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)
	Office	FAX		
Krishi Vigyan Kendra, Junagadh Agricultural University Nana-Kandhasar-363 520 **Dist: Surendranagar**	(02751) 294120	02751 280121	surendranagar.kvk@gmail.com	NA

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

Address	Telephone		E mail	Website address
	Office	FAX		
Junagadh Agricultural University, Junagadh – 360 002	0285-2672080-90	0285-2672653	dee@jau.in	-

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. M. S. Chandawat	--	094275 08708	surendranagar.kvk@gmail.com

1.4. Year of sanction: October, 2005

1.5. Staff Position (as on March 31, 2018)

				If Permanent, Please indicate			If Temporary, pl. indicate the consolidated amount paid (Rs./month)
Sl. No.	**Sanctioned post**	**Name of the incumbent**	**Discipline**	**Current Pay Band**	**Current Grade Pay**	**Date of joining**	
1.	Senior Scientist and Head	Dr. M. S. Chandawat	Extension Education	37400- 67000 (15600-39100)	22320/-	31-3-2015	-
2.	Subject Matter Specialist	Mr. M. F. Bhorania	Plant Protection	15600-39100	24400/-	18-09-2012	-
3.	Subject Matter Specialist	Dr. B. C. Bochalya	Extension Education	15600-39100	22220/-	23-08-2006	-
4.	Subject Matter Specialist	Dr. R.P.Kalma	Vetenairy	15600-39100	15600/-	19-12-2016	-
5.	Subject Matter Specialist	Mr. D.A.Patel	Horticulture	15600-39100	15600/-	20-01-2017	-
6.	Subject Matter Specialist	-	Agronomy	-	-	-	-
7.	Subject Matter Specialist	-	Home Science	-	-	-	-
8.	Programme Assistant	Mr. M. V. Pokar	Extension Education	15500 Fix	-	23-02-2012	-
9.	Computer Programmer	Mr. P.T.Patel	Computer Science	9300-34800	12240	30-12-2008	-
10.	Farm Manager	-	-	-	-	-	-
11.	Accountant/Superintendent	Mr. R.P. Vagadiya	O.S. cum Accountant	9300-34800	11750/-	01-12-2011	-
12.	Stenographer	Mr. S.H. Shukla	Junior Steno	10000 fix	-	19-11-2013	-
13.	Driver 1	Mr. H. R. Gohil	Jeep Driver	5200-20200	11870/-	01-08-2006	-
14.	Driver 2	-	-	-	-	-	-
15.	Supporting staff 1	Mr. A.M. Dhadvi	Peon	2550-3200	7580/-	01-10-2015	-
16.	Supporting staff 2	-	-	-	-	-	-

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	26
2.	Under Demonstration Units	00.34
3.	Under Crops	11.00
4.	Horticulture	2.96
5.	Pond	0
6.	Under Road	01.70

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	23/7/09	595	30,20,600	-	-	-
2.	Farmers Hostel			296	20,74,700	-	-	-
3.	Staff Quarters (6)			--	30,55,000	-	-	-
4.	Demonstration Units (2)			78	6,16,000	-	-	-
5	Fencing	RKVY	1/4/10	77	3,00,000	-	-	-
6	Rain Water harvesting system			191	13,94,500	-	-	-
7	Threshing floor			198	15,72,000	-	-	-
8	Farm godown			71	5,00,000	-	-	-
9	ICT lab	-	-	-	-	-	-	-
10	Other	-	-	-	-	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep (Bolero)	2006-07	4,96,000	-	Working but requires costly repairs
Splender Bike	2010-11	42,980	-	Working

C) Equipments & AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Computer	2006-07	49968	Working Cond.
Copier Machine	2006-07	49816	Working Cond.
Automatic Seed Drill	2006-07	31500	Working Cond.
Tractor mounted Sprayer (200ltr)	2007-08	43000	Working Cond.
Shredder	2007-08	43000	Working Cond.
Dibbler	2007-08	900	Working Cond.
Cotton stock puller	2007-08	1200	Working Cond.
Digital copier with network	2008-09	115300	Working Cond.
Rain gun	2007-08	19800	Working Cond.
LCD projector	2008-09	89985	Working Cond.
Rotavator	2008-09	96000	Working Cond.
Laptop	2008-09	47500	Working Cond.
Harrow cum cultivator (2)	2008-09	75000	Working Cond.
Groundnut Decorticator	2008-09	96530	Working Cond.
Mobile seed processing unit	2008-09	1685000	-
Thresher	2008-09	114000	Working Cond.
Zero till drill	2008-09	66700	Working Cond.
Air assisted blower type sprayer	2008-09	98750	Working Cond.
Digital Camera	2008-09	23600	Not working
Plasma TV	2008-09	73750	Working Cond.
Power Tiller	2010-11	1,15000	Working Cond.
Mini Tractor (Mahindra)	2011-12	1,98,000	Working Cond.
Trinocular Microscope	2012-13	2,90,000	Working Cond.
B.O.D. Incubator	2012-13	1,14,000	Working Cond.
Laminar Air Flow	2012-13	1,99,000	Working Cond.
Batch top centrifuge	2012-13	46,524	Working Cond.

Electronic Balance	2012-13	19,905	Working Cond.
TDS meter	2012-13	6,333	Working Cond.
Temp & humidity indicator & controller	2012-13	33,071	Working Cond.
Digital Hot Air Oven	2012-13	46,333	Working Cond.
Deep Fridge	2012-13	47,571	Working Cond.
Computer -2	2012-13	72,618	Working Cond.
Vertical Autoclave	2012-13	27,900	Working Cond.
Computer-3	2016-17	34115	Working Cond.
Kyan	2016-17	130000	Working Cond.
Copier Machine	2016-17	144391	Working Cond.
RO System	2016-17	79900	Working Cond.
20 HP/10 STG Pump Set Falcon	2017-18	71750	Working Cond.

1.8. **Details SAC meeting conducted in the year**

The 13th(Twelth) Scientific Advisory Committee Meeting of Krishi Vigyan Kendra, JAU, Surendranagar was held at seminar hall of KVK, Nana Kandhasar (Surendranagar) on 21st February, 2018. Following members were remain present in the meeting.

Sr. No.	Name & Designation	Position
1.	**Dr. A. R. Pathak** Hon'ble Vice Chancellor, JAU, Junagadh	Chairman
2.	**Dr. V. P. Chovatiya** Director of Research, JAU, Junagadh.	Member
3.	**Dr. P. R. Kanani** I/C Director of Extension Education, JAU, Junagadh.	Member
4.	**Shri H. D. Vadi** District Agriculture Officer, Surendranagar	Member
5.	**Shri Chandreshbhai Patel,** Horticulture Officer, Dept. of Hort. (Représentative of Dy. Director, Horticulture)	Member
6.	**Dr. Satyjeet Verma,** Veterinary Officer, Chotila, Surendranagar (Representative of Dy. Director, Animal Husbandry)	Member

7.	**Shri G. C. Bhalodi** Deputy Director Agriculture (Ext.) and Project Director (ATMA)	Member
8.	**Shri P. B. Joshi** Lead Bank Manager, Lead Bank (SBI, Surendranagar)	Member
9.	**Shri R. S. Sarma** AGM, NABARD, Surendranagar	Member
10.	**Vasveliya Nileshkumar K.** Forest Guard, Chotila **(**Representative of DCF, Surendranagar)	Member
11.	**Shri C. N. Patel** I/C ADA, Surendranaghar	Member
12.	**Shri Nathabhai Somabhai Sanghani** At & Post: Motimoldi, Ta. Chotila, Surendranagar	Special Invitee
13.	**Shri. Punabhai Laljibhai Chauhan,** Progressive Farmer, Village : Karmad Taluka : Chuda, Surendranagar	Member
14.	**Shri Khodabhai J. Sabhani,** Progressive Dairy Farmer, Village : Vakhatpar Taluka : Sayla, Surendranagar	Member
15	**Smt. Jashuben D. Meniya** At & Post: Navagam, Ta. Sayla, Surendranagar	Farm women Member
16.	**Smt. Chahun Minaben Sunilbhai,** At & Post: Nani Moldi, Ta. Chotila, Surendranagar	Farm women Member
17.	**Shri Ramesh M. Solanki** N.G.O Surendranagar	Member
18.	**Shri S. M. Bhanbhor** Agriculture Officer	Member
19.	**Shri Hamirsinh Parmar,** Progressive Farmer, Village : Gautamgadh Taluka : Muli, Surendranagar	Invitee Farmer
	Dr. M. S. Chandawat Sr. Scientist and Head, KVK, JAU, Surendranagar	Member- Secretary
20.	**Dr. B. C. Bochalya** SMS- Extension Education, KVK, JAU, Surendranagar	Participant
21.	**Shri M. F. Bhoraniya,** SMS- Plant Protection, KVK, JAU, Surendranagar	Participant
22.	**Dr. R. P. Kalma**	Participant

	SMS- Animal Science, KVK, JAU, Surendranagar	
23.	**Shri D. A. Patel** SMS- Horticulture, KVK, JAU, Surendranagar	Participant

The meeting was chaired by Dr. A. R. Pathak, Hon'ble Vice Chancellor, JAU, Junagadh and chairman of SAC meeting. Dr. M. S. Chandawat, Senior Scientist and Head, KVK, JAU, Surendranagar welcomed Honorable Chairman and all the members of the Scientific Advisory Committee.

Dr. M. S. Chandawat, Senior Scientist and Head, KVK, JAU, Surendranagar presented action taken report of 12th SAC Meeting and Summerized progress report of KVK, Surendranagar for the period of April, 2017 to February, 2018 & action plan for the period of April-2018 to March, 2019. Detailed discipline wise progress report for the period of April, 2017 to February 2018, & action plan for the period of April-2018 to March, 2019 presented by Dr. B. C. Bochalya (Agronomy and Extension Education), Mr. M.F.Bhoraniya (Plant Protection), Mr. D.A.Patel (Horticulture) and Dr. R.P.Kalma (Animal Husbundry & Home Science) Scientist, KVK, JAU, Surendranagar. House approved the same with some suggestions.

Dr. A. R. Pathak, Hon'ble Vice Chancellor, JAU, Junagadh gave the presidential speech and made valueable suggestions. He emphasized on promoting and popularizing low cost Net house/polyhouse in the area for growing off season crop, introduction of fodder grass (*Jinjawa* grass) among dairy farmers through demonstration and promote artificial insemination in Gir cow for breed improvement by making available Gir bull's semen to dairy farmers.

Hon'ble Vice Chancellor, Dr. A. R. Pathak congratulated KVK, Surendranagar for being nominated as winner of **"BEST KVK"-"KRISHI VIGYAN KENDRA SAMMAN"** for the Year - 2018 by **Mahindra Samriddhi India Agri Awards 2018** and also appreciated the over all work performance of KVK.

During discussion Chairman and members of SAC made suggetions for improving KVK performance.

COMMITTEE MADE THE FOLLOWING SUGGESTIONS AFTER ACTIVE INTERACTION

- Promote fodder grass *Dichanthium annulatum* (*Jinjawa* grass) in the area through demonstration of its planting material by providing it to 10-15 farmers. For planting material, if needed then may contact to CBF, JAU, Junagadh.
- Revise the dose of bio-fertilizer in OFT entitled "**Assessment of response of Bio fertilizers to wheat crop yield**" after consulting with experts of Agronomy Dept., JAU, Junagadh.
- Training programme of organic farming should be organized in June month instead of September month.
- In FLD (Front Line Demonstrations), instead of GW-366, give newly released variety of wheat i.e. GW-463 or GW-451 to farmers.
- For training on organic farming in cotton crop, select those farmers for training, who are doing non Bt cotton crop variety/*Deshi* cotton crop.

- At KVK instructional farm, prepare one plot of organic farming and use organic inputs (*Panchamrut, Panchgavya* etc) in it.
- Due to high temperature during summer, sesame production in summer may not encouraging. Area where irrigation is available in summer season, promote summer groundnut crop. In this regard, awareness through training and farmer meeting should be carried out.
- In FLD on Integrated Disease Management (IDM) in groundnut crop, provide only one or two fungicides as inputs.
- Collect seed material of the *Wadhwani* Chilli and produce its planting material at KVK nursery. And provide 5-10 seedlings to interested farmers.
- In report of horticulture discipline, it was to clarify the number of seedling provided to farmers.
- In discipline of animal husbandry, organize training programmes before and after calving of animals for its care & management.
- In FLDs on vegetable, use only bio-pesticides as inputs
- Effort should be made for increasing women participation in training programme in animal husbandry.
- Make arrangements at KVK level for semen dose of Gir breed from CBF, JAU, Junagadh or from nearby semen laboratory and provide it to the interested local dairy farmers for breed improvement.

The meeting was ended with suggestion by Dr. P. R. Kanani, I/C Director of Extension Education, JAU, Junagadh gave the speech and stressed on proper follow of extension procedure and also emphasized to ensure optimum use of ICT among the clientele farmers. He praised KVK progress. Dr. V.P.Chovatiya, Director of Research, JAU, Junagadh gave emphasis on more women participation and also said that there should be critical observation of animal grazing area for getting what type of vegetations are available for animals in free grazing area and then go for need of deworming demonstration. He complemented KVK team for good work performance and said that KVK, Surendranagar is doing very good work and it should be continue for betterment of farming community. Vote of thanks was extended by Dr. B. C. Bochalya, Scientist, KVK, JAU, Surendranagar.

2. DETAILS OF DISTRICT

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

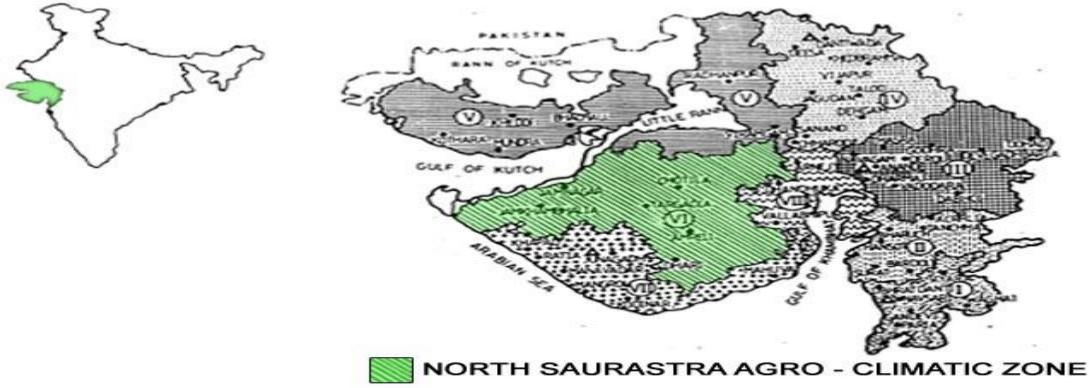
S. No	Farming system/enterprise
1	The district Surendranagar mainly falls in north Saurashtra agro-climatic zone. The district located in India at 22.0° to 23.45° North latitude and 69.45° to 72.15° East longitude. Surendranagar district is bounded in north by Gulf of Kutch and Mehasana district, in the south by Bhavnagar and part of Ahmedabad district, on the east by part of Ahmedabad and west by Rajkot district. The average annual rainfall is 400 mm. The average temperature of the district ranges with 41°C maximum to 11°C minimum. The soil is mostly medium black, shallow to moderately deep and calcareous in nature, therefore cotton is the major crop of the district. Some patches of saline soil found in Dasada and Lakhtar talukas, calcareous sandy soil found in some part of Chotila, Sayla & Dhangdhra taluka and loamy soil is found in some part of Halvad and Dhangdhra taluka. The pH of the soil is alkaline and underground water is non saline in nature. The district covers 10.48 lakh ha geographical area out of which 6.90 lakh ha under cultivation, of which only 0.62 lakh ha is irrigated. Major area comes under rainfed farming. The main sources of irrigation are wells, tube wells, ponds and canals. The major crops of this region are cotton, sesame & pearl millet and others are sorghum, wheat, chick pea, groundnut, mustard, cumin, green gram, black gram, onion, garlic and vegetables. The fruit orchard area is very less.

