

## PROFORMA FOR PREPARATION OF ANNUAL REPORT (April-2015-March-2016)

### APR SUMMARY

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

#### 1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	63	1629	3	1632
Rural youths	13	308	0	308
Extension functionaries	4	82	0	82
Sponsored Training	49	1213	547	1760
Vocational Training	4	93	49	142
<b>Total</b>	<b>133</b>	<b>3325</b>	<b>599</b>	<b>3924</b>

#### 2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	25	10	
Pulses	20	08	
Cereals	20	08	
Vegetables	0	0	
Other crops	45	18	
Hybrid crops			
<b>Total</b>	<b>110</b>	<b>44</b>	
Livestock & Fisheries	0	0	
Other enterprises	0	0	
<b>Total</b>	<b>0</b>	<b>0</b>	
<b>Grand Total</b>	<b>110</b>	<b>44</b>	

#### 3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
<b>Technology Assessed</b>			
Crops	5	15	15
Livestock	2	10	10
Various enterprises	0	0	0
<b>Total</b>	<b>7</b>	<b>25</b>	<b>25</b>
<b>Technology Refined</b>			
Crops	0	0	0
Livestock	0	0	0
Various enterprises	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Grand Total</b>	<b>7</b>	<b>25</b>	<b>25</b>

#### 4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	2238	27368
Other extension activities	4	10184
<b>Total</b>	<b>2242</b>	<b>37552</b>

## 5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
	Text only	22	1	36	0	5	0	64
	Voice only	0	0	0	0	0	0	
	Voice & Text both	0	0	0	0	0	0	0
	<b>Total Messages</b>	<b>22</b>	<b>01</b>	<b>36</b>	<b>0</b>	<b>05</b>	<b>0</b>	<b>64</b>
	<b>Total farmers Benefitted</b>	<b>907508</b>	<b>41250</b>	<b>1485014</b>	<b>0</b>	<b>206254</b>	<b>0</b>	<b>2640026</b>

## 6. Seed &amp; Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	56.8	In Stock
Planting material (No.)	10000	-
Bio-Products (kg)	0	0
Livestock Production (No.)	0	0
Fishery production (No.)	0	0

## 7. Soil, water &amp; plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	613	-
Water	18	-
Plant	0	0
<b>Total</b>	<b>631</b>	<b>0</b>

## 8. HRD and Publications :

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

## DETAIL REPORT OF APR-2015-16

### 1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
	Office	FAX	
Krishi Vigyan Kendra, Junagadh Agricultural University Nana-Kandhasar-363 520 <b>Dist: Surendranagar</b>	(02751) 294120	02751 280121	<a href="mailto:surendranagar.kvk@gmail.com">surendranagar.kvk@gmail.com</a>

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

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

#### 1.3. Name of the Programme Coordinator with phone & mobile No

Name	Telephone / Contact		
	Residence	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 30<sup>th</sup> March, 2016)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/OBC/ Others)	Mobile no.	Age (Year)	Email id
1	Programme Coordinator	Dr. M. S. Chandawat	Sr Scientist and Head	Extension Education	37400-67000 (15600-39100)	22320/-	31-3-2015	Permanent	Others	94275 08708	42	drchandawat@rediffmail.com
2	Subject Matter Specialist	Mr. M. F. Borhania	Scientist	Plant Protection	15600-39100	23510/-	18-09-2012	Permanent	Others	94282 97863	48	mfborhaniya@gmail.com
3	Subject Matter Specialist	Dr. B. C. Bochalya	Scientist	Extension Education	15600-39100	22220/-	23-08-2006	Permanent	Others	94277 13771	42	jat_bcb@yahoo.com
4	Subject Matter Specialist	-	-	-	-	-	-	-	-	-	-	-
5	Subject Matter Specialist	-	-	-	-	-	-	-	-	-	-	-
6	Subject Matter Specialist	-	-	-	-	-	-	-	-	-	-	-
7	Subject Matter Specialist	-	-	-	-	-	-	-	-	-	-	-
8	Programme Assistant	Mr. M. V. Pokar	Training Assistant	Extension Education	15500 Fix	-	23-02-2012	Temporary (Fix)	Others	94294 20468	33	mvpokar83@gmail.com
9	Computer Programmer	Mr. P. T. Patel	Computer Programmer	B.E. (Comp.)	9300-34800	11750/-	30-12-2008	Permanent	ST		34	
10	Farm Manager	Mr. M. K. Kanani	Farm Manager	Entomology	15500 Fix	-	01-04-2015	Temporary (Fix)	Other	76240 03555	26	kananimayur551@gmail.com
11	Accountant / Superintendent	Mr. R.P. Vagadiya	O.S. cum Accountant	-	9300-34800	11750/-	01-12-2011	Permanent	Other		34	-
12	Stenographer	Mr. S.H. Shukla	Junior Steno	-	10000 fix	-	19-11-2013	Temporary (Fix)	Other		32	-
13	Driver	Mr. H. R. Gohil	Jeep Driver	-	5200-20200	11870/-	01-08-2006	Permanent	Other		51	-
14	Driver	Vacant	Tractor Driver	-		-	-	-	-	-	-	-
15	Supporting staff	Mr. U.A. Vaidh	Peon	-	4440-7440	9760/-	24-04-2015	Permanent	Other		60	-
16	Supporting staff	Mr. A.M. Dhadvi	Peon	-	2550-3200	7580/-	01-10-2015	Permanent	OBC		55	-

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	4
2.	Under Demonstration Units	16
3.	Under Crops	
4.	Orchard/Agro-forestry	
5.	Others (specify)	20

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	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			158	8,30,750	-	-	-
6	Rain Water harvesting system	RKVY	1/4/10	77	3,00,000	-	-	-
7	Threshing floor			191	13,94,500	-	-	-
8	Farm godown			198	15,72,000	-	-	-
9	implement shed			71	5,00,000	-	-	-

B) Vehicles

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

C) Equipments & AV aids

Name of the equipment	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	Working Cond.
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	Working Cond.
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.

#### 1.8. A). Details SAC meeting\* conducted in the year

The 11<sup>th</sup> Scientific Advisory Committee Meeting of Krishi Vigyan Kendra, JAU, Nana-Kandhasar(Surendranagar) was held at Training Hall, KVK, Nana Kandhasar (Surendranagar) on 3<sup>rd</sup> February, 2016. Following members were remain present in the meeting.

Sr. No.	Name & Designation	Position
1.	<b>Dr. A. R. Pathak Sir</b> Hon'ble Vice Chancellor, JAU, Junagadh	Chairman
2.	<b>Dr. A. M. Parakhia</b> Director of Extension Education, JAU, Junagadh.	Member
3.	<b>Shri Pradeep Singh</b> <b>Dy. Conservator of Forest, Forest Dept, Surendranagar</b>	Member
4.	<b>Dr. B. B. Kabariya</b> Representative of A.D.R. and Research Scientist Main Dry Farming Research Station, JAU, Targhadia	Member
5.	<b>Dr. A. V. Khanpara</b> Programme Co-ordinator, KVK, JAU, Targhadiya	Member

6.	<b>Dr. N. S. Joshi</b> Programme Co-ordinator, KVK, JAU, Amreli	Member
7.	<b>Shri H. D. Vadi</b> District Agriculture Officer, Surendranagar	Member
8.	<b>Shri H. V. Gosai</b> Dy. Director of Agri (Training), Surendranagar	Member
9.	<b>Shri Ramesh Makwana</b> MDT, District Water Shed Development Unit, DRDA, Surendranagar	Member
10.	<b>Shri J K Tiwari</b> Assistant Director, NHRDF, Rajkot	Member
11.	<b>Shri N.K. Parmar</b> Assistant Director, GLDC, Surendranagar	Member
12.	<b>Shri R. S. Prajapati</b> V.O., Representative DY Director of A.H., Surendranagar	Member
13.	<b>Shri A. B. Verma</b> Seniour Technical Officer, NHRDF, Rajkot	Member
14.	<b>Shri Ambrish Matariya</b> Fisheries Officer, Surendranagar	Member
15.	<b>Shri M. J. Choudhary</b> Dy. Managaer, Sursagar Dairy, Surendranagar	Member
16.	<b>Shri Vanraj Sinh Chavda</b> Dairy Officer, Sursagar Dairy, Surendranagar	Invitee
17.	<b>Shri Arun Bedarkar</b> Director, RSETI, Surendranagar	Invitee
18.	<b>Shri R. A. Dela</b> Assistant Suprentendent, Surendranagar	Invitee
19.	<b>Smt. Jashuben D. Meniya</b> ATM (Chotila), ATMA	Member
20.	<b>Smt. Hinaben R. Padaliya</b> ATM(Than), ATMA	Invitee
21.	<b>Shri Nathabhai Somabhai Sanghani</b> At & Post: Motimoldi, Ta. Chotila, Dist. Surendranagar	Member
22.	<b>Smt. Gitaben Pravinbhai Jambukiya</b> At & Post : Magharikheda, Ta. Chotila, Dist. Surendranagar	Member
23.	<b>Shri Pravinbhai Jambukiya</b> At & Post : Magharikheda, Ta. Chotila, Dist. Surendranagar	Invitee farmer
24.	<b>Shri Ranchhodbhai Kamabhai Sambad</b> At & Post: Resamiya, Ta. Chotila, Dist. Surendranagar	Member
25.	<b>Shri Ravjibhai Karmsibhai</b> Progressive Farmer, Village : Chuda Taluka : Chuda, Dist. Surendranagar	Invitee
26.	<b>Shri Poonabhai Laljibhai Chauhan</b> Progressive Farmer, Village : Karmad, Taluka : Chuda, Dist. Surendranagar	Invitee
27.	<b>Shri Mohbatbhai Amarsinh Kathiya</b> At & Post: Ramdevgad, Ta. Chuda, Dist. Surendranagar	Invitee
28.	<b>Shri M. F. Bhorniya</b> SMS- Plant Protection, KVK, JAU, Nana-Kandhasar	Member
29.	<b>Dr. B. C. Bochalya</b> SMS- Extension Education, KVK, JAU, Nana-Kandhasar	Member
30.	<b>Dr. M. S. Chandawat</b> Programme Coordinator, KVK, JAU, Nana-Kandhasar	Member-Secretary

The meeting was chaired by Dr. A. R. Pathak Sir, Hon'ble Vice Chancellor, JAU, Junagadh. Dr. M. S. Chandawat, Programme Coordinator, KVK, JAU, Nana Kandhasar

welcomed honorable Chairman and all the members of the Scientific Advisory Committee. Dr. A. M. Parakhia, Director of Extension Education, JAU, Junagadh gave the introductory speech about KVK activities and wide scope of activities on soil fertility management, organic farming, International pulse year and uses of bio pesticides in surendranagar district.

