

# **ANNUAL ACTION PLAN**

**(JANUARY-2022 TO DECEMBER, 202)**

**SUBMITTED TO**

**ICAR-ATARI,  
ZONE-VIII, PUNE**



**SUMMITTED BY**

**KRISHI VIGYAN KENDRA  
SAMODA-GANWADA  
TA.SIDHPUR, DIST.PATAN (GUJARAT)**

**ICAR-ATARI, Pune**  
**ANNUAL ACTION PLAN OF KVK, Patan (Gujarat)**  
**(1<sup>st</sup> January to 31<sup>st</sup> December, 2022)**

**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
	Office	FAX		
Krishi Vigyan Kendra Saraswati Gram Vidhyapith Samoda- Ganwada Ta.Sidhpur, Di. Patan, Gujarat, Pin. 384 151	02767 285528	-	kvksamoda@ya hoo.com	www.kvkpatan.in

**1.2. Name and address of host organization with phone, fax and e-mail (Not of KVK)**

Address with PIN code	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.co m	www.kvkpatan.in

**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	797441559 3	kvksamoda@yahoo.com

**1.4. Year of sanction& type of host organization: 1993 (NGO)**

### 1.5. Staff Position (as on 31<sup>st</sup>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	Pl. Pathology	PB-4 - 37,400-67000	9000	1/10/2016	-
2.	Subject Matter Specialist	Shri G.A.Patel	Plant Protection	PB-3 - 15600-39100	6600	6/5/1993	-
3.	Subject Matter Specialist	Shri H.P.Patel	Extension Education	PB-3 - 15600-39100	6600	8/5/1993	-
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	2/4/2012	-
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.N.Patel	-	PB-2 - 9300-34800	4600	27/7/1996	-
9.	Computer Programmer	Shri D.R.Patel	-	PB-2 - 9300-34800	4600	01/09/2002	-
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	01/09/2002	-
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	12.00
4.	Orchard/Agro-forestry	2.00
5.	Others (specify)	3.00
	<b>Total</b>	<b>20.00</b>

**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 1999-2000	694	21,87,250=00 12,37,848=11	-	-	-
2.	Farmers Hostel	ICAR		308.82		-	-	-
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	-	-	-

**B. Vehicles**

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tractor	2019-20	6,13,417.00	663 Hr	New tractor
Jeep	2009-10	7,60,236.00	245741	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	2017	43495=00	Working
Sony digital	2017	8390=00	
Sony Handy cam	2017	31990=00	
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)	2017	14650=00	Working
-Aspee duroteck battery sprayer	2017		
-Aspee Bolo motorized knapsack sprayer	2017		
-Aspee duroteck hitech sprayer -Aspee (Marut sprayer )	2017		
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 to be conducted in the year

Sl.No.	Particulars	Proposed date of meeting
1	Scientific Advisory Committee – Meeting 1	15-02-2022

## 2. DETAILS OF JURISDICTION AREA UNDER KVK (No. of talukas)

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

S. No	Farming system/enterprise	Names of talukas covered
1.	Crop production – Dairy	Siddhpur Patan Chanasma Saraswati Harij Sami Sankeshwar
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**

<b>S. No.</b>	<b>Agro ecological situation</b>	<b>Characteristics</b>
1	Alluvial sandy soil with low rainfall	Low rainfall dry climate
2	Saline soil with low rainfall	Low rainfall, dry climate, and absence of vegetative cover
3	Salt affected soil	Low rainfall dry climate and absence of vegetative cover

**2.3. Soil Types**

<b>S. No</b>	<b>Soil type</b>	<b>Characteristics</b>	<b>Area in ha</b>
1.	Heavy black soil	<ul style="list-style-type: none"><li>- High Water holding capacity</li><li>- Low permeability</li><li>- Water logging condition</li><li>- Fertile soil</li></ul>	30400
2.	Medium black soil	<ul style="list-style-type: none"><li>- Medium WHC</li><li>- Medium permeability</li><li>- Fertile soil</li></ul>	334400
3.	Loamy soil	<ul style="list-style-type: none"><li>- More retain water and nutrient than sandy soil and low retain water and nutrient than black soil</li></ul>	213220
4.	Sandy soil	<ul style="list-style-type: none"><li>- Low WHC</li><li>- High permeability</li></ul>	165424
5.	Saline soil	<ul style="list-style-type: none"><li>- Salts accumulation on the soil surface</li><li>- Water logging condition</li><li>- Crack formation during Summer Season</li></ul>	109535

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

S. No	Crop	Area (ha)	Production (MT.)	Productivity (Qt./ha)
<b>A</b>	<b>Field Crop</b>			
	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>B</b>	<b>Fruit crops (Area- Ha, Production in M.T. &amp; Productivity in M.T./Ha)- 2018-19</b>			
	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
	<b>Total/ Average</b>	<b>2620</b>	<b>31303.36</b>	<b>12.02</b>
<b>C</b>	<b>Vegetable crops (Area- Ha, Production in M.T. &amp; Productivity in M.T./Ha)- 2018-19</b>			
\	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
	<b>Total/ Average</b>	<b>3748</b>	<b>80656</b>	<b>21.50</b>
<b>D</b>	<b>Spice crops (Area- Ha, Production in M.T. &amp; Productivity in M.T./Ha)- 2018-19</b>			
	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
	<b>Total/ Average</b>	<b>71821</b>	<b>44734</b>	<b>0.82</b>
<b>E</b>	<b>Flower crops (Area- Ha, Production in M.T. &amp; Productivity in M.T./Ha)- 2018-19</b>			
	Rose	49	427	8.71
	Marigold	57	523	9.18
	Mogra	03	22	7.33
	<b>Total/ Average</b>	<b>109</b>	<b>972</b>	<b>8.92</b>

**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	0	24.68	10.25		
February	0	28.19	13.96		
March	0	29.62	19.31		
April	0	35.73	26.02		
May	0	40.47	29.14		
June	88 mm	39.87	28.12		
July	53 mm	34.68	25.73		
August	337 mm	30.78	24.02		
September	116 mm	31.04	25.04		
October	0	31.26	24.36		
November	0	28.86	20.24		
December	0	27.66	13.82		
<b>Total</b>	<b>594</b>	31.90	21.67		

## 2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district (Ref. Year 2019-20)

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

Department of Animal Husbandry, Patan

## 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	Kuvara & Thakarasan	Blackgram Green gram Castor Cotton Mustard Wheat Chickpea Bajra Cumin Fennel Tobacco Carrot Potato Chilli Pomegranate Kagzi lime	-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 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	-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 income generation activities -No use of micronutrient in fruits & vegetable crop
Patan	Patan	Anawada, Norta			
Chanasma	Chanasma	Pimpal & Jitoda			
Saraswati	Saraswati	Vagrod & Bepadar			
Harij	Harij	Dadhana & Pipalana			
Sami	Sami	Nayka & jhilwana			
Sankeshwar	Sankeshwar	Kuwarad & Subhapura			
Radhanpur	Radhanpur	Dev			
Santalpur	Santalpur	Varnosari			

**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
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### 3. TECHNICAL PROGRAMME

#### 3.1. A. Details of targeted mandatory activities by KVK

OFT		FLD	
(1)		(2)	
Number of OFTs	Number of Farmers	Area (ha)	Number of Farmers
08	55	142	560

Training		Extension Activities	
(3)		(4)	
Number of Courses	Number of Participants	Number of activities	Number of participants
87	1810	110	4125

Seed Production (Qtl.)	Planting material (Nos.)	Livestock, poultry strains and Fish seed prod. (No's)	Soil, water and plant Samples
(5)	(6)	(7)	(8)
53	22700	-	200

#### 3.1. B. Operational areas details proposed during 2021

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

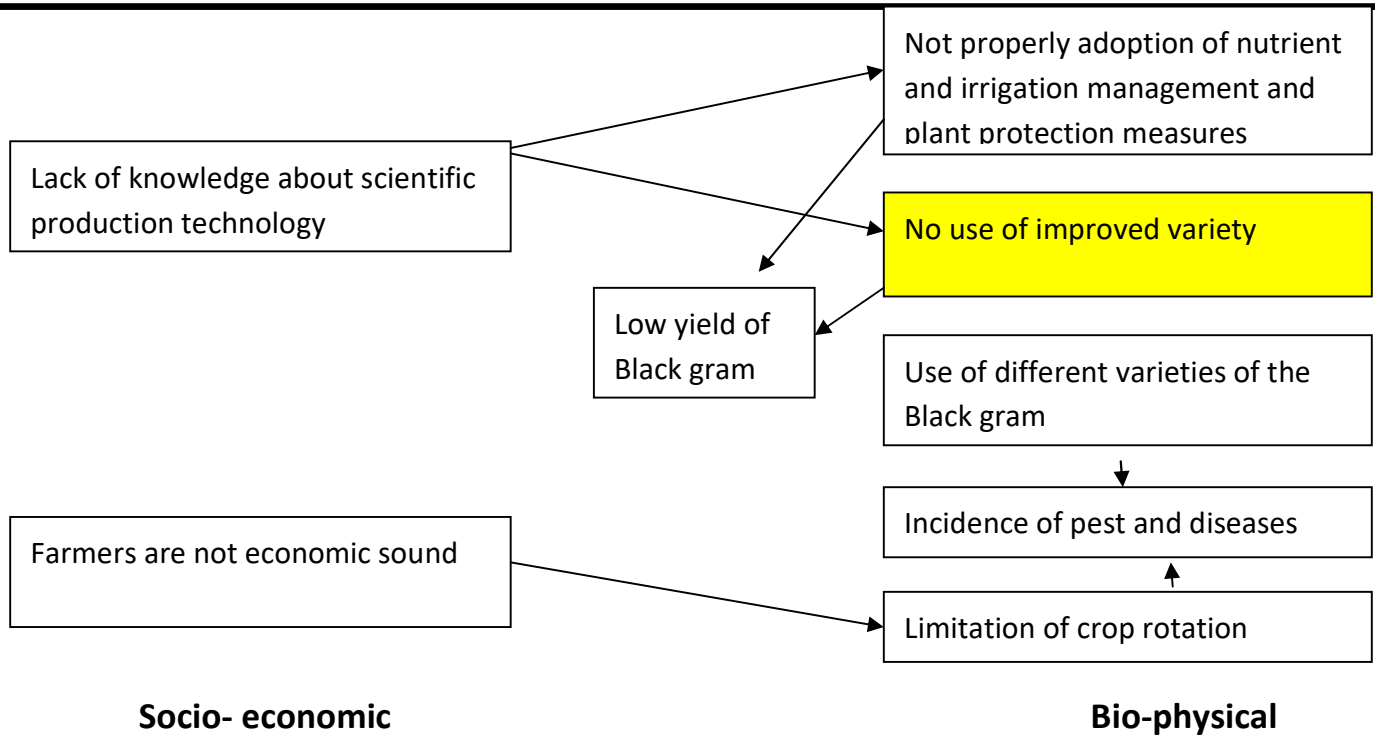
2	Black gram	Use of old/ local variety Imbalance use of nutrient Heavy infestation of pest Heavy incidence of disease	1000 ha	Sankeshwar & Sami	Training, FLD, Field Day, Field visit etc
3	Castor	Imbalance use of nutrient Scarcity of irrigation water Heavy infestation of pest Heavy incidence of disease	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
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\* Support with problem-cause and interventions diagram

