seeds per square meter to evaluate effect of stocking density on fish yield.
<b>Methodology</b>	:	<b>Fish species:</b> <i>Pangasius hypophthalmus</i> Fish will be stocked in small holding ponds of farmers about 0.05 to 0.1 ha in Navsari district as per above treatments. <b>Treatments</b> as above <b>Feeding</b> : Fish will be fed with floating feed of 30% protein content formulated specially for Pangasius fish. Initially fish will be fed 4-5 % of their Body weight and subsequently adjusted as per need. Water quality parameters will be observed once in a week and growth in terms of length and weight will be recorded per month. Quantity of feed utilized in each treatment will be recorded.
<b>Observation</b>	:	Fish survival, Fish growth ( Length weight), FCR ( Food conversion ratio) and Fish yield.

### Problem cause diagram



Socio-economic

Bio-physical

### Results of Technologies Assessed

PANGASIUS FISH SURVIVAL, YIELD AND FCR FROM OFT UNIT ONE CROP												
Treatments	Stocking density (Numbers/ sq.m)	OFT units		Survival (%)			Yield (kg)			FCR		
		R1 (1200 sq.m)	R2 (1000sq. m)	R 1	R 2	Mean	R1	R2	Mean	R1	R2	Mean
T1	10	12000	10000	88	90	89	9187	7596	8392	1.6	1.5	2
T2	15	18000	15000	87	86	87	12998	10836	11917	1.71	1.66	2
T3	20	24000	20000	85	88	87	15912	13376	14644	1.68	1.72	1.7
T4	25	30000	25000	81	76	79	17982	13110	15546	1.66	1.62	1.64

Treatments	Stocking density (Numbers/sq.m)	OFT units		Length (mm)			Weight (g)		
		R1 (1200 sq.m)	R2 (1000sq.m)	R1	R2	Mean	R1	R2	Mean
<b>T1</b>	10	12000	10000	418	410	414	870	840	855
<b>T2</b>	15	18000	15000	402	410	406	830	840	835
<b>T3</b>	20	24000	20000	395	382	389	785	760	772.5
<b>T4</b>	25	30000	25000	380	345	363	740	690	715

#### **D. Other Extension Activities:**

Sr. No.	Activity	No.	No. of Beneficiaries (Farmers/Rural Youth)			No. of Extension Functionaries			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Field Day	12	118	342	460	10	3	13	128	345	473
2	Field / FLD visit	129	743	378	1121	12	5	17	755	383	1138
3	Khedut Shibir/ Mahila shibir	21	1061	846	1907	20	5	25	1081	851	1932
4	Kisan Gosthi / Mahila Gosthi	2	20	171	191	18	4	22	38	175	213
5	Film Show	14	396	258	654	6	1	7	402	259	661
6	Agricultural Exhibition	5	1236	956	2192	14	4	18	1250	960	2210
7	Workshop / Seminar / Meeting attended	1	56								
8	Group Meeting / Farmer's meeting / Mahila meeting	18	373	92	465	6	4	10	379	96	475
9	Lecture Delivered/ Guest lecture	39	705	541	1246	6	2	8	711	543	1254
10	Newspaper Coverage	1	25								
11	Popular Articles	1	6								
12	Extension Literature (Training Manual)	1	9								



13	Radio Talk	1									
14	TV Talk	3									
15	Telephonic helpline	1	Mass ( 1,18,090 Farmers are benefited)								
16	E-KVK Service	1	45Messages 1,20,585 Farmers								
17	Scientist Visit to Farmers Field	94	274	259	533	8	2	10	282	261	543
18	Dignitaries visit to KVK	1	28 Dignitaries visit to KVK								
19	Farmers Visit to KVK	154	1058	933	1991	7	2	9	1065	935	2000
20	Diagnostic Visit	31	101	31	132	6	1	7	107	32	139
21	Exposure visit	8	96	87	183	5	2	7	101	89	190
22	Soil & water samples analysis	1	298	217	515	2	1	3	300	218	518
23	SHG meeting	2	2	24	26	1	2	3	3	26	29
24	Farmer seminar & workshop	2	31	25	56	4	1	5	35	26	61
25	Awareness Programme	8	269	541	810	6	2	8	275	543	818
26	Rawe Programme	4	138	44	182	5	2	7	143	46	189
24	Day Celebration	10	358	674	1032	8	3	11	366	677	1043
25	Method Demonstration	4	37	61	98	6	2	8	43	63	106
26	Dial out Conference	5	203	98	301	4	2	6	207	100	307
27	Swachhta Abhiyan	2	4164	4354	8518	8	4	12	4172	4358	8530
	<b>Total</b>	<b>576</b>	<b>11681</b>	<b>10932</b>	<b>22613</b>	<b>162</b>	<b>54</b>	<b>216</b>	<b>11843</b>	<b>10986</b>	<b>22829</b>

### Literature Published:

Sr. No.	Items	Number of Publications	Number of copies
1.	Technical Reports	24	150
2.	Extension Literature/Training Manual	9/1	50
3.	Research Papers	3	3
4.	Popular Articles	6	6
5.	Newspaper Coverage	25	25
6.	Local news/channel clip	16	-

### E. Functional linkages with different Organization

S.N.	Name of the Organization	Nature of Linkage
1.	N.A.U., Navsari	Provides administrative and technical support
2.	Central Government	RKVY Project, Seed village project
3.	Department of Animal Husbandry, Navsari	Collaborative training, extension programmes
4.	Bank of Baroda, Baroda Swarojgar Vikash Sansthan, Navsari	Collaborative training programmes
5.	Gandevi Co-operative Multipurpose Society, Gandevi	Organizing Khedut shibirs
6.	Department of Agriculture, Navsari	Collaborative training, extension programmes
7.	Forest Department	Collaborative training programmes on Agro-Forestry
8.	Department of Horticulture, Navsari	Collaborative extension programmes
9.	Department of Fisheries, Navsari	Collaborative training, extension programmes
10.	Veterinary College of Navsari	Collaborative training, extension programmes
11.	State Bank of India	Collaborative extension programmes
12.	Cohesion foundation Navsari, NABARD	Collaborative extension programmes
13.	ATMA, Tapi, Valsad, Surat, Navsari, Chikhali, Jalalpore	Collaborative training and extension programmes
14.	Tribal Sub plan, Vansda	Collaborative extension programmes
15.	Ramkrishna Cheritable Trust, Surat	Kitchen garden kit
16.	P.P.Savani group, Surat	Collaborative extension programmes
17.	Shri D.L.Patel	Meals of labours of KVK
18.	Tarsadiya foundation	Collaborative training and extension programmes
19.	Brahmakumaris, Navsari	Collaborative training and extension programmes
20.	JCI, Navsari	Collaborative training and extension programmes
21.	Lioness club Navsari	Collaborative training and extension programmes
22.	Manav Kalyankari sarvajanik Trust, Navsari	Collaborative training and extension programmes

23.	Lok Seva Trust, Kharel	Collaborative training and extension programmes
24.	Sneh-setu charitable trust	Collaborative training and extension programmes
25.	Gujarat State Water Shed Management, Gandhinagar	Collaborative training and extension programmes
26.	ASPEE foundation, Mumbai	Collaborative training and extension programmes
27.	JCB, Mumbai	Collaborative training and extension programmes
28.	Gandhi Memorial project, Gujarat Vidyapeeth, Ahmedabad	Collaborative training and extension programmes
29.	FAI, New Delhi	Collaborative training and extension programmes
30.	IFFCO, Surat	Collaborative training and extension programmes
31.	ASCI, New Delhi	Skill training programmes
32.	New Holland FIAT New Delhi	Collaborative training and extension programmes
33.	Samarpan Dhyam Kendra, Navsari	Collaborative training and extension programmes
34.	Senior Citizen Trust, Navsari	Collaborative training and extension programmes
35.	Anavil Sanskar Trust, Navsari	Collaborative training and extension programmes
36.	Gender Resource Center, Gandhinagar	Collaborative training and extension programmes
37.	Navsari Jilla Panchayat, Navsari	Collaborative programmes
38.	Rotary club of Navsari	Collaborative programme
39.	Shakti Foundation, Surat	Collaborative programme
40.	ICDS, Nasari	Collaborative programmes for Child and Women empowerment
41.	Nehru Yuva Kendra, Navsari	Collaborative programmes
42.	Arya Samaaj, Navsari	Cow donation for Natural farming

**(F) Special programmes undertaken by the KVK, during reporting period.**

**January-2021 to December-2021**

<b>Sr. No</b>	<b>Name of the scheme</b>	<b>Date/ Month of initiation / B.H</b>	<b>Funding agency</b>	<b>Amount received (Rs. in Lakh)</b>
1	Establishment of demonstration-cum-training center for Inland fisheries	12943	State Govt.	5.77
2	Strengthening and testing of universities technologies on farmer's field through adaptive trials, Phase-II	12306-A	State Govt.	9.75
3	Cluster frontline demonstrations of Rabi pulses	2105/00	Central Govt.	6.32
4	ARYA Project	18191	Central Govt.	13.07
5	Scheme for Organic farming	18172/02	State Govt.	41.22
6	Creation of seed hub for increasing indigenous production of Pulses seed in India :Seed Hubs	2704-02-A	Central Govt.	95.44
7	PKVY - Skill development	2125/02	Central Govt.	0.16
8	Turmeric	18930-B	Central Govt.	0.11
9	Mega seed project	2068/C	Central Govt.	0.42
10	ASCI-Organic grower	2126	Central Govt.	0.12
11	ASCI-gardener	02113/02	Central Govt.	1.19
12	Pradhan Mantari Kisan Sanmman Nidhi (PM KISHAN)	18207	Central Govt.	8.91
<b>Total</b>				<b>182.48</b>

## Activities under Organic project “Awareness, Development and Demonstration of Organic Farming in South Gujarat

### Trainings/Seminar/Shibir

Sr.No	Trainings/Seminar/Shibir	Total
1.	On Campus	11
2.	Off Campus	12
3.	Seminar	4
4.	Diagnostic /Field Visit	22
5.	NADEP/Vermi compost Training	5
6.	Use Of Biopesticide	3

### Vermibed Distribution under Demonstration:

Sr.No	Date	Village	Awareness Programme Training/ Farmer Shibir/ Farmer Seminar	Total No. Of Vermibed Distribution
1.	7/1/21	Ponsra	Progressive Farm Women And Men Group (Organic Farmers)	25
2.	21/1/21	Satimal	Progressive Farm Women And Men Group (Organic Farmers)	30
3.	23/1/21	Khambhalav	Progressive Farm Women And Men Group (Organic Farmers)	21
4.	22/3/21	Kvk Navsari	Progressive Farm Women And Men Group (Organic Farmers)	10
5.	25/3/21	Dharamपुरi Kelkacchh	Progressive Farm Women And Men Group (Organic Farmers)	56
6.	1-4/10/21	Manekpor	Progressive Farm Women And Men Group (Organic Farmers)	23
7.	6/10/21	Satimal	Progressive Farm Women And Men Group (Organic Farmers)	45
8.	8/10/21	Kukda	Progressive Farm Women And Men Group (Organic Farmers)	40
<b>Total Vermi bed Distributed</b>				<b>250</b>

