ANNUAL PROGRESS REPORT

(1st January to 31st December 2020)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address with PIN code	Telephone		E mail	Website & No. of visitors (hits)
Krishi Vigyan Kendra, **AMBHETI** Ta. Kaparada Di. Valsad Via. Vapi **Gujarat Pin. 396 191**	Office --	FAX --	**kvkvalsad@gmail.com**	www.kvkvalsad.org 1117397

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

Address	Telephone		E mail	Website address
	Office	FAX		
Gujarat Vidyapith Ashram road AHMEDABAD Pin. 380 014	(1) 079 2754 5044 (2) 079 2754 1148	079 2754 25 47	registrar @ gujaratvidyapith.org	www.gujaratvidyapith.org

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. R.F.Thakor	--	**94271 29451**	**rthakor1965@yahoo.co.in**

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

Year of Establishment : 21th Sept. 1992

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

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

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

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

1.7. Infrastructural Development:

A) Buildings

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

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tractor	2019	6,50,000	215 hrs.	Working condition.
Tractor Trolley	2019	1,50,000	--	Working condition.
Jeep (Bolero)	2010	477058	239824	Working condition.
Power tiller	2010	1,55,500	--	Working condition.
Motor Cycle	2011	49995	22655	Working condition.

C) Equipments& AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Computer -2	2007 & 2010	1,02,270 +50,000	Working condition.
L C D	2007	75,400	Working condition.
Lap Top -2	2007 & 2012	51,750	Working condition.
P A S system	2009	28057	Working condition.
Handicam	2009	12990	Working condition.
Generator set	2009	37972	Working condition.
LED –Sony TV	2015	52000	Working condition.

1.8. Details SAC meeting conducted in the year. – Date-15-10-2020

Proceedings of the 30th scientific Advisory Committee meeting of Krishi Vigyan Kendra, Ambheti, Valsad – Gujarat.

The 30th scientific Advisory Committee meeting of Krishi Vigyan Kendra, Ambheti, Valsad – Gujarat was held on 15th October, 2020 at 11.00 am at Krishi Vigyan Kendra, Ambheti. The list of the members who attended the meeting is attached herewith separately.

Dr. Rajendrabhai Khimani **,** Hon. Director, Extension **,** Gujarat vidyapith welcomed the members of the committee. Agenda wise items were than taken for discussion.

Item No. 1 - Approval of the minutes of the previous SAC meeting

The minutes of the previous SAC meeting held on 08/08/2019 was circulated earlier to all the members. As no comments received from any of the members, the minutes was approved unanimously.

Item No. 2 - Review of the progress report

Action taken report based on the suggestions given by the members of previous meeting was presented before the house. The report on various activities carried out by the Kendra during the period Jan, 2019 to Dec, 2019 was presented by Dr. R. F. Thakor, Sr. Scientist & Head as well as the SMSs of the Kendra. During the discussion some of the members suggested following.....

1. Arrangement should be made to make liquid bio fertilizer available to the farmer at affordable rates from the NAU which is useful for organic farming.

2. SMS's of Kendra should visit the villages in a group. So that farmers will get more information on different technologies.
3. Capacity building of selected rural youth may be done to guide the farmers for processing online application.
4. Seeds/Cuttings of good varieties of sweet potato provided by KVK in the past are old so it must be replaced.
5. Visit of the farmers may be arranged to center of excellence at Chanvai (Valsad) to promote cultivation of floriculture crops.
6. To collect the feedback of the farmer about agro-met advisories issued by kvk and plan conduct impact study.
7. Mechanism should be developed to reach more no of farmers so that they can avail maximum benefits of agro-met advisory services.
8. Until the Agro- Meteorological unit is operational at KVK .Arrange may be made to receive weather data on regular basis from the Agriculture Research station, Pariya (NAU).
9. Developed proper technique for making paddy husk bales so it can be stored in less space.
10. Prepare demonstration plot of Co-5 variety of perennial fodder at KVK and increase its prevalence among the dairy farmers.
11. Organizing demonstrations of the By-pass fat technique and spreading in district.
12. Increase the number of one day training and increase the total number of training programme.

Item No. 3 - Presentation of the action plan

Following suggestions were given by the members.

1. More emphasis on online training and webinar. For that to use farmers like ATMA farmer's friends.
2. Create KVK's YouTube channel to put useful videos for farmers
3. Dissemination of recommended technology to farmers after completion of On Farm Testing.
4. Promoting natural farming through training and extension activities.
5. To make efforts to sell value added product made from finger millet by SHGs.
6. Prepare literature and promoting the healthy nutririch crop like Finger millet.
7. Prepare a flex banner of success stories and display in KVK and posting the story on social media.
8. In case of more infestation of any disease or pest, report it to Navsari Agricultural University

Item No. 4 - From the chair

1. To prepare plug nursery demonstration unit at KVK for vegetable nursery training.
2. Gujarat Vidyapith Shatabdi Varsh and Ganghiji's 150th jayanti are two different activities. so separate reporting should be there.
3. Compare the weather forecast data with real time data.
4. Prepare impact study of NICRA project covering aspects of economic, Social, standard of living etc. on farming community.
5. Effect of dry azolla as a cattle feed and reason for fungul development in Azolla may be studied..
6. To increase the effectiveness of the training programme more emphasis to be given on couple training.
7. To check how much fodder is wasted and spread the best technique to reduce the wastage.
8. Impact study/success story of diesel engine repairing training programme to be prepare and presented .
9. Take appropriate action to patent the design of paddy thresher modified by kvk.

Dr. Rajendrabhai Khimani**,** Hon.Director, Extension**,** Gujarat vidyapith addressed the house and appraised the members about approaches adopted by the Gujarat Vigyapith KVKs to reach the unreached people in remote villages of tribal area.

The meeting was ended with the thanks to the chair.

List of the members who attended the 30th SAC Meeting of KVK, Valsad (Gujarat)

Sr.No.	Name of Member	Designation
1	Dr. Rajendra Khimani	Hon. Director, Extention , Gujarat Vidhyapith, Ahmedabad
2	Dr. H.D. Kavad	Directorate of extention education , NAU, Navsari
3	Dr. N.B. Patel	Res. Sci. , Livestock Res. Station, NAU, Navsari
4	Dr. Chirag Patel	Asso. Res. Sci. , NAU, Pariya
5	Dr. Nayan Thesiya	Assi. Pro. , Dep. Of Agronomy, N.M.C.A., NAU, Navsari
6	Dr. Smita Gupta	Assi. Pro. , Dep. Agro meteo. , NAU, Navsari
7	Mr. K.M. Korat	Representative of DAO, Valsad
8	Mr. Ankur D. Prajapati	DPD, ATMA Project, Valsad
9	Mr. Brijesh H. Patel	Representative of DHO, Valsad
10	Dr. Rekhan Patel	Representative of DDAH, Valsad
11	Dr. Ashok N. Thakre	Manager , Vasudhara Dairy (Invitee member)
12	Dr. Vinod K. Bist	Sci. (I/C) , Zandu Foundation, Ambach (Invitee member)
13	Mr. Veljibhai M. Patel	Farmer Representative
14	Mr. Babubhai G. Patel	Farmer Representative
15	Mrs. Anilaben A. Patel	Farm women Representative
16	Mrs. Maheswariben D. Patel	Farm women Representative
17	Mrs. Sangitaben M. Thorat	J.N. Trust, Kaprada (Invitee member)
18	Mr. Mohanbhai S. Mahala	Representative, Gramshilpi, GVP. (Invitee member)
19	Mr. Pradeepbhai Sonar	GSK, Ambheti (Invitee member)
20	Dr. R.F. Thakor	Member secretary, Sr. Sci. and Head, KVK, Ambheti

2. DETAILS OF DISTRICT

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

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

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

a) **Soil type**

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

b) Topography

Sr. No.	Agro-ecological situation	Characteristics
1	Agro-ecological situation – I & II	- Costal belt - Western part
		- Medium black to black soil
		- Hilly ,Shallow ,Undulating land – Eastern part

2.3 Soil types

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

2.4 Area , Production and Productivity of major crops cultivated in the district (2019-20)

Sr. No.	Crops	Area (,000 ha.)	Production (,000 tones.)	Productivity (Kgs / ha.)
1	**Food grains**			
	Paddy (irrigated)	21.184	69.9072	3300
	Paddy (Unirrigated)	51.572	133.055	2580
	Total Paddy	**72.756**	**202.962**	**2789**
	Ragi (Finger millet)	4.304	4.304	1000
	Jowar	0.059	0.068	1156
	Pigeon Pea	7.800	5.300	687
	Urid	6.400	4.100	641
	Mung	0.400	0.213	532
	Val	2.808	2.017	718
	Gram	2.000	1.960	978
	Groundnut	0.300	0.114	375
	Niger	3.588	1.5966	440
	Sugarcane	7.280	540.72	74275
	Total Field crops	**108.054**	**228.49**	
2	**Fruit crops**			
	Mango	26.250	157.50	6000
	Chiku	3.345	32.513	9720
	Banana	0.770	43.274	56200
	Papaya	0.145	6.254	43130
	Cashewnut	5.590	18.11	3240
	Coconut	2.930	29.30	10000
	Total	**39030**	**286.94**	
3	**Vegetables**			
	Brinjal	1.625	26.00	16000
	Okra	1.620	16.20	10000
	Tomato	1.405	29.50	21000
	Cucurbits	2.831	62.28	22000
	Chilly	0.1	1.14	11400
	Total	**7.575**	**135.12**	

Source: District agriculture department.

2.5. Weather data (2020)

Month	Rainfall (mm)	Rainy days	Temperature C		Relative Humidity (%)	
			Maximum	Minimum	Maximum	Minimum
January	--	--	30.8	13.6	79.3	54.5
February	--	--	34.3	16.6	68.9	42.3
March	--	--	33.9	19.4	77.9	56.4
April	--	--	37.9	22.2	73.3	71.4
May	--	--	37.5	26.9	76.6	83.8
June	159.5	16	35.6	27.2	94.2	95.5
July	482.16	23	32.8	22.73	89.7	85.2
August	1201.66	28	30.2	24.22	91.6	90.3
September	178.83	13	32.2	22.72	92.9	90.0
October	16.5	4	34.7	18.35	86.0	63.6
November	--	--	35.0	11.91	79.9	48.5
December	--	--	31.6	9.15	85.8	59.4
Total	2038.7	84	--			

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

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

Source : District Panchayat,Valsad

2.7 Details of Operational area / Villages

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

2.8 Priority thrust areas

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

3. TECHNICAL ACHIEVEMENTS

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

OFT				FLD			
1				2			
Number of OFTs		Number of Farmers		Number of FLDs		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
09	08	125	100	127.75 ha	122.20	730	773

Training					Extension Programmes				
3					4				
Number of Courses			No. of Participants		Name of activities	Number of activities		No. of participants	
Clientele	Targets	Achievement	Targets	Achievement		Target	Achievement	Target	Achievement
Farmers	60	97	1690	2469	Field day	08	07	400	332
Rural youth	02	03	40	76	Kisan gosthi	05	21	250	416
Extension Functionaries	04	06	100	138	Exhibition	02	02	2500	2415
Farmers (Sponsored)	06	00	225	00	Farmers Seminar	05	10	500	760
ASCI	02	02	40	40	Farmers exposure	05	09	200	291
Total	74	108	2095	2723	Group meetings	30	24	300	141
					Lectures delivery	20	09	2000	1400

Seed Production (Qt.)			Planting material (Nos.)		
Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers
Paddy – 80.00	66 qt.	573	Sugarcane - 700.00 qt.	150 qt	14
Greengram-1.00	0.50	20	Veg. seedlings – 1,10,000 nos	21000 no.	116
			Fodder Toussecks - 50,000 nos.	55000 nos.	400

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
Target	Achievement	Target	Achievement
--	--	Fruitfly trap (Mango) - 1000 no	682 no.
		Vermicompost - 20000 kg	12000 kg.

