

ICAR-ATARI, Pune

DETAILS OF ANNUAL PROGRESS REPORT OF KVK NAVSARI DURING 2019-20 (1st April 2019 to 31st March 2020)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address with PIN code	Telephone		E mail	Website address & No. of visitors (hits)
Krishi Vigyan Kendra Navsari Agricultural University Eru Char Rasta Navsari-396 450 Gujarat	Office	FAX	kvknavsari@yahoo.com kvknavsari@nau.in	www.kvknavsari.in
	(02637) 282009	(02637) 282008		

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

Address	Telephone		E mail	Website address
	Office	FAX		
Directorate of Extension Education, Navsari Agricultural University Eru Char Rasta Navsari-396 450 Gujarat	(02637) 282706	(02637) 282706	dee@nau.in	www.nau.in

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. C. K. Timbadia	9825386435	9725006012	cktamreli@yahoo.com

1.4. Year of sanction: 2006

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

Sr. No.	Sanctioned post	Name of the incumbent	Discipline	If Permanent, Please indicate			If Temporary, pl. indicate the consolidated amount paid (Rs./month)
				Current Pay Band	Current Grade Pay	Date of joining	
1	Senior Scientist and Head	Dr. C. K. Timbadia	Ext. Edu.	131400-217100	-	03.07.06	-
2	Scientist	Dr. K. A. Shah	Agronomy	68900-205500		06.02.12	-
3	Scientist	Prof. P. P. Patel	Fisheries	68900-205500		01.02.13	-
4	Scientist	Dr. P. H. Nayaka	Plant Protection	68900-205500		23.5.13	-
5	Scientist	Smt. Nital N.Patel	Home Science	57700-182400		19.06.10	-
6	Scientist	Prof. R.A. Gurjar	Horticulture	57700-182400		08.01.13	-
7	Scientist	Dr. S. R. Salunkhe	Ext. Edu.	57700-182400		12.08.15	-
8	Programme Assistant	Vacant	-			-	-
9	Computer Programmer	Mr. C. B. Naik	-	39900-126600		14.08.08	-
10	Farm Manager	Mr. A. N. Lad	Soil science	39900-126600		20.10.11	-
11	Accountant/ Superintendent	Devendra Rasiklal Rana	Senior Clerk	25500-81100		20.03.10	-
12	Stenographer	Vacant	-			-	-
13	Driver 1	Vacant	-			-	-
14	Driver 2	Shri. H. Z. Chauhan	-	19900-63200		23.8.07	-
15	Supporting staff 1	Vacant	-			-	-
16	Supporting staff 2	Vacant	-			-	-

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	550 sq. m.
2.	Under Demonstration Units	-
3.	Under Crops	19.45
4.	Horticulture	-
5.	Pond	1.00 ha
6.	Others if any	-

1.7. Infrastructural Development:

A) Buildings

Sr. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting year	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	30-11-08 20-7-10	550 sq.m.				
2.	Farmers Hostel	ICAR		-----				
3.	Staff Quarters (6)	ICAR	2012	-				
4.	Demonstration Units (2)	-	-	-				
5	Fencing	-	-	-				
6	Rain Water harvesting system	Under RKVY Project constructed (37000 litre capacity)						
7	Threshing floor	ICAR	-	-	1.44			
8	Farm godown	ICAR	-	-	3.88			
9	ICT lab	RKVY	-	-				
10	Other							
11.	Farm godown	State Plan Scheme	March-14	-	5.00 lakh			
12.	Farmer's urinal	State Plan Scheme	March-17	-	5.00 lakh			
13.	Block Paving	State Plan Scheme	March-17	-	2.00 lakh			
14.	Seed hub godown	ICAR	March 18		35.00 lakh			
15.	Fish Pond	State Plan Scheme	March-18	-	2.25 lakh			
16.	Vehicle Shed	State Plan Scheme	March-18	-	3.80 lakh			
17.	Road Expansion	State Plan Scheme	March-18	-	4.00 lakh			

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Bolero Jeep	2006	4,50,000/-	254639	Replacement is highly needed
Tractor	2006	4,15,000/-	-	Good
Power tiller with all accessories	2011	1,46,475/-	-	Good
Power tiller trailer	2011	26,500/-	-	Good
Bajaj Discover	2011	49,800/-	66184	Good
Tempo Traveler	--	--	-	Good
Qualis	--	--	362539	Good
Mobile soil testing Van	2008	26,30,000/-	--	Replacement is highly needed

C) Equipments & AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
(a) Office equipments			
Under KVK			
Toshiba Xerox machine	2007	60,000/-	Replacement is needed
Printers	2008	21,650/-	Replacement is needed
Summit analytical balance	2011	97,020/-	Good
Precision balance readability	2011	12,128/-	Good
Sonar make Willy grinder	2011	24,236/-	Good
Sonar make laboratory Oven	2011	17,260/-	Good
LG refrigerator	2011	17,295	Good
Laboratory hot plate	2011	15,929/-	Good
Systronics flame photometer	2011	42,525/	Good
Systronics pH system with electrode & temp. prob.	2011	13,800/-	Good
Systronics Conductivity meter	2011	14,800/-	Good
Systronics digital spectrometer	2011	90,100/-	Good
REMI make Rotary shake brusher	2011	50,000/-	Good
Muffle furnace	2011	32,201/-	Good
Photocopier	2017	1,50,000/-	Good
RO water purified (100 li.) with cooler	2017	79,600/-	Good
Nikon copier digital camera (P-900)	2017	29,650/-	Good
Nikon copier digital camera (S-7000)	2017	9,850/-	Good
Under RKVY project			
Nikon model SLR camera	2009	48,600/-	Replacement is needed
Sony digital camera	2009	19,038/-	Replacement is needed
Sony 45E handy cam	2009	19,991/-	Replacement is needed
Autoclave vertical	2009	89,000/-	Good
B.O.D. incubator	2009	1,35,300/-	Good

Laminar air flow	2009	85,900/-	Good
Sartorius analytical balance	2009	80,000/-	Good
Sartorius top loading balance	2009	21,000/-	Good
REMI make centrifuge	2009	38,800/-	Good
Systronics make flame photometer	2009	41,900/-	Good
Systronics make pH system with electrode	2009	19,100/-	Good
Systronics make conductivity TDS meter	2009	18,900/-	Good
Systronics spectrophotometer	2009	2,90,100/-	Good
Nitrogen distillation unit	2009	2,35,000/-	Replacement is needed
Himedia make colony counter	2009	17,668/-	Good
Himedia make automatic loop sterilizer	2009	12,908/-	Good
MSW-452 "MAC" stone bottle dust cover	2009	44,800/-	Good
Rotary flask shaker	2009	25,800/-	Good
LG A.C.	2009	20,000/-	Good
Automic absorption spectrophotometer	2009	5,75,000/-	Replacement is needed
LG refrigerator (290 lit.)	2009	16,521/-	Replacement is needed
Microscope	2009	9,550/-	Good
Photomicrography	2009	4,500/-	Good
Stereo microscope	2009	4,900/-	Good
Stereo microscope with magnification	2009	4,900/-	Good
R.O. plant (25 LPH) with cooler	2010	38,500/-	Replacement is needed
Generator 15 kva	2010	2,00,000/-	Good
R.O. plant (25 LPH)	2010	15,500/-	Replacement is needed
R.O. plant (25 LPH) with cooler	2010	38,500/-	Replacement is needed
Printer CANON	2010	13,100/-	Replacement is needed
LG A.C. (1.5 ton)	2010	1,05,600/-	Replacement is needed
Milk analyzer	2011	1,50,000/-	Good
Laser printer Canon 3 in 1	2011	13,000/-	Replacement is needed
Weighing scale - 100 kg	2011	7000/-	Replacement is needed
LG refrigerator 548 ysx4	2011	40,947/-	Good
Generator 35 kva	2012	6,06,205/-	Good
(b) Farm Equipments			
Under KVK			
Tractor Trailer	2006	85,000/-	Good
Cultivator (Fixed type)	2006	14,000/-	Good
Submersible pump set	2008	24,474/-	Good
Power Sprayer	2010	23,090/-	Good
Paddy winnower fan	2010	26,500/-	Good
Monoblock electric fan	2011	6,900/-	Good
Multi crop seed cum fertilizer drill	2011	45,000/-	Good
Multi crop thresher	2011	1,40,000/-	Good
Rotavator	2017	85,000/-	Good
Garden tools (cutter)	2017	64,700/-	Good
Under RKVY project			

CHAFF cutter with accessories	2011	2,05,941/-	Good
Feed pellet ting machine	2011	10,51,859/-	Good
Topland Diesel engine	2012	31,900/-	Good
Audio Visual Aids			
Under KVK			
“PROTON Impact 65 T” In built P.A. System with speaker with cordless microphone	2010	17,800/-	Replacement is needed
PROTON Enson EM 310 Boundary mike	2010	4,361/-	Replacement is needed
VIVITEK multimedia DLP projector (No.-2)	2010	99,990/-	Replacement is needed
Lenovo Desk top	2010	50,356/-	Replacement is needed
View sonic multimedia projector	2017	75,050/-	Good
Ahuja portable combo amplifier with accessories	2017	63,402/-	Good
Presentation digital podium	2017	1,49,800/-	Good
Under RKVY project			
Sony multimedia projector	2009	1,30,476/-	Replacement is needed
Motorized screen	2009	24,762/-	Good
Samsung LCD TV	2009	54,783/-	Replacement is needed
Dell Laptop	2009	1,57,520/-	Replacement is needed
dB UHF hand held wireless mic	2009	29,700/-	Replacement is needed
dB UHF Tie pin wireless mic	2009	9,850/-	Replacement is needed
Speech reinforcement sound system with accessories	2009	47,619/-	Replacement is needed
Sony EX50 multimedia projector	2009	62,857/-	Replacement is needed
Data processor Note book (Laptop)	2011	23,000/-	Replacement is highly needed

*** Name and Designation of Participants**

SN	Name	Designation	Position
1	Dr. S. R. Chaudhary	Hon'ble Vice Chancellor, NAU, Navsari	Chairman
2	Dr. G. R. Patel	Director of Extension Education, NAU, Navsari	Member
3	Dr. Amol Bhalerao	Scientist, ATARI, ICAR, Pune	Member
4	Dr. N.B.Patel	Associate Research Scientist, LRS, NAU, Navsari	Member
5	Dr. J. D. Thanki	Professor & Head (Agronomy), NMCA, NAU, Navsari	Member
6	Dr. C. K. Timbadia	Senior Scientist & Head, KVK, Navsari	Member Secretary
7	Dr. R.V. Borichangar	Associate Professor, College of Fisheries Science, NAU, Navsari	Member
8	Dr. P. K. Shrivastav	I/C, Principal ASPEE college, NAU, Navsari,	Member

9	Dr. Atul Gagera	DAO, Navsari	Member
10	Dr. M.G. Prajapati	Deputy Director of Animal Husbandry, Dist-Navsari	Member
11	Dr. Dineshbhai Padaliya	Deputy Director of Horticulture, Dist-Navsari	Member
12	Shri. C.K. Patel	Progressive Farmer, Village- Bhinar, Ta.Vansda	Member
13	Smt.Alpanaben M. Patel	Progressive Farm Woman, Village- Vasana, Ta.Gandevi	Member
14	Dr.K.A.Shah	Scientist (Agronomy). KVK, Navsari	Member
15	Prof P.P.Patel	Scientist (Fisheries). KVK, Navsari	Member
16	Dr.Prabhu Nayaka	Scientist (Plant Protection). KVK, Navsari	Member
17	Dr.Sumit Salunkhe	Scientist (Extension Education). KVK, Navsari	Member
18	Shri R.A.Gurjar	Scientist (Horticulture). KVK, Navsari	Member
19	Smt Nitalben Patel	Scientist (Home Science). KVK, Navsari	Member

**** Salient Recommendation on 12th SAC meeting held on 20/03/2019**

12.2.1	Organize workshop on script writing and presentation for scientist and officers of university. (Action: DEE)
12.2.2	Organize Training on Impact Studies of KVK (Action: DEE)
12.2.3	Organize values addition training with the help of line department
12.2.4	More use of ICT tools in KVK activity
12.2.5	Establishment of IFS demonstration at KVK farm
12.2.6	Organize demonstration and awareness programme on fodder production
12.2.7	Organize ornamental fish farming demonstration under cage fish farming

***** Action Taken Report on minutes of 11th SAC meeting held on 20/03/2019**

Action Taken Report on minutes of 11th SAC meeting held on 25/01/2020		
Sr. No	Suggestions	Action taken
1. During scientific Advisory committee meeting following suggestions are made by the experts		
	During the presentation of activities carried out by KVK Navsari in 10 th SAC by KVK, following decisions were taken	
11.2.1	Impact should be analyzed for training and extension activities	<ul style="list-style-type: none"> Impact study is conducted
11.2.2	Use new variety in FLDs	<ul style="list-style-type: none"> Following variety were using in FLDs Paddy GNR-3 (334 farmers), GNR-4 (3 farmers) GNR-5 (45 farmers), GNR-6 (98 farmers), GNR-7 (17 farmers) Pigeon pea GNP-2 (125 farmers)

		<ul style="list-style-type: none"> Chick pea GG-5 (200 farmers) Green gram GM-6 (120 farmers) Turmeric GNT-2 (80 farmers)
11.2.3	Convergence activities with NABARD	<ul style="list-style-type: none"> NABARD officers invited in guest lecture
11.2.4	Use Novel plus in FLDs	<ul style="list-style-type: none"> Novel plus use in Following FLDs Green gram (125 farmers) Vegetables (105 farmers) Sapota and mango (127 farmers)
11.2.5	Plan scheme strengthening proposal should be submitted along with required staff for inland fisheries scheme	<ul style="list-style-type: none"> Work in Progress

2. DETAILS OF DISTRICT

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

S. No	Farming system/enterprise
1.	Agri - horticulture system
2.	Agri - horti- silviculture system
3.	Agri - horti- livestock production system
4.	Horti- livestock production system
5.	Horti- livestock - inland aquaculture production system

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

a) Soil type

Sr. No.	Agro-climatic Zone	Characteristics
1	South Gujarat Heavy Rainfall Zone	Rainfall: 2500 mm and more Type of Soil: Deep black with few patches of coastal alluvial, laterite and medium black soils. Soil Characteristics : Most of the area cultivated ,some area non Cultivated under sallow and Past forest Soil fertility: Nitrogen-poor, Phosphorus medium, Potash High.

b) Topography

S. No.	Agro ecological situation	Characteristics
1	AES-I	Undulating, fine textured, shallow to medium depth, high to very high rainfall-rain fed, paddy, hill millet and pulses zone.
2	AES-III	Leveled, fine textured, deep, medium depth, rainfall-partly-irrigated, paddy, pulses, sugarcane, Mango, sapota zone
3	AES-IV	Leveled, fine textured, deep, salt affected, low rainfall, irrigated-paddy, sugarcane-wheat zone

2.3 Soil Types

S. No	Soil type	Characteristics	Area in ha
1	Clay, deep	Moderately drained	Navsari
2	Clay, clay loam, moderately deep	Moderately to poorly drained, salt affected	Jalalpore
3	Clay, clay loam, deep	Moderately to poorly drained, salt affected	Gandevi
4	Clay, silty clay, shallow, loamy, deep	Well drained, undulating, erosion affected	Chikhli
5	Clay, silty, loamy, shallow	Well drained, moderate to strong undulating, erosion affected	Vandsa

