ANNUAL PROGRESS REPORT

(JANUARY-2020 TO DECEMBER, 2020)

SUBMITTED TO

ICAR-ATARI,

ZONE-VIII, PUNE

SUMITTED BY

KRISHI VIGYAN KENDRA

SAMODA-GANWADA

TA.SIDHPUR, DIST.PATAN (GUJARAT)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address with PIN code	Telephone		E mail	Website address & No. of visitors (hits)
	Office	FAX		
Krishi Vigyan Kendra Saraswati Gram Vidhyapith Samoda-Ganwada Ta.Sidhpur, Di. Patan Gujarat, Pin. 384 151	02767 285528	-	kvksamoda@yahoo.com	www.kvkpatan.in

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

Address	Telephone		E mail	Website address
	Office	FAX		
Saraswati Gram Vidyapeeth, Samoda-Ganwada Ta.Sidhpur, Di. Patan Gujarat, Pin. 384 151 (N.G.)	02767 285199	02767 285528	kvksamoda@yahoo.com	-

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. Upesh Kumar Senior Scientist and Head Krishi Vigyan Kendra Samoda-Ganwada Ta.Sidhpur, Di.Patan Gujarat Pincode-384151	02767 285528	9425661514	kvksamoda@yahoo.com

1.4. Year of sanction: 1993

1.5. Staff Position (as on 31 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.Upesh Kumar	Plant Pathology	PB-4 - 37,400-67000	9000	01/10/2016	-
2.	Subject Matter Specialist	Shri G.A.Patel	Plant Pathology	PB-3 - 15600-39100	6600	06/5/1993	-
3.	Subject Matter Specialist	Shri H.P.Patel	Extension Education	PB-3 - 15600-39100	6600	08/5/1993	-
4.	Subject Matter Specialist	Smt. H.B.Patel	Home Science	PB-3 - 15600-39100	6600	19/8/2002	-
5.	Subject Matter Specialist	Shri S.S. Darji	Horticulture	PB-3 - 15600-39100	5400	02/4/2012	-
6.	Subject Matter Specialist	Shri R.P.Chaudhari	Agronomy	PB-3 - 15600-39100	5400	16/4/2015	-
7.	Subject Matter Specialist	Shri S.J.Patel	Animal Science	PB-3 - 15600-39100	5400	01/09/2016	-
8.	Programme Assistant	Smt. J.S.Patel	-	PB-2 - 9300-34800	4600	27/7/1996	-
9.	Computer Programmer	Shri D.R.Patel	-	PB-2 - 9300-34800	4600	06/05/1993	-
10.	Farm Manager	Shri D.N.Patel	-	PB-2 - 9300-34800	4600	22/2/1996	-
11.	Accountant/Superintendent	Shri N.B.Patel	-	PB-2 9300-34800	4600	25/1/1996	-
12.	Stenographer	Shri J.K.Patel	-	PB-1 5200-20200	2400	25/01/1996	-
13.	Driver 1	Shri R.A.Patel	-	PB-1 - 5200-20200	2000	14/8/2010	-
14.	Supporting staff 1	Shri R.H.Desai	-	PB-1 - 5200-20200	1900	14/5/1993	-
15.	Supporting staff 2	Shri R.D.Thakor	-	PB-1 - 5200-20200	1900	25/1/1996	-
16.	Supporting staff 3	Shri P.V.Senma		PB-1 - 5200-20200	1900	25/1/1996	-

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	1.00
2.	Under Demonstration Units	2.00
3.	Under Crops	9.00
4.	Orchard/Agro-forestry	5.00
5.	Others (specify)	3.00
	Total	**20.00**

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting year	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	1993	694	21,87,250=00	-	-	-
2.	Farmers Hostel	ICAR	1999-2000	308.82	12,37,848=11	-	-	-
3.	Staff Quarters (9)	ICAR	1996-97	731	16,89,512=74	-	-	-
4.	Demonstration Units (2)	RKVY	2012-13	4,000	5,45,000=00	-	-	-
5	Fencing	ICAR	2001-02	-	2,99,902=00	-	-	-
6	Rain Water harvesting system	-	-	-	-	-	-	-
7	Threshing floor	ICAR	2006-07	262.89	2,68,039=00	-	-	-
8	Farm Godown	ICAR	2006-07	44.89		-	-	-
9.	Implement shed	ICAR	2011-12	-	285640=00	-	-	-
10.	Other	-	-	-	-	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tractor	2019-20	6,13,417.00	650.4 Hr	New tractor
Jeep	2009-10	7,60,236.00	246880	Working
Motorcycle	2010-11	49,695.00	56530	Working

C) Equipments & AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Slide Projector/ O.H.P.	1994	23,969=00	Working
Mega Phone	1994	2,140=00	Working
Computer + Printer	2006	66,530=00	Working
Stabilizer	2006	1,750=00	Working
LCD Projector	2007	54,326=92	Working
DVD Player	2007	3,846=16	Working
Laptop	2007	39,423=08	Working
P.A. System	2009	28,600=00	Working
Computer	2009	49,500=00	Working
Generator	2009	98,500=00	Working
Fax machine	2009	19,800=00	Working
Multicrop thresher	2011	1,46,000=00	Working
Rotary weeder	2011	51,450=00	Working
Power sprayer	2011	15,855=00	Working
Seed cum fertilizer drill	2011	27,250=00	Working
K-YAN	2013	76,650=00	Working
Oven	2014	7200=00	Working
Sewing Machine	2014	8700=00	Working
Computer (Dell inspiron 3250) (No.2)	2017	68000=00	Working

Epson –M-200 printer (No.1)	2017	12000=00	Working
AC (No.2)	2017	98000=00	Working
Podium –PD-900	2017	40000=00	Working
Promax audio trally	2017	16000=00	Working
Interactive white board-IR80	2017	32000=00	Working
Double sided pinup board	2017	17050=00	Working
Folding banner stand	2017	2000=00	Working
Projection screen	2017	3200=00	Working
Camera (No.3) Canon DLSR Sony digital Sony Handy cam	 2017 2017 2017	 43495=00 8390=00 31990=00	Working
Philips 55’ digital signage display	2017	99800=00	Working
Magazin display stand (No.2)	2017	7640=00	Working
Motorized scroller	2017	17300=00	Working
Acrylic charts (57)	2017	79800=00	Working
Rolling charts (27)	2017	8910=00	Working
Standy with flex banner (No.4)	2017	3680=00	Working
GPS-Navigator	2017	8000=00	Working
Sprayers No.4) -Aspee durotekic battery sprayer -Aspee Bolo motorized knapsack sprayer -Aspee duroteck hitech sprayer -Aspee (Marut sprayer)	2017 2017 2017 2017	 14650=00	Working
Nursery tools	2017	35965=00	Working
Water cooler with purifier	2017	52100=00	Working
Soil testing lab kit (No.2)	2017	172000=00	Working
Chaff cutter	2017	26964=00	Working
Grinder	2017	16065=00	Working
BP monitor	2017	1200=00	Working
Weighting scale	2017	1000=00	Working
Acrylic specimen box (30)	2017	10500=00	Working
Agrimedia video film (125)	2017	13125=00	Working
Double sided pinup board (No.2)	2017	34100=00	Working

1.8. Details of SAC meetings conducted in the year 2020

Date	Name and Designation of Participants	Salient Recommendations	Action taken
19-02-2020	Sri M.L.Patel, Director, SGVP, Samoda-Ganwada, District – Patan	Popularization of organic farming	Training – 04 No (115 Participants) Lecture delivered – 05 No (503 Participants) Webinar- 02 No (344 Participants) CD Show- 01 No (28 Participants) KVK sale - 9150 Kg Vermi compost KVK supplied - 100 Lit waste decomposer to farming community
	Dr V.T.Patel, DEE, SDAU, S.K. Nagar		
	Dr.R.A.Patel. Senior Scientist & Head, K.V.K., Kherva, Mahesana		
	Dr.A.M. Patel, Associate Research Scientist Spices Research Station, Jagudan, S.D.A.U.		
	Dr.R.R.Prajapati, Associate Professor. DEE, SDAU, S.K. Nagar		
	Shri M.J. Patel, Manager, Lead Bank, Patan		
	Shri Rakesh kumar Varma, D.D.M., NABARD, Patan	KVK should cover all the taluka of Patan district	KVK are directly covered in all taluka except Radhanpur & Santalpur. These taluka are also covered by KVK through convergence programme of other department
	Dr. V.B.Parmar, Deputy Director , Animal Husbandry, District - Patan		
	Dr. A.V.Joshi, Assistant Director, I.C.D.P., Patan		
	Shri C.S.Patel, Assistant Director of Horticulture, Patan	More awareness about Bio-fertilizer & bio pesticides	Training – 07 No (285 Participants) Lecture delivered – 06 No (320 Participants) FLD - 06 No of FLDs (245 No of Demo.) Vermi compost sale- 9150 Kg
	Smt Desai Dipali C., A.O., Agriculture Department, Sidhpur		
	Shri Bharatbhai P. Patel, Range Forest Officer. Siddhpur		
	Solanki Bharatiben M.,I.C.D.S., I.C.D.S., Sidhpur	To promote horticultural and spices crops	FLD on Spices- 02 No (71 No of demo) FLD on Fruit plant- 01 No (20 No of Demo) FLD on Vegetable crops- 01 (20 No of demo Training – 14 No (528 No of farmers) Lecture delivered- 12 No (624 No of farmers)
	Shri P.A. Patel, F.L.C.- B.O.B., B.O.B.,Patan		
	Shri V.V.Desai, Assistant Director , G.L.D.C., Patan		
	Shri A.D. Patel, Area manager , G.G.R.C., Patan		
	Shri A.G. Mangukiya, Depo Incharge, G.N.F.C., Sidhapur		
	Shri K.B.Patel, Depo Incharge, G.S.F.C., Sidhapur		
	Shri Sompura Hardik R., B.T.M.- Saraswati, ATMA, Patan		
	Shri Mukeshbhai Desai, District Manager, Reliance foundation, Patan	KVK provide more no of quality planting material of fruits & vegetable crop	KVK sale 3566 No of sampling of fruit plant, 19538 No of seedling of vegetables.
	Shri Bharat K.Chaudhary, News Reporter, D.D.News, Patan		
	Shri Asodiya Dhaval D,, Representative N.Y.K., N.Y.K., Mahesana		

	Shri Patel Dahyabhai L., Progressive farmer, Matpur Village		
	Shri Chaudhary Shankarbhai, Progressive farmer, Samoda Village	Organize Animal Health Camp with the co-ordination of Department	With convergence of department, KVK organized 02 No of Animal Health Camp
	Smt. Chaudhary Varshaben R, Progressive Farm women, Kansa village		
	Smt.Patel Roshaniben M., Progressive Farm women, Kanesara village	KVK promote of bypass fat/ Protein technology	FLD- 02 No, Training Conduced- 02 No Participatory training- 05 No
	Shri Thakor Taraben P., Progressive Farm women, Brahmanwada village		
	Dr Upesh Kumar, Member Secretary, Krishi Vigyan Kendra, Samoda-Ganwada	Promote Azolla as Animal feed	KVK established demo unit & provide azolla culture to farming community KVK impart training on Azola production.
		Efficient use of chemical fertilizer	KVK conduct 05 No of training, 02 No of training to extension functionaries, & 04 No of FLD for promotion of liquid bio fertilizer & STV based nutrient management
		Promote kitchen garden	FLD- 01 (60 No of demonstration) Training- 04 No (92 No of farm women) Field Day- 03 (115 No of farm women)
		Technical support to FPO regarding quality seed production	Promote seed production technology of field crop Regular technical backup
		Technical support of KVK to reliance foundation	Webinar and training programme were organize on you tube for more no. of farmers. Excellent support from Reliance Foundation to organize various you tube live programme
		To promote the value addition activities	KVK have been organize on/off campus training programme for value addition in fruits and vegetables

2. DETAILS OF DISTRICT / JURISDICTION AREA OF KVK

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

S. No	Farming system/enterprise
1.	Crop production – Dairy
2.	Crop Production – Horticulture – Dairy
3.	Poultry Farming.
4.	Cropping system predominant in district - Castor - Cotton - Green gram/ Black gram/ Cluster bean – Wheat/ Mustard/ Chickpea/ Cumin / Funnel – Pearl millet

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

a) Soil type

Sl. No.	Agro-climatic Zone	Characteristics
1	Zone No.4 (Patan, Saraswati, Sidhpur and Chansama taluka)	- Average rainfall is 610 mm. - Soil type is loamy, sandy, saline & medium black. - Main crops- Cotton, Wheat, Castor, Cumin, Bajara, Mustard, Fennel, Chilli, Carrot
2	Zone No.8 (Harij, Sami, Shankheswar, Radhanpur and Santalpur taluka)	- Average rainfall is 500mm. - Soil type is loamy, sandy, saline and medium black. - Main Crops - Rainfed Cotton, Wheat, Gram, Dill seed, Mustard & Cumin.

b)Topography

Sr. No.	Agro ecological	Soil texture	Rainfall mm	Special features	Principal crops	Taluka cover
1.	Alluvial sandy soil with low rainfall	Loamy sand to sandy loam	500-700	Low rainfall dry climate	Castor, Mustard, Bajra, Cotton, Sorghum	Sidhpur :89.56% Patan :79.9%
2.	Saline soil with low rainfall	Sandy loam saline soil	500-700	Low rainfall, dry climate, and absence of vegetative cover	Cotton, Castor, Bajra, Pulses	Chanasma : 78.64%
3.	Salt affected soil	Medium black saline soil	400-500	Low rainfall dry climate and absence of vegetative cover	Bajra, Sorghum, Cumin, Gram, Cotton	Harij : 65.45% Sami :84.32% Radhanpur : 81.54% Santalpur ; 90.98%

2.3 Soil Types

S. No	Soil type	Characteristics	Area in ha
1.	Heavy black soil	- High Water holding capacity - Low permeability - Water logging condition - Fertile soil	30400
2.	Medium black soil	- Medium WHC - Medium permeability - Fertile soil	334400
3.	Loamy soil	- More retain water and nutrient than sandy soil and low retain water and nutrient than black soil	213220
4.	Sandy soil	- Low WHC - High permeability	165424
5.	Saline soil	- Salts accumulation on the soil surface - Water logging condition - Crack formation during Summer Season	109535

2.4. Area, Production and Productivity of major crops cultivated in the area of jurisdiction of KVK (2019)

S. No	Crop	Area (ha)	Production (MT.)	Productivity (Qt./ha)
A	**Field Crop**			
	Bajra-Kharif	1065	577	5.42
	Bajra-Summer	5745	15190	26.44
	Cotton- Desi	18290	12157	6.64
	Hybrid	34900	31375.1	8.99
	Castor	111980	180960	16.16
	Mustard	29262	44420	15.18
	Wheat	40180	137355	34.18
	Pulses Gram	7180	3698	5.15
	Green-gram	894	407	4.55
	Black-gram	1789	850	4.75
	Cluster bean (Seed)	42085	25335	6.02
	Moth bean & cowpea	321	157	4.88
B	**Fruit crops (Area- Ha, Production in M.T. & Productivity in M.T./Ha)- 2018-19**			
	Citrus	850	10200.4	12.00
	Mango	103	515.00	5.00
	Ber	369	3070.80	10.49
	Guava	31	279.00	9.00
	Pomegranate	662	7480.60	11.30
	Date Palm	188	1314.00	6.99
	Papaya	151	6267.00	41.50
	Aonla	161	1376.55	8.55
	Total/ Average	**2620**	**31303.36**	**12.02**
C	**Vegetable crops (Area- Ha, Production in M.T. & Productivity in M.T./Ha)- 2018-19**			
	Potato	767	18247	23.79
	Brinjal	349	6491	18.60
	Cabbage	228	4150	18.20
	Tomato	174	4289	24.64
	Cauliflower	310	5766	18.60
	Cucurbits	496	8839	17.82
	Total/ Average	**3748**	**80656**	**21.50**

D	Spice crops (Area- Ha, Production in M.T. & Productivity in M.T./Ha)- 2018-19			
	Cumin	6421	32749	0.51
	Fennel	2357	4243	1.80
	Coriander	100	168	1.68
	Fenugreek	850	1641	1.93
	Isangul	521	511	0.98
	Ajwain	180	166	0.92
	Suwa	3600	5256	1.46
	Total/ Average	**71821**	**44734**	**0.82**
E	**Flower crops (Area- Ha, Production in M.T. & Productivity in M.T./Ha)- 2018-19**			
	Rose	49	427	8.71
	Marigold	57	523	9.18
	Mogra	03	22	7.33
	Total/ Average	**109**	**972**	**8.92**

Source: District agriculture/ Horticulture/ Animal Husbandry department.

2.5. Weather data (2020)

Month	Rainfall (mm)	Temperature 0 C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
January	-	24.68	10.25	-	-
February	-	28.19	13.96	-	-
March	-	29.62	19.31	-	-
April	-	35.73	26.02	-	-
May	-	40.47	29.14	-	-
June	86	39.87	28.12	-	-
July	27	34.68	25.73	-	-
August	248	30.78	24.02	-	-
September	199	31.04	25.04	-	-
October	**15**	31.26	24.36	-	-
November	**-**	28.86	20.24	-	-
December	**-**	27.66	13.82	-	-
Total	**575**				

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

Category	Population	Production	Productivity
Cattle			
Crossbred	123530	1104	3.68 kg./day
Indigenous	7493	2520	8.40 kg./day
Buffalo	363514	1350	4.50 kg./day
Sheep			
Crossbred	53750	-	-
Indigenous	-	-	-
Goats	102937	-	-
Pigs	131	-	-
Crossbred	-	-	-
Indigenous	-	-	-
Rabbits	185	-	-
Poultry			
Hens	26210	7207750 egg./yr.	275 egg./bird/yr.