3.1. B. Operational areas details during 2020

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

3.2. Technology Assessment (Kharif 2020, Rabi 2019-20, Summer 2020)

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation	--	--	01	--	--	--	--	--	--	01
Integrated Nutrient Management	03		01	--	--	--	--	--	--	04
Integrated Pest Management	--	--	--	--	01	--	--	--	--	01
Integrated Disease Management	01	--	--	--	--	--	--	--	--	01
TOTAL	**04**	--	02	--	--	--	--	--	--	**07**

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

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Nutrition Management	01	--	-	-	-	01
TOTAL	**01**	**-**	**--**	**-**	**-**	**01**

B. Achievements on technologies Assessed

B.1. Technologies Assessed under various Crops

Ss. no	Thematic areas	Crop	Name of the technology assessed	No. of trials	No. of farmer	Area in ha
1	Integrated Nutrient Management	Paddy	Assessment of Nutrient mgt. in transplanted paddy	10	10	3.00
2		Pigeon pea	Assessment of Nutrient mgt. in Pigeon pea	05	05	3.00
3		Fingermillet	Assessment of zinc application in Fingermillet crop	20	20	4.00
4		Paddy	Assessment of efficiency Nauroji LBF and AAU developed Liquid manure	20	20	3.00
5	Varietal Evaluation	Pigeon pea	Assessment of Pigeon pea variety for Kharif cultivation	10	10	3.00
6	Integrated Pest Management	Brinjal	Assessment of diff. pesticides for mgt. of red mite in Brinjal	10	10	1.50
7	Integrated Disease Management	Paddy	Assessment of fungicide for mgt. of grain discolouration in paddy	10	10	3.00
	Total			**85**	**85**	**19.50**

B.2. Technologies assessed under Livestock and other enterprises

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Nutrition Management	Cattle	Assessment of effect of bypass fat feeding on milk production in crossbred cow	15	15 animals
Total			**15**	**15 animals**

C1.Results of Technologies Assessed

Results of On Farm Trial - 01

A. Technology Assessment - Assessment of Nutrient management in transplanted hybrid paddy.

Crop/ enterprise	Farming situation	**Problem definition**	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Paddy	Rainfed	Low yield of kharif hybrid paddy	Assessment of Nutrient mgt. in transplanted hybrid paddy.	10	T1 - Farmer's practices (100-30-40 NPK kg/ha) T2 - NAU Rec. 100-30-00 NPK kg/ha T_3 - 100-30-00 NPK kg/ha + 2.5 li potash culture/ha.	1. Productive tillers/hill 2. Days of 50 % flowering 3. Grain yield (kg/ha) 4. Straw yield (kg/ha) 1. Productive tillers/hill 2. Days of 50 % flowering 3. Grain yield (kg/ha) 4. Straw yield (kg/ha) 1. Productive tillers/hill 2. Days of 50 % flowering 3. Grain yield (kg/ha) 4. Straw yield (kg/ha)	8.69 92 3455 3675 9.58 81.50 3660 3958 10.3 80.70 3917 4744	KVK-Valsad conducted on farm testing to assess the nutrient management in Paddy (Hybrid) crop. The result of trials revealed that application of 100-30-00 NPK kg/ha with 2.5 li potash culture/ha gave 3917 kg/ha yield as compare to 3455 kg/ha of local check. B:C ratio also found higher(2.10 - **T_3**) as compare to local check (1.65 - **T_1**).	- Good germination - More tillering - Less problem of pest and disease - Mid late (100-110 days) - 7 - 10 days early than check variety. - Lodging resistant - Good cooking quality - Continuous rain effect less to the crop as compare to T1.

Technology Assessed	Source of Technology	Production (kg/ha)	Please give the unit (kg/ha, t/ha, lit/animal,)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14	15	16
T1 - Farmer's practices (100-30-40 NPK kg/ha)	Private co.	Grain Yield– 3455 Straw Yield - 3675	Kg/ha	23983	1.65
T2 - NAU Rec. 100-30-00 NPK kg/ha	N.A.U., Navsari	Grain Yield– 3660 Straw Yield – 3958	Kg/ha	31795	1.96
T_3 - 100-30-00 NPK kg/ha + 2.5 li potash culture/ha.	N.A.U., Navsari	Grain Yield– 3917 Straw Yield - 4744	Kg/ha	36968	2.10

C2. Details of On Farm Trial for assessment –

<table>
<tr><td>1</td><td>Title of Technology Assessed</td><td>:</td><td>Assessment of Nutrient management in transplanted hybrid paddy.</td></tr>
<tr><td>2</td><td>Problem Definition</td><td>:</td><td>Low yield of kharif hybrid paddy</td></tr>
<tr><td>3</td><td>Details of technologies selected for assessment</td><td>:</td><td>T1 - Farmer's practices (100-30-40 NPK kg/ha)
T2 – NAU Rec. 100-30-00 NPK kg/ha
T3 - 100-30-00 NPK kg/ha + 2.5 li potash culture/ha.</td></tr>
<tr><td>4</td><td>Source of technology</td><td>:</td><td>NAU, Navsari.</td></tr>
<tr><td>5</td><td>Production system</td><td>:</td><td>Rain fed cereal based system (paddy based cropping system)</td></tr>
<tr><td>6</td><td>Thematic area</td><td>:</td><td>Varietal evolution</td></tr>
<tr><td>7</td><td>Performance of the Technology with performance indicators</td><td>:</td><td>
<table>
<tr><th>Treatment</th><th>Productive tillers/hill</th><th>Days of 50% flowering</th><th>Grain Yield (kg/ha)</th><th>Straw Yield (kg/ha)</th><th>Income Grain (Rs./ha)</th><th>Income Straw (Rs./ha)</th><th>Expenditure (Rs/ha)</th><th>Gross Income (Rs/ha)</th><th>Net Profit (Rs/ha)</th><th>B:C Ratio</th></tr>
<tr><td>T_1 - Farmer's practices (100-30-30 NPK kg/ha)</td><td>8.69</td><td>92</td><td>3455</td><td>3675</td><td>51825</td><td>9188</td><td>37030</td><td>61013</td><td>23983</td><td>1.65</td></tr>
<tr><td>T_2 - NAU Rec. 100-30-00 NPK kg/ha</td><td>9.58</td><td>81.50</td><td>3660</td><td>3958</td><td>54900</td><td>9895</td><td>33000</td><td>64795</td><td>31795</td><td>1.96</td></tr>
<tr><td>T_3 - 100-30-00 NPK kg/ha + 2.5 li potash culture/ha.</td><td>10.3</td><td>80.70</td><td>3917</td><td>4744</td><td>58748</td><td>11860</td><td>33640</td><td>70608</td><td>36968</td><td>2.10</td></tr>
</table>
</td></tr>
<tr><td>8</td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td>:</td><td>Cost of fertilizer reduced and Yield and quality of hybrid Paddy crop was increased by using potash culture results increase in B:C ratio.</td></tr>
<tr><td>9</td><td>Final recommendation for micro level situation</td><td>:</td><td>Farmer of Valsad district advise to grow paddy crop use the mid late(100-110 days) hybrid variety GNRH-1 released by N.A.U., Navsari for Kharif Rainfed condition with potash culture instead of potash fertilizer.</td></tr>
<tr><td>10</td><td>Constraints identified and feedback for research</td><td>:</td><td>- Availability of potash culture
- Lack of awareness</td></tr>
<tr><td>11</td><td>Process of farmers participation and their reaction</td><td>:</td><td>Farmers were involved and actively participated at every level i.e. Group discussion, planning, execution, monitoring, evaluation of the trial. Farmers evaluated that paddy variety GNRH – 1 with potash culture reduces fertilizer cost, mature early (7-10 days than check) ,lodging resistant with good cooking quality and more yield.</td></tr>
</table>

Results of On Farm Trial –02

Technology Assessment - Assessment of Nutrient management in Pigeon pea.

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology assessed	Parameters of assessed	Data on the parameter	Results of assessed	Feedback from the farmer
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Pigeonpea	Rainfed	Low yield of Kharif Pigeon pea.	Assessment of Nutrient management in Pigeon pea.	05	T_1 - Farmer practices (No use of " S")	1. Plant height at harvest (cm.) 2. Days of 50 % flowering 3. Grain yield (q/ha) 4. B:C ratio.	118.8 116.8 6.04 1.57	KVK Valsad assess nutrient management in pigeon pea with Farmer practices (T1- No use of " S") and T3- (25-50-20 NPS kg/ha + one spray of 2 % urea at pod filling stage). The result shown that the T3- gave 8.74 q/ha yield with B : C ratio of 2.04 as compare to local check(6.04 q/ha) with B : C ratio of 1.57.	- Good germination - Less mortality in heavy rain - More branches - More no. of pods per plant (110-120) - Less problem of pest and disease - Good cooking quality - Continuous heavy rain from month of July and Aug. effect the crop.
					T_2 - Recommendation **(**25-50-20 NPS kg/ha**)**	1. Plant height at harvest (cm.) 2. Days of 50 % flowering 3. Grain yield (q/ha) 4. B:C ratio.	184 123.6 8.24 1.92		
					T_3 - 25-50-20 NPS kg/ha + one spray of 2 % urea at pod filling stage	1. Plant height at harvest (cm.) 2. Days of 50 % flowering 3. Grain yield (q/ha) 4. B:C ratio.	187 125.8 8.74 2.04		

Cont…

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha,)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14	15	16
T_1 - Farmer practices (No use of " S")	-	Grain Yield– 6.04	q/ha	12020	1.57
T_2 - Recommendation **(**25-50-20 NPS kg/ha**)**	NAU, Navsari	Grain Yield – 8.24	q/ha	21770	1.92
T_3 - 25-50-20 NPS kg/ha + one spray of 2 % urea at pod filling stage		Grain Yield – 8.74	q/ha	24470	2.04

C2. Details of On Farm Trial for assessment –

<table>
<tr><td>1</td><td>Title of Technology Assessed</td><td>:</td><td>Assessment of Nutrient management in Pigeon pea.</td></tr>
<tr><td>2</td><td>Problem Definition</td><td>:</td><td>Low yield of Kharif Pigeon pea.</td></tr>
<tr><td>3</td><td>Details of technologies selected for assessment</td><td>:</td><td>T 1 - Farmer practices (No use of “ S”)
T 2 - Recommendation (25-50-20 NPS kg/ha)
T3 - 25-50-20 NPS kg/ha + one spray of 2 % urea at pod filling stage</td></tr>
<tr><td>4</td><td>Source of technology</td><td>:</td><td>NAU, Navsari.</td></tr>
<tr><td>5</td><td>Production system</td><td>:</td><td>Rain fed cereal based system</td></tr>
<tr><td>6</td><td>Thematic area</td><td>:</td><td>Integrated Nutrient management</td></tr>
<tr><td>7</td><td>Performance of the Technology with performance indicators</td><td>:</td><td>
<table>
<tr><th>Treatment</th><th>Plant height at harvest (cm)</th><th>Days of 50 % flowering</th><th>Grain Yield (q/ha)</th><th>Expenditure (Rs/ha)</th><th>Gross Income (Rs/ha)</th><th>Net Profit (Rs/ha)</th><th>B:C Ratio</th></tr>
<tr><td>T 1 - Farmer practices (No use of “ S”)</td><td>118.8</td><td>116.8</td><td>6.04</td><td>21200</td><td>33220</td><td>12020</td><td>1.57</td></tr>
<tr><td>T 2 - Recommendation (25-50-20 NPS kg/ha)</td><td>184</td><td>123.6</td><td>8.24</td><td>23550</td><td>45320</td><td>21770</td><td>1.92</td></tr>
<tr><td>T3 - 25-50-20 NPS kg/ha + one spray of 2 % urea at pod filling stage</td><td>187</td><td>125.8</td><td>8.74</td><td>23600</td><td>48070</td><td>24470</td><td>2.04</td></tr>
</table>
</td></tr>
<tr><td>8</td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td>:</td><td>- Increase in yield due to Good germination, less mortality, More branches, Bold size, less problem of pest and disease and one spray of 2% urea at pod filling stage .</td></tr>
<tr><td>9</td><td>Final recommendation for micro level situation</td><td>:</td><td>Farmer of Valsad district advise to grow Pigeonpea use Mid late, white colored bold seeded and high yielding improved variety BDN-711 with 20 kg/ha sulphur + one spray of 2 % urea at pod filling stage for more yield in rain fed Kharif cultivation</td></tr>
<tr><td>10</td><td>Constraints identified and feedback for research</td><td>:</td><td>- Availability of seed
- Peacock our national bird damaged crop at early stage
- Continuous heavy rain from month of July to Aug. effect the crop</td></tr>
<tr><td>11</td><td>Process of farmers participation and their reaction</td><td>:</td><td>Farmers were involved and actively participated at every level i.e. PRA and Group discussion ,planning, execution, monitoring, evaluation of the trial. Farmers evaluated that Pigeon pea use Mid late, Indeterminate, white colored bold seeded and high yielding improved variety BDN-711 with 20 kg/ha sulphur + one spray of 2 % urea at pod filling stage for more yield in rain fed Kharif cultivation.</td></tr>
</table>

Results of On Farm Trial – 03

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

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology assessed	Parameters of assessed	Data on the parameter			Results of assessed	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8			9	10	11	12
Fingermillet	Rainfed	Low yield of fingermillet crop	Assessment of zinc application in fingermillet crop	20	T_1- Farmer Practice (46 kg N per ha+ No application of Micronutrient) T_2 : RDF 40:20:00 kg NPK per ha. + 25 kg $ZnSO_4$ as Basal dose T_3 : RDF + Seed treatment with ZnO_2 @ 10ml/kg seed + Seedling treatment @ 0.5 % $ZnSO_4$	Yield(kg/ha) Gross Income (Rs./ha) Gross cost (Rs./ha) Net profit (Rs./ha) BCR	T_1 938 33299 17965 15334 1.85	T_2 1015 36540 20611 15929 1.77	T_3 1047 37692 19180 18512 1.97	T_3 increased 11.62% grain yield and 20.73% net profit compare to farmer practice. with highest BCR (1.97)	- Method of application of zinc with seed and seedling treatment improved growth and yield - Less infestation of pest and disease	--	--