Dr. M. S. Chandawat, Program Coordinator, KVK, JAU, Nana Kandhasar presented action taken report of last 10<sup>th</sup> SAC Meeting and Summerized progress report for the period of April, 2015 to January, 2016 & action plan for the period of April-2016 to March, 2017. Detail discipline wise Progress reports & action plan for the period of April-2016 to March, 2017 presented by respective SMS of KVK, Nanakandhasar. House approved the same with incorporating few suggestions.

Dr. A. R. Pathak Sir, Hon' Vice Chancellor, JAU, Junagadh gave the presidential speech and made different suggestions on more emphasis on vocational training programme, awareness campaign pulse growing under International Pulse Year -2016. He also stressed on trainings on control of Pink Boll worm, soil & water analysis awareness programme. He also suggested to give more waitage on work of animal husbandry. Hon'ble Vice Chancellor Dr. A. R. Pathak Sir appreciated the over all work performance of KVK scientists.

During discussion Chairmen and members of SAC made various suggestions for improving KVK activities.

#### **COMMITTEE MADE THE FOLLOWING SUGGESTIONS AFTER ACTIVE INTERACTION:**

- More number of FLDs on farmers field should be implemented.
- No. of SMS containing agricultural information should be increase.
- To collect information regarding registered farmers of organic farming(Area wise).
- Soil testing based OFT should be taken.
- Training programme of animal husbandry and Home science discipline should be organized with the help of nearby KVK /Uni. centre (In case of SMS of concerned discipline is lying vacant)
- Well planning of purchasing of *Trichoderma*, *Beauveria*, seed etc for supplying to interested farmers of district should be carried out.
- Put B:C Ratio, total cost of cultivation and gross income in OFT while presenting in SAC.
- Training programme on Value addition for locally available fruits available should be carried out.
- More no. of FLD on pulses should be included for the next year action plan as year-2016 is celebration "International Pulse Year".
- KVK should plan more no. of soil sample testing at KVK to encourage farmers to follow Soil Testing based fertilizer application.
- Plantation of Guava at KVK.
- If possible, more no. of SMS on Agri advisory services to farmers should be send in collaboration with Reliance Foundation.
- In ATIC FLDs, use more Bio-Fertilizer and Bio-pesticide in pulses and other crops.



## 2.1 Major farming systems/enterprises

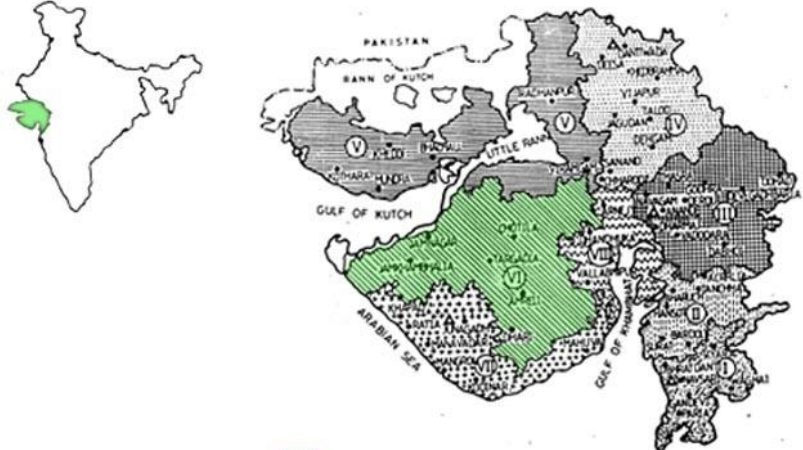
(Based on the analysis made by the KVK):

### Farming system/enterprise

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

Agro-climatic Zone	Characteristics																																																					
<p><b>PROFILE OF THE NORTH SAURASHTRA AGRO - CLIMATIC ZONE VI - GUJARAT</b></p>																																																						
																																																						
<p><span style="display: inline-block; width: 15px; height: 10px; background-color: #90EE90; border: 1px solid black; margin-right: 5px;"></span> NORTH SAURASHTRA AGRO - CLIMATIC ZONE</p>																																																						
<ol style="list-style-type: none"> <li>1. Total geographical area</li> <li>2. Area under forest</li> <li>3. Area under non agricultural use</li> <li>4. Barren and uncultivated land</li> <li>5. Permanent pasture</li> <li>6. Current fallows</li> <li>7. Net sown area</li> <li>8. Total cropped area</li> <li>9. Area sown more than one</li> <li>10. Climate</li> <li>11. Average rainfall</li> <li>12. Soil type</li> </ol>	<ol style="list-style-type: none"> <li>: 35.02 lakh ha.</li> <li>: 1.47 lakh ha.</li> <li>: 2.10 lakh ha.</li> <li>: 2.52 lakh ha.</li> <li>: 2.45 lakh ha</li> <li>: 1.70 lakh ha</li> <li>: 22.17 lakh ha</li> <li>: 25.77 lakh ha</li> <li>: 3.61 lakh ha</li> <li>: Arid and semi arid</li> <li>: 542.14 mm</li> <li>: Black to brown &amp; Shallow to moderately deep soil</li> </ol>																																																					
<p>13. Cropping pattern :</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Crop</th> <th style="text-align: left;">Area (lakh ha.)</th> </tr> </thead> <tbody> <tr><td>Kharif cereals</td><td>: 5.58</td></tr> <tr><td>Kharif pulses</td><td>: 0.23</td></tr> <tr><td>Kharif oil seeds</td><td>: 12.14</td></tr> <tr><td>Cash crops</td><td>: 4.00</td></tr> <tr><td>Rabi cereals</td><td>: 1.57</td></tr> <tr><td>Rabi pulses</td><td>: 0.56</td></tr> <tr><td>Others</td><td>: 1.69</td></tr> </tbody> </table>	Crop	Area (lakh ha.)	Kharif cereals	: 5.58	Kharif pulses	: 0.23	Kharif oil seeds	: 12.14	Cash crops	: 4.00	Rabi cereals	: 1.57	Rabi pulses	: 0.56	Others	: 1.69	<p>14. Major cropped area (%)</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">a) Kharif</th> </tr> </thead> <tbody> <tr><td>Groundnut</td><td>: 40</td></tr> <tr><td>Cotton</td><td>: 15</td></tr> <tr><td>Pearmillet</td><td>: 12</td></tr> <tr><td>Sorghum</td><td>: 10</td></tr> <tr><td>Sesamum</td><td>: 3</td></tr> <tr><td>Others</td><td>: 20</td></tr> <tr> <th colspan="2">b) Rabi</th> </tr> <tr><td>Wheat</td><td>: 5</td></tr> <tr><td>Chickpea</td><td>: 2</td></tr> <tr><td>Cumin</td><td>: 3</td></tr> </tbody> </table>	a) Kharif		Groundnut	: 40	Cotton	: 15	Pearmillet	: 12	Sorghum	: 10	Sesamum	: 3	Others	: 20	b) Rabi		Wheat	: 5	Chickpea	: 2	Cumin	: 3	<p>15. Crop sequence:</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Crop</th> </tr> </thead> <tbody> <tr><td>Groundnut - -</td></tr> <tr><td>Groundnut - Wheat</td></tr> <tr><td>Groundnut - Mustard</td></tr> <tr><td>Groundnut - Cumin</td></tr> <tr><td>Groundnut - Chickpea</td></tr> <tr><td>Pearl millet - Groundnut</td></tr> <tr><td>Pearl millet- Green gram</td></tr> <tr><td>Pearl millet- Cumin</td></tr> <tr><td>Pearl millet- Mustard</td></tr> <tr><td>Pearl millet - Garlic</td></tr> <tr><td>Cotton - -</td></tr> <tr><td>Cotton - Groundnut</td></tr> <tr><td>Cotton - Sorghum</td></tr> </tbody> </table>	Crop	Groundnut - -	Groundnut - Wheat	Groundnut - Mustard	Groundnut - Cumin	Groundnut - Chickpea	Pearl millet - Groundnut	Pearl millet- Green gram	Pearl millet- Cumin	Pearl millet- Mustard	Pearl millet - Garlic	Cotton - -	Cotton - Groundnut	Cotton - Sorghum
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Cotton - Sorghum																																																						
<b>Agro ecological situation</b>																																																						
<p><b>North Saurashtra agro-climatic zone-VI, Gujarat</b></p> <p>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</p>																																																						

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 type/s

Sr. No.	Soil type	Area
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

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Cotton (Irri)	174200	3361000	3.28
2	Cotton (Rainfed)	194900	1074000	0.94
3	Sesame	27600	72000	2.61
4	Groundnut	12800	207000	16.10
5	Wheat	30400	924000	30.37
6	Cumin	305300	1937000	6.34
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

Month	Rainfall (mm)	Rainy Days	Temperature ° C		R. Humidity (%)	
			Max.	Min.	Max.	Min.
April -15	2.0	01	42.2	20.7	89	11
May-15	--	--	42.2	24.0	94	08
June-15	106.5	05	40.9	25.1	100	21
July-15	232.0	06	36.1	23.2	100	37
August-15	--	--	32.9	24.5	95	53
September-15	113.0	06	36.8	22.1	98	28
October-15	--	--	37.7	23.2	94	22
November-15	--	--	34.9	13.7	78	17
December-15	--	--	34.9	4.2	89	13
January-16	--	--				
February-16	--	--				
March -16	--	--				