2.7. Details of Operational area / Villages

Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Siddhpur	Siddhpur	Nedra	Blackgram Green gram Castor Cotton Mustard Wheat Chickpea Bajra Cumin Fennel Tobacco Carrot	-Average productivity is low in major crop. -Leaf curl infestation in chilli -Low ground water table. -Soil productivity status is low -Problematic soil- Saline & Alkaline soil -Flower dropping in cotton -Pest & diseases intensity high- para wilt in cotton, termite in wheat, Blight in Cumin, Mealybug in Cotton, Semi-looper & prodenia	-Average productivity of major crops is low -Micro irrigation system -Reclamation of problematic soil -Area under fruit & vegetable crop is very low -Scope & Importance of secondary agriculture -Average milk production per animal is low -Farm mechanization -Women empowerment through
Patan	Patan	Mandotri & Dharpur			
Chanasma	Chanasma	Ganget & Jitoda			
Saraswati	Saraswati	Kimbuva & Delvada			
Harij	Harij	Tharod, Aritha			
Sami	Sami	Nayka & Sonar			
Sankeshwar	Sankeshwar	Tuvad & Datisana			

			Potato Chilli Pomegranate Kagzi lime	in castor, and citrus canker & dieback in lime -Pink ball worm infestation in BT Cotton -Less adoption of horticultural crops -Loss of food grains due to poor knowledge and storage facility -Average milk production per animal is low	income generation activities -No use of micronutrient in fruits & vegetable crop

2.8. Priority thrust areas:

Crop/ Enterprise	Thrust area	Crop/ Enterprise	Thrust area
Green gram/ Black gram	Improved variety, INM, IWM, MIS, IPM & IDM	Chili	Nursery Management INM MIS IDM IPM Value Addition
Castor	Hybrid variety, INM, MIS, IWM, IPM & IDM	Pomegranate and Lime	Plant propagation technique Training & Pruning Rejuvenation of old orchards Micro Nutrient Application MIS IDM IPM Value Addition
Cotton	Hybrid variety, INM, MIS, IWM, IPM & IDM	Soil Health	Production of Organic Inputs Soil Fertility Management Management of problematic soil

Chickpea	Improved variety, INM, MIS, IWM, IPM & IDM	Live-stock	Dairy Management Feed Management Disease Management Breeding Management Production of livestock feed and fodder Animal nutrition management
Mustard	Improved/ Hybrid variety, INM, MIS, IWM, IPM & IDM	Fodder Bajra and Sorghum	Integrated Crop Management Integrated Nutrient Management Fodder production
Wheat	Hybrid variety, INM, MIS, IWM, IPM & IDM	Home Science	Use of solar cooker Fruits & veg. preservation Farm women empowerment through income generation activity Drudgery reduction House hold Food Security by kitchen gardening Income generating activity Low cost & high nutrition diet Women & child care
Cumin/ Fennel/ Ajwain	Production & management technology Nutrient & Water management Integrated Pest & Disease management & Value addition		

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
06	06	60	48	21	21	555	606

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
79	83	1890	2338	60	72	4842	13500

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
54		112000	215604

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

3.1. B. Operational areas details during the year 2020

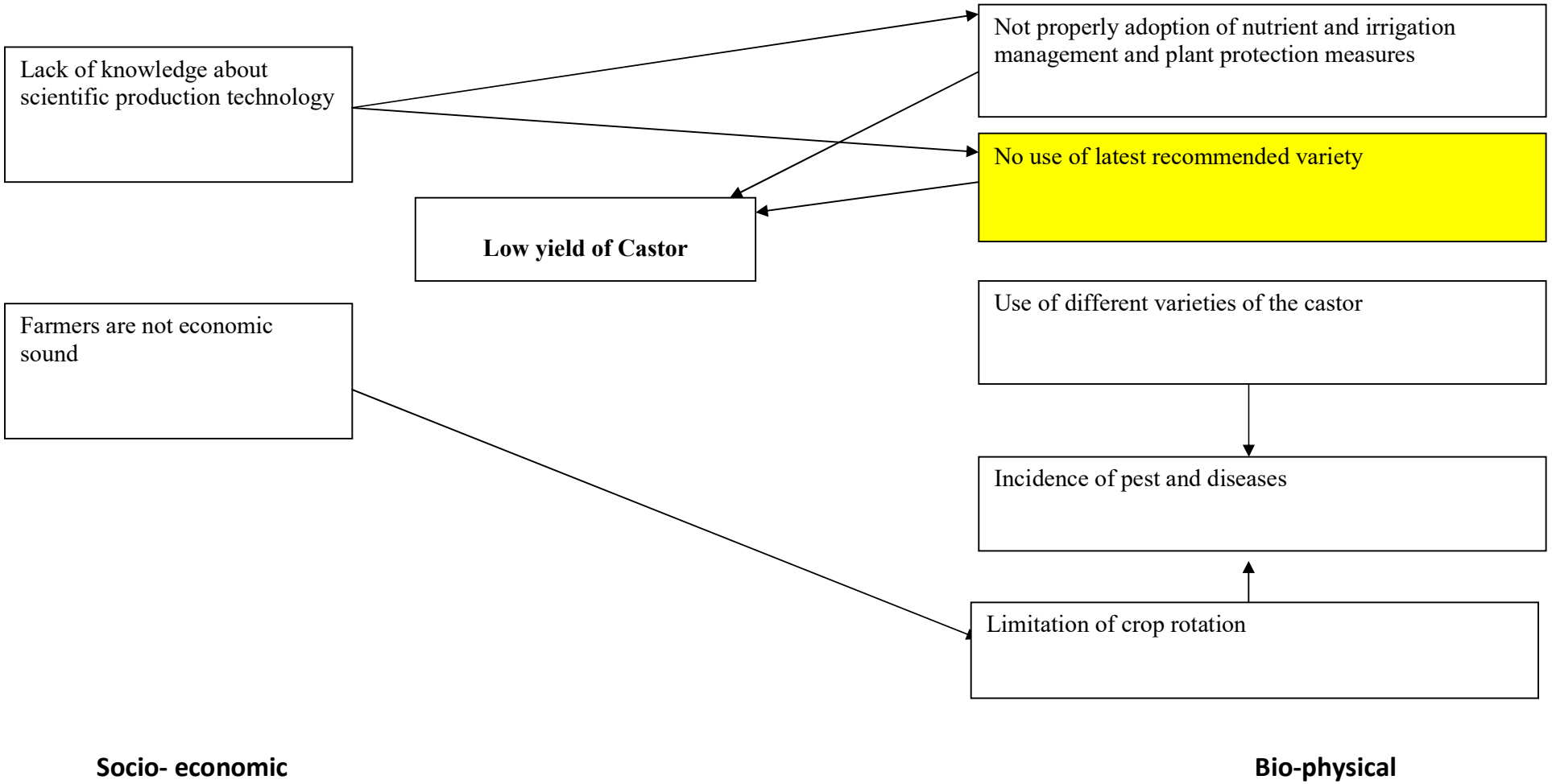
S.No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (Ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Proposed Intervention (OFT, FLD, Training, extension activity etc.)*
1	Cotton	Imbalance use of nutrient Heavy infestation of pest- pink boll worm Heavy incidence of disease- Wilt	11,000 ha	Chansama	Training, FLD, Field Day, Field visit etc
2	Black gram	Use of old/ local variety Imbalance use of nutrient Heavy infestation of pest Heavy incidence of disease	1000 ha	Sankeshwar & Sami	Training, FLD, Field Day, Field visit etc
3	Castor	Imbalance use of nutrient Scarcity of irrigation water Heavy infestation of pest Heavy incidence of disease	75000 ha	Saraswati, Siddhapur	Training, FLD, Field Day, Field visit etc
4	Chickpea	Use of old/ local variety Imbalance use of nutrient Scarcity of irrigation water Heavy infestation of pest- Heliothis Heavy incidence of disease- Wilt	5000 ha	Sankeshwar & Sami	Training, FLD, Field Day, Field visit etc
5	Mustard	Use of old/ local variety Imbalance use of nutrient Scarcity of irrigation water Heavy infestation of pest- Aphid Heavy incidence of disease-blight	20000 ha	Chanasma & Patan	Training, OFT, FLD, Field Day, Field visit etc
6	Wheat	Imbalance use of nutrient Scarcity of irrigation water Heavy infestation of pest- termite	25000 ha	Siddhapur	Training, OFT, FLD, Field Day, Field visit etc

7	Chilli	Imbalance use of major nutrient& no use of micro nutrient Scarcity of irrigation water Heavy infestation of pest- sucking pest Heavy incidence of disease – leaf curl	75 ha	Chansma, Radhanpur	Training, FLD, Field Day, Field visit etc
8	Fennel, Ajwain & Cumin	Use of old/ local variety Imbalance use of nutrient Scarcity of irrigation water Heavy incidence of disease-blight	25000 ha	Chanasma,, Patan	Training, FLD, Field Day, Field visit etc
8	Milch animal- Cow & Buffalo	Heavy infestation of endo & ecto parasite No use of by pass fat No or improper use of mineral mixture Not availability of green fodder in round the year	675 % animal are affected	Siddhpur, Saraswati	Training, OFT, FLD, Field Day, Field visit etc