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
T_1- Farmer Practice (46 kg N per ha+ No application of Micronutrient)	--	Seed yield- 938 Straw yield- 1032	kg/ha	15334.0	1.85
T_2 : RDF 40:20:00 kg NPK per ha. + 25 kg $ZnSO_4$ as Basal dose	N.A.U., Navsari	Seed yield-1015 Straw yield- 1218	kg/ha	15929.0	1.77
T_3 : RDF + Seed treatment with ZnO_2 @ 10ml/kg seed + Seedling treatment @ 0.5 % $ZnSO_4$	N.A.U., Navsari	Seed yield- 1047 Straw yield- 1256	kg/ha	18512.0	1.97

C2. Details of On Farm Trial for assessment –

<table>
<tr><td>1</td><td>Title</td><td>:</td><td>Assessment of zinc application in fingermillet crop</td></tr>
<tr><td>2</td><td>Problem diagnose/defined</td><td>:</td><td>Low yield of fingermillet crop</td></tr>
<tr><td>3</td><td>Details of technologies selected for assessment</td><td>:</td><td>T_1 : Farmer Practice (46 kg N per ha+ No application of Micronutrient)
T_2 : RDF 40:20:00 kg NPK per ha. + 25 kg $ZnSO_4$ as Basal dose
T_3 : RDF + Seed treatment with ZnO_2 @ 10ml/kg seed + Seedling treatment @ 0.5 % $ZnSO_4$</td></tr>
<tr><td>4</td><td>Source of technology</td><td>:</td><td>NAU, Navsari / Progressive farmer</td></tr>
<tr><td>5</td><td>Production system</td><td></td><td>Rainfed cereal based system (Cereal-pulse-Cereal)</td></tr>
<tr><td>6</td><td>Thematic area</td><td>:</td><td>Nutrient Management</td></tr>
<tr><td>7</td><td>Performance of the Technology with performance indicators</td><td>:</td><td>
<table>
<tr><th>Treatment</th><th>Seed yield (kg/ha)</th><th>Straw yield (kg/ha)</th><th>Income from seed</th><th>Income from straw</th><th>Gross Income (Rs./ha)</th><th>Total cost of Cultivation (Rs./ha)</th><th>Net profit (Rs./ha)</th><th>Increase in net profit (%)</th><th>Increase in seed yield (%)</th><th>BCR</th></tr>
<tr><td>T_1</td><td>938.00</td><td>1031.80</td><td>28140</td><td>5159</td><td>33299.0</td><td>17965.0</td><td>15334.0</td><td>-</td><td>-</td><td>1.85</td></tr>
<tr><td>T_2</td><td>1015.00</td><td>1218.00</td><td>30450</td><td>6090</td><td>36540.0</td><td>20611.0</td><td>15929.0</td><td>3.88</td><td>8.21</td><td>1.77</td></tr>
<tr><td>T_3</td><td>1047.00</td><td>1256.40</td><td>31410</td><td>6282</td><td>37692.0</td><td>19180.0</td><td>18512.0</td><td>20.73</td><td>11.62</td><td>1.97</td></tr>
</table>
</td></tr>
<tr><td>8</td><td>Final recommendation for micro level situation</td><td>:</td><td>Need to continue for next year</td></tr>
<tr><td>9</td><td>Constraints identified and feedback for research</td><td>:</td><td>Trial is going on</td></tr>
<tr><td>10</td><td>Process of farmers participation and their reaction</td><td>:</td><td>KVK scientist selects a village and farmers who cultivate fingermillet crop. Information pertaining to cultivation of fingermillet followed by farmers was collected. The problems faced by them was also discussed and prioritized by them. Then problem-causes analysis also has done with their active participation. Treatments were thoroughly discussed with them and lastly according to their suggestions treatments were finalized. From among these farmers twenty farmers were selected for testing the technology on their farm. The technological backstopping were provided by the KVK scientist as a facilitator as when required by the farmers. Farmers were involved and actively participated at every level i.e. planning, execution, monitoring, evaluation of the trial. PRA and Group Discussion.</td></tr>
</table>

Results of On Farm Trial – 04

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

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology assessed	Parameters of assessed	Data on the parameter				Results of assessed	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8				9	10	11	12
Paddy	Rainfed	Low yield of kharif paddy	Assessment of efficiency Nauroji LBF and AAU developed Liquid manure in paddy.	20	**T_1-** Farmer practice (177:86:00 kg NPK/ha) **T_2-** Recommended Dose of Fertiliser (RDF)(100:30:00 kg NPK/ha) **T_3 –** RDF + Nauroji LBF i.e Azoto. and PSB @ 1.25 lit/ha as seedling treatment and soil application **T_4 -** RDF + AAU developed Liquid manure @ 500 lit/ha as soil application at 30 & 45 DAP	No. of tillers/hill	T_1 8.54	T_2 8.87	T_3 9.12	T_4 9.27	T4 increased 8.42 % grain yield and 26.9% net profit compare to farmer practice. with highest BCR (1.98)	- Liquid manure can be prepared at home, helps to be self dependent - Tillering and growth of plant improved Increase in yield	--	--
						Grain yield(kg/ha)	3516	3615	3652	3812				
						Straw yield(kg/ha)	3868	3977	3740	4212				
						Gross Income (Rs./ha)	64342	66155	66000	69816				
						Total cost of cultivation (Rs./ha)	37151	33549	33748	35299				
						Net profit (Rs./ha)	27192	32606	32251	34517				
						BCR	1.73	1.97	1.96	1.98				

Cont…

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha,)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14	15	16
T_1- Farmer practice (177:86:00 kg NPK/ha)	-	Seed yield- 3516 Straw yield- 3868	kg/ha	27191.9	1.73
T_2- Recommended Dose of Fertiliser (RDF) (100:30:00 kg NPK/ha)	NAU, Navsari	Seed yield- 3615 Straw yield- 3977	kg/ha	32605.9	1.97
T_3 – RDF + Nauroji LBF i.e Azoto. and PSB @ 1.25 lit/ha as seedling treatment and soil application	NAU, Navsari	Seed yield- 3652 Straw yield- 3740	kg/ha	32251.4	1.96
T_4 - RDF + AAU developed Liquid manure @ 500 lit/ha as soil application at 30 & 45 DAP	AAU, Anand	Seed yield-3812 Straw yield- 4212	kg/ha	34517.4	1.98

C2. Details of On Farm Trial for assessment –

1	Title of Technology Assessed	:	Assessment of efficiency Nauroji LBF and AAU developed Liquid manure in paddy.
2	Problem Definition	:	Low yield of kharif paddy
3	Details of technologies selected for assessment	:	**T_1-** Farmer practice (177:86:00 kg NPK/ha) **T_2-** Recommended Dose of Fertiliser (RDF) (100:30:00 kg NPK/ha) **T_3 –** RDF + Nauroji LBF i.e Azoto. and PSB @ 1.25 lit/ha as seedling treatment and soil application **T_4 -** RDF + AAU developed Liquid manure @ 500 lit/ha as soil application at 30 & 45 DAP
4	Source of technology	:	NAU, Navsari and AAU, Anand
5	Production system	:	Rainfed cereal based system (Cereal-pulse-Cereal)
6	Thematic area	:	Nutrient Management
7	Performance of the Technology with performance indicators	:	

Treatments	No. of Tillers/hill	Seed yield (kg/ha)	Straw yield (kg/ha)	Income from Grain (Rs./ha)	Income from straw (Rs./ha)	Gross Income (Rs./ha)	Cost of cultivation (Rs./ha)	Net Return (Rs./ha)	Increase in net profit(%)	Increase in seed yield (%)	BCR
T1	8.54	3516	3868	52740	11602.8	64342.8	37150.9	27191.9	0.0	0.00	1.73
T2	8.87	3615	3977	54225	11929.5	66154.5	33548.6	32605.9	19.9	2.82	1.97
T3	9.12	3652	3740	54780	11220.0	66000.0	33748.6	32251.4	18.6	3.87	1.96
T4	9.27	3812	4212	57180	12636.0	69816.0	35298.6	34517.4	26.9	8.42	1.98

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

Results of On Farm Trial – 05

Technology Assessment - Assessment of Pigeon pea variety for Kharif cultivation .

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology assessed	Parameters of assessed	Data on the parameter	Results of assessed	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Pigeonpea	Rainfed	Low yield of Kharif Pigeon pea.	Assessment of Pigeon pea variety for Kharif cultivation.	10	T_1 - Use of local variety with local practices	1. Plant height at harvest (cm.) 2. Days of 50 % flowering 3. Grain yield (q/ha) 4. B:C ratio.	122.5 97.8 6.11 1.59	The results of the trial indicated that improved variety of pigeon pea BDN-711 earned the maximum net returns (Rs 23278/- yielding 8.47 q/ha with B:C ratio 2.00) as compare to T1 (Rs 12425/- yielding 6.11 q/ha with B:C ratio 1.59).	- Good germination - Bold seeded - More branches - More no. of pods per plant - Less problem of pest and disease - Mid late variety - Good cooking quality - Tolerant to wilt and sterility mosaic disease - Continuous heavy rain from month of July to Aug. effect the crop.
					T_2 - Recommendation (Use of GNP-2 Variety with improved practices)	1. Plant height at harvest (cm.) 2. Days of 50 % flowering 3. Grain yield (q/ha) 4. B:C ratio.	181.1 122.4 7.95 1.88		
					T_3 - Use of BDN - 711 Variety with improved practices	1. Plant height at harvest (cm.) 2. Days of 50 % flowering 3. Grain yield (q/ha) 4. B:C ratio.	195.8 122.2 8.47 2.00		

Cont…

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha,)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14	15	16
T_1 - Farmers Practices (Use of local variety with local practices)	-	Grain Yield– 6.11	q/ha	12425	1.59
T_2 - Recommendation (Use of GNP-2 Variety with improved practices)	NAU, Navsari	Grain Yield – 7.95	q/ha	20418	1.88
T_3 - Use of BDN - 711 Variety with improved practices	ARS, Badnapur, MH.	Grain Yield– 8.47	q/ha	23278	2.00

C2. Details of On Farm Trial for assessment –

<table>
<tr><td>1</td><td>Title of Technology Assessed</td><td>:</td><td>Assessment of Pigeon pea variety for Kharif cultivation .</td></tr>
<tr><td>2</td><td>Problem Definition</td><td>:</td><td>Low yield of Kharif Pigeon pea.</td></tr>
<tr><td>3</td><td>Details of technologies selected for assessment</td><td>:</td><td>T 1 - Farmers Practices (Use of local variety with local practices)
T 2 - Recommendation (Use of GNP-2 Variety with improved practices)
T3 - Use of BDN - 711 Variety with improved practices</td></tr>
<tr><td>4</td><td>Source of technology</td><td>:</td><td>NAU, Navsari.</td></tr>
<tr><td>5</td><td>Production system</td><td>:</td><td>Rain fed cereal based system (paddy-pulse cropping system)</td></tr>
<tr><td>6</td><td>Thematic area</td><td>:</td><td>Varietal evolution</td></tr>
<tr><td>7</td><td>Performance of the Technology with performance indicators</td><td>:</td><td>
<table>
<tr><th>Treatment</th><th>Plant height at harvest (cm)</th><th>Days of 50 % flowering</th><th>Grain Yield (q/ha)</th><th>Expenditure (Rs/ha)</th><th>Gross Income (Rs/ha)</th><th>Net Profit (Rs/ha)</th><th>B:C Ratio</th></tr>
<tr><td>T 1 - Use of local variety with local practices</td><td>122.5</td><td>97.8</td><td>6.11</td><td>21180</td><td>33605</td><td>12425</td><td>1.59</td></tr>
<tr><td>T 2 - Use of GNP-2 Var. with improved practices</td><td>181.1</td><td>122.4</td><td>7.95</td><td>23307</td><td>43725</td><td>20418</td><td>1.88</td></tr>
<tr><td>T3 - Use of BDN - 711 Variety with improved practices</td><td>195.8</td><td>122.2</td><td>8.47</td><td>23307</td><td>46585</td><td>23278</td><td>2.00</td></tr>
</table>
</td></tr>
<tr><td>8</td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td>:</td><td>- Increase in yield due to Good germination, More branches, Bold size, Tolerant to wilt and sterility mosaic disease, less problem of pest .</td></tr>
<tr><td>9</td><td>Final recommendation for micro level situation</td><td>:</td><td>Farmer of Valsad district advise to grow Pigeon pea use Mid late, white colored bold seeded and high yielding variety GNP – 2 and BDN -711 released for rainfed Kharif cultivation</td></tr>
<tr><td>10</td><td>Constraints identified and feedback for research</td><td>:</td><td>- Availability of seed
- Peacock our national bird damaged crop at early stage
- Continuous heavy rain from month of July to Aug. effect the crop</td></tr>
<tr><td>11</td><td>Process of farmers participation and their reaction</td><td>:</td><td>Farmers were involved and actively participated at every level i.e. PRA and Group discussion ,planning, execution, monitoring, evaluation of the trial. Farmers evaluated that Pigeon pea variety GNP - 2 and BDN-711 have good germination, very less problem of pest and disease, Indeterminate type , dual purpose, Mid late maturity, white colour, bold size, good cooking quality and more yield.</td></tr>
</table>

Results of On Farm Trials - 06

A. Technology Assessment- Management of grain discolouration problem in paddy

Crop/ enterprise	Farming situation	**Problem definition**	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Paddy	Rainfed	low productivity in paddy	Management of grain discolouration problem in paddy	10	T1 : Farmers' practice (No use of fungicide) T2 : Three spray of Propiconazole 25 EC 0.025% (10 ml/ 10 lit. water). First spray at boot leaf stage and second and third spray after 10 days interval. T3 :Three spray of Carbendazim 12 WP + Mancozeb 63 WP (15 gm/ 10 lit. water). First spray at boot leaf stage and second and third spray after 10 days interval.	Damage due to incidence of disease (%)	T1 : 16 % T2 : 4 % T3 : 8 %	Damage due to grain discolouration reduced from 16 to 4 % and yield increased by 17.42% in T2 and from 16 to 8 % and yield increased by 10.65% in T3.	- Improved quality of grain -Increase in market value	--	--

Contd..