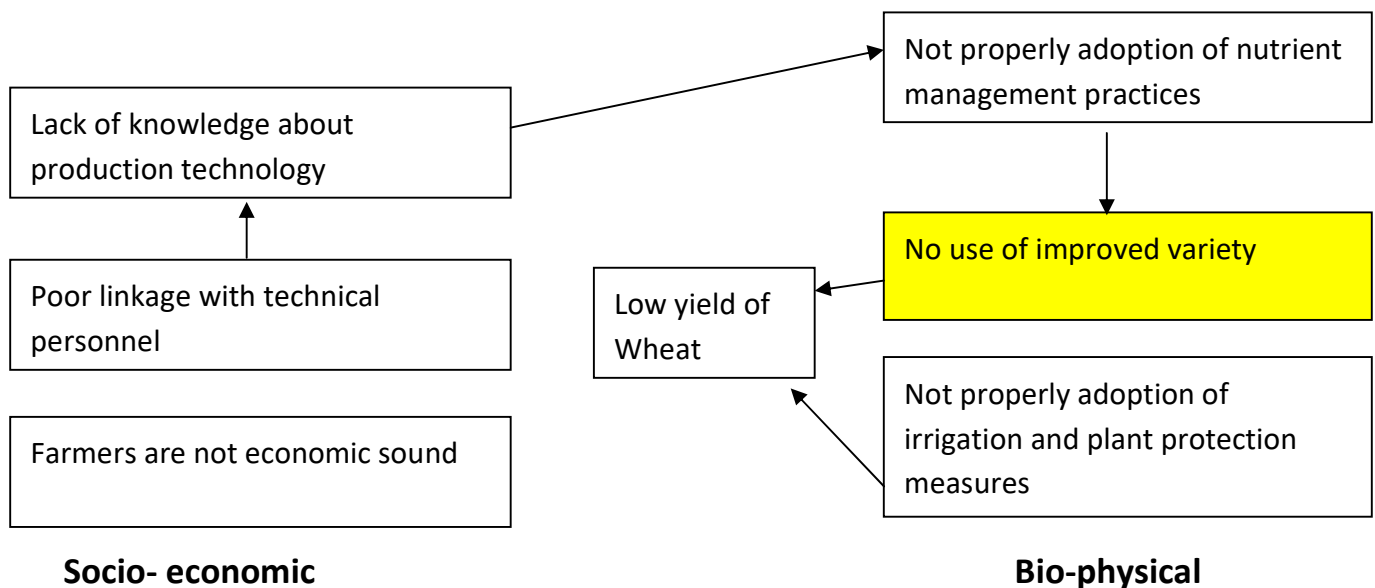
## On Farm Testing -1

### PROBLEM CAUSE DIA-GRAM – IMPROVED VARIETY OF BLACK GRAM



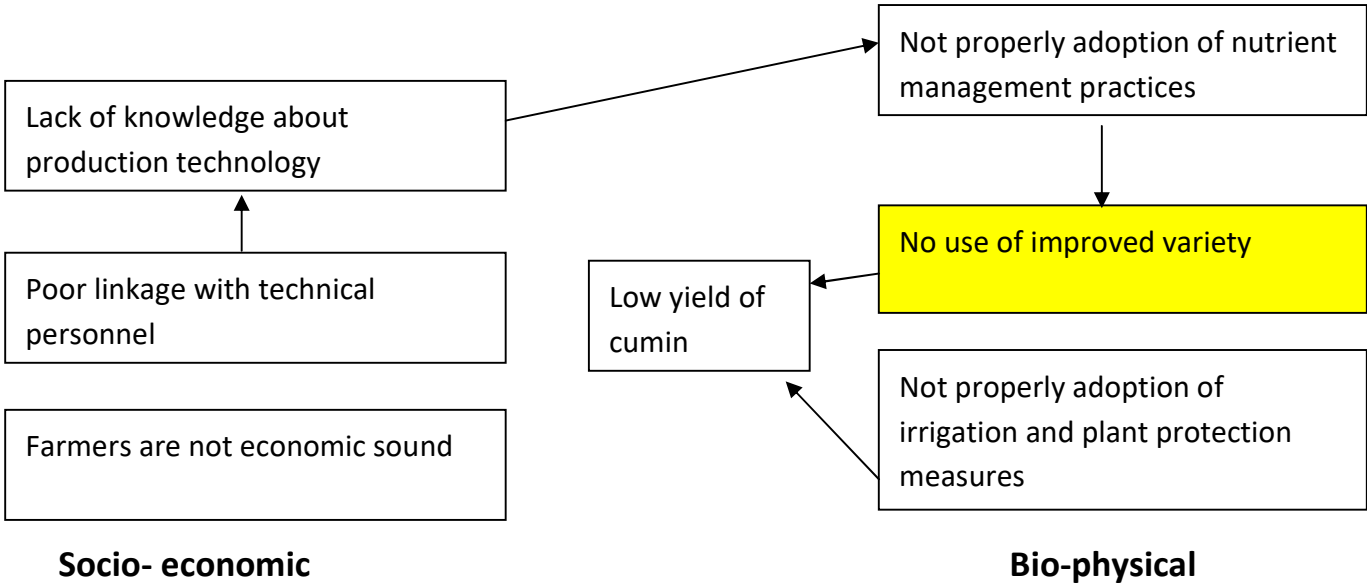
## On Farm Testing -2

### PROBLEM CAUSE DIA-GRAM – IMPROVED VARIETY OF WHEAT



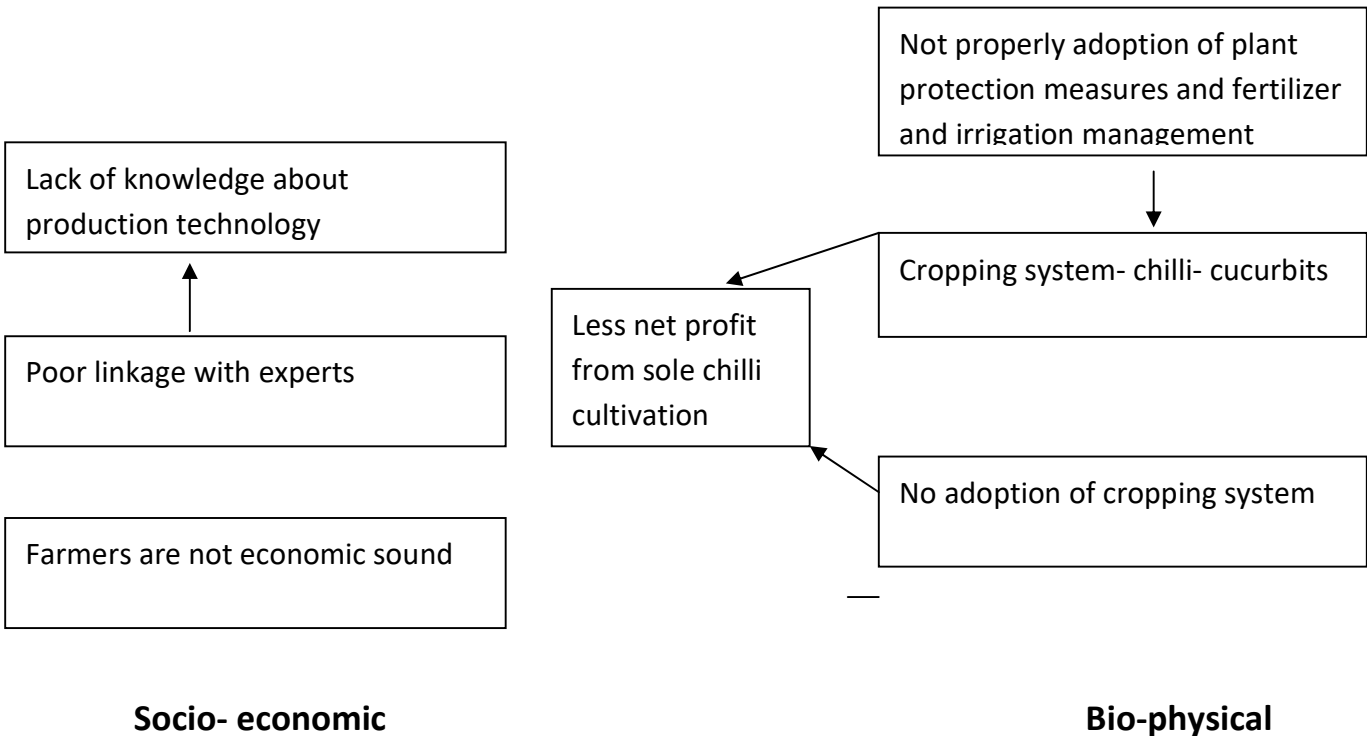
### On Farm Testing -3

#### PROBLEM CAUSE DIA-GRAM – IMPROVED VARIETY OF CUMIN



### On Farm Testing -4

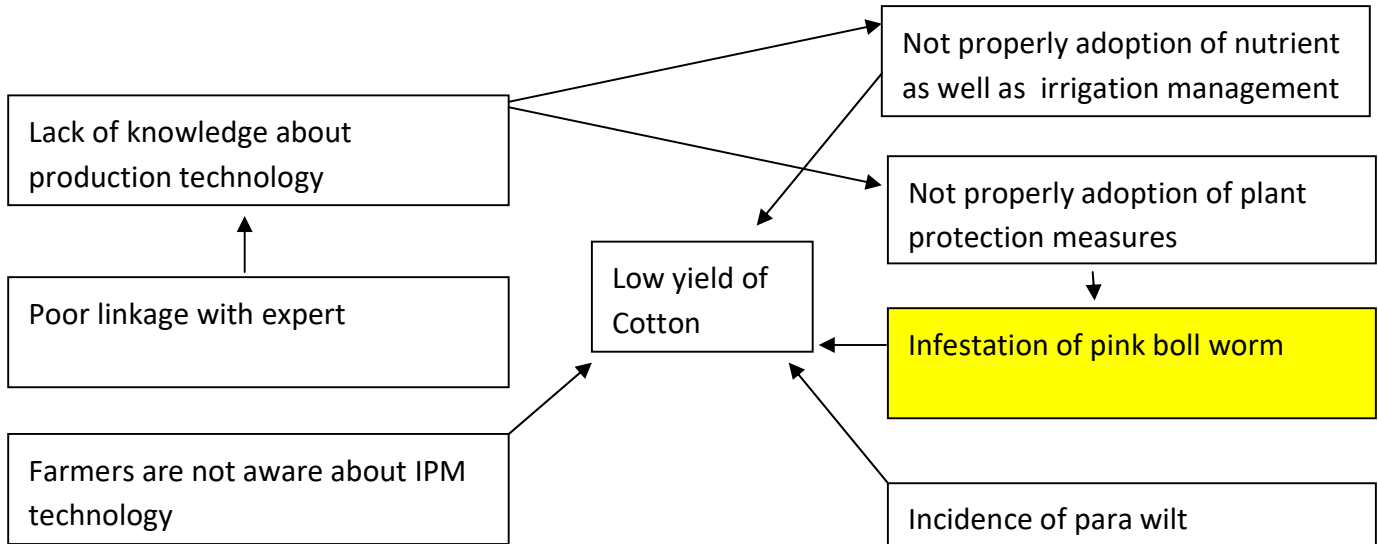
#### PROBLEM CAUSE DIA-GRAM – CHILLI- CUCURBITS