### List Of Organic Farming Certified Farmers

Sr.No	Name	Village	Mo.No	Certified Farmer
1.	Sejalkumar Devdatbhai Patel	Kumbharfaliya	9426131269	C-3
2.	Kiranbhai Khandubhai Nayak	Sarikhurd	9898933403	C-3
3.	Rameshbhai Ratilalbhai Desai	Umakacch	9909678909	C-2
4.	Amratbhai Dajibhai Patel	Vanzana	9428159817	C-3
5.	Kantibhai Dajibhai Patel	Karakhat	9726073462	C-3
6.	Sureshbhai Kalyanjibhai Patel	Vasan	9723487697	C-3
7.	Mohanbhai Jamsubhai Ganvit	Khanpur	9726204512	C-3
8.	Ishvarbahi Khalpabhai Bhagariya	Umakui	9537764547	C-3
9.	Krushnakant Champaklal Mashruvala	Valoti	9820070415	C-2
10.	Gulabbhai Jivlubhai Bhagariya	Umakui	9724472110	C-3
11.	Prakashkumara Navinbhai Patel	Talavchora	9825864282	C-3

12.	Girishchandra S. Nayak	Mandir	9724308044	C-3
13.	Sachin Navinbhai Patel	Talavchora	9925367405	C-3
14.	Satishchandra Ramanlal Nayak	Talavchora	9824181370	C-3
15.	Arvind Babalyabhai Jadav	Bedmal	7874140098	C-3
16.	Fakrubahi Mandubhai Kamdi	Ghodmal	8141968903	C-1
17.	Ishvarlal Chaganlal Patel	Aat	9998430781	C-1
18.	Thakorbbhai Laljibhai Rathod	Ghanghor	9913879793	C-1
19.	Vipinbhai Khandubhai Nayak	Khakhvada	9925578142	C-1
20.	Mangiben Ratanji Patel	Khergam	9408648711	C-1
21.	Premjibhai Babubhai Patel	Navsari	9814221060	C-1
22.	Parimal Girishchandra Desai	Mandir	9724308044	C-1
23.	Pramodkumar Rambhai Patel	Kolasana	8469726647	C-1
24.	Dharmeshbhai Bhagubhai Patel	Chijgam	9998491821	C-1
25.	Jitendra Ramanbhai Patel	Aantaliya	9978145540	C-1
26.	Kantibhai Ramanlal Patel	Aat	9512259222	C-1
27.	Vijaykumar Chaganlal Patel	Aat	7265002081	C-1
28.	Udaybhai Shankarbhai Desai	Abrama	9106807843	C-1
29.	Jayeshbhai Harsukhbhai Nayak	Kharsad		C-1
30.	Manilal Jivabhai Patel	Khata Aamba	9427313642	C-1
31.	Vijaybhai Zinabhai Patel	Nani Karod	9998218892	C-1
32.	Babubhai Dayaljibhai Nayak	Abrama	9106806520	C-1
33.	Rakeshbhai Nanubhai Patel	Talavchora	9687399792	C-1
34.	Mineshbhai Nanubhai Patel	Talavchora	9687399792	C-1
35.	Lalbhai Bhanabhai Patel	Onjal	9979487776	C-1
36.	Yagneshbhai Ramanlal Nayak	Ghanghor		C-1
37.	Pareshbhai Balubhai Nayak	Ghanghor	9265038727	C-1
38.	Jagubahi Babjibhai Chaudhari	Bartad	9638165081	C-1
39.	Sureshbhai Hirabhai Garasiya	Khanpur	9638583873	C-1
40.	Kanubhai Kalyanjibhai Patel	Kharoli	9428828799	C-1
41.	Mineshbhai K. Patel	Vedchha	9825176006	C-1
42.	Sumanbhai Dhirubhai Nayak	Ghanghor	9427868956	C-1
43.	Rameshchandra Dhirubhai Nayak	Khakhvada	9376666865	C-1
44.	Gopalbhai Lallubhai Patel	Aachavani	9904858389	C-1
45.	Maganbhai Panjibhai Deshmukh	Bedmal		C-1
46.	Raychandbhai Devjibhai Deshmukh	Bedmal		C-1

### **GOPCA New Registration Farmer List**

<b>Sr.No</b>	<b>Name</b>	<b>Village</b>
1.	Robinkuamr Mohanbhai Patel	Butlav
2.	Hemantkumar Mohanbhai Patel	Butlav
3.	Pinaben Hirjibhai Patel	Pinsad
4.	Jitendra Ramanbhai Patel	Aantaliya
5.	Gopal Manubhai Kyada	Ganeshgadhd
6.	Bharat Ramanbhai Patel	Talavchora
7.	Mineshkumar Khandubhai Patel	Vedcha
8.	Chimabhai Mithabhai Patel	Parsai
9.	Sumanbhai Dhirubhai Nayak	Ghanghor
10.	Dharmesh Bhagubhai Patel	Chijgam

## Workshop on Natural farming

Directorate of Extension Education and Krishi Vigyan Kendra, Navsari Agriculture University, Navsari jointly organized workshop on “capacity building programmed for KVKs Scientist of South Gujarat” during 23 to 25 September 2021. In presence of Dr. C. K. Timbadaia, Directorate of Extension Education, NAU, Navsari, Mr. Prafulbhai Sanjalia, Swami Kaivalya swarup swami, Nilkanth Dham, Gurukul, Poicha Swami Mangal Swarup, Nilkanth Dham, Senior Scientist and Head of South Gujarat KVKs and KVKs technical and non technical staff total 65 persons were present in that workshop.





## EXPOSURE VISIT

Sr.No.	Date	Subject	Participate
1	21/2/2021	Exposure visit at Nandanvan Sanvlla Farm, Surat	12
2	9/6/2021	Exposure visit at Unchamal for quality production and Marketing	18
3	7-14/7/2021	Exposure visit of Surendranagar and Kutch district to see the successful model farm of natural farming	36
4	14-18/7/2021	Exposure visit at Kutch and Surendranagar Sayla, Natural farm, Sethiya farm, Bhachau, Bhudiya Farm, Madhapor Shree Ram krishna Trust, Kukma village of Kutch.	50
5	8/10/2021	Exposure visit at five layer natural farm at Bhinar village Manubhai Patel farm. In this there are growing different multiple horticulture crops like papaya, guvava, mango, dragon fruits, turmeric, coconut elephant foot yam.	14







**Preparation of vermi compost and NADEP Compost**



**NADEP and Vermi composting at Farmer's field**



## PRAKRUTIK KRISHAK BAZAR

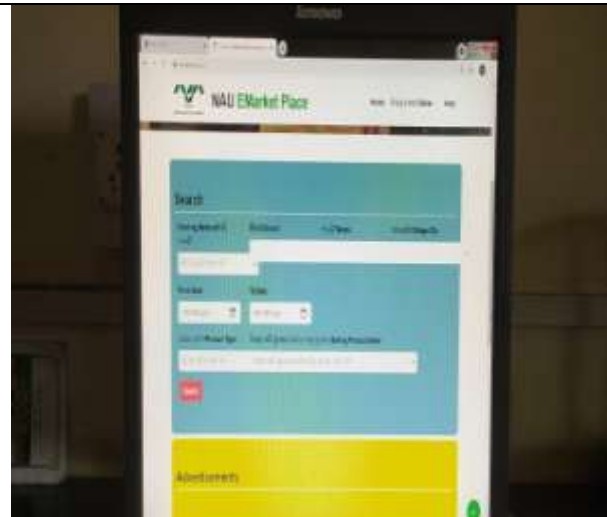
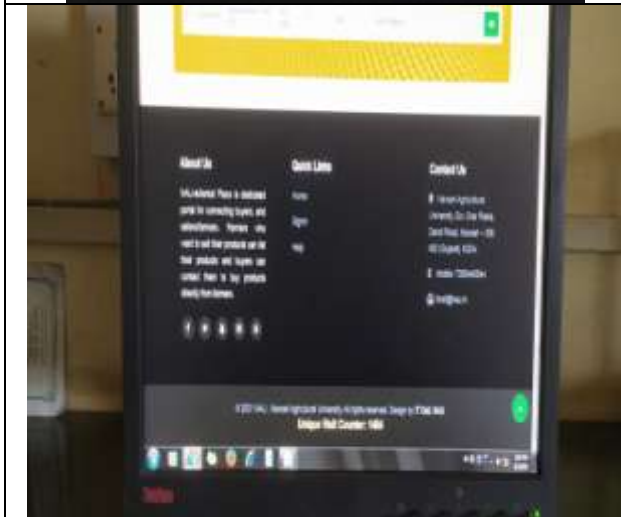
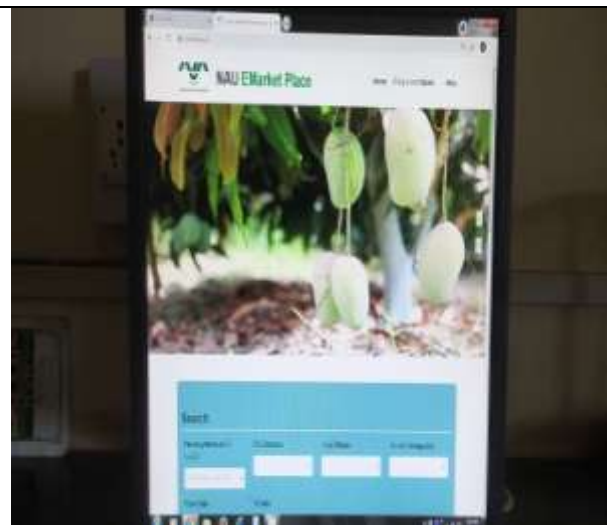
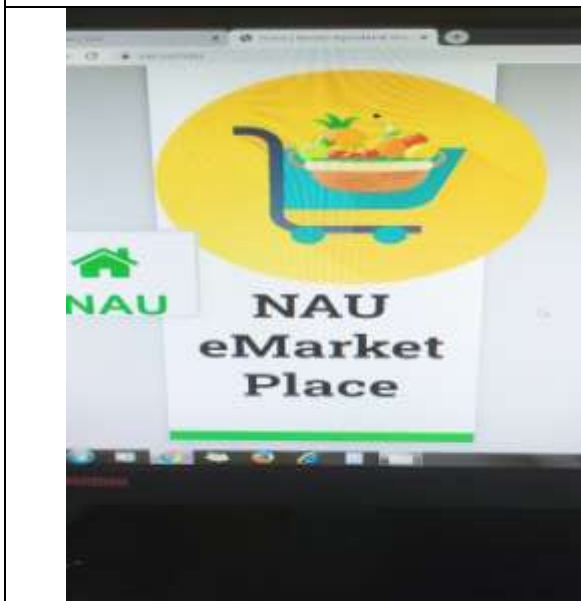
- For increase awareness regarding organic products “Prakrutik Krishak Bazaar” has been started at November 2020 to continue till date
- The Main aims of this initiative “Prakrutik krishak bazaar” is *to meet the pesticide Free Vegetable & Fruit for Navsari District peoples*
- There are **three main location** has been selected for this Prakrutik Krishak Bazaar. **1. The front gate of Navsari Agricultural University , Navsari. 2. Bagayat APMC, Mandli Grid road Navsari . 3. Tata hall parking place, Navsari Nagarpalika.**
- Total **123 farmers were registered** with their Names in the Prakrutik Krishak bazaar they earned 11,40,684 Rupees amount till date, by selling their pesticide free Agricultural & Horticulture products like, Cereals, Pulses, vegetables and Fruits