Technology Assessed	Source of Technology	Production	Unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 : Farmers practices (No use of fungicide)	--	3100	Kg/ha	20600 Rs/ha	1.62
Technology option 2 : Three spray of Propiconazole 25 EC 0.025% (10 ml/ 10 lit. water). First spray at boot leaf stage and second and third spray after 10 days interval.	Main Rice Research Station, ,NAU, Navsari, Year : 2016	3640	Kg/ha	30150 Rs/ha	1.83
Technology option 3 :Three spray of Carbendazim 12 WP + Mancozeb 63 WP (15 gm/ 10 lit. water). First spray at boot leaf stage and second and third sprayafter 10 days interval.	NARP, NAU, Navsari, Year : 2010	3430	Kg/ha	26600 Rs/ha	1.73

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

1	Title of Technology Assessed	:	Management of grain discolouration problem in paddy
2	Problem Definition	:	Low productivity in paddy
3	Details of technologies selected for assessment	:	**T1** : Farmers practices (No use of fungicide) **T2** : Three spray of Propiconazole 25 EC 0.025% (10 ml/ 10 lit. water). First spray at boot leaf stage and second and third spray after 10 days interval **T3** :Three spray of Carbendazim 12 WP + Mancozeb 63 WP (15 gm/ 10 lit. water). First spray at boot leaf stage and second and third sprayafter 10 days interval.
4	Source of technology	:	**T2 :** Main Rice Research Station, NAU, Navsari, Year : 2016 **T3 :** NARP, NAU, Navsari, Year : 2010
5	Production system	:	Rain fed cereal based system (paddy-vegetable system)
6	Thematic area	:	Integrated Disease Management
7	Performance of the Technology with performance indicators	:	(see nested table below)
8	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Improved quality of grain resulting in increase in market value
9	Final recommendation for micro level situation	:	After completion of third year
10	Constraints identified and feedback for research	:	Nil
11	Process of farmers participation and their reaction	:	Farmers were involved and actively participated at every level i.e. planning, execution, monitoring, evaluation of the trial. PRA and Group Discussion

Details of Treatment	% Disease Incidence	Yield (kg/ha)	Gross return (Rs./ha)	Gross Cost (Rs./ha)	Net profit (Rs./ha)	BCR	Increase in Yield (%)
T 1 : Farmers practices (No use of fungicide)	16	3100	53600	33000	20600	1.62	0
T 2 : Three spray of Propiconazole 25 EC 0.025% (10 ml/ 10 lit. water). First spray at boot leaf stage and second and third spray after 10 days interval.	4	3640	66600	36450	30150	1.83	17.42
T 3 : Three spray of Carbendazim 12 WP + Mancozeb 63 WP (15 g/ 10 lit. water). First spray at boot leaf stage and second and third spray after 10 days interval.	8	3430	62850	36250	26600	1.73	10.65

Results of On Farm Trial – 7

Technology Assessment: Managementof Red Mite) *Tetranychuscinnabarinus*(in Brinjal

Crop/ enterprise	Farming situation	**Problem definition**	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Brinjal	Irrigated	low yield in brinjal	Management of Red Mite in Brinjal	10	T1 : Farmers practices (No use of acaricide) T2 : Spraying of Spiromesifen 22.29 SC (8.4 ml/ 10 lit. water, 96 g a.i./ha , First spray at fruit setting and second spray at 15 days interval. T3 :Spraying of Propergite57 Ec @ 10 ml/10 lit at the time of infestation and second spray at 15 days interval.	Damage due to infestation of pest (%), Yield	T1 : 16% T2 : 6% T3 : 11%	Damage due to infestation of mite reduced from 16 to 6% and yield increased by 16.72% in T2 and from 16 to 11% and yield increased by 10.49% in T3. .	- Improved quality of fruit -Increase in market value -Increase in yield	--	--

Contd..

Technology Assessed	Source of Technology	Production	Unit	Net Return in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 : Farmers practices (No use of acaricide)	--	28500	Kg/ha	131000 Rs/ha	2.91
Technology option 2 :Spraying of Spiromesifen 22.29 SC (8.4 ml/ 10 lit. water, 96 g a.i./ha , First spray at fruit setting and second spray at 15 days interval.	Recommonded by NAU, Navsari, 2018	33600	Kg/ha	164200 Rs/ha	3.31
Technology option 2 :Spraying of Propergite57 Ec @ 10 ml/10 lit at the time of infestation and second spray at 15 days interval.	Recommonded by NAU, Navsari, 2014	32200	Kg/ha	156400 Rs/ha	3.27

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

1	Title of Technology Assessed	:	Management of Red mite in brinjal
2	Problem Definition	:	Low yield in brinjal
3	Details of technologies selected for assessment	:	T1 : Farmers practices (No use of acaricide) T2 : Spraying of Spiromesifen 22.29 SC (8.4 ml/ 10 lit. water, 96 g a.i./ha , First spray at fruit setting and second spray at 15 days interval. T3 :Spraying of Propergite57 Ec @ 10 ml/10 lit at the time of infestation and second spray at 15 days interval.
4	Source of technology	:	NAU, Navsari, 2018
5	Production system	:	Rain fed cereal based system (paddy-vegetable system)
6	Thematic area	:	Integrated Pest Management
7	Performance of the Technology with performance indicators	:	

Details of Treatment	Infestation of mite (%)	Yield (kg/ha)	Gross return (Rs./ha)	Gross cost (Rs./ha)	Net profit (Rs./ha)	BCR	Increase in Yield (%)
T1 : Farmers practices (No use of acaricide)	16	28500	199500	68500	131000	2.91	0
T2 : Spraying of Spiromesifen 22.29 SC (8.4 ml/ 10 lit. water, 96 g a.i./ha , First spray at fruit setting and second spray at 15 days interval.	6	33600	235200	71000	164200	3.31	16.72
T3 : Spraying of Propergite57 Ec @ 10 ml/10 lit at the time of infestation and second spray at 15 days interval.	11	32200	225400	69000	156400	3.27	10.49

8	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Increase yield due to reduction in damage of mite and also Improved quality of fruit resulting in good market value
9	Final recommendation for micro level situation	:	After completion
10	Constraints identified and feedback for research	:	Nil
11	Process of farmers participation and their reaction	:	Farmers were involved and actively participated at every level i.e. planning, execution, monitoring, evaluation of the trial. PRA and Group Discussion

Results of On Farm Trial – 08

Results Technologies assessed under Livestock and other enterprises.

A. Technology Assessment- Assessment of effect of bypass fat feeding on milk production in crossbred cow.

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
By pass fat feed	by pass fat feeding	Low milk production	Assessment of effect of bypass fat feeding on milk production in crossbred cow.	20	T1 : Farmers practices - Concentrate feed (1.5 kg/cow/day for maintenance + 500 gms for each liter milk production)	Milk production (lit/cow/ day)	5.42 lit/cow/ day	The results indicated that Concentrate feed (1.5 kg/cow/day for maintenance + 500gmsfor each liter milk production) + By pass fat feed 100 gms/cow/day. Milk production 7.12 lit/cow/day with B:C ratio 2.07 as compare to farmer practice	- The By pass fat feed (Godhara Shakti) is easily available at village co operative dairy. The technology is Cost effective, easy availability of feed, acceptability and applicability of technology.	-	-
					T2 : Concentrate feed (1.5 kg/cow/day for maintenance + 500gmsfor each liter milk production) + By pass fat feed 100 gms/cow/day. (Duration - 30 Days)	Milk production (lit/cow /day)	7.12 lit/cow/ day				

Technology Assessed	Source of Technology	Production per unit lit/cow/day	unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
T1 : Farmers practices - Concentrate feed (1.5 kg/cow/day for maintenance + 500 gms for each liter milk production	Prof. and Head, Dept. of LPM, Vanbandhu College, Navsari, Year : 2012)	5.42 lit/cow/day	lit/cow/day	1462	1.82
T2 : Concentrate feed (1.5 kg/cow/day for maintenance + 500gmsfor each liter milk production) + By pass fat feed 100 gms/cow/day. (Duration - 30 Days)		7.12 lit/cow/day		2429	2.07

C2. Details of On Farm Trial for assessment –

<table>
<tr><td>1</td><td>Title</td><td>:</td><td>Assessment of effect of bypass fat feeding on milk production in crossbred cow.</td></tr>
<tr><td>2</td><td>Problem Definition</td><td>:</td><td>Low milk production</td></tr>
<tr><td>3</td><td>Details of technologies selected for assessment</td><td>:</td><td>T₁ : Farmers practices - Concentrate feed (1.5 kg/cow/day for maintenance + 500 gms for each liter milk production)
T2 : Concentrate feed (1.5 kg/cow/day for maintenance + 500gmsfor each liter milk production) + By pass fat feed 100 gms/cow/day.(Duration - 30 Days) (Reco. : Dept. of LPM, Vanbandhu College, Navsari, Year : 2012)</td></tr>
<tr><td>4</td><td>Source of technology</td><td>:</td><td>Prof. and Head, Dept. of LPM, Vanbandhu College, Navsari, Year : 2012)</td></tr>
<tr><td>5</td><td>Production system</td><td></td><td>Milk production</td></tr>
<tr><td>6</td><td>Thematic area</td><td>:</td><td>Nutrition management.</td></tr>
<tr><td>7</td><td>Performance of the Technology with performance indicators</td><td>:</td><td>
<table>
<tr><th>Treatment</th><th>Milk prod.</th><th>Gross cost</th><th>Gross income</th><th>Net income</th><th>BCR</th></tr>
<tr><td>T1 - Farmers practices - Concentrate feed (1.5 kg/cow/day for maintenance + 500 gms for each liter milk production)</td><td>5.42</td><td>1790</td><td>3252</td><td>1462</td><td>1.82</td></tr>
<tr><td>T2 - Concentrate feed (1.5 kg/cow/day for maintenance + 500gmsfor each liter milk production) + By pass fat feed 100 gms/cow/day.</td><td>7.12</td><td>2270</td><td>4699</td><td>2429</td><td>2.07</td></tr>
</table>
</td></tr>
<tr><td>8</td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td></td><td>Increase in milk and fat yield
Good palatability of bypass fat powder
Locally available from village level dairy</td></tr>
<tr><td>9</td><td>Final recommendation for micro level situation</td><td>:</td><td>Trial is going on for third year</td></tr>
<tr><td>10</td><td>Constraints identified and feedback for research</td><td>:</td><td>Difficult to select group will be in similar physiological condition(age, lactation and lactation day)</td></tr>
<tr><td>11</td><td>Process of farmers participation and their reaction</td><td>:</td><td>Farmers were involved and actively participated at every level i.e. PRA and Group discussion, planning, execution, monitoring, evaluation of the trial. The By pass fat feed (Godhara Shakti) is easily available at village co operative dairy. The technology is Cost effective, easy availability of feed, acceptability and applicability of technology.</td></tr>
</table>

3.3. FRONTLINE DEMONSTRATION

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

List of technologies demonstrated during previous year and popularized during 2020 and recommended for large scale adoption in the district

Sr. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system.	Horizontal spread of Technology		
					No. of villages	No. of farmers	Area (ha)
1	Paddy	Varietal Evaluation	HYVs of Paddy, Line sowing, Seed treatment	Demo. of improved variety seeds	22	320	90
2	Fingermillet	Varietal Evaluation	HYVs of Fingermillet, IPM	Demo. of improved variety seeds	05	80	50
3	Sugarcane	Varietal Evaluation	HYVs of Sugarcane,	Demo. of improved variety planting material	05	38	24
4	Brinjal	Varietal Evaluation	HYVs of Brinjal,	Demo. of improved variety seedlings	12	92	35
5	Sweetpotato	Varietal Evaluation	HYVs of Sweetpotato, turning of veins	Demo. of improved variety seeds	04	45	22
6	Greengram	Varietal Evaluation	HYVs of Greengram, line sowing	Demo. of improved variety seeds	06	65	25
7	Green fodder	Varietal Evaluation	HYVs of Perennial grass	Demo. of improved variety planting material	15	70	15