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

Category	Population	Production	Productivity
<b>Cattle</b>			
<i>Crossbred</i>	201	54,61,197 lit	-
<i>Indigenous</i>	2,93,557		-
<b>Buffalo</b>	2,02,939		-
<b>Sheep</b>			
<i>Crossbred</i>		-	-
<i>Indigenous</i>	1,00,589	-	-
<b>Goats</b>	1,79,648	-	-
<b>Pigs</b>	22,948	-	-
<i>Crossbred</i>	-	-	-
<i>Indigenous</i>	-	-	-
<b>Rabbits</b>	-	-	-
<b>Poultry</b>			
Hens	-	-	-
<i>Desi</i>	-	-	-
<i>Improved</i>	-	-	-
Ducks	-	-	-
Turkey and others	-	-	-

Category	Area	Production	Productivity
Fish	-	-	-
<i>Marine</i>	-	-	-
<i>Inland</i>	-	-	-
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

## 2.7 Details of Operational area / Villages (2015-16)

Sl.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Chotila	Chotila	Lakhchokiya	Cotton, Bajra, Sesame, Pulses, Diary Farming,	Dry farming, pink bollworm in cotton, Reddening in cotton, Wild animals, Lower milk production.	Dry farming technology Awareness for vaccination & artificial insemination of animals
2			Bhimora	Cotton, Bajra, Groundnut, Sesame, Pulses Diary Farming,	Dry farming, HS disease	Dry farming technology Awareness for vaccination & artificial insemination of animals
3			Rajawad	Cotton, Cumin, Groundnut, Sesame, Pulses, Vegetables Diary Farming,	Dry farming, Lower milk production, HS disease	Dry farming technology, Awareness for vaccination & artificial insemination of animals
4			Sanosara	Cotton, Bajra, Cumin, Wheat, Sesame, Diary Farming,	Dry farming, 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
5	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
6			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



Farmers	83	112 (Including collaborative trainings)	2075	3392				
Rural youth	25	17	625	450				
Extn. Functionaries	05	04	125	82				

Seed Production (Qtl.)			Planting material (Nos.)		
5			6		
Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers
Groundnut	53.27	In stock	10000	10000	10000
Sesamum	05.33	In stock			
Cumin	02.40	In stock			

## IA TECHNOLOGY ASSESSMENT

### Summary of technologies assessed under various CROPS by KVKs

Thematic areas	Crop	Name of the technology assessed	No. of trials	No. of farmers
Integrated Nutrient Management	Cumin	Assessment of sulphur in cumin	3	3
	Sesame	Assessment of sulphur in Sesamum	3	3
Varietal Evaluation	Sesame	Varietal assessment of Sesamum Guj Til-4 in Surendranagar district	3	3
Integrated Pest Management	Cotton	Management of Mealy bug infestation in Cotton	3	3
	Cotton	Management of sucking pests in Cotton	3	3
Integrated Crop Management				
Integrated Disease Management				
Small Scale Income Generation Enterprises				
Weed Management				
Resource Conservation Technology				
Farm Machineries				
Integrated Farming System				
Seed / Plant production				
Post Harvest Technology / Value addition				
Drudgery Reduction				
Storage Technique				

Others (Pl. specify)				
<b>Total</b>				

### Summary of technologies assessed under **livestock** by KVKs

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Disease Management	0	0	0	0
Evaluation of Breeds	0	0	0	0
Feed and Fodder management	0	0	0	0
Nutrition Management	Buffalo	Chelated & Area Specific Mineral mixture for dairy buffaloes	5	5
	Goat	Supplementary feeding for improving production performance of lactating goat	5	5
Production and Management	0	0	0	0
Others (Pl. specify)	0	0	0	0
<b>Total</b>			10	10

## I.C. TECHNOLOGY ASSESSMENT AND REFINEMENT IN DETAIL

*(From each state please include the full details of three OFTs on technology assessment and or refinement under the broad thematic areas such as Integrated Crop Management, weed management, pest and disease management, nutrient management, resource conservation, livestock enterprises, Integrated Nutrient Management)*

*(The model for preparing the same is furnished below)*

### INTEGRATED CROP MANAGEMENT

#### (1) Problem definition: To increase the yield of cumin crop by different sources of Sulphur

##### Technology Assessed or Refined (as the case may be) : Assessment of sulphur in cumin

KVK, Surendranagar conducted on-farm trial to assess or refine (Assessment of sulphur in cumin. Recommended dose of fertilizer (30-16-00 NPK kg/ha) through Ammonium Sulphate & Single Super Phosphate a net return of Rs. 58450/ha as compared to the recommended practice with net returns of Rs. 52300 /ha (11.75% increase in net return per ha).

**Table Performance to increase in the yield of cumin crop by different sources of Sulphur**

Technology Option	No.of trials	Yield (t/ha)	Net Returns (Rs. in lakh./ha)
T1: Farmers practice	3	0.655	0.523
T2: Recommended dose of fertilizer (30-16-00 NPK kg/ha) through DAP & Urea		0.615	0.500
T3: T-2 + 16 kg Sulphur through Gypsum		0.628	0.512
T4: Recommended dose of fertilizer (30-16-00 NPK kg/ha) through Ammonium Sulphate & Single Super Phosphate.		0.690	0.584

**(2) Problem definition: To increase the yield of sesamum crop by different sources of Sulphur****Technology Assessed or Refined (as the case may be) : Management of sulphur application in Sesamum**

KVK, Surendranagar conducted on-farm trial to assess or refine **Assessment of sulphur in Sesamum**. Recommended dose of fertilizer (50-25-40 NPK kg/ha) through Ammonium Sulphate & Single Super Phosphate. a net return of Rs. 20628/ha as compared to the recommended practice with net returns of Rs. 14727/ha (40.06% increase in net return per ha).

**Table Performance to increase the yield in sesame by different sources of Sulphur**

Technology Option	No.of trials	Yield (t/ha)	Net Returns (Rs. in lakh./ha)
T1: Farmers practice	3	0.505	14727
T2: Recommended dose of fertilizer (50-25-40 NPK kg/ha) through DAP & Urea+ 20 kg Sulphur through Gypsum		0.540	16430
T3: Recommended dose of fertilizer (50-25-40 NPK kg/ha) through Ammonium Sulphate & Single Super Phosphate. (238 kgAS + 166 kg SSP + 66 kg MOP/ha)		0.620	20628

**INTEGRATED CROP MANAGEMENT****Problem definition: To increase yield of Sesamum****Technology Assessed or Refined (as the case may be) : Varietal assessment of Sesamum Guj Til-4 in Surendranagar district**

KVK, Surendranagar conducted on-farm trial to Varietal assessment of Sesamum Guj Til-4 in Surendranagar district. The Guj Til-2 / Local net return of Rs. 12427/ha as compared to the Gujarat Til-4 with net returns of Rs. 14675/ha (18.08% increase in net return per ha).

**Table Performance To increase yield of Sesamum**

Technology Option	No. of trials	Yield (t/ha)	Net Returns (Rs. in lakh./ha)
T1: Variety: Guj Til-2 / Local	3	0.43	0.124
T2: Variety: Guj Til-4		0.48	0.147

**PEST AND DISEASE MANAGEMENT****(1) Problem definition: To minimize the incidence of mealy bug in cotton****Technology Assessed or Refined (as the case may be): Management of Mealy bug infestation in Cotton**

Cotton is an important commercial crop of Gujarat. However, there is high incidence of mealy bug resulting in yield loss. KVK Surendranagar conducted on-farm trial to assess or refine management of mealy bug in Cotton. The refined technology of Recommended practices Application of the pre-sowing application of Methyl parathion 2% Dust, application of insecticides at the time of infestation & Recommended cultural practices and yield was increased by 9.69 per cent.



**Table : Performance of management of mealy bug in cotton**

Technology Option	No. of trials	% Plant infestation with mealy bug	Yield (kg/ha)	% Increase in yield over farmer's practice
T1: Farmers practice (Use of conventional insecticides after infestation)	3	9.80	2021	--
T2: Recommended practices: pre-sowing application of Methyl parathion 2% Dust, application of insecticides at the time of infestation & Recommended cultural practices.		4.60	2217	9.69
T3: Dusting of Methyl parathion 2% dust as & when required, application of bio-pesticides (Beaveria spp. or Verticillium spp.)		4.67	2138	5.79

**Result:** Mealy bug infestation maximum observed in T<sub>1</sub> treatment. Minimum infestation in T<sub>2</sub> and T<sub>3</sub>. Seed cotton yield was high in recommended Practices and bio agent spray and income loss of Rs.9248/ha

**(2) Problem definition: To minimize the incidence of sucking pests in cotton**

**Technology Assessed or Refined (as the case may be):** Management of sucking pests in Cotton

Cotton is an important commercial crop of Gujarat. However, there is high incidence of sucking pest resulting in yield loss. KVK Surendranagar conducted on-farm trial to assess or refine management of sucking pests in Cotton. The refined technology of Recommended practices Application of the systemic insecticide will be start at pest infestation occurred. (Acetamiprid: 20 SP @ 2 gm/10 litre of water or Imidacloprid: 200 SL @ 4 ml/10 litre or Cartep hydrochloride 50% S.P. @ 10 gm/10 Litre of water at the time of infestation and yield was increased by 5.86 per cent.