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

PROFILE OF THE
NORTH SAURASTRA AGRO - CLIMATIC ZONE VI - GUJARAT



1. Total geographical area : 35.02 lakh ha.
2. Area under forest : 1.47 lakh ha.
3. Area under non agricultural use : 2.10 lakh ha.
4. Barren and uncultivated land : 2.52 lakh ha.
5. Permanent pasture : 2.45 lakh ha
6. Current fallows : 1.70 lakh ha
7. Net sown area : 22.17 lakh ha

b) Topography

S. No.	Agro ecological situation	Characteristics
North Saurashtra agro-climatic zone-VI, Gujarat **Eight agro-climatic zones have been identified in Gujarat. The North Saurashtra Agro climatic Zone-VI falls in Saurashtra region. The influence area of North Saurashtra Agro climatic Zone is spread among five districts of Saurashtra region viz., Amreli (9 talukas out of 11), Bhavnagar (6 talukas out of 13), Jamnagar (all the 10 talukas), Rajkot (11 talukas out of 14) and Surendranagar (7 talukas out of 10) covering 43 talukas in all. It is bounded in the north by the gulf of Kutch and parts of Rajkot as well as Surendranagar district, in the east by the Ahmadabad district and coastal part of Bhavnagar district, on the south by the Junagadh district and parts of Amreli as well as Rajkot district, to the west by Arabian sea. The farming situation of the district Surendranagar is rainfed.**		

2.3 Soil Types

S. No	Soil type	Characteristics	Area in ha
1	Medium black	Vadhvan & Muli	
2	Saline & Alkaline soils	Dasada & Lakhatar	
3	Shallow calcareous sandy soil	Dhanghdhra	
4	Red Loamy soil	Halvad, Dhanghdhra	
5	Low land soils	Limbadi, Lakhatar	
6	Calcareous Sandy soil	Chotila, Sayla	

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

S. No	Crop	Area (ha)	Production (MT.)	Productivity (Qt./ha)
1	Cotton (Irri)	174200	3361000	19.29
2	Cotton (Rainfed)	194900	1074000	5.51
3	Sesame	27600	72000	2.61
4	Groundnut	12800	207000	16.10
5	Wheat	30400	924000	30.37
6	Cumin	305300	1937000	7.30
7	Gram	12300	91000	7.39
8	Green Gram	1400	4000	2.64
9	Mustard	300	5000	16.95
10	Guar Seed	1100	6000	6.02

2.5. Weather data (2017-18)

Month	Rainfall (mm)	Temperature 0 C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
June	100.5	-	-	-	-
July	1328	-	-	-	-
August	80.5	-	-	-	-
September	12	-	-	-	-
Total	**1521**	-	-	-	-

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

Category	Population	Production	Productivity
Cattle			
Crossbred	201	54,61,197 lit	-
Indigenous	2,93,557	-	-
Buffalo	2,02,939	-	-
Sheep			
Crossbred	-	-	-
Indigenous	1,00,589	-	-
Goats	1,79,648	-	-
Pigs	22,948	-	-
Crossbred	-	-	-
Indigenous	-	-	-
Rabbits	-	-	-
Poultry-			
Hens	-	-	-
Desi	-	-	-
Category		Production (Q.)	Productivity
Fish (Reservoir)	-	-	-

2.7. Details of Operational area / Villages

Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Chotila	Chotila	Lakhchokiya	Cotton, Bajra, Sesame, Pulses, Diary Farming,	Uncertain and scattered rainfall, pink bollworm in cotton, Reddening in cotton, Wild animals, Lower milk production.	Dry farming technology Awareness for vaccination & artificial insemination of animals
		Bhimora	Cotton, Bajra, Groundnut, Sesame, Pulses Diary Farming,	Uncertain and scattered rainfall, infestation of pink boll worm in cotton, sucking pest in vegetables, HS disease	Dry farming technology Awareness for vaccination & artificial insemination of animals
		Rajawad	Cotton, Cumin, Groundnut, Sesame, Pulses, Vegetables Diary Farming,	Lack of irrigation facility, Uncertain and scattered rainfall, Lower milk production, HS disease	Dry farming technology, Awareness for vaccination & artificial insemination of animals
		Sanosara	Cotton, Bajra, Cumin, Wheat, Sesame, Diary Farming,	Uncertain and scattered rainfall, Injudicious use of fertilizers & Pesticides, Black quarter disease	Adoption of organic farming, Bio-fertilizers & Vermi-compost Dry farming technologies Awareness for vaccination & artificial insemination of animals
Sayla	Sayla	Hadala	Cotton, Groundnut, Cumin, Wheat, Sesame, Diary Farming	Lack of knowledge of modern dry land technologies, lack of Awareness for vaccination & artificial insemination of animals	Awareness for vaccination & artificial insemination of animals
		Chorvira	Cotton, Castor, G'nut, Wheat Dairy Farming,	Lack of knowledge of modern dry land technologies, FMD	Dry farming technologies, Awareness for vaccination & artificial insemination of animals
		Mangalkui	Cotton, Wheat, Cumin, Sesame, Bajra	Lack of knowledge of modern dry land technologies, Injudicious use of fertilizers & Pesticides	Dry farming technologies
		Dharadungari	Cotton, Bajra, Sesame, Wheat, Cumin, Dairy Farming,	Lack of knowledge about weed, pest and diseases & nutrient management HS disease, Trypanosomesis disease	To motivate farmers to grow arid and semi arid horticultural crops. Awareness for vaccination & artificial insemination of animals
Chuda	Chuda	Karmad	Dairy Farming, Cotton, G'nut, Sesame, Wheat, Cumin, Bajra, Gram	Soil salinity, poor drainage system FMD, Lack of knowledge of modern dry land technologies, INM,I PM etc	Irrigated farming technology, Awareness for vaccination & artificial insemination of animals
		Ramdevgadh	Dairy Farming, Cotton, G'nut, Sesame, Wheat, Gram, Cumin, Bajra	Soil salinity, Awareness for vaccination & artificial insemination of animals	Irrigated farming technology, Awareness for vaccination & artificial insemination of animals
		Melapur	Dairy Farming, Cotton, G'nut, Sesame, Gram, Wheat, Cumin, Bajra	Soil salinity, low knowledge of scientific cultivation of crops ,HS disease, Injudicious use of fertilizers & Pesticides	Irrigated farming technology, Awareness for vaccination & artificial insemination of animals
		Chhatariyala	Dairy Farming, Cotton, G'nut, Sesame, Gram, Wheat, Cumin, Bajra	Soil salinity, poor water quality for irrigation, , low knowledge about INM, IPM , in crops,	Irrigated farming technology, Awareness for vaccination & artificial insemination of animals

2.8. Priority thrust areas:

Crop/Enterprise	Thrust area
1	Dry farming technologies.
2	Awareness for vaccination & artificial insemination of animals
3	Adoption of organic farming, Bio-fertilizers & Vermi-compost.
4	Integrated weed, pest and diseases & nutrient management.
5	Farm women empowerment.
6	To motivate farmers to grow arid & semi arid horticultural crops

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
6	6	20	20	243	243	243	243

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
-	38	-	1032	-	8	-	2033

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
-	85.25	-	11,810

Livestock, poultry strains and fingerlings (No.)		Bio-products Selling (Kg)	
7		8	
Target	Achievement	Target	Achievement
-	-	-	32,419 kg- Beauveria
			13,890 kg- Trichoderma

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	Lakhchokiya	Cotton, Bajra, Sesame, Pulses, Diary Farming,	Uncertain and scattered rainfall, pink bollworm in cotton, Reddening in cotton, Wild animals, Lower milk production.	--	--
2	Bhimora	Cotton, Bajra, Groundnut, Sesame, Pulses Diary Farming,	Uncertain and scattered rainfall, infestation of pink boll worm in cotton, sucking pest in vegetables, HS disease	--	--
3	Rajawad	Cotton, Cumin, Groundnut, Sesame, Pulses, Vegetables Diary Farming,	Lack of irrigation facility, Uncertain and scattered rainfall, Lower milk production, HS disease	--	--
4	Sanosara	Cotton, Bajra, Cumin, Wheat, Sesame, Diary Farming,	Uncertain and scattered rainfall, Injudicious use of fertilizers & Pesticides, Black quarter disease	--	--
5	Hadala	Cotton, Groundnut, Cumin, Wheat, Sesame, Diary Farming	Lack of knowledge of modern dry land technologies, lack of Awareness for vaccination & artificial insemination of animals	--	--
6	Chorvira	Cotton, Castor, G'nut, Wheat Dairy Farming,	Lack of knowledge of modern dry land technologies, FMD	--	--
7	Mangalkui	Cotton, Wheat, Cumin, Sesame, Bajra	Lack of knowledge of modern dry land technologies, Injudicious use of fertilizers & Pesticides	--	--
8	Dharadungari	Cotton, Bajra, Sesame, Wheat, Cumin, Dairy Farming,	Lack of knowledge about weed, pest and diseases & nutrient management HS disease, Trypanosomesis disease	--	--
9	Karmad	Dairy Farming, Cotton, G'nut, Sesame, Wheat, Cumin, Bajra, Gram	Soil salinity, poor drainage system FMD, Lack of knowledge of modern dry land technologies, INM,I PM etc	--	--
10	Ramdevgadh	Dairy Farming, Cotton, G'nut, Sesame, Wheat, Gram, Cumin,	Soil salinity, Awareness for vaccination & artificial insemination of animals	--	--

		Bajra			
11	Melapur	Dairy Farming, Cotton, G'nut, Sesame, Gram, Wheat, Cumin, Bajra	Soil salinity, low knowledge of scientific cultivation of crops ,HS disease, Injudicious use of fertilizers & Pesticides	--	--
12	Chhatariyala	Dairy Farming, Cotton, G'nut, Sesame, Gram, Wheat, Cumin, Bajra	Soil salinity, poor water quality for irrigation, , low knowledge about INM, IPM , in crops,	--	--

* Support with problem-cause and interventions diagram

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	0	1	0	0	0	0	0	0	0	1
Varietal Evaluation	0	1	0	0	0	0	0	0	0	1
Integrated Pest Management	0	1	0	1	0	0	0	0	0	2
Integrated Crop Management	0	0	0	0	0	0	0	0	0	0
Integrated Disease Management	0	0	0	0	0	0	0	0	0	0
Small Scale Income Generation Enterprises	0	0	0	0	0	0	0	0	0	0
Weed Management	0	0	0	0	0	0	0	0	0	0
Resource Conservation Technology	0	0	0	0	0	0	0	0	0	0
Farm Machineries	0	0	0	0	0	0	0	0	0	0
Integrated Farming System	0	0	0	0	0	0	0	0	0	0
Seed / Plant production	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
Drudgery Reduction	0	0	0	0	0	0	0	0	0	0
Storage Technique	0	0	0	0	0	0	0	0	0	0
Mushroom cultivation	0	0	0	0	0	0	0	0	0	0
Others (Pl. Specify)	0	0	0	1	0	0	0	0	0	1
Total	0	3	0	2	0	0	0	0	0	5

A2. Abstract on the number of technologies refined in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management	0	0	0	0	0	0	0	0	0	0
Varietal Evaluation	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0
Integrated Crop Management	0	0	0	0	0	0	0	0	0	0
Integrated Disease Management	0	0	0	0	0	0	0	0	0	0
Small Scale Income Generation Enterprises	0	0	0	0	0	0	0	0	0	0
Weed Management	0	0	0	0	0	0	0	0	0	0
Resource Conservation Technology	0	0	0	0	0	0	0	0	0	0
Farm Machineries	0	0	0	0	0	0	0	0	0	0
Integrated Farming System	0	0	0	0	0	0	0	0	0	0
Seed / Plant production	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
Drudgery Reduction	0	0	0	0	0	0	0	0	0	0
Storage Technique	0	0	0	0	0	0	0	0	0	0
Mushroom cultivation	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0

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

Thematic areas	**Cattle**	**Poultry**	**Piggery**	**Rabbitry**	**Fisheries**	**TOTAL**
Evaluation of Breeds	0	0	0	0	0	0
Nutrition Management	0	0	0	0	0	0
Disease of Management	0	0	0	0	0	0
Value Addition	0	0	0	0	0	0
Production and Management	0	0	0	0	0	0
Feed and Fodder	0	0	0	0	0	0
Small Scale income generating enterprises	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

A4. Abstract on the number of technologies refined in respect of livestock enterprises

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds	0	0	0	0	0	0
Nutrition Management	0	0	0	0	0	0
Disease of Management	0	0	0	0	0	0
Value Addition	0	0	0	0	0	0
Production and Management	0	0	0	0	0	0
Feed and Fodder	0	0	0	0	0	0
Small Scale income generating enterprises	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

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	Sesamum	Assessment of sulphur in Sesamum	3	3	1.2
Varietal Evaluation	Sesamum	Varietal assessment of Sesamum Guj Til-4 in Surendranagardistrict	3	3	1.2
Integrated Pest Management	Cotton	Management of sucking pests in Cotton.	3	3	1.2
	Sesamum	Management of sesame leaf webber under rainfed condition.	3	3	1.2
Other (Pls Specify)	Cotton	Assessment of high density planting in Cotton.	3	3	1.2
Total			15	15	6.0

B.2. Technologies Refined under various Crops:- (NIL)

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
Evaluation of breeds	0	0	0	0
Nutrition management	Buffalo	1	5	5
Disease management	0	0	0	0
Value addition	0	0	0	0
Production and management	0	0	0	0
Feed and fodder	0	0	0	0
Small scale income generating enterprises	0	0	0	0
Total			5	5

B.4. Technologies Refined under Livestock and other enterprises:- NIL

C1. Results of Technologies Assessed
Results of On Farm Trial

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
Sesamum	Dry fariing	1. Lack of knowledge of sulphur application. 2. Sulphur deficient soil of district (60% Area) 3. Unbalance fertilization.	Assessment of sulphur in Sesamum	3	Assessment of sulphur in Sesamum	Yield , Cost of production , Gross-Net Return and B:C Ratio	Yield	-	BC ratio is higher in recommended dose of fertilizer	-	-

Cotton		1. Lack of knowledge about the use of particular pesticides. 2. No adoption of recommended practices. 3. Farmers follows instruction given by the local pesticides retailer.	Management of sucking pests in Cotton.	3	Management of sucking pests in Cotton.	Yield, No. of Sucking pest/Plant, Cost of production, Gross-Net Return and B:C Ratio	Yield, No. of Sucking pest/Plant	More net return Rs. 7677/ha obtained from recommended practices application of the systemic insecticide will be start at pest infestation occurred	Spider and lady bird beetle population was observed maximum in treatment and Seed cotton yield was higher in recommended Practices	-	-
Sesamum	Dry farming		Varietal assessment of Sesamum Guj Til-4 in Surendranagar district	3	Varietal assessment of Sesamum Guj Til-4 in Surendranagar district	Yield , Cost of production , Gross-Net Return and B:C Ratio	Yield	-	In aberrant weather sesame crop variety GT-4 performed better because it is short duration variety	-	-

Sesamum		1. Lack of knowledge about the use of particular pesticides. 2. No adoption of recommended practices. 3. Farmers follows instruction given by the local pesticides retailer.	Management of sesame leaf webber under rainfed condition.	3	Management of sesame leaf webber under rainfed condition.	Yield, No. of leaf webber/Plant, Cost of production, Gross-Net Return and B:C Ratio	Yield, No. of leaf webber/Plant	-	-	-	-
Cotton		1. Low yield of cotton. 2. Less optimum plant population per unit area.	Assessment of high density planting in Cotton.	3	Assessment of high density planting in Cotton.	Yield, Lint production /boll, No. of bolls/plant, Cost of production, Gross-Net Return and B:C Ratio	Yield, Lint production /boll, No. of bolls/plant	-	-	-	-

Buffaloes		1. Low milk production due to improper nutrient management of milch animals 2. Infertility and reproductive problems in animals.	Assessment of effect of mineral mixture and by pass protein supplement in increasing milk production in buffaloes		Assessment of effect of mineral mixture and by pass protein supplement in increasing milk production in buffaloes	Milk Yield and No. of ainseminat ion for conceptio n and heat regularity	Milk Yield	Result Awaited	-	-	-

Contd..