* Support with problem-cause and interventions diagram

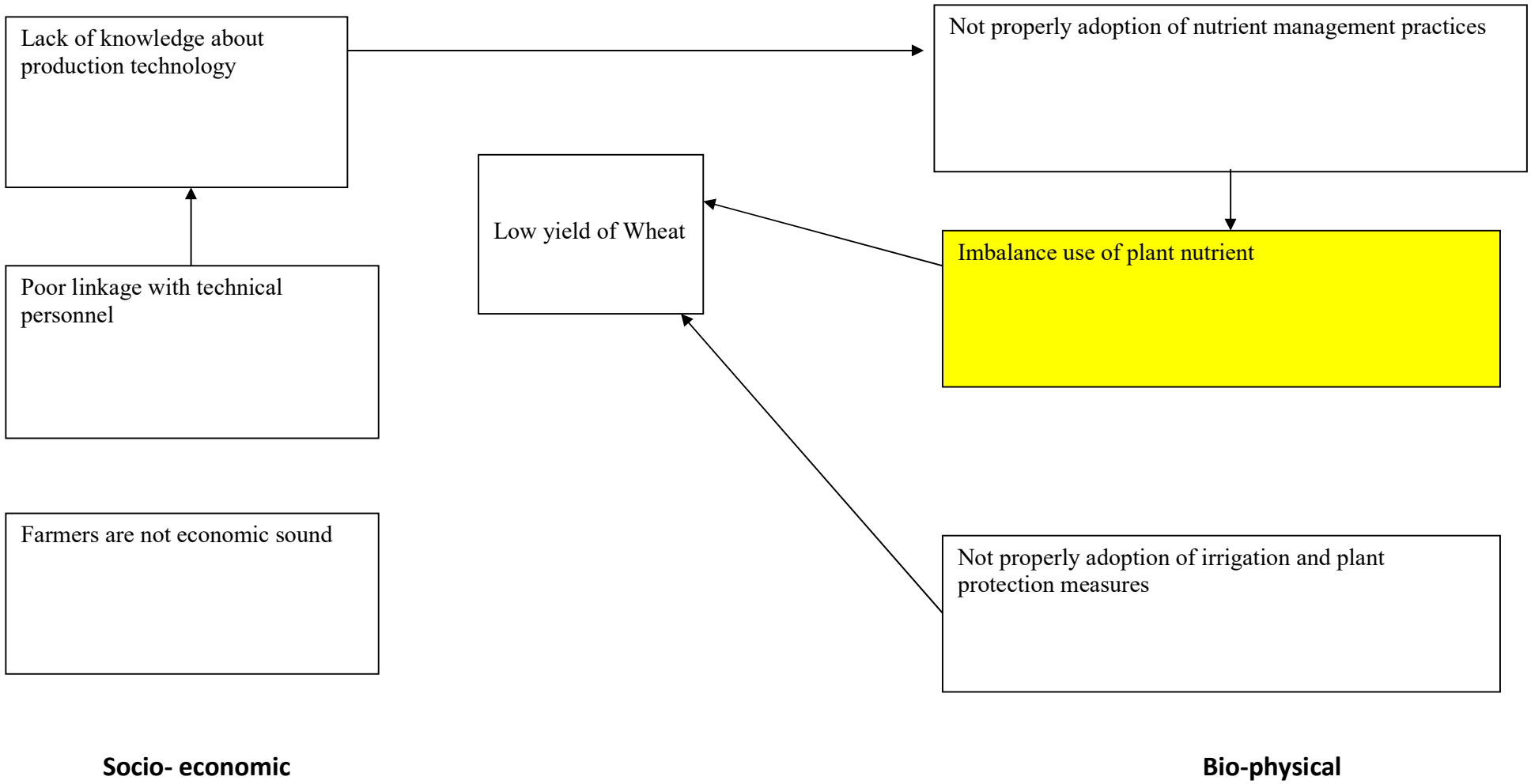
On Farm Testing -1

PROBLEM CAUSE DIA-GRAM – CASTOR VARIETY



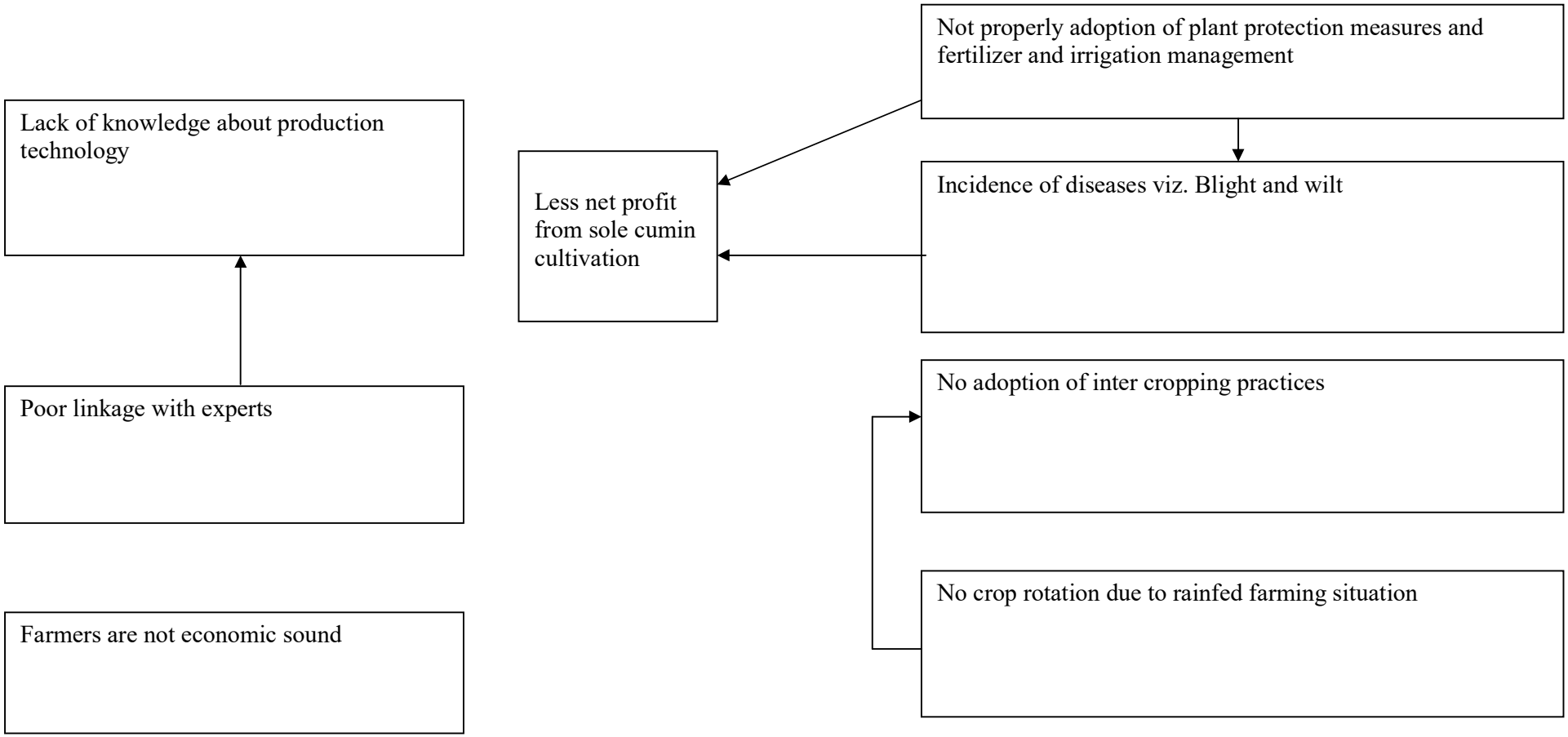
On Farm Testing -2

PROBLEM CAUSE DIA-GRAM – WHEAT-INM



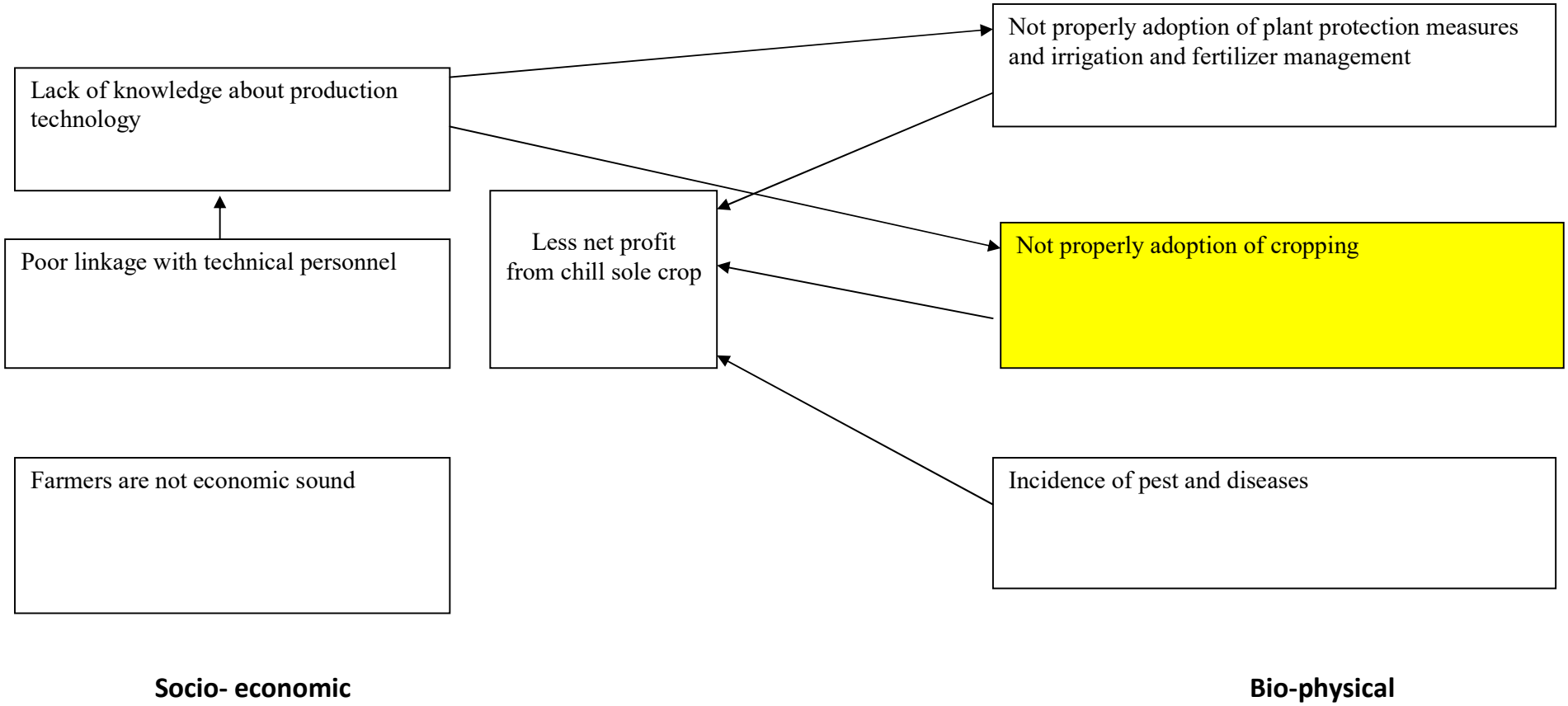
On Farm Testing -3

PROBLEM CAUSE DIA-GRAM – CUMIN - AJWAIN



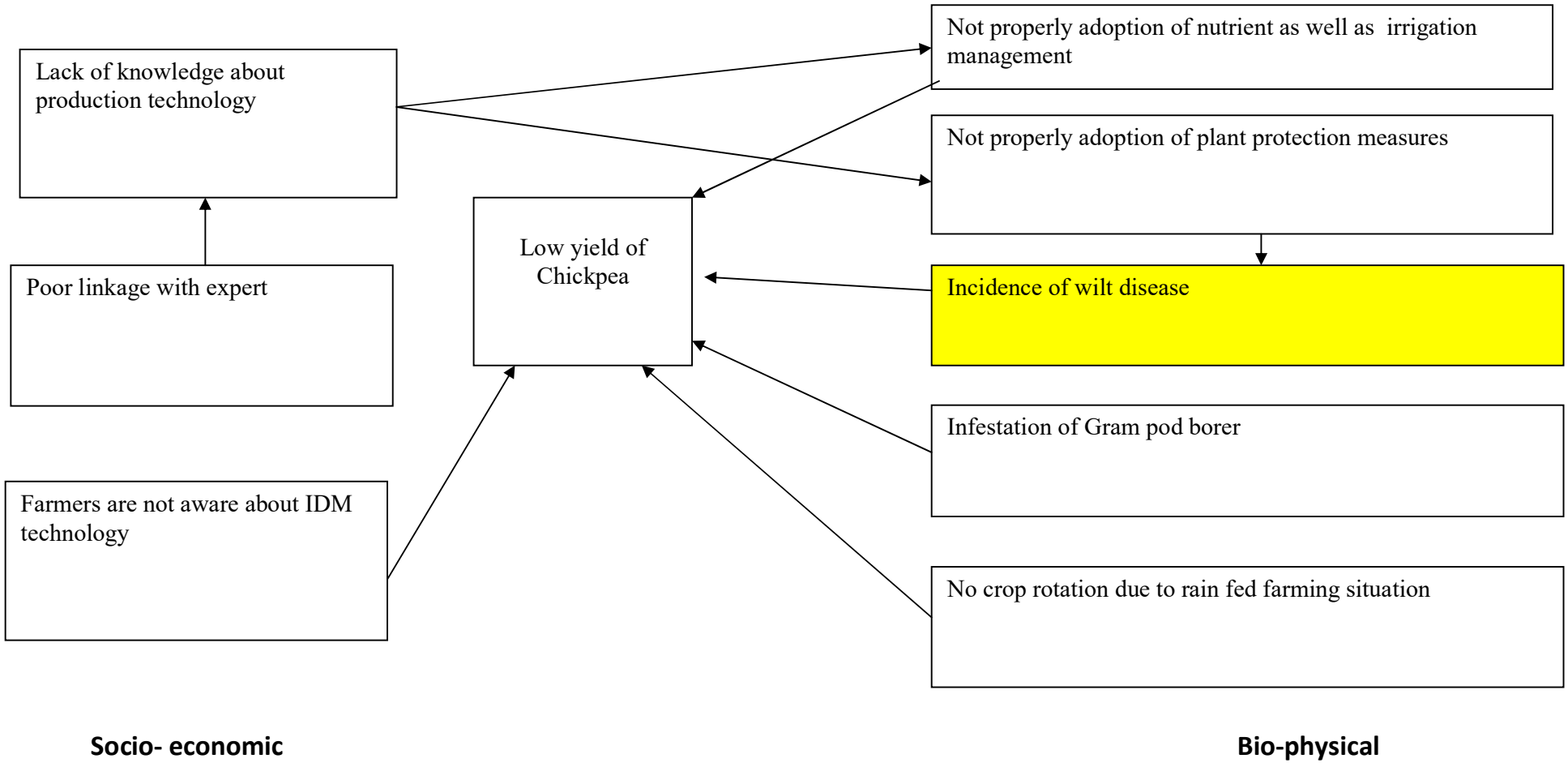
On Farm Testing -4

PROBLEM CAUSE DIA-GRAM – CHILLI



On Farm Testing -5

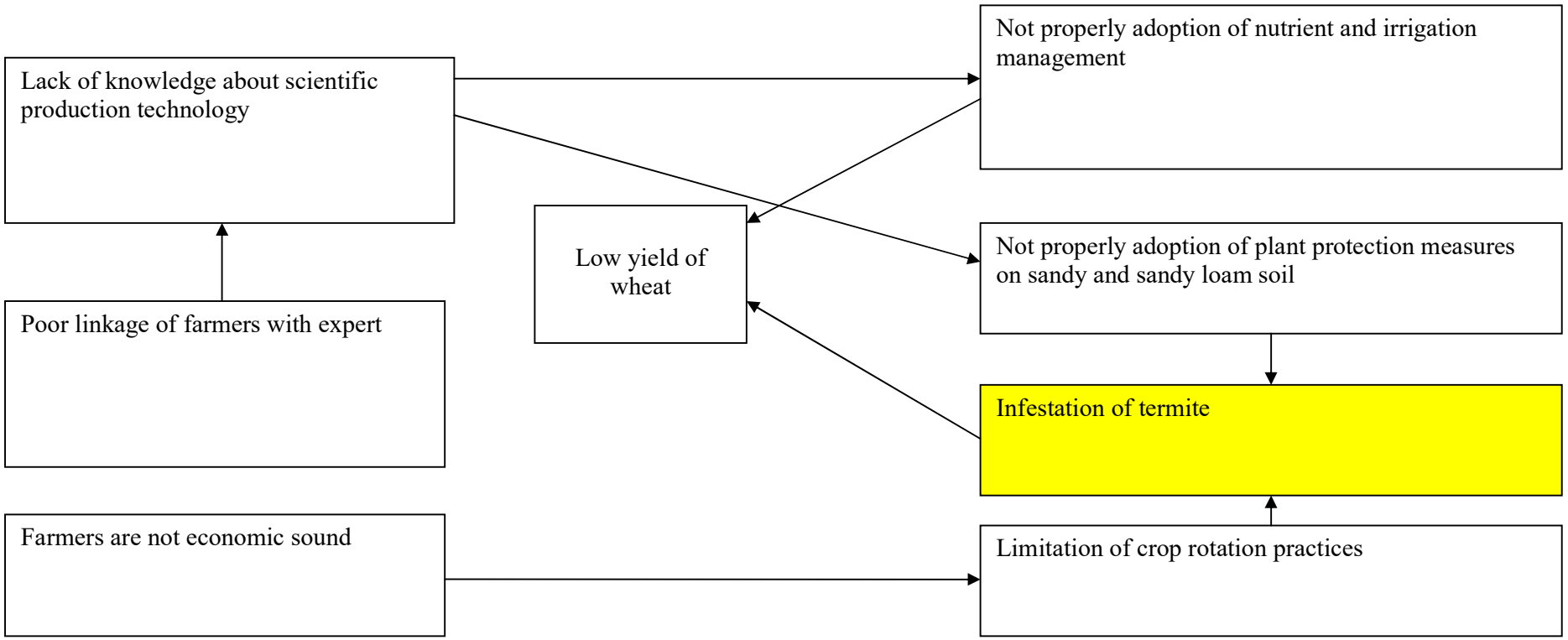
PROBLEM CAUSE DIA-GRAM – CHICKPEA-WILT



On Farm Testing -6

(Pant Protection) Wheat termite

PROBLEM CAUSE DIA-GRAM – WHEAT TERMITE



Socio- economic

Bio-physical

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

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management	1									**1**
Varietal Evaluation		1		1						**2**
Integrated Pest Management	1									**1**
Integrated Crop Management					1					**1**
Integrated Disease Management			1							**1**
Small Scale Income Generation Enterprises										
Weed Management										
Resource Conservation Technology										
Farm Machineries										
Integrated Farming System										
Seed / Plant production										
Value addition										
Drudgery Reduction										
Storage Technique										
Mushroom cultivation										
Total	**2**	**1**	**1**	**1**	**1**					**6**

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

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds						
Nutrition Management						
Disease of Management						
Value Addition						
Production and Management						

Feed and Fodder						
Small Scale income generating enterprises						
TOTAL						

B. Achievements on technologies Assessed - Year- 2019

B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trial covering all the Technological Options)
Varietal Evaluation	Castor	Assessment of Hybrid varieties in castor T1 - GCH-7 (Hybrid Variety) T2 - GCH-8 (Hybrid Variety) T3 - GCH-9 (Hybrid Variety)	10	10	2.5
Integrated Nutrient Management	Wheat	Assessment of nutrient management in wheat T1 - 200: 100: 00KG/ ha N,P & K T2 - 120:60:00 Kg/ha N,P & k (as per STV) T3 - T2+ 2% foliar spray of urea at milking stage	10	10	2.5
Varietal Evaluation	Ajwain	Assessment of variety of Ajwain T1:- Local T2:-GA-2 T3:- AA-93	04	04	0.75 ha
Integrated Pest Management	Wheat	Assessment of IPM module for the management of termite in wheat T1 - Seed treatment by Chlorpyriphos 20EC @ 5 ml./ kg. seed T2 - Seed treatment by Bifenthrin 10% EC @ 2 ml/ Kg seed T3 - Seed treatment by Fipronil 5%SC @ 6 ml/ Kg seed	10	10	2.5 ha
Integrated Disease Management	Chickpea	Assessment of IDM module for the management of wilt in chickpea T1 - Seed treatment by fungicide is not in practice T2 -Seed treatment by Carbendazim 50% WP@ 2 gm/ Kg Seed T3 - Seed treatment by T viridae @ 10 g/Kg seed & Soil inoculation by T viridae @ 2.5 Kg/ ha	10	10	2.5 ha
Total					

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
Evaluation of breeds				
Nutrition management				
Disease management				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total				

C1.Results of Technologies Assessed

Results of On Farm Trial

OFT-1

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
Castor	Irrigated	Low yield of castor due to high male flower & incidence of wilt disease in GCH-7	Assessment of Hybrid varieties in castor	10	T1 - GCH-7 (Hybrid Variety) T2 - GCH-8 (Hybrid Variety) T3-GCH-9 (Hybrid Variety)	No of Spikelet/ Plant & Yield Qtl/ha)	T1-18.4 No	T1-30.2 q/ha	✓ 9.34 more no of spikelet found under T_2 as on T1 ✓ 5.96 % yield enhancement in T_2 as on T_1	-	-
							T2-19.2 No	T2-32.0 q/ha			
							T3-17.6 No	T3- 28.5 q/ha			

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	30.2	Qtl/ha	91460	3.96
Technology option 2	SDAU, S K Nagar	32.0	Qtl/ha	98200	4.13
Technology option 3	JAU, Junagadh	28.5	Qtl/ha	84273	3.72

Details of On Farm Trial

1 **Title of Technology Assessed** - Assessment of hybrid variety in castor

2 **Problem Definition -** Low yield of castor due to high male flower & incidence of wilt disease in GCH-7

3 **Details of technologies selected for assessment-** T1 - GCH-7 (Hybrid Variety)
T2 - GCH-8 (Hybrid Variety)
T3 - GCH-9 (Hybrid Variety)

4 **Source of technology-** SDAU, S K Nagar, JAU, Juagadhh

5 **Production system and thematic area-** Varietal evaluation

6 **Performance of the Technology with performance indicators-**

No of spikelet/ Plant- **T_1-** 18.4 , **T_2-** 19.2, **T3-**17.6

7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques -** Farmers are convinced with the technology of T2 because under technology they found 6.0 % higher yield over own practice.

8 **Final recommendation for micro level situation –** The technology was found more effective over farmers practice & recommendation after compilation of next year data

9 **Constraints identified and feedback for research-** No any Constraints

10 **Process of farmers participation and their reaction**- Farmers are involved each & every activity during technology assessment. They are convinced with the technology & agreed for future adoption

OFT-2

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
Wheat	Irrigated	Low yield of wheat due to imbalance use of plant nutrient	Assessment of nutrient management in wheat	10	T1 - 200: 100: 00KG/ ha N,P & K T2 - 120:60:00 Kg/ha N,P & k (as per STV) T3 - T2+ 2% foliar spray of urea at milking stage	No of effective tillers & Yield (qtl/ha) & Yield Qtl/ha)	T1- 3.92 No T2- 4.62 No T3- 4.70 No	T1-38.4 q/ha T2-44.6 q/ha T3-45.5 q/ha	✓ 17.86% more effective tillers in T_2 & 19.90% in T_3 as compare to T_1. ✓ 16.15% more yield in T_2 & 18.49% in T_3 as compare to T_1	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	**14**	**15**	**16**	**17**	**18**
Technology option 1 (Farmer's practice)	-	38.4	Qtl/ha	51103	3.16
Technology option 2	SDAU, S K Nagar	44.6	Qtl/ha	61334	3.41
Technology option 3		45.5	Qtl/ha	63106	3.47

Details of On Farm Trial

1 **Title of Technology Assessed** - Assessment of nutrient management in wheat

2 **Problem Definition -** Low yield of wheat due to imbalance use of plant nutrient

3 **Details of technologies selected for assessment-** T1 200: 100: 00 Kg/ ha N,P & K

T2 - 120:60:00 Kg/ha N,P & k
T3 - T2+ 2% foliar spray of urea at milking stage

4 **Source of technology-** SDAU, S K Nagar

5 Production system and thematic area- INM

6 Performance of the Technology with performance indicators-

No of effective tillers / Plant- T_1- 3.9 , **T_2-** 4.6, **T3-**4.7

7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques -** Farmers are convinced with the technology of T3 because under technology they found 5.2 % higher yield over own practice.

8 **Final recommendation for micro level situation –** The technology was found more effective over farmers practice & recommendation after compilation of next year data

9 **Constraints identified and feedback for research-** No any Constraints

10 **Process of farmers participation and their reaction**- Farmers are involved each & every activity during technology assessment. They are convinced with the technology & agreed for future adoption

OFT-3

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
Ajawain	Irrigated	Low yield of ajawain due to use of local variety	Assessment of improved variety of Ajawain	04	T1 – Local T2 - GA-2 T3 - AA- 93	No of umbel/ Plant & Yield (qtl/ha)	T1-37.6 No T2-49.2 No T3-47.4 No	T1- 10.33 q/ha T2- 14.13 q/ha T3- 13.61 q/ha	✓ 30.85% more umbel in T_2 & 26.06% in T_3 as compare to T_1. ✓ 36.79% more yield in T_2 & 31.75% in T_3 as compare to T_1	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	10.33	Qtl/ha	30670	1.98
Technology option 2	SDAU, S K Nagar	14.13	Qtl/ha	53325	2.70
Technology option 3	NRC, Seed Spices, Ajmer	13.61	Qtl/ha	49963	2.58

Details of On Farm Trial

1 **Title of Technology Assessed** - Assessment of high yielding variety of Ajwain GA-2 & AA-93

2 **Problem Definition -** Low yield of existing variety of Ajwain

3 **Details of technologies selected for assessment-** variety of Ajwain GA-2 & AA-93

4 **Source of technology-** NRCSS,Ajmer and SSRC,SDAU,Jagudan

5 **Production system and thematic area-** ICM

6 **Performance of the Technology with performance indicators-**

Net Return (Rs/ha)- **T_1**:- 30670 **T_2:-** 53325 **T_3:-** 49963

7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques –** Average umbels per plant found 49.2 & 47.4 in variety GA-2 & AA-93 respectively resulting in 1413 kg/ha. & 1361 kg/ha. yield respectively. 36.79% more yield in variety GA-2 & 31.75% in variety AA-93 as compare to existing variety.

8 **Final recommendation for micro level situation –** Assessed technologies were found more effective over farmers practice & recommendation after compilation of next year data.

9 **Constraints identified and feedback for research-** Required early maturity and powdery mildew resistant variety.

10 **Process of farmers participation and their reaction**- Farmers are involved in each & every activity during identification of problem, execution of technology & data collection. Farmers are seen more profit in recommended technology over own practice (farmers Practice) resulted farmers are appreciate the technology and agreed for future adoption.