## Digital Platform for Marketing of Agricultural and Horticultural Farm Produce

- Navsari Agriculture University Navsari, started Digital Marketing Platform for Navsari farmers or Any other farmers in any district of Gujarat
- Navsari Agricultural University Navsari. Department of Information Technology (IT) Supported farmers portal for digital marketing Any Farmers in any district of Gujarat can provide selling facility in farmers portal
- From this portal farmers sell their products directly to the consumers. No middle man or no commission agents are included in the entire process

### Digital Platform For Marketing Agricultural And Horticultural Farm Produce



## F.P.O Formation: (Farmers Produce Organization) in Navsari District

- Krishi Vigyan Kandra, Navsari Agricultural University, Navsari formed Three (3) Natural Farming / Organic farming practicer F.P.O in the Navsari district
- Farmers produce organization (F.P.O) is exclusively formed. out of three – one is for womens group of 900 members
- Each F.P.O consists of 10 Board members out of which one C.E.O, One chairman and Director and 900 members are joined in each F.P.O
- KVK. Navsari is providing technical backstop for the Formation and smooth Running of F.P.O





## (i) DOUBLING FARMERS INCOME

- The main aim: Increase the farmers income double by giving agriculture and horticulture related new package of practices, technology, demonstration, trainings.
- In this scheme base line Survey has been conducted in 2016-2017 and adopted two village of Navsari district namely Kavdej & Chaudha .
- Total 110 Farmers Beneficiaries were Surveyed in two villages.
- In this two village all farmers Beneficiaries were given different agricultural inputs like package of practices like Novel, P.S.B, K.M.B., Azatobactor etc.
- Intake survey in the year of 2021-22 conducted and Among the 110 farmers 75 farmers are found their Increased income as double.

Sr. No.	Name of the Village	Population	No. of households	Major activities	Output/outcome in brief
1	Chaudha	1077	188	KVK organized training , demonstration and extension activities	<ul style="list-style-type: none"> <li>• Create organic farming awareness among the farmers.</li> <li>• Decreasing use of seed rate and input cost.</li> <li>• Increasing yield and quality of cereals, vegetables and pulses.</li> <li>• Additional income through integration of animal science, poultry and other enterprises.</li> </ul>
2	Kavdej	1053	177		



## ii) PKVY (Param Paragat Krishi Vikas Yojna)

- Aims of PKVY Scheme to support & Promote Organic Farming.
- In cluster approach, 50 or more farmers will form a cluster having 50 acre/20 ha land to take up the Organic Farming.

Sr. no	Training/ Field Visit	No. of Participant	No. of Village adapted	Total Area Covered	No. of selected farmers
1	Training- 4	86	3-Village	20 ha	40
2	Field Visit- 6	75			



## iii) ARYA Project

ARYA Training 2021								
Date	Venue	Type	Title	Gen		ST		Total
				M	F	M	F	
4/5/2021	ABM college	Webinar Training	Arya Mango value addition Pickle	20	40	0	0	60
11/5/2021	ABM college	Webinar Training	Arya Mango value addition Murabba	20	60	0	0	80


8/6/2021	ABM college	Webinar Training	Arya Mango processing Pulp preparation	30	70	0	0	100
14/9/2021	KVK Navsari	Arya Training	Mango processing freez drying	24	21	0	0	45
11/8/2021	KVK Navsari	Arya Training	Grafting in mango	0	7	0	0	7
12/8/2021	KVK Navsari	Arya Training	Grafting in mango	6	0	0	0	6
18/8/2021	Satimal	Arya Training	Mango grafting	0	0	0	20	20
18/8/2021	Vadi chondha	Arya Training	Mango grafting	0	0	18	0	18
1/9/2021	Abarama	Arya Training	Mango grafting	6	25	0	0	31
6/9/2021	Limjar	Arya Training	Mango grafting	0	0	15	0	15
<b>Total 10 Training and Webinar organised</b>			<b>TOTAL</b>	<b>106</b>	<b>223</b>	<b>33</b>	<b>20</b>	<b>382</b>







### ARYA MANGO GRAFTING

<b>Name</b>	<b>Amitbhai Pawar</b>	
<b>Address</b>	At : Nani pada, Po : Limjar Ta : Vansda Dist : Navsari	
<b>Mobile No</b>	7600004797	
<b>Age</b>	27	
<b>Education</b>	10 pass	
<b>Land Holding</b>	2 Vigha	
<b>Farming Experience</b>	7 Years	
<b>Crops Grown</b>	Mango	
<b>Livestock</b>	Nil	
<b>Vulnerability</b>	<ul style="list-style-type: none"> <li>• Lack of confidence</li> <li>• Lack of knowledge about adequate use of new technologies.</li> <li>• Pest and Disease in grafted plant were major issues</li> <li>• Not aware about safety and hygiene and microbial contamination.</li> <li>• Never used Novel Banana Sap.</li> </ul>	
<b>Problems identified</b>	<ul style="list-style-type: none"> <li>• No awareness about mother plot and its maintenance</li> <li>• Lack of knowledge for multiple grafting in one plant</li> <li>• Not aware about Sonpari hybrid mango variety.</li> </ul>	
<b>Technological intervention in brief</b>	<ul style="list-style-type: none"> <li>• Technical training was given about nutrition, deficiency symptoms, multiple grafting and pest and disease management</li> </ul>	
<b>Efforts made by KVK/ methodology followed</b>	<ul style="list-style-type: none"> <li>• By continuous approach with veteran scientist (Dr B. M. Tandel) and farmers KVK has provided a bridge for solving the problems. With the help of conference, scientific and technical guidance, advisories, farmer and scientist interfaces as well as inspiration for marketing, selling techniques and continuous</li> </ul>	



	supervision has given fruitful results.										
<b>Output</b>	<ul style="list-style-type: none"> <li>• Due to KVK intervention trust of people increased.</li> <li>• Started multiple grafting in mango.</li> <li>• Realized important of hygiene and cleanliness, safety measures.</li> <li>• Started use of Novel Banana sap and other pesticides as per need with specific amount</li> </ul>										
<b>Outcome</b>	<ul style="list-style-type: none"> <li>• Most of the entrepreneur has taken keen interest for mango grafting. Total <b>20,000</b> grafts were prepared by all members of group.</li> <li>• Out of these two groups one groups leader <b>Shree Amitbhai Pawar</b> From Nani pada Limjar Block Vansda in Navsari Disrict had sold 10,000 mango grafts commercially. Now KVK, Navsari is emphasising on marketing of grafts.</li> </ul> <table border="1"> <tr> <td>Produce (grafts)</td> <td>10,000</td> </tr> <tr> <td>Price (Rs)</td> <td>50</td> </tr> <tr> <td>Income (Rs)</td> <td>5,00,000</td> </tr> <tr> <td>Cost (Rs)</td> <td>3,00,000</td> </tr> <tr> <td>Profit (Rs) (12 month)</td> <td>2,00,000</td> </tr> </table>	Produce (grafts)	10,000	Price (Rs)	50	Income (Rs)	5,00,000	Cost (Rs)	3,00,000	Profit (Rs) (12 month)	2,00,000
Produce (grafts)	10,000										
Price (Rs)	50										
Income (Rs)	5,00,000										
Cost (Rs)	3,00,000										
Profit (Rs) (12 month)	2,00,000										



## ARYA MANGO PULP BOTTLING

<b>Name</b>	<b>Smt. Jasuben Mohanbhai Patel</b>											
<b>Address</b>	Vedchha (Chok Faliya) Ta : Navsari Dist : Navsari											
<b>Mobile No</b>	9879629329											
<b>Age</b>	59											
<b>Education</b>	8 <sup>th</sup> pass											
<b>Land Holding</b>	2 Acre											
<b>Farming Exp.</b>	20 Years											
<b>Crops Grown</b>	Mango											
<b>Livestock</b>	Nil											
<b>Vulnerability</b>	<ul style="list-style-type: none"> <li>• Lake of confidence</li> <li>• Lack of knowledge about adequate use of preservatives.</li> <li>• Bottle burst, discoloraion and burning effect were major technical issues</li> <li>• Not aware about safety and hygiene and microbial contamination</li> <li>• Never used brix meter, thermometer</li> </ul>											
<b>Problems identified</b>	<ul style="list-style-type: none"> <li>• Bottle burst, discoloraion and burning effect ,use of new instruments,safety hygiene were major technical issues</li> </ul>											
<b>Technological intervention in brief</b>	<ul style="list-style-type: none"> <li>• Technical training wqas given to solve the problems use of new instruments brix meter, micro balance for preservatives and thermometer to read the temperature as well as amount of preservatives to be used with safety hygiene</li> </ul>											
<b>Efforts made by KVK/ methodology followed</b>	<ul style="list-style-type: none"> <li>• By continuous approach with veteran scientist and farmer, KVK has provided a bridge for solving the problems. With the help of value addition confererence, scientific and technical guidance, advisories, farmer and scientist interfaces as well as inspiration and continuous supervision has given fruitful results.</li> </ul>											
<b>Output</b>	<ul style="list-style-type: none"> <li>• Due to hygiene &amp; safely precaution trust of people incresed.</li> <li>• Started microbial analysis of their product.She has received proper technical knowledge about different kinds of value addition products. in mango.</li> <li>• She realized important of hygiene and cleanliness, safety measures</li> <li>• Started use of disinfectants, gloves, mask, hair cap, apron and fire extinguisher</li> </ul> <p>Started use of thermometer of brix meter</p>											
<b>Outcome</b>	<ul style="list-style-type: none"> <li>• Most of the women entrepreneur had taken keen interest for mango pulp bottling. Total <b>3000</b> bottles were prepared by all groups.</li> <li>• Out of these two groups one groups leader <b>Smt. Jasuben Mohanbhai Patel</b> From Vedchha village of Navsari Block in Navsari Disrict had sold 1000 pulp bottles commercially. Now KVK, Navsari is emphasising on branding and marketing of products.</li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Produce (bottles)</td> <td style="text-align: center;">1000</td> </tr> <tr> <td>Price (Rs)</td> <td style="text-align: center;">80</td> </tr> <tr> <td>Income (Rs)</td> <td style="text-align: center;">80000</td> </tr> <tr> <td>Cost (Rs)</td> <td style="text-align: center;">20000</td> </tr> <tr> <td>Profit (Rs) (12 month)</td> <td style="text-align: center;">60000</td> </tr> </table>		Produce (bottles)	1000	Price (Rs)	80	Income (Rs)	80000	Cost (Rs)	20000	Profit (Rs) (12 month)	60000
Produce (bottles)	1000											
Price (Rs)	80											
Income (Rs)	80000											
Cost (Rs)	20000											
Profit (Rs) (12 month)	60000											



## Demonstration Unit at KVK, Navsari

- ✓ Low cost Green house
- ✓ Kitchen Garden
- ✓ Mushroom Unit
- ✓ Water harvesting structure
- ✓ Tubewell recharge by building water harvesting.
- ✓ Fish pond
- ✓ Fish aquarium
- ✓ Mulching
- ✓ Organic Cell
- ✓ Seed production plot.
- ✓ Drip irrigation & mulch
- ✓ Natural Farming