B. Details of FLDs implemented during 2020 **(Kharif 2020, Rabi 2019-20, Summer 2020)**

Sr. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/Demo.			Reasons for shortfall
					Proposed	Actual	SC/ST	Others	Total	
1	Paddy	ICM	HYV, IPM, INM ,line sowing	Kharif	20	21	105	--	105	--
2	Sugarcane	ICM	HYV, LBF	Rabi	01	01	10	--	10	--
3	Finger millet	ICM	HYV, INM, IPM	Kharif	10	16	80	--	80	--
4	Finger millet	ICM	HYV, INM, IPM	Kharif	08	08	40	--	40	--
5	Pigeonpea	ICM	HYV, IPM, LBF	Kharif	20	05	50	--	50	--
6	Bittergourd	ICM	HYV, IPM, LBF	Kharif	2.5	2.5	26	--	26	--
7	Chickpea(NFSM)	ICM	HYV, IPM, LBF	Rabi	30	30	75	--	75	--
8	Indianbean	ICM	HYV, IPM, LBF	Rabi	04	10	51	--	51	--
9	Chilli	ICM	HYV, IPM, LBF	Rabi	2.5	2.5	13	--	13	

10	Greengram	ICM	HYV,INM, IPM	Summer	05	10	87	--	87	--
11	Fodder sorghum	ICM	HYV	Rabi	05	09	60	--	60	--
12	Perennial fodder	ICM	HYV	Rabi	02	2.7	27	--	27	--
13	Paddy	INM	Green Manuring	Kharif	02	02	20	--	20	--
14	Paddy	ICM	Depog method of seedling raising	Kharif	02	02	25	--	25	--
15	Mushroom	ICM	Improved variety Seed	Rabi	--	--	54	--	54	--
16	Kitchen garden	ICM	Improved variety Seed & seedlings	Rabi	0.25	0.25	25	--	25	--

Details of farming situation

Sr. no.	**Crop**	**Season**	**Farming situation**	**Type of soil**	**Status of soil**			**Previous crop**	**Sowing date**	**Harvest Date**	**Seasonal Rainfall**	**No of Rainy days**
					N	**P**	**K**					
1	Paddy	Kharif	Rainfed	Medium black	Low	Medium	High	Pulses	June-20	Oct-20	2038.7	84
2	Sugarcane	Rabi	Irrigated	Medium black	Low	Medium	High	Paddy	Nov-19	Dec-20	2038.7	84
3	Finger millet	Kharif	Rainfed	Medium black	Low	Medium	High	Pulses	June-20	Oct-20	2038.7	84
4	Pigeonpea	Kharif	Rainfed	Medium black	Low	Medium	High	Pulses	July-20	Dec-20	2038.7	84
5	Bittergourd	Kharif	Irrigated	Hilly, Laterite	Low	Medium	High	Paddy	June-20	Nov-20	2038.7	84
6	Chickpea(NFSM)	Rabi	Irrigated	Medium black	Low	Medium	High	Paddy	Dec-19	March-20	--	--
7	Indianbean	Rabi	Irrigated	Medium black	Low	Medium	High	Paddy	Nov-19	March-20	--	--
8	Chilli	Rabi	Irrigated	Medium black	Low	Medium	High	Paddy	Nov-19	Feb- April .20	--	--
9	Greengram	Summer	Irrigated	Medium black	Low	Medium	High	Paddy	Feb-20	May- 20	--	--
10	Fodder Sorghum	Summer	Irrigated	Medium black	Low	Medium	High	Paddy	Jan-20	May-20	--	--
11	Perrennial fodder	Rabi	Irrigated	Medium black	Low	Medium	High	Paddy	Aug-20	Oct-20		
12	Paddy	Kharif	Rainfed	Medium black	Low	Medium	High	Pulses	June-20	Oct-20	--	--
13	Paddy- Depog	Kharif	Rainfed	Medium black	Low	Medium	High	Pulses	June-20	Oct-20	--	--
14	Mushroom	Rabi	Irrigated	Medium black	Low	Medium	High	--	Aug-20	Oct-20	--	--
15	Kitchen garden	kharif	Irrigated	Medium black	Low	Medium	High	Paddy	Jan-20	April-20	--	--

Technical feedback on the demonstrated technologies.

Sr. No	Feed Back
1	Gram variety GJG-3- Early maturity, Bold size, more number of pod per plant
2	Paddy variety GAR-13 have more tillers , non lodging, Mid late and small seeded
3	GT 104 variety - mid late (150-160 Days) , bold size with white colour, good for Dal making, good cooking quality, less problem of wilt and sterility mosaic virus.
4	Fingermillet (Guj Nagli-5) variety gives good yield in longer rainy season .
5	Uniform maturity, Bold size, Good cooking quality found in GM-6 variety of Greengram .
6	Indianbean variety Guj.Val-2 erect flowering habit , flowering starts from each inter node.
7	Production of sugarcane variety Co-N- 41131 may be reduced in case of late harvesting.
8	Demonstrated variety of bittergourd gave good yield. The variety also fetched good market price. Mosaic disease incidence was found less
9	Greengram variety GAM-5 is found resistant to YMV with bold grain size and uniform maturity.
10	Perennial fodder variety Co-4 gives continuous green fodder throughout season.

Farmers' reactions on specific technologies

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

Extension and Training activities under FLD

Sr. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	07	20-01-20 18-02-20 16-03-20 16-09-20 02-10-20 25-11-20 15-12-20	104 76 50 33 21 15 30	
2	Farmers Training	09	19/02/20 29/05/20 02/06/20 10/06/20 15/06/20 11/06/20 17/07/20 07/11/20 11/11/20	56 20 24 47 20 50 26 46 21	
3	Media coverage	04	22-02-20 22-07-20 21-10-20 25-11-20	-- -- -- --	
4	Training for extension functionaries	--	--	--	

C. Performance of Frontline demonstrations

Frontline demonstrations on oilseed crops-Nil

Frontline demonstration on pulse crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						H	L	Av.										
Green gram	ICM	Improved variety + Line sowing + INM + IPM	GAM-5	87	10	10.7	6.8	8.60	6.20	38.71	18800	51634	32834	2.70	16280	37138	20858	2.30
Pigeonpea	ICM	Improved variety + Line sowing + INM + IPM	GT- 104	50	05	11.52	6.96	8.33	6.11	36.33	23307	45793	22486	1.96	21180	33605	12425	1.59
Indian bean	ICM	Improved variety +Seed treatment + Line sowing + IPM	Guj. Val-2	51	10	11.96	8.39	10.88	8.08	34.65	17547	54400	36853	3.10	15300	40400	25100	2.64
Chickpea (NFSM)	ICM	Improved variety +Seed treatment + Line sowing + IPM	GJG-3	75	30	13.8	9.3	11.58	8.53	35.76	21647	60230	38583	2.78	20120	42640	22520	2.12

FLD on Other crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Av.										
Cereals																		
Paddy	ICM	Improved variety + Seed treatment + INM + IPM	GAR-13	105	21	46.75	29.40	39.78	31.42	26.60	31788	69384	37606	2.18	34030	54299	20269	1.60

Paddy	ICM	Depog method	GAR-13	25	2.0	38.50	32.50	36.65	32.34	13.31	33320	67278	33959	2.02	36797	58674	21877	1.59
Millets																		
Finger millet	ICM	Improved variety, Biopesticides LBF	Guj. Nagli – 5	80	16	10.95	8.45	10.08	8.36	20.57	18540	39280	20740	2.11	17400	33260	15860	1.91
Commercial Crops																		
Sugarcane	ICM	Improved variety, LBF	Co-N-41131	10	1.0	860	775	913	769	18.73	117600	273900	156300	2.33	108525	230700	122175	2.13
Fodder crops																		
Sorghum	ICM	Improved seeds	SSG	60	9.0	480	425	542	365	48.49	38945	125450	86505	3.22	34620	84800	50230	2.45
Grasses	ICM	Improved plantlets of Perennial fodder	Co-4	27	2.7	2550	2120	2470	2140	15.42	115500	247000	131500	2.14	102400	214000	111600	2.09

Frontline Demonstration on Nutri cereals

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

FLD on Livestock –Nil

FLD on Fisheries –Nil

FLD on Other Enterprises – Mushroom production

Category	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.) or Rs./unit				Economics of check (Rs.) or Rs./unit			
				Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Oyster Mushroom	Pleurotus spp	54	54	--	--	--	--	--	1800	11200	9400	6.22	--	-	-	-

FLD on Women Empowerment –Nil

FLD on Farm Implements and Machinery -Nil

FLD on Other Enterprise: Kitchen Gardening

Category and Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units	Yield (Kg)		% change in yield	Other parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Kitchen gardening	Nutritional security	Improved seeds and seedlings of vegetables	25	25	142	98	44.90	--	--	660	3834	3174	5.81	460	2646	2186	5.75

FLD on Demonstration details on crop hybrids

Crop	Technology demonstrated	Hybrid Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check(Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average										
Vegetable crops																	
Bittergourd	Improved variety, IPM, LBF	F1 (Akash)	26	2.5	220	202	212.8	178.3	19.35	67600	202160	134560	2.99	64000	169385	105385	2.64
Chilli	Improved variety	Hybride. (Eagle)	13	2.5	118	94	106.8	85.50	24.91	60600	240300	179700	3.96	59500	192375	132875	3.23

3.4. Training Programmes

Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Integrated crop management	**12**	--	--	--	325	62	387	325	62	387
Integrated water management	04	--	--	--	108	51	159	108	51	159
Weed Management	02	--	--	--	64	32	96	64	32	96
Nursery Management	02	--	--	--	62	10	72	62	10	72
Total	**20**	--	--	--	**559**	**155**	**714**	**559**	**155**	**714**
II Horticulture										
III Soil Health and Fertility Mgt.										
Integrated nutrient management	02	--	--	--	23	07	30	23	07	30
Soil water tesing	01	--	--	--	16	04	20	16	04	20
Total	**03**	--	--	--	**39**	**11**	**50**	**39**	**11**	**50**
IV Livestock Prod. and Management										
Dairy Management	02	--	--	--	23	16	39	23	16	39
Feed & fodder technology	03	--	--	--	79	24	103	79	24	103
Disease management	01	--	--	--	08	06	14	08	06	14
Total	**06**	--	--	--	**110**	**46**	**156**	**110**	**46**	**156**
V Home Science/Women Empowerment										
Household Nutritional security	05	--	--	--	34	79	113	34	79	113
Mushroom production	04	--	--	--	79	12	91	79	12	91
Vermi-compost production	01	--	--	--	--	15	15	--	15	15
Total	**10**	--	--	--	**113**	**106**	**219**	**113**	**106**	**219**
VI Agril. Engineering										
Care and maintenance of farm machinery and implements	03	--	--	--	47	2	49	47	2	49
Soil & water conservation	01	--	--	--	10	--	10	10	--	10

Installation and maintenance of micro irrigation systems	02	--	--	--	25	17	42	25	17	42
Total	**06**	--	--	--	**82**	**19**	**101**	**82**	**19**	**101**
VII Plant Protection										
Integrated Disease Management	02	--	--	--	39	02	41	39	02	41
Integrated Pest Management	02	--	--	--	40	--	40	40	--	40
Total	**04**	--	--	--	**79**	**02**	**81**	**79**	**02**	**81**
X Capacity Building and Group Dynamics										
Formation and Management of SHGs	01	--	--	--	27	--	27	27	--	27
Leadership development	01	--	--	--	17	07	24	17	07	24
Total	**02**	--	--	--	**44**	**07**	**51**	**44**	**07**	**51**
Grand Total	**51**	--	--	--	**1026**	**346**	**1372**	**1026**	**346**	**1372**

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										
Integrated crop management	08	--	--	--	126	45	171	126	45	171
Integrated water management	03	--	--	--	80	08	88	80	08	88
Weed Management	02	--	--	--	30	13	43	30	13	43
Total	**13**	--	--	--	**236**	**66**	**302**	**236**	**66**	**302**
II Horticulture										
III Soil Health and Fertility Mgt.										
Integrated nutrient management	02	--	--	--	27	03	30	27	03	30
Soil and Water Testing	01	--	--	--	15	--	15	15	--	15
Total	**03**	--	--	--	**42**	**03**	**45**	**42**	**03**	**45**
IV Livestock Production and Management										
Dairy Management	01	--	--	--	01	14	15	01	14	15
Feed & fodder technology	03	--	--	--	43	22	65	43	22	65

