

**PROFORMA FOR ANNUAL REPORT : 2013-14**  
**(01.04.2013 TO 31.03.2014)**

**1. GENERAL INFORMATION ABOUT THE KVK**

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

Address	Telephone		E mail	Web Address
	Office	FAX		
Krishi Vigyan Kendra, Mangal Bharti, At & Po. Golagamdi, Taluka : Sankheda, Dist : Vadodara, Gujarat, Pin : 391125	(02665) 243240	-	kvkvd@gmail.com	www.kvkvadodara.org

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

Address	Telephone		E mail	Web Address
	Office	FAX		
Mangal Bharti, At & Po. Golagamdi, Taluka : Sankheda, Dist : Vadodara, Gujarat, Pin : 391125	(02665) 243240	(02665) 243240	kvkvd@gmail.com	www.kvkvadodara.org

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Bharat M. Mehta Programme Coordinator	-	09426834346	bmehta_61@rediffmail.com

**1.4. Year of sanction** : 1995

### 1.5. Staff Position (as on 31<sup>st</sup> March, 2014)

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)
1	Programme Coordinator	Dr.B.M.Mehta	Prog. Coordinator	-	37400-9000-6700	46400	17/9/2013	Permanent	Other
2	Subject Matter Specialist	C. R. Patel	Subject Matter Specialist	Agronomy	15600-5400-39100	21000	23/6/2011	Permanent	Other
3	Subject Matter Specialist	M. C. Brahmhatt	-do-	Horticulture	-do-	21000	11/7/2011	Permanent	OBC
4	Subject Matter Specialist	J. P. Meena	-do-	Animal Science	-do-	21000	7/7/2011	Permanent	ST
5	Subject Matter Specialist	K. J. Soni	-do-	Home Science	-do-	21000	2/7/2011	Permanent	Other
6	Subject Matter Specialist	Dr. B. L. Dhayal	-do-	Ext.Edu	-do-	21000	23/8/13	Permanent	Other
7	Subject Matter Specialist	Dr. M. L. Patel	-do-	Plant Protection	-do-	21000	02/09/13	Permanent	Other
8	Programme Assistant	K. K. Sutaria	Prog. Asst.	-	9300-4200-34800	15780	1/12/2008	Permanent	SC
9	Computer Programmer	M.R.Kulkarni	Prog. Asst. (Comp)	-	-do-	15780	21/01/2008	Permanent	Other
10	Farm Manager	Hariom Sharma	Farm Manger	-	-do-	13500	2/9/13	Permanent	Other
11	Accountant / Superintendent	V.V.Shah	Accountant / Office Superintendent	-	9300-4200-34800	18830	04/06/2001	Permanent	Other
12	Stenographer	C.M.Raval	Steno.	-	5200-2400-20200	7600	2/9/13	Permanent	Other
13	Driver	R.N.Prajapati	Driver	-	5200-2000	8820	17/01/2008	Permanent	O.B.C
14	Driver	Z. S.Vora	Driver	-	-do-	7200	27/6/2011	Permanent	Other
15	Supporting staff	P.B.Rathwa	Supporting Staff	-	5200-1800	8580	5/9/2003	Permanent	S.T.
16	Supporting staff	J.R.Tadvi	Supporting Staff	-	-do-	8580	29/7/2002	Permanent	S.T

**6. Total land with KVK (in ha) : 20**

Sr. No.	Item	Area (ha)
1	Under Buildings	3.30
2.	Under Demonstration Units	2.00
3.	Under Crops	9.50
4.	Orchard/Agro-forestry	1.50
5.	Others	3.70

**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	2001	561.43	18,23,216/-	-	-	-
2.	Farmers Hostel	ICAR	2011	300.75	26,57,744/-			
3.	Staff Quarters (8+6=14)	ICAR	2001	694.61	29,23,910/-	-	-	-
4	Fencing	ICAR	2006	1709 Rmt.	3,45,000/-	-	-	-
5	Rain Water harvesting system	ICAR	2007	62x39 mt.	9,78,000/-	-	-	-
6	Threshing floor	ICAR	2010	41.82 (sqmt)	1,93,440/-	-	-	-
7	Farm godown	ICAR	2010	55.76 (sqmt)	2,86,422/-	-	-	-
8	Implement shed	ICAR	2010	55.76	2,99,000/-			