OFT-4

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
Chickpea	Semi-irrigated	Low yield of chickpea due to heavy incidence of wilt disease	Management of wilt disease in chickpea	10	T1 - Seed treatment by fungicide is not in practice T2 -Seed	Wilt incidence (%) & Yield (Qtl/ha)	T1-12.6 % T2-7.3 %	T1-13.2 q/ha T2-16.1 q/ha	✓ Reduce the wilt incidence- 42.10 % in T_2 & 49.50 % in T_3 in	-	-

					treatment by Carbendazim 50% WP@ 2 gm/ Kg Seed T3 - Seed treatment by viridae @ 10 g/Kg seed & Soil inoculation by T viridae @ 2.5 Kg/ ha		T3-6.4 %	T3-16.8 q/ha	comparison of T_1 ✓ Enhance the yield – 21.96% in T_2 & 27.3% in T_3 as comparison of T_1		

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	13.2	Qtl/ha	43480	3.14
Technology option 2	JAU, Junagadh	16.1	Qtl/ha	56188	3.51
Technology option 3		16.8	Qtl/ha	59450	3.65

Details of On Farm Trial

1 Title of Technology Assessed :- Management of wilt disease in chick pea

2 Problem Definition :- Low yield of chick pea due to incidence of wilt disease

3 Details of technologies selected for assessment:- T_1:-Seed treatment by fungicide is not in practice T_2:- Seed treatment by Carbendazim 50% WP@ 2 gm/ Kg Seed T_3:- Seed treatment by T viridae @ 10 g/Kg seed & Soil inoculation by T viridae @ 2.5 Kg/ ha

4 Source of technology :- JAU, Junagadh

5 Production system and thematic area :- IDM

6 Performance of the Technology with performance indicators:- In assessed technology T_2 seed treatment by chemichal fungicide and in T_3 assessed technology seed treatment by bio-fungicide, incidence of wilt disease found 7.3% and 6.4% respectivily,while average production was found 61.1 qtl/ha. and 60.8 qtl/ha. respectively, which where 22% and 27.3% respectively higher as compared to T_1 treatment (farmer practices)

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques :- Farmers are ready to adopt the seed treatment by either chemical or bio-fungicide before the sowing of seeds owing to they found less disease incidence.

8 Final recommendation for micro level situation :- Use wilt resistant variety-GG-5,Seed treatment by chemical or bio-fungicide before sowing

9 Constraints identified and feedback for research and developmental departments:- Evaluate wilt resistant variety

10 Process of farmers participation and their reaction :- Group meeting with farmers for selection of the problem solving models of chick pea production technology.

OFT-5

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
Wheat	Irrigated	Low yield of wheat due to heavy infestation of termites	Management of termite in wheat	10	T1 - Seed treatment by Chlorpyriphos 20EC @ 5 ml./ kg. seed T2 - Seed treatment by Bifenthrin 10% EC @ 2 ml/ Kg seed T3 - Seed treatment by Fipronil 5%SC @ 6 ml/ Kg seed	Termite infestation (%) & Yield (Qtl/ha)	T1-10.8 % T2- 3.9 % T3- 3.7 %	T1-35.8 q/ha T2-42.2 q/ha T3-42.6 q/ha	✓ Reduce the termite infestation- 63.89% as T2 & 65.74% as T3 in comparison of T1 ✓ Enhance the yield – 17.88% as T2 & 18.99% as T3 in comparison of T1	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	35.8	Qtl/ha	45310	2.85

Technology option 2	SDAU, S.K. Nagar	42.2	Qtl/ha	56140	3.15
Technology option 3		42.6	Qtl/ha	56870	3.17

Details of On Farm Trial

1 Title of Technology Assessed :- Management of termite in wheat

2 Problem Definition :- Low yield of wheat due to termite infestation

3 Details of technologies selected for assessment:- T_1:- Seed treatment by Chlorpyriphos 20EC @ 5 ml./ kg. seed T_2:- Seed treatment by Bifenthrin 10% EC @ 2 ml/ Kg seed T_3:- Seed treatment by Fipronil 5%SC @ 6 ml/ Kg seed

4 Source of technology :- SDAU,S.K.Nagar

5 Production system and thematic area :- IPM

6 Performance of the Technology with performance indicators:- Termite infestation found in T_2 and T_3 assessed technologies 3.9% and 3.7% respectively and their by average yield was gain 42.2qtl/ha. and 42.6qtl/ha respectively ,which where higher as compared to farmers practices 17.87% and 18.99% respectively.

7 Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques :-Very less infestation found in assessed technologies, so farmers where realized that proper method of seed treatment with recommended dose of pesticide is effective for termite management in wheat.

8 Final recommendation for micro level situation :- seed treatment with recommended dose of pesticide before sowing, Avoid moisture stress in standing crops.

9 Constraints identified and feedback for research and developmental departments:- Evaluate the bio pesticide for termite management.

10 Process of farmers participation and their reaction :- Group meeting with farmers for selection of the problem solving models of termite management in wheat..

B. Achievements on technologies Assessed **Year- 2020**

B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trial covering all the Technological Options)
Varietal Evaluation	Castor	Assessment of Hybrid varieties in castor T1 - GCH-7 (Hybrid Variety), T2 - GCH-8 (Hybrid Variety), T3 - GCH-9 (Hybrid Variety)	10	10	2.5
Integrated Nutrient Management	Wheat	Assessment of nutrient management in wheat T1 - 200: 100: 00KG/ ha N,P & K T2 - 120:60:00 Kg/ha N,P & k (as per STV) T3 - T2+ 2% foliar spray of urea at milking stage	10	10	2.5
Varietal Evaluation	Ajwain	Assessment of variety of Ajwain T1:- Local T2:-GA-2 T3:- AA-93	04	04	0.75 ha
Integrated Crop Management	Chilli-cucurbits	Assessment of cropping system T1:- Chilli- fallow T2:- chilli-Watermelon T3:-Chilli-cucumber for enhancing the net profit	04	04	0.50 ha
Integrated Pest Management	Wheat	Assessment of IPM module for the management of termite in wheat T1 - Seed treatment by Chlorpyriphos 20EC @ 5 ml./ kg. seed T2 - Seed treatment by Bifenthrin 10% EC @ 2 ml/ Kg seed T3 - Seed treatment by Fipronil 5%SC @ 6 ml/ Kg seed	10	10	2.5 ha
Integrated Disease Management	Chickpea	Assessment of IDM module for the management of wilt in chickpea T1 - Seed treatment by fungicide is not in practice T2 -Seed treatment by Carbendazim 50% WP@ 2 gm/ Kg Seed T3 - Seed treatment by T viridae @ 10 g/Kg seed & Soil inoculation by T viridae @ 2.5 Kg/ ha	10	10	2.5 ha
Total					

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
Evaluation of breeds				
Nutrition management				
Disease management				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total				

C1.Results of Technologies Assessed

Results of On Farm Trial

OFT-1

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
Castor	Irrigated	Low yield of castor due to high male flower & incidence of wilt disease in GCH-7	Assessment of Hybrid varieties in castor	10	T1 - GCH-7 (Hybrid Variety) T2 - GCH-8 (Hybrid Variety) T3-GCH-9 (Hybrid Variety)	No of Spikelet/ Plant & Yield Qtl/ha)	Result awaited			-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	Result awaited	Qtl/ha	Result awaited	
Technology option 2	SDAU, S K Nagar		Qtl/ha	Result awaited	
Technology option 3	JAU, Junagadh		Qtl/ha	Result awaited	

Details of On Farm Trial

1 **Title of Technology Assessed** - Assessment of hybrid variety in castor

2 **Problem Definition -** Low yield of castor due to high male flower & incidence of wilt disease in GCH-7

3 **Details of technologies selected for assessment-** T1 - GCH-7 (Hybrid Variety) T2 - GCH-8 (Hybrid Variety) T3 - GCH-9 (Hybrid Variety)

4 **Source of technology-** SDAU, S K Nagar, JAU, Juagadhh

5 **Production system and thematic area-** Varietal evaluation

6 **Performance of the Technology with performance indicators-** Result awaited

7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques -** Result awaited

8 **Final recommendation for micro level situation –** Result awaited

9 **Constraints identified and feedback for research-** Result awaited

10 **Process of farmers participation and their reaction**- Result awaited

OFT-2

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
Wheat	Irrigated	Low yield of wheat due to imbalance use of plant nutrient	Assessment of nutrient management in wheat	10	T1 - 200: 100: 00KG/ ha N,P & K T2 - 120:60:00 Kg/ha N,P & k (as per STV) T3 - T2+ 2% foliar spray of urea at milking stage	No of effective tillers & Yield (qtl/ha) & Yield Qtl/ha)	Result awaited	Result awaited	Result awaited	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	Result awaited	Qtl/ha	Result awaited	
Technology option 2	SDAU, S K Nagar	Result awaited	Qtl/ha	Result awaited	
Technology option 3		Result awaited	Qtl/ha	Result awaited	

Details of On Farm Trial

1 **Title of Technology Assessed** - Assessment of nutrient management in wheat

2 **Problem Definition -** Low yield of wheat due to imbalance use of plant nutrient

3 **Details of technologies selected for assessment-** T1 200: 100: 00 Kg/ ha N,P & K T2 - 120:60:00 Kg/ha N,P & k
T3 - T2+ 2% foliar spray of urea at milking stage

4 **Source of technology-** SDAU, S K Nagar

5 Production system and thematic area- INM

6 Performance of the Technology with performance indicators- Result awaited

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques - Result awaited

8 Final recommendation for micro level situation – Result awaited

9 Constraints identified and feedback for research- Result awaited

10 Process of farmers participation and their reaction- Result awaited

OFT-3

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
Ajawain	Irrigated	Low yield of ajawain due to use of local variety	Assessment of improved variety of Ajawain	04	T1 – Local T2 - GA-2 T3 - AA- 93	No of umbel/Plant & Yield (qtl/ha)	Result awaited	Result awaited	Result awaited	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	Result awaited	Qtl/ha	Result awaited	
Technology option 2	SDAU, S K Nagar	Result awaited	Qtl/ha	Result awaited	
Technology option 3	NRC, Seed Spices, Ajmer	Result awaited	Qtl/ha	Result awaited	

Details of On Farm Trial

1 **Title of Technology Assessed** - Assessment of high yielding variety of Ajwain GA-2 & AA-93

2 **Problem Definition -** Low yield of existing variety of Ajwain

3 **Details of technologies selected for assessment-** variety of Ajwain GA-2 & AA-93

4 **Source of technology-** NRCSS,Ajmer and SSRC,SDAU,Jagudan

5 **Production system and thematic area-** ICM

6 **Performance of the Technology with performance indicators-** Result awaited

7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques –** Result awaited

8 **Final recommendation for micro level situation –** Result awaited

9 **Constraints identified and feedback for research-** Result awaited.

10 **Process of farmers participation and their reaction**- Result awaited

OFT-4

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
watermelon cucumber	irrigated	low net profit of present cropping system chilli-fallow	Assessment of cropping system chilli-cucurbits for enhancing the net profit	04	T_1 –Chilli-Fallow T_2 –Chilli-Watermelon T_3-Chilli-Cucumber	Cropping intensity % & Net Income	T1:-100%. T2:- 200% T3:-200% T2- 200 % T3- 200%	T_1- Rs 133075/ha T2-Rs 242913/ ha T3- Rs 255400/ ha	Chilli-watermelon cropping system is more profitable than chilli-cucumber due to less time required in T_2	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology 1 Chilli-Fallow	IIHR,Banglore	Chilli- 22.7	t/ha.	133075	2.62
Technology 2 Chilli-Watermelon		Chilli- 21.6 & Watermelon-19.2	t/ha.	242913	3.10
Technology 3 Chilli-Cucumber		Chilli- 21.4 & Cucumber-22.8	t/ha.	255400	3.12

Details of On Farm Trial

1 **Title of Technology Assessed** - Assessment of cropping system – Chilli – Cucurbit fruit for enhancing net profit

2 **Problem Definition -** Low profit of present cropping system – Chilli – Fallow

3 **Details of technologies selected for assessment-** Chilli-Water melon & Chilli-Cucumber

4 **Source of technology-** IIHR, Banglore

5 **Production system and thematic area-** ICM

6 **Performance of the Technology with performance indicators-**

Net Return (Rs/ha)- **T_1**:- 1,33,075 **T_2:-** 2,42,913 **T_3:- 2,55,400**

7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques** – Farmer are obtain more B:C ratio (3.10 (**T_2)** & 3.12 (**T_3)** in recommended practice over 2.62(**T_1)** in farmers practice)resulted farmers are convinced with the technology.

8 **Final recommendation for micro level situation –** The technology was found more effective over farmers practice & recommendation after compilation of next year data

9 **Constraints identified and feedback for research-** Fruit fly and powdery mildew are the major problem, so farmers need fruit fly & powdery mildew resistant variety.

10 **Process of farmers participation and their reaction**- Farmers are involved in each & every activity during identification of problem, execution of technology & data collection. Farmers are seen more profit in recommended technology over own practice (farmers Practice) resulted farmers are appreciate the technology and agreed for future adoption.

OFT-5

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
Chickpea	Semi-irrigated	Low yield of chickpea due to heavy incidence of wilt disease	Management of wilt disease in chickpea	10	T1 - Seed treatment by fungicide is not in practice T2 -Seed treatment by Carbendazim 50% WP@ 2 gm/ Kg Seed T3 - Seed treatment by T viridae @ 10 g/Kg seed & Soil inoculation by T viridae @ 2.5 Kg/ ha	Wilt incidence (%) &Yield (Qtl/ha)	Result awaited Result awaited Result awaited	Result awaited Result awaited Result awaited	Result awaited	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	Result awaited	Qtl/ha	Result awaited	
Technology option 2	JAU, Junagadh	Result awaited	Qtl/ha	Result awaited	
Technology option 3		Result awaited	Qtl/ha	Result awaited	

Details of On Farm Trial

1 Title of Technology Assessed :- Management of wilt disease in chick pea

2 Problem Definition :- Low yield of chick pea due to incidence of wilt disease

3 Details of technologies selected for assessment:- T_1:-Seed treatment by fungicide is not in practice T_2:- Seed treatment by Carbendazim 50% WP@ 2 gm/ Kg Seed T_3:- Seed treatment by T viridae @ 10 g/Kg seed & Soil inoculation by T viridae @ 2.5 Kg/ ha

4 Source of technology :- JAU,Junagadh

5 Production system and thematic area :- IDM

6 Performance of the Technology with performance indicators:- Results Awaited

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques :- Results Awaited.

8 Final recommendation for micro level situation :- Results Awaited

9 Constraints identified and feedback for research and developmental departments:- Results Awaited

10 Process of farmers participation and their reaction :- Results Awaited.

OFT-6

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
Wheat	Irrigated	Low yield of wheat due to heavy infestation of termites	Management of termite in wheat	10	T1 - Seed treatment by Chlorpyriphos 20EC @ 5 ml./ kg. seed T2 - Seed treatment by Bifenthrin 10% EC @ 2 ml/ Kg seed T3 - Seed treatment by Fipronil 5%SC @ 6 ml/ Kg seed	Termite infestation (%) & Yield (Qtl/ha)	Results Awaited Results Awaited Results Awaited	Results Awaited Results Awaited Results Awaited	Results Awaited	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	Results Awaited	Qtl/ha	Results Awaited	
Technology option 2	SDAU, S.K. Nagar	Results Awaited	Qtl/ha	Results Awaited	
Technology option 3		Results Awaited	Qtl/ha	Results Awaited	

Details of On Farm Trial

1 Title of Technology Assessed :- Management of termite in wheat

2 Problem Definition :- Low yield of wheat due to termite infestation

3 Details of technologies selected for assessment:- T_1:- Seed treatment by Chlorpyriphos 20EC @ 5 ml./ kg. seed T_2:- Seed treatment by Bifenthrin 10% EC @ 2 ml/ Kg seed T_3:- Seed treatment by Fipronil 5%SC @ 6 ml/ Kg seed

4 Source of technology :- SDAU,S.K.Nagar

5 Production system and thematic area :- IPM

6 Performance of the Technology with performance indicators:- Results Awaited.

7 Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques :- Results Awaited.

8 Final recommendation for micro level situation :- Results Awaited.

9 Constraints identified and feedback for research and developmental departments:- Results Awaited.

10 Process of farmers participation and their reaction :- Results Awaited..

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

S. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1	Castor	ICM & Variety	Hybrid Variety of castor -GCH-7	Training, Demo., Field visit, Field day, Group meeting etc	150	5500	8250
2	Cotton	IPM	IPM module – Pheromone trap @ 40/ha + One spray of neem oil 1500 ppm@ 1.25 Lit/ha + one spray of spinosed 45 SC 2 0.25 Lit/ha	Training, Demo., Field visit, Field day, Group meeting etc	85	1800	1200
3	Black gram	ICM	Improved variety of black gram (GU-1), seed treatment by fungicide, Seed inoculation with bio fertilizer, RDF, timely application of IPM module	Training, Demo., Field visit, Field day, Group meeting etc	75	1200	600
4	Chickpea	ICM	Improved variety (GJG-3) +Soil inoculation of *Trichoderma viridae* @ 2.5 kg/ha + Pheroman trap @ 40/ha + RDF + Bio-fertilizer + Profenophos 50 EC	Training, Demo., Field visit, Field day, Group meeting etc	65	1800	1550
5	Mustard	ICM	Improved variety (GDM-4) + Seed treatment with fungicide + RDF + Timely irrigation + IPM module for pest management	Training, Demo., Field visit, Field day, Group meeting etc	65	1400	1120
6	Wheat-Variety	Varietal Demo	Improved variety of wheat - GW-451	Training, Demo., Field visit, Field day, Group meeting etc	90	350	450
7	Kitchen garden	Nutrition food security	Seasonal vegetable in backyard for supplementing additional vegetable in daily diet	Training, Demo., Field visit, Field day, Group meeting etc	40	800	-
8	Chilli	INM	Foliar application of Micronutrient (G-4) @ 2 Kg/ ha (Zn,Mn,Cu,B,Fe)	Training, Demo., Field visit, Field day, Group meeting etc	25	80	25

9	Fennel-Variety	Varietal Demo & IDM	Improved variety of fennel – Gujarat Fennel – 12	Training, Demo., Field visit, Field day, Group meeting etc	100	1800	1200
10	Cumin + Ajwain	Varietal demon	Intercropping of Cumin + Ajwain (4:1)	Training, Demo., Field visit, Field day, Group meeting etc	13	250	200
11	Cumin-Variety	Varietal Demo & IDM	Improved variety of cumin - GC-4	Training, Demo., Field visit, Field day, Group meeting etc	100	1250	550
12	Milch animal	Feed management	Chelated mineral mixture @ 40 Gm / day/ animal (Cow/ Buffalo)	Training, Demo., Field visit, Field day, Group meeting etc	50	750	-
13	Milch animal	Feed management	Probiotic @20 gm/day in Mehsani buffalo	Training, Demo., Field visit, Field day, Group meeting etc	15	150	-
14	Milch animal	Feed management	By pass protein @ 1 Kg/ Day per Animal in Buffalo	Training, Demo., Field visit, Field day, Group meeting etc	20	250	-
15	Milch animal	Feed management	By pass fat @ 100 gm/ Day per Animal in Buffalo	Training, Demo., Field visit, Field day, Group meeting etc	20	300	-

B. Details of FLDs implemented during 2020 **(Kharif 2020, Rabi 2019-20, Summer 2020)** (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops**.)