## On Farm Testing -5

### PROBLEM CAUSE DIA-GRAM – PINK BOLL WORM IN COTTON

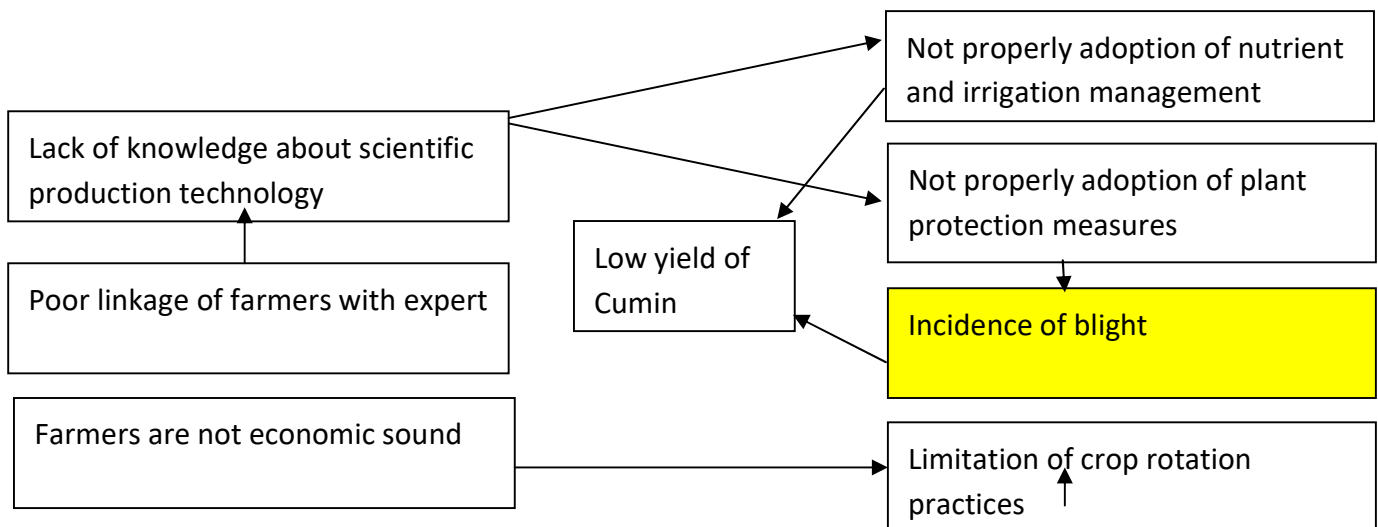


Socio- economic

Bio-physical

## On Farm Testing -6

### PROBLEM CAUSE DIA-GRAM – CUMIN BLIGHT

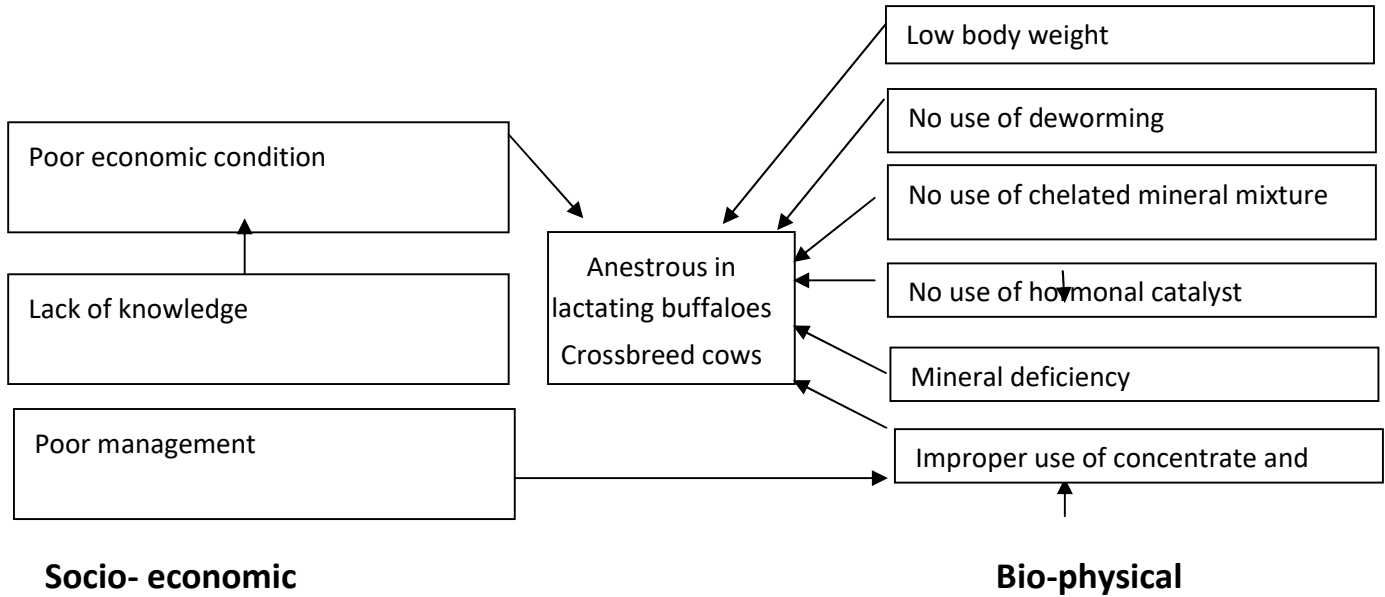


Socio- economic

Bio-physical

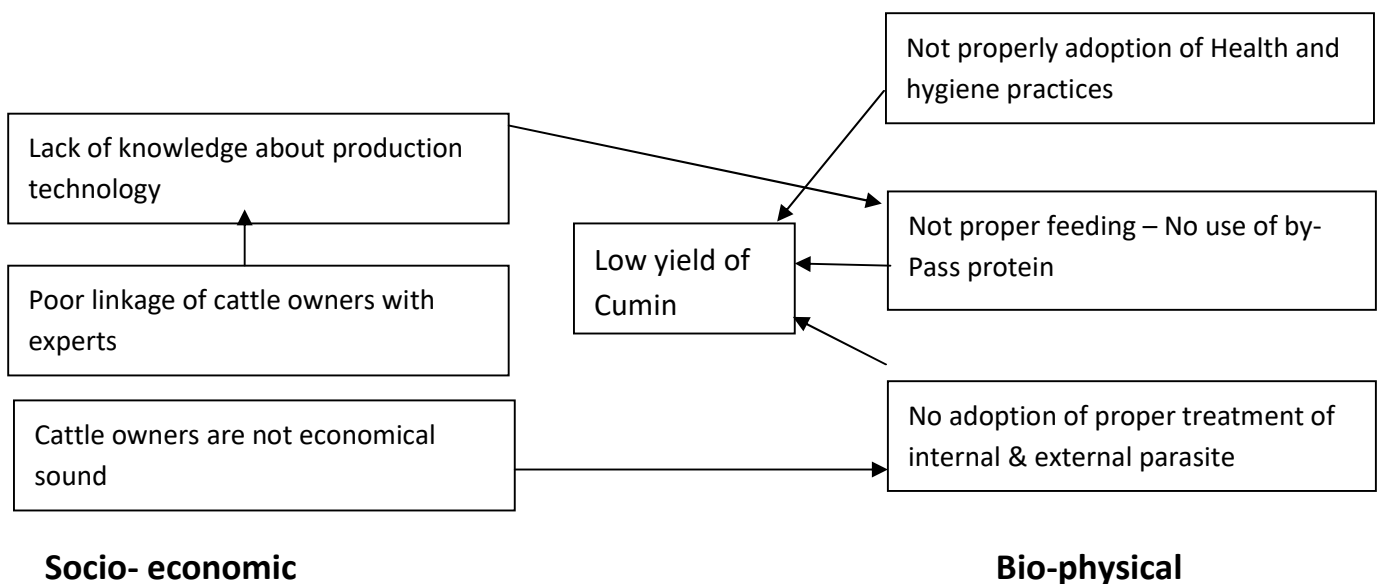
## On Farm Testing -7

### Assessment of Chelated mineral mixture and deworming effect on anestrus condition in lactating buffaloes



## On Farm Testing -8

### Problem Cause DIA-GRAM on By Pass Protein in Mahesani Buffalo





**B. Details of On Farm Trials/ Technology Assessment proposed during 2021**

S. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Technology options	Source of Technology	Name of critical input	Qty per trial	Cost per trial	No. of trials	Total cost for the intervention(	Parameters to be studied	Team members
1	Blackgram	Low yield of black gram due to use of old variety	Assessment of Improved varieties of Black gram	T1-T 9 T2-GU 1 T3-GU 2	SDAU,S. K.Nagar & JAU Junagadh	Seed of improved variety	Seed GU 1- 2 Kg GU 2 – 2 Kg	800	10	8000/-	No of pods/ plant Yield (qtl/ha)	R.P Chaudhari
2	Wheat	Low yield of wheat due to use of old variety	Assessment of Improved varieties of Wheat	T1-GW-496 T2-GW-451 T3-GW-513	SDAU,S. K.Nagar	Seed of improved variety	Seed GW-451 15 Kg GW-513 15 Kg	525 525	10	10500	No of effective tillers/ Plants  Yield – Qtl/ha	R.P Chaudhari
3	Cumin	Low yield of existing variety of Cumin	Assessment of high yielding variety of Cumin- GC-4 & GC-5	T1- Local T2- GC-4 T3- GC-5	SDAU, S.K.Nagar	Cumin seed	4.0 Kg	1200/ -	06	7200/-	No of umbel/ plant Yield (qtl/ha)	Mr S S Darji
4	Chili – cucurbits	Low net profit of present cropping system Chilli - fallow	Assessment of cropping system- Chilli – cucurbits for enhancing the net profit	T1- Chilli- Fallow T2 -Chilli – Watermelon T3- Chilli- cucumber	IIHR,B anglore	Water melon seedling	Watermelon - 625 No, Cucumber -625 No	2500	04	11760/-	Cropping intensity (%) & Net profit (Rs/Ha)	Mr S S Darji

5	Cotton	Low yield of cotton due to infestation of pink boll worm	Assessment of IPM module for the management of Pink boll worm	<p><b>T1-</b> Spraying quinolphos 25EC @ 3 ml/ Lit of water</p> <p><b>T2</b> –Spray <i>B basiana</i> @ 5 gm/ Lit of water at initiation of flowering &amp; repeated by 10 Days interval (5 spray)</p> <p><b>T3-</b> Use MDP paste-keep about 1000 drops/ ha between the upper two tiny branches of plant at initiation of flowering &amp; repeatedly by 30 days interval (3 times)</p>	JAU, Junagahr	Beauvaria vasiana & MDP paste	B basiana- 3.75 Kg & MDP paste- 1.5 KG	1800	05	9000/-	% infestation of pink boll worm & Yield (qtl/ha)	Mr G A Patel
6	Cumin	Low yield of cumin due to incidence of blight disease	Assessment of fungicide for the management of blight disease in cumin	<p>T1- Farmers practice (No Seed treatment &amp; spray of Mancozeb 75%WP @ 2.0-2.55 gm/ Lit of water</p> <p>T2-Seed treatment by Mancozeb 75% WP@3 gm/ Kg Seed &amp; spray of Mancozeb 75% WP@3.5gm/ Lit of water along with soap solution (2.5 ml) at 35-40 DAS repeatedly by 10 days interval (4 spray)</p> <p>T3- Initiation of disease first spray of Kresoxim methyl 50 SC @ 1 ml/ Lit of water &amp; second sprat of 15 Days after first spray</p>	SDAU, S K Nagar	Mancozeb 75% WP & Kresoxim methyl 50 SC	Mancozeb 75% WP- 100 gm & Kresoxim methyl 50 SC-50 ml	Rs 270/-	10	Rs 2700/-	Disease incidence (%) Yield (qtl/ha)	Mr G A Patel