**B) Vehicles**

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Messy tractor with trolley	28/03/95	2,82,058=00	1,78,412	Poor condition
Mahindra Bolero	29.3.2010	6,25,000=00	1,00,189	Working condition
Bajaj Discover	09/02/11	48,251=00	35563	Working condition

**(C) Equipments & AV aids**

<b>Sr. No</b>	<b>Name of items</b>	<b>Qty.</b>	<b>Amount (Rs.)</b>	<b>Date of purchased</b>	<b>Present condition</b>
1	Electronic type writer	01	16,380=00	30/03/95	Poor condition due to technical fault
2	Steel cupboard	01	3,300=00	30/03/95	Good
3	Iron cupboard	01	3,100=00	30/03/95	Good
4	Iron Table	02	6,370=00	30/03/95	Good
5	Chair	12	5,860=00	30/03/95	Good
6	Tractor Plough	01	15,000=00	31/03/95	Good
7	Slide Projector	01	16,500=00	31/03/95	Poor condition due to fault
8	Overhead Projector	01	10,500=00	31/03/95	Poor condition
9	VCR (onida)	01	14,300=00	01/09/96	Good
10	Micro Scope	01	3,500=00	19/09/96	Good
11	Camera (Canon)	01	2,350=00	28/09/96	Poor condition due to fault
12	Moving trolley	01	6,500=00	28/09/96	Good
13	Store well	04	10,800=00	30/09/96	Good
14	Store well	01	3,200=00	30/09/96	Good
15	Office table	03	6,525=00	30/09/96	Good
16	Office chair	04	1,400=00	30/09/96	Good
17	Glass door cupboard	01	3,900=00	30/09/96	Good
18	Office Table	01	2,175=00	30/09/96	Good
19	Office chair	01	350=00	30/09/96	Good
20	Colour T.V.(crown)	01	18,800=00	15/10/96	Good
21	Office Table	01	3,200=00	30/10/96	Good
22	Office chair	01	350=00	30/10/96	Good
23	Microphone PCM with set accessories	01	8,495=00	11/03/98	Good
24	Slide Projector with remote	01	11,300=00	01/04/98	Good
25	Glass door cupboard	01	3,150=00	04/03/2000	Good
26	Wind wheel	01	15,00=00	20/10/2000	Good
27	Store well	10	29,000=00	31/01/2001	Good
28	Office chair	10	3,000=00	31/01/2001	Good
29	Table	10	11,500=00	31/01/2001	Good
30	File rake	04	5,100=00	31/01/2001	Good
31	Museum room self	01	20,900=00	28/02/2001	Good
32	Dias	01	9,056=00	01/03/2001	Good
33	Library table	01	22,000=00	15/03/2001	Good
34	Plastic chair	35	11,900=00	30/03/2001	Good
35	Multi panel kit-12	01	11,954=00	31/03/2001	Good
36	Flash kit-4	01	12,5000=00	31/03/2001	Good
37	Eco display with 3 panel	01	5,773=00	31/03/2001	Good
38	Info panel wall type	01	6,611=00	31/03/2001	Good
39	Kitchen mixture	01	1,995=00	31/03/2002	Good
40	Kitchen pressure cooker	01	2,200=00	31/03/2002	Good

<b>Sr. No</b>	<b>Name of items</b>	<b>Qty.</b>	<b>Amount (Rs.)</b>	<b>Date of purchased</b>	<b>Present condition</b>
41	Cupboard & stand	04	9,975=00	31/03/2003	Good
42	Xerox machine (Canon-7160)	01	79,800=00	30/03/2004	Good
43	Rotavator (rotary)	01	49,000=00	31/12/2004	Good
44	Office Table	08	33,500=00	30/09/2005	Good
45	Office chair	12	9,600=00	30/09/2005	Good
46	File rake	08	6,400=00	30/09/2005	Good
47	Computer with Accessories (Compaq)	01	64,500=00	14/02/2006	Good
48	Steel cupboard	03	10,440=00	26/02/2006	Good
49	Plastic chair	12	4,560=00	26/02/2006	Good
50	Pneumatic cotton planter	01	47,400=00	28/03/2006	Under TMC-MM-II Grant
51	Power weeder	01	33,500=00	28/03/2006	Under TMC-MM-II Grant
52	Computer table	01	3,165=00	31/03/2006	Good
53	Office table	01	3,165=00	31/03/2006	Good
54	Computer chair	02	4,310=00	31/03/2006	Good
55	Plastic chair	25	8,125=00	31/03/2006	Good
56	Rake	06	16,235=00	31/03/2006	Good
57	Storage cupboard	05	25,250=00	31/03/2006	Under STL grant
58	Storage cupboard	01	5,150=00	31/03/2006	”
59	Cupboard	01	4,500=00	31/03/2006	”
60	Angel rake	04	7,100=00	31/03/2006	”
61	Store well	03	12,300=00	31/03/2006	”
62	Office table	02	7,500=00	31/03/2006	”
63	Stand frame rake	04	6,200=00	31/03/2006	”
64	Revolving chair	02	43,10=00	31/03/2006	”
65	Revolving stool	02	2,700=00	31/03/2006	”
66	Plastic stool	04	755=00	31/03/2006	”
67	Store well cupboard	03	15,000=00	31/03/2006	”
68	Fixed wall steel cupboard	--	85,021=00	31/03/2006	”
69	Hot Plate Rectangular (Nova-NV-8535)	01	7,500=00	28/02/2006	”
70	Rotary shaker (Nova-NV-853)	01	25,250=00	28/02/2006	“
71	Voltage stabilizer (Nova-NV/14)	01	16,000=00	28/02/2006	”