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Black gram	ICM	INM,IWM,IPM,full package	Kharif 2020	20	20	01	49	50	
2	Cotton	INM	Nitrogen 240 kg/ha + phosphorous 40 kg/ha + spray 3% potassium nitrate (13-0-45) at the time of flowering stage, ball formation stage, ball development	Kharif 2019	10	10	02	23	25	
3	Cotton	INM	Nitrogen 240 kg/ha + phosphorous 40 kg/ha + spray 3% potassium nitrate (13-0-45) at the time of flowering stage, ball formation stage, ball development	Kharif 2020	10	10	02	23	25	
4	Cotton	IPM	Pinkball worm management –IPM module	Kharif-2019	5	5	-	20	20	
5	Cotton	IPM	Pinkball worm management –IPM module	Kharif-2020	5	5	-	20	20	
6	Castor	ICM	Hybrid variety (GCH-7) + Seed treatment with fungicide + RDF + Timely irrigation + IPM module for pest management	Kharif 2019	20	20	01	49	50	

7	Castor	ICM	Hybrid variety (GCH-7) + Seed treatment with fungicide + RDF + Timely irrigation + IPM module for pest management	Kharif 2020	20	20	01	49	50	
8	Mustard	ICM	Improved variety (GDM-4) + Seed treatment with fungicide + RDF + Timely irrigation + IPM module for pest management	Rabi, 2019	20	20	01	49	50	
9	Mustard	ICM	Improved variety (GDM-4) + Seed treatment with fungicide + RDF + Timely irrigation + IPM module for pest management	Rabi, 2020	20	20	01	49	50	
10	Mustard+Lucerne	ICM	Mix cropping (Mustard +Lucerne)	Rabi 2019	10	10	00	25	25	
11	Mustard+Lucerne	ICM	Mix cropping (Mustard +Lucerne)	Rabi 2020	10	10	00	25	25	
12	Wheat	Varietal Evaluation	Improved Variety –GW-451	Rabi 2019	10	10	00	25	25	
13	Wheat	Varietal Evaluation	Improved Variety –GW-451	Rabi 2020	10	10	00	25	25	
14	Chick Pea	ICM	Full Package	Rabi-2019	20	20	6	44	50	
15	Chick Pea	ICM	Full Package	Rabi-2020	20	20	2	48	50	

16	Chilli	ICM	Balance of major plant nutrient along with five foliar applicatio of Arka Vegetable Special @3ml/lit of water (each spray on 25 days interval)	Kharif-2020	5	5	0	20	20	
17	Fennel	Varietal Demostration	Improved variety of GF-12	Rabi-2019	10	10	0	25	25	
18	Fennel	Varietal Demostration	Improved variety of GF-12	Rabi-2020	10	10	2	44	46	-
19	Cumin+ Ajwain	ICM	intercropping Cumin+Ajwain (4:1)	Rabi-2019	5	5	3	22	25	
20	Cumin+Ajwain	ICM	intercropping Cumin+Ajwain (4:1)	Rabi-2020	5	5	2	23	25	
21	Fennel	IDM	Blight management	Rabi-2019	10	10	-	25	25	
22	Fennel	IDM	Blight management	Rabi-2020	10	10	-	25	25	
23	Cumin	IDM	Wilt Management	Rabi-2019	10	10	2	23	25	
24	Cumin	IDM	Wilt Management	Rabi-2020	10	10	-	25	25	
25	Kagzi lime	ICM	Balance of major plant nutrient along with five foliar applicatio of Arka Citrus Special @5 ml/lit of water (each spray on 25 days interval)	Rabi-2020	2	2	1	19	20	
26	Lime	IDM	Gummosis Management	Rabi-2019	1	1	-	10	10	
27	Lime	IDM	Gummosis Management	Rabi-2020	1	1	-	10	10	
28	Kitchen garden	House food security	cultivation of seasonal vegetable in backyard for supplementing additional vegetable in daily dite	Kharif, 2019			05	55	60	

29	Kitchen garden	House food security	cultivation of seasonal vegetable in backyard for supplementing additional vegetable in daily dite	Kharif, 2020			02	58	60	
30	Castor (spike by secaiti)er	Drudgery	Harvesting of castor spike by secaitier	Kharif, 2019				20	20	
31	Castor (spike by secaiti)er	Drudgery	Harvesting of castor spike by secaitier	Kharif, 2020				20	20	

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Black gram	Kharif 2020	Irrigated	Loamy sand to medium black	L	L	M	Mustard,Sorghum and Wheat	2nd fortnight of June	1st Fortnight of September		
Cotton	Kharif, 2019	Irrigated	Sandy loam	L	L	M	Fallow	First Week of June	Last week to February		
Cotton	Kharif, 2020	Irrigated	Sandy loam	L	L	M	Fallow	First Week of June	Last week to February		
Cotton	Kharif-2019	Irrigated	Medium Black	L	L	M	Mustard,Wheat	1st week of June	End of March		
Cotton	Kharif-2020	Irrigated	Medium Black	L	L	M	Mustard,Wheat	1st week of June	End of March		
Castor	Kharif, 2020	Irrigated	Sandy loam to sandy soil	L	L	M	Fallow	IInd Fortnight of August	Ist fortnight of April		

Castor	Kharif, 2020	Irrigated	Sandy loam to sandy soil	L	L	M	Fallow	IInd Fortnight of August	Ist fortnight of April		
Mustard	Rabi, 2019	Irrigated	Sandy loam to sandy soil	L	L	M	Pulses	IInd Fortnight of October	Last week of February		
Mustard	Rabi, 2020	Irrigated	Sandy loam to sandy soil	L	L	M	Pulses	IInd Fortnight of October	Last week of February		
Mustard+ Lucerne	Rabi 2019	Irrigated	Sandy loam to sandy soil	L	L	M	Pulses	IInd Fortnight of October	Mustard Last week of February + Lucerne 2nd Fortnight of May		
Mustard+ Lucerne	Rabi 2020	Irrigated	Sandy loam to sandy soil	L	L	M	Pulses	IInd Fortnight of October	Mustard Last week of February + Lucerne 2nd Fortnight of May		
Wheat	Rabi 2019	Irrigated	Sandy loam to sandy soil	L	L	M	Pearl millet	IInd Fortnight of November	Last week of March		
Wheat	Rabi 2020	Irrigated	Sandy loam to sandy soil	L	L	M	Pearl millet	IInd Fortnight of November	Last week of March		
Chick Pea	Rabi-2019	Semi-Irrigated	Medium black to black soil	L	L	M	Cumin, Guar, Desi Cotton	2nd fortnight of October	1st week of February		
Chick Pea	Rabi-2020	Semi-Irrigated	Medium black to black soil	L	L	M	Cumin, Guar, Desi Cotton	2nd fortnight of October	1st week of February		
Chilli	Kharif-2019	Irrigated	sandy loam to sandy	M	M	M	fallow & fodder	1st fortnight of july	up to March		
Chilli	Kharif-2020	Irrigated	sandy loam to sandy	M	M	M	fallow & fodder	1st fortnight of july	up to March		
Fennel	Rabi-2019	Irrigated	sandy loam to Medium black	M	M	M	pulses	2nd fortnight of october	1st fortnight of April		

Fennel	Rabi-2020	Irrigated	sandy loam to Medium black	M	M	M	pulses	2nd fortnight of october	1st fortnight of April		
Cumin+ Ajwain	Rabi-2019	RF	saline & sandy loam soil	M	M	M	fallow,pulses,fodder	1st fortnight of november	2nd fortnight of march for cumin & 1st fortnight of may for Ajwain		
Cumin+ Ajwain	Rabi-2020	RF	saline & sandy loam soil	M	M	M	fallow,pulses,fodder	1st fortnight of november	2nd fortnight of march for cumin & 1st fortnight of may for Ajwain		
Fennel	Rabi-2019	Irrigated	Sandy loam to medium black	L	L	M	Cotton,Pulses	1st week of November	3rd week of April		
Fennel	Rabi-2020	Irrigated	Sandy loam to medium black	L	L	M	Cotton,Pulses	1st week of November	3rd week of April		
Cumin	Rabi-2019	Semi-Irrigated	Medium black to black soil	L	L	M	Chick pea,Guar,Desi Cotton	1st fortnight of November	2nd fortnight of March		
Cumin	Rabi-2020	Semi-Irrigated	Medium black to black soil	L	L	M	Chick pea,Guar,Desi Cotton	1st fortnight of November	2nd fortnight of March		
Kagzi lime	Rabi-2019	Irrigated	sandy loam to sandy	M	M	M	Sole	-	Round the year		
Kagzi lime	Rabi-2020	Irrigated	sandy loam to sandy	M	M	M	Sole	-	Round the year		
Lime	Rabi-2019	Irrigated	Sandy to sandy loam	L	L	M	Sole	-	Round the year		
Lime	Rabi-2020	Irrigated	Sandy to sandy loam	L	L	M	Sole	-	Round the year		

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Need to develop improved/ hybrid variety of wheat, Funnel, Castor, Mustard, Black gram & Chickpea
2	Need to develop climate resilient technologies/ varieties
3	Need to develop of crop based complex fertilizer
4	Need to develop INM module on cropping system
5	Need to develop water soluble complex fertilizer as per crop for foliar spray.
6	Need to develop drought tolerant/ resistant variety.
7	Need to develop IPM module for the management of major insect in vegetable crop.
8	Need to develop to resistant variety against disease & insect.

Farmers' reactions on specific technologies

S. No	Feed Back
A	**Cereals**
1.	Farmers observe good growth of plant, no lodging & more no of effective tillers are found in improved variety of wheat (GW-451)
B	**Horticultural crops**
1.	Chilli : Good growth during the season and good quality of fruits due to spraying of Micronutrient (Zn,Mn,Fe,Cu,B)
2.	Cumin (Var.) :GC-4 variety have less incidence of blight disease & also high yielding
3.	Cumin (IDM) : Seed treatment by Biofungicide viz. Trichoderma viridae @10 gm. per 1 kg.seed as well as soil inoculation of Trichoderma viridae @ 2.5 kg /ha. effective against wilt disease incidence.
4.	Fennel (IDM) : Spraying of fungicide viz. SAAF (Carbendezim 12 % + Mancozeb 63 %) @ 40 gm/15 lit. water along with 25 ml soap solution at 45 ,60 , 75 DAS, Before initiation of blight disease, increase the productivity and improve the quality of seeds.
5.	Fennel (Var.) : GF-12 variety is high yielding
6.	Lime- Cleaning the orchard and cutting the dried and diseased twigs of the plant and spray the plants by fungicide decrease the disease incidence and improve the quality of fruits.
C	**Oil seeds**
1.	Use Sunhemp as a green manure to reduce the dose of fertilize & enhance FUE in Castor resulted enhance the profitability
2.	Castor : GCH-7 variety having excellent growth & more yield over their own practice
3.	Mustard : GDM-4 variety having excellent growth & more yield over their own practice

D	**Pulses**
1.	Black gram : GU-1 variety found best in production as compared to local varieties sown.IPM module decrease the pest and disease incidence during the crop season
2.	Chickpea : Use of improved & wilt resistant variety GG -5 and seed treatment by Biofungicide T .viridae as well as bio fertilizer enhance the germination and decrease the wilt disease incidence. Installation of pheromone trap with helilure monitored and decrease the infestation of helicovarpa during the crop season.
E	**Cotton**
1	Good growth of plant, more number of bolls per plant obtain under INM in cotton resulted enhance the productivity
2	Sex pheromone trap with pectinophora lure decrease the pinball worm infestation
F	**Animal Science**
1	Proper feed management- Use of Mineral mixture, By Pass Fat, By Pass Protein & Probiotic is not only enhance the milk production but also enhance the profitability of dairy.

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	**Black gram- ICM**				
A	Farmers Training	01	18-06-2020	25	
B	Field visit	03	During crop period	22	
C	Field Day	01	26-09-2020	40	
D	Training for extension functionaries	02	07-07-2020 & 17-07-2020	66	
2	**Cotton- INM**				
A	Farmers Training	01	16-07-2021	23	
B	Field visit	05	During crop period	32	
C	Field Day	01	23-10-2020	41	
D	Training for extension functionaries	02	17-07-2020	31	
3	**Cotton- IPM**				
A	Farmers Training	01	15-06-2020	51	
B	Field visit	05	During crop period	38	
C	Field Day	01	10-11-2020	41	
D	Training for extension functionaries	01	18-08-2020	58	
4	**Castor- ICM**				

A	Farmers Training	03	25-08-2021, 08-09-2020 & 24-09-2020	87	
B	Field visit	07	During crop period	78	
C	Field Day	01	16-12-2020	31	
D	Training for extension functionaries	01	17-07-2020	31	
5	**Mustard- ICM**				
A	Farmers Training	02	07-10-2020 &14-10-2020	51	
B	Field visit	04	During crop period	52	
C	Field Day	01	25-02-2020	38	
D	Training for extension functionaries	01	08-10-2020	32	
6	**Mustard+Lucerne- ICM**				
A	Farmers Training	02	07-10-2020 & 15-10-2020	48	
B	Field visit	05	During crop period	42	
C	Training for extension functionaries	01	08-10-2020	32	
7	**Wheat- Varietal Demo**				
A	Farmers Training	01	25-11-2020	25	
B	Field visit	04	During crop period	36	
C	Field Day	01	06-03-2020	41	
D	Training for extension functionaries	02	08-10-2020 & 27-01-2020	64	
8	**Chick Pea- ICM**				
A	Farmers Training	03	21-10-2020, 15-10-2020 & 05-11-2020	113	
B	Field visit	06	During crop period	87	
C	Field Day	02	13-03-2020 & 28-02-2020	94	
D	Training for extension functionaries	01	08-10-2020	32	
9	**Chilli- INM**				
A	Farmers Training	01	18-06-2020	27	
B	Field visit	07	During crop period	35	
C	Field Day	01	22-12-2020	30	
D	Training for extension functionaries	01	21-08-2020	18	
10	**Fennel- Varietal Demo**				
A	Farmers Training	02	12-10-2020 & 30-12-2020	43	
B	Field visit	04	During crop period	24	
C	Field Day	01	06-03-2020	41	
D	Training for extension functionaries	01	28-11-2020	32	
11	**Cumin+ Ajwain - ICM**				

A	Farmers Training	03	09-10-2020, 07-11-2020 & 26-11-2020	188	
B	Field visit	05	During crop period	28 No	
C	Field Day	01	12-03-2020	40	
D	Training for extension functionaries	01	28-11-2020	32	
12	**Fennel- IDM**				
A	Farmers Training	02	04-12-2020 & 30-12-2020	41	
B	Field visit	03	During crop period	19	
C	Field Day	01	09-03-2020	41	
D	Training for extension functionaries	01	28-11-2020	32	
13	**Cumin- IDM**				
A	Farmers Training	01	24-12-2020	30	
B	Field visit	02	During crop period	17	
C	Field Day	01	12-03-2020	45	
D	Training for extension functionaries				
14	**Kagzi lime- INM**			32	
A	Farmers Training	02	31-07-2020 & 06-11-2020	80	
B	Field visit	04	During Crop period	21	
15	**Kagzi lime- IDM**				
A	Farmers Training	01	04-12-2020	21	
B	Field visit	03	During Crop period	17	
C	Field Day	01	17-03-2020	30	
D	Training for extension functionaries				
16	**Kitchen garden**				
A	Farmers Training	07	08-01-2020, 14-02-2020, 04-06-2020, 15-06-202, 04-07-2020, 15-07-2020& 17-07-2020	147	
B	Field visit	10	During Crop period	112	
C	Field Day	02	07-01-2020 & 10-12-2020	78	
D	Training for extension functionaries	01	23-10-2020	21	
17	**Castor (spike by secaitier - Drudgery**				
A	Farmers Training	03	06-03-2020, 09-11-2020 & 24-11-2020	64	
B	Field visit	04	During Crop period	48	
C	Field Day	01	22-01-2020	46	

C. Performance of Frontline demonstrations

Frontline demonstrations on oilseed crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Mustard																		
Mustard (2019-2020)	ICM	Improved variety (GDM-4) + Seed treatment with fungicide + RDF + Timely irrigation + IPM module for pest management	GDM-4	50	20	24.3	16.5	19.9	16.5	20.61	17403	79576	62173	4.6	15918	66104	50186	4.2
Mustard (2020-2021)	ICM	Improved variety (GDM-4) + Seed treatment with fungicide + RDF + Timely irrigation + IPM module for pest management	GDM-4	50	20	Result Awaited												
Castor																		
Castor (2019-2020)	ICM	Hybrid variety (GCH-7) + Seed treatment with fungicide + RDF + Timely irrigation + IPM module for pest management	GCH-7	25	10	37.6	28.4	32.5	27.9	16.6	34341	131625	97248	3.8	31020	112995	81975	3.6
Castor (2020-2021)	ICM	Hybrid variety (GCH-7) + Seed treatment with fungicide + RDF + Timely irrigation + IPM module for pest management	GCH-7	50	20	Result Awaited												

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

** BCR= GROSS RETURN/GROSS COST

Frontline demonstration on pulse crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Blackgram -2020	ICM	Improved variety of black gram (GU-1), seed treatment by fungicide, Seed inoculation with bio fertilizer, RDF, timely application of IPM module	GU-1	50	20	11.9	8.3	10.1	8.2	23.17	16870	60600	43730	3.59	15950	49200	33250	3.08
Chickpea-2019	ICM	Improved variety (GJG-5) +Soil inoculation of *Trichoderma viridae* @ 2.5 kg/ha + RDF + Bio-fertilizer + Timely plant protection	GG-5	50	20	20.8	14.6	17.3	13.7	26.3	24580	84338	59758	3.43	22450	66788	44338	2.97
Chickpea-2020	ICM	Improved variety (GJG-5) +Soil inoculation of *Trichoderma viridae* @ 2.5 kg/ha + RDF + Bio-fertilizer + Timely plant protection	GG-5	50	20	Result awaited												

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

FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmer	Area (ha)	Yield (q/ha)				% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Av.												
Cereals																			
Paddy																			
Fibers crop																			
Cotton, 2019	INM	Nitrogen 240 kg/ha + phosphorous 40 kg/ha + spray 3% pottasium nitrate (13-0-45) at the time of flowering stage, ball formation stage, ball development	25	10	29.6	19.9	26.0	21.6	20.6			38910	133900	94990	3.4	36300	111240	74940	3.1
Cotton, 2020	INM	Nitrogen 240 kg/ha + phosphorous 40 kg/ha + spray 3% pottasium nitrate (13-0-45) at the time of flowering stage, ball formation stage, ball development	25	10	Result Awaited														