	Technology Assessed	Source of Technology	Production (Seed Yield q/ha)	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
1. Sesamum	Technology option 1 (Farmer's practice)	Agricultural Research Station, JAU, Amreli	5.25	-	20960	1.59
	Technology option 2		5.90	-	24985	1.86
	Technology option 3		6.15	-	26305	1.92
2. Cotton	Technology option 1 (Farmer's practice)	Cotton Research Station, JAU, Junagadh	16.47	-	57656	3.00
	Technology option 2		17.72	-	65333	3.36
	Technology option 3		-	-	-	-
3. Sesamum	Technology option 1 (Farmer's practice)	Agricultural Research Station, JAU, Amreli	5.10		24450	1.77
	Technology option 2		5.80		29700	2.15
4. Sesamum	Technology option 1 (Farmer's practice)	DFRS, JAU, Targhadiya	-	338 kg/ha	8267	1.60
	Technology option 2		-	372 kg/ha	10758	1.80
5. Cotton	Technology option 1 (Farmer's practice)	Agricultural Research Station, JAU, Amreli	-	1380 kg/ha	43330	1.83
	Technology option 2		-	1520 kg/ha	48220	1.96
	Technology option 3		-	1680 kg/ha	55080	2.16
6. Buffaloes	Technology option 1 (Farmer's practice)	AAU, Anand	Result Awaited	-		
	Technology option 2					

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

(a)

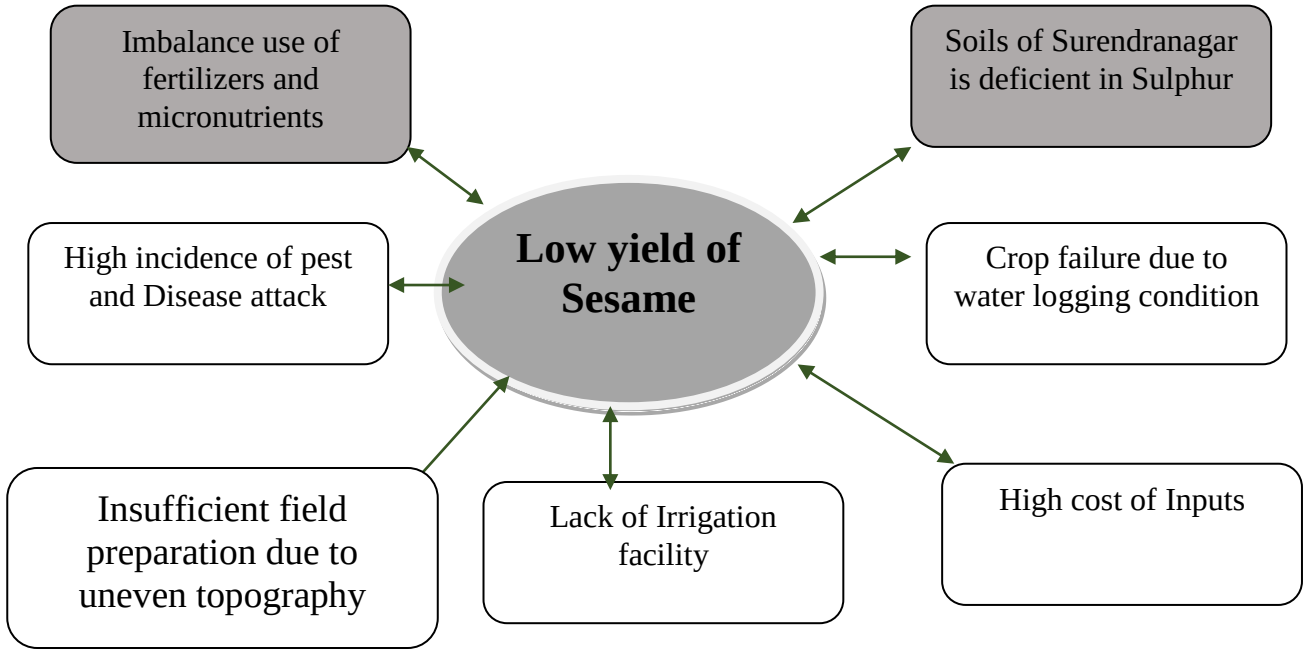
1 Title of Technology Assessed:- **Assessment of sulphur in Sesamum**

2 Problem Definition:-

Sesame (Sesamum indicum,L) is an oilseed crop grown mainly for its seeds that contain approximately 50% oil and 25% protein (Rheenen, 1973). The presence of antioxidants (sesamum, sesiamolin and sesamol) makes the oil to be one of the most stable vegetable oil in the world.

Sesamum cultivation is being practiced in Surendranagar District in Kharif season. This is oilseed crop. Farmers got low yield due to imbalance fertilization. In Surendranagar district, soil sample survey data reveals that there is 60 percent of total cultivable area is deficient in available sulphur nutrient. For oil seed crop, sulphur is essential element for getting optimum production. Farmers are not aware about the importance and role of sulphur in sesamum production. Thus the assessment of sulphur is to be taken.

Problem Cause Diagram



3 Details of technologies selected for assessment:-

Management of sulphur application in Sesamum

Treatments
1. Farmers practice (Control)(90 kg DAP +90 kg Urea / ha)
2.Recommended dose of fertilizer (50-25-40 NPK kg/ha) through DAP & Urea+ 20 kg Sulphur through Gypsum
(55 g DAP + 55 kg Urea +66 kg MOP + 100 kg Gypsum / ha)
3. Recommended dose of fertilizer (50-25-40 NPK kg/ha) through Ammonium Sulphate& Single Super Phosphate.
238kg AS + 166 kg SSP + 66 kg MOP / ha)

4 Source of technology:- Agricultural Research Station, JAU, Amreli

5 Production system and thematic area:- Rainfed and Dry Farming

6 Performance of the Technology with performance indicators:-

Results of assessment		
Av. Seed Yield (qt/ha)		
T1	**T2**	**T3**
5.25	5.90	6.15

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

Techniques:- BC ratio is higher in recommended dose of fertilizer

8 Final recommendation for micro level situation:-

Technology Assessed / Refined Seed Cotton (Qt/ha)	**Seed yield (Qt/ha)**	**Total Cost (Rs/ha)**	**Gross return / ha**	**Net Return (Profit) in Rs /ha**	**BC Ratio**
T-1: Farmers practice	5.25	13165	34125	20960	1.59
T-2: Recommended dose of fertilizer (50-25-40 NPK kg/ha) through DAP & Urea+ 20 kg Sulphur through Gypsum	5.90	13365	38350	24985	1.86
T-3: Recommended dose of fertilizer (50-25-40 NPK kg/ha) through Ammonium Sulphate& Single Super Phosphate.	6.15	13670	39975	26305	1.92

9 Constraints identified and feedback for research:- nil

10 Process of farmers participation and their reaction:- nil

(b)

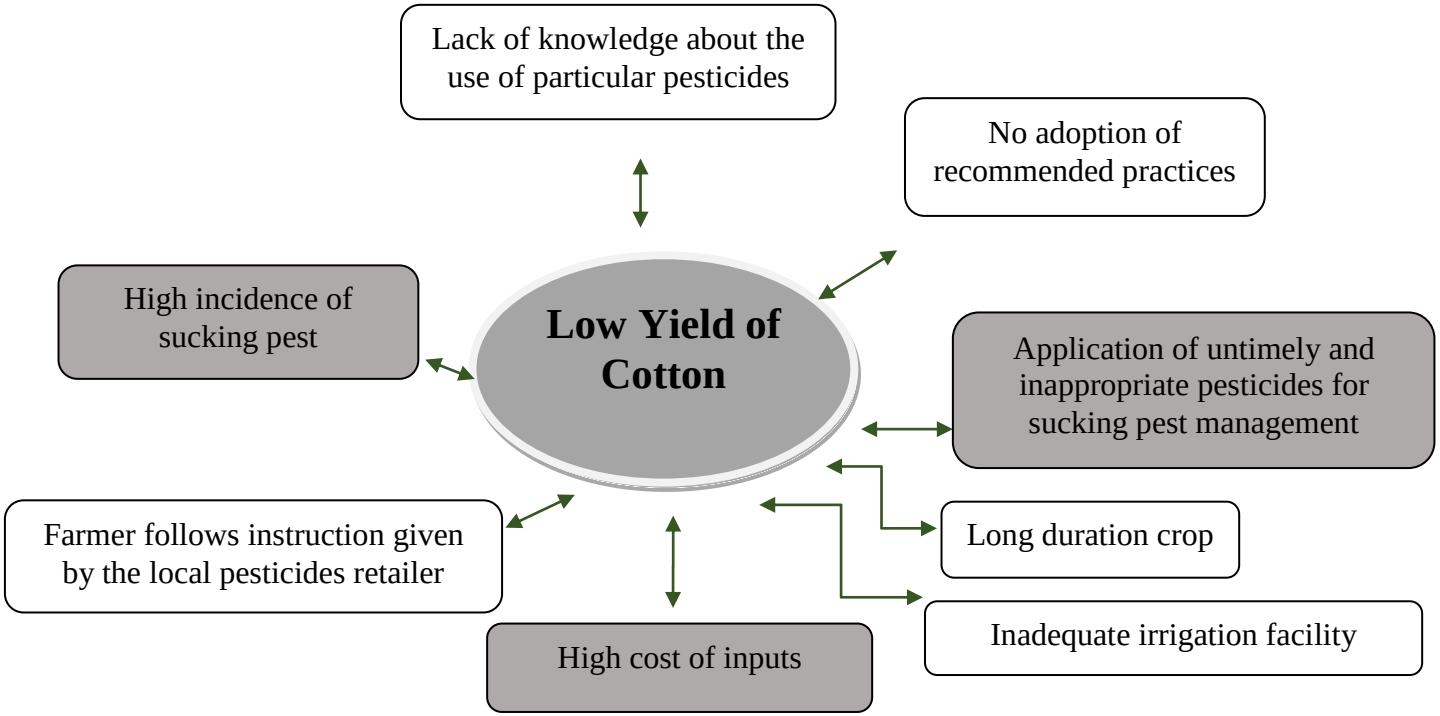
1. Title of Technology refined:- **Management of sucking pests in Cotton**

2 Problem Definition

Saurashtra account 65 % area of the state and contributes 68 % in the total cotton production of the state. Average lint production of the Saurashtra is 754 kg/ha as against 615 kg/ha of the state (2007-08). Among the different districts of Gujarat, Surendranagar ranks first in total cotton production of the state (22 %), followed by Rajkot (16.6 %), Bhavnagar (15.8 %), Vadodara (7.7 %) and Amreli (7.2 %). Thus cotton is very important crop of the Saurashtra region for sustainable agricultural production. After invention of Bt technology in cotton, sucking pest become major pest of the crop. Farmers are practicing excess use chemical pesticides without following recommended dose as prescribed by concerned scientist. Therefore cost of cultivation inevitably increase and some time crop get failure due to inappropriate and excessive use of chemical pesticides.

The manipulation of different doses in various insecticides for the control of sucking pest in the cotton crop. This OFT traces the transformation in the cotton production through recommended technology in the Surendranagar district.

Problem Cause Diagram



3 Details of technologies selected for refinement

Management of sucking pests in cotton.

Treatments

1.Farmers practice (Use of conventional insecticides after infestation)

2. Recommended practices : Application of the systemic insecticide will be start at pest infestation occurred. (Acetamiprid: 20 SP @ 2 gm/10 litre of water or Thiamethoxam 25% WG @ 4 gm/10 litre or Profenophos 50 EC @ 20 ml/10 Litre of water at the time of infestation.)

4 Source of technology:- Cotton research station, Junagadh

5 Production system and thematic area:- Rainfed and Dry Farming

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

Pooled Data of 4-Year (2014-15 to 2017-18)

Technology Assessed / Refined	Population				Seed cotton (Qt/ha)	NetReturn (Profit) in Rs. / unit	BC Ratio
	Jassid/ 3 leaves	White Fly/ 3 leaves	Spider/ plant	Lady bird beetle/plant			
T_1	9.20*	4.33*	0.38*	0.34*	16.47	57656	3.00
T_2	7.37*	3.08*	0.41*	0.37*	17.72	65333	3.36

***** Data indicated Average of three different dated observations.

Results : Data in the table revealed maximum sucking pest infestation (Jassid and White fly) was observed in T_1 followed by T_2 treatments, spider and lady bird beetle population was observed maximum in treatment T_2, Seed cotton yield was higher in recommended Practices.More net return Rs. 7677/ha obtained from recommended practices application of the systemic insecticide will be start at pest infestation occurred. (Acetamiprid: 20 SP @ 2 gm/10 litre of water or Thiamethoxam 25% WG @ 4 gm/10 litre or Profenophos 50 EC @ 20 ml/10 Litre of water at the time of infestation.)

9 Constraints identified and feedback for research: nil

10 Process of farmers participation and their reaction: nil

(c)

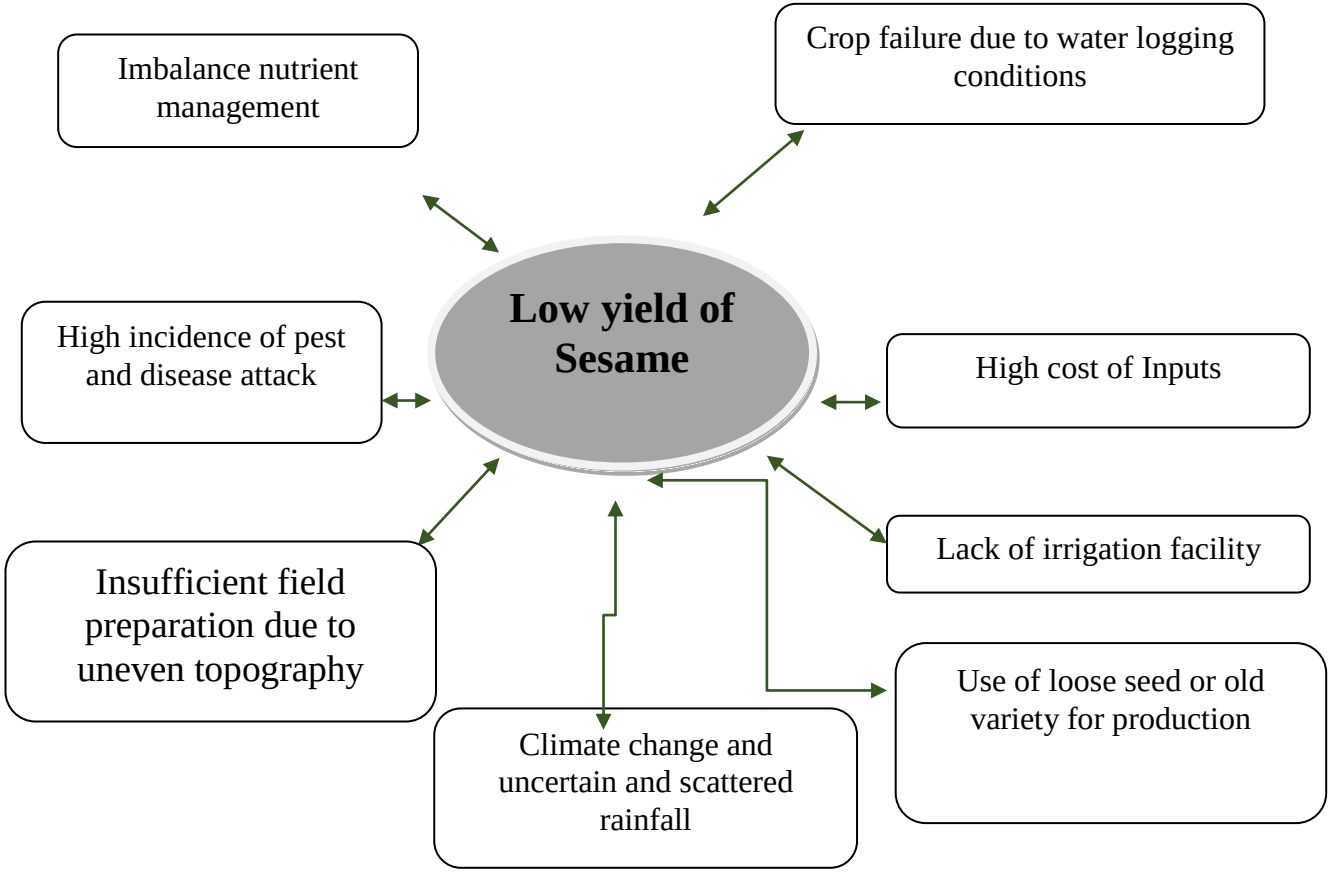
1 Title of Technology:- Assessed **Varietal assessment of SesamumGuj Til-4 in Surendranagardistrict**

2 Problem Definition

Among the oilseeds, sesame seeds are a good source of quality oil, i.e. around 50%of its total mass. India occupies first position in both sesame production and sesame export worldwide (Anonymous 2008). Among the sesame growing states, Gujarat contributes 28.6% to total sesame production in the country. The state has a great potential for sesame production for domestic and export markets but the yield of this valu able crop is relatively low especially in rainy season due to lack of improved varieties as well as resistance to diseases and pests of economic importance and suitability to changing climatic conditions.