7	Buffalo	Low profit of lactating buffalo due to anestrus problem	Assessment of anestrus management in lactating buffalo	T1- Green fodder+ Dry Fodder+ Concentrate feed T2- T1 + Chelated mineral mixture @ 30 Gm/ Day/ Animal + Trace mineral bolus @ 1 bolus/ day/ animal upto 21 Days T3- T2+ Deworming of animal with fenbendazol@3gm/ animal	SDAU S K Nagar IVRI, Izzatnagar Bareilly	Chelated mineral mixture Trace mineral bolus Fenbendazol bolus	6 Kg 21 bolus 01 Bolus	1600/- -	05	8000/-	Pregnancy %	Dr-S J Patel
8	Mehsani buffaloes	Low milk yield of lactating buffalo due to infestation of ecto parasite	Assessment of ectoparasite to control tick infestation in Mehnsani buffaloes	T1- Application of deltamethrine (1.25%) solution @ 3 ml/lit of water, spray and repeat 21 days T2- Application of amitraz 1%+cypermethrin 1% + piperonyl butoxide 5% solution @ 1ml/10 kg b wt topically along the midline and repeat after 21 days T3- Use of soap permethrin 5% + cetrimide 1% + aloe vera 1% apply and massage the leather on every part of body and wash after 1 hour	IVRI, Izzatnagar  TANUVAS, Chennai	Poron plus 100 ml  Tick out soap 150 gm	02 No  02 No	400/-  300/-	05	3500/-	Ectoparasite infestation (%),  milk production	Dr S J Patel

### 3.3. Frontline Demonstrations

A. Details of FLDs to be organized (Oilseeds, pulses, cereals, cotton, commercial crops, horticulture crops, vegetables, spices and condiments, fodder crops, etc)

Sl. No.	Crop	Variety	Thematic area	Technology for demonstration	Critical inputs with cost (Rs.)	Season and year	Area (ha)	No. of farms/ demonstration.	Parameters identified
1	Sun hemp-Castor	-	INM	Green manuring of sunhemp crop. Seed rate@60 kg/ha	Sunhemp seed- Rs 19500/-	Kharif-2022	5	20	No of spike / Plant Yield (qtl/ha)
2	Cotton	-	INM	Nitrogen 240 Kg/ha + Phosphorous 40 Kg/ha + Spray 3% Potassium Nitrate at the time of Flowering stage, Ball formation stage, Ball development stage	Potassium Nitrate (13-0-45)- Rs 7500/-	Kharif-2022	10	25	No of bolls/ plant Yield (qtl/ha)
3	Cauliflower	Hybrid	Nutrient management	Balance use of major plant nutrient along with three foliar application of arka vegetable special @ 3 ml/Lit of water (each spray on 15 days interval)	Arka vegetable special- Rs – 6000/-	Kharif, 2022	5	20	Yield (qtl/ha)
4	Wheat	-	IPM	Seed treatment by Fipronil 5%SC @ 6ml/ Kg seed & soil application@ 2.5 lit/ ha with irrigation water	Fipronil 5% SC Rs 6000/-	Rabi, 2022	05	20	Termite infestation (%) & Yield (qtl/ha)
5	Wheat	GW 451	Varietal demo	Improved variety of wheat – GW 451 with INM	Seed- Rs 37500 /-	Rabi, 2022	10	25	No of effective tillers/ plant Yield (qtl/ha)
6	Fennel	GF-12	Varietal demo	Improved variety GF-12	Seed – Rs 6250/-	Rabi, 2022	5	20	Yield (qtl/ha)
7	Fennel	-	IDM	Foliar spray of carbendazim 12% + Mancozeb 63% @ 1.5 Kg/ha at 45,60 & 75 DAS	Fungicide – Rs 9000/-	Rabi, 2022	10	25	Blight disease incidence (%) Yield (qtl/ha)
8	Potato	-	IDM	Tuber treatment by Boric acid (IP grade) @ 3% (30 gm per lit of water)	Fungicide Rs 5000/-	Rabi, 2022	2	10	Scab disease incidence (%) Yield (qtl/ha)
9	Cumin + Ajawain	GC-4 GA-2	ICM	Intercropping of Cumin + Ajwain (4:1)	Seed – Rs 19000/-	Rabi, 2022	5	20	No of umbel/ plant Yield (qtl/ha)
10	Ajawain	AA-93	ICM	Improved & early maturing variety of ajawain- AA- 93	Seed – Rs 2500/-	Rabi, 2022	5	20	No of umbel/ plant Yield (qtl/ha)
11	Kitchen garden	Hybrids/ Op	H&VC	Cultivation of seasonal vegetable in backyard for supplementing additional vegetable in daily diet	Seeds of vegetable – Rs 40000/-	Kharif, Rabi, 2022		80	Yield (Kg/ plot)
<b>Total</b>							<b>62</b>	<b>285</b>	