**Table : Performance of management of sucking pest in cotton**

Technology Assessed / Refined	No. of trials	Population				Seed cotton (Kg/ha)	% Increase in yield over farmer's practice
		Jassid/ 3 leaves	White Fly/ 3 leaves	Spider/ plant	Lady bird beetle /plant		
T1: Farmers practice (Use of conventional insecticides after infestation)	3	9.27*	4.53*	0.32*	0.29*	1823	--
T2: Recommended practices Application of the systemic insecticide will be start at pest infestation occurred. (Acetamiprid: 20 SP @ 2 gm/10 litre of water or Imidacloprid: 200 SL @ 4 ml/10 litre or Cartep hydrochloride 50% S.P. @ 10 gm/10 Litre of water at the time of infestation.)		7.37*	3.17*	0.32*	0.28*	1930	5.86
T3: Beauveria bassiana 5 gm/lit as & when required, application of bio-pesticides + Sticker 0.5 ml/lit of water		10.77*	4.60*	0.81*	0.84*	1650	-9.48

\* Data Indicated that Average of three different dated observations

**Result:** Maximum sucking pest infestation in T<sub>3</sub> followed by T<sub>1</sub> and T<sub>2</sub> treatments, spider and lady bird beetle population observed maximum in treatment T<sub>3</sub>, Seed cotton yield was higher in recommended Practices and income loss of Rs.6300/ha

## INTEGRATED NUTRIENT MANAGEMENT

**(1) Problem definition:** Low milk production & infertility problems in dairy buffalo

**Technology Assessed or Refined (as the case may be):** Chelated & Area Specific Mineral mixture for dairy buffaloes

KVK, Surendranadar assess or refine (as the case may be) the technology of integrated nutrient management by the application of effect of Buffalo fed with 50 gms/day Chelated & Area specific mineral mixture supplementation and found that the same had enhanced the yield by 39.56 per cent compared to farmers practice.

**Table Performance of Supplementary feeding for improving production performance of lactating goat**

Technology Option	No. of trials	Milk yield (lit) /lactation	B:C Ratio
T1: Farmers practices (Control)	3	1476	1.97
T2: Buffalo fed with 50 gms/day mineral mixture supplementation (Reco.)		1710	2.12
T3: Buffalo fed with 50 gms/day Chelated & Area specific mineral mixture supplementation (Intervention-1)		2060	2.44

**Result :** Buffalo fed with chelated and area specific mineral mixture supplementation give higher milk production and decrease the post partum estrus days.

**(2) Problem definition:** Low milk yield , poor weight gain in pre-weaned kids

**Technology Assessed or Refined (as the case may be):** Supplementary feeding for improving production performance of lactating goat

KVK, Surendranagar assess or refine (as the case may be) the technology of integrated nutrient management by the application of effect of Grazing for 8 hours -Farmers practices + Concentrate feed 160 gm/day for 3 months + mineral mixture 10 gm/day + vitamin A,D,E - 2 ml weekly for 2 weeks in goat found that the enhanced the yield by 90 per cent compared to farmers practice.

**Table Performance of Supplementary feeding for improving production performance of lactating goat**

Technology Option	No. of trials	Milk yield (lit) /lactation	B:C Ratio
T1: Grazing for 8 hours -Farmers practices (Control)	5	205	9.02
T2: T1 + Concentrate feed 160 gm/day for 3 months		308	9.03
T3: T1+ T2 + mineral mixture 10 gm/day + vitamin A,D,E - 2 ml weekly for 2 weeks		391	10.12

**Result :** Good response getting from goat owner

## II. FRONTLINE DEMONSTRATION

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

List of technologies demonstrated during previous year and popularized during 2014-15 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	12	2327	481
2	Cumin	PP	G Cumin-4				
3	Gram	CP	GJG. -3				
4	Green gram	CP	GM-4				
5	Sesame	CP	G Til-4				
6	Groundnut	PP	IDM				
7	Groundnut (Bio agent)	PP	GG-20				
8	Cotton	CP	Bt-cotton				

\* **Thematic areas as given in Table 3.1 (A1 and A2)**

- b. Details of FLDs implemented during 2015-16 (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.**)

Sr. No.	Crop	The matic area	Technology Demonstrated	Season and	Area (ha)		No. of farmers/ demonstration			Reasons for shortfalls in achievement
					Proposed	Actual	SC /ST	Others	Total	
1	Wheat	CP	GW – 366	Rabi-2014-15	08	08	3	17	20	-
2	Cumin	PP	G Cumin-4	Rabi-2014-15	08	08	6	14	20	-
3	Gram	CP	G Gram-3	Rabi-2014-15	04	04	2	8	10	-
4	Moong	CP	GM-4	Kharif-2015-16	04	04	3	7	10	-
5	Sesame	CP	G Til-4	Kharif-2015-16	04	04	5	5	10	-
6	G'nut	PP	IDM	Kharif-2015-16	04	04	1	9	10	-
7	G'nut-Bio	PP	GG-20	Kharif-2015-16	02	02	0	5	05	-
8	Cotton	CP	Bt-cotton	Kharif-2015-16	10	10	8	17	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 14-15	Irrigated	Medium black	L	M	H	Sesame	16/11/14	8/3/15	453	18
		Irrigated		L	M	H	Juwar	13/11/14	5/3/15		
		Irrigated	--	L	M	H	Juwar	18/11/14	20/3/15		
		Irrigated	--	L	M	H	Greengram	14/11/14	10/3/15		
		Irrigated	--	L	M	H	Sesame	22/11/14	14/3/15		
		Irrigated	--	L	M	H	Juwar	14/11/14	3/3/15		
		Irrigated	--	L	M	H	Juwar	20/11/14	15/3/15		
		Irrigated	--	L	M	H	Greengram	25/11/14	22/3/15		
		Irrigated	--	L	M	H	Juwar	13/11/14	6/3/15		

		Irrigated	--"	L	M	H	Juwar	19/11/14	4/3/15		
		Irrigated	--"	L	M	H	Bajara	23/11/14	20/3/15		
		Irrigated	--"	L	M	H	Cotton	12/11/14	27/2/15		
		Irrigated	--"	L	M	H	Juwar	16/11/14	9/3/15		
		Irrigated	--"	L	M	H	Greengram	15/11/14	4/3/15		
		Irrigated	--"	L	M	H	Juwar	19/11/14	16/3/15		
		Irrigated	--"	L	M	H	Cotton	10/11/14	25/3/15		
		Irrigated	--"	L	M	H	Bajara	12/11/14	5/3/15		
		Irrigated	--"	L	M	H	Juwar	20/11/14	13/3/15		
		Irrigated	--"	L	M	H	G'nut	13/11/14	15/3/15		
		Irrigated	--"	L	M	H	Juwar	20/11/14	10/3/15		
Cumin	Rabi 14-15	Irrigated	--"	L	M	H	Bajara	10/11/14	2/3/15		
		Irrigated	--"	L	M	H	Juwar	5/11/14	8/3/15		
		Irrigated	--"	L	M	H	Cotton	13/11/14	10/3/15		
		Irrigated	--"	L	M	H	Juwar	14/11/14	4/3/15		
		Irrigated	--"	L	M	H	Bajara	10/11/14	1/3/15		
		Irrigated	--"	L	M	H	Sesame	7/11/14	25/2/15		
		Irrigated	--"	L	M	H	Cotton	16/11/14	10/3/15		
		Irrigated	--"	L	M	H	Greengram	4/11/14	26/3/15		
		Irrigated	--"	L	M	H	Juwar	15/11/14	3/3/15		
		Irrigated	--"	L	M	H	Cotton	3/11/14	26/2/15		
		Irrigated	--"	L	M	H	G'nut	3/11/14	28/2/15		
		Irrigated	--"	L	M	H	Cotton	16/11/14	5/3/15		
		Irrigated	--"	L	M	H	Sesame	4/11/14	26/3/15		
		Irrigated	--"	L	M	H	Juwar	15/11/14	6/3/15		
		Irrigated	--"	L	M	H	Bajara	4/11/14	26/3/15		
		Irrigated	--"	L	M	H	Greengram	10/11/14	1/3/15		
		Irrigated	--"	L	M	H	Cotton	9/11/14	6/3/15		
		Irrigated	--"	L	M	H	Cotton	5/11/14	28/2/15		
				Irrigated	--"	L	M	H	Juwar	7/11/14	1/3/15
		Irrigated	--"	L	M	H	Sesame	3/11/14	27/3/15		
Gram	Rabi 14-15	Irrigated	--"	L	M	H	G'nut	3/11/14	6/2/15		
		Irrigated	--"	L	M	H	Cotton	5/11/14	13/2/15		
		Irrigated	--"	L	M	H	Sesame	25/10/14	3/2/15		
		Irrigated	--"	L	M	H	Bajara	4/11/14	6/2/15		
		Irrigated	--"	L	M	H	Juwar	30/10/14	4/2/15		
		Irrigated	--"	L	M	H	G'nut	5/11/14	14/2/15		
		Irrigated	--"	L	M	H	Sesame	2/11/14	10/2/15		
		Irrigated	--"	L	M	H	Juwar	26/10/14	1/2/15		
		Irrigated	--"	L	M	H	Cotton	4/11/14	9/2/15		
		Irrigated	--"	L	M	H	Juwar	8/11/14	13/2/15		
Green Gram	Kharif 15-16	Rainfed	--"	L	M	H	Wheat	25/6/15	14/9/15		
		Rainfed	--"	L	M	H	Cumin	27/6/15	21/9/15		
		Rainfed	--"	L	M	H	Cotton	25/6/15	18/9/15		
		Rainfed	--"	L	M	H	Cotton	28/6/15	24/9/15		
		Rainfed	--"	L	M	H	Juwar	25/6/15	16/9/15		
		Rainfed	--"	L	M	H	Cotton	26/6/15	18/9/15		
		Rainfed	--"	L	M	H	Cumin	27/6/15	20/9/15		
		Rainfed	--"	L	M	H	Juwar	26/6/15	13/9/15		
		Rainfed	--"	L	M	H	Juwar	25/6/15	19/9/15		