2.4. Area, Production and Productivity of major crops cultivated in the district (2017-18)

S. No	Crop	Area (ha)	Production (M.ton)	Productivity (kg /ha)
Field crops (Kharif Crops)				
1.	Paddy (TP)	17248	54486	3159
2.	Paddy (Irri)	36394	139935	3845
3.	Sorghum	29	36	1226
4.	Ragi	11.99	9.65	804.30
5.	Pigeon pea	1131	1070	946
6.	Black gram	392	284	724
7.	Ground nut	14	11	820
8.	Niger	6	2	318
9.	Green manure	1437	35925	25000
10.	Other pulses	171	137	800
	Total	56834	231896	37642
Field crops (Rabi/Summer Crops)				
11.	Sugarcane	174.19	12615.83	72424.88
12.	Rabi Sorghum	558	624	1118
13.	Gram	174.27	205.50	1179.22
14.	Paddy (Summer)	7059	30671	4350
15.	Green gram (Summer)	428	228	533
16.	Maize	126	179	1420
17.	Wheat	807.13	2378.15	3071
18.	Mustard	15	24	1600
19.	Indian bean	512	413	807
20.	Black gram (summer)	42	28	658
21.	Ground nut (summer)	40	73	1828
	Total	9936	47439	88989
Horticultural crops				
Sr. No	Crop	Area (ha)	Production (M.T)	Productivity (t/ha)
Fruit Crops				
1.	Mango	32665	300252	9.19
2.	Sapota	8133	102886.00	12.65

3.	Ber	5	43	8.60
4.	Banana	3161	163076	51.59
5.	Guava	2	25	12.50
6.	Papaya	417	26265	62.99
7.	Cashew Nut	347	347	1.00
8.	Coconut	593	5029	8.48
	Total	45323	597923	167
Vegetable crops				
9.	Onion	200	3485	17.94
10.	Brinjal	3029	59490	19.64
11.	Cabbage	205	4717	23.01
12.	Okra	6448	81564	12.65
13.	Tomato	176	4154	23.60
14.	Cauliflower	133	2601	19.56
15.	Clusterbean	741	7282	9.83
16.	Cowpea	876	7009	8.00
17.	Cucurbits	10800	1965601	18.20
	Total	22608	2135903	152.43
Flower crops				
18.	Rose	98	858	8.76
19.	Mari gold	722	7128	9.87
20.	Spider lily	1338	13487	10.08
	Total	2158	21473	28.71
Medicinal crops				
21.	Alovera	5	75	15.00
22.	Safed nusli	11	44	4.00
23.	Ashwgandha	2	0.1	0.05
24.	Pacholi	6	240	40.0
	Total	24	359.1	59.05
Spices and condiments crops				
25.	Chilli	740	1110	1.50
26.	Garlic	190	1235	6.50
27.	Turmeric	874	19534	22.35
28.	Ginger	132	2643	20.02
	Total	1936	24522	50.37

Source : DAO, Navsari District

2.5. Weather data (2019-20)

Month	Rainfall (mm)	Temperature °C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
Apr-19	0.0	36.6	21.5	86	51
May-19	0.0	34.7	24.3	85	62
Jun-19	262.0	33.5	25.4	92	77
Jul-19	491.0	31.4	24.2	94	87
Aug-19	535.0	29.9	23.5	96	87
Sep-19	750.0	30.9	22.9	96	88
Oct-19	95.0	33.4	21.5	88	68
Nov-19	37.0	33.2	19.1	91	64
Dec-19	0.0	31.0	15.8	85	62
Jan-20	0.0	29.0	11.6	87	55
Feb-20	0.0	32.5	15.4	83	40
Mar-20	0.0	33.4	18.2	89	49
Total	2170.0	-			
Total Mean	-	32.5	20.3	89.3	65.8

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

Table: Latest livestock census 2012

Sr. No.	Name of the Livestock	Total No. of livestock as per 2012 census
1	Cattle	232738
2	Buffalo	115032
3	Camels	06
4	Sheep	2089
5	Goats	84519
6	Horses and Ponies	95
7	Donkeys Mule & Dogs	3070
8	Rabbits	824
9	Pigs	443
10	Poultry Birds	874174
11	Others	24
Total		13,13,014

(Source: Dy. Director, District Animal Husbandry Office, Navsari)

Category	Population	Production	Productivity
Cattle			
Crossbred	95594	89230 tones	NA
Indigenous	60725	19630 tones	NA
Buffalo	102142	69620 tones	NA
Sheep	3000	4 metric tones	NA
Goats	87207	3390 tones	NA
Pigs	369	NA	NA
Crossbred	NA	NA	NA
Indigenous	NA	NA	NA
Rabbits	NA	NA	NA
Poultry			
Hens	245300	129.72 lakhs	NA
Desi	189800	447.79 lakhs	NA
Fish (Reservoir)			
Marine	53 km	17191 MT	-
Inland	412.06 ha	269 MT	652.8 kg/ha
Prawn	-	-	-
Scampi	735 ha.	65 MT	88.4 kg/ha
Shrimp	845 ha.	796.7 MT	942.8 kg/ha

(Source: Dy. Director, District Animal Husbandry Office, Navsari)

Fisheries Statistics as on 31/03/2015 is as under

No. of Boats to catch fish in the District	
Mechanized Boats	694
Without Mechanized Boats	378
No. of Active Fisherman in the District	19868
Production of Fishes in MT	28596
No. of Primary Fisheries Co-operative Societies	19
No of Membership of Co-operative Societies	6230
Subscribed Share Capital of Co-operative Societies	Rs. 23,51,140
Fishing Nets	21453
Ice Factories	08
Boat Building Yards (70 MT capacity)	03
Frozen Storage	01
Boat Licenses issued	470
Fishing Ponds	630

The Fishermen Population as on 31/03/2014 is as under:

Sr. No.	Taluka (Nos.)	Male (Nos.)	Female (Nos.)	Children (Nos.)	Total (Nos.)
1	Navsari	394	348	232	974
2	Jalalpore	5604	5553	7675	18832
3	Gandevi	4681	4643	4627	13951
4	Chikhli & Khergam	443	416	439	1298
5	Vansda	704	601	740	2045
TOTAL		11826	11561	13713	37100

(Source: Fisheries Department, District Panchayat, Navsari)

2.7. Details of Operational area / Villages

Taluka	Name of the block	Name of the village	Major crops & enterpriess	Major problem identified	Identified Thrust Areas
Navsari	Navsari	Adada Kachhol Unn	-Paddy -Sugarcane -Spider lily -Vegetable -Mango -Sapota - Animal Husbandry -Fisheries - Food preservation	1. Injudicious use of fertilizer, pesticides and Irrigation water and other inputs 2. Difficulty for timely availability of certified seed and planting materials 3. Less availability of labours at the time major agricultural operations during crop seasons 4. No seed treatment in any crop 5. Heavy infestations of weeds 6. Traditional Management of animals 7. Aquatic weed infested village ponds availability 8. Lack of knowledge & scientific information regarding fish feeds & nutrition	1. Fertilizer, weed and Irrigation water management. 2. Pests and disease management 3. Soil health conservation 4. Integrated farming 5. Seed production 6. Scientific management of livestock 7. Disease management in animals 8. Composite fish culture 9. Water quality management 10. Value addition

Jalalpore	Jalalpore	Bodali Mandir Pethan	<ul style="list-style-type: none"> -Paddy -Sugarcane -Wheat -Mango -Sapota -Vegetable -Animal Husbandry -Fish culture -House hold food security 	<ol style="list-style-type: none"> 1. Frequent flooding of farms during rainy season. 2. Coastal area salinization. 3. Injudicious use of fertilizer, pesticides and Irrigation water 4. Old orchard of mango and sapota 5. Less knowledge about tuber crops. 6. No Crop rotation. 7. Traditional Method of kitchen garden 8. Nutrition deficiency in animals. 9. No deworming in animal 10. Lack of knowledge & scientific information regarding fish feeds and nutrition 	<ol style="list-style-type: none"> 1. Orchard management 2. Soil health conservation. 3. IPDM 4. Integrated farming 5. Water Harvesting and storage 6. Cropping system 7. Production technology 8. Feed management in animals 9. Health management in animals 10. Fish nutrition 11. Fish disease management 12. Value addition 13. Kitchen gardening
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Gandevi	Gandevi	Changa Dhanori Vagalvada	<ul style="list-style-type: none"> -Paddy -Pulses -Mango -Sapota -Sugarcane -Vegetable -Animal Husbandry - Fishing - Drudgery reduction 	<ol style="list-style-type: none"> 1. Lack of knowledge of pruning 2. Less availability of labors at the time major agricultural operations during crop seasons. 3. Injudicious use of fertilizer, pesticides and Irrigation water 4. Heavy infestations of weeds. 5. No crop rotation 6. No knowledge on orchard management. 7. Lack knowledge on ornamental crops 5. Mismanagement of calf 8. Lack of knowledge about production of quality animals 9. Lack of skill for conducting fish farming 10. Reduction in quantity of fresh water prawn 	<ol style="list-style-type: none"> 1. Soil health conservation 2. Crop diversification 3. Seed Production 4. Nutrient use efficiency 5. Production technology on ornamental crops 6. Pests and disease management 7. Rejuvenation of old orchards 8. Cultivation of fruits 9. Scientific calf rearing 10. Fish culture in village pond 11. Women and child care 12. Methods of prawn culture
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Chikhli	Chikhli	Soldhara Bamanvada Golav	<ul style="list-style-type: none"> -Paddy -Gram -Green gram -Sugarcane -Mango -Sapota -Tubers -Vegetable -Livestock -Fish 	<ol style="list-style-type: none"> 1. Injudicious use of fertilizer & pesticides 2. Lacking in production technology of tuber crops 3. Less availability of labours at the time major agricultural operations during crop seasons 4. Heavy infestations of weeds 5. Severe Snail problem during Kharif season 6. Traditional calf rearing 7. Nutritional deficiency in animals 8. Weed infested shallow village ponds 	<ol style="list-style-type: none"> 1. Fertilizer, weed and Irrigation water mgmt. 2. Organic farming 3. Mechanization of agricultural operations 4. Production technology 5. Value addition in tuber crops 6. Seed treatment 7. IPDM 8. Soil health conservation 9. Water harvesting & recharge 10. Scientific calf rearing 11. Quality animal products 12. Fish culture method 13. Agriculture marketing
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Vansda	Vansda	Nani valzar Unai charvi Kharjai	-Paddy -Pulses -Mango -Sapota -Pointed gourd -Vegetables Animal Husbandry -Fishery	<ol style="list-style-type: none"> 1. Irrigation shortage during summer season 2. Injudicious use of fertilizer, pesticides. 3. High incidence of pests and diseases in vegetable crops. 4. No knowledge about cropping system 5. Lack knowledge on protective cultivation 6. No availability of seed and seedling materials 7. Traditional methods of rearing animals 8. No deworming in animals 9. No awareness on Fish culture species 10. Weed infested village pond 	<ol style="list-style-type: none"> 1. Organic farming. 2. Water Harvesting and storage. 3. Integrated farming 4. Pests and disease management 5. Soil health conservation 6. Crop diversification 7. Disease management in animals 8. Feed management in animal 9. Fish stocking & Fish composition rate 10. Pond water quality management
Khergam	Khergam	Naranpur Bahej Bhervi	-Pointed gourd -Vegetables -Animal Husbandry	<ol style="list-style-type: none"> 1. Fragmented land holding 2. Poor financial status of farmers 3. Low productivity of milk animals 	<ol style="list-style-type: none"> 1. Mix farming concept (Agri.+Horti.+livestock)

2.8. Priority thrust areas:

Thrust area	
Soil health conservation	Kitchen gardening
Integrated farming	Seed treatment
Seed production	Fish culture method
Scientific management of livestock	Organic farming
Quality feed management for animal	Crop diversification
Value addition	Feed management in calf
IPDM	Disease management in animals
Cropping system	Fish stocking & fish composition

3. TECHNICAL ACHIEVEMENTS

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

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
4	2	22	12	137	657.72	1693	3928

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
66	107	2109	5195	161	756	5165	38227

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
112	388.82	9000	5880

Livestock, poultry strains and fingerlings/Fisheries (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
Nil	1425	-	-

3.1. B. Operational areas details during 2018-19

S. No	Major crops & enterprises being practiced in cluster of villages	Prioritized problems in these crops/ enterprise	Extent of area (ha/No.) affected by the problem in the district	Name of Cluster Villages identified for interventions	Interventions (OFT, FLD, Training, extension activity etc.)*
1	Paddy	Low production variety	1500	Adada Kachhol Unn Bodali Mandir Pethan Changa Dhanori Vagalvada Soldhara Bamanvada Golav Nani valzar Unai charvi Kharjai Naranpur Bahej Bhervi	FLD, Training for farmers & extension personnel and Khedut shibir
2	Paddy	Low production variety	1100		FLD, Training and Khedut shibir
3	Paddy	Low production variety	1600		FLD, Training and Khedut shibir
4	Paddy	Use of local variety	1400		FLD, Training and Khedut shibir
5	Green gram	Use of local variety	250		OFT, FLD, Training and Khedut shibir
6	Chick pea	Use of local variety	710		FLD, Training and Khedut shibir
7	Chick pea	Use of local variety	760		FLD, Training and Khedut shibir
8	Green gram	Use of local variety	300		FLD, Training and Khedut shibir
9	Pigeon pea	Use of local seed and flate sowing	800		FLD, Training and Khedut shibir
10	Chilli	Murda complex in chilly	80		OFT, Training and Khedut shibir
11	Paddy	No awareness about bio control	1300		FLD, Diagnostic visit, Training
12	Mango/Sappota	No use of fruit fly trap	22000/6000		FLD, Diagnostic visit, Training
13	Sapota	Low production wilting	300		FLD, Diagnostic visit, Training
14	Kitchen garden	Haphazardly growing kitchen garden practices	510		FLD, Training and Khedut shibir
15	Mango	Use of local variety	22000		FLD, Training and Khedut shibir
16	Mango	No use of bio fertilizers	22000		FLD, Diagnostic viist, Training
17	Mango	No use of fruit fly trap	22000		FLD, Diagnostic viist, Training

18	Brinjal	Use of local variety	1500		FLD, Training, Field visit
19	Plastic bags	Loss of stored grains	100		FLD, Training and Mahila shibir
20	Fresh water fish farming	1. Low fish yield 2. Non availability of quality fish seeds (yearlings)	60 ha.	Matwad, Onjal, Aat, Soldhara, Ancheli, Mohanpur, Ranverikhurd, Nandarkha, Dandi, Kothamadi, chijgam, Kanera, Pitha, Karadi	1. OFT on stocking density of fish seed for stunted yearlings production in cage culture system. 2. OFT on to assess fish species stocking ratio of Indian major carps and Chinese carps in culture ponds. 3. FLD- Indian major carps seed production from fry to yearlings. 4. FLD- Fresh water fish seed stocking density and species ratio for higher production in village tanks/khet talavadi/ courtyard tanks. 5. Fish nutrition and feeding management for fresh water culture

* Support with problem-cause and interventions diagram

3.2. Technology Assessment

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation	-	-	1	-	-	-	-	-	-	1
Integrated Pest Management	-	-	-	-	1	-	-	-	-	1
Total			1		1					2

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

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Production and Management	0	0	0	0	1	1
TOTAL	0	0	0	0	1	1

B. Achievements on technologies Assessed

B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Varietal Evaluation	Mung	New Variety in green gram	1	6	1.2
Integrated Pest Management	Chilli	Sucking pest management in chilli	1	6	1.2
Total			2	12	2.4

B.2. Technologies assessed under Livestock and other enterprises

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Production and management	Fisheries	Stocking density of fingerlings (Catla, Rohu, Mrigal and Grass carp) for production of stunted yearlings in cage culture system	1	20
Total			1	20

1.Results of Technologies Assessed

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Green gram	Irrigated	Yellow vein mosaic virus infestation in mung bean & small seed of green gram	Assessment of new variety of green gram	1	Gujarat Greengram-6	Seed Weight & yield	5.1 gm of 100 seeds	878 kg/ha	New variety is very good yield & seed size is bold & market price is also good as compared to meha	---	---
					Meha		3.5 gm of 100 seeds	727 kg/ha			

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Variety Meha (Farmer's practice)	Navsari Agricultural University technology	727	kg/ha	27001	1.95
Variety GM-6	Navsari Agricultural University technology	878	kg/ha	38483	2.36