### Seed produced at KVK, Navsari

Sr. No.	Name of crop		Qty. (Kg)	Income generated (Rs.)
1	Paddy	GNR-3	5530	To be sell in Kharif-22
2	Paddy	GR-17	1890	
<b>Total</b>			<b>7420</b>	

### Seed Sell in year 2021

Crop	Name of the crop	Name of the variety	Class	Quantity of seed (q)	Value (Rs)
<b>Cereals</b>	Paddy	GNR-3	CS	64.50	202000
		GNR-7	FS	19.85	67510
				84.35	269510
<b>Pulses</b>	Pigeon Pea	GT-104	TF	1.51	13590
	Gram	G.G.-5	TF	5.13	35910
	Green Gram	GM-6	TF	1.60	14400
<b>Commercial</b>	Sugarcane			19.845	66084
<b>Total</b>				<b>196.78</b>	<b>669004</b>

**Saplings produced at KVK, Navsari**

<b>Sr.No.</b>	<b>Name of crop</b>	<b>Qty. (no.)</b>	<b>Income generated (Rs.)</b>
1	Brinjal	2635	1995
2	Tomato	2540	1734
3	Chilly	1065	885
4	Cabbage	525	315
5	Cauliflower	350	210
6	Mari gold	790	790
7	Drum stick	283	8490
8	Dragon Fruit	954	23850
<b>TOTAL</b>			<b>38269</b>

**Vegetables and other crop produced at KVK, Navsari**

<b>Sr.No.</b>	<b>Name of crop</b>	<b>Qty. (kg)</b>	<b>Income generated (Rs.)</b>	<b>Sr.No.</b>	<b>Name of crop</b>	<b>Qty. (kg)</b>	<b>Income generated (Rs.)</b>
1	Brinjal	353.5	7070	13	Carrot	23	460
2	Tomato	364.5	7290	14	Cabbage	115	2300
3	Ridge gourd	162.5	3250	15	Drum stick	108	180
4	Sponge gourd	170	3400	16	Watermelon	4045.8	101145
5	Okra	55.5	1110	17	Fish	1466.5	146650
6	Bitter gourd	28	560	18	Turmeric	668	16700
7	Indian bean	26	520	19	Green leafy vegetables	2900	14500
8	Bottle gourd	122.5	2450	20	Pumpkin	5	100
9	Raddish	716	1790	21	Cauli flower	33	660
10	Musk melon	697	24395	22	Chilly	137.5	2750
11	Sweet corn	1959.5	39190	23	Broccoli	48.5	1940
12	Coconut Fruit	100	1500				
<b>TOTAL</b>			<b>92525</b>	<b>TOTAL</b>			<b>287385</b>
<b>Grand total = 3,79,910 /- (In word Three lakh Seventy nine thousand nine hundred ten only)</b>							

**Inputs availability and Marketing help to the farmers.**

<b>Sr. No</b>	<b>Name of Input Marketing through KVK</b>	<b>Qty.</b>
1	Honey	346.5 kg
2	Turmeric powder	58 kg
3	Gulkand	20 bottle
4	Rose Water	17 bottle
5	Garam Masala	137 Packet
6	Tea Masala	141 Packet
7	Hair Oil	72 bottle
8	Red Chilly Power	20 kg

## (H) Remarkable activities carried out during reporting period

### Technology week celebration

Sr. No.	Date	Theme	Participant
1	11/1/2021	Use of novel in vine vegetables	194
2	12/1/2021	Small scale Agri- entrepreneurs	35
3	13/1/2021	Role of Women in Agriculture	111
4	15/1/2021	Entrepreneurship Development through fish farming and Value addition	60
5	16/1/2021	Integrated Farming System (IFS)	95







### **Value addition of fruits and vegetables/ Preparation of Tomato ketchup, Strawberry jam and Strawberry syrup (Date: 20-02-2021)**

This training is organized at Hansapore village to develop value addition skill among farm woman. In this event through method demonstration, practical knowledge and technical guidance were given about value addition. Conducted Method demonstration on preparation of Tomato ketchup, Strawberry jam and Strawberry syrup. There were 29 farm women of Hansapore and Abrama village were participated and learned.





### **Gramin Krushi Mosam seva and its effect on crop yield (Date : 25-02-2021)**

KVK, Navsari and NMCA are associated to guide farmers on changes in weather conditions. Dr. C. K. Timbadia, Director of Extension Education, NAU, Navsari, Dr. Arvadiya, Dr.P.P. Panday, Dr. P. K. Parmar and Dr. K. A. Shah gave the lecture about effect of changes in weather on agriculture. 54 farmers were participated actively.



### **Farm Women’s Organic Farming Shibir ( Date 6/3/2021)**

On the event of International Women’s Day, One day Organic farming shibir was organized exclusively for farm women at “Kesali” village Ta. Chikhali on dated 06.03.2021. Krishi Vigyan Kendra, Navsari Agricultural University, Navsari in Association with Kesali Kelavani Mandal Jointly organized the programme. About 700 farmers and farm women’s were present during the programme. Five farm women’s from milk cooperative Kesali were felicitated by Hon’ble VC. Dr. Z. P. Patel NAU Navsari and three farm women from KVK, Navsari, who did extensively good achievement in small scale Agri entrepreneurship development (viz., Mushroom, Masala and Value added products in fruits) were felicitated by Dr. C. K. Timbadia, DEE, NAU, Navsari. Other dignitaries Viz., Dhirubhai, Sumanbhai and Umeshbhai were present in the programme.



## **International Women's Day- 2021 (Date : 8/3/2021)**

KVK Navsari celebrated International Women's Day' 2021 on 08.03.2021. Theme of program was "Women leadership in Agricultural Entrepreneurship Equity and Empowerment. President Dr. Z. P. Patel Hon'ble Vice chancellor NAU. Chief Guest Dr. Anil Jain, Member of Advisory Committee, Ministry of Commerce and Industry and Ministry of Civil Aviation. Directorate of Extension Education NAU, Navsari Dr .C. K. Timbadia gave the information on women leadership and organic Agriculture entrepreneurship development. In this program board member, Prafulaben Desai, Dr.Amitaben Patel, Former President Jilla Panchayat Navsari, Smt. Shitalben Soni , Smt. Chetnaben Birla President,Smt. Rajeshriben Kharadi, Smt. Sonia Patel,President, Smt. Rishida Thakur, Smt Rekhaben Patel, Smt.Ajitaben Choksi remain present. 180 farm women were actively participated and benefited by the event.



## **World water day (Date: 22/03/2021)**

Krishi vigyan kendra, Navsari celebrate of world water day with the theme "valuing water" on 22<sup>nd</sup> march 2021 in presence of Dr. Z. P. Patel, Vice Chancellor of Navsari Agricultural University, Dr. C. K. Timbadia, Director of Extension Education , NAU, Navsari. Pradamashri Mathurbhai Savani, President of Saurashtra Jaldhara Trust along with farmers and Scientist of KVK were present. Dr. Z. P. Patel emphasized on different water conservation techniques at household. Pradmashri Mathurbhai savani highlighted the importance of water in our day to day life and stressed on fresh water conservation. He further stressed upon the strategies to be adopted by people to reduce, reuse and recycle the water. Dr. C. K. Timbadia emphasized on the importance of water in human life. More than 60 farmers participated in this event.



### **Webinar on World Honey Bee Day (Date : 20/5/2021)**

KVK, Navsari Agricultural University Navsari organized webinar on “ World Honey Bee Day” celebration in presence of Dr. C. K. Timbadia, Directorate of Extension Education , NAU, Navsari. Dr. C. K. Timbadia addressed the farmers to attach with KVK and proliferate bees to create healthy environment . He also told that the farmers have to learn marketing of their produce directly to consumers and Dr. Abhishek Mehta, Assistant professor, Collage of forestry, NAU, Navsari shared important points to keep in mind for beekeeping . He also guided them regarding importance of seasonal bee management, diversification in beekeeping, role of bees in crop pollination and management of bees against bee enemies and diseases. He also told that beekeeping is a viable rural enterprise for employment generation in rural sector of India.





## World environment Day (Date: 5-6-2021)

World environment day celebrated In presence of Hon'ble vice chancellor Dr. Z. P. Patel, NAU, Navsari. Hon'ble Mrs. Prashasti Parik IAS, District development officer, Navsari district, Director of research Dr. S. R. Chaudhary, NAU, Navsari, Director of Extension Education Dr. C. K. Timbadia, NAU, Navsari, NAHEP CAAST project PI Dr. Timur Ahlawat, NAU, Navsari, Dr. Rishida Thakur, National president of Tapsya nari sewa samiti charitable trust, Miss Varsha Dogha, District president of Nehru yuva Kendra Navsari . Saplings were planted on the memory of the event and also to encourage green and clean environment.



## Bhoomi Suposhan Campaign

Bhoomi Suposhan Campaign Organized by KVK, Navsari during june'2021. Objectives of this event is to create awareness about conservation of Soil fertility among the farmers and encourage them for organic and natural farming. There were 3 programme conducted for "Bhoomi poojan". Bhoomipoojan done by Hon.'ble vice chancellor, NAU, Navsari , and Directorate of Extension Education,NAU, Navsari. 45 Farm women participated actively in that campaign. Also she did bhoomipojan at her Field.



## Dignitaries visit at KVK

No.	VIPs/ Guests	Designation and Address	Date of Visit
1.	Shree V. D. Zalawadia	MLA	3-7-2021
2.	Dr. Z. P. Patel	Hon'ble vice chancellor, NAU, Navsari	5-8-2021
3	Hon'ble Dilip Sanghani	President National Co-operating Union of India and Vice- Chairman of IFFCO and former Cabinet Minister of Gujarat State	12-8-2021
4	Shri Barot	State Nodal Officer ATMA, Gandhinagar	24-12-2021
5	Shri.Jayeshbhai Natvarbhai Patel	Director of SUMUL dairy	30-12-2021
6	Dr. Prashsti Parik,	District Development Officer, Navsari	6-01-2020



**Shree V. D. Zalawadia sir visit kvk**



**Hon' ble VC Dr. Z. P. Patel Visit KVK**





**Hon'ble Dilip Sanghani visited KVK**



**Shri. D.B. Barot, State Nodal Officer ATMA, Gandhinagar**



**Shri. Jayeshbhai Natvarbhai Patel, Director of SUMUL, dairy**

### **Vocational Training (Date: 1 to 4/7/2021)**

Krishi Vigyan Kendra, Navsari organized three days training on making a mixture of spices under the Home Science discipline organized by Nital Patel, Scientist, Home Science. 110 farm women participated in this training.



### **Training on low cost Bio-fortification kit (Date: 6-7-2021)**

Training on low cost Bio-fortification kit: A sustainable technology tool for nutrition yield and income security of farmers. Dr. Usadiya, Department of Agronomy, Dr Dhudhat Associate. Professor, Agronomy, Dr. Nitin, Dr. C. K. Timbadia, DEE, NAU, Navsari, More than 17 farm women participated in this program





## 93rd ICAR Foundation Day Celebration (Date: 16-7-2021)

Krishi vigyan kendra Celebrated 93rd ICAR Foundation Day at Abrama village, 93rd ICAR foundation day celebration was inaugurated by collector Shri Amit Yadav as the Chairman of the function , Hon'ble Vice Chancellor Shri Dr. Z. P. Patel, Dr. C.K. Timbadia, DEE, NAU, Navsari, Sarpanch Mr. Shaileshbhai and other village leaders Pramodbhai, Udaybhai, Natwarbhai and Belaben etc. About 70 farmers are participated in this program saplings were planted on this memorable day.



