ANNUAL PROGRESS REPORT

(APRIL-2017 TO MARCH-2018)

SUBMITTED TO

ATARI, ICAR,

COLLEGE OF AGRIL. CAMPUS,

ZONE-VIII, PUNE

SUMITTED BY

KRISHI VIGYAN KENDRA

SAMODA-GANWADA

TA.SIDHPUR, DIST.PATAN (GUJARAT)

ICAR-ATARI, Pune

DETAILS OF ANNUAL PROGRESS REPORT OF KVKs DURING 2017-18

(1st April 2017 to 31st March 2018)

1. GENERAL INFORMATION ABOUT THE KVK

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

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

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 March 31, 2018)

Sl. No.	Sanctioned post	Name of the incumbent	Discipline	If Permanent, Please indicate			If Temporary, pl. indicate the consolidated amount paid (Rs./month)
				Current Pay Band	Current Grade Pay	Date of joining	
1.	Senior Scientist and Head	Dr.Upesh kumar	Pl. Pathology	PB-4 37,400-67000	9000	1/10/16	-
2.	Subject Matter Specialist	Shri G.A..Patel	Plant Protection	PB-3 15600-39100	5400	6/5/1993	-
3.	Subject Matter Specialist	Shri H.P.Patel	Extension Education	PB-3 15600-39100	5400	8/5/1993	-
4.	Subject Matter Specialist	Smt. H.B.Patel	Home Science	PB-3 15600-39100	5400	19/8/2002	-
5.	Subject Matter Specialist	Shri S.S. Darji	Horticul-ture	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	Shri D.N.Patel	-	PB-2 9300-34800	4600	22/2/1996	-
9.	Computer Programmer	Smt. J.N.Patel	-	PB-2 9300-34800	4600	27/7/1996	-
10.	Farm Manager	Shri D.R.Patel	-	PB-2 9300-34800	4600	01/09/2002	-
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	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 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	-	-	-

10.	Other	-	-	-	-	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tractor	1992-93	1,82,910=00	-	Not in proper working
Jeep	2009-10	7,60,236=00	174963	Working
Motorcycle	2010-11	49,695=00	51904	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	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 SAC meeting conducted in the year

Date	Name and Designation of Participants	Salient Recommendations in 2017-18	Action taken report of last SAC (2016-17)
13-03-2018	Sri M.L. Patel. Director, S G V P, Samoda-Ganwada, District – Patan Dr K.A.Thakkar, DEE, Directorate of Extension, SDAU, S.K. Nagar Shri Anil kumar Nair, D.D.M., NABARD District - Patan Sri S.S.Patel, DAO, District Agriculture Office, District - Patan Shri M.J.Patel, L.D.M.Distrcit –Patan Shri M.B.Galavadiya, DDH, District Horticulture Office, District – Patan Shri V.K.Modh, Marketing Manager., G.N.F.C. Ltd. Sidhpur Shri K.B.Patel, Marketing Manager, G.S.F.C. Ltd. Sidhpur Shri B.K.Patel, S.M.S. (Agronomy), K.V.K., Kherva, Mahesana Dr. N.S.Patel, Dist.Agril. Husbandary Officer, D.A.H.O. , Patan Dr.B.S.Patel, Veterinary Officer Nagvasan, D.A.H.O., Patan Shri V.V. Desai, Assistant Director, G.L.D.C., G.L.D.C., Patan Shri M.S.Patel, Project Director ATMA, District -Patan Shri Mukesh A.Desai, Reliance Foundation, Patan Shri Prakash B.Patel, Progressive Farmer, Madhupura Village Smt. Nitaben B.Patel, Progressive Farm women, Madhupura Village Dr Upesh Kumar, Sr Scientist & Head, KVK, District – Patan	❖ KVK should motivate the farming community fro use of bio fertilizer, bio & botanical pesticide. ❖ KVK motivate the farmers for diversify farming. ❖ KVK more focus on popularization of STV based nutrient management ❖ KVK conduct awareness programme on organic farming ❖ KVK more focus on popularization of Kitchen garden technologies ❖ KVK produce & supply quality planting material of fruit plant ❖ KVK should conduct FLD of by pass fat in high yielding cow & buffalo ❖ KVK should conduct animal health camp with coordination of department. ❖ KVK focus on round the year green fodder production technologies	❖ KVK developed need based literature on latest technologies ❖ KVK conduct Training, FLD, Field Day, Field visit for popularization of technology ❖ KVK conduct Training, FLD, Field Day, Field visit for popularization of technology ❖ KVK conduct Training, FLD, Field Day, Field visit for popularization of technology ❖ KVK conduct training & OFT on promotion vegetable raising on Plug tray ❖ KVK regularly produce the sampling of fruit plant, seedling of vegetables & its provide to farmers ❖ KVK regularly promote liquid bio fertilizer through Traning, OFT & FLD programme ❖ KVK conduct CFLD on STV based nutrient management ❖ KVK promote value addition technologies of fruits & vegetable through training ❖ KVK conduct more No of training programme on health management of dairy animal ❖ KVK conduct Training & FLD on Round the year green fodder technology

2. DETAILS OF DISTRICT

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 district

S. No	Crop	Area (ha)	Production (MT.)	Productivity (Qt./ha)
1	Bajra-Kharif	1065	577	5.42
2	Bajra-Summer	5745	15190	26.44
3	Cotton- Desi	18290	12157	6.64
	Hybrid	34900	31375.1	8.99
4	Castor	111980	180960	16.16
5	Mustard	29262	44420	15.18
6	Wheat	40180	137355	34.18
7	Pulses Gram	7180	3698	5.15
	Green-gram	894	407	4.55
	Black-gram	1789	850	4.75
8.	Cluster bean (Seed)	42085	25335	6.02
9.	Moth bean & cowpea	321	157	4.88
10.	Fruit- Lime	805	8533	106
	Pomegranate	553	6138	111
	Ber	344	3619	105.20

11.	Cumin	41177	37059	9.0
12.	Fennel	3339	7680	23.0
13.	Dilseed	3300	4785	14.50
14.	Potato	527	11705	222.1
15.	Vegetable-Cluster bean	683	7615	111.5
16.	Cow pea	495	4960	100.2

Source: District agriculture department.

2.5. Weather data (2017-18)

Month	Rainfall (mm)	Temperature 0 C	
		Maximum	Minimum
April-17	0.0	38.50	28.41
May-17	0.0	41.18	29.78
June-17	46.0	37.44	27.56
July-17	509.0	29.59	20.86
August-17	218.0	29.50	21.69
September-17	0.0	30.05	21.01
Oct.- 17	0.0	28.29	18.46
Nov.- 17	0.0	28.22	15.07
Dec.- 17	0.0	23.78	11.72
Jan.-18	**0.0**	24.38	12.97
Feb.-18	**0.0**	27.80	16.13
March-18	**0.0**	33.62	19.97

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 Sub division	Name of the Village	Major crops & enterprises	Major problem identified	Identified thrust area
Sidhpur Patan Chansma Saraswati	**Patan**	Biliya, Chandrawati, Madhopura, Lavara, Kuwara Nagwasan Mandlop, Lanva, Danodarada, Agar, Kimbuwa Jaisalpur	Castor Cotton Mustard Wheat Bajra Cumin Fennel Tobacco Carrot Pomogranate Kagzi lime Chilli	-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
Sami Shankheshwar Harij Radhanpur Santalpur	Radhanpur	Orumana Kathi Gurjarwada Tuvad	Cumin Ajwain Gram Guar Castor Wheat Dilseed Desi Cotton		

2.8. Priority thrust areas:

Crop/ Enterprise	Thrust area	Crop/ Enterprise	Thrust area
Castor	Integrated Nutrient management Micro Irrigation System Integrated weed management Integrated pest management Integrated Disease management	Chilli	Nursery Management Integrated Nutrient Management Micro Irrigation System Value Addition Production Technology Integrated Disease Management Integrated Pest Management
Cotton	Integrated Nutrient management Integrated weed management Micro Irrigation System Integrated pest management Integrated Disease management	Pomegranate and Lime	Plant propogation technique Training & Pruning Rejuvenation of old orchards Micro Nutrient Application Micro Irrigation System Integrated Disease Management Integrated Pest Management Value Addition
Chickpea	Integrated Nutrient management Integrated weed management Micro Irrigation System Integrated pest management Integrated Disease management	Soil Health	Production of Organic Inputs Soil Fertility Management Management of problematic soil
Mustard	Integrated Nutrient management Integrated weed management Micro Irrigation System Integrated pest management Integrated Disease management	Live-stock	Dairy Management Feed Management Disease Management Breeding Management Production of livestock feed and fodder Animal nutrition management
Wheat	Integrated Nutrient management Integrated weed management Micro Irrigation System Integrated pest management Integrated Disease management	Fodder Bajra and Sorghum	egrated Crop Management egrated Nutrient Management dder production
Cumin/ Fennel/Ajwain	Production & management technology Water management	Home Science	Use of solar cooker Fruits & veg. preservation

	Integrated Pest & Disease management Value addition		Farm women empowerment through income generation activity Drudgery reduction House hold Food Security by kitchen gardening and nutritional gardening Income generating activity Low cost & high nutrition diet Women & child care

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
11	11	95	109	19	19	380	562

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
67	67	1291	1465	21	47	2450	11246

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
11	24.40	207750	71364

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
		3000	3715

3.1. B. Operational areas details during 2017-18

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	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	Mandlop	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	Orumana & Agar	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	Madhopura , Madlop & Lanva	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	Kathi & Orumana	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	Ganwada, Lanva, Lavara, Kumwara & Dhanawada	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	Danodarda, Agar	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	Biliya, Chandrawati & Madhopura	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	Danodarda, Kathi, Mandlop, Jaisalpur	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	Madhopura, Agar, Kimbuwa, Orumana	Training, OFT, FLD, Field Day, Field visit etc