### Sponsored Demonstrations (CFLDs on O & P/Others)

S. No.	Crop	Variety	Season and Year	Area (ha)	No. of farmers
A	<b>Oilseed Crops</b>				
1	Castor	GCH-8	Kharif, 2022	20	50
2	Mustard	GDM-4	Rabi-2022	20	50
	<b>Total</b>			<b>40</b>	<b>100</b>
B	<b>Pulse Crops</b>				
1	Black Gram	GU-1	Kharif,2022	20	50
2	Chickpea	GG-5	Rabi-2022	20	50
	<b>Total</b>			<b>40</b>	<b>100</b>

### B. Extension and Training activities under FLDs

S. No.	Activity	No. of activities	Month	Number of participants
1	Field days	17	-	745
2	Farmers Training	25	-	625
3	Media coverage	10	-	Mass
4	Training for extension functionaries	7	-	175

### C. Details of FLD on Enterprises

#### a. Farm Implements

Name of the implement	Crop	Season and year	No. of farmers	Area (ha)	Critical inputs	Performance parameters / indicators
Secaiteer	Castor	Kahrif, 2022	10	-	Secaiteer (Rs 5000/-)	Area harvested (Day/ women)

#### b. Livestock and Fisheries Enterprises

Enterprise	Breed	No. of farmers	No. of animal	Critical inputs	Performance parameters / indicators
Feed supplement	Mehsani Buffalo	20	20	Probiotic @20 gm/day (Rs 4,000/-)	Milk production (Lit/Day), Fat %
Feed supplement	Mehsani Buffalo	20	20	Mineral mixture @40 gm/day (Rs 10,000/-)	Milk production (Lit/Day), Fat %
Feed supplement Bypass fats	Cross breed	10	10	Use of Dry fodder, Green fodder & concentrate with bypass fats (100 gm/day/animal) in diets of cross breed cows– Rs 18000/-	Milk production (Lit/Day), Fat %
Feed supplement- Bypass protein	Mehsani Buffalo	10	10	Use of green fodder, dry fodder, concentrate with bypass protein concentrate @ 1 kg per day per animal for 60 days – Rs 16000/-	Milk production (Lit/Day), Fat %
<b>Total</b>		<b>60</b>	<b>60</b>		





Management of potted plants								
Export potential of ornamental plants								
Propagation techniques of Ornamental Plants								
<b>d) Plantation crops</b>								
Production and Management technology								
Processing and value addition								
<b>e) Tuber crops</b>								
Production and Management technology								
Processing and value addition								
<b>f) Spices</b>								
Production and Management technology	02	40	00	40	10	00	10	50
Processing and value addition								
<b>g) Medicinal and Aromatic Plants</b>								
Nursery management								
Production and management technology								
Post harvest technology and value addition								
<b>III Soil Health and Fertility Management</b>								
Soil fertility management								
Soil and Water Conservation								
Integrated Nutrient Management								
Production and use of organic inputs	01	18	00	18	02	00	02	20
Management of Problematic soils								
Micro nutrient deficiency in crops								
Nutrient Use Efficiency								
Soil and Water Testing								
<b>IV Livestock Production and Management</b>								
Dairy Management								
Poultry Management								
Piggery Management								
Rabbit Management/goat								
Disease Management	02	18	18	36	02	02	04	40
Feed management	02	00	36	36	00	04	04	40
Production of quality animal products								
<b>V Home Science/Women empowerment</b>								
Household food security by kitchen gardening and nutrition gardening	01	00	18	18	00	02	02	20
Design and development of low/minimum cost diet								
Designing and development for high nutrient efficiency diet								
Minimization of nutrient loss in processing								
Gender mainstreaming through SHGs								
Storage loss minimization techniques								
Value addition	03	00	54	00	00	06	06	60
Income generation activities for empowerment of rural Women								
Location specific drudgery reduction technologies								
Rural Crafts								
Women and child care								
<b>VI Agril. Engineering</b>								
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								
<b>VII Plant Protection</b>								
Integrated Pest Management	04	72	00	72	08	00	08	80
Integrated Disease Management	02	36	00	36	04	00	04	40
Bio-control of pests and diseases	01	18	00	18	02	00	02	20
Production of bio control agents and bio pesticides								
<b>VIII Fisheries</b>								
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								
<b>IX Production of Inputs at site</b>								
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								
<b>X Capacity Building and Group Dynamics</b>								
Leadership development								
Group dynamics								
Formation and Management of SHGs								
Mobilization of social capital								
Entrepreneurial development of farmers/youths								
WTO and IPR issues								
<b>XI Agro-forestry</b>								
Production technologies								
Nursery management								
Integrated Farming Systems								
<b>XII Others (Pl. Specify)</b>								

<b>TOTAL</b>	25	332	126	404	48	14	62	520
<b>(B) RURAL YOUTH</b>								
Mushroom Production								
Bee-keeping								
Integrated farming								
Seed production								
Production of organic inputs								
Integrated Farming (Medicinal)								
Planting material production								
Vermi-culture								
Sericulture								
Protected cultivation of vegetable crops								
Commercial fruit production								
Repair and maintenance of farm machinery and implements								
Nursery Management of Horticulture crops								
Training and pruning of orchards								
Value addition								
Production of quality animal products	01	00	10	10	00	05	05	15
Dairying								
Sheep and goat rearing								
Quail farming								
Piggery								
Rabbit farming								
Poultry production								
Ornamental fisheries								
Para vets								
Para extension workers								
Composite fish culture								
Freshwater prawn culture								
Shrimp farming								
Pearl culture								
Cold water fisheries								
Fish harvest and processing technology								
Fry and fingerling rearing								
Small scale processing								
Post Harvest Technology								
Tailoring and Stitching	01	00	10	10	00	00	00	10
Rural Crafts	01	00	10	10	00	05	05	15
<b>TOTAL</b>	<b>03</b>	<b>00</b>	<b>30</b>	<b>30</b>	<b>00</b>	<b>10</b>	<b>10</b>	<b>40</b>
<b>(C) Extension Personnel</b>								
Productivity enhancement in field crops	02	40	00	40	10	00	10	50
Integrated Pest Management	02	40	00	40	10	00	10	50
Integrated Nutrient management								
Rejuvenation of old orchards								
Protected cultivation technology								
Formation and Management of SHGs								
Group Dynamics and farmers organization								
Information networking among farmers								
Capacity building for ICT application								



Export potential fruits								
Micro irrigation systems of orchards	01	20	00	20	05	00	05	25
Plant propagation techniques								
<b>c) Ornamental Plants</b>								
Nursery Management								
Management of potted plants								
Export potential of ornamental plants								
Propagation techniques of Ornamental Plants								
<b>d) Plantation crops</b>								
Production and Management technology								
Processing and value addition								
<b>e) Tuber crops</b>								
Production and Management technology	01	20	00	20	05	00	05	25
Processing and value addition								
<b>f) Spices</b>								
Production and Management technology								
Processing and value addition								
<b>g) Medicinal and Aromatic Plants</b>								
Nursery management								
Production and management technology								
Post harvest technology and value addition								
<b>III Soil Health and Fertility Management</b>								
Soil fertility management								
Soil and Water Conservation								
Integrated Nutrient Management	04	72	00	72	08	00	08	80
Production and use of organic inputs								
Management of Problematic soils								
Micro nutrient deficiency in crops								
Nutrient Use Efficiency								
Soil and Water Testing	01	18	00	18	02	00	02	20
<b>IV Livestock Production and Management</b>								
Dairy Management	04	18	54	72	02	06	08	80
Poultry Management								
Piggery Management								
Rabbit Management /goat								
Disease Management	03	18	36	54	02	04	06	60
Feed management	04	18	54	72	02	06	08	80
Production of quality animal products								
<b>V Home Science/Women empowerment</b>								
Household food security by kitchen gardening and nutrition gardening	02	00	36	36	00	04	04	40
Design and development of low/minimum cost diet	02	00	36	36	00	04	04	40
Designing and development for high nutrient efficiency diet								
Minimization of nutrient loss in processing								
Gender mainstreaming through SHGs								

Storage loss minimization techniques	01	00	18	18	00	02	02	20
Value addition	04	00	72	72	00	08	08	80
Income generation activities for empowerment of rural Women								
Location specific drudgery reduction technologies	01	00	18	18	00	02	02	20
Rural Crafts	01	00	18	18	00	02	02	20
Women and child care	01	00	18	18	00	02	02	20
<b>VI Agril. Engineering</b>								
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								
<b>VII Plant Protection</b>								
Integrated Pest Management	04	72	00	72	08	00	08	80
Integrated Disease Management	02	36	00	36	04	00	04	40
Bio-control of pests and diseases	02	36	00	36	04	00	04	40
Production of bio control agents and bio pesticides								
<b>VIII Fisheries</b>								
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								
<b>IX Production of Inputs at site</b>								
Seed Production								
Planting material production (Horti.)								
Bio-agents production								
Bio-pesticides production								
Bio-fertilizer production								
Vermi-compost production (Horti.)								
Organic manures production (A.S.)								
Production of fry and fingerlings								
Production of Bee-colonies and wax sheets								