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Chilli Green	Irrigated	Due to sucking pests in chilli there will be drastic reduction in chilli yield and also these sucking pests acts as vectors in disease transmission	Sucking pest management in chilli	6	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	No. of sucking pests and Yield	No. of thrips /leaf: 3.43 No. of mites /leaf: 7.20 No. of Ahids /leaf: 4.70 Leaf curl index :0.43 Note: Observation on first three leaves on top, middle and bottom of the crop	10870 kg/ha	Biopesticides and biorationals are good in managing the sucking pests and also economical compare to chemical farming	---	---

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Indiscrominate use of pesticide(Cypermethrin +spiromesifen+indoxarb) (Farmer's practice)	Farmers technology	9200	kg/ha	143120	2.07
Seedling treatement 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	2.67

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

1. Title of technology assessed. : Assessment of new variety of green gram
2. Problem definition : Yellow vein mosaic virus infestation in mung bean & small seed of greengram
3. Details of technologies selected for assessment : Yellow vein mosaic virus resistance new released variety GM-6
4. Source of technology : Navsari Agricultural University, Navsari
5. Production system and thematic area : Varietal Evaluation
6. Performance of technology with performance indicator : Yellow vein mosaic virus resistant variety increase seed yield
7. Feedback, matrix scoring of various technology parameters do techniques. : Feedback is good
8. Final recommendation for micro level situation : Second year assessment is running
9. Constraints identified and feedback for research : none identified
10. Process of farmers participation and their reaction : Good

1. Title of technology assessed. : Assessment of new variety of okra
 2. Problem definition : Lack of awareness of new variety.
 3. Details of technologies selected for assessment : Gujarat Anand okra
 4. Source of technology : Anand Agricultural University, Anand
 5. Production system and thematic area : Varietal Evaluation
 6. Performance of technology with performance indicator : Low yield compared to market variety
 7. Feedback, matrix scoring of various technology parameters do techniques. : Lower yield compared to other varieties under south Gujarat condition
 8. Final recommendation for micro level situation : Farmers are not ready to grow this variety again.
 9. Constraints identified and feedback for research : Under south Gujarat condition variety do not perform well in terms of yield.
 10. Process of farmers participation and their reaction : Difficult to convince to grow again
-
1. Title of technology assessed. : Sucking pest management in chilli
 2. Problem definition : Farmers of south Gujarat are not practicing integrating approach in management of chilli 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 chilli yield in farmer's field.
 3. Details of technologies selected for assessment : seed treatment with imidacloprid 70%ws @ 400-600 g/100 seed and foiliar spray of spinosad 45% sc @ 64 ml in 200 lit of water. Before transplanting seedling root dip *trichoderma viridae* 5 gm/lit for 30 minutes and use of Blue and yellow sticky traps
 4. Source of technology : SAU
 5. Production system and thematic area : Integrated pest & disease management
 6. Performance of technology with performance indicator : Performance of the technology good
Performance indicators management of aphids, mites, trips and leaf curves disease
 7. Feedback, matrix scoring of various technology parameters do techniques. : Feedback is good
 8. Final recommendation for micro level situation : Second year assessment is running
 9. Constraints identified and feedback for research : none identified
 10. Process of farmers participation and their reaction : Good

1. Title of technology assessed. : Stunted yearlings of IMC(Catla, Rohu and Mrigal) and Grass carp production in cage culture system
2. Problem definition : Lack of technical knowledge of various culture systems and cultivable traits of particular growing organisms
3. Details of technologies selected for assessment : Rearing of IMC (Catla, Rohu and Mrigal) and Grass carps' seeds of size 40mm to 50 mm in net cages of size 3 m x 1m x 1m with 10 mm mesh nylon netting material. The stocking density is 166 number per cubic meter with species ratio 2:4.5:2.5:1 :: catla:Rohu:mrigal:Grass carp.
4. Source of technology : College of Fisheries Science, Navsari Agricultural University, Navsari, Navsari
5. Production system and thematic area : Production system: Nylon netting or plastic cages. Thematic area: Inland Fisheries
6. Performance of technology with performance indicator : Size (Length and weight) and survival (Production of seeds in numbers)
7. Feedback, matrix scoring of various technology parameters do techniques. : Although it is under assessing but will be the best to utilize deep water resources such as stone quarry and village tanks along with grow out culture system. This system requires regular checking, maintenance and cleaning of cages.
8. Final recommendation for micro level situation : It is under assessing
9. Constraints identified and feedback for research : Identification of specific natural food organisms for particular fin fish and maintain supply chain in fish rearing system.
10. Process of farmers participation and their reaction : Constant technical backstopping including personal guiding, FLD arrangement, effective presentation and providing exposure to modern culture units attracts farmers to adopt recently developed modern techniques of aquaculture

3.3. FRONTLINE DEMONSTRATION

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

List of technologies demonstrated during previous year and popularized during 2019-20 and recommended for large scale adoption in the district

Sr No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1.	Paddy	ICM	NAUR-1	Demonstration Training, Field day	9	273	60
2.	Paddy	ICM	GNR-3	Demonstration Training, Field day	20	334	88.4
3.	Paddy	ICM	GNR-2	Demonstration Training, Field day	15	120	28.3
4.	Paddy	ICM	GNR-4	Demonstration Training, Field day	2	3	1
5.	Paddy	ICM	GNR-5	Demonstration Training, Field day	10	45	9.2
6.	Paddy	ICM	GNR-6	Demonstration Training, Field day	12	98	20.8
7.	Paddy	ICM	GNR-7	Demonstration Training, Field day	8	17	5.8
8.	Paddy	IPDM	GNR-3	Demonstration Training, Field day	5	20	10
9.	Paddy	IPDM	GNR-4	Demonstration Training	5	20	10
10.	Pigeon pea	ICM	Vaishali	Demonstration Training, KM	20	323	35
11.	Pigeon pea	IPDM	Vaishali	Demonstration Training, KM	5	10	5
12.	Chickpea	ICM	GG-5	Demonstration Training, Field day	15	200	20

13.	Green gram	ICM	GM-6	Demonstration Training, Field day	9	100	20
14.	Pigeon pea	ICM	GNP-2	Demonstration Training, Field day	10	125	20
15.	Little gourd	INM	GNLG-1	Demonstration Training, KM	10	44	1
16.	Pointed gourd	INM	GNPG-1	Demonstration Training, KM	2	15	0.2
17.	Mango	Bio control of pest and diseases	Kesar	Demonstration Training, KM	15	150	30
18.	Mango	INM	Biofertilizer (PSB,KMB, Azto.,)	Demonstration Training, KM	20	325	130
19.	Mango	INM	Novel Spray	Demonstration Training, KM	15	140	35
20.	Mango	INM	Sonpari	Demonstration Training, KM	10	500	5
21.	Sapota	INM	Kalipatti	Demonstration Training, KM	3	21	8.4
22.	Sapota	INM	Kalipatti	Demonstration Training, KM	5	20	35
23.	Turmeric	ICM	GNT-2	Demonstration Training	2	40	0.4
24.	Sweetpotato	INM	C-71	Demonstration Training	1	3	0.3
25.	Fresh water fish culture	Inland fisheries	Fish seed stocking density and species ratio	Demonstrate d in villages tanks, khet talavadi of farmers and courtyard tanks by giving trainings and inputs such as Fish seeds(Fingerlings, yearlings	10	112	27
26.	Fresh water fish culture	Inland fisheries	Fish feed nutrition and feeding methods	Trainings and method demonstration of fish feeding such as bag	18	136	42

				feeding and broad casting by providing various protein content floating fish feed and sinking feed along with rice bran			
27.	Cage farming	Inland fisheries	Pungasius cage culture in village tank	Arranged two floating cages of size 6 m X 4m X 4 m in village tank of Soldhara and trained 5 young persons and demonstrated Pungasius culture by providing seeds and feeds as per requirements	02	5	2
28.	Fish seed rearing	Inland fisheries	Fish seed production from fry to yearlings	Demonstrated fish seed rearing from fry size to yearling size in khet talavadi.	2	7	0.5
29.	Kitchen gardening	Household food security kitchen gardening	To introduce scientific model for maintaining kitchen gardening in kharif, Rabi and summer	Demonstration Training,	150	722	7.22
Total					410	3928	657.52

B. Details of FLDs implemented during 2018-19 (Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops)

Sr. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ Demonstrations			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1.	Paddy	ICM	NAUR-1	Kharif-19	5	60	273	0	273	
2.	Paddy	ICM	GNR-3	Kharif-19	5	88.4	271	63	334	
3.	Paddy	ICM	GNR-2	Kharif-19	2.5	28.3	108	12	120	
4.	Paddy	ICM	GNR-4	Kharif-19	-	1	3	0	3	
5.	Paddy	ICM	GNR-5	Kharif-19	-	9.2	45	0	45	
6.	Paddy	ICM	GNR-6	Kharif-19	2.5	20.8	98	0	98	
7.	Paddy	ICM	GNR-7	Kharif-19	-	5.8	17	0	17	
8.	Paddy	IPDM	GNR-3	Kharif-19	10	10	10	10	20	
9.	Paddy	IPDM	GNR-4	Kharif-19	10	10	10	10	20	
10.	Pigeon pea	ICM	Vaishali	Kharif-19	5	35	94	229	323	
11.	Pigeon pea	IPDM	Vaishali	Kharif-19	5	5	5	5	10	
12.	Chickpea	ICM	GG-5	Rabi-19	5	20	198	2	200	
13.	Green gram	ICM	GM-6	Rabi-19	5	20	8	92	100	
14.	Pigeon pea	ICM	GNP-2	Kharif-19	-	20	100	25	125	
15.	Little gourd	INM	GNLG-1	Kharif-19	5	1	15	29	44	

16.	Pointed gourd	INM	GNPG-1	Kharif-19	5	0.2	5	10	15	
17.	Mango	Bio control of pest and diseases	Kesar	Kharif-19	5	30	70	80	150	
18.	Mango	INM	Biofertilizer (PSB,KMB, Azto.,)	Kharif-19	5	130	130	195	325	
19.	Mango	INM	Novel Spray	Kharif-19	1	35	70	70	140	
20.	Mango	INM	Sonpari	Kharif-19	5	5	200	300	500	
21.	Sapota	INM	Kalipatti	Kharif-19	5	8.4	10	11	21	
22.	Sapota	INM	Kalipatti	Kharif-19	4	35	10	10	20	
23.	Turmeric	ICM	GNT-2	Kharif-19	-	0.4	20	20	40	
24.	Sweet potato	INM	C-71	Kharif-19	10	0.3	3	0	3	
25.	Fresh water fish culture	Inland fisheries	Fish seed stocking density and species ratio	Kharif-19	25	27	65	47	112	
26.	Fresh water fish culture	Inland fisheries	Fish feed nutrition and feeding methods	Kharif-19	30	42	56	80	136	
27.	Cage farming	Inland fisheries	Pungasius cage culture in village tank	Kharif-19	1	2	2	3	5	
28.	Fish seed rearing	Inland fisheries	Fish seed production from fry to yearlings	Kharif-19	2	0.5	3	4	7	

29.	Kitchen gardening	Household food security kitchen gardening	To introduce scientific model for maintaining kitchen gardening in kharif, Rabi and summer	Kharif-19	-	7.2	165	557	722	
	Total				158	657.5	2064	1864	3928	

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Paddy	Kharif-18	Rainfed	Black	L	M	H	Mung	July-19	Oct-19	2170	86
Paddy	Kharif-18	Rainfed	Black	L	M	H	Paddy	July-19	Oct-19	2170	86
Paddy	Kharif-18	Rainfed	Black	L	M	H	Paddy	July-19	Oct-19	2170	86
Paddy	Kharif-18	Rainfed	Black	L	M	H	Gram	July-19	Oct-19	2170	86
Paddy	Kharif-18	Rainfed	Black	L	M	H	Paddy	July-19	Oct-19	2170	86
Paddy	Kharif-18	Rainfed	Black	L	M	H	Paddy	July-19	Oct-19	2170	86
Paddy	Kharif-18	Rainfed	Black	L	M	H	Paddy	July-19	Oct-19	2170	86
Paddy	Kharif-18	Rainfed	Black	L	M	H	Paddy	July-19	Oct-19	2170	86
Paddy	Kharif-18	Rainfed	Black	L	M	H	Paddy	July-19	Oct-19	2170	86
Pigeon pea	Kharif-18	Rainfed	Black	L	M	H	-	July-19	Oct-19	2170	86
Pigeon pea	Kharif-18	Rainfed	Black	L	M	H	-	July-19	Oct-19	2170	86
Chickpea	Rabi-18	Rainfed	Black	L	M	H	Paddy	Nov-19	Feb-20	2170	86
Mango	Kharif-18	Rainfed	Black	L	M	H	Mango	-	May-20	2170	86
Sapota	Kharif-18	Rainfed	Black	L	M	H	Sapota	-	Oct-19	2170	86
Mango	Kharif-18	Rainfed	Black	L	M	H	Mango	-	May-19	2170	86
Little gourd	Kharif-18	Irrigated	Black	L	M	H	paddy	July-19	Aug-19	2170	86
Mango	Kharif-18	Rainfed	Black	L	M	H	Mango	-	May-19	2170	86
Mango	Kharif-18	Rainfed	Black	L	M	H	Mango	-	May-20	2170	86
Fish farming	Kharif-18	-	-	-	-	-	Fish	-	Oct-19	2170	86

IMC & Chinese carp											
Fish farming	Kharif-18	-	-	-	-	-	Fish	-	Oct-19	2170	86
Cage farming	Kharif-18	-	-	-	-	-	Fish	-	Oct-19	2170	86
Fish seed rearing	Kharif-18	-	-	-	-	-	Fish	-	Oct-19	2170	86

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Experiment on cage culture in big village tanks need to be conducted
2	Preparation and testing of amrutmitti, amrutjal, jivamrut and panchgavya for different crops.
3	Preparation and testing of herbal pesticide for controlling pests and diseases.
4	Testing of cow dung and cow urine for enhancing growth and controlling pests and diseases.
5	Module for pesticide free productions.
6	Availability of country seeds.
7	Develop salt reclamation bio fertilizers.
8	To develop new variety of hybrid vegetables.
9	Develop early maturing and high yielding pigeon pea variety.
10	Branches of mango or sometime mango plant die in month of September-October.
11	Stem cracking or bark splitting was found in mango.
12	Terrace gardening, Box gardening and hanging pot kitchen gardening / availability of vegetables throughout the year on season basis.
13	Cost of feeding animals to be reduced
14	Experiment on amur common carp need to be conducted

Farmers' reactions on specific technologies

Sr. No	Feed Back
1	Banana sap highly performed and gave good results
2	Increase seed availability for newly released varieties at village level timely and in small packing (pulses, vegetables etc.).
3	Introduction of IPDM technology becomes helpful in reducing pests and disease
4	NAUR-1 is found susceptible to false smut & also lodging.
5	Grain discoloration was found in GNR-3.
6	Profuse tillering but more pest incidence was found in GNR-4 after penical initiation.
7	The wastage of paddy straw is reduced and milk yield is increased by feeding of urea treated paddy straw.
8	Optimized inter calving period in buffalo
9	More number of complication around parturition in animals.
10	Inland aquaculture variety is good
11	Fish production increased with less expenditure.
12	Improve in the interest and initiation to bring village tanks for fish culture activities.
13	Cage fish farming can be significant component in blue revolution.