3.2. Technology Assessment and Refinement

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	-	-	-	01	-	-	-	-	-	01
Varietal Evaluation	-	01	-	-	-	-	-	-	-	01
Integrated Pest Management	01	-	-	-	-	-	-	-	-	01
Integrated Crop Management	-	-	-	01	01	-	-	-	-	02
Integrated Disease Management	-	-	-	-	-	01	-	-	-	01
Resource Conservation Technology	01	-	-	-	-	-	-	-	-	01
Farm Machineries	01	-	-	-	-	-	-	-	-	01
Drudgery Reduction	-	01	-	-	-	-	-	-	-	01
TOTAL	**03**	**02**	**-**	**02**	**01**	**01**	**-**	**-**	**-**	**09**

A2. Abstract on the number of technologies refined in respect of crops - No

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management										
Varietal Evaluation										
Integrated Pest Management										
Storage Technique										
Mushroom cultivation										
Total										

A3. Abstract on the number of technologies assessed in respect of livestock enterprises

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Nutrition Management	01	-	-	-	-	01
Disease of Management	01	-	-	-	-	01
TOTAL	**02**	**-**	**-**	**-**	**-**	**02**

A4. Abstract on the number of technologies refined in respect of livestock enterprises - No

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds						
Nutrition Management						
Small Scale income generating enterprises						
TOTAL						

B. Achievements on technologies Assessed and Refined

B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Integrated Nutrient Management	Cotton	Fertilizer Dose : 240kg. N2 + 40kg P2O5 per ha. + Three sprays of 3% KNO3 at flowering stage, Ball formation stage & Ball development stage	10	10	2.4
Drudgery Reduction	Groundnut	Weeding in groundnut through twin Wheel hoe	10	10	2.5
Resource	Wheat	Soil conditioner (Pusa Hydrogel) @ 2.5 kg./ha. as basal dose	10	10	4.0

Conservation Technology					
Farm Machineries	Wheat	Line sowing method through seed cum fertilizer drill with recommended seed rate-125 kg./ha.	10	10	2.4
Integrated Pest Management	Wheat	T2-Seed treatment by Fipronil 5SC @ 600ml./5 lit. water/100kg seed before 8hrs of sowing and soil treatment by Fipronil 5SC @ 1.6 lit./ha. with 4th irrigation	10	10	2.5
Integrated Crop Management	Mustard+ Lucerne	Mixed of mustard with Lucerne (Mustard seed – 3.5 Kg + Lucerne – 5 Kg)	10	10	2.4
Integrated Crop Management	Cumin + Ajwain	Intercropping – Cumin + Ajwain (4:1)	5	5	1.0
Integrated Crop Management	Chilli-water melon	cropping system –Chilli-water melon	4	4	1.0
Integrated Disease Management	Lime	Spraying of Fojetile 80% WD @ 20gm./15 lit water immediately after the cutting of dry / disease twigs of the plants (2 sprays in 12-15 days interval) for management of gummosis disease management	10	10	-
Total			**79**	**79**	**18.2**

B.2. Technologies Refined under various Crops - No

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Integrated Nutrient Management					
Varietal Evaluation					
Integrated Pest Management					
Total					

B.3. Technologies assessed under Livestock and other enterprises

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Nutrition management	Cross breed cow	Bypass fats (100 gm/ day/ animal) in diets of cross breed cows	10	10
Disease management	Indigenous breed - Kankrej	Ivermectin @ 1 ml/50kg. body weight for the management of internal & external parasite	20	20
Total			**30**	**30**

B.4. Technologies Refined under Livestock and other enterprises - No

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds				
Nutrition management				
Total				

C1.Results of Technologies Assessed

Results of On Farm Trial

OFT-1 (Last year – 2016-17)

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
Lime	Irrigated	Low fruit yield of lime due to heavy incidence of Gummosis disease	Assessment of Fojetile 80% WD fungicide for the management of Gummosis diseases in lime	10	Spraying of Fojetile 80% WD @ 20gm./15 lit water immediately after the cutting of dry / disease twigs of the plants (2 sprays in 12-15 days interval) for management of gummosis disease management	Disease incidence (%) Yield	T1- 32.1% T2- 8.2%	T1- 132.40 q/ha T2- 143.70 q/ha	Farmers are seen in technology reduce the disease incidence 74.46% resulted enhance the yield is 8.53%	-	-

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)		132.40	Qtl/ha	219090	4.06
Technology option 2	SDAU, S K Nagar	143.70	Qtl/ha	239550	4.13

Details of On Farm Trial

1 **Title of Technology Assessed** - Assessment of Fosetyl 80% WDG fungicide for the management of Gummosis diseases in lime

2 **Problem Definition** - Low fruit yield of lime due to heavy incidence of Gummosis disease

3 **Details of technologies selected for assessment**- Spraying of Fojetile 80% WD @ 20gm./15 lit water immediately after the cutting of dry / disease twigs of the plants (2 sprays in 12-15 days interval) for management of gummosis disease management

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

5 **Production system and thematic area**- Integrated Disease Management

6 **Performance of the Technology with performance indicators**- Disease Incidence (%) – T1- 32.1, T2- 8.2 Yield (Qtl/ha)- T1- 132.40, T2-143.70

7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques** - Farmers are seen in technology reduce the disease incidence 74.46% resulted enhance the yield is 8.53%

8 **Final recommendation for micro level situation –** Technology of disease management was found effective over farmers practice & recommendation after compilation of third 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 agree 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
Cotton	Irrigated	Low yield Bt cotton due to imbalance use of plant nutrient	Assessment of nutrient management in Bt cotton	10	240 kg N + 40 kg P per ha. + Three sprays of 3% KNO3 at flowering, Ball formation & Ball development stage	Yield	-	T1- 25.2 q/ha	Farmers are seen good growth of plant, more no of boll resulted enhance the productivity	-	-
							-	T2- 29.7 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. / ha	BC Ratio
13	**14**	**15**	**16**	**17**	**18**
Technology option 1 (Farmer's practice)	-	25.2	Qtl/ha	72202	3.1
Technology option 2	SDAU, S K Nagar	29.7	Qtl/ha	89400	3.4

Details of On Farm Trial

1 **Title of Technology Assessed** - Assessment of RDF along with foliar spray of 3 % KNo3 in Bt cotton

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

3 **Details of technologies selected for assessment-** 240 kg N + 40 kg P per ha. + Three sprays of 3% KNO3 at flowering, Ball formation & Ball development stage

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

5 **Production system and thematic area-** Integrated Nutrient Management

6 **Performance of the Technology with performance indicators- Yield (Qtl/ha)-** T1- 25.2, T2-29.7

7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques -** Farmers are seen good growth of plant, more no of boll resulted enhance the productivity

8 **Final recommendation for micro level situation –** Technology of nutrient management was found 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 agree 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
Groundnut	Rainfed	Low working efficiency and high work load of farm women during weeding in groundnut	Assessment of drudgery reduction of farm women by using improved wheel hoe for weeding in groundnut	10	Weeding in groundnut through twin Wheel hoe	Weeding efficiency (ha/ day/ labour) Yield	T1- 0.05 ha T2- 0.6 ha	T1- 16.5 q/ha T2- 17.2 q/ha	Farm women are seen under technology reduce the drudgery resulted farm women are regularly work	-	-

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. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	16.5	Qtl/ha	35500	2.92
Technology option 2	SDAU, S K Nagar	17.2	Qtl/ha	41300	3.66

Details of On Farm Trial

1 **Title of Technology Assessed** - Assessment of drudgery reduction of farm women by using improved wheel hoe for weeding in groundnut

2 **Problem Definition -** Low working efficiency and high work load of farm women during weeding in groundnut

3 **Details of technologies selected for assessment-** Weeding in groundnut through twin Wheel hoe

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

5 Production system and thematic area- Farm Machinery

6 Performance of the Technology with performance indicators- Yield (Qtl/ha)- T1- 16.5, T2-17.2

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques - Farm women are seen under technology reduce the drudgery resulted farm women are regularly work

8 Final recommendation for micro level situation – Technology of weed management in groundnut by twin wheel hoe was found 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 agree 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
Wheat	Semi irrigate	Low yield wheat due to moisture stress condition at critical stage in Wheat	Assessment of soil moisture conservation technologies (Pusa Hydrogel) in wheat crop	10	Soil conditioner (Pusa Hydrogel) @ 2.5 kg./ha. as basal dose	No of effective tillers/ plant Yield	T1- 3.65 T1- 4.18	T1- 29.6 q/ha T2- 34.2 q/ha	Farmers are seen good growth of plant, more no of effective tillers/ plant resulted enhance the productivity	-	-

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. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	29.6	Qtl/ha	23490	1.83
Technology option 2	SDAU, S K Nagar	34.2	Qtl/ha	28010	1.88

Details of On Farm Trial

1 **Title of Technology Assessed** - Assessment of soil moisture conservation technology- Pusa Hydrogel in wheat crop

2 **Problem Definition -** Low yield wheat due to moisture stress condition at critical stage in Wheat

3 **Details of technologies selected for assessment-** Soil conditioner (Pusa Hydrogel) @ 2.5 kg./ha. as basal dose

4 **Source of technology**- IARI, New Delhi

5 Production system and thematic area- Resource Conservation

6 Performance of the Technology with performance indicators- No of effective tillers/ plant- T1- 3.65, T2-4.18 **Yield (Qtl/ha)-** T1- 29.6, T2-34.2

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques - Farmers are seen good growth of plant, more no of effective tillers/ plant resulted enhance the productivity

8 Final recommendation for micro level situation – Technology of soil moisture conservation - Pusa Hydrogel was at par with farmers practice

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 not agree 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
Wheat	Irrigated	Low yield of wheat due to broad casting of seed & use of high seed rate (160Kh/ha)	Assessment of sowing method in wheat	10	Line sowing method through seed cum fertilizer drill with recommended seed rate-125 kg./ha	No of effective tillers/ plant Yield (qtl/ha)	T1- 3.86 No T1- 4.25 No	T1- 35.8 q/ha T2- 40.3 q/ha	Farmers are seen good growth of plant, more no of effective tillers/ plant resulted enhance the productivity	-	-

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. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	35.8	Qtl/ha	33280	2.1
Technology option 2	SDAU, S K Nagar	40.3	Qtl/ha	40295	2.3

Details of On Farm Trial

1 **Title of Technology Assessed** - Assessment of sowing method in wheat

2 **Problem Definition -** Low yield of wheat due to broad casting of seed & use of high seed rate (160Kh/ha)