Disease management	01	--	--	--	08	09	17	08	09	17
Total	**05**	--	--	--	**52**	**45**	**97**	**52**	**45**	**97**
V Home Science/Women empowerment										
Household Nutritional security	05	--	--	--	--	112	112	--	112	112
Mushroom production	02	--	--	--	79	52	131	79	52	131
Total	**07**	--	--	--	**79**	**164**	**243**	**79**	**164**	**243**
VI Agril. Engineering										
Installation and maintenance of micro irrigation systems	03	--	--	--	45	13	58	45	13	58
Soil & water conservation	02	--	--	--	26	09	35	26	09	35
Farm Machinary and its maintenance	01	--	--	--	25	06	31	25	06	31
Total	**06**	--	--	--	**96**	**28**	**124**	**96**	**28**	**124**
VII Plant Protection										
Integrated Pest Management	03	--	--	--	54	10	64	54	10	64
Integrated Disease Management	02	--	--	--	36	02	38	36	02	38
Total	**05**	--	--	--	**90**	**12**	**102**	**90**	**12**	**102**
X Capacity Building and Group Dynamics										
Formation and Management of SHGs	03	--	--	--	80	00	80	80	00	80
Leadership development	02	--	--	--	61	04	65	61	04	65
Group Dynamics and farmers organization	02	--	--	--	34	05	39	34	05	39
Total	**07**	--	--	--	**175**	**09**	**184**	**175**	**09**	**184**
Grand Total	**46**	--	--	--	**770**	**327**	**1097**	**770**	**327**	**1097**

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

Thematic area	**No. of courses**	**Participants**								
		Others			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
I Crop Production										
Integrated crop management	**20**	--	--	--	451	107	558	451	107	558

Integrated water management	07	--	--	--	188	59	247	188	59	247
Weed Management	04	--	--	--	94	45	139	94	45	139
Nursery Management	02	--	--	--	62	10	72	62	10	72
Total	**33**	--	--	--	**795**	**221**	**1016**	**795**	**221**	**1016**
II Horticulture										
III Soil Health and Fertility Mgt.										
Integrated nutrient management	04	--	--	--	50	10	60	50	10	60
Soil water tesing	02	--	--	--	31	04	35	31	04	35
Total	**06**	--	--	--	**81**	**14**	**95**	**81**	**14**	**95**
IV Livestock Prod. and Management										
Dairy Management	03	--	--	--	24	30	54	24	30	54
Feed & fodder technology	06	--	--	--	122	46	168	122	46	168
Disease management	02	--	--	--	16	15	31	16	15	31
Total	**11**	--	--	--	**162**	**91**	**253**	**162**	**91**	**253**
V Home Science										
Household Nutritional security	10	--	--	--	34	191	225	34	191	225
Mushroom production	06	--	--	--	158	64	222	158	64	222
Vermi-compost production	01	--	--	--	--	15	15	--	15	15
Total	**17**	--	--	--	**192**	**270**	**462**	**192**	**270**	**462**
VI Agril. Engineering										
Care and maintenance of farm machinery and implements	04	--	--	--	72	08	80	72	08	80
Soil & water conservation	03	--	--	--	36	09	45	36	09	45
Installation and maintenance of micro irrigation systems	05	--	--	--	70	30	100	70	30	100
Total	**12**	--	--	--	**178**	**47**	**225**	**178**	**47**	**225**
VII Plant Protection										
Integrated Pest Management	04	--	--	--	84	10	94	84	10	94
Integrated Disease Management	05	--	--	--	75	04	79	75	04	79
Total	**09**	--	--	--	**159**	**14**	**173**	**159**	**14**	**173**

X Capacity Building and Group Dynamics		--	--	--						
Formation and Management of SHGs	04	--	--	--	107	00	107	107	00	107
Leadership development	03	--	--	--	78	11	89	78	11	89
Group Dynamics and farmers organization	02	--	--	--	34	05	39	34	05	39
Total	**09**	--	--	--	**219**	**16**	**235**	**219**	**16**	**235**
Grand Total	**97**				**1796**	**673**	**2469**	**1796**	**673**	**2469**

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**
Quality seed grower	01	--	--	--	20	--	20	20	--	20
Tractor operator	01	--	--	--	20	--	20	20	--	20
Mushroom production	02	--	--	--	18	32	50	18	32	50
Nursery management	01	--	--	--	03	23	26	03	23	26
Total	**05**	--	--	--	**61**	**55**	**116**	**61**	**55**	**116**

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

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

Area of training	**No. of Courses**	**No. of Participants**								
		General			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Quality seed grower	01	--	--	--	20	--	20	20	--	20
Tractor operator	01	--	--	--	20	--	20	20	--	20
Mushroom production	02	--	--	--	18	32	50	18	32	50
Nursery management	01	--	--	--	03	23	26	03	23	26
Total	**05**	--	--	--	**61**	**55**	**116**	**61**	**55**	**116**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Feed and fodder management	01	--	--	--	20	--	20	20	--	20
Dairy management	01	--	--	--	16	31	47	16	31	47
Soil sampling techniques	01	--	--	--	12	--	12	12	--	12
Total	**03**	**--**	**--**	**--**	**48**	**31**	**79**	**48**	**31**	**79**

Training programmes for Extension Personnel 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
Feed and fodder management	01	--	--	--	19	01	20	19	01	20
Integrated Pest Management	01	--	--	--	17	04	21	17	04	21
Group Dynamics and farmers organization	01	--	--	--	18	--	18	18	--	18
Total	**03**	--	--	--	**54**	**05**	**59**	**54**	**05**	**59**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Feed and fodder management	02				39	01	40	39	01	40
Dairy management	01	--	--	--	16	31	47	16	31	47
Soil sampling techniques	01	--	--	--	12	--	12	12	--	12
Integrated Pest Management	01	--	--	--	17	04	21	17	04	21
Group Dynamics and farmers organization	01	--	--	--	18	--	18	18	--	18
	06	**--**	**--**	**--**	**102**	**36**	**138**	**102**	**36**	**138**

Sponsored training programmes –Nil

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Income generation activities										
Mushroom production	02	--	--	--	18	32	50	18	32	50
Nursery management	01	--	--	--	03	23	26	03	23	26
Total	**03**	--	--	--	**21**	**55**	**76**	**21**	**55**	**76**

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services (Other than KMAS)	--	--	--	--
Diagnostic visits	04	34	02	40
Field Day	07	332	06	345
Group discussion	21	416	12	449
Kisan Ghosthi	10	760	10	770
Film Show	12	275	--	287
Self -help groups	--	--	--	--
Kisan Mela	--	--	--	--
Exhibition	02	2415	25	2442
Scientists' visit to farmers field	24	141	08	173
Plant/animal /soil health camps	04	212	06	222
Farm Science Club	--	--	--	--
Ex-trainees Sammelan	--	--	--	--
Farmers' seminar/workshop	10	760	10	770
Method Demonstrations	06	61	04	71
Celebration of important days	06	274	12	292
Special days Celebration(constitution)	02	110	02	114

Exposure visits	09	291	--	300
Others (pl.specify)				
Lecture delivered in other programmes	09	1400	18	1427
Swachhata Pakhvada	15	989	08	1012
Farmers visit to kvk	655	655	--	1310
Total	**796**	**9125**	**123**	**10024**

Details of other extension programmes

Particulars	**Number**
Extension Literature	08
News paper coverage	14
Popular articles	03
Research paper	02
Radio Talks	05
TV Talks	05
Animal health camps (Number of animals treated)	--

3.6 Online activities during year 2020

S. No.	**Activity Type**	**Mode of implementation (Video conferencing / Audio Conferencing / Face book Live / YouTube Live/ Zoom/ Google meet/ Webex etc.)**	**Title of Program**	**No. of Programmes**	**No. of Participants/ Views**
A	Farmers training				
1	Methods of Soil testing	**Zoom meet**	Methods of Soil testing	01	12
2	Nutritional gardening	**Google meet**	Nutritional gardening	03	54
3	IPM in Paddy	**Google meet**	IPM in Paddy	01	16
4	Nutritional security	**Zoom meet**	Nutritional security	01	21
	Total			06	103
B	Farmers scientist's interaction programme	--	--	--	--
C	Farmers seminars				
D	Expert lectures				
1	Nutritiona importance of fingermillet	**Google meet**	Nutritiona importance of fingermillet	01	55

2	Different nutritional receipes prerparataion from fingermillat	**Google meet**	Different nutritional receipes prerparataion from fingermillat	01	55
	Total			02	110
E	Any other (Pl. specify)	--	--	--	--
	Grand Total (A+B+C+D+E)			**08**	**213**

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

Production of seeds by the KVK

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals	Paddy	GAR-13	--	66.00	198000	573
Pulses	Greengram	GAM-5	--	0.50	6000	20
Others	Sugarcane	Co.N-04131	--	150.00	56700	14
Total				**216.5**	**260700**	**607**

Production of planting materials by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Vegetable seedlings	Brinjal, Tomato	--	Mukta round NS-501	20000 1000	15000 500	115 20
Fodder crop saplings	Perennial grass	Co-4	--	55000 (tousseks)	55000	400
Total				**76000**	**70500**	**535**

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Nos./Kg	Value (Rs.)	No. of Farmers
Bio Agents	Fruitfly trap (Mango)	682 no.	25234	36
Others	Vermicompost	12000 kg.	60000	210
	Vermiculture	75 kg.	15000	25

Production of livestock materials: nil

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

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

B. Literature developed/published

Item	Title	Authors name	Number
Research papers	1. Effect of LBF application on Growth and yield of Brinjal	L.T.Kapur, R.F.Thakor & P.R.Ahir	--
	2. Nutri Garden Model for Household Nutritional security in Tribal areas of Valsad	R.F.Thakor, P.R.Ahir & L.T.Kapur,	--
News letters	Half yearly news letter	R.F.Thakor et.al	01
Technical bulletins	--	--	--
Popular articles	1. Piyat vyavasthapan ma Plastic culture nu mahatva	M.M.Gajjar, P. R. Patel &, R.F.Thakor	--
	2. Krushi havaman salahkari seva ane Meghdoot application	P.B.Ratia, Aditi Solanki & R.F.Thakor	--
	3. Dapog - Paddy seedling raising method	L.T.Kapur, R.F.Thakor	--
Extension literature	1. PKVY Parampagat Krishi Vika Yojana	P.J.Joshi , K.A.Patel & L. T. kapur	1000
	2. KVK Parichaya	K.A.Patel , A.R.Patel & R.F.Thakor	1000
	3. Vermicompost	K.A.Patel , M,M,Gajjar & L. T. kapur	1000
	4. Meghdoot Application	P.B.Ratia, Aditi Solanki & R.F.Thakor	1000
	5. Drumstic	K.A.Patel , A.R.Patel & P.R. Ahir	1000
	6. Gangama Vartul	K.A.Patel , A.R.Patel & P.R. Ahir	1000
	7. Dangar ma jaivik Kheti	K.A.Patel , & P.J.Joshi	1000
	8. Krishi Upaj Vyapar ane Vanijya Adhiniyam (Farm Act)2020	K.A.Patel , A.R.Patel & R.F.Thakor	1000

C. Details of Electronic Media Produced- Nil

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

D. Details of Social Media Platforms Created / Used

S. No.	Type of social media platform	Title of social media	Number of Followers/ Subscribers
1	YouTube Channel	KVK- Valsad	**77**
2	Facebook page/ Account	KVK- Abheti-Valsad	**879**
3	Mobile Apps	--	--
4	WhatsApp groups	KVK Farmers Groups-06	**627**
5	Twitter Account	KVK- Valsad	**10**
6	Any other (Pl. Specify)	www.kvkvalsad.org	--

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

Title : Gram (GJG-3) – A crop fetching high income to tribal farmer's.
Crop and Variety: Chickpea Var. GJG – 3.
Name of farmer & Address: Chimanbhai Sitarambhai Mahala
At – Samarsingi Ta – Dharampur Di - Valsad
Details of technology demonstrated: Imp. Var.GJG - 3 @ 70 kg/ha. + Seed treatment (Thiram @ 2.0-3.0 gm + Rhizobium spp. and PSB cultures each 20ml/kg seed +Line sowing (R X P) 30-45 X 10-15 cm + IPDM.

Institutional Involvement: Chimanbhai and other farmers of Samarsingi village participated in off campus training organized by kvk on demo plots in which they discussed about poor yield production of gram due to higher mortality in field, wilting , heavy pest and disease attack, poor quality etc. It was also felt that they were growing gram just to utilized land. Analyzing the situation based on farmers problems the scientist of kvk decided to lay down demonstration of Gram with newly recommended variety GJG-3 which is specially recommended for rain fed cultivation with improved technologies like seed treatment with fungicide and LBF (Seed treatment according to formula *i.e.* FIR.), optimum seed rate, Line sowing and IPDM. Chimanbhai Preparing land immediately after harvest of paddy by opening a small furrow and place the seed at 10 cm depth to maximize the conserved moisture. Seed treatment with Rhizobium and PSB culture @ 10 ml/ kg seed with line sowing of 30-45 cm spacing to maintain plant population. The demonstrations were laid down covering 75 farmers of different village under NFSM-pulse. Chimanbhai Patel was one of them. He act as facilitator farmers for the village.

Seed treatment with LBF

Success Point: The Demonstrated gram variety GJG -3 with improved production technology gave 1360 kg per ha yield with net return of 49073 Rs. per ha (52 Rs./kg) against 860 kg per ha yield with net return of 22880 Rs. per ha of local cultivar. The yield increase up to 58.13 % over check. The demonstrated gram variety with improved package of practices created very good impression among the farmers of Valsad district. Majority of farmer's viewed that area under rabi rain fed gram will increase provided seed availability of preferred variety.