<b>Sr. No</b>	<b>Name of items</b>	<b>Qty.</b>	<b>Amount (Rs.)</b>	<b>Date of purchased</b>	<b>Present condition</b>
72	“EI” Microprocessor Flame Photometer (Model-1381)	01	35,250=00	28/02/2006	Under STL grant
73	“EI” Microprocessor based pH meter (Model-1012)	01	15,275=00	28/02/2006	”
74	“EI” Microprocessor based Conductivity/TDS meter (Model-1601)	01	17,450=00	28/02/2006	”
75	Single pan balance ‘K-Roy’ (Model: K-14 Deluxe)	01	11,950=00	28/02/2006	”
76	Electronic Balance: Multi-function series (Model: Swis-310)	01	14,900=00	28/02/2006	”
77	Visible Spectrophotometer (FGSL-177 Scanning)	01	55,944=00	02/03/2006	”
78	Electronic Automatic Kel Plus Micro-processor based Twelve Place macro block Digestion System (Model: KES 12 L)	01	96,020=00	16/03/2006	”
79	Electronic Kel Plus Micro-processor based Automatic Distillation System (Model: DISTY-EM)	01	1,25,350=00	16/03/2006	”
80	Sampling Augers (Hand size 3”)	01	1,200=00	25/03/2006	”
81	Sampling Augers (Hand size 6”)	01	2,150=00	25/03/2006	”
82	Extension Rod - Size: 3”	01	800=00	25/03/2006	Under STL grant
	Size: 6”	01	1,050=00	25/03/2006	”
83	Refrigerator 330 Lit (Ken star-SR)	01	15,000=00	27/03/2006	”
84	Stabilizer	01	500=00	27/03/2006	”
85	‘Nova’ Willey mill stainless steel body	01	21,550=00	06/03/2006	”
86	‘Nova’ Horizontal shaker-Kahn-Platform	01	24,975=00	06/03/2006	”
87	“Mac” Electrically Heated all glass Distillation apparatus (Model: MSW-193)	01	16,350=00	06/03/2006	“
88	Test Sieves Size: 3.35mm	01	475=00	25/03/2006	“
89	Size: 2.00 mm	01	475=00	25/03/2006	“

<b>Sr. No</b>	<b>Name of items</b>	<b>Qty.</b>	<b>Amount (Rs.)</b>	<b>Date of purchased</b>	<b>Present condition</b>
90	Soil Hydrometer Range: 58-92%	01	700=00	25/03/2006	“
91	High speed stirrer: IS: 2720IV)	01	11,400=00	25/03/2006	“
92	Hand/Sugar Refractometer	01	2,500=00	25/03/2006	“
93	Hanna Pocket pH Meter	01	2,600=00	25/03/2006	”
94	Hanna Pocket TDS Meter	01	2,450=00	25/03/2006	”
95	Aero Blast Sprayer (Aspee-Mod.No.ATB/6HDP)	01	86080=00	06/02/2007	Under TMC-MM-II
96	LCD Projector (Panasonic- Model. No.-PT-PISD 1500luens.	01	73010=00	16/03/07	
97	DVD Handy Cam (Sony.Model:608E	01	20500=00	20/03/07	
98	Digital Camera (Orite Mod.No.-C8000	01	9200=00	20/03/07	
99	Trolley With Cabinet	01	10688=00	16/03/07	
100	Projector Screen with Stand (Size:52”70)	01	11560=00	16/03/07	
101	Seed cum fertilizer drill	01	30000=00	28/11/10	Under ICAR grant