Extension and Training activities under FLD

Sr. No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days	16	17/4,1/5,18/9,10/10,10/10.10/10,16/10,19/10,19/10,19/10,19/10,29/1,29/1,29/1,30/1,31/1	632	-
2	Farmers Training	24	May, June, July, Oct, Sep, Nov, Dec. Jan, Feb, March	1265	-
3	Media coverage	35	May, June, July, Aug, Sep, Nov, Dec. Jan, Feb, March	-	-

C. Performance of Frontline Demonstrations

Frontline demonstrations on Oilseed crops - Nil

Frontline Demonstration on Pulse crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Pigeonpea		Introduction of new variety+ seed treatment with fungicide and biofertilizers	Vaishali	323	35	10.48	7.68	9.19	7.56	21.56	27960	57604	29644	2.06	28580	47341	18761	1.65
Pigeonpea	Use of biopesticides	Use of Biopesticides and H. armigera traps	Vaishali	10	5		8.98	10.87			31970	68100	36130	2.130121989	33210	55828	22618	1.68

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

** BCR= GROSS RETURN/GROSS COST

FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average												
Cereals																				
Paddy	To increase the productivity of paddy	Introduction of new variety+ seed treatment with fungicide and biofertilizers	NAUR-1	273	60	51.37	44.61	48.63	42.17	15.32	-	-	37855	95704	57849	2.52	39950	82738	42788	2.07
	To increase the productivity of paddy	Introduction of new variety+ seed treatment with fungicide and biofertilizers	GNR-2	120	28.3	47.39	43.58	45.77	42.17	8.54			38150	90075	51925	2.36	39450	82738	43288	2.09
	To increase the productivity of paddy	Introduction of new variety+ seed treatment with fungicide and biofertilizers	GNR-3	334	88.4	55.36	47.83	52.18	44.21	18.03			38650	107908	69258	2.79	39450	91161	51711	2.31
	To popularize the new high yielding bio fortified variety	Introduction of new variety+ seed treatment with fungicide and biofertilizers	GNR-4	3	1	43.47	40.86	38.48	34.72	10.83			37870	75729	37859	1.99	38450	64649	26199	1.68
	To popularize the	Introduction of new variety+ seed treatment	GNR-5	45	9.2	49.52	44.24	46.04	42.17	9.18			37460	90607	53147	2.41	38660	78521	39861	2.03

	new high yielding variety	with fungicide and biofertilizers																		
	To popularize the new high yielding variety	Introducation of new variety+ seed treatment with fungicide and biofertilizers	GNR-6	98	20.8	48.63	42.09	45.64	40.24	13.42			38200	89820	51620	2.35	38990	74927	35937	1.92
		Introducation of new variety+ seed treatment with fungicide and biofertilizers	GNR-7	17	5.8	47.21	40.46	44.55	39.87	11.74			38200	87674	49474	2.29	38990	74238	35248	1.90
	Introducion of IPDM technologies	Biopesticides (Insecticides+fungicides) seed treatment, seedling dip and foliar sprays	GNR-3	20	10	52.63	46.48	48.34	42.26	14.39			39150	97501	58351	2.490446999	42340	86928	44588	2.05
	Use of bio agents	Seedling dip treatment with biopesticides , Corcyra egg staple and Pheromone traps	GNR-4	20	10	42.65	36.56	38.59	34.12	13.10			40110	83315	43205	2.077162802	41020	74006	32986	1.80
Vegetables																				
Little gourd		New variety	GNL G1	44	1	220	180	200	170	17.65			92000	50000	40800	5.43	82000	42500	34300	5.18
Pointed gourd		New variety	GNPG 1	15	0.2	118	98	108	96	12.50			55000	37800	32300	6.87	50000	33600	28600	6.72
Fruit crops																				
Mango	IPDM	Nauoji Steinhouse fruit fly	Kesar	150	30	113.58	89.62	98.40	84.80	16.04			35200	196800	161600	5.59	31400	169600	138200	5.40

Mango		biofertilizer	PSB, KMB, Azoto	325	130	120	82	101	92	9.78			75000	404000	329000	5.39	64000	368000	304000	5.75
Mango		Novel spray	Novel spray	140	35	132	80	106	94	12.77			78000	424000	346000	5.44	65000	376000	311000	5.78
Mango		New variety	Sonpatri	500	5	Continue.....														
Sapota		Novel spray	Availa ble	21	8.4	150	130	140	125	12.00			72000	210000	138000	2.92	68000	187500	119500	2.76
Sapota		Novel spray	Availa ble	20	35	150	128.94	139.47	125	11.58			70480	278940	208460	3.96	67290	250000	182710	3.72
Spices & condiments																				
Turneric	To popularize the new high yielding variety	Introduction of new variety+ seed treatment with fungicide and bio fertilizers	GNT-2	40	4.0	256.72	207.23	224.53	198.31	13.22			132190	396969	264779	3.003018383	139560	349422	209862	2.50
Medicinal & aromatic plants																				
Fodder Crops																				
Tuber crops																				
Sweet potato		New variety	C-71	3	0.3	123	102	112.5	100	12.50			38000	60000	22000	1.58	34000	50000	16000	1.47

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

** BCR= GROSS RETURN/GROSS COST

FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units (Animal/ Poultry/ Birds, etc)	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
NIL																	

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

** BCR= GROSS RETURN/GROSS COST

FLD on Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters production (Kg/ha)		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demons Ration	Check		Demons ration(Survival)	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Fisheries	Inland Fisheries	Fish seed stocking density and species ratio	112	27	1018	640	59.06			47000	122160	75160	2.59	39000	76800	37800	1.96
Fisheries	Inland fisheries	Fish feed nutrition and feeding methods	136	42	2436	1830	33.11			108388	297192	188804	2.74	87080	219600	132520	2.52
Fisheries	Inland Fisheries	Pungasius cage culture in village tank	5	6X4 mt. 2 cage	1500	860	74.42			93500	180000	86500	1.92	68600	103200	34600	1.50
Fisheries	Integrated Fish farming	Fish seed production from fry to yearlings	7	0.5	32000	20000	60.00			68000	224000	156000	3.29	52000	122000	70000	2.34

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

** BCR= GROSS RETURN/GROSS COST

FLD on Other Enterprises

Category	Name of the technology demonstrated	No. of Farmer	No. of farmer	No. of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.) or Rs./unit				Economics of check (Rs.) or Rs./unit				
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)	

D. Performance of Cluster Frontline Demonstrations (CFLD)

CFLD on Oilseed crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
NIL																		

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

** BCR= GROSS RETURN/GROSS COST

FLD on Women Empowerment

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

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.)			
						Demo	Check		Land preparation	Sowing	Weeding	Total	Land preparation	Labour	Irrigation	Total
NIL																

FLD on Other Enterprises: Kitchen Gardening

Category	Name of the technology demonstrated	No. of Farmer	No.of farmer	No.of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.) or Rs./unit				Economics of check (Rs.) or Rs./unit			
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Vegetable kit	Kitchen gardening	To introduce them scientific model for maintaining Kitchen gardening in Rabi and Summer	722	7.2	3	2	1.6	-	-	8400	10000	-3400	0.60	10000	4000	-6000	0.40

FLD on Demonstration details on crop hybrids

Crop	technology demonstrated	Hybrid Variety	No. of Farmers	Area (ha)	Yield (q/ha)			Check	% Increase in yield	Economics of demonstration (Rs./ha)			
					Demo					Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average						
NIL													

Note : Remove the Enterprises/crops which have not been shown

CFLD on Pulse crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Pigeon pea		Introduction new released variety	GNP-2	125	20	11.92	9.44	10.71	8.94	20.47	27590	62118	34528	2.25	26834	51852	25018	1.93
Green gram		Introduction new released variety	GM-6	100	20	9.42	7.04	8.36	6.76	23.67	26950	66286	39336	2.46	28270	53620	25350	1.90
Chickpea		Introduction new released variety	GG-5	200	200	15.73	11.26	13.78	10.93	26.08	28580	81613	53033	2.86	27790	64640	36850	2.33

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

** BCR= GROSS RETURN/GROSS CO

g) Medicinal and Aromatic Plants										
GT (a-g)	8	22	278	300	34	85	119	56	363	419
III Soil Health and Fertility Management										
Soil fertility management	2	25	10	35	71	48	119	96	58	154
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Nutrient Use Efficiency										
Balance use of fertilizers	1	42	8	50	16	16	32	58	24	82
Soil and Water Testing	1	2	0	2	15	50	65	17	50	67
Others (pl specify)										
Total	4	69	18	87	102	114	216	171	132	303
IV Livestock Production and Management										
Total	0	0	0	0	0	0	0	0	0	0
V Home Science/Women empowerment										
Total	0	0	0	0	0	0	0	0	0	0
VI Agril. Engineering										
Total	0	0	0	0	0	0	0	0	0	0
VII Plant Protection										
Integrated Pest Management	1	71	0	71	0	0	0	71	0	71
Integrated Disease Management	1	10	0	10	10	48	58	20	48	68
Bio-control of pests and diseases	1	15	0	15	15	0	15	30	0	30
Production of bio control agents and bio pesticides	1	0	0	0	10	2	12	10	2	12
Others (pl specify)										
Total	4	96	0	96	35	50	85	131	50	181
VIII Fisheries										
Integrated fish farming	1	66	21	87	15	0	15	81	21	102
Fish processing and value addition	1	30	23	53	2	0	2	32	23	55
Carp fry and fingerling rearing	1	9	30	39	0	0	0	9	30	39
Hatchery	1	3	7	10	0	0	0	3	7	10

management and culture of freshwater prawn										
Total	4	108	81	189	17	0	17	125	81	206
IX Production of Inputs at site										
Planting material production	1	10	41	51	0	0	0	10	41	51
Bio-pesticides production	1	4	38	42	0	0	0	4	38	42
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Organic manures production	1	0	0	0	15	0	15	15	0	15
Total	3	14	79	93	15	0	15	29	79	108
X CapacityBuilding and Group Dynamics										
Leadership development	2	59	12	71	0	0	0	59	12	71
Group dynamics	1	110	30	140	0	0	0	110	30	140
Formation and Management of SHGs	1	0	0	0	0	21	21	0	21	21
Total	4	169	42	211	0	21	21	169	63	232
XI Agro-forestry										
Total	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	43	599	573	1172	609	767	1376	1208	1340	2548

Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	1	0	0	0	48	11	59	48	11	59
Resource Conservation Technologies	1	0	0	0	75	21	96	75	21	96
Cropping Systems	0	0	0	0	0	0	0	0	0	0
Crop Diversification	1	0	0	0	13	14	27	13	14	27
Integrated Farming	1	0	0	0	11	20	31	11	20	31
Micro Irrigation/irrigation				0			0	0	0	0
Seed production	1	0	0	0	13	15	28	13	15	28
Nursery management										
Integrated Crop Management	3	0	0	0	39	56	95	39	56	95
Soil & water conservation	1	0	14	14	0	0	0	0	14	14
Integrated nutrient management	3	0	0	0	33	75	108	33	75	108

Production of organic inputs	1	0	0	0	38	3	41	38	3	41
Others (pl specify)										
Total	13	0	14	14	270	215	485	270	229	499
II Horticulture										
a) Vegetable Crops										
Off-season vegetables	1	0	0	0	1	30	31	1	30	31
Nursery raising	1	0	0	0	0	31	31	0	31	31
Exotic vegetables	0	0	0	0	0	0	0	0	0	0
Protective cultivation	1	0	0	0	25	3	28	25	3	28
Others (pl specify)										
Total (a)	3	0	0	0	26	64	90	26	64	90
b) Fruits										
Total (b)	0	0	0	0	0	0	0	0	0	0
c) Ornamental Plants										
Total (c)	0	0	0	0	0	0	0	0	0	0
d) Plantation crops										
Total (d)	0	0	0	0	0	0	0	0	0	0
e) Tuber crops										
Total (e)	0	0	0	0	0	0	0	0	0	0
f) Spices										
Total (f)	0	0	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants										
Total (g)	0	0	0	0	0	0	0	0	0	0
GT (a-g)	3	0	0	0	26	64	90	26	64	90
III Soil Health and Fertility Management										
Soil fertility management	1	0	0	0	1	64	65	1	64	65
Total	1	0	0	0	1	64	65	1	64	65
IV Livestock Production and Management										
Total	0	0	0	0	0	0	0	0	0	0
V Home Science/Women empowerment										
Minimization of nutrient loss in processing	1	0	37	37	0	0	0	0	37	37
Storage loss minimization techniques										
Value addition	2	0	18	18	0	46	46	0	64	64
Women empowerment	1	19	7	26	0	0	0	19	7	26
Women and child care	1	0	0	0	1	55	56	55	1	56
Total	5	19	62	81	1	101	102	20	163	183

Total (a)	8	15	200	215	27	70	97	42	270	312
b) Fruits										
Training and Pruning	2	4	22	26	33	79	112	37	101	138
Total (b)	2	4	22	26	33	79	112	37	101	138
c) Ornamental Plants										
Nursery Management	1	3	56	59	0	0	0	3	56	59
Total (c)	1	3	56	59	0	0	0	3	56	59
d) Plantation crops										
Total (d)	0	0	0	0	0	0	0	0	0	0
e) Tuber crops										
Total (e)	0	0	0	0	0	0	0	0	0	0
f) Spices										
Total (f)	0	0	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants										
Total (g)	0	0	0	0	0	0	0	0	0	0
GT (a-g)	11	22	278	300	60	149	209	82	427	509
III Soil Health and Fertility Management										
Soil fertility management	3	25	10	35	72	112	184	97	122	219
Integrated water management	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0
Balance use of fertilizers	1	42	8	50	16	16	32	58	24	82
Soil and Water Testing	1	2	0	2	15	50	65	17	50	67
Others (pl specify)										
Total	5	69	18	87	103	178	281	172	196	368
IV Livestock Production and Management										
Total	0	0	0	0	0	0	0	0	0	0
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	0	0	0	0	0	0	0	0	0	0
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	1	0	37	37	0	0	0	0	37	37

Planting material production	2	29	62	91	0	0	0	29	62	91
Bio-pesticides production	2	4	38	42	35	0	35	39	38	77
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Organic manures production	2	0	0	0	109	2	111	109	2	111
Total	6	33	100	133	144	2	146	177	102	279
X Capacity Building and Group Dynamics										
Leadership development	3	59	12	71	0	74	74	59	86	145
Group dynamics	3	110	86	196	13	87	100	123	173	296
Formation and Management of SHGs	2	0	0	0	54	25	79	54	25	79
Total	8	169	98	267	67	186	253	236	284	520
XI Agro-forestry										
Total	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	83	736	772	1508	1169	1560	2729	1905	2332	4237

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Integrated farming	1	0	0	0	21	2	23	21	2	23
Integrated crop management	1	6	12	18	0	0	0	6	12	18
Production of organic inputs	1	22	7	29	0	0	0	22	7	29
Shrimp farming	1	12	8	20	0	0	0	12	8	20
Fish processing and value addition	1	3	32	35	1	5	6	4	37	41
Off-season vegetables	1	84	85	169	0	0	0	84	85	169
Training & Pruning	1	22	10	32	0	0	0	22	10	32
TOTAL	7	149	154	303	22	7	29	171	161	332

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Integrated crop management	1	16	10	26	0	0	0	16	10	26
Leadership development	2	42	39	81	0	0	0	42	39	81
Integrated Pest Management	1	0	0	0	13	50	63	13	50	63
TOTAL	4	58	49	107	13	50	63	71	99	170

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Integrated farming	1	0	0	0	21	2	23	21	2	23
Integrated crop management	2	22	22	44	0	0	0	22	22	44
Production of organic inputs	1	22	7	29	0	0	0	22	7	29
Shrimp farming	1	12	8	20	0	0	0	12	8	20
Fish processing and value addition	1	3	32	35	1	5	6	4	37	41
Off-season vegetables	1	84	85	169	0	0	0	84	85	169
Training & Pruning	1	22	10	32	0	0	0	22	10	32
Leadership development	2	42	39	81	0	0	0	42	39	81
Integrated Pest Management	1	0	0	0	13	50	63	13	50	63
TOTAL	11	207	203	410	35	57	92	242	260	502

Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Increasing production and productivity of crops	1	5	40	45	0	0	0	5	40	45
Commercial production of field crops	1	0	0	0	0	30	30	0	30	30
Production and value addition										
Soil health and fertility management	1	9	33	42	0	0	0	9	33	42
Total	3	14	73	87	0	30	30	14	103	117
Plant Protection										
Integrated Disease Management	2	63	1	64	28	38	66	91	39	130
Bio-control of pests and diseases	2	0	27	27	34	4	38	34	31	65
Total	4	63	28	91	62	42	104	125	70	195
Livestock and fisheries										
Fisheries Management	1	15	0	15	0	0	0	15	0	15
Total	1	15	0	15	0	0	0	15	0	15
Home Science										
Value addition	1	0	0	0	0	20	20	0	20	20
Total	1	0	0	0	0	20	20	0	20	20
Agricultural Extension										
Capacity Building and Group Dynamics	2	32	40	72	0	0	0	32	40	72
Total	2	32	40	72	0	0	0	32	40	72
GRAND TOTAL	11	124	141	265	62	92	154	186	233	419