Layout and Management of Orchards								
Cultivation of Fruit	01	20	00	20	05	00	05	25
Management of young plants/orchards								
Rejuvenation of old orchards								
Export potential fruits								
Micro irrigation systems of orchards	01	20	00	20	05	00	05	25
Plant propagation techniques								
<b>c) Ornamental Plants</b>								
Nursery Management								
Management of potted plants								
Export potential of ornamental plants								
Propagation techniques of Ornamental Plants								
<b>d) Plantation crops</b>								
Production and Management technology								
Processing and value addition								
<b>e) Tuber crops</b>								
Production and Management technology	01	20	00	20	05	00	05	25
Processing and value addition								
<b>f) Spices</b>								
Production and Management technology	02	40	00	40	10	00	10	50
Processing and value addition								
<b>g) Medicinal and Aromatic Plants</b>								
Nursery management								
Production and management technology								
Post harvest technology and value addition								
<b>III Soil Health and Fertility Management</b>								
Soil fertility management								
Soil and Water Conservation								
Integrated Nutrient Management	04	72	00	72	08	00	08	80
Production and use of organic inputs	01	18	00	18	02	00	02	20
Management of Problematic soils								
Micro nutrient deficiency in crops								
Nutrient Use Efficiency								
Soil and Water Testing	01	18	00	18	02	00	02	20
<b>IV Livestock Production and Management</b>								
Dairy Management	04	18	54	72	02	06	08	80
Poultry Management								
Piggery Management								
Rabbit Management/goat								
Disease Management	05	36	54	90	04	06	10	100
Feed management	06	18	90	108	02	10	12	120
Production of quality animal products								
<b>V Home Science/Women empowerment</b>								
Household food security by kitchen gardening and nutrition gardening	03	00	54	54	00	06	06	60
Design and development of low/minimum cost diet	02	00	36	36	00	04	04	40
Designing and development for high nutrient efficiency diet								
Minimization of nutrient loss in processing								
Gender mainstreaming through SHGs								

Storage loss minimization techniques	01	00	18	18	00	02	02	20
Value addition	07	00	126	126	00	14	14	140
Income generation activities for empowerment of rural Women								
Location specific drudgery reduction technologies	01	00	18	18	00	02	02	20
Rural Crafts	01	00	18	18	00	02	02	20
Women and child care	01	00	18	18	00	02	02	20
<b>VI Agril. Engineering</b>								
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								
<b>VII Plant Protection</b>								
Integrated Pest Management	08	144	00	144	16	00	16	160
Integrated Disease Management	04	72	00	72	08	00	08	80
Bio-control of pests and diseases	03	54	00	54	06	00	06	60
Production of bio control agents and bio pesticides								
<b>VIII Fisheries</b>								
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								
<b>IX Production of Inputs at site</b>								
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								

<b>X Capacity Building and Group Dynamics</b>								
Leadership development								
Group dynamics	02	36	00	36	04	00	04	40
Formation and Management of SHGs								
Mobilization of social capital								
Entrepreneurial development of farmers/youths								
WTO and IPR issues								
<b>XI Agro-forestry</b>								
Production technologies								
Nursery management								
Integrated Farming Systems								
Sponsored training								
<b>TOTAL</b>	<b>75</b>	<b>884</b>	<b>486</b>	<b>1316</b>	<b>126</b>	<b>54</b>	<b>180</b>	<b>1550</b>
<b>(B) RURAL YOUTH</b>								
Mushroom Production								
Bee-keeping								
Integrated farming								
Seed production								
Production of organic inputs								
Integrated Farming								
Planting material production								
Vermi-culture								
Sericulture								
Protected cultivation of vegetable crops								
Commercial fruit production								
Repair and maintenance of farm machinery and implements								
Nursery Management of Horticulture crops								
Training and pruning of orchards								
Value addition								
Production of quality animal products	01	00	10	10	00	05	05	15
Dairying								
Sheep and goat rearing								
Quail farming								
Piggery								
Rabbit farming								
Poultry production								
Ornamental fisheries								
Para vets								
Para extension workers								
Composite fish culture								
Freshwater prawn culture								
Shrimp farming								
Pearl culture								
Cold water fisheries								
Fish harvest and processing technology								
Fry and fingerling rearing								
Small scale processing								
Post Harvest Technology								
Tailoring and Stitching	01	00	10	10	00	00	00	10



Scientific visit to farmers field	125	1000	100	1100	00	00	00	1000	100	1100
Farmers visit to KVK	500									
Diagnostic visits	10	100	10	110	10	00	10	110	10	120
Exposure visits	01	25	00	25	00	00	00	25	00	25
Ex-trainees Sammelan	02	50	00	50	00	00	00	50	00	50
Soil health Camp	01	50	00	50	00	00	00	50	00	50
Animal Health Camp	01	50	00	50	00	00	00	50	00	50
FPO meeting	01	30	00	30	00	00	00	30	00	30
Celebration of special days (specify)	05	150	100	250	10	05	15	160	105	265
Technological week	01	250	20	270	30	00	30	280	20	300
<b>Total</b>	<b>751</b>	<b>5450</b>	<b>1180</b>	<b>6630</b>	<b>185</b>	<b>65</b>	<b>250</b>	<b>5635</b>	<b>1245</b>	<b>6880</b>

### 3.6. Target for Production and supply of Technological products

#### SEED MATERIALS

Sl. No.	Crop	Variety	Quantity (qtl.)
<b>CEREALS</b>			
1	Wheat	GW-451 (Seed)	40
2	S.Bajara	Hybrid (Commercial)	30
<b>OILSEEDS</b>			
1	Castor	GCH-7 7 GCH-8 (Commercial)	100
2	Mustard	GDM-4 (Seed)	04
<b>PULSES</b>			
1	Sun hemp	Local (Seed)	01
2	Green gram	GU-1 (Seed)	08
<b>OTHERS (Specify)</b>			
1	Cotton	Bt cotton Bollgard -2 (Commercial)	20
2	Tobacco	GCt-3 & DCT-4 (Commercial)	45
<b>FRUIT PLANT</b>			
1	Lemon	Kagzi lime	New Plantation
2	Mango	Kesar	Fruiting condition
3	Sapota	Kalipatti	

#### PLANTING MATERIALS

Sl. No.	Crop	Variety	Quantity (Nos.)
<b>FRUITS</b>			
1	Lime	Kagzi lime	5000
2	Papaya	Madhu bindu	1000
<b>VEGETABLES</b>			
1	Tomato	Hybrid	2000
2	Brinjal	Hybrid	2000

3	Chilli	Hybrid	2000
4	Cabbage	Hybrid	2000
5	Cauliflower	Hybrid	2000
6	Watermelon	Hybrid	3100
7	Cucumber	Desi	3100
<b>ORNAMENTAL PLANTS</b>			
1	Rose	Desi	300
	Pendula	Desi	200
<b>Total</b>			<b>22700</b>

#### Bio-products

Sl. No.	Product Name	Species	Quantity	
			Kg	Lit
1	Vermi compost	I foetida	5000	-
2	Azolla	Azolla pinnata	50	
3	Waste decomposer	-	-	100

#### LIVESTOCK

Sl. No.	Type	Breed	Quantity (No.)
CATTLE			
GOAT			
SHEEP			
POULTRY			

#### VALUE ADDED PRODUCTS

Crop / Commodity	Name of the product	Quantity to be prepared (kg or litre)	Sale value (Rs)
Fruit crops			
Vegetables			
Cereals and Millets			
Any other (PI specify)			
	<b>Total</b>		

### 3.7. Action plan for management of KVK instructional farm

Total land with KVK :20.0 ha                      Cultivable land :15.0 ha (Irrigated :10.0 ha, Rainfed :5.0 ha)

Micro-irrigation facility available at KVK : No.

S. No.	Name of crop	Area (ha)	Variety	Date of sowing / Planting	Date of harvest	Expected yield (q)
1	<b>Crops</b>					
	Cotton	1.00	BT cotton (BG-2)	IInd Week of June	-	20
	Black gram	0.75	GU-1	Ist fort night of July	October	8.5
	Castor (irrigated)	4.00	GCH-7 & GCH-8	IInd fortnight of july to Ist Fortnight of August	February-March	100
	Castor (Rainfed)	1.00	GCH-2	Onset of Mansoon	January-February	10
	Tobacco	1.5	GCT-3 & DCT-4	Mid November	April	45
	Summer Bajra	1.0	Hybrid	Ist week of March	June	30
2	Fruit crops					
	Mango	0.50	Kesar	1994		
	Sapota	0.50	Kali Patti	1994		
	Lime	1.0	Kagzi Lime	August, 2020		
3	Seed production					
	Sunhemp	0.25	Local	Onset of Mansoon	January	1
	Mustard	0.25	GDM-4 & GDM-6	Mid October	March	4
	Wheat	1.0	GW-451	IInd fortnight of November	March	40
4	Technology cafeteria*	0.2	Variety of field crop & technologies			
5	Nutritional Garden*	0.1	Round the year production of Vegetables			

\*May add separate table/information if necessary

#### 4. Literature to be Developed/Published

##### A. Literature developed/published

S.No.	Topic	Number
1	Research papers	02
2	Technical reports	04
3	News letters	01
4	Training manuals	01
5	Popular articles	20
6	Extension literature	05
7	E-publication	25
8	Any other (Please specify)	
	<b>Total</b>	<b>58</b>

##### B. Details of Electronic Media to be produced

S. No.	Type of media (CD / VCD / DVD / Audio-Cassette) and video clippings	Title of the programme	Number
1	video clippings	Vermi compost production technology	1
2	video clippings	Pheromone trap installation technique	1
3	video clippings	Azolla production technology	1
4	video clippings	Kitchen garden	1
5	video clippings	Technique of seed treatment	1
6	video clippings	Value addition in Aonla	1
7	video clippings	Soil sampling	1
8	video clippings	Organic farming	1