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

Sl. No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken
1	21-6-13	<ol style="list-style-type: none"> <li>1. Dr. Y. V. Singh, ZPD Zone VI, Jodhpur, Rajasthan</li> <li>2. Dr. M.M. Pathak , Asso. Dir. &amp; Res. , AAU, Anand</li> <li>3. Dr. M. K. Trivedi, Dy. Dir. ATMA, Vadodara</li> <li>4. V. m. Bathar, Dy. Dir, of Agri, , Vadodara</li> <li>5. Dr. D.B. Patel, Res. Sci, AAU, Model farm , Vadodara</li> <li>6. V.B. Darji, Horticulture Officer , Vadodara</li> <li>7. N.G. Vadhar, Director, BSVS, Vadodara</li> <li>8. Dr. V.K. Gararia, Veterinary Officer, Sankheda</li> <li>9. Dr. P. K. Sharma, P.C. KVK, Kheda</li> <li>10. Dr. B.S. Patel, Trg. Asso. ,Dir, Ext. Edu, AAU, Vadodara</li> <li>11. R. L. Chhaliya, ARS Paddy, Res .St, AAU, Dabhoi</li> <li>12. J.N.Parmar, Asst. Dir, of Agri, sub div. Dabhoi</li> <li>13. J.R. Rathva, Ext. Offi, Agri, Sankheda</li> <li>14. Mr. RitaMatta, Plant Prot, Officer, Central IPM, Vadodara</li> <li>15. M.K. Dave, Asst. P.P. CIPMC, Vadododara</li> <li>16. Dhanjay Takkar, ACT agro chem.Vadodara</li> <li>17. K.,M. Patel, Agri. Asst. Vadodara</li> <li>18. Mr.K. J. Patel, CIPMC, Vadodara</li> <li>19. Mr. H.S. Tadvi, Forest officer, Sankheda</li> <li>20. S.D. Parmar, GEB Officer, Sankheda</li> <li>21. D. K. Patel, Agrocel Ind. Ltd, Dabhoi</li> <li>22. Mr. N.B. Patel, Farmer</li> <li>23. Laxmiben A. Kapadiya, Member of SHG</li> <li>24. Baria, M.V. Farmer</li> <li>25. Mr. M.C.Brachambhatt I.C. P.C. , KVK Vadodara</li> <li>26. Mr. J.P.Meena SMS( Ani. Sci.)</li> <li>27. Mr. C.R. Patel SMS</li> </ol>	<p>Voice message services should be used maximum for farmers because it is more beneficial to the uneducated farmers as it is in local language.</p> <p>Demonstration units like bio fertilizer unit (vermi compost), water harvesting unit etc. should be established at KVK.</p> <p>Make impact studies after giving FLDs and OFTs, find reasons for the acceptance or rejection of the particular technologies.</p> <p>OFT should be laid out according to cropping system. Cover some rainfed area under FLD.</p> <p>Highlight different types of trainings with remarks and justification i.e. vocational trainings, sponsored trainings etc.</p> <p>Increase no. of days in vocational and other trainings.</p> <p>Conduct group meetings of all KVK of the zone and discuss various techniques for OFTs.</p> <p>Encourage integrated farming system for controlling cases of farmer suicide.</p> <p>Maintain effective linkage between ATMA and KVK for better results at field level.</p>	<p>Voice messages has been send to the farmers in local language related to seasonal crop specific information and also send the text messages.</p> <p>Demonstration laid down on bio-pesticide SNPV etc prepared in KVK lab and distributed to the farmers.</p> <p>The impact study on FLD chilli and OFT on animal husbandry has been taken and completed.</p> <p>OFTs and FLD laid down according to the cropping system.</p> <p>New programme should be plan accordingly.</p> <p>Training programme set to the need of the farmers. Faces problems of residential facilities</p> <p>DEE, AAU Anand conducts the group meeting with all KVKs and discusses it briefly.</p> <p>KVK encourage the farmer to adopt integrated farming system.</p> <p>Many training programme conducted in collaboration with ATMA like Kisan mela, Kisan</p>