## Parthenium Awareness Week Celebration

Date	Place	Participate
13/8/2021	Chaundha	54
13/8/2021	Kavdej	55
18/8/2021	KVK, Navsari	20
19/8/2021	Mora amba	54
21/8/2021	Kandha	56
<b>Total</b>		<b>239</b>





### **Celebration of World Coconut Day (Date: 2-9-2021)**

ASPEE College of Horticulture and Forestry and Krishi Vigyan Kendra, Navsari jointly organized World Coconut Day on 2<sup>nd</sup> September 2021 at KVK. President of the function Hon'ble Vice Chancellor Dr. Z. P. Patel, NAU, Navsari and the other dignitaries Dr. Sunil Chaudhary , D.R, NAU, Navsari, Dr. C. K. Timbadia, DEE, NAU, Navsari, Dr. P. K. Shrivastava Principal and Dean ASPEE Collage NAU, Navsari and KVK, staff were present . Dr. Z. P. Patel focus on coconut based women led enterprises with the goal of improving their lives by making and selling value added products from coconuts. He emphasis on different products such as coconut water, coconut peat, organic fertilizer and coco-coir from husks, vegetables and processed snack food and drinks. Dr. C. K. Timbadia highlights and raise awareness about importance and benefits of coconut. More than 58 farm women participated in this event.





**"Poshan Vatika Mahaabhiyan and Plantation Day "(Poshan Maah celebration)  
Date: 17-9-2021**

Krishi Vigyan Kendra, Navsari celebrated one day program on poshan Vatika Mahaabhiyan and Plantation Day on the occasion of birth anniversary of Hon'ble Pradhanmantri Shri Narendra Modi. In this programme Hon'ble Director of Extension Education, NAU, Navsari Dr. C. K. Timbadia remained present as a chairman of the programme. His emphasis on awareness about nutrition among women. The chief guest Mr. Bhikhubhai Ahir, President, Jilla Panchayat Navsari remain present and appreciate women participation in this programme. Shrimati Jagrutiben Desai deputy President Vijalpore Nagarpalika Navsari gave information about prevention of malnutrition and urged for better foods nutrition intact to women. In technical session scientist Horticulture and Home science delivered lectures on kitchen Garden and role of nutrition for better health. In this program 1100 fruits plant and other plant and 100 Kitchen garden seed packet distributed to women farmers. Also plantation performed by dignitaries.



**Khedut Shibir (Date: 5-8-2021)**

Khedut Shibir organised under the community base fruit fly management in horticultural crops. In presence Dr. Z. P. Patel, Hon'ble Vice chancellor, Dr. S. R. Chaudhari, Dr. C. K. Timbadia, DEE, NAU, Navsari. Fruit fly trap distributed to all farmers. More than 60 farmer's participant in this program.





**Khedut Shibir under the Doubling Farmers Income and Swachhta Pakhwada program (Date: 13-8-2021)**

Krishi Vigyan Kendra, Navsari Organized Khedut Shibir under the Doubling Farmers Income, and Swachhta Pakhwada. Chondha village on 13 August 2021 in presence of Chonda milk- Co-operative President, During the shibir highlighted the Doubling the farmers income and also project demo inputs like Novel, PSB, KMB ,Azotobactor were distributed to the beneficiaries in DFI scheme. More than 50 farmers participated in the shibir they were told about usage and application method of inputs distributed during the shibir.



### **Khedut Shibir on Creeper crop (Date: 19-8-2021)**

BAIF, Vasada, Development Research Foundation organised Khedut Shibir under the Comprehensive Community Development Project (CCDP) funded by LTPCT on 19 Aug 2021. during technical session highlighted the creeper and non creeper type vegetables cultivation viz., Little gourd, Bitter gourd and spiny gourd. Information on Usage and application of bio fertilizers such as PSB, KMB, and Azotobacter in gourd family crop were given during the training. In continuation famers were also educated about Schemes viz., Gujarat Government Saat Pagala Khedut Kalyan Scheme under seven sub schemes such as Mukhya Mantri Paak Sangrah Structure Yojana, Kisan Parivahan Yojana, Fencing Yojana etc. Later on use of famers friendly mobile application viz., Kisanmitra, kisan rath and Agrimedia to get resolve farmer problem were specified. About 65 farmers enthusiastic participated in khedut shibir.



### **Khedut Shibir (Date: 20-8-2021)**

BAIF, Vansada, Development Research Foundation organized khedut shibir under the Comprehensive Community Development Project (CCDP) funded by LTPCT on 20 August 2021. In technical session outlined the pest and disease management in creeper and non creeper type vegetables like bitter melon, bitter melon and spiny melon and also focus on organic farming. In continuation with session they were briefed about transfer of technology activity of krishi vigyan kendra Navsari and role of ICT tool's in Agriculture department among farming community. More than 85 farmers enthusiastic participated in khedut shibir.



### “Azadi ka Amrut Mahotsav”

Sr. No.	Date	Place	Activity Name	No. of Participants
1	10/8/2021	Krishi Vigyan Kendra, Navsari	Khedut shibir under the theme of Holistic development approaches through RKVY project	80
2	26/8/2021	Krishi Vigyan Kendra, Navsari	Khedut Shibir under the theme of Food and Nutrition for Farmers	103
3	3/9/2021	Mohanpur	Pak Parisavand under the theme of Natural farming and organic farming for farmers	70
4	14/9/2021	Krishi Vigyan Kendra, Navsari	Freeze drying technology in mango and other horticulture crop under the ARYA project	45
5	28/9/2021	Krishi Vigyan Kendra, Navsari	Farmer interface program for climate resilient variety, technology and practice	100
6	15/10/2021	Krishi Vigyan Kendra, Navsari	Mahila Kisan Divas	89





**Khedut shibir under the theme of Holistic development approaches through RKVY project**



**Khedut Shibir under the theme of Food and Nutrition for Farmers**



**Pak Parisavand under the theme of Natural farming and organic farming for farmers**



**Freeze drying technology in mango and other horticulture crop under the ARYA project**



**Mahila Kisan Divas**



**Farmer interface program for climate resilient variety, technology and practice**



## **Vocational Training on preparation of vermi compost**

**(Date: 1 to 4 -10-2021)**

Krishi Vigyan Kendra, Navsari, Agricultural University organized in a four days vocational training on preparation of vermi compost and their importance for both farming and economic generation at Manekpore in collaboration with BSVS, RSETI, Navsari. Dr. Kinjal Shah, Scientist (Agronomy) gave the technical knowledge by method demonstration on preparation of vermin compost and its advantage. More than 23 farmers participated in this training.



## **Training on use of bio fertilizer in sapota and mango orchard (Date: 8-10-2021)**

Training on use of bio fertilizer in sapota and mango orchard. KVK Scientist and NAU faculty dept. of Horticulture gave the lecture in bio fertilizer in sapota and mango orchard. More than 65 farmers participated in this training.



## **Celebration of world food day (Date: 16-10-2021)**

Krishi Vigyan Kendra, NAU, Navsari organized off campus program on a celebration of world food day at kedkutch village. More than 40 farmers participated in this program.



## **Swachata campaign and vigilance awareness (Date: 20-10-2021)**

Krishi vigyan kendra, Navsari , NAU, organized on special swachata campaign and vigilance awareness on 20 October 2021. In presence of Dr. C. K. Timbadia, Director of Extension Education, NAU, Navsari, Shri Pareshbhai Ahir, progressive farmers, Shri Bharatbhai Patel, progressive farmer, Bhutsad village. More 70 farmers and students are participated in this program.



## **Organic and cow base farming awareness Gaudaan Samarabh program**

**(Date: 3-11-2021)**

Event was jointly organized by Arya Samaj, Navsari and Krishi Vigyan Kendra, Navsari. Program was organized at Sultanpur village in presidential presence of dr.



Z.P.Patel, Hon,ble Vice chancellor, NAU,Navsari, President jilla panchayat, Navsari, Shri Jignesh Patil, President, Youth for Gujarat Charitable Trust. Objective of event is to create awareness and encouragement among farmer for organic and cow base farming. Total 12 cow donated to 12 farm women of Kalthan, Vasan, Kesali, Bhutsad, Abrama, Hansapor, Mandir villages. Total 80 farm women actively participated in that event.



### **Training program for farmers on medicinal plants (Date: 29-11-2021)**

Krishi Vigyan Kendra, Navsari Agriculture University Navsari and RCFC-WR regional center of National Medical Plant Board, Ministry of AYUSH, Government of India jointly organized training on medicinal plants at KVK, Navsari on 29-11-2021. In presents of Dr. C. K. Timbadia, Director of Extension Education, NAU, Navsari, Dr. Chetna Jani, CEO Gujarat medical plant board, Gandhinagar, Dr. D. N. Mogat, Principal investigators of RCFC-WR-NMPB, Dr. Babulal Nakrani, BAMS, Khadsupa guest remain present in that event. More than 50 farmers participated in that program.



## Swachhta Abhiyaan and Sawchhata Campaign

Sr. No.	Date	Place	Activity Name	No.of Participants
1	1/10/21	KVK, Navsari	office building and surrounding cleanliness	29
2	4/10/2021	KVK, Navsari	swachhbhart abhiyan swachhta pledge done	53
3	5/10/2021	NAU,Campus	footh part outside the university campus was clean	24
4	16/10/2021	Mohanpur	swachhta Awareness program	42
5	06/10/2021	Satimal	Compost & vermi compost preparation from Agricultural west & residue production of organic input	45
6	07/10/2021	Anklach	Special Swachhta Abhiyan	38
7	26/10/2021	Daladha	Use of bio fertilizer & micronutricens	31
8	26/10/.2021	Kanboya	vigillance awarness week	31
9	27/10/2021	Gholar	Vigllance awarness programme	57
10	24/10/2021	KVK, Navsari	Special Swachhta campiaing with centrel industrial securit force (CIFC)&RAWE Students	24
11	28/10/2021	Abrama, Mohanpur, Kalthan, Boriyach	swachhta abhiyan & vigillance awarness week celebration	65
12	16/12/21	KVK, Navsari	Swachhta Awareness program	91
13	17/12/21	KVK, Navsari	Stock taking on digitization of office records(2)Review of progress on weeding out old records, disposing of old and obsolete furniture's, junk materials	24
14	18/12/21	KVK, Navsari	Weeding operation in demonstration plot	17
15	20/12/21	KVK, Navsari	Stock traking on waste management for organic farming practices, cleanliess of organic demo unit	6
16	21/12/21	KVK, Navsari	Cleanliness drive including cleaning of offices, corridors and premises.	7
17	22/12/21	KVK, Navsari	white washing of tree	7
18	23/12/21	KVK, Navsari	Kisan Divash Celebration	93
19	28/12/21	KVK, Navsari	Generation of wealth from waste	22
20	29/12/21	KVK, Navsari	Planting material preparation	16
21	31/12/21	Ambapani	Swachhta Pledge and cleanning of villae community hall	41
<b>Total Activities: 21</b>				<b>763</b>





### **Celebration of World Soil Day (Date: 05-12-2021)**

Krishi vigyan kendra Navsari Agricultural University Navsari and KRIBHCO Surat jointly organized world soil day on 5-Dec 2021. President of the function Dr. C. K. Timbadia, Director of Extension Education, NAU, Navsari, and other dignitaries Smt Prafulben Desai, Board member, NAU, Navsari, Shri. P. V. Kachhadiya, Senior area manager KRIBHCO, Surat, KVK, Navsari staff and farmers were present. In his presidential address underlined the significance of soil health restoration for the society well being. He also urged to maintain the soil health in all possible ways. More than 90 farmers participated in this program.