		Rainfed	--"--	L	M	H	Cotton	28/6/15	18/9/15		
Sesame	Kharif 15-16	Rainfed	--"--	L	M	H	Wheat	27/6/15	20/9/15		
		Rainfed	--"--	L	M	H	Cotton	27/6/15	14/9/15		
		Rainfed	--"--	L	M	H	Cotton	25/6/15	12/9/15		
		Rainfed	--"--	L	M	H	Juwar	26/6/15	19/9/15		
		Rainfed	--"--	L	M	H	Cotton	26/6/15	18/9/15		
		Rainfed	--"--	L	M	H	Cumin	25/6/15	21/9/15		
		Rainfed	--"--	L	M	H	G'nut	28/6/15	19/9/15		
		Rainfed	--"--	L	M	H	Cotton	26/6/15	22/9/15		
		Rainfed	--"--	L	M	H	Cumin	28/6/15	10/9/15		
		Rainfed	--"--	L	M	H	Cotton	26/6/15	16/9/15		
G'nut	Kharif 15-16	Rainfed	Medium black	L	M	H	Wheat	26/6/15	2/11/15		
		Rainfed		L	M	H	Wheat	28/6/15	30/10/15		
		Rainfed	--"--	L	M	H	Cumin	27/6/15	05/11/15		
		Rainfed	--"--	L	M	H	Cotton	25/6/15	25/10/15		
		Rainfed	--"--	L	M	H	Cotton	26/6/15	3/11/15		
		Rainfed	--"--	L	M	H	Wheat	28/6/15	20/10/15		
		Rainfed	--"--	L	M	H	Juwar	26/6/15	25/10/15		
		Rainfed	--"--	L	M	H	Cumin	25/6/15	5/11/15		
		Rainfed	--"--	L	M	H	Cotton	29/6/15	27/10/15		
		Rainfed	--"--	L	M	H	Juwar	27/6/15	30/10/15		
Bio-ager	Kharif 15-16	Rainfed	Medium black	L	M	H	Cumin	26/6/15	28/10/15		
		Rainfed		L	M	H	Cotton	28/6/15	4/11/15		
		Rainfed	--"--	L	M	H	Wheat	28/6/15	30/10/15		
		Rainfed	--"--	L	M	H	Cotton	25/6/15	6/11/15		
		Rainfed	--"--	L	M	H	Juwar	26/6/15	30/10/15		
Cotton	Kharif 15-16	Irrigated	Medium black	L	M	H	G'nut	15/6/15	13/12/15		
		Irrigated		L	M	H	Cotton	25/6/15	22/11/15		
		Irrigated	--"--	L	M	H	Cotton	28/6/15	14/12/15		
		Irrigated	--"--	L	M	H	Cumin	18/6/15	2/12/15		
		Irrigated	--"--	L	M	H	Wheat	27/6/15	8/12/15		
		Irrigated	--"--	L	M	H	Cotton	26/6/15	22/12/15		
		Irrigated	--"--	L	M	H	Cotton	26/6/15	5/12/15		
		Irrigated	--"--	L	M	H	Wheat	25/6/15	25/11/15		
		Irrigated	--"--	L	M	H	Cumin	26/6/15	18/11/15		
		Irrigated	--"--	L	M	H	Wheat	22/6/15	30/12/15		
		Irrigated	--"--	L	M	H	Cumin	25/6/15	16/12/15		
		Irrigated	--"--	L	M	H	Cotton	28/6/15	2/12/15		
		Irrigated	--"--	L	M	H	Cumin	24/6/15	25/12/15		
		Irrigated	--"--	L	M	H	Cotton	23/6/15	12/11/15		
		Irrigated	--"--	L	M	H	Wheat	26/6/15	24/12/15		
		Irrigated	--"--	L	M	H	Cumin	26/6/15	9/12/15		
		Irrigated	--"--	L	M	H	Juwar	24/6/15	20/12/15		
		Irrigated	--"--	L	M	H	Wheat	19/6/15	12/12/15		
		Irrigated	--"--	L	M	H	G'nut	25/6/15	23/12/15		
		Irrigated	--"--	L	M	H	Cumin	28/6/15	15/12/15		
		Irrigated	--"--	L	M	H	Wheat	24/6/15	21/12/15		
		Irrigated	--"--	L	M	H	Sesame	22/6/15	12/11/15		
		Irrigated	--"--	L	M	H	Cumin	27/6/15	16/12/15		
Irrigated	--"--	L	M	H	Wheat	23/6/15	17/11/15				
Irrigated	--"--	L	M	H	Juwar	26/6/15	12/12/15				

**Technical Feedback on the demonstrated technologies**

S. No	Feed Back
1. Chickpea : -G Gram-3	<ul style="list-style-type: none"> <li>It is good variety over local variety for all parameters.</li> <li>Farmer demanded seeded varieties for vegetable purpose in both irrigated &amp; non irrigated conditions.</li> <li>Farmers demanded adequate seed quantity availability at the time of sowing.</li> </ul>
2. Cumin :- GC-4	<ul style="list-style-type: none"> <li>High yielder and wilt resistance but delayed germination observed.</li> <li>Farmer demanded blight resistant variety.</li> </ul>
3. Wheat : GW: 366	<ul style="list-style-type: none"> <li>Yield better than Lok-1 and GW-496, baking quality observed good.</li> </ul>
4. Sesame	<ul style="list-style-type: none"> <li>Guj. Til-4 gave higher yield as compare to local varieties.</li> </ul>
5. Green gram	<ul style="list-style-type: none"> <li>Guj. Green Gram-4 is superior over K-851, It is also suitable for late monsoon condition.</li> </ul>
6. Cotton	<ul style="list-style-type: none"> <li>Farmer demanded sucking pest tolerant variety.</li> <li>Location specific varieties should be developed</li> <li>Bt. cotton requires more water and nutrient, do not withstand in moisture and nutrient stress conditions. So drought tolerant variety should supply.</li> <li>Later stage of crop infected by pink boll worm so required tolerant Bt cotton varieties.</li> </ul>

**Farmers' reactions on specific technologies**

S. No	Feed Back
1. Green gram	Guj. Green gram-4 is superior over K-851, it mature once a time so more picking not required
2. Cotton	Bt- Cotton resistance over larvae but pink bollworm incidence was observed, it is require the sucking pest and pink bollworm resistance variety
3. Sesame	Gujarat Til-4 is early variety hence suitable for low rainfall area

**Extension and Training activities under FLD**

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	1	14/09/14	23	
		1	12/10/15	29	
		1	15/10/15	23	
		1	17/10/15	29	
		1	20/10/15	25	
		1	06/11/15	17	
		1	08/11/15	20	
		1	13/01/16	30	
		1	16/01/16	29	
		1	18/01/16	27	
		1	19/01/16	22	
		1	02/02/16	90	
		1	23/02/16	27	
		1	03/03/16	38	
		1	04/03/16	23	
		1	05/03/16	18	
		1	09/03/16	25	
	Total	17		<b>495</b>	
2	Farmers Training	80		2022	
3	Media coverage	11			
4	Training for extension functionaries	1	24/7/15	16	
		1	28/10/15		
		1	17/08/15		
		1	19/08/15		
	Total	<b>4</b>			

## 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																			
	PP	IDM	-	10	04	10.25	3.50	6.31	6.02	4.86	19060	22094	3034	1.16	18340	21070	2730	1.15	
	PP	Bio Agent	GG-20	05	02	9.38	6.50	7.98	7.28	9.55	20090	27913	7823	1.39	18340	25480	7140	1.39	
Sesamum																			
	CP	Improved Variety	G Til-4	10	04	5.63	3.88	4.85	4.54	6.83	13240	33950	20710	2.56	13165	31780	18616	2.41	
Mustard																			
Toria																			
Linseed																			
Sunflower																			
Soybean																			

\* 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										
Pigeonpea																		
Blackgram																		
Greengram																		
	CP	Improved Variety	GM-4	10	04	6.88	4.88	5.78	5.35	7.94	10980	37538	26558	3.42	10880	34775	23895	3.20
Chickpea																		
	CP	INM	Local	10	04	16.13	8.63	11.68	10.69	9.21	19730	40863	21133	2.07	19435	37416	17980	1.93
Fieldpea																		
Lentil																		
Horsegram																		

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

\*\* BCR= GROSS RETURN/GROSS COST











<b>Commercial Crops</b>																			
<b>Cotton</b>																			
	CP	INM	25	10	19.00	11.13	16.34	14.35	6.93			27720	74801	47081	2.70	28300	69956	41656	2.47
<b>Sugarcane</b>																			
<b>Potato</b>																			
<b>Medicinal &amp; aromatic plants</b>																			
<b>Mentholment</b>																			
<b>Kalmegh</b>																			
<b>Ashwagandha</b>																			
<b>Fodder Crops</b>																			
<b>Sorghum (F)</b>																			
<b>Cowpea (F)</b>																			
<b>Maize (F)</b>																			
<b>Lucern</b>																			
<b>Berseem</b>																			
<b>Oat (F)</b>																			

\* 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)
Cattle																	
Buffalo																	
Buffalo Calf																	
Dairy																	
Poultry																	
Sheep & Goat																	
Vaccination																	

\* 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 Demonstration details on crop hybrids** (*Details of Hybrid FLDs implemented during 2015-16*)

Crop	technology demonstrated	Hybrid Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)			
					High	Demo Low	Average	Check		Gross Cost	Gross Return	Net Return	BCR (R/C)
Oilseed crop													
Pulse crop													
Cereal crop													
Vegetable crop													
Fruit crop													
Other (specify)													

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



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
<b>Total (f)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>g) Medicinal and Aromatic Plants</b>										
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
<b>Total (g)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GT (a-g)</b>	<b>4</b>	<b>50</b>	<b>73</b>	<b>123</b>	<b>5</b>	<b>29</b>	<b>34</b>	<b>55</b>	<b>102</b>	<b>157</b>
<b>III Soil Health and Fertility Management</b>										
Soil fertility management	4	127	8	135	26	6	32	153	14	167
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
<b>Total</b>	<b>4</b>	<b>127</b>	<b>8</b>	<b>135</b>	<b>26</b>	<b>6</b>	<b>32</b>	<b>153</b>	<b>14</b>	<b>167</b>
<b>IV Livestock Production and Management</b>										
Dairy Management	2	9	67	76	3	12	15	12	79	91
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	1	0	21	21	0	5	5	0	26	26
Disease Management	1	0	22	22	0	6	6	0	28	28
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)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>4</b>	<b>9</b>	<b>110</b>	<b>119</b>	<b>3</b>	<b>23</b>	<b>26</b>	<b>12</b>	<b>133</b>	<b>145</b>
<b>V Home Science/Women empowerment</b>										
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
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>VI Agril. Engineering</b>										
Farm Machinery 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	3	81	0	81	29	0	29	110	0	110
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	2	10	55	65	0	23	23	10	78	88
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>5</b>	<b>91</b>	<b>55</b>	<b>146</b>	<b>29</b>	<b>23</b>	<b>52</b>	<b>120</b>	<b>78</b>	<b>198</b>
<b>VII Plant Protection</b>										
Integrated Pest Management	5	102	0	102	31	0	31	133	0	133