Details of trainings organized under ASCI

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Organic grower	1	14	6	20	0	0	0	14	6	20
Assistant gardener	1	10	5	15	1	4	5	11	9	20
	2	24	11	35	1	4	5	25	15	40

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	1	5691	12	5703
Diagnostic visits	26	94	5	99
Field Day	16	632	4	636
Group discussions	21	408	6	414
Kisan Ghosthi	8	1176	77	1253
Film Show	33	1263	12	1275
Self -help groups	3	51	3	54
Kisan Mela	1	712	10	722
Exhibition	10	8301	15	8316
Scientists' visit to farmers field	50	325	7	332
Farmers' seminar/workshop	3	391	6	397
Method Demonstrations	3	27	6	33

Celebration of important days	8	5358	12	5370
Exposure visits	20	512	15	527
Others (pl.specify)				0
Awareness Programme	5	1080	10	1090
Guest lecture	81	5216	44	5260
Field Visit	80	585	18	603
Khedut Shibir/Mahila Shibir	13	2315	28	2343
Farmer's visit to KVK Farm	144	855	10	865
Soil & water sample analysis	143	140	5	145
Educational Tour	1	75	2	77
Workshop/Seminar/Meeting attended	55	0	0	0
Organic farming pak parisnavad	2	310	8	318
Dignitaries visit to KVK	12	0	0	0
Dial out conference	3	145	6	151
Krishi Mahotsav	3	1778	15	1793
Swachhata hi seva	11	441	10	451
Total	756	37881	346	38227

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	3
Extension Literature	22
Newspaper coverage	35
Popular articles	10
Radio Talks	3
TV Talks	4
Animal health amps (Number of animals treated)	-
Others (pl. specify)	
Research Paper published	4
E-KVK serviced	62
Total	143

3.6. PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS

Production of Seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals	Paddy	GNR-3	-	102.4	3,04,545.00	55
		NAUR-1	-	25.70	81,400.00	15
Pulses	Pigeon pea	Vaishali	-	7.37	61,955.00	20
	Green gram	GM-6	-	0.75	6750.00	5
	Pigeon pea (Seed hub)	Vaishali	-	252.60	2117859	115
Total				388.82	2267964	210

Production of Planting Materials by the KVK

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Vegetable seedlings	Brinjal	Gulabi	-	3650	2190.00	56
	Tomato	S-22	-	1540	924.00	24
	Chilli	-	-	465	279.00	10
	Cabbage	-	-	225	135.00	6
Total				5880	3528	96

Vegetables and other crop produced at KVK, Navsari

Sr. No.	Name of crop	Qty. (kg)	Income generated (Rs.)	Sr. No.	Name of crop	Qty. (kg)	Income generated (Rs.)
1	Brinjal	170	3400	14	Onion	3	60
2	Tomato	53.75	1075	15	Brocoli	18	360
3	Cabbage	23	460	16	Castor	72	3600
4	Ridge gourd	128.75	2575	17	Red beet	32	80
5	Smooth gourd	251	5020	18	Drum stick	290	483
6	Okra	77.75	1555	19	Watermelon	2377.6	59440
7	Bitter gourd	12.5	250	20	Cauli flower	2	40
8	Guvar	4.75	95	21	Raddish	86	215
9	Indian bean	16.25	325	22	Green leafy vegetables	823	4115
10	Bottle gourd	69	1380	23	Tur	2.5	50
11	Little gourd	15	300	24	Green gram	310	24800
12	Pointed gourd	6.25	125	25	Mango	420	16800
13	Chick pea	280.5	1402.5	26	Red Cabbage	6	120
TOTAL		1108.5	17962.5	TOTAL		4442.1	110163
Grand total = 128125.5.00 i.e. One lakh twenty eight thousand one hundred twenty five							

Production of livestock materials:

Live stock / Fishery	Name of the breed	Quantity	Value (Rs.)	No. of Farmers
		Kg		
Fishery	Catla, Rohu, Grass carp	1425 kg.	142500.00	159
Total		1425 kg.	142500.00	159

4. Literature Developed/Published (with full title, author & reference)**A. KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.)****B. Literature developed/published**

Item	Title	Authors name	Number
Research papers	-	-	4
Technical reports	APR, AAP, SAC, ZREAC, MPR, QPR, AGRESCO, QRT	-	25
Popular articles	RKVY yojana antagrath chiku ni safal varta	Dr. C.K.Timbardia	Swadesh swapan
	Siyalu kathol pakoni kheti padhdhati	Dr.K.A.Shah Dr.Sumit Salunkhe Shri R.A.Gurjar Dr. C.K.Timbardia	Krishi Jivan
	Siyalu kathol pakoni kheti padhdhati	Dr.K.A.Shah Dr.Sumit Salunkhe Shri R.A.Gurjar Dr. C.K.Timbardia	Krishi Vigyan
	Chana ni safal varta	-	Krishi Vigyan
	Kitchen Garden	-	Divya Bhaskar
	Gramya vistar bad have shaheroma pan kitchen garden banavvu sambhav	-	Sandesh
	Samprat samayma khetini vastvikta and shasvat khetini Jaruriyat	Dr. C.K.Timbardia	Financial Express
Extension literature			22
Others (Pl. specify)			
TOTAL			58

C. Details of Electronic Media Produced

Sr. No.	Type of media (CD / VCD / DVD/ Audio-Cassette) and Video Clippings developed	Title of the programme	Number
1	CD / DVD	Farmer's Meet	2
2	CD	Khedut shibir	1
3	CD	Kisan Diwas	2
4	CD	ASCI Training	2
5	CD	PM Kisan Sanmman nidhi	5

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

:Success stories:

Successful Case or Success Story of Paddy (GNR-7) (2019-20)

Profile			
Name	: Nanubhai Chhimabhai Gavit	Age	: 54
Village	: Chaundha	Education	: 10 th Pass
Taluka	: Vasda	Land holding	: 4 Vingha
Dist.	: Navsari	Farming Experience	: 22 year
Mo. no	: 9586561315	Crops grown	: Paddy, Pigeon pea, Chick pea, Vegetable and Black Gram

BEFORE CONTACT WITH KVK

Since more than 30 year back, he is cultivated paddy traditionally and uses hybrid variety as results of this, the cost of cultivation is increased and potential yield is not obtained.

AFTER KVK GUIDANCE ADOPTED TECHNOLOGY

Area	-	0.10 ha.
Variety	-	Paddy (GNR-7)
Spacing	-	20 x 15 cm
Seed Treatment	-	Thairum @ 3 gm/kg seed Azosrillum, PSB and KMB each @ 10-20 ml/kg seed
Seed rate	-	25-30 kg/ha
Nutrient management	-	120:30:00 kg NPK/ha
Weeding	-	1 time weeding



- **After KVK intervention**
 - Adaption of improve and moderate resistance to pest and disease medium durations high yielding variety
 - Integrated nutrient management in crop
 - Scientific method of cultivation practices adopted
- **Area of adaptive of technology**
 - Started chickpea cultivation 0.10 ha
- **Result of this technology**
 - ✓ Seed and chemical fertilizers requirement are reduced
 - ✓ Yield is increased
 - ✓ Cost on seed purchasing on every is reduced
 - ✓ More than 34.57 % additional income
- **Yield performance of Paddy (GNR-7) Plot**

Yield (kg/ha)		% increase over check
Demo.	Check	
5534	4589	20.59

- **Income from this**
 - Total income of Rs. 83310 /ha during 115 days only.
- **Horizontal spread**
 - About 66 farm family in the village and surrounding village adopted this technology.



Successful Case or Success Story of Green gram (2019-20)

Profile			
Name	: Jasuben Mohan Patel	Age	: 58
Village	: Vedacha	Education	: 8 th Pass
Taluka	: Jalalpore	Land holding	: 6 Vigha (1. 5ha)
Dist.	: Navsari	Farming Experience	: 32 year
Mo. no	: 9879629329	Crops grown	: Paddy, Mango, Sugarcane, and Green Gram

BEFORE CONTACT WITH KVK

Since more than 26 year back, he is cultivated Green gram traditionally, but it affected by Yellow vein mosaic virus after emergence as results of this potential yield is not obtained and the cost of cultivation is increased.

AFTER KVK GUIDANCE ADOPTED TECHNOLOGY

Area	-	0.2 ha
Variety	-	Green Gram – GM-6
Spacing	-	45 x10 cm
Seed Treatment	-	Thairum @ 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 weeding



- **After KVK intervention**

- Adaption of *summer* green gram recently released good yielding variety
- Integrated nutrient management in crop
- Scientific method of cultivation practices adopted

- **Area of adaptive of technology**

- Started Green gram cultivation approximate 1.0 Vigha (0.20 ha)

- **Result of this technology**

- ✓ Seed requirement is decreased
- ✓ Plant growth is improved
- ✓ Yield is increased
- ✓ More than 38.56 % additional income

- **Yield performance of Green Gram Plot**

Yield (kg/ha)		% increase over check
Demo.	Check	
886	692	28.03

- **Income from this**

- Total income of Rs. 67120/ha during 75-80 days only.

- **Horizontal spread**

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



Green Gram plot of Jasuben Patel

Green Gram plot of Jasuben Patel

Successful Case or Success Story of Chick pea (2019-20)

Profile			
Name	:	Ramiben Janaksingh Gavit	Age : 52
Village	:	Dharampuri	Education : 3 th Pass
Taluka	:	Vansda	Land holding : 2 vigha (0.5 ha)
Dist.	:	Navsari	Farming Experience : 30 year
Mo. no	:	---	Crops grown : Paddy, Chick pea, Okra and Pigeon pea

BEFORE CONTACT WITH KVK

Since more than 20 year back, she is cultivated Chick pea traditionally but it wilted after emergence as results of this, the cost of cultivation is increased and potential yield is not obtained.

AFTER KVK GUIDANCE ADOPTED TECHNOLOGY

Area	-	1 vigha (0.2 ha)
Variety	-	Gujarat Chick Pea - 5
Spacing	-	30 cm
Seed Treatment	-	Thairum @ 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 weeding



- **After KVK intervention**

- Adaption 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**

- ✓ Seed requirement is decreased
- ✓ Yield is increased
- ✓ Mortality of plant is reduced
- ✓ More than 32.94 % additional income

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

Yield (kg/ha)		% increase over check
Demo.	Check	
1396	1119	24.75

- **Income from this**
 - Total income of Rs. 67970 /ha during 115 days only.
- **Horizontal spread**
 - About 43 farm family in the village and surrounding village adopted this technology.



Successful Case or Success Story of Pigeon pea (2019-20)

Profile			
Name	: Champaben Nanubhai Mahala	Age	: 46
Village	: Limzar	Education	: 6 th Pass
Taluka	: Vansada	Land holding	: 4 vigha (1.0 ha)
Dist.	: Navsari	Farming Experience	: 24 year
Mo. no	: 9979392945	Crops grown	: Paddy, Green Gram, Pigeon pea and Vegetables

BEFORE CONTACT WITH KVK

Since more than 20 year back, he is cultivated Pigeon pea traditionally, but it wilted after emergence as results of this potential yield is not obtained and, the cost of cultivation is increased.

AFTER KVK GUIDANCE ADOPTED TECHNOLOGY

Area	-	1.0 vigha (0.2 ha)
Variety	-	Gujarat Navsari Pigeon pea-2
Spacing	-	120 cm
Seed Treatment	-	Thairum @ 3 gm/kg seed Rhizobium, PSB and KMB each @ 10-20 ml/kg seed
Seed rate	-	12-15 kg/ha
Nutrient management	-	25:50:00 kg NPK/ha
Weeding	-	2 time weeding



- **After KVK intervention**

- Adaption of short durations and wilt resistance high yielding variety
- Integrated nutrient management and seed treatment with fungicide and bio-fertilizers in crop
- Scientific method of cultivation practices adopted

- **Area of adaptive of technology**

- Started pigeon pea cultivation 1.0 Vigha

- **Result of this technology**

- ✓ Seed requirement is decreased
- ✓ Yield is increased
- ✓ Mortality of plant is reduced
- ✓ More than 29.59 % additional income

- **Yield performance of Pigeon pea Plot**

Yield (kg/ha)		% increase over check
Demo.	Check	
1148	902	27.27

- **Income from this**

- Total income of Rs. 74410 /ha during 150-160 days only.

- **Horizontal spread**

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





Chick pea plot of Champaben Nanubhai Mahala



Chick pea plot of Champaben Nanubhai Mahala

Use of novel in Mango

Name	Pinaben Hirjibhai Patel	 
Address	A-25, Gayatri Sankul Society, Vijalpore Road, Navsari	
Mobile No	9825760079	
Age	50	
Education	M.Sc. Microbiology	
Land Holding	5 ha	
Farming Experience	7 Years	
Crops Grown	Sugarcan, Mango	
Livestock	Nil	
Before Contact With KVK	No awareness about use of novel banana Sap.	
After KVK Guidance	She became aware and habituate about use of novel banana foliar sap spray at four critical stage of reproductive phase.	


Production Detail

Result to adopt this technology


- Quality fruits
- Minimum fruit drop of Mango

	Mango	
	Check	Banana Novel sap spray
Area	1.0 ha	1.0 ha
Yield	65 q	70 q
Price (q)	3500	3500
Income	227500	245000
Cost	38000	40000
Profit (12 month)	189500	205000

New variety of Little gourd GNLG-1

Profile Name	: Santubhai Devalbhai Chavaria	
Address	: Ankalachha, Vansada	
Mo.no	: 8141073512	
Age	: 45 year	
Education	: 8 th Pass	
Occupation	: Farming	
Farming Experience	: 20 Year	
Land holding	: 20 Guntha	
Live stock	: No	
Problem	: Low yield in Little guard	
Before contact with KVK	:	<ul style="list-style-type: none"> Plants were grown without proper distance. He used to apply fertilizers without soil sample analysis. He was not aware about new high yielding variety Gujarat Navsari Little Gourd-1. He was not aware about benefits of use of novel banana sap foliar fertilizer.
After KVK intervention	:	<ul style="list-style-type: none"> He became aware about importance of soil analysis based application of fertilizer & manure which reduced cost of cultivation. Proper fertilizer at proper stage & use of novel liquid organic fertilizers at reproducing phase. Proper grading of produce helped for easy marketing & high remunerative price.
Effect of KVK intervention	:	<ul style="list-style-type: none"> Farmers became aware about importance of soil analysis. Farmers became aware about new high yielding variety. "Gujarat Navsari Little Gourd-1" compared to local variety. Farmer became habituate for use of recommended dose of fertilizer on basis of soil analysis. NPK (50:50:50) proper distance among plants. biocontrol methods like light trap and biological control of fruit fly by culture .
Economics	Check	GNLG-1
AREA	10 Guntha	10 Guntha
YIELD	1500 Kg	2000 Kg
PRICE	25 Rs/Kg	25Rs / Kg
INCOME	37,500 Rs	50,000 Rs
COST	17,000 Rs	17,000 Rs
PROFIT	20,500	33,000 Rs

Use of Pointed gourd : GNPG-1 (Success Story 2019-20)

Name	Niruben Pravinbhai Patel	
Address	Ashram Faliya, At.-Po. : Sindhai Ta : Vandsa Dist. : Navsari State : Gujarat	
Mobile No	9913691044	
Age	55	
Education	9 th Pass	
Land Holding	4 Acre	
Farming Experience	25 Years	
Crops Grown	Parval, Paddy, Sugarcane, Brinjal	
Livestock	5 Cow and 3 Buffalo	
Before Contact With KVK	No information about new released variety of Pointed gourd : GNPG-1 (Release Year - 2014) from NAU, Navsari.	
After KVK Guidance	She became aware and habituate about use of Pointed gourd : GNPG-1 from NAU, Navsari.	