3 **Details of technologies selected for assessment-** Line sowing method through seed cum fertilizer drill with recommended seed rate-125 kg./ha

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

5 **Production system and thematic area-** Farm Machinery

6 **Performance of the Technology with performance indicators- No of effective tillers/ plant-** T1- 3.86, T2-4.25 **Yield (Qtl/ha)-** T1- 35.8, T2-40.3

7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques -** Farmers are seen good growth of plant, more no of effective tillers/ plant resulted enhance the productivity

8 **Final recommendation for micro level situation –** Technology of sowing of seed through seed cum ferti drill machine was found 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 agree for future adoption

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	Semi Irrigated	Low yield of wheat due to heavy infestation of termite	Assessment of IPM module for the management of termite in wheat	10	Seed treatment by Fipronil 5SC @ 600ml./5 lit. water/100kg seed before 8hrs of sowing and soil treatment by Fipronil 5SC @ 1.6 lit./ha. with 4th irrigation	Termite infestation (%) Yield (qtl/ha)	T1- 11.3 % T2- 5.4 %	T1- 33.7 q/ha T2- 40.1 q/ha	Farmers are seen negligible infestation of termite under assessed technology resulted enhance the productivity	-	-

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. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	33.7	Qtl/ha	36075	2.57
Technology option 2	SDAU, S K Nagar	40.1	Qtl/ha	45775	2.88

Details of On Farm Trial

1 **Title of Technology Assessed** - Assessment of IPM module for the management of termite in wheat

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

3 **Details of technologies selected for assessment-** Seed treatment by Fipronil 5SC @ 600ml./5 lit. water/100kg seed before 8hrs of sowing and soil treatment by Fipronil 5SC @ 1.6 lit./ha. with 4th irrigation

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 (%) - T1- 11.3, T2-5.4 **Yield (Qtl/ha)-** T1- 33.7 T2-40.1

7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques -** Farmers are seen negligible infestation of termite under assessed technology resulted enhance the productivity

8 **Final recommendation for micro level situation –** Technology of termite management was found 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 agree for future adoption

OFT-7

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
Mustard + Lucerne	Irrigated	Low net profit in existing cropping system- mustard grown as a sole crop	Assessment of mixed cropping of mustard with Lucerne	10	Mixed of mustard with Lucerne (Mustard seed – 3.5 Kg + Lucerne – 5 Kg)	Yield (qtl/ha) Net Income (Rs/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. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	Result awaited			
Technology option 2	SDAU, S K Nagar				

Details of On Farm Trial

1 **Title of Technology Assessed** - Assessment of mixed cropping of mustard with Lucerne

2 **Problem Definition** Low net profit in existing cropping system- mustard grown as a sole crop

3 **Details of technologies selected for assessment-** Mixed of mustard with Lucerne (Mustard seed – 3.5 Kg + Lucerne – 5 Kg)

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

5 **Production system and thematic area-** Cropping System

6 **Performance of the Technology with performance indicators-** Yield (qtl/ha) & Net Income (Rs/Ha) - 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-8

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
Cumin	Irrigated	Low net profit in exsting cropping system - sole crop of cumin	Assessment of Intercropping of cumin + Ajwain for enhancing the net profit	05	Intercropping – Cumin + Ajwain (4:1)	Yield	-	T1(Cumin)- 9.14 q/ha	Farmers are observed one more crop (Ajawain) are taken without effecting the main crop (Cumin) resulted enhance the profitability	-	-
							-	T2- Cumin- 9.06 q/ha Ajwain – 2.96 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. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	9.14	Qtl/ha	88930	3.58
Technology option 2	SDAU, S K Nagar	Cumin- 9.06 Ajwain – 2.96	Qtl/ha	100450	3.63

Details of On Farm Trial

1 **Title of Technology Assessed -** Assessment of Intercropping of cumin + Ajwain for enhancing the net profit

2 **Problem Definition -** Low net profit in exsting cropping system - sole crop of cumin

3 **Details of technologies selected for assessment-** T2-Intercropping – Cumin + Ajwain (4:1)

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

5 Production system and thematic area- Cropping system

6 Performance of the Technology with performance indicators- Yield (Qtl/ha)- T1- (Cumin) – 9.14, T2- Cumin- 9.06 & Ajwain – 2.96

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques - Farmers are observed one more crop (Ajawain) are taken without effecting the main crop (Cumin) resulted enhance the profitability

8 Final recommendation for micro level situation – Technology of Intercropping of cumin + Ajwain was found 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 agree for future adoption

OFT-9

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Chilli - Water melon	Irrigated	Low profit of present cropping system – Chilli – Fallow	Assessment of cropping system – Chilli – Cucurbit fruit for enhancing net profit	04	Chilli-Water melon	Yield	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. / ha	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	Result awaited			
Technology option 2	SDAU, S K Nagar				

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

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

5 Production system and thematic area- ICM

6 Performance of the Technology with performance indicators- Yield (Qtl/ha)- 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-10

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
Lime	Irrigated	Low fruit yield of lime due to heavy incidence of Gummosis disease	Assessment of Fojetile 80% WD fungicide for the management of Gummosis diseases in lime	10	Spraying of Fojetile 80% WD @ 20gm./15 lit water immediately after the cutting of dry / disease twigs of the plants (2 sprays in 12-15 days interval) for management of gummosis disease management	Disease incidence (%) Yield (qtl/ha)	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			
Technology option 2	SDAU, S K Nagar				

Details of On Farm Trial

1 **Title of Technology Assessed** - Assessment of Fosetyl 80% WDG fungicide for the management of Gummosis diseases in lime

2 **Problem Definition -** Low fruit yield of lime due to heavy incidence of Gummosis disease

3 **Details of technologies selected for assessment-** Spraying of Fojetile 80% WD @ 20gm./15 lit water immediately after the cutting of dry / disease twigs of the plants (2 sprays in 12-15 days interval) for management of gummosis disease management

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

5 **Production system and thematic area-** Integrated Disease Management

6 **Performance of the Technology with performance indicators- Disease Incidence (%)** – Result awaited **Yield (Qtl/ha)-** Result awated

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-11

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
Cross breed cow	-	Low milk yield due to negative energy balance	Assessment of bypass fat (rumen protected fat) in diets of cross breed cows	10	Use of bypass fats (100 gm/ day/ animal) in diets of cross breed cows	Milk yield (Lit./day for 3 month)	-	T1- 9.34 l/da	Farmers are seen under the technology Use of bypass fat to enhance milk yield as well as fat % in milk resulted enhance the profitability	-	-
							-	T2- 9.71 l/day			

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. For 3 Month	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	9.34	Lit./day for 3 month	8487	1.64
Technology option 2	SDAU, S K Nagar	9.71	Lit./day for 3 month	12123	1.81

Details of On Farm Trial

1 **Title of Technology Assessed** - Assessment of bypass fat (rumen protected fat) in diets of cross breed cows

2 **Problem Definition -** Low Low milk yield due to negative energy balance

3 **Details of technologies selected for assessment-** Use of bypass fats (100 gm/ day/ animal) in diets of cross breed cows

4 **Source of technology-** NDRI, Karnal

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

6 **Performance of the Technology with performance indicators-** Milk yield (Lit./day for 3 month)- T1- 9.34, T2-9.71

7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques -** Farmers are seen under the technology Use of bypass fat to enhance milk yield as well as fat % in milk resulted enhance the profitability

8 **Final recommendation for micro level situation –** Technology of of bypass fat in cross breed cows was found 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 agree for future adoption

OFT-12

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
Indigenous breed - Kankrej	-	Low milk production due to heavy infestation of internal & external parasite in Indigenous breed - Kankrej	Assessment of Ivermectin medicine for the management if internal & external parasite in Indigenous breed - Kankrej	20	Use of Ivermectin @ 1 ml/50kg. body weight for the management of internal & external parasite	Milk yield (Lit./day for 3 month)	-	T1- 5.80 l/day	Farmers are seen under the technology Use of ivermectin dewormer to control endo & ecto parasite resulted enhance the milk yield as well as net profit		
							-	T2- 6.52 l/day			

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. For 3 Month	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	-	5.80	Lit./day for 3 month	3429	1.32
Technology option 2	SDAU, S K Nagar	6.52	Lit./day for 3 month	4351	1.38

Details of On Farm Trial

1 **Title of Technology Assessed** - Assessment of Ivermectin medicine for the management if internal & external parasite in Indigenous breed - Kankrej

2 **Problem Definition** Low milk production due to heavy infestation of internal & external parasite in Indigenous breed - Kankrej

3 **Details of technologies selected for assessment**- Use of Ivermectin @ 1 ml/50kg. body weight for the management of internal & external parasite

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

5 **Production system and thematic area**- NDRI, Karnal

6 **Performance of the Technology with performance indicators**- Milk yield (Lit./day for 3 month)- T1- 5.80, T2-6.52

7. **Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques** - Farmers are seen under the technology Use of ivermectin dewormer to control endo & ecto parasite resulted enhance the milk yield as well as net profit

8 **Final recommendation for micro level situation –** Technology of ivermectin for control of external & internal parasite was found 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 agree for future adoption

D1. Results of Technologies Refined - No

Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology refined	Parameters of refined t	Data on the parameter	Results of refinement	Feedback from the farmer	Details of refinement done
1	2	3	4	5	6	7	8	9	10	11

Contd..