No. of Pods/branches

Farmer Feedback:

Low mortality

More branches (20-23) than check variety

Less pest and disease (3-5 Pod / Plant damaged due to Pod borer)

More number of pod per plant (79 - 82 pod per plant)

Yield (q/ha)	
Demonstration	13.6
Potential yield of variety/technology	15-17
District average	9.78
State average	9.78

Performance of technology vis-à-vis Local check (Increase in productivity and returns)

Practice used	**Yield (q/ha)**	**Gross cost (Rs/ha)**	**Gross income (Rs/ha)**	**Net income (Rs/ha)**	**B.C. Ratio**
Farmer practices	8.6	20120	43000	22880	2.14
Demonstration	13.6	21647	70720	49073	3.27
% Increase	58.13	7.59	64.46	114.47	52.80

Field day celebration

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

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

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

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

A. Practicing Farmers

a. Participatory Rural Appraisal
b. Farmer group discussions
c. Diagnostic services
d. Existing cropping system

B. Rural Youth

a Participatory Rural Appraisal

b. Farmer group discussions

C. In-service personnel

a Existing cropping system

b. Feed back from state departments as well as NGOs

5.2. Indicate the methodology for identifying OFTs/FLDs

For OFT:

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

For FLD:

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

5.3. Field activities

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

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

ii. No. of farm families selected per village : 25

iii. No. of survey/PRA conducted : 02

iv. No. of technologies taken to the adopted villages- 15

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

a) Improved variety of Paddy and Sugarcane crops for cereals.

b) Vermi compost preparation at farm level

C) Use of methyl eugenol trap in Mango

d) Use of plastic tray for vegetable seedling raising

e) Mushroom production

f) Improved variety of Pulse crops-Indianbean, Greengram, Pigeonpea,Chickpea

g) Use of Azolla in paddy

h) Improved variety of Bittergourd for tuber crops

i) Perennial fodder grass variety

j) Jivamrut and bio pesticides preparation at farm level.

vi. Impact (production, income, employment, area/technological– horizontal/vertical): Pl see results item no.12

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

a) Non availability of spawn of mushroom
b) Unavailability of seeds of improved variety.
c) High cost of inputs i.e. chemical of trap, plastic tray etc.

6. LINKAGES

A. Functional linkage with different organizations

Sr. No.	Name of organization	Nature of linkage
1	Navsari. Agril. Uni. Navsari	Provides expertise for latest technology and supply of improved seeds of paddy,greengram,pigeonpea, sugarcane, indianbean and Trichoderma, LBFand Pseudomonas etc.
2	ATMA	Training and organizing farmers shibir , agri. Exhibition.
3	Dept. of Agril. Valsad.	Involvement of kvk experts for delivering lectures, farmers seminars and extension functionaries' trainings.
4	Dept. of Horticulture, Valsad	Involvement for exposure visit at excellence centre.
5	Dept. of Animal husbandry, Valsad	Joint organization of pashupalan shibir
6	Vasudhara dairy	Joint implementation of farmers, farm women & ext. functionaries training.
7	J. N. Trust, Kaparada	Joint implementation of farmers & ext. functionaries training & seminars.
8	Jain Irrigation Co , Dharampur	Soil and water sample analysis.
9	Mushroom training centre, Vapi	Joint implementation of mushroom training.

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

C. Details of linkage with ATMA-

a) Is ATMA implemented in your district -- Yes

Coordination activities between KVK and ATMA

S. No.	Programme	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks
01	Meetings	4	4	
02	Research projects	0	0	
03	Training programmes	0	0	
04	Demonstrations	0	0	
05	Extension programmes			
	Technology week	0	0	
	Exposure visit	3	0	
	Exhibition	2	2	
	Soil health camps	0	1	

	Animal health campaigns	0	0	
	Capacity development	0	0	
06	Video films	0	0	
	Extension literature	0	2	

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

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

F. Details of linkage with RKVY

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	ASCI -Training	Quality seed grower- Training	180000	179933	
2	ASCI -Training	Training- Tractor Operator	186800	186800	

G. Details of linkage with PKVY (Paramparagat Krishi VikasYojana)

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	Demonstrations on Paddy	Inputs, Awareness , capacity buildings	330000	245000	--

H. Details of linkage with NFSM

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

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

7. Convergence with other agencies and departments :

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

8. Innovator Farmer's Meet –Nil

9. Farmers Field School (FFS) –Nil

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

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

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

- Indian bean variety with red colour seeds needs to be developed
- Pigeon pea variety which mature early on conserve moisture needed for sloppy muram type soil.
- Early to mid late lodging resistant variety for paddy and finger millet should developed for heavy rainfall area of south gujarat

11. Technology week celebration during 2020 - No

12. IMPACT

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

Sr . No.	Name of specific technology/skill transferred	No . of participants	% Adoption	Change in income (Rs.)	
				Before training Rs / unit	After training Rs / unit
1	HYV s of Sugarcane	45	65	106619 Rs. / ha.	120460 Rs. / ha.
2	HYV s of Paddy	115	80	27076 Rs. / ha.	32075 Rs. / ha.
3	HYV s of Fingermillet	80	60	13,500 Rs. / ha.	16,400 Rs. / ha.
4	HYV s of Brinjal	40	75	85,500 Rs. / ha.	120,000 Rs. / ha.
5	HYV s of Green fodder	80	100	36,800 Rs. / ha.	46,400 Rs. / ha.
6	Q lure traps IPM in Vegetable crops (cucurbits)	60	85	45,000 Rs. / ha.	58,000 Rs. / ha.
7	Mushroom Production	135	40	--	12000 Rs./farmer

B. Cases of large scale adoption

Paddy seedling raising technology - Dapog method

Situation analysis/Problem statement:

Valsad district is composed largely of tribal communities, primarily depends on agriculture for their livelihood. The soil of the valsad district is characterized by medium black, shallow soil with steep slopes which is poor in fertility. Paddy is the main food crop of Valsad district. Traditionally, farmers of Valsad district raising paddy seedlings with their traditional method known as "Aadar". Farmers makes a ½ to 1 *feet* height layer of leaves, twigs, branches of plant, agricultural waste and cowdung cake on selected 0.12 *ha.* (13,007 *sq.ft*) area and burn all the biomass. After "Aadar" practice they made flat bed and sown seeds @ 35 *kg* ha^{-1}. Weak and yellow seedlings with undeveloped roots were ready to transplant in 25 to 30 days, which were severely damaged during heavy rain. This method is costly, laborious and deteriorates soil health.Aadarincreases the soil temperature more than

100 ^{0}C in the upper 5 *cm*, with a concomitant partial reduction of the bacterial population eroding amount of organic matter and loss soil nutrients. Quantity of lost soil nutrients replenished through costly fertilizers increase cost of cultivation.

Paddy seedlings raising with traditional method "Aadar- flat bed"

Plan, Implement and Support :

KVK Intervention:

Dapog method was developed in *Philippines*, in which seedlings are raised on surface, like banana leaves or plastic sheets without disturbance of soil. On plastic sheets 92-100 beds of size 1 *m* wide and 5 *m* long, were made on raised surface and boundaries were provided with frames with the help of waste bamboo or bricks or stones. Each frame was filled with a mixture of 70% soil, 20% FYM, 10% ash and 100 gm Urea and SSP. About 36 to 48 hours pre-germinated paddy seed (*Jaya* variety) at the rate of 20 *kg* ha^{-1} was uniformly spread. The bed was mulched with paddy straw net to protect from bird damage.

Process:

To stop deterioration of soil health and makes a paddy cultivation more profitable, KrishiVigyan Kendra - Valsadconducted frontline demonstration ondapog method of raising paddy seedlings in Asma and Ozar villages. To aware the tribal farmers about dapog method, KVK were expanded the

technology by various extension activities like, Training, goup discussion, method demonstration and field days etc. in Asma, Rabdi, Ozar and Lakhmapore villages of Valsad.

Result of Dapog Method

OUT PUT :

Growth and yield parameters:

With the Dapog method, paddy seedlings can be transplanted within 14 to 17 DAS (Days after sowing) however in traditional aadarflat bed nursery, transplanting was delayed. The delay also reduced maximum tiller number, and extended crop duration with delayed maximum tillering, flowering and maturity. Crop lodging during heavy rains were found minimum compare to traditional aadarflat bed nursery raised plot. Grain yield was consistently increased upto 7.71 to 9.10 % with younger seedlings transplanting.

Table.1 Impact of paddy seedling raising methods on yield and yield attributes of paddy

Yield and yield parameters	Traditional Aadar flat bed nursery		Dapog nursery	
	***Kharif* 2019**	***Kharif* 2020**	***Kharif* 2019**	***Kharif* 2020**
Average number of tillers per plant	9.7	9.4	11.2	11.8
Grain yield *(kg ha^{-1})*	3364	3247	3645	3572
Straw yield *(kg ha^{-1})*	2804	2756	2795	2670

Straw bundle yield *(kg ha^{-1})* (1 bundle of 200 -250 *gm* straw)	8995	8742	9020	8857
Increase in grain yield (%)	*Kharif* 2019		7.71	
	Kharif 2020		9.10	

Impact on soil health:

For making of traditional adar flat bed nursery farmers were burnt biomass like twig, branches of plants, crop residues and cowdung cake, heats the soil above 100 ^{0}C reduce the beneficial bacterial population slow down the rate of mineralization of nutrients. "Aadar" practice also deteriorates the amount of organic matter and available soil nutrients present in soil and also responsible for soil structural degradation. Thus, "Aadar" practice, adversely affect the soil fertility and crop productivity. However, in dapog method of raising paddy seedling soil was not disturbed. Both year data (Table 4) shows sustainability in soil health in dapog nursery areas.

Table 2. Effect of burning of biomass on soil health of paddy seedling nursery areas .

Chemical Properties	***Kharif* 2019**			***Kharif* 2020**		
	Initial	**After uprooting of seedlings**		**Initial**	**After uprooting of seedlings**	
		Adar flat bed nursery	**Dapog nursery**		**Adar flat bed nursery**	**Dapog nursery**
EC(dSm^{-1})	0.17	0.19	0.15	0.24	0.27	0.20
pH (1:2.5 at 25 ^{0}C)	7.21	7.28	7.20	7.25	7.30	7.25
Organic Carbon *(%)*	0.44	0.28	0.45	0.40	0.25	0.41
Available phosphorus *(kg ha^{-1})*	28.00	19.00	27.00	30.00	25.30	30.10
Available potash *(kg ha^{-1})*	358.00	423.00	358.00	364.00	417.00	362.00
Available sulphur*(kg ha^{-1})*	8.47	6.48	8.45	8.52	6.37	8.50

Economic gain:

The seed requirement and its cost for dapog nursery was reduced upto 70 % i.e 20 *kg ha^{-1}*compared with 35 *kg ha^{-1}*for the traditional aadarflat bed nursery. The dapog nursery does not require tractor ploughing as it is established near the homestead in a small area of 0.04 *ha^{-1}* as against 0.12 *ha^{-1}* for a traditional aadar flat bed nursery so inputs and labour cost also reduced. The overall cost for the dapog nursery was reduced 26.13 % for one *ha.* of transplanted paddy. Small area of dapog nursery, with low seed rate reduced the cost up to 26.13 % than traditional aadar flat bed.

Transplanting at younger healthy seedlings raised in dapog nursery, improves number of tillers, flowering results in 7 to 9 % more grain yield of paddy, simultaneously increase net profit upto 19.09 to 23.51% against traditional aadar flat bed nursery. Highest BCR 1.86 (*Kharif* 2019) and 1.76 (*Kharif* 2020) were recorded with dapog nursery compare to traditional aadar flat bed nursery BCR 1.66 (*Kharif* 2019) and 1.55 (*Kharif* 2020).

OUT COME :

Farmers of Valsad district are pleased with our efforts for motivation and other nearby farmers came forward to adopt dapog method of paddy seedling nursery. About 84 farmers of Asma, Rabdi, Ozar and Lakhmapore villages of Valsad district were started to raised paddy seedling with dapog method.

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

- High yielding varieties were promoted in Paddy - GAR-13, Green gram- GM 6, Chickpea- GJG-3, Pigeon pea- BDN-711, Finger millet- Guj. Nagli-5, Indian bean – Guj. Val-2, Green fodder Co4, Sweetpotato – C-71, Drumstick –PKM-1
- Women entrepreneur development : Mushroom, Vegetable nursery, Mango pulp preservation
- Nutritional Security – Kitchen garden (Gangama circle)
- Skill development training -Tractor operator, Quality seed grower
- Production and Supply of technological inputs- – Paddy (66 qt HYVs variety produced and supplied to 573 farmers), Sugarcane 150 qt HYVs variety produced and supplied to 14 farmers), Vegetable seedlings (21000 HYVs variety produced and supplied to 135 farmers)
- More than 400 farmers have adopted HYVs of perennial fodder variety CO-4.
- Bio agent production – Fruit fly traps (About 68 ha. Mango crop area covered.)
- Soil Testing Compaign. (More than 800 farmers were covered for soil test and provided soil health cards.)
- Adoption of bio pesticides like Neem oil, Pseudomonas, Beuvaria, Pheromone traps, fruit fly traps, etc.
- Promoting organic farming- More than 335 farmers were promoted for use of vermicompost.