Production Detail


Result to adopt this technology

- Qualitative bigger size of fruits
- High production compared to local variety

	Pointed gourd	
	GNPG-1	Check
Area	0.2 ha	0.2 ha
Yield	92 q/ha	80 q/ha
Price (q)	2000	2000
Gross cost	55000	50000
Gross return	184000	160000
Net return	129000	110000

Success Story: Home Science

Title: Papad and Papdi making : A venture Adding value to Farm Women's social and economic status.

	<p>Name of the women Entrepreneurer: Smt. Jasuben Mohanbhai Patel</p> <p>Village: Vedchha(Chok Faliya)</p> <p>Tal: Jalalpor Gujarat.</p> <p>Dist: Navsari</p> <p>Mob. 9879629329</p>
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Profile	Thematic area: Value Addition		
Age	:	59 yrs.	Adoption of technology: Attended 2 days on campus training on post harvest technology
Education	:	8 th pass	
Occupation	:	Housewife	
Marital status	:	Married	
Entrepreneur Experience	:	8 yrs	
Live Stock	:	-	

Introduction and Problems:

This is the story of rural farm women Smt. Jasuben Mohanbhai Patel. Living with her family in village of Navsari district totally dependent on agriculture. Before 10 years she was faced economic crisis due to lack of knowledge and awareness about scientific farming and value addition of farm produce.

Before KVK intervention and KVK contact:

- She had not any knowledge about value addition.
- Due to small land area they take only three crop per year.
- Small scale farming is not enough source for income generation and sustainable livelihood.

KVK intervention:

- Before 8 year she came in contact with KVK through FTC, Navsari then after three month she had attended **2 days on campus training on post harvest technology**. After this training she become aware about value addition of regional crops. Before KVK contact she prepared home base Papad and Papadi during summer season only. But after that training she decide to develop her skill and apply her knowledge on vocational base then she start making papad and papadi on commercial base. she start to took order from near by her villages. after that till day she could not look back in her bussiness.
- KVK Motivate to start an enterprise.
- Technical guidance for starting the unit.
- Advisory services.
- Follow- up visits.
- Technical back-up in running the unit when required

After KVK Intervention :

- Now a day she sell her product in both Navsari city and neighbour villages
- She prepare 10 kg papad per day.
- She benefitted by market linkages provided by KVK

- Now a days her bussiness not limited to Papad and Papadi but she also produce Mango and Lemon squash, Pulp, Pickle etc.
- They take another 3 vigha land on rent bases
- She scientifically cultivate Sugarcane, Mango, Gram and Green gram, Black gram as intercropping crop in Sugarcane.

Econimic Impact:

- Now a days she sell her product Papad: 300 /-Rs./kg, Rice papadi: 350/- Rs./kg, Mango pulp 150/- Rs./kg.
- She earn 7000 - 8000/- rupees benefit per month.

Horizontal spread:

Motivated from the above Mentioned Smt. Jasuben M. Patel now a days one another group created in Mohanpur village. One more thing she hire another neighbor 4 to 5 women on 50/- rupees per 3 hour base for papad making. Provide them opportunity to earn income at door step. This enterprise will provide skill development to the women dwellers in identified area, rural families will be benefited directly and creating ray of hope for better sources of livelihood, and sustainable life with self- sufficiency and self- reliance.



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

Innovative technologies used for Transfer of Technology

1. Group formation a new approach: The expansion of Indian agriculture is depending on 103 million farm families involved in agricultural activities. It is impossible to reach such a huge number of farmers individually. The effective and efficient diffusion of new technologies to the needy farmers is very much essential for increasing the yield. To deal with this problem, KVK have adopted a new approach that is to involve the leader of the farmer in planning and implementation of the activities. Under this approach, groups are formed from the entire village. These groups are varying in size, generally 20 to 30 members in each group. Then after 3 to 5 leaders are identified from the same group and they are given the detail guidance and information, so that they can help to group members in better way.



2. Innovative farmers in extension programme

The farmers those are introducing new ideas and technology to their farming system are innovative farmers, such farmers are being identified and information regarding their ideas, adoptive technology are being documented by this centre. Platform in the form of Innovative farmers meet is being provided, so that innovative farmers will display and discuss their ideas and adoptive technology and become helpful to common farmers. Thus KVK becomes the linkage between innovative farmers and common farmers in agricultural extension activities.



3. Convergence : There are so many government and non government agencies, those are working in interest of farmers in different subject are being converged and provided platform, so they could reach to the farmers field , fulfill the objectives of their project and ultimately achieve their goals/targets in the form of progressive farmers and higher GDP in Agriculture.

4. Diversification in agriculture crops.

New crops varieties those are suitable in the south Gujarat climate and have more demand in market are being introduced, so farmers can earn higher return. American Sweet corn has good market and consumer preference, so it can fetch high price in market and farmers can earn good return too.

5. TOT through Dial Out Conference: In collaboration with Reliance Foundation, KVK, Navsari organised dial out conference to give the relative subject information to tribal farmers.

6. e- Connectivity at KVK

By using latest information technologies KVK tried to reach to the farmers. KVK has established e-KVK, that enables the farming communities to get regular message regarding different crops, their varieties, climate report, pest and diseases related information. More than 1.5 lakh voice message had been sent and covered about 3200 farmers of the district.



7. Demand driven activities: KVK has started demand driven activities in order to create interest among the farming communities in agriculture through various scheme. KVK has started work for providing marketing facilities of their farm produce. By becoming mediator Several MoU between private companies and farmers have been done for marketing of agricultural produce, so farmers can get assured market and encouraging returns of their farm produce. Thus farmers remain in touch with KVK and get information of latest technologies and new varieties of crops.

8. Felicitation of innovative farmer's: KVK, Navsari identified innovative farmers of the district and they were selected by the scrutinizing committee. They are felicitated during different activities of the KVK. This function brings huge motivation of other farmers. During the function they explain their technology

F. Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development.

Sr. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1	Pulse& Vegetables	Farmers are using fly ash to control sucking pest	To control sucking pest
2	Mango	Farmers apply irrigation in mango during winter	For initiation of flowering
3	Mango	Smoke of chilly and neem leaves in mango orchard	To control disease & pest during winter
4	Mix farming	Banana+chilly+Maize+leafy vegetable	To increase income from per unit ares
5	Vegetable	Spry cow urine and mixture of cow urine and buttermilk in vegetable	To save fertilizer and reduce pest incidences
6	Vegetable	Spry Jethropa Leaves ark to control sucking pest.	To control Jassid thrips and hopper.
7	Animal Science	Farmers fed boiled grains with jiggery	For expulsion of placenta and energy supply
8	Animal Science	Farmers apply used oil on skin of animal	To treat skin diseases
9	Animal Science	Farmers fed fodder as whole	To decrease the wastage of feed

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

A. Practicing Farmers

- a) PRA
- b) Problem identified from Matrix
- c) Field level observations
- d) Farmer group discussions
- e) ON / OFF campus training

B. Rural Youth

- a) PRA
- b) Problem identified from Matrix
- c) Field level observations
- d) Farmer group discussions
- e) ON / OFF campus training

C. In-service personnel

- a) PRA
- b) Problem identified from Matrix
- c) Field level observations
- d) Farmer group discussions
- e) ON / OFF campus training

5.2. Indicate the methodology for identifying OFTs/FLDs

For OFT:

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

For FLD:

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

5.3. Field activities

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

Sr.No.	Taluka	Village	Village	Village
Intensive operational area				
1.	Jalalpore	Bodali	Mandir	Pethan
2.	Navsari	Adada	Kachhol	Unn
3.	Gandevi	Changa	Dhanori	Vagalvada
4.	Chikhali	Soldhara	Bamanvada	Gholav
5.	Vansada	Nani Valzar	Unai Charvi	Kharjai
6.	Khergam	Naranpur	Bahej	Bhervi

ii. No. of farm families selected per village : 125

iii. No. of survey/PRA conducted : 12

iv. No. of technologies taken to the adopted villages - 20

v. Name of the technologies found suitable by the farmers of the adopted villages:

- ◆ Eco-friendly management of pest
- ◆ Need based insecticide application
- ◆ Introduction of bio-pesticide
- ◆ Use of Methyl eugenol trap to control fruit fly
- ◆ Urea treatment of paddy straw
- ◆ Use of bypass fat during transition period
- ◆ Use of chillated minerals and vitamins
- ◆ fish seed stocking density and species ration in village tanks
- ◆ Composite fish culture in village tank
- ◆ Importance of variety , use of bio fertilizer and land configuration
- ◆ High yielding variety and balance use of fertilizer
- ◆ High yielding variety and balance use of fertilizer
- ◆ Recommended spacing & seed rate and recommended dose of fertilizer
- ◆ System Rice Intensification
- ◆ Introduction of new variety
- ◆ Use of Pre emergence herbicide

- ◆ Spraying of CaNo₃ & Boron at 50% flowering
- ◆ Spray novel liquid fertilizer
- ◆ Popularized canopy management
- ◆ Introduction of Scientific- Economic- Nutritional kitchen garden

vi. Impact (production, income, employment, area/technological– horizontal/vertical)

Specific technology/skill transferred	No. of beneficiaries	Per cent knowledge
Popularize new variety of paddy-NAUR 1 and GNR-3	3123	95
Green manuring	2963	75
New variety of Green gram- Meha	1213	81
Adoption of inter cropping in sugarcane	2912	73
INM in paddy	2689	42
Adoption of new tur variety	2364	74
Replacement of paddy through vegetables	1412	52
Use of bio fertilizer in sapota	2798	70
INM in vegetables	1110	76
New variety in Mango	1032	37
Kitchen gardening	3102	92
Control of fruit fly in mango	4098	93
Awareness regarding pesticide	3712	51

Horizontal spread of technologies

Crop	Technologies	No. of village	No. of farmers	Area in ha.
Paddy	Introduction of New variety	165	6700	2800
	SRI	45	380	160
Pigeon pea	New variety	135	3900	1600
Green gram	New variety	115	2851	898
Gram	New variety	28	1247	174
Sugar cane	Inter cropping	220	5500	3500
Indian bean	New variety	32	225	49
Mango	Fruit fly control	179	7650	3124
	Bio fertilizers	48	1280	482
	New variety	86	1250	892
Sapota	INM	39	4220	1750
Okra	Off Season cultivation	88	1280	550
Vegetable	INM	39	793	351
Brinjal/ Okra	IPDM/ Yellow sticky trap	72	1900	290
Kitchen garden	Nutritional	168	5100	90
Fisheries	Inland aquaculture	54	387	76

vii.Constraints if any in the continued application of these improved technologies - NIL

5.4 . No. and Name of villages adopted for Doubling Farmers Income. Indicate whether benchmark survey of the villages are done or not.

Sr.No.	Name of District	Name of village	No.of Farmers	Whether survey completed
1	Navsari	Chaudha	150	100 % per completed
2	Navsari	Vadi-chaudha	150	100 % per completed
3	Navsari	Bedmal	150	100 % per completed
4	Navsari	Kavdej	150	100 % per completed
5	Navsari	Mankuniya	150	100 % per completed

6. LINKAGES

A. Functional linkage with different organizations

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	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 Trust, Navsari	Collaborative training and extension programmes
23.	Lok Seva Trust, Kharel	Collaborative training and extension programmes
24.	Sneh-setu cheritable 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 programmes

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

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Establishment of demonstration-cum-training center for inland fisheries	12943	State Govt.	23.30
Strengthening and testing of universities technologies on farmer's field through adoptive trials, Phase-II	12306-A	State Govt.	11.0
Cluster frontline demonstrations of Rabi pulses 2017-18	2105/00	Central Govt.	4.50
Development, Demonstration and awareness programme of Organic farming in South Gujarat region	18172-2	State Govt.	44.10
Creation of seed hub for increasing indigenous production of pulses in India Seed Hubs	2704-02-A	Central Govt.	-

RKVY-Skill development	02113/02 2126	Central Govt.	3.60
Turmeric	18930-B	Central Govt.	0.30
Mega seed project	2068/C	Central Govt.	0.15
ARYA Project	18191/00	Central Govt.	17.88
PKVY	2125/02	Central Govt.	3.30
Tree plantation	2130/03	Central Govt.	0.10
Microbial based agril. waste management using vermi composting under (SAP)	2132/03	Central Govt.	22.70
Implementation animal disease	2128/03	Central Govt.	0.15

C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

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

Coordination activities between KVK and ATMA

Sr. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
1	Meetings	4	4		
2	Research projects	NIL			
3	Training programmes	4	370	3	
4	Demonstrations	NIL			
5	Extension Programmes				
6	Kisan Mela	1	1000	3	
7	Exposure visit	4	302	3	
8	Exhibition	1	1200	1	
9	Farmers Field School	3	50	2	
10	Publications	NIL			
11	Other Activities (Pl.specify)	NIL			

D. Give details of programmes implemented under National Horticultural Mission

Sr. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Constraints if any
NIL					

E. Nature of linkage with National Fisheries Development Board

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

F. Details of linkage with RKVY

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

7. Convergence with other agencies and departments: Activities may be specified under DAESI, YCMOU study centres and others**8. Innovator Farmer's Meet**

Sr.No.	Particulars	Details
1	Have you conducted Farm Innovators meet in your district?	Yes
2	Brief report in this regard	

9. Farmers Field School (FFS)

Sr. No	Thematic area	Title of the FFS	Budget proposed in Rs.	Brief report
NIL				

10.1. Technical Feedback of the farmers about the technologies demonstrated and assessed: Farmers' reactions on specific technologies

Sr. No	Feed Back
1	Banana sap highly performed and gave good results
2	Increase seed availability for newly released varieties at village level timely and in small packing (pulses, vegetables etc.).
3	Introduction of IPDM technology becomes helpful in reducing pests and disease
4	NAUR-1 is found susceptible to false smut & also lodging.
5	Grain discoloration was found in GNR-3.
6	Profuse tillering but more pest incidence was found in GNR-4 after penical initiation.
7	The wastage of paddy straw is reduced and milk yield is increased by feeding of urea treated paddy straw.
8	Optimized inter calving period in buffalo
9	More number of complication around parturition in animals.
10	Inland aquaculture variety is good
11	Fish production increased with less expenditure.
12	Improve in the interest and initiation to bring village tanks for fish culture activities.

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

Technical Feedback on the demonstrated technologies

Sr. No	Feed Back
1	Terrace gardening, Box gardening and hanging pot kitchen gardening / availability of vegetables throughout the year on season basis.
2	Cost of feeding animals to be reduced
3	Experiment on amur common carp need to be conducted
4	Experiment on cage culture in big village tanks need to be conducted
5	Preparation and testing of amrutmitti, amrutjal, jivamrut and panchgavya for different crops.
6	Preparation and testing of herbal pesticide for controlling pests and diseases.
7	Testing of cow dung and cow urine for enhancing growth and controlling pests and diseases.
8	Module for pesticide free productions.
9	Availability of country seeds.
10	Develop salt reclamation bio fertilizers.
11	To develop new variety of hybrid vegetables.
12	Develop early maturing and high yielding pigeon pea variety.
13	Branches of mango or sometime mango plant die in month of September-October.
14	Stem cracking or bark splitting was found in mango.