		<p>(Agronomy) 28. K. J. Soni , SMS (Home Sci.)</p>	<p>Use Public-Private-Partnership technique to solve problems like low availability of raw material and marketing of final products for vocational trainings.</p> <p>Recommend cotton variety hybrid bt-8 to farmers and use castor variety GCH-7 instead of GCH-5 for demonstration.</p> <p>Recommend paddy-wheat cropping pattern system. After harvesting of paddy, sowing of wheat should be done immediately for more production by practicing zero tillage method.</p> <p>Suggest alternate vegetable crops for net house instead of capsicum.</p> <p>Recommend mix farming, good animal husbandry practices, tree agriculture for more income.</p>	<p>Ghosti, FFS and OFT.</p> <p>KVK utilize Public-Private-Partnership channel to provide the certified seed of the major crops as well as fertilizer and pesticide at an appropriate time.</p> <p>OFT laid down for assessment and FLD should be plan accordingly.</p> <p>No any recommendation on zero tillage method from the SAU.</p> <p>KVK suggested the cucumber and other leafy vegetable in net house cultivation.</p> <p>KVK recommended mix farming practices with animal husbandry and horticulture crops on farmer boundry.</p>
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## **2. DETAILS OF DISTRICT (2013-14)**

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

<b>Sr. No</b>		<b>Farming system/enterprise</b>
1	Crop	<b>Kharif</b> : Cotton, Pigeon pea, Castor, Paddy, Soyabean, Maize, Chilli, Tomato, Banana <b>Rabi</b> : Sorghum, Wheat, Gram, Maize <b>Summer:</b> Groundnut, Greengram, Sesamum, Okra, Watermelon, Muskmelon
2	Enterprise	Agriculture and Animal Husbandry

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

<b>Sr. No</b>	<b>Agro-climatic Zone</b>	<b>Characteristics</b>
1	Middle Gujarat zone III	Average rain fall is 800-1000 mm. Geographically Vadodara district is located between 21 <sup>0</sup> 49' to 22 <sup>0</sup> 49' north latitude and 72 <sup>0</sup> 51' to 74 <sup>0</sup> 17' east longitude

<b>Sr. No</b>	<b>Agro ecological situation</b>	<b>Characteristics</b>
1	Sandy loam soil with high rain fall	Altitude (in meter above MSL): 25-75 Taluka : Vadodara, Padara, Savli, Dabhoi, Waghodia
2	Medium black soil with high rain fall	Altitude (in meter above MSL): 75-150 Taluka : Pavi jetpur, Chhotaudaipur, Naswadi, Karjan
3	Deep black soil with high rain fall	Altitude (in meter above MSL): 25-75 Taluka: Dabhoi, Sankheda, Shinor, Karjan
4	Light soil with high rain fall	Altitude (in meter above MSL): 150-300 Taluka: Chhotaudaipur (tribal base)

### **2.3 Soil type/s**

<b>Sr. No</b>	<b>Soil type</b>	<b>Area in ha</b>
1	Black soil	88864
2.	Medium black	208646
3.	Sandy loam	174021
4.	Sandy	36305
5.	Salt affected	4888

#### 2.4. Area, Production and Productivity of major crops cultivated in the district

Sr. No.	Crop	Area (ha)	Production (MT.)	Productivity (kg/ha)
<b>A</b>	<b><i>Kharif</i></b>			
<b>1</b>	Cotton Irrigated	115600	4653	684 (Lint)
	Un irrigated	49400	1253	431 (Lint)
<b>2</b>	Paddy Irrigated	17600	328	1858
	Un irrigated	38400	282	735
<b>3</b>	Sorghum	1800	18	1019
<b>4</b>	Bajara	6900	103	1500
<b>5</b>	Castor	16200	265	1634
<b>6</b>	Maize	46500	855	1840
<b>7</b>	Pigeon Pea	75600	808	1068
<b>8</b>	Green gram	1600	7	426
<b>9</b>	Groundnut	1300	17	1342
<b>10</b>	Black gram	13200	104	786
<b>11</b>	Tobacco	122	178	1458
<b>12</b>	Soybean	10100	80	796
<b>13</b>	Chillies	600	4	765
<b>14</b>	Banana	2300	1599	69895
<b>15</b>	Tomato	3567	129940	36400
<b>B</b>	<b><i>Rabi</i></b>			
<b>1</b>	Wheat	30700	798	2602
<b>2</b>	Sorghum	3900	41	1043
<b>3</b>	Gram	2200	23	1062
<b>4</b>	Maize	63900	1318	2063
<b>C</b>	<b><i>Summer</i></b>			
<b>1</b>	Groundnut	19900	327	1639
<b>2</b>	Sugarcane	6600	445	6709
<b>3</b>	Bajara	6300	122	1931
<b>4</b>	Sesamum	1600	6	388
<b>5</b>	Green gram	4100	23	559