Integrated Disease Management	0	0	0	0	0	0	0	0	0	0
Bio-control of pests and diseases	1	16	0	16	5	0	5	21	0	21
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>6</b>	<b>118</b>	<b>0</b>	<b>118</b>	<b>36</b>	<b>0</b>	<b>36</b>	<b>154</b>	<b>0</b>	<b>154</b>
<b>VIII Fisheries</b>										
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
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>IX Production of Inputs at site</b>										
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	1	22	0	22	5	0	5	27	0	27
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>1</b>	<b>22</b>	<b>0</b>	<b>22</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>27</b>	<b>0</b>	<b>27</b>
<b>X Capacity Building and Group Dynamics</b>										
Leadership development	3	75	15	90	19	0	19	94	15	109
Group dynamics	3	84	2	86	5	0	5	89	2	91
Formation and Management of SHGs	1	20	0	20	4	0	4	24	0	24
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	1	25	0	25	3	0	3	28	0	28
WTO and IPR issues	1	20	0	20	4	0	4	24	0	24
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>9</b>	<b>224</b>	<b>17</b>	<b>241</b>	<b>35</b>	<b>0</b>	<b>35</b>	<b>259</b>	<b>17</b>	<b>276</b>
<b>XI Agro-forestry</b>										
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
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GRAND TOTAL</b>	<b>61</b>	<b>1231</b>	<b>373</b>	<b>1604</b>	<b>273</b>	<b>105</b>	<b>378</b>	<b>1504</b>	<b>478</b>	<b>1982</b>





Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>11</b>	<b>218</b>	<b>3</b>	<b>221</b>	<b>49</b>	<b>0</b>	<b>49</b>	<b>267</b>	<b>3</b>	<b>270</b>
<b>VIII Fisheries</b>										
Integrated fish farming	1	25	0	25	0	0	0	25	0	25
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
<b>Total</b>	<b>1</b>	<b>25</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>25</b>
<b>IX Production of Inputs at site</b>										
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
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>X Capacity Building and Group Dynamics</b>										
Leadership development	2	42	0	42	6	0	6	48	0	48
Group dynamics	2	59	0	59	11	0	11	70	0	70
Formation and Management of SHGs	2	47	9	56	18	0	18	65	9	74
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	1	20	0	20	6	0	6	26	0	26
WTO and IPR issues	1	20	0	20	2	0	2	22	0	22
Income generation activities for farmers	1	22	0	22	4	0	4	26	0	26
<b>Total</b>	<b>9</b>	<b>210</b>	<b>9</b>	<b>219</b>	<b>47</b>	<b>0</b>	<b>47</b>	<b>257</b>	<b>9</b>	<b>266</b>
<b>XI Agro-forestry</b>										
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
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GRAND TOTAL</b>	<b>55</b>	<b>1216</b>	<b>102</b>	<b>1318</b>	<b>215</b>	<b>19</b>	<b>234</b>	<b>1431</b>	<b>121</b>	<b>1552</b>







Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>17</b>	<b>336</b>	<b>3</b>	<b>339</b>	<b>85</b>	<b>0</b>	<b>85</b>	<b>421</b>	<b>3</b>	<b>424</b>
<b>VIII Fisheries</b>										
Integrated fish farming	1	25	0	25	0	0	0	25	0	25
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
<b>Total</b>	<b>1</b>	<b>25</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>25</b>
<b>IX Production of Inputs at site</b>										
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	1	22	0	22	5	0	5	27	0	27
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>1</b>	<b>22</b>	<b>0</b>	<b>22</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>27</b>	<b>0</b>	<b>27</b>
<b>X Capacity Building and Group Dynamics</b>										
Leadership development	5	117	15	132	25	0	25	142	15	157
Group dynamics	5	143	2	145	16	0	16	159	2	161
Formation and Management of SHGs	3	67	9	76	22	0	22	89	9	98
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	2	45	0	45	9	0	9	54	0	54
WTO and IPR issues	2	40	0	40	6	0	6	46	0	46
Others (pl specify)	1	22	0	22	4	0	4	26	0	26
<b>Total</b>	<b>18</b>	<b>434</b>	<b>26</b>	<b>460</b>	<b>82</b>	<b>0</b>	<b>82</b>	<b>516</b>	<b>26</b>	<b>542</b>
<b>XI Agro-forestry</b>										
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
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GRAND TOTAL</b>	<b>116</b>	<b>2447</b>	<b>475</b>	<b>2922</b>	<b>488</b>	<b>124</b>	<b>612</b>	<b>2935</b>	<b>599</b>	<b>3534</b>

### 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	1	22	0	22	3	0	3	25	0	25

Seed production	2	41	0	41	7	0	7	48	0	48
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	4	76	0	76	19	0	19	95	0	95
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	1	2	0	2	19	0	19	21	0	21
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
<b>TOTAL</b>	<b>8</b>	<b>141</b>	<b>0</b>	<b>141</b>	<b>48</b>	<b>0</b>	<b>48</b>	<b>189</b>	<b>0</b>	<b>189</b>

**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	1	20	0	20	0	0	0	20	0	20
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	1	24	0	24	1	0	1	25	0	25
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	2	38	0	38	9	0	9	47	0	47
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
Government subsidy schemes for farmers	1	25	0	25	2	0	2	27	0	27
<b>TOTAL</b>	<b>5</b>	<b>107</b>	<b>0</b>	<b>107</b>	<b>12</b>	<b>0</b>	<b>12</b>	<b>119</b>	<b>0</b>	<b>119</b>

**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	1	22	0	22	3	0	3	25	0	25
Seed production	2	41	0	41	7	0	7	48	0	48
Production of organic inputs	1	20	0	20	0	0	0	20	0	20
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	1	24	0	24	1	0	1	25	0	25

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	6	114	0	114	28	0	28	142	0	142
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	1	2	0	2	19	0	19	21	0	21
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)	1	25	0	25	2	0	2	27	0	27
<b>TOTAL</b>	<b>13</b>	<b>248</b>	<b>0</b>	<b>248</b>	<b>60</b>	<b>0</b>	<b>60</b>	<b>308</b>	<b>0</b>	<b>308</b>

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
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	1	20	0	20	3	0	3	23	0	23
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
Global worming	1	16	0	16	4	0	4	20	0	20
<b>TOTAL</b>	<b>2</b>	<b>36</b>	<b>0</b>	<b>36</b>	<b>7</b>	<b>0</b>	<b>7</b>	<b>43</b>	<b>0</b>	<b>43</b>

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

Area of training	No. of Course	No. of Participants		
		General	SC/ST	Grand Total

	s	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
Government subsidy scheme for farmers	2	33	0	33	6	0	6	39	0	39
<b>TOTAL</b>	<b>2</b>	<b>33</b>	<b>0</b>	<b>33</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>39</b>	<b>0</b>	<b>39</b>

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
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	1	20	0	20	3	0	3	23	0	23
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)	3	49	0	49	10	0	10	59	0	59
<b>TOTAL</b>	<b>4</b>	<b>69</b>	<b>0</b>	<b>69</b>	<b>13</b>	<b>0</b>	<b>13</b>	<b>82</b>	<b>0</b>	<b>82</b>

**Table. 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
<b>Crop production and management</b>										
Increasing production and productivity of crops	18	412	98	510	142	25	167	554	123	677
Commercial production of vegetables	5	24	85	109	9	9	18	33	94	127
<b>Production and value addition</b>										
Fruit Plants	1	0	31	31	0	22	22	0	53	53
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	6	187	12	199	33	8	41	220	20	240
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
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>30</b>	<b>623</b>	<b>226</b>	<b>849</b>	<b>184</b>	<b>64</b>	<b>248</b>	<b>807</b>	<b>290</b>	<b>1097</b>
<b>Post harvest technology and value addition</b>										
Processing and value addition	2	10	55	65	0	23	23	10	78	88
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>2</b>	<b>10</b>	<b>55</b>	<b>65</b>	<b>0</b>	<b>23</b>	<b>23</b>	<b>10</b>	<b>78</b>	<b>88</b>
<b>Farm machinery</b>										
Farm machinery, tools and implements	3	82	0	82	25	0	25	107	0	107
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>3</b>	<b>82</b>	<b>0</b>	<b>82</b>	<b>25</b>	<b>0</b>	<b>25</b>	<b>107</b>	<b>0</b>	<b>107</b>
<b>Livestock and fisheries</b>										
Livestock production and management	4	12	101	113	5	24	29	17	125	142
Animal Nutrition Management	0	0	0	0	0	0	0	0	0	0
Animal Disease Management	1	0	22	22	0	6	6	0	28	28
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
<b>Total</b>	<b>5</b>	<b>12</b>	<b>123</b>	<b>135</b>	<b>5</b>	<b>30</b>	<b>35</b>	<b>17</b>	<b>153</b>	<b>170</b>
<b>Home Science</b>										
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
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Agricultural Extension</b>										
Capacity Building and Group Dynamics	9	226	26	252	46	0	46	272	26	298
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>9</b>	<b>226</b>	<b>26</b>	<b>252</b>	<b>46</b>	<b>0</b>	<b>46</b>	<b>272</b>	<b>26</b>	<b>298</b>
<b>GRAND TOTAL</b>	<b>49</b>	<b>953</b>	<b>430</b>	<b>1383</b>	<b>260</b>	<b>117</b>	<b>377</b>	<b>1213</b>	<b>547</b>	<b>1760</b>

Name of sponsoring agencies involved: ATMA, FTC, RSETI, GGRC, AKRSP, NETAFIM etc

#### 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
<b>Crop production and management</b>										
Commercial floriculture				0			0	0	0	0
Commercial fruit production				0			0	0	0	0
Commercial vegetable production				0			0	0	0	0