White seeded sesame variety G.Til 4 was found suitable for cultivation

in North Saurashtra Region of Gujarat. This variety showed yield increment of 18.28% and10.79% over G.Til 2 and G.Til 3, respectively. G.Til 4 is at least 5 days earlier than both the checks.



3 Details of technologies selected for assessment

4 Source of technology:- Agricultural Research Station, JAU, Amreli

5 Production system and thematic area:- Rainfed and Dry Farming

6 Performance of the Technology with performance indicators

Technology Assessed / Refined	Seed yield (Qt/ha)	Total Cost (Rs/ha)	Gross return / ha	Net Return (Profit) in Rs. / ha	BC Ratio
T_{-1} : Variety: Guj Til-2 / Local	5.10	13800	38250	24450	1.77
T_{-2} :Variety: Guj Til-4	5.80	13800	43500	29700	2.15

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

In aberrant weather sesame crop variety GT-4 performed better because it is short duration variety

8 Final recommendation for micro level situation:nil

9 Constraints identified and feedback for research:nil

10 Process of farmers participation and their reaction: nil

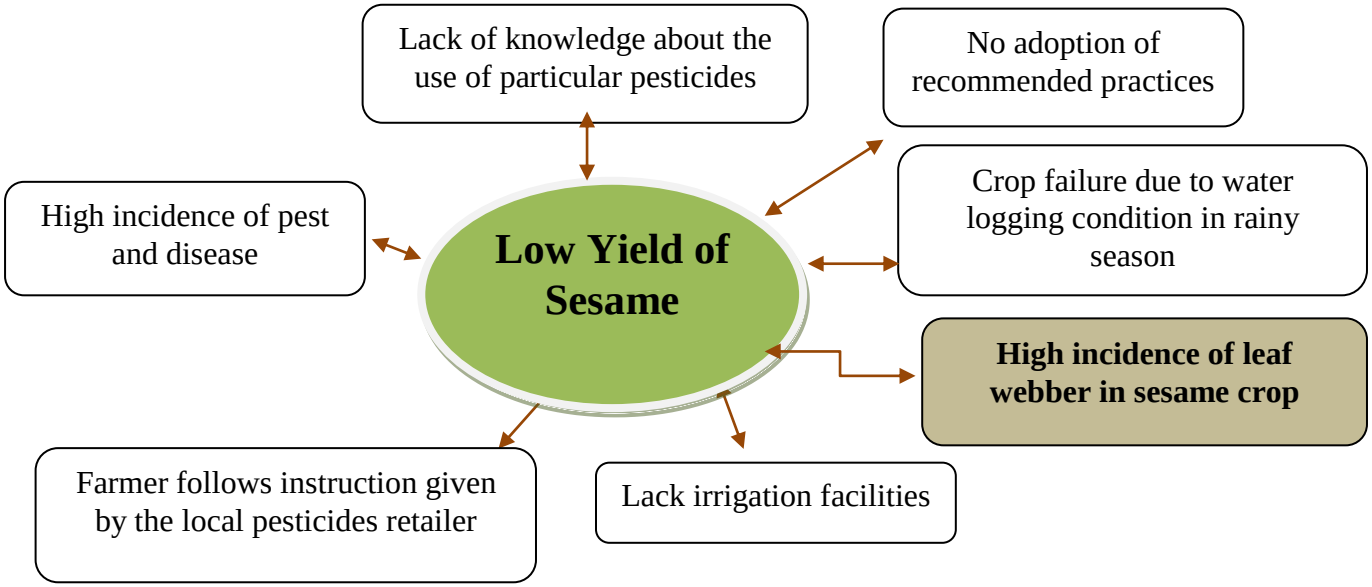
(d)

1 Title of Technology:- **Assessed Management of sesame leaf webber under rainfed condition.**

2 Problem Definition:-

Sesame (Sesamum indicum,L) is an oil seed crop grown mainly for its seeds that contain approximately 50% oil and 25% protein (Rheenen, 1973). Sesamum cultivation is being practiced in Surendranagar District in *Kharif* season. This is oilseed crop. Leaf webber cause 10-15 % yield loss in crop. Farmers got low yield due to 1. Lack of knowledge about the use of specific pesticide for effective management of leaf webber in sesame. 2. No adoption of recommended practices.

Problem Cause Diagram



3 Details of technologies selected for assessment

Treatments
1. Farmers practice(Acephate 40gm/15 lt, Quinalphos 40 ml/15 lt,, Monocrotophos 35 ml/15 lt water after infestation)
2. Recommended practices Application of the insecticide will be start at pest infestation occurred. Cartap hydrochloride 50% S.P. @ 10 gm/10 Litre of water at the time of infestation.

4 Source of technology:- Dry Farming Research Station,JAU,Targhadia

5 Production system and thematic area;

6 Performance of the Technology with performance indicators

Technology Assessed / Refined	Average of 10 plants/treat of three different date observations	% Increase in yield over farmer's practice	Yield (kg/ha)	Net retune (Rs/ha)	BCR
T_1	0.50	--	338	8267	1.60
T_2	0.35	10.05	372	10758	1.80
Results : Leaf webber infestation maximum observed in T_1(Farmer's practices) treatment. Minimum infestation in T_2 (Recommended practices) treatment. Seed yield was high in Cartap hydrochloride 50% S.P. @ 10 gm/10 Litre of water at the time of infestation. The yield was increased by 10.05 per cent in T_2 over T_1 treatment.					

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

8 Final recommendation for micro level situation: nil

9 Constraints identified and feedback for research: nil

10 Process of farmers participation and their reaction: nil

(e)

1 Title of Technology Assessed:- Assessment of high density planting in Cotton.

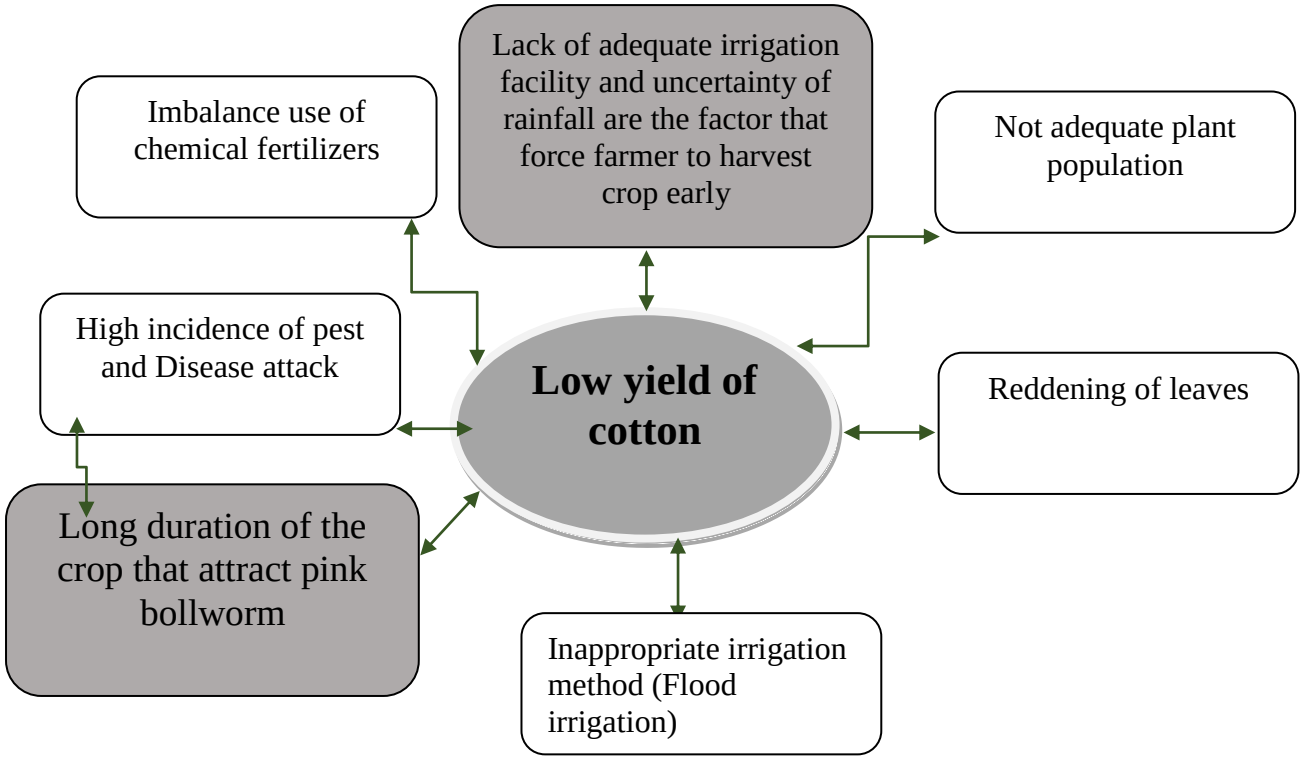
2 Problem Definition

Surendranagar district ranks first in total cotton production of the state (22 %), followed by Rajkot (16.6 %), Bhavnagar (15.8 %) respectively. Thus cotton is very important crop of the district for sustainability point of view.

Since last two to three years, infestation of pink bollworm in cotton, uncertainty of rainfall and scattered rain and changing climatic condition, now farmers are forced to harvest crop as against they assumed for 180 to 240 days period. Ultimately this resulted in low production due to inadequate plant population and less no. of bolls per plant and per unit area.

The manipulation of plant density and crop geometry is a time tested agronomic technique for achieving high crop yield. Several leading cotton producing countries like USA, Australia, Brazil, Uzbekistan and China have developed suitable plant types to accumulate plant densities varying from 1 lakh to 2.5 lakh plants/ha with using narrow and ultra narrow row spacing. This OFT traces the transformation in the cotton production in the district.

Problem Cause Diagram:



3 Details of technologies selected for assessment

Treatments

1. Farmer Practice: Sowing of cotton at spacing 150 x 45 cm (14815) plants / ha)
2. Recommendation: Sowing of cotton at spacing 120 x 45 cm. (18,518 plants / ha)
3. Intervention: Sowing of cotton at spacing 90 x 30 cm. (37037 plants / ha)

4 Source of technology: Agricultural Research Station, JAU, Amreli

5 Production system and thematic area: Irrigated and dry farming

6 Performance of the Technology with performance indicators

Technology Option	Yield (kg/ha)	Total Cost (Rs/ha)	Gross return / ha	Net Return (Profit) in Rs. / ha	BC Ratio
T_1 : Sowing of cotton at spacing 150 x 45 cm (14875) plants/ha	1380	23600	66930	43330	1.83
T_2 :Recommendation: sowing of cotton at spacing 120 x 45 cm. (18,518 plants/ha)	1520	24500	73720	48220	1.96
T_3Intervention: Sowing of cotton at spacing 90 x 30 cm. (37037 plants/)	1680	25400	81480	55080	2.16

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

8 Final recommendation for micro level situation:nil

9 Constraints identified and feedback for research:nil

10 Process of farmers participation and their reaction:nil

(f) Title of OFT: Effect of mineral mixture and by pass protein supplement in increasing milk production in buffaloes

1. Agro Ecological Zone : North Saurastra Agroclimatic Zone- VI

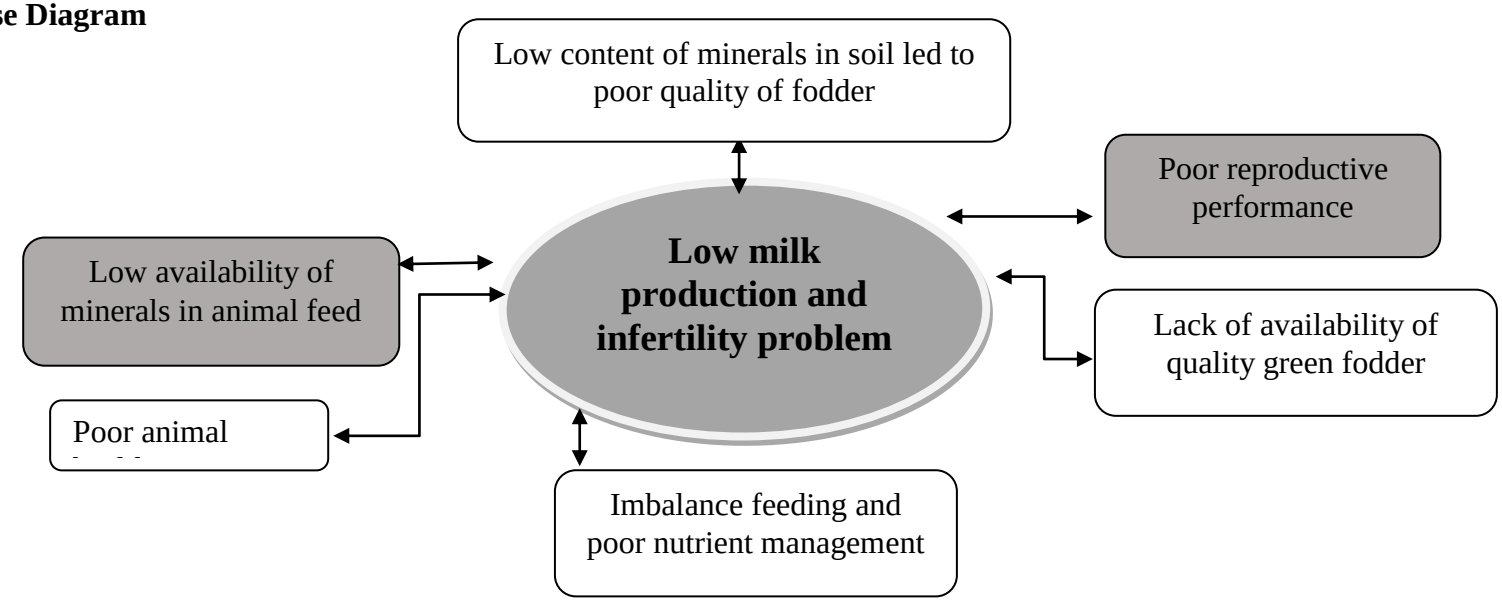
2. Production system : Irrigated

Low availability of required minerals in animal feed causes productive and reproductive problems in animals. Infertility in dairy buffalo is one of the problems in the region. It causes loss in milk production. By supplementation of mineral mixture, deficiency of these minerals can be fulfilled. Mineral mixture is beneficial to improve milk production, fat percentage and reproductive parameters in animals which enhance overall returns to the dairy farmers.