11. Technology Week celebration during 2019-20 : NO

Period of observing Technology Week : Nil

Total number of farmers visited : -

Total number of agencies involved : -

Number of demonstrations visited by the farmers with in KVK campus : -

Other Details

Types of Activities	No. of Activities	Number of Farmers
Gosthies	-	-
Lectures organized	-	-
Exhibition	-	-
Film show	-	-
Farm Visit	-	-
Diagnostic Practicals	-	-
Supply of Literature (No.)	-	-
Supply of Seed (q)	-	-
Total number of farmers visited the technology week	-	-

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

13. IMPACT

A. Impact of KVK activities

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Mango Bio fertilizer	226	60%	134000	196800
Brinjal Novel spray	25	45%	175000	220000
Mango Fruit fly management	200	22%	154770	165690
Introduction of new variety Paddy (NAUR-1, GNR-3, GNR-2, S-25114 SRI)	498	68%	75934	88439
Fish seed stocking density and species ratio carps culture	92	72%	72000	168000
Fish seed rearing (Fry to yearlings)	5	100%	85000	178000
Fish nutrition & feeding management in carps culture	118	70%	70000	174000

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

B. Cases of large scale adoption- full cases may be given at the end as Annexure.

1. Newly released variety of paddy NAUR- 1 is adopted in large scale in tribal area of Navsari district. Farmers are growing NAUR-1 variety instead of hybrid paddy variety. During this year, more than 2000 farmers have adopted NAUR-1 variety covering more than 500 ha.
2. Vaishali variety of Tur was adopted by farmers. This variety used for dual purpose, for dal and green vegetable purpose. In Navsari district, 1891 farmers have adopted this variety.
3. Yellow vein mosaic resistant variety, Meha of green gram is largely adopted by farmers. Total 467 ha area was covered by this variety. This variety produced 21% higher yield than old variety but farmers get higher price of Meha.
4. New short duration high value crop sweet corn is adopted by farmers. Nearly 130 ha. area are covered under this crop. Nearly 700 farmers are cultivating sweet corn because this crop earn more profit during short duration.
5. Farmers are aware about soil health. They are using bio compost from the sugar factories. Near about 1 lakh ton of Bio compost was used by the farmers.

C. Details of impact analysis of KVK activities carried out during the reporting period Out Put of Trainings: On basis of pre and post evaluation of trainings

Agronomy:

- Technology Benefits: Old varieties has been replaced by new varieties/newly released SAU varieties. by increase in per cent yield .
- Economic Benefits: Due increase in yield farmers obtained higher return over expenditure.
- Environment benefits: New varieties are tolerant to many pest and disease, there by reduction in use of pesticides and production of residue free food grains.

Horticulture:

- The knowledge level of farmer about use of bio fertilizer in mango increased by 62% as a result of KVK intervention which was earlier 25%
- More than 48% farmer adopted novel spray fertilizer in brinjal after intervention of KVK which was earlier only 20%
- After initiative of sonpari mango variety 35% farmers started interest in growing of few sonpari plants in their farm.
- Regarding little gourd, the crop is still in cultivation & total production of crop has not reported but farmer were happy by growing little gourd in their farm. Because growing are long and slenderous well as higher in yield compared to local variety.

Plant protection:

- **Technology Benefits:** After adopting this technology lot of area has been transformed into use of fruit fly traps not only in mango and sapota also.
- **Economic Benefits:** Change in the income status of farmers income for unit are has been increased
- **Environment benefits:** Residue free fruits are available and no of sprays to control fruit fly in mango has nearer to nil.

Home Science

- Through training on nutrition education more than 70% women of adopted villages are become conscious about the health of their family.
- With the help of training on kitchen garden, around 70-80% farmers and farm women have adopted kitchen garden concept at their own backyard and around 20-30% farmers are making kitchen garden on large scale and got additional income through selling the excess vegetables.
- Farm women are now preparing mango pulp, jam, and masalas at their home rather than buying it from the market.
- Farm women prepared value added products like masalas, gulkand, rose water, rose syrup. pickles, farsan, biscuits, ragi papad, flour, ragi biscuits etc., and sold it near market their own from home, Krishi Mela as well as in different stall programmes of KVK, Navsari
- Moreover best out of west products like doormats, napkin, decorative diyas (Kodiya), decorative flower pot, sathiya, bamboo, wall piece, toys, flower pot etc. prepared by farm women and also after selling all products socio- economic status will increase.
- Exposure visits organised by KVK at different food industry and places to aware and educate farm women.

Extension

- 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.

Fisheries

- Fresh water culture activities in village tanks/khet talavadi increased by 200 % in Navsari district.
- Fish production yield increased by 48-17% in villages tanks.
- Farmer's visits and enquiries are increased by 400% for fish farming activities & related issues.
- Now there enquiries from farmers for implementing latest modern aquaculture technologies such as RAS, BIOFLOC, Aqua ponies & cage farming.
- Fish farming activities are becoming effective tools for employment generation. Livelihood nutrition security for poor & active rural youth.

- Fish consumption rate per capital increased by 300 % in the home holds these encouraged by KVK through training & demonstration of fish farming.
- Fish farming activities in villages tanks by rural youth not only increase the income but rural development works such as sports ground, water tanks for cattle, street lights & roads have been done.

14. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
April 2019	1	2062	6
May	5	69102	15
June	-	-	-
July	7	35070	21
August	7	8199	14
September	5	6372	8
October	7	4126	9
November	5	8230	13
December	7	18532	25
January 2019	6	6374	12
February	6	11378	20
March	6	2066	11
Total	62	171511	154

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	Total
KVK, Navsari	Text only	25	2	2	3	20	10	62
	Voice only	0	0	0	0	0	0	0
	Voice & Text both	0	0	0	0	0	0	0
	Total Messages	25	2	2	3	20	10	62
	Total farmers Benefitted	68954	3564	6591	6120	45628	40654	171511

15. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sr. No.	Demo Unit	Year of Establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
NIL									

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

Name	Date of	Date of	☺	☹	Details of production	Amount (Rs.)	Remark
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of the crop	sowing	harvest		Variety	Type of Produce	Qty.	Cost of inputs	Gross income	s
Cereals									
Paddy	July-19	Oct-19	2	GNR-3	Seed Pro.	90.00		252000	
Paddy	July-19	Oct-19	0.5	GNR-7	Seed Pro.	19.00		60000	
Sweet corn	Oct-19	Jan-20	0.3	S-75	General	1.0		20000	
Pulses									
Pigeon pea	July-19	Feb-20	0.5	GT-104	Demo.	5.00		30000	
Gram	Dec-19	March-20	0.5	GG-5	Demo.	4.50		31500	
Green gram	Oct-19	Jan-20	0.1	CO4	Demo.	1.0		10000	
Fruits									
Watermelon	Dec-19	March-20	0.3	Sugar queen	Demo.	42.0		105000	
Vegetables									
Vegetables	-	-	0.2	-	Demo.	-	-	10000	-

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

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

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

Sr. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Rohu, Catla, Mrigal, Grass carp	-	Fish	1425 kg		142500	-

E. Utilization of hostel facilities

Accommodation available (No. of beds): 12

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2019	-	-	
May 2019	2	7	
June 2019	8	5	
July 2019	1	40	
August 2019	22	17	
September 2019	1	56	
October 2019	-	-	
November 2019	1	40	
December 2019	2	19	

January 2020	3	5	
February 2020	2	10	
March 2020	1	5	

F. Database management: NIL

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

Rain Water recharge structure of KVK. Building which has capacity of 37000 liter

Amount sanctioned (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.	Activities conducted				Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
			No. of Training programmes	No. of Demonstrations	No. of plant materials produced	Visit by farmers (No.)		
Farmers who come to KVK, are exposed to Rainwater Harvesting Demonstration Unit								

16. FINANCIAL PERFORMANCE

A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	State Bank of India, Navsari	Agriculture campus, Eru char rasta	3889	Senior Scientist & Head, KVK, NAU, Navsari	30043864605	396002062	SBIN0003889
With KVK							

B. Utilization of KVK funds during the year 2019-20 (Rs. in lakh)

Sr. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	99.50	99.50	94.72
2	Traveling allowances	1.00	1.00	0.98
3	Contingencies	12.00	12.00	11.98
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			
B	POL, repair of vehicles, tractor and equipments	-	-	-
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	-	-	-
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	-	-	-
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	-	-	-
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	-	-	-
G	Training of extension functionaries	-	-	-
H	Maintenance of buildings	-	-	-
I	Establishment of Soil, Plant & Water Testing Laboratory	-	-	-
J	Library	-	-	-
TOTAL (A)		112.50	112.50	107.68
B. Non-Recurring Contingencies				
1	Works			
2	Equipments including SWTL & Furniture	8.00	8.00	7.91
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
TOTAL (B)		8.00	8.00	7.91
C. REVOLVING FUND		-	-	-
GRAND TOTAL (A+B+C)		120.5	120.5	115.59

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

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2017 to March 2018	5,17,198	6,84,662	9,05,080	2,96,780
April 2018 to March 2019	2,96,198	9,55,529	7,50,924	* 5,01,385
April 2019 to March 2020	5,30,366	8,40,393	6,64,364	# 6,77,414

* 5,30,366-5,01,385 = 28,981 EMD + SD GF ~15IF BFTFDF\ HDF CTFP

6,77,414-7,06,395 = 28,981 EMD + SD GF ~15IF NAU Fund DF\ 8=Fg;OZ SIF"[P

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

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr.K.A.Shah	Scientist (Agronomy)	QRT meeting & presenatation attended	Anand	25-26/11/19
Dr.Sumit R. Salunkhe	Scientist (Extension Education)	ISEE National seminar	Bikaner	14/11/19 to 16/11/19
Dr.Prabhu Nayaka	Scientist (Plant protection)			
Dr.C.K.Timbadia	Scientist (Senior Scientist & Head)	Annual zonal workshop of KVKs, Maharashtra Gujarat & goa	Goa	14-15/6/19
Dr.C.K.Timbadia	Scientist (Senior Scientist & Head)	ARYA review meeting	Kolhapur	12/12/19
Prof R.A. Gurjar	Scientist (Horticulture)	Agricultural education entrepreneurship and field development in india	Manipur, Imphal	27/8/19 to 16/9/19
Dr.Sumit R. Salunkhe	Scientist (Extension Education)	Agripreurship current & future	Aspee collage, Navsari	26/12/19 to 28/12/19
Dr.K.A.Shah	Scientist (Agronomy)	Review workshop on creation of seed hub project	Bhopal	10-12/2/2020
Dr.K.A.Shah	Scientist (Agronomy)	Pulses as the climate smart crops : Challenges and opportunities	Bhopal	10-12/2/20
Dr.C.K.Timbadia	Scientist (Senior Scientist & Head)	Review cum action plan workshop on CFLD oilseeds and pulses in Gujarat	Ahmadabad	13-14/2/20

18. List the other collaborative research/ extension projects and also write brief key achievements of the projects.

- Pro SOIL
- NARI (Please indicate the name of one adopted village and give the activities carried over on nutri sensitive agriculture)
- VATICA

Seed Hub Project:

1. **Separate account opening date as per guidelines:** 18/8/17
2. **Transfer/deposit of money by host institute (Mention date):**
3. **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	30.67	4.33
2	Seed processing machinery equipment	15.00	6.57	8.43
	Total	50.00	37.24	12.76

4. 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)		
		2017-18	2018-19	2019-20	Seed processing & storage Infrastructure under (2016-17)	Revolving und	
						2016-17	2017-18
Gujarat	KVK, Navsari	700	1000	1000	50.00	35.00	65.00

5. 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	Class (FS/CS)	Quantity of seed produced (q)			
					2017-18	2018-19	2019-20	Total
Gujarat	KVK, Navsari	Navsari	Mung bean	CS	15	00*	3	18
			Pigeon pea	CS	80	300	00**	380
Total					95	300	3	398

Note : * Due to unavailability of foundation/breeder seeds of newly released variety target was not achieved.

**** Due to high rainfall (more than 2100 mm) during 2019-20 and unavailability of foundation/breeder seeds of newly released variety target were not achieved.**

ARYA Project
Attracting and Retaining Rural Youth in Agriculture

Sr. No.	Project Title	Subject	Group	Trained people
1	Establishment of mango processing training centre	Horticulture	06	283
2	Entrepreneurship development through Mango nursery	Horticulture	02	92
3	Entrepreneurship development in rural youth through fish farming in village tanks	Fisheries	2	50

Project No. 1 Entrepreneurship development through Mango nursery

Different activities of ARYA

Sr. No.	Date	Details	Village	Total
1	31/05/2019	ARYA project information meeting	Abrama	4
2	07/06/2019	ARYA orientation programme	Navsari	74
3	21/06/2019	ARYA mango processing training	Navsari	85
4	25/06/2019	ARYA mango pulp bottling training	Navsari	59
5	15/06/2019	ARYA mango processing at farmers house	Abrama	5
6	12/07/2019	ARYA Mango kernel mouth freshener training	Bodali	56
7	21/08/2019	ARYA Mango Nursery Management	Doldha	31
8	23/08/2019	ARYA Mango Nursery Management	Charanvada	61
			Total	283

Project No. 2 Entrepreneurship development through Mango nursery

Different activities of ARYA

Sr. No.	Date	Details	Village	Total
1	21/08/2019	ARYA Mango Nursery Management	Doldha	31
2	23/08/2019	ARYA Mango Nursery Management	Charanvada	61
			Total	92

Case studies of individual youth/group related to ARYA intervention

Jagaruti Mango Pulp Centre.

Few years ago Jagarutiben started making of pulp from mango. She was not able to sell it confidently because it was not made by scientific methods. Last year with approach of ARYA project she made a group of women & now she runs her business successfully with scientific method with proper hygienic conditions.

Vulnerability : She was not aware about proper scientific method. Even she was not aware about safety cautions, hygiene, cleanliness, registration process in food & drug department for selling in market.

Needs/Problems Identified : Marketing registration process

Technological intervention : Earlier during pulping burning of pulp was major issue. After intervention of KVK they became aware about proper temperature for processing & proper use of preservatives.

Efforts made by KVK

KVK played very good role for bringing needful people to technical by expert people & youth got proper training.

Output Farmers/ youth started to work with proper methods & scientific way. Similarly, now they became aware about registration in food & drug department before selling of product in market

Outcome Farmer/youth became successful entrepreneur by obtaining 30000 Rs/ year income.

Impact More number of women are interested to join this project to make their own mango processing unit.

Activities Conducted Under Arya Project Of Carp Fish Farming And Value Addition Components

MALE	FEMALE	TOTAL	OBC	ST
06	44	50	40	10

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

Remarkable activities carried out by KVK, Navsari :

[1]

KHEDUT SHIBIR ON COW BASED AGRICULTURE- A STEP TOWARDS ECONOMIC STABLE

Krishi Vigyan Kendra Navsari , Navsari Agriculture University , Navsari has held an Awareness programme on “**Cow Based Agriculture- A Step towards Economic Stable**” on dated **30th July 2019**. The main purpose of this programme was to give information to farmer for cow based agriculture, dairy products and organic farming and its effect on soil health and economic improvement. The inaugural function of this programme was graced by the chief guest chairman National Kamdhenu Ayog, New Delhi, Dr. Vallabhbhai Kathiria, Hon’ble Vice-Chancellor Dr. C.J.Dangaria Navsari Agricultural University, Shree Nareshbhai Patel M.L.A. Gandevi, Dr. G.R.Patel, Director of Extension Education, NAU, Navsari, Dr.C.K. Timbadia, Senior Scientist and Head, Krishi Vigyan Kendra, Navsari. Dr. Vallabhbha Kathiria Chairman, National Kamdhenu Ayog, New Delhi. He motivated to youth for adopt cow’s based business like dairy products and waste products businesses. He also told that people’s need to aware about cow’s benefits in the agriculture, animal husbandry and nutrition.

Honb’le Vice Chancellor Dr. C.J. Dangaria, N.A.U. Navsari, He was also delivered a inspiring lecture on cow based organic farming and its importance and cow based dairy products and improving economic by cow and cow based organic farming and its importance.



[2]

EXPOSURE VISITS FOR FARMERS

Farmers of South Gujarat were taken to different places to visit and make awareness regarding organic farming. These kinds of exposure visits facilitate the farmers and scientists to development demonstration and awareness about organic farming.

Surat, Hat Bazar Visit. on dated: 23/7/2019



AAU, Anand OF farm on dated: 23-27/07-2019



OF in Dang district on dated: 20/07/2019



[6]

World Environment Day

World Environment Day, Dated 05/06/2019 KVK Navsari celebrate world environment day in presence of more than 150 farmers. Dr. C.K. Timbadia and others scientist of KVK Navsari were interact farmers.