Source- Director of Agriculture ,Gandhinagar

## 2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
April-13	0.00	39.69	22.26	56.20
May-13	0.00	40.27	26.51	74.18
June-13	103.00	35.22	25.72	77.88
July-13	516.00	32.83	25.65	82.16
August-13	185.00	32.25	25.38	85.79
September-13	494.00	32.22	25.02	88.29
October-13	15.00	34.50	22.29	68.86
November-13	0.00	32.69	17.85	56.95
December-13	0.00	30.28	15.75	60.66
January-14	35.20	27.21	13.06	68.59
February-14	4.40	28.51	15.11	74.14
March-14	0.00	33.00	18.46	68.35

Source: Paddy Research Station, AAU, Daboi

## 2.6 Details of Operational area / Villages (2013-14)

Sl No	Tehsil	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Sankheda	Sankheda	Saradiya, Raipur, Sundarpura, Kathmandva, Targod, Navapura, Ambapura, Vagetha, Deroli	<p><b>Kharif</b> Cotton Pigeonpea Castor Banana Vegetables</p> <p><b>Rabi</b> Maize</p> <p><b>Summer</b> Greengram Groundnut</p>	<p><b>Cotton :</b></p> <ol style="list-style-type: none"> <li>Higher application of nitrogenous fertilizers</li> <li>Improper water management</li> <li>No use of micronutrients</li> <li>Problem of pest &amp; diseases</li> <li>Depends only on manual weeding</li> </ol> <p><b>Pigeon pea</b></p> <ol style="list-style-type: none"> <li>Improper spacing</li> <li>Use of higher seed rate</li> <li>No use of micronutrients</li> <li>Improper pest and disease management</li> <li>Improper water management</li> <li>Depends only on manual weeding</li> </ol> <p><b>Castor</b></p> <ol style="list-style-type: none"> <li>Use of higher seed rate</li> <li>Improper spacing</li> <li>No use of micronutrients</li> <li>Indiscriminate use of fertilizer</li> <li>Improper water management</li> <li>Problems of wilt, rootrot and semi looper</li> </ol>	<p>INM IWM IPM Water Mgt.</p> <p>ICM INM IPM IWM</p> <p>ICM INM IWM IPM</p>

					<p><b>Banana</b></p> <ol style="list-style-type: none"> <li>1.No use of tissue culture plants</li> <li>2. Not follow seed treatment to rhizome</li> <li>3. Excess use of fertilizer</li> <li>4. Excess use of water</li> <li>5. Improper disease management</li> </ol> <p><b>Maize</b></p> <ol style="list-style-type: none"> <li>1. Use of higher seed rate</li> <li>2. Improper spacing</li> <li>3. No use of micronutrients</li> <li>4. Higher application of nitrogenous fertilizer</li> <li>5. Improper water management</li> </ol> <p><b>Greengram</b></p> <ol style="list-style-type: none"> <li>1. Use of local seeds</li> <li>2. Use of higher seed rate</li> <li>3. Improper water management</li> <li>4. Improper pest and disease management</li> </ol> <p><b>Groundnut</b></p> <ol style="list-style-type: none"> <li>1.Use of local seeds</li> <li>2.No use of micronutrients</li> <li>3. Improper weed management</li> </ol>	<p>ICM IPM IDM IWM</p> <p>ICM INM IWM</p> <p>ICM IPM</p>
2.	Naswadi	Naswadi	Dhamasiya Pochamba Payakui	<p><b>Kharif</b></p> <p>Cotton Paddy Castor</p> <p><b>Rabi</b></p> <p>Wheat Gram</p> <p><b>Summer</b></p> <p>Greengram Groundnut</p>	<p>- <b>Paddy</b></p> <ol style="list-style-type: none"> <li>1.Use of local seeds</li> <li>2.Application of higher dose nitrogenous fertilizer</li> <li>3.No use of micronutrients</li> <li>4. T.P. at random method</li> <li>5.In adequate and delayed plant protection</li> <li>6.Use more seed rate</li> <li>7.Problem of BLB, Hopper and stem borer</li> </ol> <p><b>Wheat</b></p> <ol style="list-style-type: none"> <li>1. Use of local seeds</li> <li>2. Delayed sowing</li> <li>3. Use of higher rate of seed</li> <li>4. Improper water management</li> <li>5. Improper nutrient management</li> <li>6. No use of micronutrients and Bio-fertilizers</li> </ol> <p><b>Greengram</b></p> <ol style="list-style-type: none"> <li>1. Use of local seeds</li> <li>2. Use of higher seed rate</li> <li>3. Improper water management</li> <li>4. Improper pest and disease management</li> </ol> <p><b>Groundnut</b></p> <ol style="list-style-type: none"> <li>1.Use of local seeds</li> <li>2.No use of micronutrients</li> <li>3. Improper weed management</li> </ol>	<p>ICM SRI INM IPM</p> <p>INM IWM ICM</p> <p>ICM INM IPM</p>
3.	Waghodiya	Waghodiya	Goraj, Rojoyapura Godhara, Nurpuri	<p><b>Kharif</b></p> <p>Cotton, Pigeonpea, Castor Vegetables</p>	<p><b>Cotton :</b></p> <ol style="list-style-type: none"> <li>1. Higher application of nitrogenous fertilizers</li> <li>2. Improper water management</li> <li>3. No use of micronutrients</li> <li>4.Problem of pest &amp; diseases</li> <li>5. Depends only on manual weeding</li> </ol>	<p>INM IWM IPM Water Mgt.</p>