Integrated crop management	1	28	0	28	2	0	2	30	0	30
Organic farming				0			0	0	0	0
Others (pl. specify)				0			0	0	0	0
<b>Total</b>	<b>1</b>	<b>28</b>	<b>0</b>	<b>28</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>30</b>	<b>0</b>	<b>30</b>
<b>Post harvest technology and value addition</b>										
Value addition	1	6	42	48		7	7	6	49	55
Others (pl. specify)				0			0	0	0	0
<b>Total</b>	<b>1</b>	<b>6</b>	<b>42</b>	<b>48</b>	<b>0</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>49</b>	<b>55</b>
<b>Livestock and fisheries</b>										
Dairy farming				0			0	0	0	0
Composite fish culture				0			0	0	0	0
Sheep and goat rearing				0			0	0	0	0
Piggery				0			0	0	0	0
Poultry farming				0			0	0	0	0
Others (pl. specify)				0			0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Income generation activities</b>										
Vermicomposting				0			0	0	0	0
Production of bio-agents, bio-pesticides, bio-fertilizers etc.				0			0	0	0	0
Repair and maintenance of farm machinery and implements	1	24	0	24	6	0	6	30	0	30
Rural Crafts				0			0	0	0	0
Seed production				0			0	0	0	0
Sericulture				0			0	0	0	0
Mushroom cultivation				0			0	0	0	0
Nursery, grafting etc.				0			0	0	0	0
Tailoring, stitching, embroidery, dyeing etc.				0			0	0	0	0
Agril. para-workers, para-vet training				0			0	0	0	0
Others (pl. specify)	1	22	0	22	5	0	5	27	0	27
<b>Total</b>	<b>2</b>	<b>46</b>	<b>0</b>	<b>46</b>	<b>11</b>	<b>0</b>	<b>11</b>	<b>57</b>	<b>0</b>	<b>57</b>
<b>Agricultural Extension</b>										
Capacity building and group dynamics				0			0	0	0	0
Others (pl. specify)				0			0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Grand Total</b>	<b>4</b>	<b>80</b>	<b>42</b>	<b>122</b>	<b>13</b>	<b>7</b>	<b>20</b>	<b>93</b>	<b>49</b>	<b>142</b>

#### IV. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	1991	1991	0	1991
Diagnostic visits	57	277	3	280
Field Day	17	449	29	478
Group discussions	86	2497		2497
Kisan Ghosthi	3	678	9	687
Film Show	28	1134		1134
Self -help groups	0	0	0	0
Kisan Mela	0	0	0	0
Exhibition	20	17928	160	18088
Scientists' visit to farmers field	16	255	38	293
Plant/animal health camps	0	0	0	0
Farm Science Club	0	0	0	0
Ex-trainees Sammelan	1	27	3	30
Farmers' seminar/workshop	2	758		758
Method Demonstrations	15	278	18	296
Celebration of important days	2	836		836
Special day celebration	0	0	0	0



Exposure visits	0	0	0	0
Others (pl. specify)	0	0	0	0
<b>Total</b>	<b>2238</b>	<b>27108</b>	<b>260</b>	<b>27368</b>

#### Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	
Extension Literature	10102
News paper coverage	7
Popular articles	11
Radio Talks	0
TV Talks	0
Animal health amps (Number of animals treated)	
Others (pl. specify)	64
<b>Total</b>	<b>10184</b>

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
	Text only	22	1	36	0	5	0	64
	Voice only	0	0	0	0	0	0	
	Voice & Text both	0	0	0	0	0	0	0
	<b>Total Messages</b>	<b>22</b>	<b>01</b>	<b>36</b>	<b>0</b>	<b>05</b>	<b>0</b>	<b>64</b>
	<b>Total farmers Benefitted</b>	<b>907508</b>	<b>41250</b>	<b>1485014</b>	<b>0</b>	<b>206254</b>	<b>0</b>	<b>2640026</b>

## V. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS

Number of KVKs organised Technology Week	Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
1	Gosthies	5	547	Cultivation of Kharif crops and their scientific management and seed production technologies of different crops, organic farming, integrated farming system cultivation practices for rainfed farming, agricultural entrepreneurship, women empowerment etc. Visit of farm's kharif crop farm field and crop cafeteria, integrated farming system demo unit, fodder demo unit, vermicompost demo unit, Agril. Demo unit, mother orchard demo unit, KVK Museum, Renewable energy demo unit, solar water lifting devices demo unit.
	Lectures organised	29	547	
	Exhibition	1	497	
	Film show	5	547	
	Fair	0	0	
	Farm Visit	5	518	
	Diagnostic Practicals	3	308	
	Distribution of Literature (No.)	1500	547	
	Distribution of Seed (q)	0	0	
	Distribution of Planting materials (No.)	8000	491	
	Bio Product distribution (Kg)	850	245	
	Bio Fertilizers (q)	0	0	
	Distribution of fingerlings	0	0	
	Distribution of Livestock specimen (No.)	0	0	
	Total number of farmers visited the technology week			

## VI. PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS

### Production of seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals						
Oilseeds						
	Groundnut	GJG-31	--	25.35	stock	
		GJG-9	--	25.96	stock	
		GG-2	--	1.96	stock	
	Sesame	GT-3	--	5.33	stock	
Pulses						
Commercial crops						
Vegetables						
Flower crops						
Spices						
Fodder crop seeds						

Fiber crops						
Forest Species						
Others						
<b>Total</b>						

#### Production of planting materials by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Commercial						
Vegetable seedlings	Tomato	GJT-3	--	5350	0	210
	Brinjal	GOB -3	--	4650	0	175
Fruits						
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices						
Tuber						
Fodder crop saplings						
Forest Species						
Others						

<b>Total</b>						

**Production of Bio-Products**

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

**Table: Production of livestock materials**

<b>Particulars of Live stock</b>	<b>Name of the breed</b>	<b>Number</b>	<b>Value (Rs.)</b>	<b>No. of Farmers</b>
<b>Dairy animals</b>				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
<b>Poultry</b>				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
<b>Piggery</b>				
Piglet				
Others (Pl. specify)				
<b>Fisheries</b>				
Indian carp				
Exotic carp				
Others (Pl. specify)				
<b>Total</b>				

## VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	613	613	13	0
Water	18	18	15	0
Plant				
Manure				
Others (pl. specify)				
<b>Total</b>	<b>631</b>	<b>631</b>	<b>28</b>	<b>0</b>

## VIII. SCIENTIFIC ADVISORY COMMITTEE

Name of KVK	Number of SACs conducted
Surendranagar	01 (03/02/2016)

## IX. NEWSLETTER/MAGAZINE

Name of News letter/Magazine	No. of Copies printed for distribution

## X. PUBLICATIONS

Category	Number
Research Paper	2
Technical bulletins	0
Technical reports	7
Popular Article	9
Leaflet/Folder	5
Research Abstract	2

## XI. DETAILS ON RAIN WATER HARVESTING STRUCTURE AND MICRO-IRRIGATION SYSTEM

Activities conducted				
No. of Training programmes	No. of Demonstration s	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)
01(Rain water harvesting)	05	-		15
03(MIS Training)	08	-		-

## XII. INTERVENTIONS ON DISASTER MANAGEMENT/UNSEASONAL RAINFALL/HAILSTORM/COLD WAVES ETC

### Introduction of alternate crops/varieties

Crops/cultivars	Area (ha)	Extent of damage	Recovery of damage through KVK initiatives if any
<b>Total</b>			

### Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds		
Pulses		
Cereals		
Vegetable crops		
Tuber crops		
<b>Total</b>		

### Farmers-scientists interaction on livestock management

Livestock components	Number of interactions	No.of participants
Model dairy farming shibir for taluka level dairy farmers in collaboration of Department of Ani. Husbandry.	1	149
<b>Total</b>	<b>1</b>	<b>149</b>

### Animal health camps organised

Number of camps	No.of animals	No.of farmers
-	-	-
<b>Total</b>	<b>-</b>	<b>-</b>

### Seed distribution in drought hit states

Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers
-	--	-	-
	-	-	-
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>

### Large scale adoption of resource conservation technologies

Crops/cultivars and gist of resource conservation technologies introduced	Area (ha)	Number of farmers
Adoption of trichoderma for cotton and groundnut crop in approximately 1500 ha.	1500	825
Application of Beauveria in 525 ha area.	525	360

<b>Total</b>	<b>2025</b>	<b>1185</b>
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## Awareness campaign

	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
Control of pink bollworm in cotton	14	702	-	-	-	-	-	-	02	880	12	245
Soil Health Campaign	13	262	-	-	01	81	-	-	01	580	08	220
<b>Total</b>	<b>27</b>	<b>964</b>	<b>-</b>	<b>-</b>	<b>01</b>	<b>81</b>	<b>-</b>	<b>-</b>	<b>03</b>	<b>1460</b>	<b>20</b>	<b>465</b>

**XIII. DETAILS ON HRD ACTIVITIES****A. HRD activities organized in identified areas for KVK staff by the Directorate of Extension**

Name of the SAU	Title of the training programmes	No of programmes	No. of Participants	No. of KVKs involved
Junagadh Agricultural University	New frontiers of Agricultural Technologies	01	03	-
<b>Total</b>				




**B. HRD activities organized in identified areas for KVK staff by ATARI**

Title of the training programmes	No of programmes	No. of Participants	No. of KVKs involved
Management Development Programme for newly recruited Programme Coordinators of KVK	01	01	01
Training programme for nodal officer of FLD on pulses	01	01	01
<b>Total</b>	<b>02</b>	<b>02</b>	<b>02</b>