##### C. Details of social media platforms to be started / continued

S. No.	Type of social media platform	Title / Purpose	Number
1	YouTube Channel	Live programme on dissemination of agricultural technology Uploading clipping of technologies	
2	Facebook page	Uploading KVK activities, technologies & live programme	
3	Mobile Apps	-	
4	WhatsApp groups	05 Groups	-
5	Twitter Account	01	-
6	Any other – Digital Farm School	Production technology of field crop	



**D. Success stories/Case studies identified for development as a case (Based on previous years success)**

S. No.	Title of success story / case study identified	Proposed month for case/story to be prepared/ developed
1	Success stories	05 No during the year
2	Case study	01 No

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

**A. Practicing Farmers**

a)

**B. Rural Youth**

a)

**C. In-service personnel**

a)

**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 farmer's 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

### 6.1. Functional linkage with different organizations

Sl.No.	Name of organization	Nature of Linkage
1.	Sardarkrushinagar Dantiwada Agril. University, S.K.Nagar	-Linkage for seasonal training cum workshop of kharif, Rabi and summer crops. -Linkage for various demonstration of farm technology. -Linkage for diagnostic services & Technical guidance
2.	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.
3.	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
4.	IIFCO, G.N.F.C. Sidhpur	-Linkage for soil and water analysis. -Linkage for farmer training programme
5.	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.
6.	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
7.	Farmers Training Centre, Patan	-linkage for imparting training to farmers & farm women & rural youth
8.	ICDS Patan	In-service training programme and sponsored training programme
9.	ATMA Patan	-Seasonal training programme & Demonstration of Agril. Technology
10.	IWMP, Patan	Imparting training to the extension functionaries, farmers & farm women about soil reclamation & other enterprises
11	NABARD, Patan	Training to members of farm science club
12	Reliance	Quick delivery of message in large scale through Kisan Mobile sandesh
13	SSNL	Technical backup
14	FPOs	Technical backup

### 6.2. Details of linkage with ATMA

S. No.	Programme	Nature of linkage
1	Meeting	Technical support
2	FFS	Technical support
3	Training	Technical support
4	Kisan Mela/ Kisan Gosthi	Technical support
5	Joint Field Visit	Technical support

**6.3. Give details of programmes under National Horticultural Mission**

S. No.	Programme	Nature of linkage
1		
2		

**6.4. Nature of linkage with National Fisheries Development Board**

S. No.	Programme	Nature of linkage
1		
2		

**6.5. Additional Activities planned including sponsored projects (NARI/DAESI/DAMU/DFI/PKVY/ Skill Trainings/TSP/KKA/Seed Hub on Pulses, etc.) schemes during 2021, if involved.**

S.No.	Name of the agency / scheme	Name of activity	Technical programme with quantification	Financial outlay (Rs.)	Names of the team members involved
1	NARI	Training Demonstration	10 No 01 No	-	Smt H B Patel
2	DAESI	Training	01 No	-	Dr Upesh Kumar & Mr G A Patel
3	FPO	Technical backup	02 No	-	Dr Upesh Kumar

### 6.5.1. Details of activities planned in Doubling Farmers' Income (DFI) villages

Name of DFI village selected	Total No. of families in the village	Interventions planned during 2021	No. of families to be covered under the intervention	Present annual income of the family (Rs/annum)	Expected annual income of the family after intervention (Rs/annum)
Hajipur, Taluka- Patan	249	Training & Demonstration	25	1,85,000	207200
Biliya, Taluka- Siddhpur	580	Training & Demonstration	25	1,80,000	203400

### 6.5.2. Details of activities planned under NARI (Including FSN project)

S. No.	Name of the village	Activities planned	No. of families to be covered
1	Kuwara	Training- 10 No	50
		Demonstration – 01 No	

### Details of training programme under NARI

Date	Clientele	Title of the training programme	Duration in days	Number of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
April, 2022	FW	Importance & uses of drum stick	01	00	18	18	00	02	02	20
May, 2022	FW	Preparation & preservation of Mango product	01	00	18	18	00	02	02	20
June, 2022	FW	Importance & techniques of kitchen garden	01	00	18	18	00	02	02	20
July, 2022	FW	Nursery raising of fruits & vegetables	05	00	18	18	00	02	02	20
August, 2022	FW	Clean milk production	01	00	18	18	00	02	02	20
September, 2022	FW	Minimization of nutrient losses during cooking	01	00	18	18	00	02	02	20
October, 2022	FW	Importance of fruits & vegetables in our daily diet	01	00	18	18	00	02	02	20
November, 2022	FW	Value addition of Aonla & Lime	02	00	18	18	00	02	02	20
November, 2022	FW	Value addition of milk	01	00	18	18	00	02	02	20
December, 2022	FW	Preservation of leafy vegetables	01	00	18	18	00	02	02	20

**6.5.3. Details of activities planned under Paramaparagat Krishi Vikas Yojana (PKVY)**

S. No.	Name of the village	Activities planned	No. of families to be covered

**6.5.4. Details of skill trainings planned (sponsored by ASCI)**

S. No.	Name of Job Role	Duration (No. of hours)	No. of participants

**6.5.5. Details of activities planned under TSP**

S. No.	Name of the village	Activities planned	No. of families to be covered

**6.5.6. Details of activities planned under Krishi Kalyan Abhiyan (KKA)**

S. No.	Name of the village	Activities planned	No. of families to be covered

**6.5.7. Details of seed production planned under Seed Hub on Pulses**

S. No.	Name of the crop	Variety	Stage (Foundation / Certified)	Quantity of seed to be produced (q)

**6.6. Activities planned in respect of FPOs / FPCs**

1. No. of FPOs / FPCs to be formed: No
2. No. of existing FPOs / FPCs to be facilitated: 03
3. Type of support to be provided to existing FPOs / FPCs: Technical backup

S. No	Name of the FPO / FPC	No. of members	Major activities of FPO / FPC	Type of support to be provided by KVK
1	Parikranta Farmers Producer Company Limited	200	input supply, aggregation & marketing	Technical backup
2	Banas Famers Producer Company Limited	1354	input supply, aggregation & marketing	Technical backup
3	Vadhiyar Famers Producer Company Limited	650	input supply, aggregation & marketing	Technical backup

### 6.7. Activities planned in respect of developing Integrated Farming System (IFS) Models on farmers' fields during 2021

S. No	Name of the village	No. of IFS models to be identified / developed	Major components of IFS model
1	Der	10	Dairy & Agriculture

### 7.0 Convergence with other agencies and line departments in the district:

S. No.	Name of the department / Agency	Type of convergence	Area (ha) / No. of farmers to be benefited
1	SSNL	Technical backup for conducting demonstration & Training	
2	Agriculture Department	Training, Demonstration, Sangosthi & Visit	
3	ATMA	Training, Demonstration, Sangosthi, Farmers fair & Visit	
4	Horticulture	Training, Demnstration & Exposure visit	
5	Animal Husbandry	Animal Health camp, Training & Sangosthi	
6	NABARD	Technical backup to FPOs	
7	Reliance Foundation	Technical backup through social media	

### 8. Innovator Farmer's Meet 2021

Sl.No.	Particulars	Details	Expected No. of participants
1	Digital Farm school	Crop period	60 No
2	FPO meeting	Technical backup	50 No

### 9. Utilization of hostel facilities

S. No.	Month	No. of days to be utilized
1		
2		
3		
4		
	<b>Total</b>	

### 10. Details of online activities planned (If any)

S. No.	Type of activities	No. of programmes	Mode of implementation (Video conferencing / Audio Conferencing / Facebook Live / YouTube Live, etc)	No. of participants to be covered
1	Farmers trainings	05	You Tube Live	100
2	Farmers scientist's interaction programme	01	You Tube Live	50

3	Farmers seminars	02	You Tube Live	100
4	Expert lectures	02	-	-
5	Any other (Pl. specify)			

#### 11. Details of collaborative applied research projects planned if any

S. No.	Name of the research project	Funding agency	Collaborating organizations	Year of commencement	Major activities planned

Annexure - I

#### Training Programme

##### i) Farmers & Farm women (On Campus)

Date	Clientele	Title of the training programme	Duration in days	Number of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
<b>Crop Production</b>										
May 2022	PF	Production technology of cotton	1	18	0	18	02	0	02	20
July 2022	PF	Production technology of castor	1	18	0	18	02	0	02	20
September 2022	PF	Production technology of Mustard	1	18	0	18	02	0	02	20
October 2022	PF	Integrated Weed management in Mustard	1	18	0	18	02	0	02	20
November 2022	PF	Production technology of Wheat	1	18	0	18	02	0	02	20
<b>Horticulture</b>										
September, 2022	PF	INM in cauliflower	1	18	0	18	02	0	02	20
October, 2022	PF	Production technology of fennel	1	18	0	18	02	0	02	20
October, 2022	PF	Production technology of Ajawain	1	18	0	18	02	0	02	20
November 2022	PF	ICM in cumin	1	18	0	18	02	0	02	20
<b>Livestock prod.</b>										
April 2022	FW	Importance of minerals and vitamins as feed supplement in dairy animals	1	0	18	18	0	2	2	20
May 2022	FW	Importance of Deworming and vaccination in dairy animals	1	0	18	18	0	02	02	20
July 2022	FW	Metabolic diseases and its treatment in dairy	1	0	18	18	0	02	02	20

		animals								
August 2022	FW	Importance of bypass elements on milk production in dairy animals	1	0	18	18	0	2	2	20
<b>Agril. Engg.</b>										
	PF									
<b>Home Sc.</b>										
January 2022	PF	preparation and preservation of Aonla products	1	0	18	18	0	2	2	20
May, 2022	PF	preparation and preservation of Mango products	1	0	18	18	0	02	02	20
July, 2022	PF	Layout and planning of kitchen garden	1	0	18	18	0	02	02	20
<b>Plan prot.</b>										
June 2022	PF	Integrated pest management in Kharif pulses	1	18	0	18	02	0	02	20
June, 2022	PF	Plant protection measures in Black gram	1	18	0	18	02	0	02	20
September, 2022	PF	Plant protection measures in fennel	1	18	0	18	02	0	02	20
October 2022	PF	Plant protection measures in chickpea	1	18	0	18	02	0	02	20
October 2022	PF	Integrated pest management in Rabi pulses	1	18	0	18	02	0	02	20
November 2022		Plant protection measures in wheat	1	18	0	18	02	0	02	20
<b>Soil Health</b>										
June 2022	PF	Production and use of organic manures	1	20	0	20	5	0	5	25