Objective	To increase milk yield and regularity of heat
Problem statement	3. Low milk production due to improper nutrient management of milch animals 4. Infertility and reproductive problems in animals.
Reason	Low milk production and infertility problem in dairy buffaloes
Technical Intervention	Enhancement of milk production with improvement in reproductive efficiency

Treatments	T_1: Farmer practice (No use of mineral mixture and by pass protein) T_2: Mineral mixture 30gm/animal/day + By pass protein supplement 800 gm/animal/day for 60 days
Parameter	1. Milk yield (lit/lac) 2. No. of insemination for conception and heat regularity.
No. of farmers	05
No. of Animals	10
Source of technology	AAU, Anand
Result	Awaited

Problem Cause Diagram



D1. Results of Technologies Refined (NIL)

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	Wheat	CP	GW – 366	FLD, Field Day & Training	22	2670	1867
2	Cumin	PP	G Cumin-4				
3	Gram	CP	G Gram-3				
4	Moong	CP	GM-4				
5	Sesame	CP	G Til-3				
6	G'nut	PP	DM				
7	G'nut-Bio	PP	*Trichoderma harzianum*				
8	Cotton	CP	INM				
9	Groundnut (NMOOP)	CP	GJG-9/GJG-31/GJG-22				
10	Chick pea (NFSM)	CP	GJG-3/GG-5				

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	Wheat	CP	GW – 366	*Rabi*-2017-18	08	08	3	17	20	-
2	Cumin	PP	G Cumin-4	*Rabi*-2017-18	08	08	6	14	20	-
3	Gram	CP	G Gram-3	*Rabi*-2017-18	04	04	2	8	10	-
4	Moong	CP	GM-4	*Kharif*-2017-18	04	04	3	7	10	-
5	Sesame	CP	G Til-3	*Kharif*-2017-18	04	04	5	5	10	-
6	G'nut	PP	DM	*Kharif*-2017-18	04	04	1	9	10	-
7	G'nut-Bio	PP	*Trichoderma harzianum*	*Kharif*-2017-18	02	02	0	5	05	-
8	Cotton	CP	INM	*Kharif*-2017-18	10	10	8	17	25	-
9	Groundnut (NMOOP)	CP	GJG-9/GJG-31/GJG-22	*Kharif*-2017-18	50	50	12	51	63	
10	Chick pea (NFSM)	CP	GJG-3/GG-5	*Rabi*-2017-18	20	20	6	19	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					
Wheat	Rabi 17-18	Irrigated	Medium black	L	M	H	Juwar	18-Nov-17	16-Mar-18	1521	27
		Irrigated		L	M	H	G'nut	25-Nov-17	17-Mar-18		
		Irrigated	--"--	L	M	H	Juwar	24-Nov-17	18-Mar-18		
		Irrigated	--"--	L	M	H	G'nut	22-Nov-17	19-Mar-18		
		Irrigated	--"--	L	M	H	Greengram	4-Dec-17	20-Mar-18		
		Irrigated	--"--	L	M	H	Juwar	28-Nov-17	21-Mar-18		
		Irrigated	--"--	L	M	H	G'nut	25-Nov-17	22-Mar-18		
		Irrigated	--"--	L	M	H	Juwar	10-Nov-17	23-Mar-18		
		Irrigated	--"--	L	M	H	Cotton	18-Nov-17	24-Mar-18		
		Irrigated	--"--	L	M	H	Sesame	25-Nov-17	25-Mar-18		
		Irrigated	--"--	L	M	H	Greengram	18-Nov-17	26-Mar-18		
		Irrigated	--"--	L	M	H	Juwar	29-Nov-17	27-Mar-18		
		Irrigated	--"--	L	M	H	Sesame	27-Nov-17	28-Mar-18		
		Irrigated	--"--	L	M	H	G'nut	22-Nov-17	29-Mar-18		
		Irrigated	--"--	L	M	H	Juwar	24-Nov-17	30-Mar-18		
		Irrigated	--"--	L	M	H	Sesame	13-Nov-17	31-Mar-18		
		Irrigated	--"--	L	M	H	Cotton	15-Nov-17	1-Apr-18		
		Irrigated	--"--	L	M	H	Greengram	5-Dec-17	2-Apr-18		
		Irrigated	--"--	L	M	H	Juwar	20-Nov-17	3-Apr-18		
		Irrigated	--"--	L	M	H	G'nut	8-Dec-17	4-Apr-18		
Cumin	Rabi 17-18	Irrigated	--"--	L	M	H	Juwar	9-Nov-17	03-Mar-18		
		Irrigated	--"--	L	M	H	Juwar	1-Nov-17	20-Feb-18		
		Irrigated	--"--	L	M	H	Cotton	14-Nov-17	28-Feb-18		
		Irrigated	--"--	L	M	H	Bajara	12-Nov-17	22-Feb-18		
		Irrigated	--"--	L	M	H	Juwar	2-Nov-17	19-Feb-18		
		Irrigated	--"--	L	M	H	Sesame	8-Nov-17	22-Feb-18		

		Irrigated	--"--	L	M	H	Juwar	14-Nov-17	02-Mar-18		
		Irrigated	--"--	L	M	H	G'nut	9-Nov-17	21-Feb-18		
		Irrigated	--"--	L	M	H	Juwar	18-Nov-17	06-Mar-18		
		Irrigated	--"--	L	M	H	Sesame	7-Nov-17	19-Feb-18		
		Irrigated	--"--	L	M	H	Greengram	6-Nov-17	26-Feb-18		
		Irrigated	--"--	L	M	H	Juwar	11-Nov-17	28-Feb-18		
		Irrigated	--"--	L	M	H	Cotton	2-Nov-17	26-Feb-18		
		Irrigated	--"--	L	M	H	Sesame	4-Nov-17	17-Feb-18		
		Irrigated	--"--	L	M	H	Juwar	11-Nov-17	28-Feb-18		
		Irrigated	--"--	L	M	H	Juwar	6-Nov-17	14-Feb-18		
		Irrigated	--"--	L	M	H	Bajara	1-Nov-17	24-Feb-18		
		Irrigated	--"--	L	M	H	G'nut	8-Nov-17	20-Feb-18		
		Irrigated	--"--	L	M	H	Sesame	12-Nov-17	02-Mar-18		
		Irrigated	--"--	L	M	H	Juwar	8-Nov-17	23-Feb-18		
Gram	Rabi 17-18	Irrigated	--"--	L	M	H	Juwar	25-Oct-17	10-Feb-18		
		Irrigated	--"--	L	M	H	Juwar	30-Oct-17	14-Feb-18		
		Irrigated	--"--	L	M	H	Sesame	4-Nov-17	22-Feb-18		
		Irrigated	--"--	L	M	H	Bajara	28-Oct-17	10-Feb-18		
		Irrigated	--"--	L	M	H	Bajara	4-Nov-17	15-Feb-18		
		Irrigated	--"--	L	M	H	Juwar	28-Oct-17	11-Feb-18		
		Irrigated	--"--	L	M	H	Greengram	5-Nov-17	23-Feb-18		
		Irrigated	--"--	L	M	H	Cotton	23-Oct-17	09-Feb-18		
		Irrigated	--"--	L	M	H	G'nut	4-Nov-17	16-Feb-18		
		Irrigated	--"--	L	M	H	Bajara	4-Nov-17	25-Feb-18		
Green Gram	*Kharif 17-18*	Rainfed	--"--	L	M	H	Wheat	12-Jun-17	14-Sep-17		
		Rainfed	--"--	L	M	H	Wheat	13-Jun-17	9-Sep-17		
		Rainfed	--"--	L	M	H	Cotton	12-Jun-17	15-Sep-17		
		Rainfed	--"--	L	M	H	Wheat	14-Jun-17	10-Sep-17		
		Rainfed	--"--	L	M	H	Wheat	12-Jun-17	14-Sep-17		
		Rainfed	--"--	L	M	H	Cotton	13-Jun-17	16-Sep-17		
		Rainfed	--"--	L	M	H	Cumin	12-Jun-17	17-Sep-17		
		Rainfed	--"--	L	M	H	Wheat	14-Jun-17	12-Sep-17		
		Rainfed	--"--	L	M	H	Wheat	12-Jun-17	16-Sep-17		

		Rainfed	--"--	L	M	H	Wheat	12-Jun-17	13-Sep-17		
Sesame	*Kharif 17-18*	Rainfed	--"--	L	M	H	Cumin	13-Jun-17	10-Sep-17		
		Rainfed	--"--	L	M	H	Cumin	12-Jun-17	8-Sep-17		
		Rainfed	--"--	L	M	H	Wheat	14-Jun-17	5-Sep-17		
		Rainfed	--"--	L	M	H	Cotton	13-Jun-17	8-Sep-17		
		Rainfed	--"--	L	M	H	Cumin	12-Jun-17	11-Sep-17		
		Rainfed	--"--	L	M	H	Wheat	12-Jun-17	5-Sep-17		
		Rainfed	--"--	L	M	H	Wheat	13-Jun-17	4-Sep-17		
		Rainfed	--"--	L	M	H	Cotton	14-Jun-17	6-Sep-17		
		Rainfed	--"--	L	M	H	Cumin	13-Jun-17	8-Sep-17		
		Rainfed	--"--	L	M	H	Wheat	13-Jun-17	10-Sep-17		
G'nut	*Kharif 17-18*	Rainfed	Medium black	L	M	H	Wheat	12-Jun-17	10-Oct-17		
		Rainfed		L	M	H	Cumin	13-Jun-17	15-Oct-17		
		Rainfed	--"--	L	M	H	Wheat	12-Jun-17	12-Oct-17		
		Rainfed	--"--	L	M	H	Sesame	14-Jun-17	17-Oct-17		
		Rainfed	--"--	L	M	H	Wheat	12-Jun-17	22-Oct-17		
		Rainfed	--"--	L	M	H	Cotton	11-Jun-17	20-Oct-17		
		Rainfed	--"--	L	M	H	G'nut	12-Jun-17	24-Oct-17		
		Rainfed	--"--	L	M	H	Cotton	14-Jun-17	25-Oct-17		
		Rainfed	--"--	L	M	H	Wheat	12-Jun-17	10-Oct-17		
		Rainfed	--"--	L	M	H	Wheat	11-Jun-17	19-Oct-17		
Bio-agent	*Kharif 17-18*	Rainfed	Medium black	L	M	H	G'nut	11-Jun-17	20-Oct-17		
		Rainfed		L	M	H	G'nut	13-Jun-17	24-Oct-17		
		Rainfed	--"--	L	M	H	Wheat	12-Jun-17	14-Oct-17		
		Rainfed	--"--	L	M	H	Cotton	14-Jun-17	10-Oct-17		
		Rainfed	--"--	L	M	H	Wheat	12-Jun-17	15-Oct-17		
Cotton	*Kharif 17-18*	Irrigated	Medium black	L	M	H	Cotton	10-Jun-17	1-Jan-18		
		Irrigated		L	M	H	Cotton	12-Jun-17	22-Jan-18		
		Irrigated	--"--	L	M	H	Wheat	10-Jun-17	10-Jan-18		
		Irrigated	--"--	L	M	H	Wheat	10-Jun-17	7-Jan-18		
		Irrigated	--"--	L	M	H	Cotton	13-Jun-17	25-Dec-17		
		Irrigated	--"--	L	M	H	G'nut	12-Jun-17	5-Jan-18		
		Irrigated	--"--	L	M	H	Wheat	10-Jun-17	21-Dec-17		

		Irrigated	--"--	L	M	H	Cumin	14-Jun-17	14-Jan-18		
		Irrigated	--"--	L	M	H	Cotton	10-Jun-17	4-Jan-18		
		Irrigated	--"--	L	M	H	Gram	11-Jun-17	15-Dec-17		
		Irrigated	--"--	L	M	H	Gram	15-Jun-17	27-Dec-17		
		Irrigated	--"--	L	M	H	Gram	13-Jun-17	10-Jan-18		
		Irrigated	--"--	L	M	H	Gram	12-Jun-17	30-Dec-17		
		Irrigated	--"--	L	M	H	Cumin	12-Jun-17	6-Jan-18		
		Irrigated	--"--	L	M	H	Gram	12-Jun-17	25-Dec-17		
		Irrigated	--"--	L	M	H	Gram	14-Jun-17	7-Jan-18		
		Irrigated	--"--	L	M	H	G'nut	12-Jun-17	17-Jan-18		
		Irrigated	--"--	L	M	H	Gram	12-Jun-17	20-Jan-18		
		Irrigated	--"--	L	M	H	Wheat	14-Jun-17	2-Jan-18		
		Irrigated	--"--	L	M	H	Cumin	18-Jun-17	23-Dec-17		
		Irrigated	--"--	L	M	H	Gram	16-Jun-17	30-Dec-17		
		Irrigated	--"--	L	M	H	Cotton	14-Jun-17	10-Jan-18		
		Irrigated	--"--	L	M	H	Cumin	13-Jun-17	14-Jan-18		
		Irrigated	--"--	L	M	H	Cotton	15-Jun-17	15-Jan-18		
		Irrigated	--"--	L	M	H	Gram	12-Jun-17	14-Jan-18		

Technical Feedback on the demonstrated technologies

Chickpea : -GJG-3	• It is good variety over local variety for all parameters. • Farmer demanded seeded verities for vegetable purpose in both irrigated & non irrigated conditions. • Average 2-3 grains per pod is found in GJG3 variety whereas in local variety only 1-2 grains were observed. • In nutshell, farmers preferred GJG3 variety due to High Yielding character, bold seeded size and prominent to wilt resistant. • Grain size of this variety is also of bold than local variety, hence may fetch good market price.
Cumin :- GC-4	• High yielder and wilt resistance but delayed germination observed. • Farmer demanded blight resistant variety.
Wheat : GW: 366	• Yield better than Lok-1 and GW-496, baking quality observed good.
Sesame	• Guj. Til-3 is higher yielder over all local varieties.
Green gram	• Guj. Green Gram-4 is bold seeded and it is also suitable for late monsoon condition.
Groundnut	GJG-31:- ✓ good for pod and fodder yield

	✓ resistant against stem rot disease GJG-9:- ✓ Early mature variety ✓ Higher yielder over all local varieties. GJG-22:- ✓ Medium seeded variety ✓ Resistant against stem rot disease ✓ Higher yielder over all local varieties.
Brinjal (GJLB-4)	✓ Higher yielder over local varieties. ✓ Less infection observed fruit borer and white fly
Tomato (JT-3)	✓ Higher yielder over all local varieties.

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days				
		1	08/09/17	26	
		1	20/09/17	37	
		1	22/09/17	35	
		1	22/09/17	31	
		1	10/11/17	25	
		1	16/11/17	22	
		1	27/11/17	36	
		1	07/11/17	25	
		1	18/01/18	41	
		1	19/01/18	26	
		1	08/02/18	52	
		1	28/02/18	57	
		1	01/03/18	39	
	Total	**13**	**-**	**452**	
2	Farmers Training	38	-	1032	
3	Media coverage	1	-	57	
4	Training for extension functionaries	3	-	95	

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										
Groundnut																		
	DM		GJG-9	10	4	24.13	12.75	18.06	16.50	9.47	27402	74508	47106	2.72	26682	68063	41381	2.55
	PLP	Bio-Agent		5	2	22	17.13	19.38	17.32	11.68	27402	79922	52520	2.92	25652	71445	45793	2.79
NMOOP	CP		GJG-31	20	16	31.50	9.4	23.11	20.81	11.06	27402	95339	67937	3.48	26762	85841	59074	3.21
NMOOP	CP		GJG-9	10	8	30.16	15.94	21.22	19.01	11.64	27402	87518	60116	3.19	26762	78396	51629	2.93
NMOOP	CP		GJG-22	33	26	28.13	10	16.69	14.88	12.11	27402	68828	41426	2.51	26762	61394	34627	2.29
Sesamum																		
	CP		GT-3	10	4	5.75	4.06	4.87	4.47	8.92	13800	31647	17847	2.29	13725	29055	15330	2.12

* 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										
Greengram																		
	CP	Variety	GM-4	10	4	5.25	3.87	4.54	4.15	9.62	11080	21583	10503	1.95	10980	19689	8709	1.79
Chickpea																		
	CP	Variety	GJG-3	10	4	29.38	13.5	19.13	14.01	36.49	20980	66938	45958	3.19	20660	49044	28384	2.37
NFSM	CP	Variety	GJG-3	25	20	30	13.1	22.76	17.33	31.37	22180	79660	57480	3.59	20980	60638	39658	2.89

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

** BCR= GROSS RETURN/GROSS COST

FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average										
Cereals																	
Wheat																	
GWW-366	CP	Varietal	20	8	68.88	31.00	47.91	40.75	17.6	23140	81441	58301	3.52	22740	69275	46535	3.05
Cumin																	
GC-4	DM	DM	20	8	10.25	5.75	7.44	6.48	14.75	27475	100406	72931	3.65	27255	87497	60242	3.21
Cotton																	
Bt cotton	INM	INM	25	10	30.13	14.88	23.10	20.52	12.59	28660	121270	92610	4.23	29200	107713	78513	3.69
Lucerne																	
Anand Lucerne-3	Fodder	Variety	10	1	Result awaited												
Vegetables																	
Tomato																	
JT-3	CP	Varietal	10	0.1	366.5	288.24	306.8	255.1	19.9	14150	47554	33404	3.36	12150	34533	22383	2.84
Brinjal																	
GJLB-4	CP	Varietal	10	0.1	388.8	291.23	322.76	276.5	16.8	10450	37117	26667	3.55	9735	29028	19293	2.98

* 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)
Sheep & Goat																	
Goat (Zalawad)	LPM	Deworming	10	5	Result awaited												
Buffalo																	
	ANM	Mineral Mixture	5	5	2400 lit/La.	2000 lit/La.	20	-	-	90000	130000	40000	1.44	80000	100000	20000	1.25