Technology Refined	Source of Technology for Technology Option1 / Justification for modification of assessed Technology Option 1	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
12	13	14	15	16	17
Technology Option 1 (best performing Technology Option in assessment)					
Technology Option 2 (Modification over Technology Option 1)					
Technology Option 3 (Another Modification over Technology Option 1)					

D.2. Details of each On Farm Trial for refinement to be furnished in the following format separately as per the following details:

1. Title of Technology refined
2. Problem Definition
3. Details of technologies selected for refinement
4. Source of technology
5. Production system and thematic area
6. Performance of the Technology with performance indicators
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
8. Final recommendation for micro level situation
9. Constraints identified and feedback for research
10. Process of farmers participation and their reaction

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 2016-17 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	Hybrid Variety of castor -GCH-7 & Sunhemp (seed @ 60 kg./ha.) as a green gram + Castor as a main crop	Training, Demo., Field visit Field day	105	2850	4750
2	Groundnut	ICM	Improved variety (GG-20) + Seed treatment with fungicide + Seed inoculation with bio fertilizer + RDF + Timely plant protection	Training, Demo., Field visit Field day	20	105	84
3	Green-gram	ICM	Improved variety (GAM-5) +Seed treatment by Fungicide and Bio-fertilizer + RDF + Sulphur + IPM module	Training, Demo., Field visit Field day	40	225	148
4	Chilli	Nutrient Management	Micronutrient (G-4) @ 2 Kg/ ha	Training, Demo., Field visit Field day	15	35	10
5	Chickpea	ICM	Soil inoculation of Trichoderma @ 2.5 kg/ha + Pheroman trap + RDF + Bio-fertilizer + Profenophos 50 EC	Training, Demo., Field visit Field day	20	350	280
6	Mustard	ICM	Improved variety (GDM-4) + Seed treatment with fungicide + RDF + Timely irrigation + Timely plant protection	Training, Demo., Field visit Field day	20	150	110
7	Wheat	ICM	Improve variety (GW-451)+ Seed treatment by Carbendezim 1 gm./kg. seed & Fipronil 5SC @ 600 ml /5 lit. water / 100kg. seed + RDF along with Zinc sulphate 8kg./ha.& Ferrous sulphate	Training, Demo., Field visit Field day	55	188	225
8	Ajwain	Varietal Demo	Improved variety of Ajwain - Var. Guj.Ajwain-2	Training, Demo., Field visit Field day	30	75	50
9	Fennel	Varietal Demo&IDM	Improved variety of Fennel - GF-12	Training, Demo., Field visit Field day	65	1300	780
10	Cumin	Varietal Demo&IDM	Improved variety of cumin GC-4 & Three spay of carbendazim 12% + Mancozeb 63% @ 1.5 Kg/ha at 45,60 & 75 DAS	Training, Demo., Field visit Field day	55	250	110

B. Details of FLDs implemented during 2017-18 (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	Cotton	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	Kharif-2017	6.0	6.0	01	24	25	-
2	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	Kharif, 2017	20	20	02	48	50	-
3	Castor – Green manuring	Soil fertility management	Sunhemp (seed @ 60 kg./ha.) as a green manuring + Castor as a main crop	Kharif-2017	05	5.0	00	20	20	-
4	Castor	Varietal evaluation	Hybrid variety – GCH-7	Kharif-2017	15	15	01	36	37	-
5	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	Rabi, 2017-18	20	20	02	48	50	-
6	Mustard	ICM	Improved variety (GDM-4) + Seed treatment with fungicide + RDF + Timely irrigation + IPM module for pest management	Rabi, 2017-18	40	40	03	97	100	-
7	Mustard- INM	INM	RDF along with granular sulphur @ 20 Kg/ Ha	Rabi-17	10	10	00	25	25	-
8	Wheat- Variety	Varietal Evaluation	Improved variety of wheat - GW-451	Rabi-17	10	10	00	25	25	-
9	Wheat- INM	INM	RDF along with Zinc sulphate @ 8kg./ha & Ferrous sulphate @ 15 Kg/ha	Rabi-17	10	10	00	25	25	-
10	Green fodder	Feed management	Kharif- Multi cut jowar & Rabi- Lucerne	Kharif & Rabi, 2017-18	02	02	02	18	20	-

11	Kitchen garden	Nutrition food security	Seasonal vegetable in backyard for supplementing additional vegetable in daily diet	Kharif-2017	1.0	1.0	00	20	20	-
12	Chilli	INM	Foliar application of Micronutrient (G-4) @ 2 Kg/ ha (Zn,Mn,Cu,B,Fe)	Kharif-2017	05	5.0	00	20	20	-
13	Fennel- Variety	Varietal evaluation	Improved variety of fennel – Gujarat Fennel – 12	Rabi-17	10	10	00	25	25	-
14	Fennel- IDM	IDM	Foliar spay of carbendazim 12% + Mancozeb 63% @ 1.5 Kg/ha at 45,60 & 75 DAS	Rabi-17	10	10	02	23	25	-
15	Ajwain	Varietal evaluation	Improved variety of Ajwain - GA-2	Rabi-17	10	10	00	25	25	-
16	Cumin- Variety	Varietal Evaluation	Improved variety of cumin - GC-4	Rabi-17	10	10	02	23	25	-
17	Cumin- IDM	IDM	Seed treatment by Trichoderma viridae @ 10gm/ Kg Seed along with soil treatment by T. viridae @ 2.5 Kg/ha	Rabi-17	10	10	02	23	25	-

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					
Cotton	Kharif-2017	Irrigated	Sandy loam	L	L	M	-	25 To 30-06-2017	Up to Feb., 2018	773	25
Black gram	Kharif, 2017	Rainfed	Sandy loam	L	L	M	Fallow	18 to 29/7/2017	07 to 21-02-2018	773	25
Castor – Green manuring	Kharif-2017	Semi irrigated	Sandy loam	L	L	M	Fodder crop	16 to 30/08/2017	Up to March, 2018	773	0
Castor	Kharif-2017	Semi irrigated	Sandy loam	L	L	M	Jowar	20 to 14/07/2017 (Sunhemp) 16 to 30/08/2017 (Castor)	Up to March, 2018	773	25
Chickpea	Rabi, 2017-18	Semi irrigated	Sandy loam	L	L	M	Chickpea/ Cumin	16 to 25/10/2017	07 to 21-02-2018	0.0	0
Mustard	Rabi, 2017-18	Semi irrigated	Sandy loam	L	L	M	Groundnut	10 to 20/10/2017	15 to 25-02-2018	0.0	0
Mustard-	Rabi-17	Semi	Sandy	L	L	M	Jowar	10 to 20/10/2017	15 to 26-02-2018	0.	0

INM		irrigated	loam							0	
Wheat-Variety	Rabi-17	Irrigated	Sandy loam	L	L	M	Green-gram Black-gram	27 to 30/11/2017	26 to 30-03-2018	0.0	0
Wheat- INM	Rabi-17	Irrigated	Sandy loam	L	L	M	Green-gram/ Fodder	25 to 30/11/2017	22 to 30-03-2018	0.0	0
Green fodder	Kharif & Rabi, 2017-18	Irrigated	Sandy loam	L	L	M		July in kharif, October in Rabi	July, 2017 & April, 2018	773	25
Kitchen garden	Kharif-2017	Irrigated	Sandy loam	L	L	M	-	July in kharif, October in Rabi	-	773	25
Chilli	Kharif-2017	Irrigated	Sandy loam	L	L	M	Bajara	15 to 20/7/2017	Up to March, 2018	218	8
Fennel-Variety	Rabi-17	Irrigated	Sandy loam	L	L	M	Black gram	20 to 25/10/2017	15 to 20 April, 2018	0.0	0
Fennel- IDM	Rabi-17	Irrigated	Sandy loam	L	L	M	Black gram	20 to 25/10/2017	15 to 20 April, 2018	0.0	0
Ajwain	Rabi-17	Irrigated	Sandy loam	L	L	M	Black gram	10 to 20/10/2017	25 March to 10 April, 2018	0.0	0
Cumin-Variety	Rabi-17	Irrigated	Sandy loam	L	L	M	Black gram	20 to 25/11/2017	20 to 30 March, 2018	0.0	0
Cumin- IDM	Rabi-17	Irrigated	Sandy loam	L	L	M	Black gram	12 to 17/11/2017	15 to 21 March, 2018	0.0	0

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Need to develop improved /hybrid variety of what, Cumin, Funnel, Azawain, Castor, Groundnut, Mustard, Green 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
	Cereals
1.	Farmers are observe , under technology (seed treatment by Fipronil 5 % SC) termite infestation is very low in comparison to their own practice, resulted enhance the productivity of wheat crop
2.	Farmers observe good growth of plant, no lodging & more no of tillers are found in improved variety of wheat (GW-451)
	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) : Spraying of SAAF (Carbendazim 12% + Mancozeb 63%) reduce the disease incidence
4.	Fennel (IDM) : Spraying of SAAF (Carbendazim 12% + Mancozeb 63%) reduce the disease incidence
5.	Fennel (Var.) : GF-12 variety is high yielding
6.	Pomegranate : reduce the fruit cracking
7.	Ajwain : No. of umbels per plants and seed per umbels are comparatively more over old/ local variety
	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.	Groundnut (NMOOP) : GG-20 variety having excellent growth & more yield over their own practice
4.	Mustard (NMOOP) : GDM-4 variety having excellent growth & more yield over their own practice
	Pulses
1.	Green-gram (NFSM) :GAM-5 variety having excellent growth & more yield over their old/ local variety :Taste of grain is comparatively sweet than local/ old varieties
2.	Chickpea (NFSM): Under technology reduce the wilt incidence & pod borer infestation resulted enhance the productivity
	Cotton
-	-
	Commercials crops
1.	Kitchen garden

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
A	**Cotton- IPM**				
1	Field days	01	06-11-2017	43	
2	Farmers Training	01	21-06-2017	25	
3	Training for extension functionaries	01	21-06-2017	57	
B	**Black gram**				
1	Field days	01	11-10-2017	49	
2	Farmers Training	03	30 May, 20 & 23 June, 2017	80	