Cotton-2019	IPM	IPM module – Pheromone trap @ 40/ha + One spray of neem oil 1500 ppm@ 1.25 Lit/ha + one spray of spinoced 45 SC 2 0.25 Lit/ha	20	5	27.8	21.2	24.9	20.7	20.3	PBW % 10.3	PBW % 18.7	37950	105825	67875	2.79	35500	87975	52475	2.48
Cotton-2020	IPM	IPM module – Pheromone trap @ 40/ha + One spray of neem oil 1500 ppm@ 1.25 Lit/ha + one spray of spinoced 45 SC 2 0.25 Lit/ha	20	5	Result awaited														
Mixed cropping																			
Mustard + Lucerne (2019-2020)	Cropping Systems	Mix cropping (Mustard +Lucerne)	25	10	19.6	14.4	17.0	15.8	7.6			20106	93464	73358	4.7	15684	63184	47500	4.0
Mustard + Lucerne (2020-2021)	Cropping Systems	Mix cropping (Mustard +Lucerne)	25	10	Result Awaited														
Scented Rice																			
Wheat																			
Wheat (2019-2020)	Varietal Evaluation	Improved variety of wheat - GW-451	25	10	47.9	37.5	43.1	36.8	17.6			25700	86200	58345	3.3	23750	73640	47908	3.0

Wheat (2020-2021)	Varietal Evaluation	Improved variety of wheat - GW-451	25	10	Result Awaited														
Chilli																			
Chilli-2019	**ICM**	**Foliar application of Micronutrient (G-4) @ 2 Kg/ ha (Zn,Mn,Cu,B,Fe)**	25	**10**	**242**	**225**	**233.12**	**218.92**	**6.49**	**175.07**	**163.18**	**81168**	**221464**	**140296**	**2.73**	**80768**	**207974**	**127406**	**2.58**
Chilli-2020	**ICM**	**Foliar application of Micronutrient (G-4) @ 2 Kg/ ha (Zn,Mn,Cu,B,Fe)**	25	**10**	**Result Awaited**														
Fruit crops																			
Lime-2019	IDM	Gummosis Management	10	01	140.8	110.3	124.5	108.7	14.5	10.8	23.1	75100	270788	195688	3.61	70600	236423	165823	3.35
Lime-2020	IDM	Gummosis Management	10	01															
Lime-2019	ICM	Foliar spray of Arka Citrus special @ 5 ml/ lit of water -First on onset of monsoon & next in every 25 days interval	20	2	166	145	153.70	144.15	6.63	**2088.84**	**2012.50**	**60725**	**334298**	**273573**	**5.51**	**60275**	**313526**	**253251**	5.20
Lime-2019	ICM	Foliar spray of Arka Citrus special @ 5 ml/ lit of water -First on onset of monsoon & next in every 25 days interval	20	2	Result Awaited														
Spices & condiments																			

Fennel-2019	IDM	Foliar spay of carbendazim 12% + Mancozeb 63% @ 1.5 Kg/ha at 45,60 & 75 DAS	25	10	21.6	16.8	18.9	16.1	17.4	Blight % 6.5	Blight % 14.8	25700	85050	59350	3.3	23950	72450	48500	3.02
Fennel-2020	IDM	Foliar spay of carbendazim 12% + Mancozeb 63% @ 1.5 Kg/ha at 45,60 & 75 DAS	25	10															
Cumin-2019	IDM	Seed treatment by Trichoderma viridae @ 10gm/ Kg Seed along with soil treatment by T. viridae @ 2.5 Kg/ha	25	**10**	**11.2**	**7.9**	**9.1**	**7.4**	**22.9**	**Wilt% 8.9**	**Wilt % 18.4**	**33700**	**118300**	**84600**	**3.51**	**31500**	**96200**	**64700**	**3.05**
Cumin-2020	IDM	Seed treatment by Trichoderma viridae @ 10gm/ Kg Seed along with soil treatment by T. viridae @ 2.5 Kg/ha	25	10															
Fennel-2019	ICM	Improved variety of fennel – Gujarat Fennel – 12	25	10	17.7	14.1	15.97	13.96	14.44	20.70	16.06	36040	**111804**	**75764**	**3.10**	**34960**	97692	62732	2.80
Fennel-2019	ICM	Improved variety of fennel – Gujarat Fennel – 12	25	10	Result awaited														
Cumin+Ajwain-2019	**ICM**	Intercropping cumin+Ajwain (4:1)	25	**5**	**10.1 Cumin+**	**7.0 Cumin+ 2.4**	**8.5 Cumin+ 3.1**	**8.8**	**31.26**			**33926**	**129072**	**95146**	**3.8**	**32776**	**114608**	**81832**	**3.5**

					3.9 Ajwain	Ajwain	Ajwain											
Cumin+Ajwain-2019	**ICM**	**Intercropping cumin+Ajwain (4:1)**	25	**5**	Result awaited													

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

Frontline Demonstration on Nutri cereals

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase 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										
Sorghum																		

FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of Units (Animal/ Poultry/ Birds, etc)	Major parameters Milk Production		% change in major parameter	Other parameter Fat %		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Cattle																	
Crossbreed cow, 2019	Feed management	Bypass fat	10	10	10.6	9.5	15.79	4.6	3.9	11835	27795	15960	2.4	10485	21049	10564	2.0
Crossbreed cow, 2020	Feed management	Bypass fat	10	10	Results awaited												
Buffalo																	

Mehsani Buffalo, 2019	Feed management	Bypass Protein	10	10	7.96	7.36	8.15	7.83	7.38	11867	35251	23385	2.97	10517	30663	20146	2.92
Mehsani Buffalo, 2020	Feed management	Bypass Protein	10	10	Results awaited												
Mehsani Buffalo, 2019	Feed management	Chelated Mineral mixture	20	20	6.7	6.2	8.06	7.29	7.16	12110	27704	15594	2.29	11502	25279	13777	2.20
Mehsani Buffalo, 2020	Feed management	Chelated Mineral mixture	20	20	Results awaited												
Mehsani Buffalo, 2019	Feed management	Probiotics	20	20	7.09	6.7	5.82	7.4	7.27	12067	29815	17747	2.47	11437	27648	16211	2.42
Mehsani Buffalo, 2020	Feed management	Probiotics	20	20	Results awaited												

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

FLD on Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Common Carps																	

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

FLD on Other enterprises

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																

FLD on Women Empowerment

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

FLD on Farm Implements and Machinery

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit etc.)			
						Demo	Check		Land preparation	Sowing	Weeding	Total	Land preparation	Labour	Irrigation	Total
Secaitier, 2019-20	castor	Harvesting of castor spike	20	01	laboure requirement /ha.	20.1 (160.8 hr.)	25.3 (202.4 hr)	20.55 %	-	-	-	-	-	-	-	
Secaitier, 2020-21	castor	Harvesting of castor spike	20	01	laboure requirement /ha.	Result awaited			-	-	-	-	-	-	-	

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 garden, 2019	house food security	cultivation of seasonal vegetable in backard for supplementing additional vegetable in daily diet	60	60	237Kg/unit	456 kg requirement of a family(5 members)	51.97	-	-	-	9480/ unit	-	-	18240/ unit	-	-	-
Kitchen garden, 2020	house food security	cultivation of seasonal vegetable in backard for supplementing additional vegetable in daily diet	60	60	Result awaited												

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)			
					Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average						
Oilseed													
Castor, 2020	Hybrid variety (GCH-7) + Seed treatment with fungicide + RDF + Timely irrigation + IPM module for pest management	GCH-7	50	20	Result awaited								

Fiber crops					
Cotton, 2020	Nitrogen 240 kg/ha + phosphorous 40 kg/ha + spray 3% pottasium nitrate (13-0-45) at the time of flowering stage, ball formation stage, ball development	Hybrid	25	10	Result Awaited
Cotton, 2020	IPM module – Pheromone trap @ 40/ha + One spray of neem oil 1500 ppm@ 1.25 Lit/ha + one spray of spinoced 45 SC 2 0.25 Lit/ha	Hybrid	20	5	Result Awaited
Vegetable crop					
Chilli, 2020	Foliar application of Micronutrient (G-4) @ 2 Kg/ ha (Zn,Mn,Cu,B,Fe)	Hybrid	20	5	Result Awaited

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

3.4. Training Programmes (Online programmes if any should be included under On Campus category)

Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming	01	25	00	25	00	00	00	25	00	25
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management	04	96	00	96	05	00	05	101	00	101
Soil & water conservatioin										
Integrated nutrient management										
Production of organic inputs	01	27	00	27	00	00	00	27	00	27
Others (pl specify)										
Total	**06**	**148**	**00**	**148**	**05**	**00**	**05**	**153**	**00**	**153**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops	01	27	00	27	00	00	00	27	00	27
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)										
Total (a)	**01**	**27**	**00**	**27**	**00**	**00**	**00**	**27**	**00**	**27**
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit	02	87	00	87	08	00	08	95	00	95
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards	01	42	00	42	00	00	00	42	00	42
Plant propagation techniques										

Others (pl specify)										
Total (b)	**03**	**129**	**00**	**129**	**08**	**00**	**08**	**137**	**00**	**137**
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										
f) Spices										
Production and Management technology	04	201	0	201	16	00	16	217	00	217
Processing and value addition										
Others (pl specify)										
Total (f)	**04**	**201**	**0**	**201**	**16**	**00**	**16**	**217**	**00**	**217**
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)										
GT (a-g)	**08**	**357**	**00**	**357**	**24**	**00**	**24**	**381**	**00**	**381**
III Soil Health and Fertility Management										
Soil fertility management	01	110	00	110	00	00	00	110	00	110
Integrated water management										
Integrated Nutrient Management	01	28	00	28	02	00	02	30	00	30
Production and use of organic inputs										
Management of										

Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing										
Others (pl specify)										
Total	**02**	**138**	**00**	**138**	**02**	**00**	**02**	**140**	**00**	**140**
IV Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management										
Feed & fodder technology										
Production of quality animal products										
Others (pl specify)										
Total										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs	01	-	22	22	-	-	-	-	22	22
Storage loss minimization techniques										
Value addition	2	03	44	47	-	-	-	03	44	47
Women empowerment										
Location specific drudgery reduction technologies	01	-	12	12	-	-	-	-	12	12
Rural Crafts	02	-	23	23	-	-	-	-	23	23
Women and child care										
Others (pl specify)										
Total	**06**	**03**	**101**	**104**	**-**	**-**	**-**	**03**	**101**	**104**
VI Agril. Engineering										
Farm Machinary and its maintenance										
Installation and maintenance of micro irrigation systems										

Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl specify)										
Total										
VII Plant Protection										
Integrated Pest Management	03	127	-	127	04	-	04	131	-	131
Integrated Disease Management	02	60	-	60	-	-	-	60	-	60
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl specify)										
Total	**05**	**187**	**-**	**187**	**04**	**-**	**04**	**191**	**-**	**191**
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										

Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
Total										
X CapacityBuilding and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total										
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL										

Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	01	32	00	32	00	00	00	32	00	32
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation										

Seed production										
Nursery management										
Integrated Crop Management										
Soil & water conservatioin										
Integrated nutrient management										
Production of organic inputs	01	16	00	16	00	00	00	16	00	16
Others (pl specify)										
Total	**02**	**48**	**00**	**48**	**00**	**00**	**00**	**48**	**00**	**48**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops	01	07	20	27	00	00	00	07	20	27
Off-season vegetables	01	21	00	21	00	00	00	21	00	21
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)	02	09	44	53	00	12	12	09	56	65
Total (a)	**04**	**37**	**64**	**101**	**00**	**12**	**12**	**37**	**76**	**113**
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit	01	20	00	20	00	00	00	20	00	20
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)										
Total (b)	**01**	**20**	**00**	**20**	**00**	**00**	**00**	**20**	**00**	**20**
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)										
d) Plantation crops										
Production and Management technology										

Processing and value addition										
Others (pl specify)										
Total (d)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										
f) Spices										
Production and Management technology	01	20	00	20	00	00	00	20	00	20
Processing and value addition										
Others (pl specify)										
Total (f)	**01**	**20**	**00**	**20**	**00**	**00**	**00**	**20**	**00**	**20**
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)										
GT (a-g)	**06**	**77**	**64**	**141**	**00**	**12**	**12**	**77**	**76**	**153**
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management	01	30	00	30	00	00	00	30	00	30
Integrated Nutrient Management	01	23	00	23	00	00	00	23	00	23
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency	02	50	00	50	00	00	00	50	00	50
Balance use of fertilizers										
Soil and Water Testing										
Others (pl specify)										
Total	**04**	**103**	**00**	**103**	**00**	**00**	**00**	**103**	**00**	**103**
IV Livestock Production and Management										
Dairy Management	04	28	60	88	-	02	02	28	62	90
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition										

Management										
Disease Management	01	-	20	20	-	-	-	-	20	20
Feed & fodder technology	03	32	36	68	-	-	-	32	36	68
Production of quality animal products										
Others (pl specify)										
Total	**08**	**60**	**116**	**176**	**-**	**02**	**02**	**60**	**118**	**178**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	06	-	113	113	-	11	11	-	124	124
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing	01	-	28	28	-	02	02	-	30	30
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	01	-	24	24	-	-	-	-	24	24
Value addition					-	-	-			
Women empowerment										
Location specific drudgery reduction technologies	01	-	17	17	-	05	05	-	22	22
Rural Crafts	01	--	10	10	--	--	-	-	10	10
Women and child care	01	-	20	20	-	-	-	-	20	20
Others (pl specify)										
Total	**11**		**212**	**212**	**-**	**18**	**18**	**-**	**230**	**230**
VI Agril. Engineering										
Farm Machinary and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl specify)										
Total										
VII Plant Protection										
Integrated Pest Management	03	88	10	98	05	-	05	93	10	103

Integrated Disease Management	04	90	-	90	04	-	04	94	-	94
Bio-control of pests and diseases	01	30	-	30	-	-	-	30	-	30
Production of bio control agents and bio pesticides										
Others (pl specify)	08	208	10	218	09	-	09	217	10	227
Total										
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										

Others (pl specify)										
Total										
X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics	03	54	-	54	-	-	-	54	-	54
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others										
Total	**03**	**54**	**-**	**54**	**-**	**-**	**-**	**54**	**-**	**54**
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL										

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

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	01	32	00	32	00	00	00	32	00	32
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming	01	25	00	25	00	00	00	25	00	25
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management	04	96	00	96	05	00	05	101	00	101
Soil & water conservatioin										
Integrated nutrient management										
Production of organic inputs	02	43	00	43	00	00	00	43	00	43
Others (pl specify)										
Total	**08**	**196**	**00**	**196**	**05**	**00**	**05**	**201**	**00**	**201**
II Horticulture										

a) Vegetable Crops										
Production of low value and high valume crops	02	34	20	54	00	00	00	34	20	54
Off-season vegetables	01	21	00	21	00	00	00	21	00	21
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)	02	09	44	53	00	12	12	09	56	65
Total (a)	**05**	**64**	**64**	**128**	**00**	**12**	**12**	**64**	**76**	**140**
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit	03	107	00	107	08	00	08	115	00	115
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards	01	42	00	42	00	00	00	42	00	42
Plant propagation techniques										
Others (pl specify)										
Total (b)	**04**	**149**	**00**	**149**	**08**	**00**	**08**	**157**	**00**	**157**
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										
f) Spices										

Production and Management technology	05	221	00	221	16	00	16	237	00	237
Processing and value addition										
Others (pl specify)										
Total (f)	**05**	**221**	**00**	**221**	**16**	**00**	**16**	**237**	**00**	**237**
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)										
GT (a-g)	**14**	**434**	**64**	**498**	**24**	**12**	**36**	**458**	**76**	**534**
III Soil Health and Fertility Management										
Soil fertility management	01	110	00	110	00	00	00	110	00	110
Integrated water management	01	30	00	30	00	00	00	30	00	30
Integrated Nutrient Management	02	51	00	51	02	00	02	53	00	53
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency	02	50	00	50	00	00	00	50	00	50
Balance use of fertilizers										
Soil and Water Testing										
Others (pl specify)										
Total	**06**	**241**	**00**	**241**	**02**	**00**	**02**	**243**	**00**	**243**
IV Livestock Production and Management										
Dairy Management	04	28	60	88	-	02	02	28	62	90
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management	01	-	20	20	-	-	-	-	20	20
Feed & fodder technology	03	32	36	68	-	-	-	32	36	68
Production of quality animal products										
Others (pl specify)										
Total	**08**	**60**	**116**	**176**	**-**	**02**	**02**	**60**	**118**	**178**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	06		113	113	-	11	11	-	124	124

Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing	01	-	28	28	-	02	02	-	30	30
Processing and cooking										
Gender mainstreaming through SHGs	01	-	22	22	-	-	-	-	22	22
Storage loss minimization techniques	01	-	24	24	-	-	-		24	24
Value addition	02	03	44	47	-	-	-	03	44	47
Women empowerment										
Location specific drudgery reduction technologies	02	-	29	29	-	05	05	-	34	34
Rural Crafts	03	-	33	33	-	-	-	-	33	33
Women and child care	01	-	20	20	-	-	-	-	20	20
Others (pl specify)										
Total	**17**	**03**	**313**	**316**	**-**	**18**	**18**	**03**	**331**	**334**
VI Agril. Engineering										
Farm Machinary and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl specify)										
Total										
VII Plant Protection										
Integrated Pest Management	06	215	10	225	09	00	09	224	10	234
Integrated Disease Management	06	150	00	150	04	00	04	154	00	154
Bio-control of pests and diseases	01	30	00	30	00	00	00	30	00	30
Production of bio control agents and bio pesticides										
Others (pl specify)										
Total	**13**	**395**	**10**	**405**	**13**	**00**	**13**	**408**	**10**	**418**
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										

Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
Total										
X CapacityBuilding and Group Dynamics										
Leadership development-FPO										
Group dynamics	3	54	0	54	0	0	0	54	00	54
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial										

development of farmers/youths										
WTO and IPR issues										
Others (Organic farming)										
Total	**3**	**54**	**0**	**54**	**0**	**0**	**0**	**54**	**00**	**54**
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL										

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

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

Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL										

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts	01	-	10	10	-	-	-	-	10	10
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										

Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL										

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts	01	-	10	10		-	-	-	10	10
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										

Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL										

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops	03	92	0	92	2	0	2	94	0	94
Productivity enhancement in horticultural crops	02	50	0	50	0	0	0	50	0	50
Integrated Pest Management	02	93	0	93	0	0	0	93	0	93
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care	02	00	42	42	0	0	0	00	42	42
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization	02	38	0	38	0	0	0	38	0	38
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Others (pl specify) PRA Techniques for training need assessment	02	41	5	46	3	2	5	44	7	51
TOTAL	**11**	**273**	**42**	**315**	**2**	**0**	**2**	**275**	**42**	**317**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	Total
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										

Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production	01	25	-	25	-	-	-	25	-	25
Household food security										
Any other (pl.specify)	01	28	-	28	04	-	04	32	-	32
TOTAL	**02**	**53**	**-**	**53**	**04**	**-**	**04**	**57**	**-**	**57**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops	03	92	00	92	02	00	02	94	00	94
Productivity enhancement in horticultural crops	02	50	00	50	00	00	00	50	00	50
Integrated Pest Management	02	93	00	93	00	00	00	93	00	93
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care	02	00	42	42	00	00	00	00	42	42
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization	02	38	00	38	00	00	00	38	00	38
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production	01	25	-	25	-	-	-	25	-	25
Household food security										
Any other (pl.specify)	01	28	-	28	04	-	04	32	-	32
TOTAL	**11**	**273**	**42**	**315**	**2**	**0**	**2**	**275**	**42**	**317**

Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Crop production and management										
Increasing production and productivity of crops	3	415	18	433	41	0	41	456	18	474

Commercial production of vegetables										
Production and value addition										
Fruit Plants										
Ornamental plants										
Spices crops										
Soil health and fertility management										
Production of Inputs at site										
Methods of protective cultivation										
Others (pl. specify)										
Total										
Post harvest technology and value addition										
Processing and value addition										
Others (pl. specify)										
Total										
Farm machinery										
Farm machinery, tools and implements										
Others (pl. specify)										
Total										
Livestock and fisheries										
Livestock production and management	2	162	485	647	12	52	64	174	537	711
Animal Nutrition Management										
Animal Disease Management										
Fisheries Nutrition										
Fisheries Management										
Others (pl. specify)										
Total										
Home Science										
Household nutritional security										
Economic empowerment of women										
Drudgery reduction of women										
Others (pl. specify)										
Total										
Agricultural Extension										
Capacity Building and Group Dynamics										
Others (Agro forestry)	1	79	00	79	5	0	05	84	00	84
Total										
GRAND TOTAL	**6**	**656**	**503**	**1159**	**58**	**52**	**110**	**714**	**555**	**1269**

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		
		M	F	T	M	F	T	M	F	T
Crop production and management										
Commercial floriculture										
Commercial fruit production										
Commercial vegetable production										
Integrated crop management										
Organic farming										

Others (pl. specify)										
Total										
Post harvest technology and value addition										
Value addition	01	-	13	13	-	02	02	-	15	15
Others (pl. specify)										
Total										
Livestock and fisheries										
Dairy farming										
Composite fish culture										
Sheep and goat rearing										
Piggery										
Poultry farming										
Others (pl. specify)										
Total										
Income generation activities										
Vermicomposting										
Production of bio-agents, bio-pesticides,										
bio-fertilizers etc.										
Repair and maintenance of farm machinery										
and implements										
Rural Crafts	01	-	14	14	-	01	01	-	15	15
Seed production										
Sericulture										
Mushroom cultivation										
Nursery, grafting etc.	01	-	15	15	-	-	-	-	15	15
Tailoring, stitching, embroidery, dying etc.	01	-	11	11	-	-	-	-	11	11
Agril. para-workers, para-vet training										
Others (pl. specify)										
Total										
Agricultural Extension										
Capacity building and group dynamics										
Others (pl. specify)										
Total										
Grand Total	**04**	**-**	**53**	**53**	**-**	**03**	**03**	**-**	**56**	**56**

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	Total
Advisory Services (Other than KMAS)				
Diagnostic visits				
Field Day	20	789	12	801
Group discussions	09	126	-	126
KisanGhosthi	06	4273	60	4333
Kisan Seminar	03	643	30	673
Film Show	06	196	-	196
KisanMela	01	2050	28	2078
Exhibition	01	2050	28	2078
Scientists' visit to farmers field	117	1262	-	1262
Plant/animal health camps	01	92 Animal	-	92 Animal
Farm Science Club	-	-	-	-
Ex-trainees Sammelan	02	33	-	33
Farmers' seminar/workshop	08	1126	12	1138
Method Demonstrations	06	58	-	58
Celebration of important days	06	1434	14	1438
Constitution awarness programme	02	123	-	123
P.M. Live telecast programme Good Governance day	01	407	18	**425**
Field visit	117	1262	-	**1262**
Lecture delivered in other programme	72	3540	60	**3600**
Total	**378**	**19372**	**262**	**19624**

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

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	-
Extension Literature	-
Newspaper coverage	40
Popular articles	38
Radio Talks	-
TV Talks	02
Animal health amps (Number of animals treated)	92
Social Media (No. of platforms Used)	04
Others (pl. specify)	-
Total	**176**

3.6 Online activities during year 2020

S. No.	Activity Type	Mode of implementation	Title of Program	No. of Programmes	No. of Participants/ Views
A	**Farmers training**				
1	Crop production	Google meet	Production technology of castor	01	25
		Audio	Soil health management	01	110

		Conferencing			
2	Plant Protection	Google meet	Plant protection measures in organic farming	01	60
		Google meet	Soil reclamation	01	35
		Google meet	Plant protection measures in summer vegetables	01	42
		Google meet	IPM in BT cotton	01	25
3	Home science	Google meet	preparation of detergent powder	01	08
		Google meet	importance and use of solar cooker	01	12
		Google meet	preparation of rakhi making	01	12
		Google meet	formation and management of SHG	01	22
4	Horticulture	Google meet	Fruit production technology in salt affected area	01	35
		Audio Conferencing	Cultivation of Kagzi lime And Guava	01	60
		Google meet	Agronomical Practices of kharif vegetable crops	01	27
		YouTube Live & Audio Conferencing	Production Technology of Cumin	02	158
	Total			**15**	**631**
B	**Farmers seminars**				
1	Agronomy				
		Audio conference	Production technology of wheat	01	90
		You tube live	kisan gosthi on world soil health day	01	300
		Audio conference	Production technology of chickpea	01	75
		You tube live	Production technology of castor	01	110
2	Extension	You tube live	kisan diwas	01	329
		Mobile conference	World Environment	01	550
		You tube live	World Soil day	01	300
		You tube live	Agriculture bill, 2020	01	154
1	Plant Protection	Face book live	IPM in kharif crops	01	3500
		You tube live	ICM&IPDM in Bt cotton	01	138
		You tube live	Organic farming	01	149
		You tube live	management of pink boll worm in cotton	01	719
		You tube live	Agriculture bill 2020	01	154
2	Horticulture	Face book Live	Lime Cultivation	01	4128

		YouTube Live	Pre sowing technology of Spices crop	01	132
3	Animal Science	Face book live	Importance of feed supplement on milk production	01	5604
		Face book live	Government schemes in animal husbandry	01	7058
4	Home science	You tube live	poshan mah – nutri kitchen garden	01	719
		You tube live	world food day	01	149
	Total			**18**	**24204**
C	**Expert lectures**				
1	Agriculture Extension	YouTube Live	Water management in vegetables through MIS	01	42
2	Agriculture Extension	Google meet	Agriculture bill, 2020	01	35
	Total			**02**	**77**
D	**Any other (Training to extension personnel)**				
1	Agronomy	Google meet	production technology of castor,cotton& black gram	01	31 Gram sevak, Extension Officer
2	Agronomy	Google meet	Production technology of field crop wheat, chickpea & mustard	01	32 Gram sevak, Extension Officer
3	Plant protection	Google meet	IPDM module in kharif croups	01	35 Gram sevak, Extension Officer
4	Plant protection	Google meet	IPM in BT cotton	01	58 Gram sevak, Extension Officer
5	Extension	Google meet	PRA Technique & survey for training need assessment	02	38
6	Home science	Google meet	Nutrition education to combat malnutrion	01	21Aganwadi worker
7	Home science	Google meet	care and nutrition for children and pregnant women	01	21Aganwadi worker
8	Horticulture	Google Meet	Production technology of Chilli	01	18-ATM,BTM, HO OF ATMA & Horti.Deptt2Patan
9	Horticulture	Google Meet	Production technology of Species crops	01	32-Gram Sevak of patan district
	Total			**09**	**286**
	Grand Total (A+B+C+D)			**44**	**25198**

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

Production of seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals	Wheat	GW-451	-	24.22	72660	43
	Wheat	GW-499	-	6.60	16500	02
Oilseeds	Mustard	GDM-4	-	1.50	12000	50
Total				**32.32**	**101160**	**95**

Production of planting materials by the KVK

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Vegetable seedlings	Chilli		Hybrid	1000	-	60
	Brinjal		Hybrid	1000	-	60
	Tomato		Hybrid	1000	-	60
	Onion			2000	-	60
	Watermelon		Hybrid	3500	-	5
	Cucumber		Hybrid	3500	-	5
Fruits	Lime	Kagzi Lime	-	3566	53490	159
Ornamental plants	Rose	Deshi	-	38	380	7
Others	Tobacco	DCT-3 & GCT-4		11500	2300	4
Total				27104	56170	420

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	No. of Farmers
Bio Agents	Waste decomposer	50 Liter	-	10
Others -	Vermi Compost	9200 Kg	46000	18
	Azolla	20 Kg	-	10
Total		**9220 Kg & 50 Litre**	**46000**	**38**

Production of livestock materials - Nil

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
Total				

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

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

B. Literature developed/published

Item	Title	Authors name	Number
Research papers	Impact of front line demonstration programme on the yield of chickpea in Patan district of Gujarat (India)	Kumar Upesh, Patel G A ; Patel H P; Chaudhary R P, & Darji S S	*Legume Research- An International Journal*. 44 (2): 221-225
Technical reports	Enhancement of productivity in Castor Crop in District- Patan	KVK Staff	Institution Publication
	Enhancement of productivity in Mustard Crop in District- Patan	KVK Staff	Institution Publication
	Enhancement of productivity in Black Gram Crop in District- Patan	KVK Staff	Institution Publication
	Enhancement of productivity in Chickpea Crop in District- Patan	KVK Staff	Institution Publication
Popular articles	Animal feed and fodder, breeding, housing, diseases	Dr. S. J. Patel	25
Extension literature	Castor production technology	KVK Staff	1000 Copy
Others (Pl. specify)			

C. Details of Electronic Media Produced

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		
2	Facebook page/ Account		
3	Mobile Apps		
4	WhatsApp groups		
5	Twitter Account		
6	Any other (Pl. Specify)		

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

Enhancing chickpea productivity through adoption of latest technology

Name of KVK	Krishi Vigyan Kendra, Dist. Patan (Gujarat)
Crop and variety	Chickpea & GG-5 (Gram) Season Year: Rabi-2019-20
Name of farmer & address	Padhariya Shaileshbhai Ranchhodbhai Village : Memna, Ta.: Shankheswar, Dist.Patan (Gujarat) Mobile No.: 7820036021

Background information about farmer field -

Details of technology demonstrated	➢ Improved & wilt resistant variety GG-5 ➢ Seed treatment & soil inoculation of Bio-fertilizer viz. NPK liquid consortia and Bio-fungicide viz. *Trichoderma viridae* ➢ Timely application of INM, IWM & IPM
Institutional involvement	➢ Krishi Vigyan Kendra ➢ Department of Agriculture, Patan ➢ ATMA, Patan ➢ Village Panchayat ➢ Reliance Foundation, Patan
Success point	➢ GG-5 is a wilt resistant variety & Mature in 100-103 DAS ➢ Average 50-65 pods per plant & seed color Brown ➢ Reduce wilt incidence & excellent growth of plant due seed & soil inculcation of *T viriade* & N,P,K liquid bio fertilizer ➢ Timely application of IPM modal for management of pest infestation ➢ 51.8 % enhance the productivity of crop
Farmer feedback	➢ Excellent growth of variety GG-5 of chickpea ➢ Seed and soil inoculation by Bio-fungicide & bio fertilizer is enhance the germination, growth of plant & also reduce the wilt incidence. ➢ Very low infestation of insect pest and disease incidence due to adoption of IPDM modals.

Performance of technology:-

Used Practice	Yield (q/ha)	Gross cost (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Farmer practices (Local check)	13.7	22450	66788	44338	2.97
Demonstration (success farmers)	20.8	24580	101400	78820	4.12
% Increase	51.8%	-	-	-	-

Enhancing castor productivity through adoption of latest technology

Name of KVK Krishi Vigyan Kendra, Dist. Patan (Gujarat)
Crop and variety Castor & GCH-7 Season/Year : Kharif : 2019-20

Name of farmer & address Thakor Jalaram Ambaram
Village : Tharod, Ta.Harij, Dist.: Patan
Mobile No.: 9924180558

Background information about farmer field -

Details of technology demonstrated	➢ Hybrid & wilt resistance variety – GCH-7 ➢ Seed treatment and soil inoculation of Bio-fertilizer viz. NPK, Liquid consortia and Bio-fungicide viz. Trichoderma viridae Timely application of INM, IWM and IPM
Institutional involvement	➢ Krishi Vigyan Kendra ➢ Department of Agriculture, Patan ➢ ATMA, Patan ➢ Village Panchayat
Success point	➢ GCH-7 – Hybrid and wilt resistant variety. ➢ 23.7% increase yield. ➢ Seed treatment and soil inoculation by liquid bio-fertilizer enhance the germination as well as growth and bio-fungicide viz. *T viridae* reduce the wilt disease incidence.
Farmer feedback	➢ Excellent growth of variety GCH-7 of castor ➢ Seed and soil inoculation by Bio-fungicide & bio fertilizer is enhance the germination, growth of plant & also reduce the wilt incidence. ➢ Very low infestation of insect pest and disease incidence due to adoption of IPM modules.

Performance of technology:-

Used Practice	Yield (q/ha)	Gross cost (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Farmer practices (Local check)	30.4	31360	123104	91744	3.9
Demonstration (success farmers)	37.6	35230	152248	117018	4.3
% Increase	23.7	-	-	-	-

Enhancing farm profitability through improved dairy

Name of KVK	Krishi Vigyan Kendra, Dist. Patan (Gujarat)
Name of farmer & address	Patel Narsinhbhai Shivarambhai, Village- Ganeshpura, Taluka- Siddhpur, District- Patan Mo No- 9726437260
Animals	Cow- 04 No (HF) & 01 No (Gir) Calf – 03 No (HF) & 02 No (Gir)
Milking machine	01 No
Vermi Compost Unit	01 No
Background information about farmer field	
Specialty	➢ Urine Collection for Organic farming ➢ Chaff cutter for proper feeding management ➢ Scientific manage with automatic drinking water
Institutional involvement	➢ Krishi Vigyan Kendra ➢ Animal Husbandry Department, Patan ➢ ATMA, Patan
Success point	➢ Annual Income- Rs 2.25 Lakh
Farmer feedback	➢ Green Fodder- Oat, Lucerne, Maize, Bajra, Jwar ➢ Concentrate- Pellets, Maize, Cotton seed cake ➢ Seed supplement- Chelated mineral mixture ➢ Other crops for fodder- Wheat, Mustard, Fenugreek & Wastage of Kitchen garden

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

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

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK

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

A. Practicing Farmers

a) Bench mark survey
b) PRA
c) Field visit
d) Group Discussion etc

B. Rural Youth

a) Field visit
b) PRA
c) Training
d) Group discussion

C. In-service personnel

a) Field visit/ Diagnostic visit
b) SAC meeting

5.2. Indicate the methodology for identifying OFTs/FLDs

For OFT:

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

For FLD:

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

5.3. Field activities

i. Name of villages identified/adopted with block name (from which year) -
ii. No. of farm families selected per village :
iii. No. of survey/PRA conducted :
iv. No. of technologies taken to the adopted villages
v. Name of the technologies found suitable by the farmers of the adopted villages:
vi. Impact (production, income, employment, area/technological– horizontal/vertical)
vii. Constraints if any in the continued application of these improved technologies

6. LINKAGES

A. Functional linkage with different organizations

Name of organization	Nature of linkage
Sardarkrushinagar Dantiwada Agril. University, S.K.Nagar	-Technical Back stopping
Agril. Department Gujarat State, Patan	-Linkage for exchange of information regarding farming. -Linkage for training programme of seasonal crops for practicing farmers. -Linkage for training of extension functionaries.