**XIV. CASE STUDIES/ Our Success with farmers**


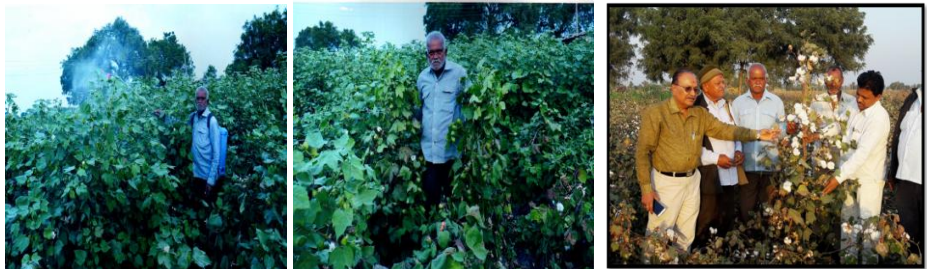


## 1. KRISHI VIGYAN KENDRA, JAU, SURENDRANAGAR

	<p>Thematic Area: livestock enterprenuership</p> <p><b>"Goat Rearing"</b></p> <p>Name : Januben Rupabhai Tarmata  Village: Reshmiya, Taluka: Chotila District: Surendranagar, Gujarat  Mo.: 09099806388</p>																																							
<p><b>Profile</b></p> <p>Age: 30 years  Education: 4<sup>th</sup> pass  Land Holding: 0.80 ha</p> <p><b>Crops:</b>  a) Kharif: Cotton</p> <p><b>Animals:</b>  1)  Goats</p> <p><b>Social Identity:</b>  Progressive Goat owner</p>	<p><b>Description of Technology:</b></p> <p><b>Description:</b> Januben R. Tarmata is a women farmer with limited resource. She owns 0.80 ha (5 vigha) of un irrigated land from which income was insufficient to run family. Goat rearing was the only source of her income.</p> <p><b>Technology:</b> She attended 2 days "Goat rearing" training programme organized by Krishi Vigyan Kendra, JAU, Surendranagar. During the training she got knowledge regarding improved goat rearing practices and effective goat raising. Prior to the training, Januben had 8 goats and 10 kids of desi breed (non descriptive) from which she received a limited amount of income. After the training, under the guidance of KVK experts desi breed were crossed with improved buck (Zalawadi). Presently Januben have flock of 28 adult goat &amp; 35 goat kids. She gives all credit to her husband &amp; the team of KVK, Surendranagar for her success. She is doing this business since last 5 years. She got 80,000/- income annually from milk of zalawadi goat rearing. &amp; additional income 28,000/- from selling of goat.</p> <p><b>Output:</b></p> <table border="1" data-bbox="459 1144 1390 1442"> <thead> <tr> <th rowspan="2">Year</th> <th colspan="2">Adult goat</th> <th colspan="2">Goat kids</th> <th rowspan="2">Receipts realized sale of goat &amp; goat milk</th> <th rowspan="2">Total income</th> </tr> <tr> <th>Male</th> <th>Female</th> <th>Male</th> <th>Female</th> </tr> </thead> <tbody> <tr> <td>2012</td> <td>01</td> <td>08</td> <td>01</td> <td>06</td> <td>21000/- (Milk)</td> <td>21000/-</td> </tr> <tr> <td>2013</td> <td>02</td> <td>14</td> <td>01</td> <td>17</td> <td>12000/-(goat) + 39000/- (Milk)</td> <td>51000/-</td> </tr> <tr> <td>2014</td> <td>02</td> <td>19</td> <td>02</td> <td>22</td> <td>20,000/- (goat) +61000/- (Milk)</td> <td>81000/-</td> </tr> <tr> <td>2015</td> <td>03</td> <td>25</td> <td>02</td> <td>33</td> <td>28,000/- (goat) + 80,000/- (Milk)</td> <td>1,08,000/-</td> </tr> </tbody> </table> <p><b>Impact:</b> He encouraged many farm women of surrounding village for rearing of Goat.</p>	Year	Adult goat		Goat kids		Receipts realized sale of goat & goat milk	Total income	Male	Female	Male	Female	2012	01	08	01	06	21000/- (Milk)	21000/-	2013	02	14	01	17	12000/-(goat) + 39000/- (Milk)	51000/-	2014	02	19	02	22	20,000/- (goat) +61000/- (Milk)	81000/-	2015	03	25	02	33	28,000/- (goat) + 80,000/- (Milk)	1,08,000/-
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Goat	Goat feeding MAKAI Bharaha																																							

## 2. KRISHI VIGYAN KENDRA, JAU, SURENDRANAGAR

	<p>Thematic Area: Climate smart cultivation</p> <p><b>"Sesamum crop gave good return when cotton failed to many a farmers"</b></p> <p>Sh. Jagabhai Vithalbhai Meniya  Village:Nana Kandhasar, Taluka: Chotila, District:  Surendranagar,  Gujarat - 363520, Mo.: 09978216601</p>
<p><b>Profile</b></p> <p>Age: 45 years  Education: 4<sup>th</sup> Pass  Land Holding: 3ha.</p> <p><b>Crops:</b></p> <p>a) Kharif: Cotton, Sesame  b) Rabi : Wheat, Lucern</p> <p><b>Animals:</b></p> <p>1) Buffalos-3</p> <p><b>Social Identity:</b> Progressive Farmers  Best Farmer</p>	<p><b>Description of Technology:</b></p> <p>Shri Jagabhai is educated upto 4 standard and possess 3.5 ha land. Out of which only 1.0 ha land is irrigated and rest of 2.5 ha land is remain unirrigated. Quality of underground water which is to be utilize for irrigation is not so good. So most of the cultivation comes under rainfed. Since last 3 years, he was growing cotton crop but due uncertainty, scanty and erratic rainfall, he got crop production failure. This year he participated in training programme and monsoon related campaign run by KVK, JAU, Nana Kandhasar and got information about less rainfall and possibility of delay in monsoon as well as prolonged interval in two spell of monsoon. Then he discussed with KVK expert about to which crop he should grow. Looking into his past failure, and monsoon forecasting, KVK experts suggested him to grow sesamum crop with short duration crop variety GT-4 and well suits for rainfed situation. As per advise of KVK experts, he cultivated 1,28 ha and received 10 qtl total production(7.81qtl./ha). He earned Rs. 60000.00 gross return (Rs43680.00/ha). Whereas his other fellow farmers who traditionally cultivated cotton crop ignoring monsoon forecasting found themselves in troubles as cotton crop production failures. Even though farmers who grown cotton crop could not get spare the cost cultivation.</p> <p><b>Impact:</b> He encourages about 20-25 farmers of with in or surrounding villages. As a result of, many farmers motivate</p>
	

	<p>Thematic Area: Use of bio pesticides and bio agents</p> <p><b>"Bumper production in Bt Cotton Crop by using bio agents and Bio Pesticides"</b></p> <p>Sh. Poonabhai Laljibhai Chauhan  Village:Karmad, Taluka: Chuda, District: Surendranagar,  Gujarat - 363415, Mo.: 09712260683</p>																																				
<p><b>Profile</b>  Age: 64 years  Education: 4<sup>th</sup> Pass  Land Holding: 1.2 ha.</p> <p><b>Crops:</b>  a) Kharif: Cotton  b) Rabi : Wheat, Chilly</p> <p><b>Animals:</b>  Buffalos-1  cow-1</p> <p><b>Social Identity:</b>  Best Farmer ATMA award at Taluka level</p>	<p><b>Description of Technology:</b>  Shri Poonabhai Chauhan is engaged in cotton production since last 40 years. He possess 1.2 ha land. Earlier he was grown cotton crop by traditional method. He had to use chemical fertilizers and chemical pesticides to get more crop production of cotton crop, burning of cotton stalk for fuel etc. When Bt cotton seed variety comes in market, he adopted Bt cotton crop. But with the passage of time his production was stabilized but cost of cultivation was started growing which resulted in reduction of net profit. Then he got advice from agricultural experts of KVK, agriculture department, ATMA etc and started crop cultivation accordingly. He initiated small steps to adopt e.g. incorporation of cotton stalks in soil, use of trichoderma for soil application as well as seed treatment, use of beuveria basiana for control of sucking pest as well as boll worm of early stages. Gradually his cost of cultivation behind chemical fertilizer and pesticides not only decreased but net return was also started boosting. Apart from this he yielded record production of Bt cotton per ha area by adopting environmental friendly cultivation practices.</p> <p>Now he is able to take 65 to 70 qtl per ha production of cotton crop. In the year, 2014-15, he produced 72 to 75 qtl cotton/ha and fetched Rs.</p> <table border="1" data-bbox="486 1205 1423 1460"> <thead> <tr> <th>Sr. No.</th> <th>Year</th> <th>Production in Qtl</th> <th>Cost of cultivation (In Rs.)</th> <th>Gross profit(In Rs.)</th> <th>Net profit(In Rs.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2010</td> <td>42</td> <td>17800</td> <td>139650</td> <td>121850</td> </tr> <tr> <td>2</td> <td>2011</td> <td>45</td> <td>22500</td> <td>200250</td> <td>177750</td> </tr> <tr> <td>3</td> <td>2012</td> <td>55</td> <td>32300</td> <td>247500</td> <td>215200</td> </tr> <tr> <td>4</td> <td>2013</td> <td>62</td> <td>31000</td> <td>283650</td> <td>252650</td> </tr> <tr> <td>5</td> <td>2014</td> <td>72</td> <td>28500</td> <td>288000</td> <td>259500</td> </tr> </tbody> </table> <p>Now he is regarded as potential cotton grower of the Surendranagar district. Majority of the neighboring farmers follows him and get advice on cotton crop from him. Hundreds of the farmers visits his cotton crop field during the season to observe cotton crop field condition. Hundred of farmers follow his advice and doing low input oriented cotton crop production. Still shri Poonabhai keep himself in touch with agricultural expert and always shows keenness to adopt new technologies.</p> <p><b>impact:</b> He encourages about 20-25 farmers of withn in or surrounding villages. As a result of, many farmers motivate</p> <div data-bbox="486 1731 1417 1998">  </div>	Sr. No.	Year	Production in Qtl	Cost of cultivation (In Rs.)	Gross profit(In Rs.)	Net profit(In Rs.)	1	2010	42	17800	139650	121850	2	2011	45	22500	200250	177750	3	2012	55	32300	247500	215200	4	2013	62	31000	283650	252650	5	2014	72	28500	288000	259500
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