3	Training for extension functionaries	01	21-06-2017	57	
C	**Castor – Green manuring**				
1	Field days	01	14-03-2018	36	
2	Farmers Training	01	24-06-2017	20	
3	Training for extension functionaries	01	21-06-2017	57	
D	**Castor- Variety**				
1	Field days	01	14-02-2018	37	
2	Farmers Training	02	12 & 16 -08-2017	41	
3	Training for extension functionaries	01	21-06-2017	57	
E	**Chickpea**				
1	Field days	02	16 -01 & 05-02-2018	92	
2	Farmers Training	03	05, 06-10-2017 & 03-01-2018	63	
3	Training for extension functionaries	01	05-01-2018	31	
F	**Mustard**				
1	Field days	02	19 & 30-01-2018	74	
2	Farmers Training	03	11, 12 & 16- 10-2017	75	
3	Training for extension functionaries	01	05-01-2018	31	
G	**Mustard- INM**				
1	Field days	01	15-02-2018	34	
2	Farmers Training	04	09, 10, 11 &12-10-2017	100	
3	Training for extension functionaries	01	05-01-2018	31	
H	**Wheat- Variety**				
1	Field days	01	17-03-2018	47	
2	Farmers Training	01	10-11-2017	30	
3	Training for extension functionaries	01	05-01-2018	31	
I	**Wheat- INM**				
1	Field days	01	28-02-2018	30	
2	Farmers Training	01	16-11-2017	25	
J	**Green fodder**				
1	Field days	02	29-12-2017 & 03-01-2018	48	
2	Farmers Training	01	04-10-2017	21	
3	Training for extension functionaries	01	11-09-2017	15	
K	**Kitchen garden**				
1	Farmers Training	02	05 & 06- 07-2018	50	
L	**Chilli**				
1	Field days	01	10-01-2018	38	
2	Farmers Training	03	24-05, 11-08 & 14-09-2017	62	
M	**Fennel- Variety**				

1	Field days	01	27-02-2018	30	
2	Farmers Training	02	13 & 26-09-2017	43	
3	Training for extension functionaries	01	30-01-2018	15	
N	**Fennel- IDM**				
1	Field days	01	28-02-2018	34	
2	Farmers Training	01	08-11-2017	25	
O	**Ajwain**				
1	Field days	01	26-02-2017	29	
2	Farmers Training	01	11-11-2017	25	
P	**Cumin- Variety**				
1	Field days	01	28-02-2018	30	
2	Farmers Training	02	06 & 07-11-2017	50	
Q	**Cumin- IDM**				
1	Field days	01	27-02-2018	27	
2	Farmers Training	01	11-11-2017	25	

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										

Castor – Green manuring	Soil fertility management	Sunhemp (seed @ 60 kg./ha.) as a green manuring + Castor as a main crop	GCH-7	20	5.0	38.3	29.7	33.4	28.2	18.44	29350	126920	97570	4.3	27980	107160	79180	3.8
Castor	Varietal evaluation	Hybrid variety – GCH-7	GCH-7	37	15	37.9	27.2	32.4	28.6	13.29	29100	123120	94020	4.2	28820	108680	79860	3.8
Mustard	ICM	Improved variety (GDM-4) + Seed treatment with fungicide + RDF + Timely irrigation + IPM module for pest management	GDM-4	100	40	21.7	13.8	17.9	15.3	16.99	17300	62650	45350	3.6	15500	53550	38050	3.45
Mustard-INM	INM	RDF along with granular sulphur @ 20 Kg/ Ha	GDM-4	25	10	21.4	13.2	17.6	15.5	13.55	16170	61600	45430	3.8	15480	54250	38770	3.5

* 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										
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	GU-1	50	20	11.2	7.7	10.8	8.6	25.5	14125	43200	29075	3.05	13700	34400	20700	2.51
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	GJG-3	50	20	16.0	10.6	14.1	10.9	29.30	22700	51112	28412	2.25	20500	39512	19012	1.92

* 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

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										

Cotton	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	Bt Cotton	25	6.0	36.0	24.0	30.4	25.6	18.8	36800	129200	92600	3.5	34800	108800	74000	3.1
Wheat-Variety	Varietal Evaluation	Improved variety of wheat - GW-451	GW-451	25	10	45.8	35.1	40.7	34.8	16.95	29120	711225	42105	2.4	28640	60900	32260	2.1
Wheat-INM	INM	RDF along with Zinc sulphate @ 8kg./ha & Ferrous sulphate @ 15 Kg/ha	GW-451	25	10	46.8	33.9	17.6	15.5	18.7	16170	61600	45450	3.8	15480	54250	38770	3.5
Green fodder	Feed management	Kharif- Multi cut jowar & Rabi- Lucerne	GFSH-1 & AL_3	20	02	GD Yield-1090	1205	1139.15	732.50	15.36	13527	25734	12207	1.90	12542	22295	9754	1.78
						Milk Yield – 11.2 L/D	10.0 L/D	10.59	9.18									
Kitchen garden	Nutrition food security	Seasonal vegetable in backyard for supplementing additional vegetable in daily diet	Hybrids of vegetable	20	1.0	Result awaited												
Chilli	INM	Foliar application of Micronutrient (G-4) @ 2 Kg/ ha (Zn,Mn,Cu,B,Fe)	Hybrid	20	5.0	244	214	227.2	207.37	9.57	81579	193129	111550	2.37	80547	176263	95716	2.19
Fennel-Variety	Varietal evaluation	Improved variety of fennel – Gujarat Fennel – 12	GF-12	25	10	16.4	13.9	15.4	13.5	13.73	35920	100022	64102	2.79	34936	87947	53011	2.52
Fennel-IDM	IDM	Foliar spay of carbendazim 12% + Mancozeb 63% @ 1.5 Kg/ha at 45,60 & 75 DAS	GF-12	25	10	19.6	15.2	17.8	14.7	21.1	22300	102350	80050	4.6	20600	84525	63925	4.1
Ajwain	Varietal evaluation	Improved variety of Ajwain - GA-2	GA-2	25	10	19.5	14.1	20.5	17.5	16.7	32325	112558	802325	4.4	31730	96470	64740	3.8
Cumin-Variety	Varietal Evaluation	Improved variety of cumin - GC-4	GC-4	25	10	11.6	8.6	10.02	8.46	18.50	38196	135270	97074	3.54	34940	114156	79216	3.27

Cumin-IDM	IDM	Seed treatment by Trichoderma viridae @ 10gm/ Kg Seed along with soil treatment by T. viridae @ 2.5 Kg/ha	GC-2	25	10	12.1	8.4	10.24	8.75	17.02	34900	138240	103340	3.96	32100	118125	86025	3.67

* 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 Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of Units (Animal/ Poultry/ Birds, etc)	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Buffalo	Nutritional Management	Mineral mixture@40gm/ day	10	1 Animal	Milk Yield – 8.57 L/day for 3 month	Milk Yield – 7.61 L/day for 3 month	12.61	-	-	13068	37022	23951	2.83	12537	32875	20338	2.62
Poultry	Breed	Breed for backyard poultry- RIR	10	25 chicks	Body weight - Kg	Body weight - Kg	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 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																	
Composite fish culture																	
Feed Management																	

* 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		% change in major parameter	Labor reduction (man days)				Cost reduction			
						Demo	Check		Land preparation	Sowing	Weeding	Total	Land preparation	Labour	Irrigation	Total

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)

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 crop													
Castor	Hybrid variety – GCH-7	GCH-7	37	15.0	37.9	27.2	32.4	28.6	13.29	29100	123120	94020	4.2

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

3.4. Training Programmes

Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	01	14	00	14	01	00	01	15	00	15
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management	05	128	00	128	03	00	03	131	00	131
Soil & water conservatioin	02	50	00	50	00	00	00	50	00	50
Integrated nutrient management										
Production of organic inputs										
Others (pl specify)										
Total	**08**	**192**	**00**	**182**	**04**	**00**	**04**	**196**	**00**	**196**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops										
Off-season vegetables										
Nursery raising	01	20	00	20	00	00	00	20	00	20
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)										
Total (a)	**01**	**20**	**00**	**20**	**00**	**00**	**00**	**20**	**00**	**20**
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
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)										
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	03	72	00	72	02	00	02	74	00	74
Processing and value addition										
Others (pl specify)										
Total (f)	**03**	**72**	**00**	**72**	**02**	**00**	**02**	**74**	**00**	**74**
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)	**04**	**92**	**00**	**92**	**02**	**00**	**02**	**94**	**00**	**94**
III Soil Health and Fertility Management										
Soil fertility management	01	20	00	20	00	00	00	20	00	20
Integrated water management										
Integrated Nutrient Management										
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	**01**	**20**	**00**	**20**	**00**	**00**	**00**	**20**	**00**	**20**
IV Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management	01	00	19	19	00	01	01	00	20	20
Feed & fodder technology	03	19	35	54	02	04	06	21	39	60
Production of quality animal products										
Others (pl specify)										
Total	**04**	**19**	**54**	**54**	**02**	**05**	**07**	**21**	**59**	**80**
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										
Storage loss minimization techniques										
Value addition	05	00	139	139	00	00	00	00	139	139
Women empowerment										
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care										
Others (pl specify)										
Total	**05**	**00**	**139**	**139**	**00**	**00**	**00**	**00**	**139**	**139**
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	05	120	00	120	05	00	05	125	00	125
Integrated Disease Management	03	66	00	66	04	00	04	70	00	70
Bio-control of pests and diseases										

Production of bio control agents and bio pesticides										
Others (pl specify)										
Total	**08**	**186**	**00**	**186**	**09**	**00**	**09**	**195**	**00**	**195**
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	**30**	**509**	**193**	**673**	**17**	**5**	**22**	**526**	**198**	**724**