13. Kisan Mobile Advisory Services

Month	No. of SMS	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
March	02	31938	--
April	03	48003	--
May	01	16014	--
June	01	16399	--
July	02	32808	--
August	01	16400	--
September	02	32778	--
October	01	16415	--
Total	13	210755	

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	Total
Valsad	Text only	04	--	02	01	06	--	13
	Voice only	--	--	--	--	--	--	--
	Voice & Text both	--	--	--	--	--	--	--
	Total Messages	**04**	**--**	**02**	**01**	**06**	**--**	**13**
	Total farmers Benefitted	**64735**	**--**	**32825**	**16400**	**96795**	**--**	**210755**

14. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl.	Demo Unit	Year of	Area	Details of production	Amount (Rs.)	Remarks

No.		establishment	(ha)	Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Vermicompost	2003-04	0.1	Eudrilus eugeniae	Vermicompost	20 ton	22,000	65,000	Farm use & 100 farmers
2		2003-04	0.1	Eudrilus eugeniae	Vermiculturw	75 kg		15000	
	Dairy	2003-04	0.2	H.F.	Milk	2952 lit	509579	90500	
	Dairy	2003-04	0.2	H.F.	FYM	20 tone	--	16,000	
	Dairy	2003-04	0.5	Co.-4	Green fodder	55000 no.	25,000	55000	--
	Veg. Nursery	2002-03	0.2	Hy seedling of Brinjal, Chilli, Tomato	Seedling	21000 no.	8000	15000	
	Mango germplasm demo	2006-07	0.25	Keshar, Alphanso, Amrapali, Rajapuri,	--	--	--	--	
	Bio Agents	2009-10	--	--	ME trap	682 no.	24500	25460	

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

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Paddy	30/11/2020	10/05/2020	2.5	GAR-13, Sardar	Seed production	6600 kg	98000	198000	
Pulses									
Greengram	30/06/2020	22/10/2020	0.1	GAM-5	Seed production	50 kg	1,800	6000	
Spices & Plantation crops									
Fruits									
Mango	1999	-	3.0	Kesar, Alphanso	Commercial	3500 g	40,000	72,000	
Others (specify)									
Sugarcane	18/12/2019	20/10/2020	0.5	Co.N.-13073	Seed production	150 qt	25,000	56700	Damage by Pigs
Sugarcane	20/10/2019	--	1.5	Co.N.- 41131	Commercial	50 tone	1,12,500	1,65,000	
Fodder	24/11/19	Multicut	0.10	Co.-4	Seed production	55,000 tussecks	10,000	55,000	
Eucalyptus	2015	--	2	JK-413	Commercial	--	1,35,000	Crop is standing	

Casurina	2014	--	1.0	Clonal	Commercial	--	65,000	1310000	

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	Fruitfly trap (Mango)	682 no.	21000	25460	36 farmers

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

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Cow	H.F.cross (06)	Milk	2952 litres	509579	90500	
			FYM	20 tones	--	16000	
			Sale of animals (Cow)	00	--	00	

E. Utilization of hostel facilities- Accommodation available (No. of beds) : 25 Beds

Months	**No. of trainees stayed**	**Trainee days (days stayed)**	**Reason for short fall (if any)**
January			
February			
March	--	--	Covid-19
April	--	--	
May	--	--	
June	--	--	
July	36	96	--
August	40	160	--
September	49	146	--

October	44	67	--
November	356	600	--
December	89	89	--

F. Database management -Nil

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

H. Performance of Nutritional Garden at KVK farm

Is Nutritional Garden developed at KVK farm/Village Level ? Yes

Nutritional Garden developed at KVK farm

Area under nutritional garden (ha)	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers visited
800 sq.ft.	Vegetable crops	Brinjal, Chilli, tomato,Okra, Fennugreek,spinach, coriander, cowpea,clusterbean, carrot, radish, bottlegourd, onion, palak,garlicetc,	315
	Fruit crops	Papaya	
	Others if any	Mint, basil, turmeric	

Nutritional Garden developed at Village Level

No. of Villages covered	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers covered
04 Amdha, Panas, Sukhala, Lakhmapore	Vegetable crops	Brinjal, Chilli, tomato,Okra, Fennugreek,spinach, coriander, cowpea,clusterbean, carrot, radish, bottlegourd, onion, palak,garlicetc,	25
	Fruit crops	Papaya	
	Others if any	Mint, basil, turmeric	

H. Details of Skill Development Trainings organized

S.No.	Name of KVKs/SAUs/ICAR Institutes	Name of QP/Job role	Duration (hrs)	No. of participants					
				SCs/STs		Others		Total	
				Male	Female	Male	Female	Male	Female
1	Valsad	Quality Seed grower	200	17	00	03	00	20	00
2		Tractor Operator	200	20	00	00	00	20	00

15. FINANCIAL PERFORMANCE

A. Details of KVK Bank accounts

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

B. Utilization of KVK funds during the year 2020-21 (Rs. in lakh) (Till Dec, 2020)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	--	18491000	16694949
2	**Traveling allowances**	50000	50000	44713
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	578000	578000	255924
B	POL, repair of vehicles, tractor and equipments			155838
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	800000	800000	96835
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			74059
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			340195
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			49856
G	Training of extension functionaries			
H	Maintenance of buildings			12186
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
TOTAL (A)				**17724555**
B. Non-Recurring Contingencies				
1	**Works**	--	--	--
2	**Equipments including SWTL & Furniture**	--	--	--
3	**Vehicle** (Four wheeler/Two wheeler, please specify)	--	--	--
4	**Library** (Purchase of assets like books & journals)	--	--	--
TOTAL (B)		--	--	--
C. REVOLVING FUND		--	--	--
GRAND TOTAL (A+B+C)		--	19919000	17724555

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2018 to March 2019	8699572	2098996	1502101	9296467
April 2019 to March 2020	9296467	1965956	1465292	9797131
April 2020 to December, 2020	9797131	950000	1066000	9681131

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

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr. R F Thakor	Sr Sci. & Head	NICRA annual workshop	KVK-Ahmadnagar	02-03/01/2020
Dr.R F Thakor, L. T. kapur,	Sr Sci. & Head SMS	Regional Workshop for annual Action Plan	GVP, Ahmedabad	19-20/02/2020
Dr.R F Thakor	Sr Sci. & Head	National Conference for KVKs	NASC, New Delhi	28-29/02/2020 &01/03/2020
Smt. P.R.Ahir	Pro. Asstt.	Seminar on Climate action and gandhian Abhigam	GVP, Ahmedabad	12/03/2020
Dr.R F Thakor, L. T. kapur,	Sr Sci. & Head SMS	Annual Zoanl Workshop for KVKs-Online	ATARAI	10-12/07/2020
Dr.R F Thakor, Smt. P.R.Ahir	Sr Sci. & Head SMS	ONnline Webinar on Gender in Agri. Develoment	MANAGE	17-7-20 to 5-8-20

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

Name of the village	Total No. of families surveyed	Key interventions implemented	No. of farmers covered in each intervention	Change in income (Rs/unit)	
				Before	After
Lakhmapor	91	Greenfodder	75	47700	71500
		IPM in mango	75		
		Improved variety and IPDM in Pulse crops	67		
		Improved variety and IPDM in Paddy	37		
		Nutritional Garden	25		

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

S. No.	Name of the programme	No. of villages adopted	Key activities performed	No. of activities carried out	No. of families covered
1	Trainings	05	Training on Nursery management, Kitchen garden, Mushroom production, value addition in Finfermillet	10	243
2	Group meetings	01	Group discussion	18	18
3	Demonstration	02	Kitchen garden	25	25

19. Details of Progress of ARYA Project - Nil

20 . Details of SAP

S. No.	Types of major Activity conducted- Swachhta Pakhwada, Cleaning, Awareness Workshop, Miccobial based Agricultural Waste Management by Vermicomposting etc.	No. of Programmes conducted	No. of Participants
1	Digitization of office records/ e-office,	--	--
2	Basic maintenance (include housekeeping, cleaning of guest house, institute buildings & toilets, campus, etc)	3	43
3	Sanitation and SWM	1	18
4	Cleaning and beautification of surrounding areas	1	23
5	Vermicomposting/Composting of biodegradable waste management & other activities on generate of wealth for waste	1	57
6	Used water for agriculture/ horticulture application	2	64
7	Swachhta Awareness at local level	2	48
8	Swachhta Workshops	--	--
9	Swachhta Pledge	1	49
10	Display and Banner	2	10
11	Foster healthy competition	1	14
12	Involvement of print and electronic media	3	678
13	Involving and with the help of the farmers, farm women and village youth in their adopted villages (no of adopted villages)	7	247
14	No of Staff members involved in the activities	17	13
15	No of VIP/VVIPs involved in the activities	--	--

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

POSHAN MAAH CELEBRATION

Sr. no	Date	Name of Event	Type of Participents (Farmer/Farm women/anganvadi workers,etc.)	Venue	Participants
1	01/09/2020	Gosthi	Farm women	Ambheti	10
2	02/09/2020	Visit of Anganvadi	anganvadi worker	Kakadkpopar	06
3	03/09/2020	Tree plantation	Farm women	Ambheti	10
4	04/09/2020	Guidance of Aganvadi worker	Anganvadi worker	Ambheti	24
5	05/09/2020	Guidance of Farmer and farm women	Farmer and Farm woman	Sukhala	30
6	07/09/2020	Training programme on Mushroom	Farmer and Farm woman	KVK	30
7	08/09/2020	Training programme on Nutritional garden	Farm women	KVK	25
8	09/09/2020	Training programme on mall nutrition	Farm women	KVK	14
9	10/09/2020	Training programme on Nutritional garden	Anganvadi worker/farm women	KVK	20
10	11/09/2020	Visit to Anganvadi	Farm women and children	Mota pondha	04
11	12/09/2020	Layout of nutritional garden	anganvadi worker	Dhodhadkuva	20
12	14/09/2020	Visit of Nutiritional garden	Farm women	Sukhala	20
13	17/09/2020	Capacity Development of Anganvadi worker	Aganvadi worker/ farm women	KVK	75
14	18/09/2020	Fruit tree plantation Anganvadi	Aganvadi worker	Balchondhi	16
15	21/09/2020	Guidence on terrace garden	Farmer and Farm woman	Ambheti	25
16	23/09/2020	Training Programme	Aganvadi worker/ farm women	Karaya	37
17	25/09/2020	Guidence on Milk process	Farmer and Farm woman	Ambheti	16
18	28/09/2020	Layout of nutritional garden	farm women	Koparli	10
19	29/09/2020	Gosthi on child balance diet	Farm women and child	Kakadkpopar	21
20	30/09/2020	Guidance on family nutrition	Farm women	KVK	23

APR SUMMARY

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	97	1796	673	2469
Rural youths	03	21	55	76
Extension functionaries	06	102	36	138
Sponsored Training	--	--	--	--
Vocational Training	02	40	00	40
Total	**108**	**1959**	**764**	**2723**

2. Frontline demonstrations

Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	--	--	--
Pulses	263	55.00	263 units
Cereals	250	47.00	250 units
Vegetables	64	5.25	64 units
Other crops (sugarcane)	10	1.00	10 units
Green fodder –perennial grass	27	2.70	27 units
Green fodder –fodder sorghum	60	9.00	60 units
Total	674	119.95	674 units
Other enterprises			
Green manuring	20	2.00	20units
Mushroom	54	--	54units
Kitchen gardening	25	0.25	86units
Total	99	2.25	99 units
Grand Total	773	122.20	773 units

3. Technology Assessment

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	07	85	85
Livestock	01	15	15
Total	**08**	**100**	**100**
Technology Refined			
Crops	--	--	--
Livestock	--	--	--
Various enterprises	--	--	--
Total	--		
Grand Total	**08**	**100**	**100**

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	796	10024
Other extension activities	06	37
Total	802	10061

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke-ting	Aware-ness	Other enterprise	Total
Valsad	Text only	04	--	02	01	06	--	13
	Voice only	--	--	--	--	--	--	--
	Voice & Text both	--	--	--	--	--	--	--
	Total Messages	04	--	02	01	06	--	13
	Total farmers Benefitted	64735	--	32825	16400	96795	--	210755

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	216.50 qt	260700
Planting material (No.)	76000 nos.	70500
Fruitfly trap	682 nos.	25234
Vermicompost	12000 kg.	60000
Vermiculturet	75 kg.	15000

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil - 819	817	88170
Water - 118	118	5900
Plant - 54	59	--
Total -	**994**	**94070**

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	01
2	Conferences	--
3	Meetings	--
4	Trainings for KVK officials	25
5	Visits of KVK officials	--
6	Book published	--
7	Training Manual	02
8	Book chapters	--
9	Research papers	02
10	Lead papers	--
11	Seminar papers	--
12	Extension folder	08
13	Proceedings	--
14	Award & recognition	--
15	On going research projects	--