**ii) Farmers & Farm women (Off Campus)**

Date	Clientele	Title of the training programme	Duration in days	No. of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
<b>Crop Production</b>										
July 2022	PF	Integrated farming system for enhancing profitability	1	18	0	18	02	0	02	20
October 2022	PF	Importance and scope of drip and sprinkler irrigation for higher crop production	1	18	0	18	02	0	02	20
November 2022	PF	Integrated weed management in wheat	1	18	0	18	02	0	02	20
<b>Horticulture</b>										
January, 2022	PF	Production technology of water melon	1	18	0	18	02	0	02	20
February 2022	PF	Organic farming of cow pea & Cluster bean	1	18	0	18	02	0	02	20
April, 2022	PF	Importance & use of MIS in horticultural crops	1	18	0	18	02	0	02	20



May, 2022	PF	Importance & use of mulching in horticulture crops	1	18	0	18	02	0	02	20
October, 2022	PF	Natural farming in cumin	1	18	0	18	02	0	02	20
November 2022	PF	INM in Potato	1	18	0	18	02	0	02	20
December, 2022	PF	INM & Water management in rabi onion	1	18	0	18	02	0	02	20
<b>Live Stock Production.</b>										
February 2022	FW	Care and management of milch animals after calving	1	0	18	18	0	2	2	20
March 2022	FW	Prevention and control of Mastitis disease in dairy animals	1	0	18	18	0	02	02	20
April 2022	FW	Major bacterial diseases in dairy animals and its remedial measures	1	0	18	18	0	02	02	20
May 2022	FW	Housing management of dairy animals	1	0	18	18	0	2	2	20
June 2022	PF	Care and management of calf	1	18	0	18	02	0	02	20
July 2022	PF	Clean milk production	1	18	0	18	02	0	02	20
August 2022	PF	Major viral diseases in dairy animals and its remedial measures	1	18	0	18	02	0	02	20
September 2022	FW	First aid treatment in dairy animals	1	0	18	18	0	2	2	20
October 2022	FW	Method of Silage making	1	0	18	18	0	02	02	20
November 2022	FW	Balance feeding technology for milch animals	1	0	18	18	0	02	02	20
December 2022	FW	Reproductive diseases and its remedial measures	1	0	18	18	0	2	2	20
<b>Home Sc.</b>										
February 2022	FW	Dehydration & preservation of green leafy vegetables	01	0	18	18	0	2	2	20
March 2022	FW	Management of stored grain paste	01	0	18	18	0	2	2	20
May 2022	RY	Preparation and preservation of mango products	01	0	18	18	0	2	2	20
June 2022	FW	Importance and technique of kitchen gardening	01	0	18	18	0	02	02	20
July, 2022	FW	Production technology of vermi compost	01	0	18	18	0	2	2	20
August, 2022	FW	Food management for pregnant women and adult girls	01	0	18	18	0	02	02	20
October, 2022	FW	Nutritional security through kitchen garden	01	0	18	18	0	02	02	20
November 2022	FW	Drudgery reduction of farm women through use of women friendly tools	01	0	18	18	0	02	02	20

December 2022	RY	Preparation of detergent powder making	01	0	18	18	0	02	02	20
<b>Plant Protection</b>										
January, 2022	PF	IPDM in Rabi spices crops	1	18	0	18	02	0	02	20
April, 2022	PF	Method of preparation of botanical insecticide & their uses	1	18	0	18	02	0	02	20
May, 2022	PF	Improvement of soil health though use of bio pesticide for management of soil borne disease	1	18	0	18	02	0	02	20
June, 2022	PF	IPDM in Bt cotton	1	18	0	18	02	0	02	20
July, 2022	PF	IPDM module for management of pest in castor	1	18	0	18	02	0	02	20
August, 2022	PF	Plant protection measures in Papaya	1	18	0	18	02	0	02	20
October 2022	PF	Plant protection measures in rabi spices	1	18	0	18	02	0	02	20
December 2022	PF	Plant protection measures in rabi pulses	1	18	0	18	02	0	02	20
<b>Soil health</b>										
April 2022	PF	Importance and method of soil & water sampling	1	18	0	18	02	0	02	20
May 2022	PF	Integrated nutrient management in cotton	1	18	0	18	02	0	02	20
June 2022	PF	Production technology of Vermi compost	1	18	0	18	02	0	02	20
August 2022	PF	Nutrient & Irrigation management in castor	1	18	0	18	02	0	02	20
September 2022	PF	Organic farming in wheat & chickpea	1	18	0	18	02	0	02	20
October 2022	PF	Importance & use of bio fertilizer for enhancing nutrient use efficiency	1	18	0	18	02	0	02	20
November 2022	PF	Importance & use of Liquid fertilizer in field crop	1	18	0	18	02	0	02	20
<b>Agriculture Extension</b>										
April, 2022	PF	Awareness about natural farming	1	18	0	18	02	0	02	20
May, 2022	PF	Scope & Importance of organic farming	1	18	0	18	02	0	02	20

## ii) Vocational training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title*	Month	Duration (days)	No. of Participants			SC/ST participants			G.Total
					M	F	T	M	F	T	
Home Science	Rural craft	Tailoring & Stitching	April, 2022	30	0	10	10	0	5	5	15
Home Science	Rural craft	Making Decorative articles	May,2022	10	0	10	10	0	5	5	15
Animal	Para vets	Indigenous Technical Knowledge in	September,	06	15	00	15	0	0	0	15

Science		Animal Husbandry	2022								
Home Science	Value addition	Value addition of fruits & vegetables	November, 2022	06	00	10	10	0	5	5	15
Horticulture	Nursery management	Nursery raining technique of fruits & vegetable crops	June, 2022	05	00	15	15	0	5	5	20

### iii) Training programme for extension functionaries

Date	Clientele	Title of the training programme	Duration in days	No. of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
<b>On Campus</b>										
Apr, 2022	Extension officer	PRA technique & survey for identifying training needs & develop village action plan	1	20	0	20	0	0	0	20
May ,2022	Extension officer	Production technology of castor, cotton & Black gram	1	20	0	20	5	0	5	25
June, 2022	Extension officer	Integrated pest disease management in Kharif crops	1	20	0	20	5	0	5	25
June, 2022	Livestock inspector	Housing management of dairy animals	1	20	0	20	5	0	5	25
June 2022	Aganwadi worker	Health and nutrition management and lactating women and children	1	0	20	20	0	5	5	25
September 2022	Extension officer	Production technology of Mustard, Chickpea & Wheat	1	20	0	20	5	0	5	25
September, 2022	Aganwadi worker	Layout & planning of kitchen garden	1	0	20	20	0	5	5	25
September, 2022	Extension officer	Integrated pest disease management in Rabi crops	1	20	0	20	5	0	5	25
October, 2022	Livestock inspector	Scientific dairy management	1	0	20	20	0	5	5	25
October, 2022	Horticulture field staff, ATMA staff & Gram sevak	Production technology of spices crop	1	20	0	20	5	0	5	25



## Details of Budget Estimate (2022-23) based on proposed action plan

<b>S. No.</b>	<b>Particulars</b>	<b>BE 2022 - 23(Rs.)</b>
<b>25.1</b>	<b>Recurring Contingencies</b>	
25.1.1	<b>Pay &amp; Allowances</b>	1,90,00,000/-
25.1.2	<b>Traveling allowances</b>	1,50,000/-
25.1.3	<b>Contingencies</b>	
<i>A</i>	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	3,50,000/-
<i>B</i>	POL, repair of vehicles, tractor and equipments	
<i>C</i>	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	8,00,000/-
<i>D</i>	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	
<i>E</i>	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	
<i>F</i>	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	
<i>G</i>	Training of extension functionaries	
<i>H</i>	Maintenance of buildings	
<i>I</i>	Establishment of Soil, Plant & Water Testing Laboratory	
<i>J</i>	Library	
<b>25.1</b>	<b>TOTAL Recurring Contingencies</b>	<b>2,03,00,000/-</b>
<b>25.2</b>	<b>Non-Recurring Contingencies</b>	
25.2.1	<b>Works</b>	10,00,000/-
25.2.2	<b>Equipments including SWTL &amp; Furniture</b>	8,00,000/-
25.2.3	<b>Vehicle</b> (Four wheeler/Two wheeler, please specify)	
25.2.4	<b>Library</b> (Purchase of assets like books & journals)	10,000/-
<b>25.2</b>	<b>TOTAL Non-Recurring Contingencies</b>	<b>18,10,000/-</b>
<b>25.3</b>	<b>REVOLVING FUND</b>	
<b>25.4</b>	<b>GRAND TOTAL</b>	<b>2,21,10,000/-</b>