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	17	00	17	00	00	00	17	00	17
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation	01	25	00	25	00	00	00	25	00	25
Seed production										
Nursery management										
Integrated Crop Management										
Soil & water conservatioin										
Integrated nutrient management	02	44	00	44	02	00	02	46	00	46
Production of organic inputs	01	14	00	14	01	00	01	15	00	15
Others (pl specify)	01	18	00	18	00	00	00	18	00	18
Total	**06**	**118**	**0**	**118**	**3**	**0**	**3**	**121**	**0**	**121**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops										
Off-season vegetables	02	42	00	42	00	00	00	42	00	42
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)										
Total (a)	**02**	**42**	**00**	**42**	**00**	**00**	**00**	**42**	**00**	**42**
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential										

fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)	01	28	00	28	00	00	00	28	00	28
Total (b)	**01**	**28**	**00**	**28**	**00**	**00**	**00**	**28**	**00**	**28**
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	01	30	00	30	00	00	00	30	00	30
Processing and value addition										
Others (pl specify)										
Total (e)	**01**	**30**	**00**	**30**	**00**	**00**	**00**	**30**	**00**	**30**
f) Spices										
Production and Management technology	02	41	00	41	03	00	03	44	00	44
Processing and value addition										
Others (pl specify)										
Total (f)	**02**	**41**	**00**	**41**	**03**	**00**	**03**	**44**	**00**	**44**
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**	**141**	**00**	**141**	**03**	**00**	**03**	**144**	**00**	**144**
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
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	01	32	00	32	00	00	00	32	00	32
Others (pl specify)										
Total	**01**	**32**	**00**	**32**	**00**	**00**	**00**	**32**	**00**	**32**
IV Livestock Production and Management										
Dairy Management	01	00	28	28	00	00	00	00	28	28
Poultry Management	02	00	00	00	30	00	30	30	00	30
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management	02	74	00	74	02	00	02	76	00	76
Feed & fodder technology	02	00	48	48	00	02	02	00	50	50
Production of quality animal products										
Others (pl specify)	01	08	00	08	00	00	00	08	00	08
Total	**08**	**82**	**76**	**158**	**32**	**02**	**34**	**114**	**78**	**192**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	02	00	50	50	00	00	00	00	50	50
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency										

diet										
Minimization of nutrient loss in processing	01	00	13	13	00	13	13	00	26	26
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	01	00	28	28	00	00	00	00	28	28
Value addition										
Women empowerment										
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care	02	00	43	463	00	00	00	00	43	43
Others (pl specify)										
Total	**06**	**00**	**134**	**134**	**00**	**13**	**13**	**00**	**147**	**147**
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	67	00	67	06	00	06	73	00	73
Integrated Disease Management	02	52	00	52	02	00	02	54	00	54
Bio-control of pests and diseases	01	22	00	22	01	00	01	23	00	23
Production of bio control agents and										

bio pesticides										
Others (pl specify)										
Total	**06**	**141**	**00**	**141**	**09**	**00**	**09**	**150**	**00**	**150**
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										
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	**33**	**514**	**210**	**724**	**47**	**15**	**62**	**561**	**225**	**786**

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	02	31	00	31	01	00	01	32	00	32
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation	01	25	00	25	00	00	00	25	00	25
Seed production										
Nursery management										
Integrated Crop Management	05	128	00	128	03	00	03	131	00	131
Soil & water conservatioin										
Integrated nutrient management	04	94	00	94	02	00	02	96	00	96
Production of organic inputs	01	14	00	14	01	00	01	15	00	15
Others (pl specify)	01	18	00	18	00	00	00	18	00	18
Total	**14**	**310**	**00**	**310**	**07**	**00**	**07**	**317**	**00**	**317**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops										
Off-season vegetables										
Nursery raising	03	62	00	62	00	00	00	62	00	62
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)										
Total (a)	**03**	**62**	**00**	**62**	**00**	**00**	**00**	**62**	**00**	**62**
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										

Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques	01	28	00	28	00	00	00	28	00	28
Others (pl specify)	**01**	**28**	**00**	**28**	**00**	**00**	**00**	**28**	**00**	**28**
Total (b)										
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	01	30	00	30	00	00	00	30	00	30
Processing and value addition										
Others (pl specify)										
Total (e)	**01**	**30**	**00**	**30**	**00**	**00**	**00**	**30**	**00**	**30**
f) Spices										
Production and Management technology	05	113	00	113	05	00	05	118	00	118
Processing and value addition										
Others (pl specify)										
Total (f)	**05**	**113**	**00**	**113**	**05**	**00**	**05**	**118**	**00**	**118**
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)	**10**	**233**	**00**	**233**	**05**	**00**	**05**	**238**	**00**	**238**
III Soil Health and Fertility Management										
Soil fertility management	01	20	00	20	00	00	00	20	00	20
Integrated water management										
Integrated Nutrient Management										
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	01	32	00	32	00	00	00	32	00	32
Others (pl specify)										
Total	**02**	**52**	**00**	**52**	**00**	**00**	**00**	**52**	**00**	**52**
IV Livestock Production and Management										
Dairy Management	01	00	28	28	00	00	00	00	28	28
Poultry Management	02	00	00	00	30	00	30	30	00	30
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management	03	74	19	93	02	01	03	76	20	96
Feed & fodder technology	05	19	83	102	02	06	08	21	89	110
Production of quality animal products										
Others (pl specify)	01	08	00	08	00	00	00	08	00	08
Total	**12**	**101**	**130**	**231**	**34**	**07**	**41**	**135**	**137**	**272**
272V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	02	00	50	50	00	00	00	00	50	50
Design and development of low/minimum cost diet										
Designing and development for high										

nutrient efficiency diet										
Minimization of nutrient loss in processing	01	00	13	13	00	13	13	00	26	26
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	01	00	28	28	00	00	00	00	28	28
Value addition	05	00	139	139	00	00	00	00	139	139
Women empowerment										
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care	02	00	43	43	00	00	00	00	43	43
Others (pl specify)										
Total	**11**	**00**	**273**	**273**	**00**	**13**	**13**	**00**	**286**	**286**
VI Agril. Engineering										
Farm Machinery 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	08	187	00	187	11	00	11	198	00	198
Integrated Disease Management	05	118	00	118	06	00	06	124	00	124
Bio-control of pests and diseases	01	22	00	22	01	00	01	23	00	23
Production of bio										

control agents and bio pesticides										
Others (pl specify)										
Total	**14**	**327**	**00**	**327**	**18**	**00**	**18**	**345**	**00**	**345**
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	**63**	**1023**	**403**	**1426**	**64**	**20**	**84**	**1087**	**423**	**1510**

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										
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										
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		
		Male	Female	Total	Male	Female	Total	Male	Female	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	01	12	00	12	03	00	03	15	00	15
Livestock feed and fodder production	01	00	17	17	00	13	13	00	30	30
Household food security										
Any other (pl.specify)										
TOTAL	**02**	**12**	**17**	**29**	**03**	**13**	**16**	**15**	**30**	**45**

Training programmes for Extension Personnel including sponsored training (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
Productivity enhancement in field crops	01	23	04	27	26	04	30	49	08	57
Integrated Pest Management	01	22	00	22	09	00	09	31	00	31
Household food security										
Any other (pl.specify)	02	26	00	26	04	00	04	30	00	30
TOTAL	**04**	**71**	**04**	**75**	**39**	**04**	**43**	**110**	**08**	**118**

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		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	01	23	04	27	26	04	30	49	08	57
Integrated Pest Management	01	22	00	22	09	00	09	31	00	31
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	12	00	12	03	00	03	15	00	15
Household food security	01	00	17	17	00	13	13	00	30	30
Any other (pl.specify)	02	26	00	26	04	00	04	30	00	30
TOTAL	**06**	**83**	**21**	**104**	**42**	**17**	**59**	**125**	**38**	**163**

Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Increasing production and productivity of crops										
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)	**05**	**194**	**00**	**194**	**18**	**00**	**18**	**212**	**00**	**212**
Total										
Post harvest technology and value addition										
Processing and value addition	**04**	**00**	**201**	**201**	**00**	**08**	**08**	**00**	**209**	**209**
Others (pl. specify)										
Total										
Farm machinery										
Farm machinery, tools and implements										
Others (pl. specify)										
Total										
Livestock and fisheries										
Livestock production and management										
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										
CapacityBuilding and Group Dynamics										
Others (pl. specify)	**01**	**1011**	**91**	**1102**	**96**	**60**	**156**	**1107**	**151**	**1258**
Total										
GRAND TOTAL	**10**	**1205**	**292**	**1497**	**114**	**68**	**182**	**1319**	**360**	**1679**

Details of vocational training programmes carried out by KVKs for rural youth

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
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										
Others (pl. specify)										
Total										
Livestock and fisheries										
Dairy farming	01	10	00	10	02	00	02	12	00	12
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	02	00	47	47	00	03	03	00	50	50
Seed production										
Sericulture										
Mushroom cultivation										
Nursery, grafting etc.										
Tailoring, stitching, embroidery, dying etc.	01	00	08	08	00	02	02	00	10	10
Agril. para-workers, para-vet training										
Others (pl. specify)										
Total										
Agricultural Extension										
Capacity building and										

group dynamics										
Others (pl. specify)										
Total										
Grand Total	**4**	**10**	**55**	**65**	**2**	**5**	**7**	**12**	**60**	**72**

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services - KMA	37	358014	00	358014
Diagnostic visits	07	23	-	23
Field Day	19	671	14	685
Group discussions	03	74	00	74
KisanGhosthi	05	347	08	355
Film Show	19	925	15	940
KisanMela	01	3076	24	3100
Exhibition	03	4057	32	4089
Scientists' visit to farmers field	122	1313	-	1313
Ex-trainees Sammelan	2	58	00	58
Farmers' seminar/workshop	2	758	12	770
Method Demonstrations	05	82	04	86
Celebration of important days	02	106	00	106
Special day celebration	02	91	00	91
Exposure visits	1			
Others (Sankalp Se Siddhi)	01	490	29	519
Total	**231**	**370085**	**138**	**370223**

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	00
Extension Literature	05
Newspaper coverage	06
Popular articles	05
Radio Talks – Vedio conference	02
TV Talks	09
Animal health amps (Number of animals treated)	00
Others (Swachcha Bharat Abhiyan)	05
Other – Jal Doot Training	01
Other – Soil Health Campaign	01
Other- PM live telecast	01
Total	**11**

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

Production of seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals	Wheat	GW-451	-	15.50	55800	35
	Wheat	GW-451	-	22.0	-	Store at KVK
Oilseeds	Mustard	GDM-4	-	3.09	24720	152
	Mustard	GDM-4		0.75	2550	Market sale
	Mustard	GDM-4	-	2.40	-	Store at KVK
Total				**43.74**	**83070**	

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
	Tobacco	GCT-3 & DCT-4	-	66500	13300	11
	Brinjal	-	Neelesh	200	200	20
	Tomato	-	Abhinav	200	200	20
	Chilli	-	VNR	200	200	20
	Lime	Kagji lime	-	3305	34350	75
	Pome granate	Sinduri	-	100	2500	01
	Papaya	Madhu bindu	-	673	3252	07
	Drum stick	Multiplex (Pvt)	-	40	1000	01
Ornamental plants	Rose	Desi		82	820	07
	Jasud	Desi		21	210	02
	Night queen	Desi		03	30	01
	Cactus	-		20	200	01
	Acalifa			10	100	01
	Aurelia			10	100	01
Total				**71364**	**56462**	**168**