### **Subhash Palekar Natural Farming (SPNF) workshop (Date : 25 to 27/12/2021)**

Hon'ble Acharya Devvrat, Governor of Gujarat Inaugurated the workshop on Subhash Palekar Natural Farming (SPNF) in the presence of Hon'ble Mukesh Patel Minister of States Agriculture, Government of Gujarat. Shri Bhikhubhai Ahir, President of Navsari Jilla pranchayat, Dr. S. R. Chaudhary, Director of research, Navsari Agricultural

University Navsari, Shri Prafulbhai, President of SPNF, Gujarat, Dr. C. K. Timbadia, Directorate of Extension Education, NAU, Navsari, Gujarat. More than 3400 South Gujarat farmera along with ATMA Project, Gandhinagar, Gujarat and Prakrutik Kheti Sayojak Samiti were present on 25 to 27 Dec 2021 at samarpal ashram, Dandi. Navsari







**Pre- Vibrant Gujarat in Natural Farming Stall (Date: 13 to 16 -12-2021)**

Krishi Vigyan Kendra Navsari participated in Pre- Vibrant Gujarat at Anand Agricultural University, Anand on dated 13/12/21 to 16/12/21 Under the theme of “Natural Farming” Stall was installed about 800 farmers enquired about Natual farming practices and concerned to join natural farming practices in near future.





### **Celebration of Kisan Divash ( Date: 23-12-2021)**

Krishi vigyan kendra, Navsari Celebrated " Kisan divash" in presidential presence of Dr. C. K. Timbadia, DEE, NAU, Navsari, He explain the role and importance of farmer for national food security, newly appointed sarpanch shri and Progressive farm women were felicitated for their contribution in both farming and farming community. More than 87 farm women participated in this program.





## Award and Recognition



Felicitated by Rotary Club of Navsari for best efforts & support extended during the rotary year 2020-21



*Dr. C. K. Timbadia Director of Extension Education, KVK Navsari received Felicitated by Shri Acarya Devvratji Hon'ble Governor Government of Gujarat during Natural Farming shibir at Amreli District on 15 November*



Dr Prabhu Nayaka Scientist plant protection Felicitated by Hon'ble Governor Government of Gujarat shri. Acharya Devvratji in occasion on the Natural Farming Workshop held at Dandi



Dr. Kinjal A. Shah, Scientist Agronomy Felicitated by Shri. Acharya Devvratji, Hon'ble Governor, Government of Gujarat. on the occasion of Natural Farming Workshop held at Dandi Samarpan Ashram.






Dr. Sumit Salunkhe Scientist Agril. Extension Felicitated by Shri. Acharya Devvratji, Hon'ble Governor, Government of Gujarat. on the occasion of Natural Farming Workshop held at Dandi Samarpan Ashram.

#### Activities carried out under Soil Testing Laboratory in 2021 at KVK, Navsari

Month	Soil samples analyzed in KVK Lab	Water samples analyzed in KVK Lab
January-21	25	29
Februry-21	25	35
March-21	30	20
April-21	45	50
May-21	21	22
June-21	30	25
July-21	21	19
August-21	18	20
September-21	-	15
October-21	15	10
November-21	15	10
December-21	10	5
<b>Grand total</b>	<b>255</b>	<b>260</b>

## Success stories:

### Success Story: Home Science

<b>Title: Hair Oil promote growth to livelihood of Farm women</b>	
	Name of the women entrepreneur: Smt. Binduben Dipakbhai Patel Village: Abrama (Daji Faliya), Tal. Jalalpore, Dist. Navsari- 396406 Mob. 7434822915
<b>Profile:</b>	
<b>Age:</b>	: 41 years
<b>Education:</b>	: 10 <sup>th</sup> pass
<b>Occupation:</b>	: Farming
<b>Marital status:</b>	: Married
<b>Land Holding</b>	: 4 vigha
<b>Farming Experience:</b>	: 18yers
<b>Thematic Area:</b>	Income generation activities for empowerment of rural women
<b>Adoption of Technology:</b>	Attended On Campus Skill development training on Hair oil preparation.
<b>Situation Analysis/ Problem:</b>	
This is success story of farm women of Abrama village of Navsari district. She is very small farm women have small land holding area for farming. She grown Green gram, Pigeon pea and vegetable crop. Her husband is auto driver. She has two children. Due to global worming from last 5 year crop become fail to proper yield. Due to Low yield and low market price income is not enough to survive. Than she is look for sustainable source of income.	
<b>Plan, Implement and Support:</b>	
In November '2019 she joined KVK, Navsari as a active leader farm women. KVK, Navsari sent her to Tapi, KVK, Vyara for 4 days training of Hair oil preparation. After that training she decided to commence small scale Hair oil enterprise. She brought all the necessary ingredient for it but, she was not confident to prepare it. Than she request to KVK, Navsari for conduct hair oil preparation training. In December'2020 scientist Home science conduct 3days on campus skill training for it. After this training, same days she also organise training at own home for her SHG member. She successfully prepared first lot ready with 15 bottle with the help of guidance and information provided by KVK. Scientist home science support her to prepare quality lable and Bottle. Give brand name "KESH BINDU" ayurvedic hair oil. In hair oil she used 3 type of oil namely Sesame, Coconut and Castor oil and used other 17 herbs both in dry and green form.	
<b>Output:</b>	
She sell first stock in her village and neighbour with price 100 Rs. of 100 ml. After sell of first stock she was inspire to increase production and 2 <sup>nd</sup> stock ready with 44 bottle for sell. only in one moth sell 20000/- Rs. of hair oil and got 10,000/- Rs. benefit. her confidence increase and till date she do not look back in her entrepreneur. She sell her product by KVK, NAU campus, neighbour village.	
<b>Outcome:</b>	
From her inspiration there were 6 other farm women visited her unit and start to prepare hair oil and they learn to earn extra income. She motivate to other farm women by her knowledge and guidance. They also benefitted by extra income other than farming. Now a days she not sell only hair oil but she purchase tuber crop like Onion, Purple yam, Sweet Potato, Elephant foot yam etc. from other organic grower of KVK and get benefit by sell it in local market.	



<b>Impact: Economic Impact of Hair oil</b>			
<b>Month</b>	<b>Income</b>	<b>Cost</b>	<b>Net Profit</b>
January'21	42700	23200	19500
February'21	40700	20600	20100
March'21	34800	26800	8000
	-	7400 (Cost of bottle and sticker)	-
<b>TOTAL</b>	<b>118200</b>	<b>78000</b>	<b>40200</b>

From the above cited table she got about 40% net profit from this venture. She is happy and thanks giving to KVK, Navsari for Kind support and cooperation.

**કેશાંબિદુ**  
આયુર્વેદિક હેર ઓઇલ

સામગ્રી : તલનું તેલ, કોપરેલ, દિવેલ, દુધી, આમળા, ભાંગરો, ગ્રાહી, ઘોડાવજ, સુખડનો પાવડર, નાગમોચ, કુંવારપાઠું, કડવો લીમડો, મીઠો લીમડો, મહેંદીના પાન, જસુદ-ગુલાબના ફૂલ, જટામાંસી, જેઠીમધ, અગર, અનંતમૂળ, ઝરણનું તેલ

સંપર્ક: બિંદુબેન ડી. પટેલ (મો.૭૪૩૪૮૨૨૯૧૫)  
મુ.પો. આશ્રામ (દાણુ કળિયા), તા. જલાલપોર, જિ. નવસારી, ૩૯૬૪૦૬

વજન: \_\_\_\_\_  
ભાવ : \_\_\_\_\_

માર્ગદર્શક : કૃષિ વિજ્ઞાન કેન્દ્ર, ન.કૃત્યુ., નવસારી



## Successful Case or Success Story of Paddy GNR-7(2021-22)

Profile			
<b>Name</b>	:	Kajalben Mayurbhai Patel	<b>Age</b> : 31
<b>Village</b>	:	Sindhai	<b>Education</b> : 8 <sup>th</sup> Pass
<b>Taluka</b>	:	Vansda	<b>Land holding</b> : 1.2 ha
<b>Dist.</b>	:	Navsari	<b>Farming Experience</b> : 08
<b>Mo. no</b>	:		<b>Crops grown</b> : Paddy, Sorghum, Okra, Chickpea, Pigeon pea and Indian bean

### BEFORE CONTACT WITH KVK

Traditionally she started paddy cultivation about 10 years ago. Every time she used to purchase seeds from the market. Lack of knowledge on scientific cultivation of paddy and other management practices lead her to debt in her farming. Once She contacted KVK for the new variety of paddy that changed her life in farming.

### AFTER KVK GUIDANCE ADOPTED TECHNOLOGY

<b>Area</b>	-	1 Vingha
<b>Variety</b>	-	Paddy – GNR-7
<b>Spacing</b>	-	20*15 cm
<b>Seed Treatment</b>	-	Thiram 3gm/kg seed at the time of nursery raising
<b>Seed rate</b>	-	25-30 kg/ha
<b>Nutrient management</b>	-	Azosipullum and PSB each @ 10 ml/l water for seedling treatments 5 t FYM/ha + 100:30:00 kg NPK/ha
<b>Weeding</b>	-	2 time hand weeding



- **After KVK intervention**
  - Adoption of *Rainy* Paddy recently released good yielding variety
  - Integrated nutrient management in crop
  - Scientific method of cultivation practices adopted
- **Area of adaptive of technology**
  - Started Paddy cultivation in approximate 1.0 Vigha (0.20 ha)
- **Result of this technology**
  - ✓ Seed requirement is decreased
  - ✓ Plant growth is improved
  - ✓ Yield is increased
  - ✓ More than 27.49 % additional income

- **Yield performance of Paddy Plot**

Yield ( kg/ha)		% increase over check
Demo.	Check	
4974	4127	20.52

- **Income from this**

- Total income of Rs. 93780/ha during 110-115 days only.

- **Horizontal spread**

- About 39 farm family in the village and surrounding village adopted this technology.



**Paddy plot (GNR-7)of Kajalben Mayurbhai Patel**

**Successful Case or Success Story of Paddy GNR-7 (2021-22)**

Profile			
<b>Name</b>	: Balubhai Patel	<b>Age</b>	: 62
<b>Village</b>	: Kukada	<b>Education</b>	: -
<b>Taluka</b>	: Vansda	<b>Land holding</b>	: 1.5 ha
<b>Dist.</b>	: Navsari	<b>Farming Experience</b>	: 35
<b>Mo. no</b>	: 9638997662	<b>Crops grown</b>	: Paddy, Pigeon pea, Green Gram and Turmeric

**BEFORE CONTACT WITH KVK**

Since more than 35 year back, he is cultivated Paddy traditionally and every year purchases seed and also found pest and disease incidence as a result of this getting low yield hence potential yield is not obtained and the cost of cultivation is increased.