[7]

National Nutrition week Programme

Krishi Vigyan Kendra Navsari, organized National Nutrition week (Date-07/09/2019) was inaugurated by B K Gitadidi. More than 55 vanagi were nominated in the competition by farm woman and out of them best five were selected by expert and farm woman were felicitated by Hon VC NAU Dr. C. J. Dangaria sir, Rishida Thakur and 100 farm woman participated in the program. All farm women enriched spiritually and enjoyed day.



[8]

Innovative Farm Woman's Meet

Innovative farm woman meet (Date : 07/06/2019) on organic farming and ARYA orientation programme was organized at KVK Navsari. Shri Prafulbhai Senjalia, Shri Lalitbhai Thumar, Pravinbhai Asondaria and more than 90 farm women were participated. Shri Prafulbhai Senjalia had delivered very good lecture on natural farming and motivated 45 farm woman to adopt it. Mrs Dipal Soni home scientist was honoured by leaders and KVK staffs. Rashmikantbhai Gurjar also organized mango computation among innovative farm woman.



[9]

International Yoga Day

International Yoga Day (Date : 21/06/2019) celebrated at KVK, Premises with active participation of 200 participants from school and staff. During this programme the participants were enlightened with importance of the day and yoga for healthy life and society. Few postures were also demonstrated by Dr. Satishkumar Sinha and Dr. C. K. Timbadia sir, Senior scientist and Head, NAU, Navsari.



[10]

Krusha Mahila Divas

KVK, Navsari Celebrated Krushi Mahila Divash (Date : **06/08/2019**) in collaboration of District Panchayat at KVK training Hall. Hon District president Dr Amitaben Patel preside over the function and felicitated six farm woman foe their achievement. She also explained her experience about her journey from ground to become president and encouraged farm woman present in the programme. Dr B N Patel principal ASPEE college, Mrs Shital Soni, Director Suraxa Samiti of the state, Rajshreeben Kharadi, Chetanben Birla, Falguniben, Dr Prajapati, Dr Atul Gajera DAO Navsari and Krishna Patil had participated the function Farm woman had expressed their views behind the success more than 200 woman had participated in the programme.



[11]

Web telecast of F&M Disease of animal awareness programme

Krishi Vigyan Kendra Navsari, organized Web telecast of F&M Disease of animal awareness programme (Date : 11/09/2019) in collaboration of dept of animal husbandry. Hon MP shri C.R .Patil sir had visited KVK Navsari. Hon. MLA and deputy whip GOG R. C.Patel , Hon. VC NAU Dr. C J Dongaria and DDO shri R.G Gohil graced the function. Dr Prajapati DDAH, veterinarians and livestock owners had participated in the programme. 112 farmers participated in this probramme.



[12]

Composting Prepared from Pujapo and Flowers

Krishi Vigyan Kendra Navsari, Prepared from Pujapo and Flowers used for Lord Ganesh utsav are collected by Rotary club, Navsari and Vijalpor nagarpalika and rotary club and deposited at KVK (Date : 13/09/2019). KVK staff and RAWE students took pain for segregation and preparing bed



[13]

Fertilizer Application Awareness Program

Krishi Vigyan Kendra organized fertilizer application awareness program (Date : 22/10/2019) in presence of Dr. M.K.Arvidia sir, Principal and Dean, N.M. Collage of agriculture, Navsari. Shri. Gamanbhai Patel, Vasundara dairy Chairman, Chikhali, Dr.S.D.Kavad Association professor, DEE office, Dr.K.G.Patel sir, professor and head, Soil and chemistry, N.M.C.A.NAU. Dr. Rakholia sir association professor, department of plant pathology. Dr.K.A.Shah sir, Scientist KVK Navsari , Pritesh patel , deputy director ATMA Navsari and Shri. Vakeria sir, marketing office, GNFC, Navsari. In this programs 400 farmers were present.



[14]

Natural Farming and Environment Awareness Programme

Krishi vigyan Kendra, Navsari organized off campus programme with TARANG electrical vehicles Surat and Patidar agro Vyara District Tapi sponsored a programme prakrutik kheti and paryavaran jagruti (Date: 16/11/2016) for farmers and farm women at TATA hall Navsari. Hon Dr Amitaben Patel District president has spared valuable time. She emphasized on organic farming to save our planet. Hon VC NAU had honored new appointed BOM NAU Mr Lalit Thumar, Manojbhai shekhpur and Prafulaben Naik Kaccholi and appreciated programme SP Navsari Dr Girish Pandya , DE Dr G R Patel, Dr C K Timbadiasir, Madhubhai, Dipakbhai Naik Amalsad mandali, Satishbhai and many more dignitaries with more than 900 farmers had enjoyed the programme. All experts realized importance of prakriti and its status.



[15]

World Soil Day Programme

Krishi vigyan kendra organized off campus programme on celebrated World Soil Day (Date : 05/12/2019) at village Dambhar Ta Jalalpor in collaboration with KRIBHCO Mr P V Kachhadia sir and Dr C K Timbadia sir explain soil management through microbes. Mr Kiranbhai Naik, Dharmesh Patel and Jatinbhai expressed their views and shared effective experience among farmers. All farmers group realize importance of soil health. 53 farmers are participated in this programme.



[16]

Training on Entrepreneurship development through Fish value addition among farm woman

KVK, Navsari organized training programs on Fish value addition (Date: 11/12/2019). To promote pangasius fish farming and sustaining market it is essential to develop value addition options. So fish filleting and its products preparation skill training under ARYA has been conducted. About 45 farm woman participated and prepared various fish dishes such as fish sticks, fish Manchurian, shrimp lollipop, fish cutlets, and shrimp Manchurian farm woman can start their own small scale restaurant of fish products.



[17]

Distribution of Organic manure kits Prepared from waste Material of Pujapa collected During Lord Ganeshotsav Programme

KVK, Navsari organized (Date: 11/12/2019) distribution of organic manure kits with help of rotary club, Navsari in presence of District Governor Sri Shah and Rotary club of Navsari ex President Sri Lalitbhai Thumar, Mrs Desy Bodhanwala and many more Rotarians had participated and distributed organic manure kits (prepared from waste material of pujapa collected during Lord Ganeshotsav)



[18]

Innovative Farmers Meet Krishi Sangam 2019

Innovative farmers meet Krishi Sangam 2019 programme (Date: 20/12/2019) was sponsored by CII Mumbai and it was organized by KVK Navsari. Hon collector Mrs Adra Agraval graced the function and suggested three importance points to double the farmer's income and assured to meet KVK farmers frequently. DEE Dr G R Patel, Mr Ravindra ARYA, Dean Dr M K Arvadia, Manoj Patel and Kanu Baldania, Dr C K Timbadia sir were on the stage. Five progressive farmers were felicitated for their achievement. Different technical lecture were delivered by NAU scientists. KVK team worked hard for grand success. More than 250 farmers participated in this program.



[19]

Suvarn Jayanti Mahotsav Programme

Suvarn jayanti mahotsav at village Agasi, Ta Vandsa (Date: 21/12/2019) Late Sri Dhirubhai Manibhai Desai Gandhian philosophy follower had established in 1969 Late Sri Jugatram Dave, Ravishankar Maharaj and Morarji Desai had inaugurated. Sri Ashokbhai Desai and many more dignitaries with parents and students participated the programme.



[20]

Agriculture Fair at FTC Navsari

Glimpses of today's agri fair (Date : 10/1/2020) at FTC Navsari Hon Dr Amitaben Patel District president inaugurated and said use of technologies are need of the day in agriculture and emphasised on natural farming for health of the society. She also appreciated activities carried out by ATMA , FTC and KVK. Farm woman and farmers shared their experience Naginbhai Gamit, Gabanibhai joint director and many more dignitaries had graced the function with 700 farmers and more than 25 stall holders. Congratulation to Mr C R Patel for organizing the events.



[21]

Mango Seminar Programme

Krishi vigyan Kendra organized mango seminar (Date: 17/1/2020) was organized at KVK Navsari in collaboration of horticulture department Navsari. Hon MLA Nareshbhai Patel, DEE Dr G R Patel, Dr C K Timbadiasir, ex principal ASPEE collage, Dr N L Patel and scientist of NAU Dr Kalubhai, Dr Yatin Tandel and Budhabhai Patel with 160 mango growers participated in the programme and interacted with the farmers. Two success mango growers were felicitated by the MLA. MLA Nareshbhai emphasized on water consumption and need of conservation by the farming community and advised to add name in 7-12

records for benefits of government scheme. DDH Shri Padalia had explained dept schemes and practical way of increasing yield of mango. Overall farmers were satisfied about care and measures of mango crop against climate change. More than 190 farmers participated in this program.



[22]

25 Days Skill Training on Organic Grower and Assistant Gardener

Krishi vgyan kendra organized on campus 25 days skill training (Date: 27/1/2020) on organic grower and assistant Gardener training were inaugurated by Padmsri Mathurbhai Savani. He emphasizes need of organic agriculture for water conservation and social improvement. He also motivated for village culture and future scope of organic agriculture. Wonderful speech was appreciated by Dr V C Raj, Jayantibhai Patel, Dr Chavlaji, Dr Alka, Dr Durgarani, Dr Dipakbhai Desai, Dr C K Timbadiasir and many more farmers and 40 trainees of two batch assistant gardener and organic growers. Each trainees were introduced themselves and progressive organic success farmers had shared their experience. Dr Prabhu Nayaka and Rashmikantbhai Gurjar took pain for grand success.



[23]

Khedut Shibir Programm in Organic Farming

Awareness programme on organic farming (Date: 7/2/2020) at village Matwad Awda Falia. Hon Hetaldidi from Tejaswini Sanskardham Dist The Dang was chief guest. She explained the theme on role of farmers in process of back to nature. She is engage in Yog, cow based agriculture and diet pattern for improving health. It was sponsored by Harish Patel NRI USA the function was graced by Babu Patel NRI. UK, HiraKaka NRI Newziland, Dr C K Timbadiasir Parimal Patel Dandi and Champaben. Dr Sumit

Salunke, Mrs Nital Patel and team of KVK worked hard for grand success. More than 160 farmers are participated in this program.



[24]

Pradhan Mantari Kisan Sanmman Nidhi (PM KISHAN) Programm

Pradhan Mantari Kisan Sanmman Nidhi (PM KISHAN) Programm, Date: 24/2/2020. Hon district president Mrs Amitaben Patel, Hon VC NAU Dr S R Chaudhary, DEE Dr G R Patel, DDO Navsari, SDM MR Tushar Jani, Dr C K Timbadia sir and many more respected dignitaries had graced the function of celebration of anniversary of PM KISHAN schemes at KVK Navsari. Five farmers gave feedback of the scheme. Hon Rupalasir expressed concept of scheme launching at national level and its successful implementation in the country through digital media. Grand success with support of district authority and pain taking capacity of KVK scientist, KVK team, NAU staff ICAR and DAC and FW New Delhi support. The PM-Kisan beneficiaries namely - Shri Kirtibhai Jadhav, Butsad, Jalalpure; Shri Vipin K. Naik Khakwada, Gandevi; Shri Hemanthbhai B. Patel, Sadlav, Navsari and Shri Jayantibhai M. Bhoya, Vansdsa also expressed their gratitude towards the scheme. More than 4750 farmers are participated in this program. Thanks to all and farmers of the district.



[25]

Health Awareness Seminar Programm Date: 5/3/2020

Krishi vigyan Kendra organized on campus program in Swasthay Jagruti Shibir (Date : 5/3/2020) was organized by senior citizen trust vijalpor and NAU Pensioner union at KVK Navsari. Dr Dinesh Vaid expert of snake bite and paralysis from Dungari valsad and Dr Narendra parmar orthopedist were called to provide guidance about health issues. Dr R R Kaswalasir, Dr R T Desaisir, Mrs Prafulaben Desai, Dr H C Pathaksir, Gopalbhai Tandel and Dr V C Rajsir graced the function. Sriti kataria was honoured for her achievement Dr Dinesh vaid, Dr R R Kaswalasir, Dr Narendra parmar and NAU board member Mrs Prafulaben Desai felicitated. Dr V C Raj, Dr Sumanbhaisir, Dr Dungaranisir and Mr Hemant Sadhu, Dr C

K Timbadiasir, Nitalben and KVK staff took pain for organizing the programm. More than 119 senior citizen participated in this programm.



[26]

International Woman's Days Programme

Krishi vigyan Kendra organized on campus program in International Woman,s day (Date:08/03/2020) was celebrate in auspicious presence of Hon district president Amitaban Patel, Prafulaben Desai board members NAU, Deisiben Bodhanwala president Rotary club navsari, Rishida Thakur president Tapasya Nari seva sansthan and trustees of Manav Kalyankari seva sarvajanik trust shri Natukaka, Ramanbhai, Thakorbhai Naik, Valabhbhai Patel and, Dr C. K. Timbadiasir. Amitaben has inspired woman for their agriculture activities. Mrs Anjitaben Naik, Mrs Illaben and Alpanaben were honoured for their achievement in the field of agriculture. Many competition were organized and honored to winner woman farmers. Mrs Nital patel home science and KVK staff took pain for success. Every woman farmers contributed and enjoyed programm. More than 106 woman participated in this programm.



Award received

Sr. No.	Name of the Award	Given by	Name of award	Given for
A	KVK Awards	Society of Extension Education by Society of Extension Education Gujarat.	Best Extension Scientist Award	Dr. C.K. Timbadia Senior scientist and Head, KVK Navsari
B	KVK Awards	Indian Society of Extension Education, New Delhi Seminar SK. Rajasthan Agricultural University , Bikaner.	Best KVK Scientist Award-2019	Dr. Sumit Salunkhe, Scientist (Extension Education) KVK, Navsari.
C.	KVK Awards	KVK, NAU, Navsari on the occasion of Celebration of International Woman's Day.	Felicited by District President, Navsari Smt. Amitaben Patel with Sawl	Smt. Nital N. Patel Scientist (Home Science) KVK, Navsari.
D	KVK Awards	KVK, NAU, Navsari on the occasion of 12 th SAC Meeting.	Felicited by Dr. Amol Bhalerav Atari Pune with Sawl	Mr. Devendrabhai R. Rana (Senior Clerk) KVK, Navsari.

APR SUMMARY

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

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	83	1905	2332	4237
Rural youths	11	242	260	502
Extension functionaries	-	-	-	-
Sponsored Training	11	186	233	419
ASCI Training	2	25	15	40
Total	107	2358	2840	5198

2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds			
Pulses	758	100	
Cereals	930	233.5	
Vegetables	781	8.4	
Other crops			
Fruit crops	1156	243.4	
Spices crops	40	0.4	
Tuber crops	3	0.3	
Total	3668	586	
Livestock & Fisheries	260	71.5	
Other enterprises			
Total	260	71.5	
Grand Total	3928	657.5	

3. Technology Assessment

Category	No. of Technology Assessed	No. of Trials	No. of Farmers
Technology Assessed			
Crops	2	6	12
Livestock/Fisheries			
Various enterprises			
Other			
Total	2	6	12

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	203	25131
Other extension activities	553	13096
Total	756	38227

5. Mobile Advisory Services

Type of Messages		

Name of KVK	Message Type	Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	Total
	Text only	25	2	2	3	20	10	62
	Voice only							
	Voice & Text both							
	Total Messages	25	2	2	3	20	10	62
	Total farmers Benefitted	68954	3564	6591	6120	45628	40654	171511

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	388.82	2267964
Planting material (No.)	5880	3528
Bio-Products (kg)		
Livestock Production (No.)		
Fishery production (No.)	1425	142500

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	80	10800/-
Water	63	
Plant		
Total	143	

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	7
2	Conferences	5
3	Meetings	15
4	Trainings for KVK officials	-
5	Visits of KVK officials	-
6	Book published	2
7	Training Manual	-
8	Book chapters	-
9	Research papers	4
10	Lead papers	-
11	Seminar papers	-
12	Extension folder	21
13	Proceedings	-
14	Award & recognition	4
15	Ongoing research projects	-