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	No. of Farmers
Bio Fertilisers	Vermi compost	3715	18450	13
Total				

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals				
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	IDM module for the management of yellow vein mosaic disease in okra. *HortFlora Research Spectrum.6(3):215-217*	Kumar Upesh & Kumar Suresh (2017).	
	IDM module for the management of wilt disease in chickpea. *Int. J. Pure App. Biosci. Manuscript No: IJPAB-2017-5315, Dated -28-07-2017.*	Kumar Upesh (2017).	
	IDM module for the management of leaf curl in chilli. *Int.J.Curr.Microbiol.App.Sci* (2017) *6*(9): 2087-2091	Kumar Upesh & Kumar Suresh (2017).	
	Performance of Summer Pearl Millet (Pennisetum glaucum L.) Hybrids under North Gujarat Conditions. Int.J.Curr.Microbiol.App.Sci (2018) 7(1): 637-644	Chaudhari R.P. , Patel P.M., Patel B.M., Kumar Upesh, Darji S.S. and Patel S.J.	
Technical reports			
News letters			
Technical bulletins			
Popular articles	Care & Managemnt of pregnant animal	Dr S J Patel	
	Importance of vegetable & Kitchen Garden	Smt H B Patel	
	Management of pink boll worm in Bt cotton	Mr G A Patel	
	Management of repeat breeding in milch animal	Dr S J Patel	
	IPM in Castor	Mr G A Patel	
	Empowering women through skill development	Dr S J Patel	
Extension literature	Sankalp Se Siddhi	KVK Staff	500
	Integrated Pest Management	Mr G A Patel	1000
	Integrated Pest Management	Mr G A Patel	1000
	Profitable farming through dairy animal	Dr S J Patel	1000
	Azolla – as a animal feed	Dr S J Patel	1000
	Chilli crop production technology	Mr S S Darji	1000
Others (Pl. specify)			
TOTAL			

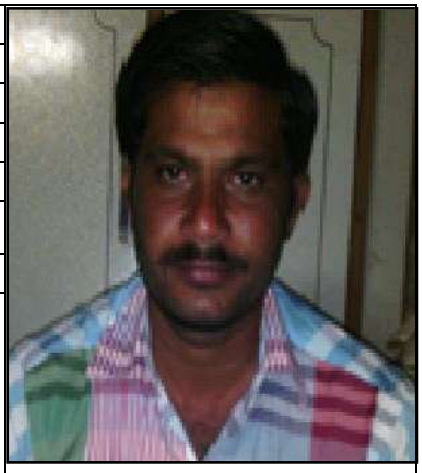
C. Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the programme	Number
01	CD	Method demo of pheromone trap	01
02	CD	Package demo of chickpea	01

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).

Enhance profitability through Nursery Management in Chilli

Name of farmers	-	Mr Vinubhai Ishwarbhai Patel
Fathers Name	-	
Age	-	38 Year
Village & Taluka	-	Chandrawati & Siddhapur
Mo No	-	9714883115
Area	-	1.0 ha
Irrigated area	-	1 ha
Major crops	-	Kharif- Castor, Cotton, Chilli Rabi- Fennel, Zaid –Sorghum Fruit plant- Nil Animal – 02 (Buffalo)



Mr Vinubhai Ishwarbhai Patel is a young farmers of Village – Chandrawati, Taluka – Siddhapur, District – Patan (Gujarat). He is SSC passed & after completion of education, he is evolved in agriculture. Mr V.I.Patel are hard working for getting more profit in your small holding lands. But they are not in sucees. During meeting of Krishi Vigyan Kendra, he touch the Scientist of Krishi VIgyan Kendra. Scientist of Krishi Vigyan Kendra are suggested scientific vegetable cultivation as well as seedling selling of vegetable crop for more profit in small land holding. Under the guidance of Krishi VIgyan Kendra, he was grow chilli seedling in 0.25ha land

Nursery Management Technology Adopted:-

- **Raised bed nursery**
- **Hybrid seeds of chilli**
- **Line sowing**
- **Protect the nursery with mosquito net**
- **Seed treatment by systemic fungicide as well as insecticide**
- **Timely weeding & apply plant protection measure**

Mr V.I.Patel are regularly touch with KVK scientist & timely impart the activity as per suggestion given by scientist. He was regularly touch with the farmers & farmers are also visit in your farm resulted he was sell the seedling of chilli & earned 46,500 Rs. Net profit from 0.25 acre land.

Economic Impact:-

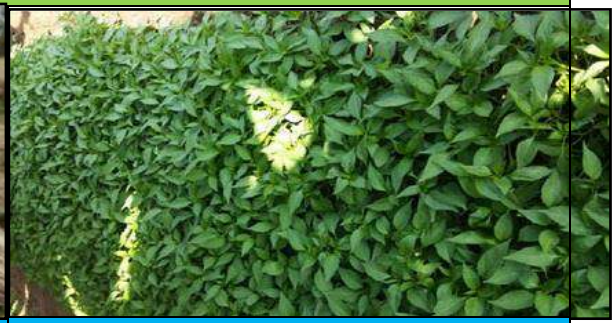
Particulars	Cost (Rs)	Production	Gross Return (Rs.)	Net Return (Rs.)
Input cost – Seed , Chemical etc	16500	180000 seedlings Sold @ 350 Rs./1000 seedlings	63000	46500

Outcome:- Mr V.I.Patel are work under the guidance of Krishi Vigyan Kendra Scientist. In limited time period (Within 2 Month), he was getting net profit is Rs 46500 only in 0.25ha land. AT present he was motivate the other farmers for adoption of scientific technologies.

Impact:- Adjoining farmers are seen the act of Mr V.I.Patel & regularly visit & discuss with Mr V.I.Patel. After result obtain by Mr V.I.Patel, other farmers are also appreciate the work of Mr V.I.Patel & hopeful for future adoption of scientific technologies.

ACTION PHOTOGRAPHS

Nursery management



Healthy seedling

Package demonstration of Groundnut under NMOOP programme

Name of farmers	-	Sri Rohit Bhai Chaudhari
Fathers Name	-	Sri Savaji Bhai Chadhari
Age	-	35
Vilage & Taluka	-	Nagvasan, Siddhapur
Mo No	-	9978307343
Area	-	5.0 ha
Irrigated area	-	5.0 ha
Method of irrigation		Sprinkalar irrigation
Major crops	-	Kharif- Groundnut, Castor & Cluster bean Rabi- Wheat & Tobacco – Greengram

Mr Rohit Bhai Chaudhari is a farmers of Village – Nagvasan, Taluka – Siddhapur, District – Patan (Gujarat). He is a progressive farmers & working in the field of agriculture. After education, Mr Chaudhari was engaged in agriculture & he was regular touch with KVK scientist for taking latest agriculture technology for enhancing profitability in our farm. The main source of farm income of Mr Chaudhari is Field crops & good Dairy Farm. Under Field crop, he was grown castor & cotton as a case crop but he is not interested on growing of other oilseed crops like – Groundnut. He was cultivated groundnut only for home consumption. KVK Scientist regularly motivates for crop diversification & discuss about the profitability of groundnut as a oilseed crops. In 2016-17, KVK was conducted the demonstration under NMOOP programme on Package demonstration of groundnut & he was interested for cultivation of groundnut. He was actively participate the programme identification of problem for low production of green gram to implementation of demonstration.

Demonstrated technology:-

Improved variety (GG-20) + Seed inoculation with *T viridae* @ 10gm/Kg seed + Soil inoculation with NPK liquid bio fertilizer along with *T viridae* @ 2.5 Kg/ Ha + RDF + IWM & IPM module

Mr R.B.Chaudhari are regularly touch with KVK scientist & timely impart the activity like seed treatment, sowing, timely & proper dose application of fertilizer, timely weed management, apply timely plant protection measure resulted enhance 29.61 % productivity of demonstrated plot as compared to their own practice.

Output/ Economic Impact:-

Yield (qtl/ha)			Net return (Rs/ha)		B:C ratio	
T1	**T2**	**% Enhance**	**T1**	**T2**	**T1**	**T2**
15.2	19.7	29.61	34450	47270	2.84	3.18
T1- Farmers practice,			**T2- Recommended Practice**			

Outcome:- Under technology farmers are found 29.61% higher yield over own practice resulted enhance the net profit 37.21 %.

Impact:- Adjoining farmers are minutely observe the results of technology like germination , plant population, plant growth etc. They are appreciated the technology & hopeful for future adoption of technology.

ACTION PHOTOGRAPHS

Training programme

Data Collection

Field day

Field Visit

E. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year - No

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
1.	Nursery seedling	-Use of Tobacco dust solution	To control damping off disease in Nursery plants
2.	Wheat, Chilli, Cotton etc.	-Use of calotropics decomposed leaves & twigs solution along with irrigation water	To control termite in different crops
3.	Cumin	-Using wood ash + old Bajara flour dusting	To control blight disease in Cumin
4.	Lemon	-To broadcast Tobacco dust	To control aphid & other sucking pest in Lemon
5.	Chilli	-Use of sour butter milk & cow urine spraying -Spraying of the mixture of sour butter milk & cow urine in chilli	To control sucking pest & leaf curl in chilli

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	-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
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
Reliance	Quick delivery of message in large scale through Kisan Mobile sandesh

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

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.)
Krishi Jal Doot	01-15 June, 2017	NABARD, Patan	Rs 50,000/-

C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes/No - 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	04	03	

02	**Research projects**				
03	**Training programmes**	Skill development	01 +01		
		Skill development			
		Organic farming		05	
		Value addition		04	
		Doubling farmers income- Kisan Mitra		05	
		NASA regarding training programme	01		
		Post harvest management		01	
		Training need assessment & evaluation of training		01	
		Skill development in horticulture crop	01		
		IDPM in field crops & soil health management	01		
04	**Demonstrations**			01	
05	**Extension Programmes**				
	KisanMela	Kisan Mela	01		
	Others	Kisan – ScientistGosthi	01	01	
		Kisan Gosthi	01		
		PM live telecast programme		01	
06	**Publications**				
	Extension Literature	Value addition in fruits & vegetable Organic Farming		02	
	Pamphlets				