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

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
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	0	0	0	0	0	0	0	0	0	0
Resource Conservation Technologies	0	0	0	0	0	0	0	0	0	0
Cropping Systems	1	24	0	24	2	0	2	26	0	26
Crop Diversification	0	0	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0	0	0
Micro Irrigation/irrigation	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Crop Management	0	0	0	0	0	0	0	0	0	0
Soil & water conservatioin	1	27	3	30	5	0	5	32	3	35
Integrated nutrient management	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	1	0	17	17	0	2	2	0	19	19
Organic Farming	1	0	31	31	0	6	6	0	37	37
Total	**4**	**51**	**51**	**102**	**7**	**8**	**15**	**58**	**59**	**117**
II Horticulture										
a) Vegetable Crops	0	0	0	0	0	0	0	0	0	0
Production of low value and high valume crops	1	29	1	30	2	0	2	31	1	32
Off-season vegetables	0	0	0	0	0	0	0	0	0	0
Nursery raising	0	0	0	0	0	0	0	0	0	0
Exotic vegetables	0	0	0	0	0	0	0	0	0	0
Export potential vegetables	0	0	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0	0	0
Protective cultivation	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	6	354	23	377	2	2	4	356	25	381
Total (a)	7	383	24	407	4	2	6	387	26	413
b) Fruits										
Training and Pruning	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	0	0	0	0	0	0	0	0	0	0
Management of young plants/orchards	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (b)	0	0	0	0	0	0	0	0	0	0
c) Ornamental Plants										
Nursery Management	0	0	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0	0	0

Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (c)	0	0	0	0	0	0	0	0	0	0
d) Plantation crops										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (d)	0	0	0	0	0	0	0	0	0	0
e) Tuber crops										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (e)	0	0	0	0	0	0	0	0	0	0
f) Spices	0	0	0	0	0	0				
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (f)	0	0	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants										
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
Value addition	7	10	312	322	0	0	0	10	312	322
Total (g)	**7**	**10**	**312**	**322**	**0**	**0**	**0**	**10**	**312**	**322**
GT (a-g)	**14**	**393**	**336**	**729**	**4**	**2**	**6**	**397**	**338**	**735**
III Soil Health and Fertility Management										
Soil fertility management	0	0	0	0	0	0	0	0	0	0
Integrated water management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0
Balance use of fertilizers	0	0	0	0	0	0	0	0	0	0
Soil and Water Testing	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	9	465	32	497	0	0	0	465	32	497
Total	**9**	**465**	**32**	**497**	**0**	**0**	**0**	**465**	**32**	**497**
IV Livestock Production and Management										
Dairy Management	0	0	0	0	0	0	0	0	0	0
Poultry Management	0	0	0	0	0	0	0	0	0	0
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	7	35	215	250	5	0	5	40	215	255
Disease Management	4	60	211	271	0	0	0	60	211	271
Feed & fodder technology	0	0	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	1	11	12	23	3	2	5	14	14	28
Total	**12**	**106**	**438**	**544**	**8**	**2**	**10**	**114**	**440**	**554**
V Home Science/Women										

empowerment										
Household food security by kitchen gardening and nutrition gardening	0	0	0	0	0	0	0	0	0	0
Design and development of low/minimum cost diet	0	0	0	0	0	0	0	0	0	0
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0	0	0
Processing and cooking	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0
Value addition	1	0	18	18	0	10	10	0	28	28
Women empowerment	0	0	0	0	0	0	0	0	0	0
Location specific drudgery reduction technologies	0	0	0	0	0	0	0	0	0	0
Rural Crafts	1	0	40	40	0	2	2	0	42	42
Women and child care				0			0	0	0	0
Kitchen Garden	6	27	304	331	0	0	0	27	304	331
Total	**8**	**27**	**362**	**389**	**0**	**12**	**12**	**27**	**374**	**401**
VI Agril. Engineering										
Farm Machinary and its maintenance	17	766	27	793	4	0	4	770	27	797
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**17**	**766**	**27**	**793**	**4**	**0**	**4**	**770**	**27**	**797**
VII Plant Protection										
Integrated Pest Management	3	60	0	60	15	0	15	75	0	75
Integrated Disease Management	0	0	0	0	0	0	0	0	0	0
Bio-control of pests and diseases				0			0	0	0	0
Production of bio control agents and bio pesticides	1	31	0	31	3	0	3	34	0	34
Pink Ball Warm	12	493	7	500	20	0	20	513	7	520
Total	**16**	**584**	**7**	**591**	**38**	**0**	**38**	**622**	**7**	**629**
VIII Fisheries										
Integrated fish farming	0	0	0	0	0	0	0	0	0	0
Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0

Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IX Production of Inputs at site										
Seed Production	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Apiculture	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
X Capacity Building and Group Dynamics										
Leadership development	0	0	0	0	0	0	0	0	0	0
Group dynamics	1	46	0	46	0	0	0	46	0	46
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	0	0	0	0	0	0	0	0	0	0
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**1**	**46**	**0**	**46**	**0**	**0**	**0**	**46**	**0**	**46**
XI Agro-forestry										
Production technologies	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	2	28	26	54	0	0	0	28	26	54
Total	**2**	**28**	**26**	**54**	**0**	**0**	**0**	**28**	**26**	**54**
GRAND TOTAL	**83**	**2466**	**1279**	**3745**	**61**	**24**	**85**	**2527**	**1303**	**3830**
(C) Extension Personnel										
Productivity enhancement in field crops	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0

Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	1	25	0	25	3	0	3	28	0	28
Capacity building for ICT application	1	29	0	29	3	0	3	32	0	32
Management in farm animals	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0
any other (pl.specify)	1	27	0	27	2	0	2	29	0	29
TOTAL	**3**	**81**	**0**	**81**	**8**	**0**	**8**	**89**	**0**	**89**
Grand Total	**86**	**2547**	**1279**	**3826**	**69**	**24**	**93**	**2616**	**1303**	**3919**

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
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	0	0	0	0	0	0	0	0	0	0
Resource Conservation Technologies	0	0	0	0	0	0	0	0	0	0
Cropping Systems	1	23	0	23	3	3	6	26	3	29
Crop Diversification	0	0	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0	0	0
Micro Irrigation/irrigation	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Crop Management	2	42	2	44	4	2	6	46	4	50
Soil & water conservatioin	0	0	0	0	0	0	0	0	0	0
Integrated nutrient management	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	1	12	3	15	2	2	4	14	5	19
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**4**	**77**	**5**	**82**	**9**	**7**	**16**	**86**	**12**	**98**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops	0	0	0	0	0	0	0	0	0	0

Off-season vegetables	0	0	0	0	0	0	0	0	0	0
Nursery raising	1	17	0	17	3	0	3	20	0	20
Exotic vegetables	0	0	0	0	0	0	0	0	0	0
Export potential vegetables	0	0	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0	0	0
Protective cultivation	1	24	0	24	3	0	3	27	0	27
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (a)	**2**	**41**	**0**	**41**	**6**	**0**	**6**	**47**	**0**	**47**
b) Fruits										
Training and Pruning	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	0	0	0	0	0	0	0	0	0	0
Management of young plants/orchards	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	1	21	0	21	2	0	2	23	0	23
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (b)	**1**	**21**	**0**	**21**	**2**	**0**	**2**	**23**	**0**	**23**
c) Ornamental Plants										
Nursery Management	0	0	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total (c)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
d) Plantation crops										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	1	7	16	23	0	2	2	7	18	25
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (d)	**1**	**7**	**16**	**23**	**0**	**2**	**2**	**7**	**18**	**25**
e) Tuber crops										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices										

Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (f)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
g) Medicinal and Aromatic Plants										
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (g)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GT (a-g)	**4**	**69**	**16**	**85**	**8**	**2**	**10**	**77**	**18**	**95**
III Soil Health and Fertility Management										
Soil fertility management	0	0	0	0	0	0	0	0	0	0
Integrated water management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0
Balance use of fertilizers	0	0	0	0	0	0	0	0	0	0
Soil and Water Testing	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IV Livestock Production and Management										
Dairy Management	0	0	0	0	0	0	0	0	0	0
Poultry Management	0	0	0	0	0	0	0	0	0	0
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	0	0	0	0	0	0	0	0	0	0
Disease Management	1	9	1	10	6	1	7	15	2	17
Feed & fodder technology	1	17	0	17	3	0	3	20	0	20
Production of quality animal products	1	13	0	13	4	0	4	17	0	17
Others (pl specify)	1	36	0	36	0	0	0	36	0	36
Total	**4**	**75**	**1**	**76**	**13**	**1**	**14**	**88**	**2**	**90**
V Home										

Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	0	0	0	0	0	0	0	0	0	0
Design and development of low/minimum cost diet	0	0	0	0	0	0	0	0	0	0
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0	0	0
Processing and cooking	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
Women empowerment	0	0	0	0	0	0	0	0	0	0
Location specific drudgery reduction technologies	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Women and child care	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
VI Agril. Engineering										
Farm Machinary and its maintenance	0	0	0	0	0	0	0	0	0	0
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
VII Plant Protection										
Integrated Pest Management	3	66	0	66	19	0	19	85	0	85
Integrated Disease Management	1	25	3	28	4	0	4	29	3	32
Bio-control of pests and	0	0	0	0	0	0	0	0	0	0

diseases										
Production of bio control agents and bio pesticides	1	17	0	17	3	0	3	20	0	20
Others (pl specify)	1	21	0	21	5	0	5	26	0	26
Total	**6**	**129**	**3**	**132**	**31**	**0**	**31**	**160**	**3**	**163**
VIII Fisheries										
Integrated fish farming	0	0	0	0	0	0	0	0	0	0
Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IX Production of Inputs at site										
Seed Production	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0

Apiculture	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
X Capacity Building and Group Dynamics										
Leadership development	0	0	0	0	0	0	0	0	0	0
Group dynamics	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	1	20	3	23	4	3	7	24	6	30
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**1**	**20**	**3**	**23**	**4**	**3**	**7**	**24**	**6**	**30**
XI Agro-forestry										
Production technologies	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	**19**	**370**	**28**	**398**	**65**	**13**	**78**	**435**	**41**	**476**
Grand Total	**19**	**370**	**28**	**398**	**65**	**13**	**78**	**435**	**41**	**476**

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**
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	0	0	0	0	0	0	0	0	0	0
Resource Conservation Technologies	0	0	0	0	0	0	0	0	0	0
Cropping Systems	2	47	0	47	5	3	8	52	3	55
Crop Diversification	0	0	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0	0	0
Micro Irrigation/irrigation	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Crop Management	2	42	2	44	4	2	6	46	4	50
Soil & water conservatioin	1	27	3	30	5	0	5	32	3	35
Integrated nutrient management	0	0	0	0	0	0	0	0	0	0
Production of organic	2	12	20	32	2	4	6	14	24	38

inputs										
Others (pl specify)	1	0	31	31	0	6	6	0	37	37
Total	**8**	**128**	**56**	**184**	**16**	**15**	**31**	**144**	**71**	**215**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops	1	29	1	30	2	0	2	31	1	32
Off-season vegetables	0	0	0	0	0	0	0	0	0	0
Nursery raising	1	17	0	17	3	0	3	20	0	20
Exotic vegetables	0	0	0	0	0	0	0	0	0	0
Export potential vegetables	0	0	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0	0	0
Protective cultivation	1	24	0	24	3	0	3	27	0	27
Others (pl specify)	6	354	23	377	2	2	4	356	25	381
Total (a)	**9**	**424**	**24**	**448**	**10**	**2**	**12**	**434**	**26**	**460**
b) Fruits										
Training and Pruning	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	0	0	0	0	0	0	0	0	0	0
Management of young plants/orchards	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	1	21	0	21	2	0	2	23	0	23
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (b)	**1**	**21**	**0**	**21**	**2**	**0**	**2**	**23**	**0**	**23**
c) Ornamental Plants										
Nursery Management	0	0	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (c)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
d) Plantation crops										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	1	7	16	23	0	2	2	7	18	25
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (d)	**1**	**7**	**16**	**23**	**0**	**2**	**2**	**7**	**18**	**25**
e) Tuber crops										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value	0	0	0	0	0	0	0	0	0	0

addition										
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (f)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
g) Medicinal and Aromatic Plants										
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	7	10	312	322	0	0	0	10	312	322
Total (g)	**7**	**10**	**312**	**322**	**0**	**0**	**0**	**10**	**312**	**322**
GT (a-g)	**18**	**462**	**352**	**814**	**12**	**4**	**16**	**474**	**356**	**830**
III Soil Health and Fertility Management										
Soil fertility management	0	0	0	0	0	0	0	0	0	0
Integrated water management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0
Balance use of fertilizers	0	0	0	0	0	0	0	0	0	0
Soil and Water Testing	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	9	465	32	497	0	0	0	465	32	497
Total	**9**	**465**	**32**	**497**	**0**	**0**	**0**	**465**	**32**	**497**
IV Livestock Production and Management										
Dairy Management	0	0	0	0	0	0	0	0	0	0
Poultry Management	0	0	0	0	0	0	0	0	0	0
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	7	35	215	250	5	0	5	40	215	255
Disease Management	5	69	212	281	6	1	7	75	213	288
Feed & fodder technology	1	17	0	17	3	0	3	20	0	20
Production of quality animal products	1	13	0	13	4	0	4	17	0	17
Others (pl specify)	2	47	12	59	3	2	5	50	14	64
Total	**16**	**181**	**439**	**620**	**21**	**3**	**24**	**202**	**442**	**644**

V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	0	0	0	0	0	0	0	0	0	0
Design and development of low/minimum cost diet	0	0	0	0	0	0	0	0	0	0
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0	0	0
Processing and cooking	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0
Value addition	1	0	18	18	0	10	10	0	28	28
Women empowerment	0	0	0	0	0	0	0	0	0	0
Location specific drudgery reduction technologies	0	0	0	0	0	0	0	0	0	0
Rural Crafts	1	0	40	40	0	2	2	0	42	42
Women and child care	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	6	27	304	331	0	0	0	27	304	331
Total	**8**	**27**	**362**	**389**	**0**	**12**	**12**	**27**	**374**	**401**
VI Agril. Engineering										
Farm Machinary and its maintenance	17	766	27	793	4	0	4	770	27	797
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**17**	**766**	**27**	**793**	**4**	**0**	**4**	**770**	**27**	**797**
VII Plant Protection										
Integrated Pest Management	6	126	0	126	34	0	34	160	0	160
Integrated Disease Management	1	25	3	28	4	0	4	29	3	32
Bio-control of pests and diseases	0	0	0	0	0	0	0	0	0	0
Production of bio control agents and bio pesticides	2	48	0	48	6	0	6	54	0	54

Others (pl specify)	13	514	7	521	25	0	25	539	7	546
Total	**22**	**713**	**10**	**723**	**69**	**0**	**69**	**782**	**10**	**792**
VIII Fisheries										
Integrated fish farming	0	0	0	0	0	0	0	0	0	0
Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IX Production of Inputs at site										
Seed Production	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Apiculture	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
X Capacity Building and Group Dynamics										
Leadership development	0	0	0	0	0	0	0	0	0	0
Group dynamics	1	46	0	46	0	0	0	46	0	46
Formation and Management	0	0	0	0	0	0	0	0	0	0

of SHGs										
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	1	20	3	23	4	3	7	24	6	30
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**2**	**66**	**3**	**69**	**4**	**3**	**7**	**70**	**6**	**76**
XI Agro-forestry										
Production technologies	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	2	28	26	54	0	0	0	28	26	54
Total	**2**	**28**	**26**	**54**	**0**	**0**	**0**	**28**	**26**	**54**
GRAND TOTAL	**102**	**2836**	**1307**	**4143**	**126**	**37**	**163**	**2962**	**1344**	**4306**
(C) Extension Personnel										
Productivity enhancement in field crops	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	1	25	0	25	3	0	3	28	0	28
Capacity building for ICT application	1	29	0	29	3	0	3	32	0	32
Management in farm animals	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	1	27	0	27	2	0	2	29	0	29

TOTAL	**3**	**81**	**0**	**81**	**8**	**0**	**8**	**89**	**0**	**89**
Grand Total	**105**	**2917**	**1307**	**4224**	**134**	**37**	**171**	**3051**	**1344**	**4395**

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	0	0	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
Small scale processing	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0	0	0
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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	0	0	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
Small scale processing	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0	0	0
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0

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	0	0	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
Small scale processing	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0	0	0
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0

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	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0

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	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers	0	0	0	0	0	0	0	0	0	0

organization										
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0

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	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0

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	0	0	0	0	0	0	**0**	**0**	**0**	**0**
Commercial production of vegetables	**4**	**331**	**0**	**331**	**0**	**0**	**0**	**331**	**0**	**331**