## AFTER KVK GUIDANCE ADOPTED TECHNOLOGY

Area	-	1 Vingha
Variety	-	Paddy – GNR-7
Spacing	-	20*15 cm
Seed Treatment	-	Thiram 3gm/kg seed at the time of nursery raising
Seed rate	-	25-30 kg/ha
Nutrient management	-	Azosipullum and PSB each @ 10 ml/l water for seedling treatments 5 t FYM/ha +100:30:00 kg NPK/ha
Weeding	-	2 time hand weeding



- **After KVK intervention**
  - Adaption of *Rainy* Paddy recently released good yielding variety
  - Integrated nutrient management in crop
  - Scientific method of cultivation practices adopted
- **Area of adaptive of technology**
  - Started Paddy cultivation in approximate 1.0 Vingha (0.20 ha)
- **Result of this technology**
  - ✓ Seed requirement is decreased
  - ✓ Plant growth is improved
  - ✓ Yield is increased
  - ✓ More than 24.79 % additional income
- **Yield performance of Paddy Plot**

Yield ( kg/ha)		% increase over check
Demo.	Check	
4843	4067	19.08

- **Income from this**
  - Total income of Rs. 90945/ha during 110-120 days only.
- **Horizontal spread**
  - About 46 farm family in the village and surrounding village adopted this technology.





**Paddy (GNR-7) plot of Balubhai Patel**

### Successful Case or Success Story of Paddy GRH-2(2021-22)

		Profile	
<b>Name</b>	: Janiben Jayantibhai Kukana	<b>Age</b>	: 31
<b>Village</b>	: Kharjai	<b>Education</b>	: 12 <sup>th</sup> Pass
<b>Taluka</b>	: Vansda	<b>Land holding</b>	: 0.8 ha
<b>Dist.</b>	: Navsari	<b>Farming Experience</b>	: 10
<b>Mo. no</b>	: <b>6353034193</b>	<b>Crops grown</b>	: Paddy, Sorghum, Sweet corn, Chickpea, Pigeon pea and Green Gram

#### BEFORE CONTACT WITH KVK

Since more than 10 year back, She is cultivated Paddy traditionally and every year purchases hybrid seed form market and also found pest and disease incidence as a result of this potential yield is not obtained hence, getting low yield and income as well as the cost of cultivation is increased

#### AFTER KVK GUIDANCE ADOPTED TECHNOLOGY

Area	-	20 Guntha
Variety	-	Paddy - GRH-2
Spacing	-	20*15 cm
Seed Treatment	-	Thiram 3gm/kg seed at the time of nursery raising
Seed rate	-	12-15 kg/ha
Nutrient management	-	Azosipullum and PSB each @ 10 ml/l water for seedling treatments



		5 t FYM/ha + 100:30:00 kg NPK/ha
Weeding	-	1 time hand weeding

- **After KVK intervention**

- Adoption of recently released good yielding paddy variety
- Seed treatments and integrated nutrient management in crop
- Scientific method of cultivation practices adopted

- **Area of adaptive of technology**

- Started Paddy cultivation approximate 1.0 Vigha (0.20 ha)

- **Result of this technology**

- ✓ Seed requirement is decreased
- ✓ Plant growth is good
- ✓ Yield is increased
- ✓ More than 30.36 % additional income

- **Yield performance of Paddy Plot**

Yield ( kg/ha)		% increase over check
Demo.	Check	
5386	4652	15.77

- **Income from this**

- Total income of Rs. 99120/ha during 110-120 days only.

- **Horizontal spread**

- About 44 farm family in the village and surrounding village adopted this technology.



**Paddy plot of Janiben Jayantibhai Kukana**

## Successful Case or Success Story of Paddy GRH-2(2021-22)

Profile					
<b>Name</b>	:	Moahnbbhai Jamsubhai Gavit	<b>Age</b>	:	62
<b>Village</b>	:	Khanpur	<b>Education</b>	:	10 <sup>th</sup> Pass
<b>Taluka</b>	:	Vansda	<b>Land holding</b>	:	1.8ha
<b>Dist.</b>	:	Navsari	<b>Farming Experience</b>	:	40
<b>Mo. no</b>	:	<b>9728204512</b>	<b>Crops grown</b>	:	Paddy, Chickpea, Pigeon pea, vegetables, and Green Gram

### BEFORE CONTACT WITH KVK

Since more than 30 year back, He is cultivated Paddy traditionally and every year purchases hybrid seed form market and also found pest and disease incidence as a result of this potential yield is not obtained hence, getting low yield and income as well as the cost of cultivation is increased.

### AFTER KVK GUIDANCE ADOPTED TECHNOLOGY

Area	-	20 Guntha
Variety	-	Paddy - GRH-2
Spacing	-	20*15 cm
Seed Treatment	-	Thiram 3gm/kg seed at the time of nursery raising
Seed rate	-	12-15 kg/ha
Nutrient management	-	Azosipullum and PSB each @ 10 ml/l water for seedling treatments 5 t FYM/ha + 100:30:00 kg NPK/ha
Weeding	-	1 time hand weeding



- **After KVK intervention**
  - Adaption of recently released good yielding paddy variety
  - Seed treatments and integrated nutrient management in crop
  - Scientific method of cultivation practices adopted
- **Area of adaptive of technology**
  - Started Paddy cultivation in approximate 1.0 Vigha (0.20 ha)
- **Result of this technology**
  - ✓ Seed requirement is decreased
  - ✓ Plant growth is good
  - ✓ Yield is increased
  - ✓ More than 28.43 % additional income



- **Yield performance of Paddy Plot**

Yield ( kg/ha)		% increase over check
Demo.	Check	
5253	4571	14.92

- **Income from this**

- Total income of Rs. 98756/ha during 110-120 days only.

- **Horizontal spread**

- About 28 farm family in the village and surrounding village adopted this technology.



**Paddy plot of Moahnbhai Jamsubhai Gavit**

**Successful Case or Success Story of Paddy GNR-3 (2021-22)**

Profile			
<b>Name</b>	: Belaben Natvarbhai Patel	<b>Age</b>	: 49
<b>Village</b>	: Abrama	<b>Education</b>	: 10 <sup>th</sup> Pass
<b>Taluka</b>	: Jalalpor	<b>Land holding</b>	: 2.5 ha
<b>Dist.</b>	: Navsari	<b>Farming Experience</b>	: 24
<b>Mo. no</b>	:	<b>Crops grown</b>	: Paddy, Sugarcane, Chickpea, Sapota and Mango

**BEFORE CONTACT WITH KVK**

Since more than 8 year back, he is cultivated Paddy traditionally, every year purchases seed and also found pest and disease incidence as a result of this getting low yield hence potential yield is not obtained and the cost of cultivation is increased.



## AFTER KVK GUIDANCE ADOPTED TECHNOLOGY

Area	-	18 Guntha
Variety	-	Paddy – GNR-6
Spacing	-	20*15 cm
Seed Treatment	-	Thiram 3gm/kg seed at the time of nursery raising
Seed rate	-	25-30 kg/ha
Nutrient management	-	Azosipullum and PSB each @ 10 ml/l water for seedling treatments 5 t FYM/ha +100:30:00 kg NPK/ha
Weeding	-	2 time hand weeding



- **After KVK intervention**
  - Adaption of *Rainy* Paddy recently released good yielding variety
  - Integrated nutrient management in crop
  - Scientific method of cultivation practices adopted
- **Area of adaptive of technology**
  - Started Paddy cultivation in approximate 1.0 Vigha (0.20 ha)
- **Result of this technology**
  - ✓ Seed requirement is decreased
  - ✓ Plant growth is improved
  - ✓ Yield is increased
  - ✓ More than 33.52 % additional income
- **Yield performance of Paddy Plot**

Yield ( kg/ha)		% increase over check
Demo.	Check	
5075	4376	15.98

- **Income from this**
  - Total income of Rs. 104340/ha during 110-120 days only.
- **Horizontal spread**
  - About 57 farm family in the village and surrounding village adopted this technology.



**Paddy (GNR-3) plot of Belaben Natvarbhai Patel**

## Impact of extension activities (Trainings/Demonstration)

### Feedback:

#### Agronomy:

- Increased in knowledge and awareness about new varieties of paddy (NAUR-1, GNR-3, GNR-4, GR-15).
- 81% farmers adopted these new varieties.
- 69% farmers adopted new varieties in gram and Tur crops.
- 21% farmers adopted weed management in sugarcane crop.
- 28% farmers adopted intercrop cultivation in sugarcane crop
- 19% farmers adopted integrated nutrient management technologies.
- 79% farmers shown keen interest in bio-fertilizer, organic manure and green manure.
- 72% farmers adopted yellow vein mosaic resistant variety meha of green gram.
- Increase in income of farmers by 65% adopting sweet corn in tribal region and spread in about 292 ha area.
- Adoption of SRI technologies in paddy and 76% increase in productivity.

#### Plant protection:

- Increased knowledge of the farmers regarding major insect-pest infestation and its control measure for sugarcane, paddy, mango, sapota, and vegetables.
- Organic and natural farming practitioner are increased in the district
- Number of GOPCA certificate holders are increasing day by day
- Increased awareness of farmers regarding judicious use of pesticide.
- Farmers have realized the importance of bio-control.
- 26% farmers aware about IPDM technology
- Reduced the cost of Plant protection and increased awareness about ill effect of pesticide.
- Farmers are aware about the importance of healthy seed and seed treatment for reducing seed born diseases.

#### Home Science:

- Through training on nutrition education, women of adopted villages become conscious about the health of self and their family.
- With the help of training on kitchen garden, farm women have adopted kitchen garden concept at their own backyard.
- Farm women are now preparing mango pulp, jam, and spices at their home rather than buying it from the market.
- Increase value addition skill among farm women
- Farm women become **Atma nirbhar** through Value addition of local farm produce.

## Fisheries:

- Increase in grass carp adoption rate in village ponds
- Increase in fish production in village pond fish farming system
- Increase in fresh water prawn fishing capture and Profit using one way trap
- SHG group of women are working well in many villages.
- Fish farming activities have been spread extensively.

## Capacity building:

- Enriched the knowledge level of field functionaries.
- Increased convergence among different department through strong coordination with line departments.
- Because of linkages, it became possible to conduct various extension activities.
- Due to the follow-up by the functionaries, demonstration and technologies have become effective.
- In general, the area, production, and productivity increased in the district.