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

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 - NA

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 - NA

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

7. Convergence with other agencies and departments:

- ATMA, Distt.- Patan
- Deprtt of Agriculture Distt.- Patan
- Department of Horticulture, Distt.- Patan
- Department of Animal Husbendary, Distt.- Patan
- NABARD, Distt.- Patan
- Lead NGOs working in agriculture, Distt.- Patan

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 2017-18 Yes/No, If Yes - No

Period of observing Technology Week: From to
Total number of farmers visited :
Total number of agencies involved :
Number of demonstrations visited by the farmers within KVK campus:

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies			
Lectures organized			
Exhibition			
Film show			
Fair			
Farm Visit			
Diagnostic Practicals			
Supply of Literature (No.)			
Supply of Seed (q)			
Supply of Planting materials (No.)			
Bio Product supply (Kg)			
Bio Fertilizers (q)			
Supply of fingerlings			
Supply of Livestock specimen (No.)			
Total number of farmers visited the technology week			

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

13 Introduction of alternate crops/varieties

State	Crops/cultivars	Area (ha)	Number of beneficiaries

B. Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds		
Pulses		
Total		

C. Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No.of participants
Total			

D. Animal health camps organized

State	Number of camps	No.of animals	No.of farmers
Total			

E. Seed distribution in drought hit states

State	Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers
Total				

F. Large scale adoption of resource conservation technologies

State	Crops/cultivars and gist of resource conservation technologies introduced	Area (ha)	Number of farmers
Total			

G. Awareness campaign

State	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers
Total												

13. IMPACT

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

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	82	-	-
Fennel-GF-12	25	54	-	-
Wheat-GW-451	50	68	-	-
Cumin-GC-4	25	74	-	-
Ajwain- GA-2	25	48	-	-
Wilt disease management in Cumin through use of Bio-fungicide (Trichoderma spp.)	25	24	-	-
Management of pink boll worm through IPM	25	32	-	-
Application of sulpher in mustard	25	76	-	-
Managemnet of wilt in fennel	25	83	-	-

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

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

14. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
April 2017	02	3860	22
May	00	00	00
June	03	5779	38
July	01	1930	42
August	03	5799	52
September	05	57812	102
October	03	27008	88
November	05	56035	142
December	02	27200	32
January 2018	10	112043	114
February	02	54020	56
March	01	27010	26

Name of KVK	Message Type	Type of Messages						
		Crop	**Livestock**	**Weather**	**Marke-ting**	**Aware-ness**	**Other enterprise**	**Total**
Patan	Text only	27	05	00	04	01	00	37
	Voice only							
	Voice & Text both							
	Total Messages	27	05	00	04	01	00	37
	Total farmers Benefitted	**243541**	**56507**	**00**	**30956**	**27010**	**00**	**358014**

15. PERFORMANCE OF INFRASTRUCTURE IN KVK

13 **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	Vermi compost	2003	200 M^2		Compost	3715 Kg	-	18450	Sale to farmers
2	Azolla	2016-17	02 Pit						
3	Dairy – Gir Cow	2016-17	10 No of calfs						
4	Goatery-Mahesani	2016-17	15 No of goat						
5	Nursery	2012-13	4000M^2	Regular production of sampling					
6	IFS	2016-17	1.0 ha	Under progress					

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	`02-12-2017	04-04-2018	0.75	GW-451	Seed	22.0 qtl	15700	-	Store
Summer Bajra	07-03-2017	-	0.85	Pioneer hybrid	Grain				
Pulses									
Gwar	05-07-2017	15-11-2017	1.0	GG-1	Grain	3.66 qtl	1580	13267	
Oilseeds									
Castor	15-08-2017	II fortnight of march, 2018	3.25	GCH-7	Grain	48.50	4500	-	Store
Mustard	16-10-2017	28-02-2018	1.50	GDM-4	Seed	12.80 qtl	10120	36869	Seed - 2.40qtl are store & rest are sale in mandi
Fruits									
Lime	2004		2.70	Kagji lime				63000	
Mango	1994		0.95	Kesar				28000	
Sapota	1994		0.60	Kali patti					
Pome granate	2013		0.50	Sinduri				-	
Tobacco	20-11-2017	13-04-2018	1.5	DCT-4 & GCT-3	Commercial	33.86 qtl	21000	145820	Sale in mandi

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

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

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):- 25 No

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2017	21	06	
May 2017	16	30	
June 2017	16	30	
July 2017	16	07	
August 2017	29	22	
September 2017	29	22	
October 2017	29	18	
November 2017	27	30	
December 2017	27	30	
January 2018	27	30	
February 2018	32	30	
March 2018	32	30	

F. Database management

S. No	Database target	Database created

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

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.)		

16.FINANCIAL PERFORMANCE

13 **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, District – Mahesana	15232	KVKSGVS Ganwada	10265325092	384002509	SBIN0015232

B. Utilization of KVK funds during the year 2017-18 (Rs. In lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	140.00	140.00	135.93
2	**Traveling allowances**	0.90	0.90	0.90
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	7.50	3.00	1.44
B	POL, repair of vehicles, tractor and equipments			1.46
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)		4.50	0.66
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			0.19
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			2.66
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			0.68
G	Training of extension functionaries			0.10
H	Maintenance of buildings			00
I	Establishment of Soil, Plant & Water Testing Laboratory			00
J	Library			00
TOTAL (A)				
B. Non-Recurring Contingencies				
1	**Works**	00	00	00
2	**Equipments including SWTL & Furniture**	00	00	00
3	**Vehicle** (Four wheeler/Two wheeler, please specify)	00	00	00
4	**Library** (Purchase of assets like books & journals)	00	00	00
TOTAL (B)		00	00	00
C. REVOLVING FUND		00	00	00
GRAND TOTAL (A+B+C)		**148.40**	**148.40**	**144.02**

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 2015 to March 2016	313380	760354	450453	623281
April 2016 to March 2017	623281	381768	471649	533400
April 2017 to March 2018	533400	648341	786540	395204

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

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Mr G A Patel	SMS, Plant Protection	Workshop on doubling farmers income	SDAU, S K Nagar	18 to 19-04-2017
Mr R P Chaudhari	SMS Crop Production	Training on Soil testing	ATARI, Jodhpur	19 to 20-05-2017
Mr S S Darji	SMS, Horticulture	Jal Doot Training	NABARD, Patan	23-05-2017
Dr Upesh Kumar	Sr Scientist & Head	Zonal workshop	JAU, Junagarh	10&11-06-2017
Dr S J Patel	SMS, Animal Science	Zonal workshop	JAU, Junagarh	10&11-06-2017
Mr R P Chaudhari	SMS Crop Production	Pre Seasonal Kharif workshop	SDAU, S K nagar	13 &14-07-2017
Mr H. P. Patel	SMS, Agri Extenstion	Pre Seasonal Kharif workshop	SDAU, S K nagar	13 &14-07-2017
Dr S J Patel	SMS, Animal Science	PFMS training	Gujarat Vidyapeeth, Ahmedabad	28&29-10-2017
Mr N B Patel	Accounatant	PFMS training	Gujarat Vidyapeeth, Ahmedabad	28&29-10-2017
Mr S S Darji	SMS, Horticulture	Newer option of arid horticulture & doubling farmers income	CAZRI, Jodhpur	12 to 21-11-2017

Dr Upesh Kumar	Sr Scientist & Head	National Seminar on Doublling Farmers income	BRAU, Lucknow	10&11-02-2018
Dr Upesh Kumar	Sr Scientist & Head	Farmers – Scientist interaction congress on doubling farmers income	BIOVED, Allahabad	17& 18-02-2018
Dr Upesh Kumar	Sr Scientist & Head	Workshop on OFT	SDAU, S K Nagar	11-01-2018
Mr R P Chaudhari	SMS Crop Production	Workshop on OFT	SDAU, S K Nagar	11-01-2018
Mr H. P. Patel	SMS, Agri Extenstion	Workshop on OFT	SDAU, S K Nagar	11-01-2018
Mr S S Darji	SMS, Horticulture	Workshop on OFT	SDAU, S K Nagar	11-01-2018
Dr S J Patel	SMS, Animal Science	Workshop on OFT	SDAU, S K Nagar	11-01-2018
Mr G A Patel	SMS Plant Protection	Workshop on OFT	SDAU, S K Nagar	11-01-2018

18. 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	63	1087	423	1510
Rural youths	-	-	-	-
Extension functionaries	06	125	38	163
Sponsored Training	10	1319	360	1679
Vocational Training	04	30	60	90
Total				

2. **Frontline demonstrations**

Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	182	70	-
Pulses	100	40	-
Cereals	50	20	-
Vegetables	20	05	-
Other crops	190	59	-
Hybrid crops	-	-	-
Total	542	194	-
Livestock & Fisheries	20	-	10 animal & 260 bird
Other enterprises	-	-	
Total	25620	194	10 animal & 260 bird
Grand Total			

3. **Technology Assessment & Refinement**

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed		79	79
Crops	09	30	30
Livestock	02	-	-
Various enterprises	-	109	109
Total	11		
Technology Refined	-		
Crops	-		
Livestock	-		
Various enterprises	-		
Total	-		
Grand Total	11	109	109

4. **Extension Programmes**

Category	No. of Programmes	Total Participants
Extension activities	47	11246
Other extension activities	09	2279
Total		

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Market-ing	Awar e-ness	Other enterprise	Total
Patan	Text only	27	05	00	04	01	00	37
	Voice only							
	Voice & Text both							
	Total Messages	27	05	00	04	01	00	37
	Total farmers Benefitted	**243541**	**56507**	**00**	**30956**	**27010**	**00**	**358014**

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	19.3	83070
Seed (q)	24.4	Stock
Planting material (No.)	71364	56462
Bio-Products (kg)	3715	18450
Livestock Production (No.)	-	-
Fishery production (No.)	-	-

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	180	-
Water	-	-
Plant	-	-
Total	**180**	**-**

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	01
2	Conferences	01
3	Meetings	05
4	Trainings for KVK officials	18
5	Visits of KVK officials	08
6	Book published	-
7	Training Manual	-
8	Book chapters	-
9	Research papers	04
10	Lead papers	-
11	Seminar papers	-
12	Extension folder	06
13	Proceedings	-
14	Award & recognition	01
15	On going research projects	-