Production and value addition										
Fruit Plants	0	0	0	0	0	0	**0**	**0**	**0**	**0**
Ornamental plants	0	0	0	0	0	0	**0**	**0**	**0**	**0**
Spices crops	0	0	0	0	0	0	**0**	**0**	**0**	**0**
Soil health and fertility management	**9**	**465**	**32**	**497**	**0**	**0**	**0**	**465**	**32**	**497**
Production of Inputs at site	0	0	0	0	0	0	**0**	**0**	**0**	**0**
Methods of protective cultivation	0	0	0	0	0	0	**0**	**0**	**0**	**0**
Organic Farming	**1**	**0**	**31**	**31**	**0**	**6**	**6**	**0**	**37**	**37**
Total	**14**	**796**	**63**	**859**	**0**	**6**	**6**	**796**	**69**	**865**
Post harvest technology and value addition										
Processing and value addition	**7**	**10**	**312**	**322**	**0**	**0**	**0**	**10**	**312**	**322**
Others (pl. specify)				**0**			**0**	**0**	**0**	**0**
Total	**7**	**10**	**312**	**322**	**0**	**0**	**0**	**10**	**312**	**322**
Farm machinery										
Farm machinery, tools and implements	**17**	**766**	**27**	**793**	**4**	**0**	**4**	**770**	**27**	**797**
Pink ball warm (Plant Protection)	**10**	**453**	**3**	**456**	**9**	**0**	**9**	**462**	**3**	**465**
Total	**27**	**1219**	**30**	**1249**	**13**	**0**	**13**	**1232**	**30**	**1262**
Livestock and fisheries										
Livestock production and management	0	0	0	0	0	0	**0**	**0**	**0**	**0**
Animal Nutrition Management	**6**	**15**	**197**	**212**	**0**	**0**	**0**	**15**	**197**	**212**
Animal Disease Management	**4**	**60**	**211**	**271**	**0**	**0**	**0**	**60**	**211**	**271**
Fisheries Nutrition	0	0	0	0	0	0	**0**	**0**	**0**	**0**
Fisheries Management	0	0	0	0	0	0	**0**	**0**	**0**	**0**
Others (pl. specify)	0	0	0	0	0	0	**0**	**0**	**0**	**0**
Total	**10**	**75**	**408**	**483**	**0**	**0**	**0**	**75**	**408**	**483**
Home Science										
Household nutritional security	0	0	0	0	0	0	**0**	**0**	**0**	**0**
Economic empowerment of women	0	0	0	0	0	0	**0**	**0**	**0**	**0**
Drudgery reduction of women	0	0	0	0	0	0	**0**	**0**	**0**	**0**
Kitchen Garden	**6**	**27**	**304**	**331**	**0**	**0**	**0**	**27**	**304**	**331**
Total	**6**	**27**	**304**	**331**	**0**	**0**	**0**	**27**	**304**	**331**
Agricultural Extension										
Capacity Building and Group Dynamics	**1**	**46**	**0**	**46**	**0**	**0**	**0**	**46**	**0**	**46**
Agro Forestry	**2**	**28**	**26**	**54**	**0**	**0**	**0**	**28**	**26**	**54**
Total	**3**	**74**	**26**	**100**	**0**	**0**	**0**	**74**	**26**	**100**
GRAND TOTAL	**67**	**2201**	**1143**	**3344**	**13**	**6**	**19**	**2214**	**1149**	**3363**

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	0	0	0	0	0	0	0	0	0	0
Commercial floriculture	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Commercial vegetable production	0	0	0	0	0	0	0	0	0	0
Integrated crop management	0	0	0	0	0	0	0	0	0	0
Organic farming	0	0	0	0	0	0	0	0	0	0
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Livestock and fisheries	0	0	0	0	0	0	0	0	0	0
Dairy farming	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Poultry farming	0	0	0	0	0	0	0	0	0	0
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Income generation activities	0	0	0	0	0	0	0	0	0	0
Vermicomposting	0	0	0	0	0	0	0	0	0	0
Production of bio-agents, bio-pesticides,	0	0	0	0	0	0	0	0	0	0
bio-fertilizers etc.	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery	0	0	0	0	0	0	0	0	0	0
and implements	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0
Mushroom cultivation	0	0	0	0	0	0	0	0	0	0
Nursery, grafting etc.	0	0	0	0	0	0	0	0	0	0
Tailoring, stitching, embroidery, dying etc.	0	0	0	0	0	0	0	0	0	0
Agril. para-workers, para-vet training	0	0	0	0	0	0	0	0	0	0
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Agricultural Extension	0	0	0	0	0	0	0	0	0	0
Capacity building and group dynamics	0	0	0	0	0	0	0	0	0	0
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Field Day	13	413	55	481
Film Show	21	767	63	851
Kisan Mela	2	23994	11	24007
Exhibition	10	22773	45	22828
Scientists' visit to farmers field	44	460	44	548
Farmer Visit to KVK	0	6226	0	6226
Telephonic information to Farmers	0	6793	0	6793
Farmer Meeting	4	94	8	106
Night Meeting	4	114	8	126
Lectures Delivered	187	31091	561	31839
Swachchhta Pakhwada (16th to 31st May 2017)	1	115	6	122
Mahila Shaktikaran Pakhwadiyu (1st August to 14th August 2017)	1	73	17	91
New India Manthan- Sankalp Se Sidhdhi (30 August 2017)	1	607	12	620
Celebration of Technology Week (25th to 29 September 2017)	1	758	35	794
Processing and Cultivation Pratices of Spices Crop	1	105	9	115
Krishi Unnati Mela 2018	1	309	4	314
Parthenium Week	1	20	2	23
SAC Meeting	1	46	12	59
Total	**293**	**94758**	**892**	**95943**

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	0
Extension Literature	0
Newspaper coverage	11
Popular articles	1
Radio Talks	1
TV Talks	5
Animal health amps (Number of animals treated)	0
Others (pl. specify)	0
Total	**18**

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
Oilseeds						
	Sesamum	GT-3 (TF)	-	11.60		-
		GT-3 (Bredder)	-	6.40		-
	Groundnut	GJG-31 (Bredder)	-	19.60		-
		GJG-9 (Bredder)	-	18.90		-
		GJG-2 (Bredder)	-	6.90		-
		GJG-31 (TF)	-	21.85		-
	Cumin	GC-4 (TF)		2.86		
			Total	**88.11**		
Vegetables						
	Seed Packets	-	-	769 No. of Packets	7690	-
Others						
Fruit	Sapota	Kalipatti	-	1.835	1835	-
	Mango	Kesar	-	2.24	4480	-
	Gunda		-	0.3	450	-
Goat Milk		-	-	35 Lit	385	-
Egggs		-	-	462	2310	-
Total	-	-	-	-	-	-

University products made available to farmers:-

Sr. No.	Name of product	Quantity (In kg or No. or lit)
1	Sawaj Beauveria bassiana	32,419 kg
2	Sawaj Trichoderma	13,890 kg
3	Pheromone traps (for pink bollworm control)	169 No.
4	Lure of pink bollworm	417 No.
5	Vegetable packets	609 No.
6	Bio fertilizers:	
	Rhizobium (500ml Bottle)	737 No.
	Azotobactor (500ml Bottle)	770 No.
	PSM (500ml Bottle)	177 No.

Farm Product

Sr. No.	Product	Selling
1	Eggs	462 No.
2	Milk (Goat)	35 Lit

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
Commercial	-	-	-	-	-	-
Vegetable seedlings	Tomato	JT-5	-	2355	-	133
	Brinjal	GJLB-4	-	4455	-	89
		GJHB-4	-	3000	-	101
	Onion	GJRO-11	-	750	-	53
		GJWO-3	-	750	-	59
Fruits	Papaya	Local	-	500	-	75
Others	-	-	-		-	-
Total	-	-	-	**11810**	-	**510**

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	No. of Farmers
Bio Fertilisers	-	-	-	-
Bio-pesticide	-	-	-	-
Bio-fungicide	-	-	-	-
Bio Agents	-	-	-	-
Others	-	-	-	-
Total	-	-	-	-

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals				
Cows	Male	2	-	-
	Female	1	-	-
Goat	Male	1	-	-
	Female	1	-	-
	Kids	4	-	-
Poultry			-	-
Layers	-	9	-	-
Total	-	**18**	-	-

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	Assessment of frontline demonstration on yield enhancement and Economics of cumin (GC-4) in Surendranagar district of Saurashtra region of Gujarat.	M. F. Broraniya, M. S. Chandawat and B. C. Bochalya	*Guj. J. Ext. Edu.* 28(1):14-17
	Knowledge of farmers about neem coated urea.	M. F. Broraniya, M. S. Chandawat and B. C. Bochalya	*Guj. J. Ext. Edu.* 28(2):375-76
	Adoption of organic farming practices by the farmers of Surendranagar district of Saurashtra region of Gujarat	M. S. Chandawat, B. C. Bochalya and M. F. Broraniya	*Guj. J. Ext. Edu.* 28(2):382-388
	Constraints Faced in Adoption of Organic Farming Practices By the Farmers of Surendranagar District of Saurashtra Region of Gujarat State.	M. S. Chandawat, M. F. Broraniya, B. C. Bochalya, A. M. Parakhia and R. P. Kalma	Abstract Book on "Improving Income of Farmers through Agriculture & Aquaculture through Development Interventions". PP-84
Technical reports	ZERAC	Dr. M. S. Chandawat, Mr. M. F. Broraniya, Mr.D.A.Patel, Dr. B. C. Bochalya, and Dr. R.P.Kalma	-
	ZERAC		
	AGRESCO		
	SAC		
News letters	Quaterly	Dr. M. S. Chandawat, Dr. R.P.Kalma, Mr. M. F. Broraniya, Mr.D.A.Patel and Dr. B. C. Bochalya,	4
	e-news letter		4
Technical bulletins	-	-	-
Popular articles	Insect-Pest management in Vegetable crops	M.V.Pokar, V.K.Dobariya, D.A.Patel and Dr. R.P.Kalma	1
Extension literature	-	-	-
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
-	-	-	-

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).

1. KRISHI VIGYAN KENDRA, JAU, SURENDRANAGAR

High income by producing chickpea crop seed

- **Profile of Farmer:**

Name	**:**	Solanki KhumansinhValjibhai
Village	**:**	Karmad
Taluka	**:**	Chuda
Age	**:**	60-Year (Birth Date13-07-1957)
District	**:**	Surendranagar (Gujarat)
PIN	**:**	363 415

Mobile No.	**:**	9978795667
Education	**:**	10th Pass
Land : Holding		Total 6 Acre : 1 Acre Cotton + Chick Pea 5 Acre Chick Pea
Farming : Experience		42
Crops Grown	**:**	Cotton, Chick-Pea, Sesame
Cropping : System		Sole crop, Intercrop
Livestock	**:**	Total : 6 Animal (3 Cow + 2 Calf +1 Buffalo)

- **Situation analysis/Problem statement :-**

In Karmad village, major crops grown in *Kharif* are cotton, sesamum and bajara and in *Rabi* season, wheat, cumin and chickpea crops. Farmer generally sows chickpea crop by using loose seed (indigenous). Khumansinhbhai was also doing the same. That resultant in low remuneration due to low yield of the crop. Mostly local varieties also infested by *helicoveraarmegera* larvae and wilt problems so this crop is not profitable in consideration of farmer. He grownchickpea crop for home consumption only.

Plan, Implement and Support :-

In the year 2015-16, KVK, JAU, Surendranagar has been provided chick pea's improved crop variety GJG - 3 under NFSM cluster FLD for 20 ha area covering 50 farmers. Solanki Khumansinhwas also one of them.

Its performance was found good and seen increasing demand of chickpea crop variety by other farmers and farmers of neighboring villages, Khumansinhbhai adopted this technology immediately for next year in larger area in hope of good production and high return. And it actually happened to him.

When on the basis of cluster FLD of chickpea crop variety GJG-3, demand of this variety's seed was grown, KVK carried out survey of the need of the seed of the same for next season and said to many farmers that seed production of chickpea crop may be business of profit as there are huge demand may raise for next coming season.

- **Output:-**

He got bumper seed production in the year 2016-17 in the 2 ha area. He stored seed as per the directions given by the scientist of KVK. For that, he sorted the seed material and graded it, stored it in air tight doubled layered plastic laminated gunny bags. At the same time KVK and he himself made publicity of availability of seed material during KVK extension programmes like, Farmers fair, exhibition, farmer meeting, field day and in training programmes. This kept

interested farmers informed about seed's quality, available quantity, price per kg etc. It resulted in purchasing of entire 60.00 quintal seed from his home. He did not even spent a single penny for transportation cost of its selling of 60.00 quintal seed.

- **Out Come:**

After seeing the performance of this variety many farmers of this village and from neighboring villages sought the seed demand from him for next coming season as seed (for the *Rabi* 2016 - 17). He sown in 2 ha land and got 62 quintal production from same area. Out of it he stored 60.00 quintal seed of GJG-3 crop variety properlyfor selling. He provided 60.00 quintal seed material to the 23interested farmers as seed input. This action not only fetched good price for him but it also ensured the availability of good quality of seed at their locality with less price as compare to market. He sold his chickpea seed @Rs. 7500/- per quintal. He earned gross income of 4.61 lakh from 2 ha area. Both of them (he himself and buyers) got benefited and it was win - win situation for both of them.

- **Details are given below:**
  - **Market price : Rs. 5500 per quintal**
  - **Price fetched by sold as seed to other farmer : Rs. 7500 per quintal**

Chickpea Crop sown Area (In ha)	Crop Variety	Cost of cultivation (2 ha)	Total Production	Production as per local variety grown in previous year	Increase in production over local in 2 ha	Quantity sold as seed (In qtl.)	Comparison of price fetched (In Rs.)		Gross profit (As per local variety production)	Total Benefit (In Rs.)
							As per market	As seed sold (450000 +11000)		
2.00	GJG-3	41360	62 qtl	33.60	28.40	60qtl	341000	461000	184800	276200

- **Impact:** Now with in short span of time Karmad village popular having good quality of seed of gram. in current year again farmer grow this seed at their farms and about seeing the good performance of crop this season also good for seed production.

Field day Organized at KarmadVillage

Training Programme at KarmadVillage

Farmers Drying their seed for next crop

Field day Organized at KarmadVillage

2. Prosperity through production and selling of chickpea seed and adoption of climate resilient technology.

1. **Profile of Farmer**:

Name	:	Chauhan JadishbhaiBhagawanbhai
Village	:	Karmad
Taluka	:	Chuda
Age	:	64-Year (Date of Birth 10-12-1953)
District	:	Surendranagar (Gujarat)
PIN	:	363514
Mobile No.	:	9979197277
Education	:	6th Pass
Land Holding	:	Total 15.0 Acre 5 Acre Cotton + Chick Pea 5 Acre Chick Pea) 5 Acre Cotton
Farming Experience	:	51 Year
Crops Grown	:	Cotton, Chick pea, Sesame Sorghum
Cropping System	:	Sole crop Intercrop
Livestock	:	Total 4 Animal (1 Cow + 3 Buffalo)

- **Description of Innovation:**

In Karmad village, major crops grown in *Kharif* are cotton, sesamum and in *Rabi* season, wheat, cumin and chickpea crops. Farmer generally sows chickpea crop by using loose seed (indigenous). Jagdishbhai was also doing the same. That resultant in low remuneration due to low yield of the crop. Mostly local varieties also infested by *helicoveraarmegera* larvae and wilt problems so this crop is not profitable in consideration of farmer. He grownchickpea crop for home consumption only.In the year 2015-16, KVK, JAU, Surendranagar has been provided chick pea's improved crop variety GJG - 3 under NFSM cluster FLD for 20 ha area.

- **Plan, Implement and Support :-**

Shri Jagdishbhai Chauhan earlier grown cotton, cumin and wheat crop in his farm field. He stopped chickpea crop due to occurrence of disease in chick pea as he used local variety for chickpea. As he had had not aware about the new variety of chickpea crop. When KVK gave CFLD on chickpea crop variety GJG-3 and it performed well, he continued it for the next year also. In the year, 2016 – 17, when cotton crop almost got failure due to severe attack of pink bollworm in Bt cotton field. Performance of cotton crop was not looked so good and he was doubtful of getting even 50% of crop production as against of normal year. In this situation, he discussed with KVK scientist and opined that can he go for relay cropping of improved chickpea variety GJG-3 in cotton crop field as intercropping 1:3 ratio. KVK scientist gave him scientific information and supported him.