## Research need:

S. No	Crop	Feed Back
1	Paddy	<ul style="list-style-type: none"> <li>• High yielding, medium duration varieties/hybrids.</li> <li>• Less irrigation requirement paddy varieties/hybrids there by reduction in soil salinity &amp; maintenance soil health</li> <li>• Reduce cost of cultivation by developing pest &amp; disease tolerant varieties/hybrids.</li> </ul>
2	Pigeon pea	<ul style="list-style-type: none"> <li>• Development organic pest modules for pigeon pea</li> <li>• Increase in yield.</li> <li>• Develop early maturing and high yielding pigeon pea variety.</li> </ul>
3	Sapota	<ul style="list-style-type: none"> <li>• Keeping quality of sapota fruit</li> <li>• Uniformity in size of the fruit</li> <li>• Weight of fruit.</li> </ul>
4	Mango	<ul style="list-style-type: none"> <li>• Branches of mango or sometime mango plant die in month of September-October.</li> <li>• Stem cracking or bark splitting was found in mango</li> </ul>
5	Kitchen garden	<ul style="list-style-type: none"> <li>• Terrace gardening, Box gardening and hanging pot kitchen gardening popularization. And also availability of vegetables throughout the year on season basis.</li> <li>• To develop new variety of hybrid vegetables.</li> </ul>
6	Animal Feed	<ul style="list-style-type: none"> <li>• Cost of feeding animals to be reduced</li> </ul>
7	Fish	<ul style="list-style-type: none"> <li>• Experiment on amur common carp need to be conducted</li> </ul>
8	Fish	<ul style="list-style-type: none"> <li>• Experiment on cage culture in big village tanks need to be conducted</li> </ul>
9	Organic farming	<ul style="list-style-type: none"> <li>• Preparation and testing of amrutmittii, amrutjal, jivamrut and panchgavya for different crops</li> <li>• Preparation and testing of herbal pesticide for controlling pests and diseases</li> <li>• Testing of cow dung and cow urine for enhancing growth and controlling pests and diseases</li> <li>• Module for pesticide free productions</li> <li>• Availability of country seeds</li> <li>• Develop salt reclamation bio fertilizers.</li> </ul>

10	Drudgery reduced technology	<ul style="list-style-type: none"> <li>• Need to develop and make available regional Women friendly drudgery reduction technology, Farm implements, handtools etc.</li> </ul>
----	-----------------------------	---

### Infrastructure development:

- Mini Bus
- Latest multi media/laptop/tablet equipments for effective transfer of technologies should be provided to each and every scientist.
- Strengthening of farmers hostel with more intake capacity.
- Extension functionaries for effective follow up for technology transfer, impact studies and gaps finding.

### Women Empowerment through Group Approach :

- KVK, Navsari successfully create women friendly environment for women Participation. Formate farm women groups in 60 village and groups are lead by 159 farm leader women. Each farm leader women leading the group of 50 farm women member in each village.



### Strategies of extension development:

- Identification of leader and capacity build up for effective transfer of technologies.
- Innovative farmers meet.
- Continuous follow up use of latest multimedia technologies and ICT tools in extension activities

### Line Department:

Line Departments appreciated the works, extension strategies and stands KVK for agricultural development in the district by collecting feedbacks from innovative and successful farmers and the same has been certified.



## **Farmers and stake holders:**

Farmers are most significant clients for our KVK. KVK along with our team members are living in the heart of farmers. Farmers' success and development are the most prime and urgent tasks for KVK. Innovative, successful farmers and stake holders appreciated and happy with the work pattern, style and treatment extended by KVK and accordingly they certified the same.

## **Status in the District:**

Looking to the transparent, farmers' interested and Agriculture development oriented works and activities being carried out by KVK, The District authorities Hon'ble Executive magistrate & Collector, DDO and other main responsible authorities have appreciated KVK efforts and certified the same. They are also interested to implement many agriculture development projects through KVK. Thus KVK becomes the synonyms of Agriculture development in the district

## **Overview for KVK development:**

For strengthening and extending vast working area with new era of development in agriculture and allied sectors efficiently and accurately active and efficient follow up extension functionaries with latest multimedia operation technologies need to be established.

### 10.3 Presentation on Action Plan of January-2022 to December-2022

#### A. THRUST AREAS identified by KVK (Approved by competent Authority in meetings/workshop)

THRUST AREA	
I.	Crop production management (Paddy, Sugarcane, Vegetables, Pulses , Mango, Sapota, Banana, Flower crops and Fisheries)
II.	Conservation of natural resources
III.	Cost effective techniques for natural resources conservation and soil health
IV.	Arid horticulture development / Diversification of Agriculture
V.	Low cost technology / Input efficient technology
VI.	Organic farming
VII.	Self employment to Rural youth and farm women
VIII.	Women empowerment
IX.	Management of dairy animals
X.	High tech agriculture
XI.	Freshwater fish farming through cages
XII.	Fish value addition
XIII.	Freshwater fish seed rearing
XIV.	Value addition of local farm produce

#### B. Adopted Villages

Sr.No.	Taluka	Village	Village	Village
<b>Intensive operational area</b>				
1.	Jalalpore	Dambhar/Posara	Abrama	Bhutsad
2.	Navsari	Posara	Vada	Kachhol
3.	Gandevi	Mohanpore	Kachholi	Undach
4.	Chikhali	Degam	Agasi	Sadakpore
5.	Vansada	Satimal	Kukda	Kureliya
6.	Khergam	Gholar	Chimanpada	Rojavani

### C. Training Programmes

S.N.	Discipline	Total On campus Training		Off campus training		EF/Inservice training		Vocational training		GT
		No.	Beni.	No.	Beni.	No.	Beni.	No.	Beni.	
1.	Crop Production	12	300	10	250	1	20	1	20	24
2.	Horticulture	8	200	8	200	1	20	1	20	18
3.	Home Science	8	200	8	200	0	0	1	25	17
4.	Plant Protection	8	200	8	200	0	0	1	20	17
5.	Extension Education	8	200	8	200	0	0	0	0	16
6.	Fisheries	0	0	0	0	0	0	0	0	0
	<b>Total</b>	<b>44</b>	<b>1100</b>	<b>42</b>	<b>1050</b>	<b>3</b>	<b>65</b>	<b>5</b>	<b>115</b>	<b>92</b>

### D. Frontline Demonstrations

Sl. No.	Crop	Variety	Thematic area	Technology for demonstration	Season and year	Area (ha)	No. of farmers/demon.	Parameters identified
1	Kitchen Garden		Drudgery reduction technology	Weed management by twin wheel hoe	Rabi-22	-	30	Labour saving per ha.
2	-	-	Natural resource conservation technology	Solar energy conservation Solar cooker	Rabi-22	-	20	Fuel saving per year
3	Paddy	Available	IPDM	Introduction of IPDM technologies	Kharif-19	10	20	Improved package of practice
4	Pigeon pea	Vaishali	Use of bio pesticides	Use of biopesticide in pest & disease management	Kharif-19	5	10	Introduction of new variety
5	Mango	Available	Fruit fly control	Use of nauroji trap	Rabi-20	5	20	Popularized canopy management
6	Little guard	GNLG-1	New Variety	Introduction of new variety	Kharif-21	1	10	Improved package of practice
7	Pointed guard	GNSPG-1	New Variety	Introduction of new variety	Kharif-21	1	10	Improved package of practice
8	Mango	Sonpari	New Variety	Introduction of new variety	Kharif-21	1	10	Improved package of practice
9	Mango	Available	Nutrient management	Novel	Rabi-21	2	100	Improved package of practice
10	Sapota	Available	Nutrient management	Novel	Rabi-21	2	100	Improved package of practice
11	Drum stick	PKM-1	New Variety	Plant	Kharif	1	100	Improved package of practice

12	Dragon fruit	Red	New Variety	Plant	Kharif	0.5	50	Improved package of practice
13	Kitchen garden	Available	Residue free vegetable	Seed kit	Summer-22. kharif-22 Rabi-22	1	400	Improved package of practice
14	Mango	Bio fertilizer	Available	PSB, KMB, Azto.	Kharif-21	5	125	Improved package of practice
15	Sapota	Bio fertilizer	Available	PSB, KMB, Azto.	Kharif-21	5	125	Improved package of practice
16	Paddy	GNR-3	INM	Varity + seed treatment with bio fertilizer	Kharif	10	50	Reduction in stem borer infestation and increase in yield
17	Paddy	GNR-7	INM	Varity + seed treatment with bio fertilizer	Kharif	10	50	Reduction in stem borer infestation and increase in yield
18	Paddy	GNR-17	INM	Varity + seed treatment with bio fertilizer	Kharif	5	25	Reduction in stem borer infestation and increase in yield
19	Paddy	GNR-6	INM	Varity + seed treatment with bio fertilizer	Kharif	5	25	Reduction in stem borer infestation and increase in yield
20	Paddy	GNR-5	INM	Varity + seed treatment with bio fertilizer	Kharif	5	25	Reduction in stem borer infestation and increase in yield
21	Pigeonpea	GT-104	ICM	Varity + seed treatment with bio fertilizer	Kharif	10	50	Introduction of new variety
22	Chick pea	GG-5	ICM	Varity + seed treatment with bio fertilizer	Rabi	10	50	INM and Increase in yield
23	Greengram	GM-6	ICM	Varity + seed treatment with bio fertilizer	Summer	10	50	INM and Increase in yield
					<b>Total</b>	<b>104.5</b>	<b>1405</b>	



### E. On Farm Testing

No.	Particulars	Numbers	Area (ha)/Farmers
1	New variety in Brinjal (NSRP 1)	1	6
2	Use Of Liquid Consortia Npk-1(Kribhco Polyculture) In Mango Crop	1	6
3	Sucking pest management in chilli	1	6
4	New Variety in hybrid rice GRH-2	1	6
5	Use of Liquid Consortia NPK-1(KRIBHCO Polyculture) In Sugarcane Crop.	1	6
6	To assess stocking density of pangasius ( <i>Pangasius hypophthalmus</i> ) fish in pond based culture system.	1	6

### F. Extension Activities (including activities of FLD programmes)

Sr.No.	Nature of Extension Activity	No. of activities
1.	Field Day	5
2.	Kisan Mela	1
3.	Kisan Ghosthi	3
4.	Exhibition	2
5.	Film Show	20
6.	Farmers Seminar	2
7.	Workshop	2
8.	Group meetings	4
9.	Lectures delivered as resource persons	10
10.	Newspaper coverage	10
11.	Radio talks	2
12.	TV talks	2
13.	Popular articles	5
14.	Extension Literature	10
<b>15.</b>	<b>Advisory Services</b>	1
16.	Scientific visit to farmers field	30
17.	Farmers visit to KVK	-
18.	Diagnostic visits	8
19.	Exposure visits	2
20.	Ex-trainees Sammelan	1
21.	Soil health Camp	1
22.	Farm Science Club Conveners meet	1
23.	Self Help Group Conveners meetings	2
24.	Mahila Mandals Conveners meetings	2
25.	Celebration of important days (specify)	7
26.	Krishi Mohostva	1
27.	Pre Kharif workshop	1

28.	Pre Rabi workshop	1
29.	Any Other (Specify)	-
	<b>Total</b>	<b>136</b>

## 10.4 Presentation of Budget Position

### Utilization of KVK funds during the year 2021 (January-2021 to December-2021)

S. No.	Particulars	Sanctioned (Lakh)	Released (Lakh)	Expenditure (Lakh)
1	Pay & Allowances	106	37.65	94.62
2	T.A			
3	Recurring Contingencies	13.00	7.18	4.71
4	Non-recurring Contingencies	-	-	-
5	Vehicle	-	-	-
6	Library	-	-	-
	<b>Total</b>	<b>119</b>	<b>44.83</b>	<b>99.33</b>

### Status of revolving fund (Rs. in lakhs) (January-2021 to December-2021)

Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Closing balance
7,92,194	8,73,995	85826	6,76,369

## 10.5 Suggestions and discussion to make Krishi Vigyan Kendra, Navsari more effective

- 1) Timely grant should be released.
- 2) Need of minibus for training purpose.
- 3) Need of Farm equipments for farm development.
- 4) Need of infrastructure facilities like Training Hall and more capacity of hostel.
- 5) Laptop and computers as all facilities became old and take more maintenance.