				<p><b>Rabi</b> Maize Gram <b>Summer</b> Greengram</p>	<p><b>Pigeonpea</b> 1. Improper spacing 2. Use of higher seed rate 3. No use of micronutrients 4. Improper pest and disease management 5. Improper water management 6. Depends only on manual weeding</p> <p><b>Castor</b> 1. Use of higher seed rate 2. Improper spacing 3. No use of micronutrients 4. Indiscriminate use of fertilizer 5. Improper water management 6. Problems of wilt, rootrot and semi looper</p> <p><b>Maize</b> 1. Use of higher seed rate 2. Improper spacing 3. No use of micronutrients 4. Higher application of nitrogenous fertilizer 5. Improper water management</p> <p><b>Greengram</b> 1. Use of local seeds 2. Use of higher seed rate 3. Improper water management 4. Improper pest and disease management</p>	<p>ICM INM IPM IWM</p> <p>ICM INM IWM IPM</p> <p>ICM INM IWM</p> <p>ICM INM IWM</p>
4.	Kawant	Kawant	Khathiyawat Baladgam	<p><b>Kharif</b> Cotton, Pigeonpea, Castor Vegetables <b>Rabi</b> Maize Gram <b>Summer</b> Greengram</p>	<p><b>Cotton :</b> 1. Higher application of nitrogenous fertilizers 2. Improper water management 3. No use of micronutrients 4. Problem of pest &amp; diseases 5. Depends only on manual weeding</p> <p><b>Pigeonpea</b> 1. Improper spacing 2. Use of higher seed rate 3. No use of micronutrients 4. Improper pest and disease management 5. Improper water management 6. Depends only on manual weeding</p> <p><b>Castor</b> 1. Use of higher seed rate 2. Improper spacing 3. No use of micronutrients 4. Indiscriminate use of fertilizer 5. Improper water management 6. Problems of wilt, rootrot and semi looper</p> <p><b>Maize</b> 1. Use of higher seed rate</p>	<p>INM IWM IPM Water Mgt.</p> <p>ICM INM IPM IWM ICM INM IWM IPM</p> <p>ICM INM IWM</p> <p>ICM INM IWM</p>

					2. Improper spacing 3. No use of micronutrients 4. Higher application of nitrogenous fertilizer 5. Improper water management	
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## 2.7 Priority/thrust areas