Gujarat State Fertilizer & Chemical Ltd. Sidhpur	-linkage for demonstration about efficient and proper use of chemical fertilizer and importance of bio-fertilizer. -Linkage for soil and water analysis and training programme to farmers
G.N.F.C. Sidhpur	-Linkage for soil and water analysis. -Linkage for farmer training programme
Department of Animal Husbandry, Gujarat State, Patan Dudhsagar Dairy, Mehsana	-Linkage for training of management of milking animal & steps to solve the burning problem of cattle owner. -Linkage for training to Ext. functionaries.
Dept. of Horticulture Gujarat State, Patan	To create awareness regarding different schemes of Horticulture development. -To increase the awareness about protective cultivation in shade net
Farmers Training Centre, Patan	-linkage for imparting training to farmers & farm women & rural youth
ICDS Patan	In-service training programme and sponsored training programme
ATMA Patan	-Seasonal training programme -Demonstration of Agril. technology
IWMP, Patan	Imparting training to the extension functionaries, farmers & farm women about soil reclamation & other enterprises
NABARD, Patan	Training to members of farm science club
SSNL	Demonstration & Training for dissemination of latest technology
Reliance Foundation	Quick delivery of message in large scale through Kisan Mobile sandesh Technical backup through training & demonstration for dissemination of latest technology

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

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

C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

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

Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	**Meetings**	ATMA Management Committee Meeting	02		
		AGB Meeting	02		
		Meeting for ATMA Award	01		
		Meeting Selection of best farmers	01		
		SAC Meeting	-	01	
		Meeting for Kisan Mela	01		

02	**Training programmes**	**Awareness programme like-** Low cost technology for higher production in major filed crops, Fruit & vegetable preservation, Crop production, Animal Science & Horticulture etc	10		
03	**Extension Programmes**				
	KisanMela	Kisan Mela	01		
	Technology Week	Technology Week		01	
	Exhibition	Exhibition of latest technology	01		
	Soil health camps	Soil health camps	-	01	
	Others (Pl. specify)	Kisan Diwas, World Soil Helath Day & World Envionment Day	-	03	
	Animal Health Campaigns		-	01	

D. Give details of programmes implemented under National Horticultural Mission

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

E. Nature of linkage with National Fisheries Development Board

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

F. Details of linkage with RKVY

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

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

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

H. Details of linkage with NFSM

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

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

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	Kisan Gosthi	Technical Backup	-	-	Organized by Forest department, Siddhpur

7. Convergence with other agencies and departments:

Date	Venue	Participants			Convergence with	Remark
		SC/ST	Others	Total		
09-01-2020	KVK	23	187	210	BAIF, Patan	Scientific cultivation of Bt cotton in Cotton under connect programme
11-01-2020	KVK	16	171	187		
24-02-2020	KVK	05	79	84	Forest Deptt, Patan	Agro forestry
18-12-2020	Dhadhana	02	75	77	Reliance Foundation & SSNL, Patan	IPDM in rabi crops

8. Innovator Farmer's Meet - No

Sl.No.	Particulars	Details
	Have you conducted Farm Innovators meet in your district?	Yes/ No
	Brief report in this regard	

9. Farmers Field School (FFS) - No

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

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

- Need to develop yellow mosaic resistant variety of black gram.
- Need to develop high yielding, wilt resistant & drought tolerance variety of chickpea.
- Need to develop wilt resistant variety in castor
- Need to develop wilt & pink boll worm resistant/ tolerance variety in cotton
- Need to develop cropping system module of vegetable crops.
- Need to develop INM module as per cropping system.
- Need to develop to resistant variety of chilli against viral diseases.
- Need to develop IPM module in major insect of vegetable crop.
- Need to develop complex fertilizer as per crops.

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

Name of scientist	Feed back
Mr R.P.Chaudhri, SMS- Crop Production	Need to develop high yielding & drought tolerant variety of chickpea Need to develop INM module in field crop as per cropping system Need to develop complex fertilizer as per crops
Mr S S Darji, SMS- Horticulture	Need to develop cropping system module of vegetable crops Need to develop INM module in vegetable crop as per cropping system
Mr G A Patel, SMS- Plant Protection	Need to develop yellow mosaic resistant variety of black gram. Need to develop wilt resistant variety of chickpea Need to develop wilt resistant variety in castor Need to develop wilt & pink boll worm resistant/ tolerance variety in cotton
Dr S J Patel, SMS- Animal Science	Need to develop high yielding & high protein contain variety of fodder crop

11. Technology Week celebration during 2020:Yes/ No, If Yes

Period of observing Technology Week : 16th to 23rd December, 2020
Online / Offline : Both
Total number of farmers visited : 50
Total number of agencies involved : 06 No
Number of demonstrations visited by the farmers within KVK campus: 04 No

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies	02	187	IPDM in rabi crops
Lectures organized	04	139	Training under NFSM programme on SHC
Field Day	02	61	Castor & Chilli
Film show	1	24	IFS model
Method demonstration	2	47	Secatier for harvesting of castor
Farm Visit	13	113	During Crop period
Training	2	51	Value addition & IFS Modle
Group Meeting	01	07	Feeding management in milch animal
Animal Health Camp	01	33	Animal Health Camp
Kisan Seminar	01	329	Kisan Seminar under Kisan Diwas
Total number of farmers visited the technology week	**29**	**991**	

12. IMPACT

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

B.

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Varietal adoption				
Castor-GCH-7	50	81	-	-
Fennel-GF-12	25	56	-	-
Wheat-GW-451	50	64	-	-
Cumin-GC-4	25	72	-	-
Ajwain- GA-2	25	52	-	-
Wilt disease management in Cumin through us of Bio-fungicide (Trichoderma spp.)	25	28	-	-
Management of pink boll worm through IPM	25	38	-	-
Application of sulpher in mustard	25	82	-	-
Management of wilt in fennel	25	88	-	-

B. Cases of large scale adoption
(Please furnish detailed information for each case)

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

13. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
Jan 2020	07	35346	-
Feb 2020	04	35346	-
March 2020	-	-	-
April 2020	02	35350	-
May 2020	03	35350	-
Jun 2020	03	35350	-
Jul 2020	05	35350	-
Aug 2020	03	35350	-
Sept 2020	03	35346	-
Oct 2020	03	35346	-
Nov. 2020	01	35350	-
Dec. 2020	03	35350	-

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke -ting	Aware -ness	Other enterprise	Total
	Text only	29	04	-	03	01	-	37
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	**29**	**04**	**-**	**03**	**01**	**-**	**37**
	Total farmers Benefitted	**-**	**-**	**-**	**-**	**-**	**-**	

14. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Nursery unit	2012-13	0.4	Lime- Kagaji Vegetable seedling Rose – Desi Tobacco Seedling	Seedling Seedling Sapling Seedling	5000 No 12000 No 800 No 200000	48000	53490 Provide under FLD 380 2300	Sale to farmers & seedling of vegetable grow & provide to farming community under FLD
2	Vermi compost	2012-13		*Icenia foetida*	Compost	10000 Kg	24000	46000	9200 Kg Sale to Farmers & rest used at KVK Farm
3	Azolla	2019-20	02 No of Pit	*A pinnata*	Azolla Seed culture	250 Kg	-	-	20 Kg Provide to farmers & rest use at Gaushala
4	Bio decomposer	2019-20	-	*Waste decomposed*	-	300 Liter			50 Liter distributed to farmers & rest use at our farm

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									
Wheat	23-11-2019 to 05-12-2019	08-04-2020 to 09-4-2020	1.5	GW-451, GW-11 & GW- 499	Seed	5332 Kg	23138	142480	
Wheat	15 to 16-11-2020	-	1.0	GW-451	Seed	Crop is standing position			
Pulses									
Black gram	14-07-2020	20-10-2020	0.60	GU-1	Commercial	500 Kg	1364	30469	
Oilseeds									
Castor (Irrigated)	05-08-2019	IInd fortnight of February, 2020	1.25	GCH-7	Commercial	1556 Kg	5721	60947	
Castor (Irrigated)	05 to 08-09-2019	-	4.5	GCH-7, GCH-8, Avani seed	Commercial	Crop is standing position			
Castor (Rainfed)	06-08-2019 to to 22-08-2019	February to March, 2020	4.25	GCH-7, GCH-8 GCH-9	Commercial	9813 Kg	50,005	384540	
Castor (Rainfed)	18-07-2020	-	1.0	GCH-2	Commercial	Crop is standing position			
Mustard	23-10-2019	28-02-2020	0.25	GDM-4	Seed	376 Kg	2211	25200	
Mustard	15-10-2020	-	0.1	GDM-4	Seed	Crop is standing position			
Fiber									

Cotton	08to 09-06-2020	Upto Nov., 2020	1.0	Bt BGII, Ajit-155, Ajit, Ankur Jay-45	Commercial	2007.6 Kg	10987	106870	
Mango	June, 1994	May, 2020	0.5	Kesar	Commercial	-	-	15,000	
Chiku	June, 1994	March, 2020	0.5	Kali Patti	Commercial	-	-		
Mango	June, 1994	May, 2021	0.5	Kesar	Commercial	-	-	50000	
Chiku	June, 1994	March, 2021	0.5	Kali Patti	Commercial	-	-		
Lime	August, 2020	-	1.0	Kagzi Lime	Commercial	-	-	-	New Plantation
Others (specify)									
Tobacco	26-11-2019 to 27-11-2019	01-04-2020	1.25	DCT-4	Commercial	4380 Kg	12563	153300	
Tobacco	22 to 30-11-2020	-	1.5	GCT-3 & DCT-4	Commercial	Crop is standing position			
Sunhemp	20-07-2020	26-12-2020	0.20	Local	Seed	96 Kg	828	5760	
S Bajra	02 to 04-03-2021	-	1.0	Nandi-52	Commercial	Crop is standing position			

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

Sl. No.	Bio Products	Name of the Product	Qty (kg)	Amount (Rs.)		Remarks
				Cost of inputs	Gross income	
1	Bio- Fertilizers	Vermi compost	10000 Kg	24000	46000	9200 Kg Sale to Farmers & rest used at KVK Farm
2	Bio-Agents	Waste decomposer	300 Liter	-	-	50 Liter distributed to farmers & rest use at our farm
		Azolla	250 Kg	-	-	20 Kg Provide to farmers & rest use at Gaushala

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

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

E. Utilization of hostel facilities

Accommodation available (No. of beds):

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
January 2020	43	44	
February 2020	28	44	
March 2020	9	45	
April 2020	-	-	
May 2020	-	-	
June 2020	-	-	
July 2020	-	-	
August 2020	-	-	
September 2020	-	-	
October 2020	-	-	
November 2020	-	-	
December 2020	-	-	

F. Database management

S. No	Database target	Database created

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

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

H. Performance of Nutritional Garden at KVK farm

If Nutritional Garden developed at KVK farm/Village Level? Yes/No

If yes,

Nutritional Garden developed at KVK farm

Area under nutritional garden (ha)	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers visited
600sq feet	Vegetable crops	Brinjal-20,Tomato-20,chilli-20,cabbage-20,cauliflower-20,capsicum-15lady's finger, bitter gourd,potato, spinach,fenugreek, coriander,radish,onion	68

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	Vegetable crops	brinjal-25,chilli-25,tomato-25.ladys finger,cowpea,cluster bean, sponge gourd,bottle gourd,Bitter gourd,cucumber, garlic.onion,radish,fenugreek,coriander,spinach,Guwar,cauliflower,cabbage	90
	Fruit crops	Papaya-10,lemon-2,Drumstick-2	

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

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							
With KVK	State Bank of India	Kahoda, Mahesana	15232	KVKSGVS Ganwada, Saraswati Gram Vidyapeeth, Ganwada, Siddhpur	10265325092	384002509	SBIN0015232

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**	198.13	198.13	198.13
2	**Traveling allowances**	0.40	0.40	0.12
3	**Contingencies1.**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	2.33	2.33	1.25
B	POL, repair of vehicles, tractor and equipments			0.78
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	3.86	3.86	0.46
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			0.11
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			1.98
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			0.27
G	Training of extension functionaries			
OH	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
TOTAL (A)		**204.72**	**204.72**	**203.10**
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)		**204.72**	**204.72**	**203.10**

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	3.95	11.91	5.70	10.16
April 2019 to March 2020	10.16	7.62	6.27	11.51
April 2020 to December, 2020	11.51	8.34	4.71	15.14

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

Name of the staff	Designation	Title of the training programme	Institute where attended	Mode (Online/Offline)	Dates
Dr. Upesh Kumar	Sr. Scientist & Head	National level awareness quiz on covid-19	IQAC BLDEA'S SSM college, Vijayapur (Karnataka)	On line	09/05/2020
Dr. Upesh Kumar	Sr. Scientist & Head	Effect of covid-19 on agricultural sector	Honourable Governers & State ministry of Agriculture	On line	15/05/2020
Dr. Upesh Kumar	Sr. Scientist & Head	International webinar on present pandemic & Bioinformatics	Janta vedic college- Baghpat (U.P.)	On line	22/05/2020
Dr. Upesh Kumar	Sr. Scientist & Head	ICAR foundation day	ICAR, Pune	On line	16/07/2020
Dr. Upesh Kumar & Mr S S Darji	Sr. Scientist & Head SMS Horticulture	Seed spices production technology	SDAU S.K Nagar	On line	04/08/2020
Dr. Upesh Kumar & Mr S S Darji	Sr. Scientist & Head SMS Horticulture	Resource conservation& energy self reliance for sustainable agriculture	SDAU S.K.Nagar	On line	28to30/05/2020

Mr G.A.Patel	Plant protection	Kharif pakoma pak sarankshan na prashno ane nirakaran	AAI Anand	On line	20/08/2020
Mr G.A.Patel	Plant proticton	Management of fall army wom	EEI Anand	On line	23to24/12/2020
Mr G.A.Patel	Plant protection	Agriculture bill-2020	KVK Gandhinagar	On line	29/10/2020
Mr G.A.Patel	Plant protection	scientific cultivation of cumin	SDAU SK Nagar	On line	02/11/2020
Smt H.M.Patel	Home Science	International Webinar on Strenthing the immune system against COVID-19	Fatepur Shekhawati,Jaipur	On line	29/07/2020
Smt H.M.Patel	Home Science	Post Harvest Processing Technologios	CIAE-BHOPAL	On line	04/08/2020
Smt H.M.Patel	Home science	Kisan Mahila Diwas	DG,DDG,ICAR	On line	15/10/2020
Smt H.M.Patel	Home Science	Approach for promotion and value addition for high value crop	EEI ANAND	On line	28/29/12/2020
Dr S.J. Patel	Animal Science	Smart Dairy farming	NAU, Navsari	On line	22/08/2020
Dr S.J. Patel	Animal Science	Dairy farming	Punabha Lok Vigyan Kendra, Patan	On line	23/08/2020
Dr S.J. Patel	Animal Science	Veterinary licensure in North America	VCI, New Delhi	On line	13/08/2020
Dr S.J. Patel	Animal Science	Prevention of ecto parasites for enhancing milk production in dairy animals	SDAU, SK Nagar	On line	01/062020 to 02/06/2020
Dr S.J. Patel	Animal Science	Immunological advancement in male and female fertility	JAU, Junagadh	On line	01/09/2020 to 05/09/2020

Dr S.J. Patel	Animal Science	All india fodder production officers: Rabi	IGFRI, Jhansi	On line	13/10/2020 to 15/10/2020
Mr H.P.Patel	S.M.S. (Agril. Extension)	Zonal workshop for KVK's Zone-8	ATARI,Pune	On line	10/06/2020 to 12/06/2020
Mr H.P.Patel	S.M.S. (Agril. Extension)	Indian agricultural education system & enterpremenureship scope	Krishi Vidyapith, Akola	On line	05/08/2020 to 14/08/2020
Mr H.P.Patel	S.M.S. (Agril. Extension)	Natural farming	SDAU, S.K.Nagar	On line	22/06/2020
Mr H.P.Patel	S.M.S. (Agril. Extension)	Bi-manthly workshop	SDAU, S.K.Nagar	On line	06/08/2020
Mr H.P.Patel	S.M.S. (Agril. Extension)	Production technology of spices crops	SDAU, S.K.Nagar	On line	04/08/2020
Mr S.S.Darji	S.M.S (Horticulture)	Effect of Covid-19 on Agriculture sector	State Agriculture Ministry,Gujarat	On line	15/05/20
Mr S.S.Darji	S.M.S (Horticulture)	International webinar on present pendamic and bio-informatics	Janta vedic college,Barabanki	On line	22/05/20
Mr S.S.Darji	S.M.S (Horticulture)	Resource conservation & energy self reliance for sustainable agriculture development	S.D.A.U.,S.K.Nagar	On line	24-30/05/20
Mr S.S.Darji	S.M.S (Horticulture)	Zonal workshop APR'2019	ATARI,Pune	On line	10-11/07/20
Mr S.S.Darji	S.M.S (Horticulture)	ICAR Foundation Day	ATARI,Pune	On line	16/07/20
Mr S.S.Darji	S.M.S (Horticulture)	Nursery raising of vagetable crops	R.N.B.C.A.U,Zanshi	On line	17/07/20
Mr S.S.Darji	S.M.S (Horticulture)	The Spining money crop -Orchid	R.N.B.C.A.U,Zanshi	On line	27/07/20
Mr S.S.Darji	S.M.S (Horticulture)	Castor cultivation	S.D.A.U.,S.K.Nagar	On line	07/08/20

Mr S.S.Darji	S.M.S (Horticulture)	Innovation grant on capacity building and skill development in renewable energy	P.D.K.V.,Akola.	On line	5-14/08/20
Mr S.S.Darji	S.M.S (Horticulture)	Scientific crop production of cumin	S.D.A.U.,S.K.Nagar	On line	2/11/20
Mr S.S.Darji	S.M.S (Horticulture)	Approach for promotion and value addition for high value crop	EEI,Anand	On line	28-29/12/20

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
Hajipur	25	1. High yielding variety 2. IPM modules 3. Dairy management	25	185000	222000
Madhupura	25	1. High yielding variety 2. Cultivation of Horti. crops with MIS 3. IPM modules 4. Dairy management	25	215000	258000

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	NARI	02	Training	11	150
			Demonstration	05	
			Field Visit	14	
			Exhibition	01	
			Health checkup camp	01	
			Group meeting	05	
			Field Day	04	

18. Details of Progress of ARYA Project

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

20. Details of SAP

S. No.	Types of major Activity conducted- SwachhtaPakhwada, Cleaning, Awareness Workshop, Miccobial based Agricultural Waste Management by Vermi composting etc.	No. of Programmes conducted	No. of Participants
1	Cleaning Awareness	3	69
2	Workshop	6	665
3	Microbial Based Agriculture waste	6	212
4	Vermi compost	1	10

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

APR SUMMARY

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

1. **Training Programmes**

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women				
Rural youths				
Extension functionaries				
Sponsored Training				
Vocational Training				
Total				

2. **Frontline demonstrations**

Enterprise	No. ofFarmers	Area(ha)	Units/Animals
Oilseeds			
Pulses			
Cereals			
Vegetables			
Other crops			
Hybrid crops			
Total			
Livestock & Fisheries	60		60
Other enterprises			
Total			
Grand Total			

3. **Technology Assessment & Refinement**

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops			
Livestock			
Various enterprises			
Total			
Technology Refined			
Crops			
Livestock			
Various enterprises			
Total			
Grand Total			

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities		
Other extension activities		
Total		

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke-ting	Awar e-ness	Other enterpri se	Total
	Text only							
	Voice only							
	Voice & Text both							
	Total Messages							
	Total farmers Benefitted							

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)		
Planting material (No.)		
Bio-Products (kg)		
Livestock Production (No.)	50 kg Azolla	---
Fishery production (No.)		

7. Soil, water & plant Analysis

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

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	
2	Conferences	
3	Meetings	
4	Trainings for KVK officials	

5	Visits of KVK officials	
6	Book published	
7	Training Manual	
8	Book chapters	
9	Research papers	
10	Lead papers	
11	Seminar papers	
12	Extension folder	
13	Proceedings	
14	Award & recognition	
15	On going research projects	