Accordingly in the year 2016-17, he sown chickpea in 2 ha land as solo crop and got 4000 kg production. In other farm field of 2 haarea, he grown chickpea as relay crop in cotton field. In relay crop, he got 1600kg seed production in 2 ha area which was additional income with cotton yield. Details are given in below table:

- **Income through adoption Relay Cropping : Cotton followed by Chickpea for mitigation of adverse effect on cotton due to changing climatic condition:**

Crop Name	Name of Critical inputs	Yield (q/ha)	Cost of Cultivation (Rs./ha)	Gross Return	Net Return (Rs./ha)
Chick pea	Crop var. GJG-3	8	4525	60000	55475
Cotton	Bt Cotton	16	28500	86000	57500
				Total	**112975**

- **Spread ofInnovation:**

Apart from this, Shri JagdishbhaiBhagvanjibhai sold about 36 quintal chickpea as seed @ Rs. 7500/quintal to farmers of Siyani, Limdi, Lilapur and Patadi village. While chickpea grain price at that time in market was Rs. 5500 to Rs. 6500 per quintal. In this way he fetched additional Rs. 36000.00 by price difference as selling chickpea as seed to other fellow farmers. Many farmers also adopted and inspired from him and acted for horizontal spread of the technology.

Cotton + Chickpea field of Jagadishbhai at Karmad village

Farmer's meeting organized by KVK scientists atJagadishbhai's field at Karmad village

3. Organic Lemon Orchard brings happiness through high income by fetching good market prices.

Profile of Farmer:

Name	**:**	Shri HamirSinhRaghubhaParmar
Village	**:**	Gautamgadh,
Taluka	**:**	Muli
Age	**:**	67 (20-11-1951)
District	**:**	Surendranagar
PIN	**:**	363001
Mobile No.	**:**	9825385048
Education	**:**	B. A. with Politics
Land Holding	**:**	5.98 ha
Farming Experience	**:**	40 Years
Crops grown	**:**	Lemon Orchards with intercropping of vegetables
Cropping System	**:**	Lemon Orchard
Livestock	**:**	01 Cow

Description of Innovation :

Shri Hamirsinh Bhai is a govt retired person, and always worried about the increasing and injudicious use of chemical pesticides and fertilizers in agriculture. Due to this, cost of cultivation increased and also cause deteriorate the soil health. He then decided that after retirement, he will do organic farming in his ancestral land and show the path to other fellow farmer. He then initiated his efforts and also contacted scientists for getting knowledge and guidance for going to organic farming. First he decided to minimize the use of chemical pesticides and fertilizers and then he acquired the knowledge about organic input for providing nutrition, health management etc through organic inputs. He first applied it to his lemon orchard of 1.60 ha. and adopted drip irrigation and ensured the optimum use of available irrigation water, then started the composting of farm waste at his own at his organic farm house. He also reared the buffaloes for getting dung and other product. He then approached and publicized his organically produced lemon. He also acquired the "SCOPE" certificate from GOPCA(Gujarat Organic Products Certification Agency)

Utility of Innovation:

He is getting almost stable production of lemon fruit from 1.6 ha land. He is getting 75 qtl lemon fruits/ and net return is Rs. 409365.00. He himself prepared the various extracts for managing pest and diseases and also producing farm waste composting. By doing this, he reduces the cost of cultivation drastically. He applied drip irrigation and ensured the judicious use of irrigation water and also reduced the labor cost, time saving in irrigation, application of organic nutrient as fertigation through drip system. It saves him money in terms of labour, time and made his work easy with less dependency on labor. Buyers buys directly from his farm and readily paid higher price due to organically produced lemon with high quality and trust on him. It fetched the 15 to 20 % higher money than prevailing market price. He also use the 04 whatsapp group platform for informing his customers regarding availability of production, market price etc. Further on the advise of scientist of KrishiVigyan Kendra, Surendranagar, he initiated the value

addition and processing of organically produced lemon fruits and vegetables. By doing this he will get two fold increase in his net return.

Year	crop	Area (ha)	Production (kg)	Cost of cultivation (Rs.)	Gross income (Rs.)	Net return (Rs.)
2014-15	Lemon + Sapota	1.6	12000	29000	329000	300000
2015-16			13200	164000	526000	362000
2016-17			10740	77825	487190	409365

Spread ofInnovation:

He inspired many farmers to adopt organic farming especially organic farming of orchards. At least 20 farmers adopted organic farming. He also is inspiring the farmers for organic certification for organic farming. Now he proceeded towards value addition and processing of organically produced lemon and would be more provocative towards his advisory services towards fellow farmers.

Organic farming by Hamirsinhbhai's success story media coverage in local news paper

Field visit by KVK Scientists with farmer of GautamgadhVillage

Shri Hamirsinhbhai showing the packaging material for value added products made by lemon fruits

Lemon fruits of Hamirsinhbhai's lemon orchard

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

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

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

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

5.2. Indicate the methodology for identifying OFTs/FLDs (NIL)

5.3. Field activities (NIL)

6. LINKAGES

A. Functional linkage with different organizations

Name of organization	Nature of Linkage
State department of Agriculture	Technology backstoping
Dy. Director of Agriculture (Extension)	Technology backstoping
Dy. Director of Horticulture	Technology backstoping
Dy. Director of Animal husbandry	Technology backstoping
Dy. Director of Soil Conservation	Technology backstoping
Dy. Director of Social Forestry	Technology backstoping
Dy. Director of Fisheries	Technology backstoping
NABARD	Technology backstoping
Jilla Udyog Kendra	Technology backstoping
Milk Co-operative Society	Technology backstoping
State bank of India (Lead bank)	Technology backstoping
Doordarshan Kendra	Technology backstoping
All India Radio	Technology backstoping
ATMA, Surendranagar	Technology backstoping
NHRDF	Technology backstoping
Farmers Training Centre	Technology backstoping
Information department, Surendranagar	Technology backstoping
RSETI, Surendranagar	Technology backstoping

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.)
-	-	-	-

C. Details of linkage with ATMA

a) Is ATMA implemented in your district **Yes**/ No

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**	-	-	-	-
02	**Research projects**	-	-	-	-
03	**Training programmes**	54	2	5	-
04	**Demonstrations**	-	-	-	-
05	**Extension Programmes**				
	Kisan Mela	2	5	-	Collaborate with ATMA
	Technology Week	1	10	1	Collaborate with ATMA
	Exposure visit	-	-	-	-
	Exhibition	2	-	-	During Krishi Mela
06	**Publications**	**NIL**			
07	**Other Activities** (Pl. specify)	-	-	-	-

D. Give details of programmes implemented under National Horticultural Mission

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

E. Nature of linkage with National Fisheries Development Board

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

F. Details of linkage with RKVY

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

7. Convergence with other agencies and departments:

Name of organization
State department of Agriculture
Dy. Director of Agriculture (Extension)
Dy. Director of Horticulture
Dy. Director of Animal husbandry
Dy. Director of Soil Conservation
Dy. Director of Social Forestry
Dy. Director of Fisheries
NABARD
Jilla Udyog Kendra
Milk Co-operative Society
State bank of India (Lead bank)
Doordarshan Kendra
All India Radio
ATMA, Surendranagar
NHRDF
Farmers Training Centre
Information department, Surendranagar
RSETI, Surendranagar
AKRSP

8. Innovator Farmer's Meet

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

9. Farmers Field School (FFS)

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: NIL

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

11. Technology Week celebration during 2017-18 Yes/No, If Yes

Period of observing Technology Week: From: 25th to 29th September 2017.
Total number of farmers visited : 758
Total number of agencies involved : 2
Number of demonstrations visited by the farmers within KVK campus: 758

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies	5	758	Cultivation of Kharif and Rabi crops and their scientific management
Lectures organized	20	758	and seed production technologies of different crops,
Exhibition	5	758	organic farming, integrated farming system
Film show	5	758	cultivation practices for rainfed farming, agricultural entreprenuership,
Fair	0	0	women empowerment etc.
Farm Visit	5	758	Visit of farm's kharif crop farm field and crop cafeteria, integrated farming system demo unit,
Diagnostic Practicals	3	543	fodder demo unit, vermicompost demo unit, Agril. Demo
Supply of Literature (No.)	3000	758	unit, mother ochard demo unit, KVK Museum, Renewable energy
Supply of Seed (q)	0	0	demo unit, solar water lifting devices demo unit.
Supply of Planting materials (No.)	6000	0	
Bio Product supply (Kg)	1750	240	
Bio Fertilizers (q)	0		
Supply of fingerlings	0		
Supply of Livestock specimen (No.)	0		
Total number of farmers visited the technology week	-	758	

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

A. 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
-	-	-
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
Gujarat	**0**	**0**	**0**
Total	**0**	**0**	**0**

E. Seed distribution in drought hit states

State	Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers
Gujarat	**0**	**0**	**0**	**0**
Total	**0**	**0**	**0**	**0**

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 (Pink bollworm control in cotton crop" from KVK, Nana kandhasar to farmers and NGO staff)

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
Gujarat	10	2458	-	-	-	-	-	-	-	-	-	-
Total	10	2458	-	-	-				-			

13. IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
-	-	-	-	-

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) (NIL**)**

C. Details of impact analysis of KVK activities carried out during the reporting period (NIL**)**

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	1	45622 (Plant Protection)	-
May	7	3,20,476 (Plant Protection, Weather Information)	-
June	5	2,33,336 (Plant Protection, Weather Information)	-
July	6	2.80,260 (Plant Protection, Weather Information)	-
August	7	3,26,970 (Plant Protection, Weather Information, Event Information)	-
September	10	4,64,600 (Plant Protection, Weather Information, Event Information)	-
October	5	2,33,500 (Plant Protection, Weather Information)	-
November	8	3,29,860 (Plant Protection, Weather Information)	-
December	8	7,73,384 (Plant Protection, Weather Information, Event Information)	-
January 2018	8	7,3,126 (Plant Protection, Weather Information)	-
February	2	1,23,928 (Plant Protection, Weather Information, Event Information)	-
March	7	2,06,994 (Plant Protection, Weather Information)	-

Name of KVK	Message Type	Type of Messages						
		Crop	**Livestock**	**Weather**	**Marke-ting**	**Aware-ness**	**Other enterprise**	**Total**
Surendranagar (Gujarat)	Text only	9	1	33	0	7	24	74
	Voice only	4	0	3	0	1	16	24
	Voice & Text both	13	1	36	0	8	40	98
	Total Messages	**13**	**1**	**36**	**0**	**8**	**40**	**98**
	Total farmers Benefitted	**696706**	**68998**	**56793**	**0**	**501917**	**2165842**	**3490256**

15. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Vermi-Compost Unit	2017		-	-	1600 kg	-	-	Farm Use in organic plot
2	Guava plantation	2016		VNR-Bihi and Lucknow-	-	-	-	-	-

				49					
3	Orchard (Mango, Guava and Gunda and)	-		Kesar and Kaalipatti		437.5		6765	-
4	*Khati Aamblr* and *Rayan* Orchard	-		Local	-	-	-	-	Demonstrations Only
5	organic farming unit	-		-					
6	Technology museum	-		-	-	-	-	-	
7	Heap method of composting	-		-	-	-	-	-	
8	Crop cafeteria	-		Different crop demostration	-	-	-	-	
9	Gir cow unit	-		Gir	-	-	-	-	
10	Goat Unit	-		Zalawadi Goat	-	-	-	-	
11	Bio Gas Unit	-		-	-	-	-	-	
12	Poultry Unit	-		-	-	-	-	-	
13	Fodder Demonstration Unit -	-		-	-	-	-	-	
14	Medicinal Plant Unit	-		-	-	-	-	-	
15	Nursery Unit	-		-	-	-	-	-	
16	Automatic Weather Station	-		-	-	-	-	-	
17	Solar Photo voltaic water lifting pump	-		-	-	-	-	-	
18	Nadep Compost Unit	-		-	-	-	-	-	
19	Farm Machinery unit	-		-	-	-	-	-	
20	Date Palm Plantation	2016		-	-	-	-	-	

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	-	-	-	-	-	-	-	-	-
Pulses	-	-	-	-	-	-	-	-	-
Oilseeds	Sesamum		3.05	GT-3	(TF)	1160			
			1.89	GT-3	(Bredder	640			
	Groundnut		2.36	GJG-31	Bredder	1960			
			3.03	GJG-9	Bredder	1890			
			0.94	GJG-2	Bredder	690			
			2.18	GJG-31	TF	2185			
Fibers	-	-	-	-	-	-	-	-	-
Spices & Plantation crops (**NIL**)									
Others (specify) (**NIL**)									

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	
1	Cow	Gir	-	-	-	-	-
2	Goat (Male)	Zalawadi				-	-
	Goat (Female)	-	-	-	-	-	-
3	Hen	-	-	-	-	-	-

E. Utilization of hostel facilities

Accommodation available (No. of beds): 25

Months	**No. of trainees stayed**	**Trainee days (days stayed)**	**Reason for short fall (if any)**
April 2017	-	-	-
May 2017	-	-	-
June 2017	-	-	-
July 2017	-	-	-
August 2017	-	-	-
September 2017	-	-	-
October 2017	-	-	-
November 2017	-	-	-
December 2017	-	-	-

January 2018	-	-	-
February 2018	-	-	-
March 2018	50	2	-

F. Database management

S. No	Database target	Database created

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

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

16. FINANCIAL PERFORMANCE

A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	-	-	-	-	-	-	-
With KVK	State Bank of India	Surendranagar (Chotila)	60104	Training Organizer K.V.K Nana Kandhasar	66002464030	363002521	SBIN0060104

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**	8600000	8600000	7058075
2	**Traveling allowances**	79000	79000	65902
3	**Contingencies**			
		1120000	1120000	1076102
TOTAL (A)				
B. Non-Recurring Contingencies				
1	**Works**	0	0	0
2	**Equipments including SWTL & Furniture**	0	0	0
3	**Vehicle** (Four wheeler/Two wheeler, please specify)	0	0	0
4	**Library** (Purchase of assets like books & journals)	0	0	0
TOTAL (B)				
C. REVOLVING FUND		4286194	4286194	11249092
GRAND TOTAL (A+B+C)		14085194	14085194	11249092

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	2511264	1573458	631127	3453595
April 2016 to March 2017	3453595	3291526	2458926	4286194
April 2017 to March 2018	4286194	11249092	5674257	5574835

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

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr.M.S.Chandawat	Senior Scientist and Head	Mahindra Samridhihi Award	New Delhi	06-03-2018
Dr.M.S.Chandawat	Senior Scientist and Head	Krishi Unnati Mela 2018	New Delhi	17-03-2018
Mr. Patel Dipt Anilkumar	Scientist	Workshop-cum-Training on CFLDs on Pulses and Oilseeds	Nau, Navsari, Gujarat	29-01-2018 to 31-01-2018

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

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	38	837	195	1032
Rural youths	00	00	00	00
Extension functionaries	03	91	04	95
Sponsored Training	64	2123	1145	3268
Vocational Training	0	0	0	0
Total	105	3051	1344	4395

2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	88	60	0
Pulses	45	28	0
Cereals	20	08	0
Vegetables	20	0.2	0
Other crops	45	18	0
Hybrid crops	0	0	0
Total	218	114.2	0
Livestock & Fisheries	25	0	15
Other enterprises	0	0	0
Total	25	0	15
Grand Total	243	114.2	15

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	5	15	15
Livestock	1	5	5
Various enterprises	0	0	0
Total	6	20	20
Technology Refined			
Crops	0	0	0
Livestock	0	0	0
Various enterprises	0	0	0
Total	0	0	0
Grand Total	6	20	20

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	98	61634
Other extension activities	8	2033
Total	106	63667

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Lives tock	Weat her	Mark e-ting	Aware -ness	Other enterprise (Plant Protection)	Total
Surendranagar (Gujarat)	Text only	9	1	33	0	7	24	74
	Voice only	4	0	3	0	1	16	24
	Voice & Text both	13	1	36	0	8	40	98
	Total Messages	**13**	**1**	**36**	**0**	**8**	**40**	**98**
	Total farmers Benefitted	**696706**	**68998**	**56793**	**0**	**501917**	**2165842**	**3490256**

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	85.25	-
Planting material (No.)	11810	-
Bio-Products (kg)	-	-
Livestock Production (No.)	-	-
Fishery production (No.)	-	-

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	84	0
Water	21	0
Plant	0	0
Total	**105**	**0**

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	1
2	Conferences	0
3	Meetings	2
4	Trainings for KVK officials	1
5	Visits of KVK officials	12
6	Book published	0
7	Training Manual	0
8	Book chapters	0
9	Research papers	5
10	Lead papers	0
11	Seminar papers	0
12	Extension folder	0
13	Proceedings	1
14	Award & recognition	2
15	On going research projects	0