Crop/Enterprise	Thrust area
Cotton	Integrated Nutrient Management Integrated Pest Management Integrated Weed management
Rice	Varietal evaluation Water Management Integrated Weed Management Integrated Nutrient management Integrated pest Management
Pigeonpea	Varietal evaluation Production and use of organic inputs Integrated pest Management
Gram	Varietal evaluation Production and use of organic inputs Integrated pest Management
Wheat	Integrated crop management Integrated weed management Integrated Nutrient management
Maize	Varietal evaluation Integrated Nutrient Management Integrated weed management
Castor	Integrated Pest & Disease Management Varietal evaluation Integrated Nutrient Management Water Management
Greengram	Varietal evaluation Integrated Pest & Disease Management
Cucurbits	Integrated Pest & Disease Management Integrated Nutrient management
Banana	Integrated Nutrient Management Integrated Weed management Water Management
Animal husbandry	Management of Dairy animal for maximize the milk production Clean milk production Animal Health management
Home science	Nutritional security for women and child popularize the drudgery reduction technology Value addition Income generation activity

### **3. TECHNICAL ACHIEVEMENTS**

#### **3. A. Details of target and achievements of mandatory activities by KVK during 2013-14**

<b>OFT (Technology Assessment and Refinement)</b>				<b>FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)</b>			
<b>1</b>				<b>2</b>			
<b>Number of OFTs</b>		<b>Number of Farmers</b>		<b>Number of FLDs</b>		<b>Number of Farmers</b>	
<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>
04	04	25	25	14	14	266	266

<b>Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)</b>					<b>Extension Activities</b>			
<b>3</b>					<b>4</b>			
<b>Number of Courses</b>			<b>Number of Participants</b>		<b>Number of activities</b>		<b>Number of participants</b>	
<b>Clientele</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>
Farmers	96	102	1920	2609	198	724	3960	15428
Extension Functionaries	03	03	60	87	0	0	0	0
<b>Total</b>	<b>99</b>	<b>105</b>	<b>1980</b>	<b>2696</b>	<b>198</b>	<b>724</b>	<b>3960</b>	<b>15428</b>

<b>Seed Production (qtl.)</b>		<b>Planting material (Nos.)</b>	
<b>5</b>		<b>6</b>	
<b>Target</b>	<b>Achievement</b>	<b>Target</b>	<b>Achievement</b>
Green Gram -10.00	10.43	Vegetable Seedling-1.0 lac	0.60 lac



## B. Abstract of interventions undertaken

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions					
				Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
	Varietal evaluation	Paddy	Low yield of paddy	-	Introduction of new variety	Cultivation Practices of Paddy	-	Field day Diagnostic services	Seeds
1	Varietal evaluation	Greengram	YMV problem		Introduction of resistance variety	Cultivation Practices of Greengram	Production technology of Summer pulse crop	Field day Diagnostic services	Seeds
2.	Varietal evaluation	Pigeonpea	Wilt and Mosaic	-	Introduction of wilt resis. variety	Cultivation practices of Pigeonpea	-	Field day Diagnostic services	Seeds and all other inputs
3.	Varietal evaluation	Chickpea	Wilt and low yield	-	Introduction of variety for irrigated condition	Cultivation practices of chickpea	-	Field day Diagnostic services	Seeds and all other inputs
4.	Varietal evaluation	Wheat	Low yield of wheat	-	Cultivation Practices of wheat	Cultivation Practices of wheat	-	Field day Field visit	Seed
6.	Varietal evaluation	Lucerne	Green fodder	-	Introduction of variety	cultivation practices of Lucerne	-	Field day Field visit	Seed
7.	IPM	Paddy	Stem borer infestation in Paddy	Control of stem borer in Paddy	-	IPM in Paddy	-	Field day Field visit	Pesticide
8.	INM/IPM	Bt. Cotton	No use of INM	INM and IPM in Bt. cotton	-	INM and IPM in Bt. cotton	INM and IPM in Bt. cotton	Field visit	Bio-fertilizer Bio-pesticide
9.	Weed management	Groundnut	Only hand weeding		Weed management in groundnut	Weed management in groundnut	-	Field day Field visit	Herbicide

10	INM	Chilli	No use of Micro-nutrient	-	INM	INM	-	Field day Diagnostic services	Bio-fertilizers and micro-nutrients
11	INM	Tomato	Low yield	-	INM	INM	-	Field day Diagnostic services	Bio-fertilizers and micro-nutrients
12	INM	Water melon	Imbalanced use of fertilizer	-	INM	INM	-	Field day Diagnostic services	Bio-fertilizers and micro-nutrients
13	Nutritional Management	Buffalo	Low milk yield	Improvement in milk production of buffalo	-	Improvement in milk production of buffalo	-	Field day Diagnostic services	Mineral mixture and Common salt
14	Nutritional Management	Adolescent Girls	Aneamia	Food supplement efficacy to increase hemoglobin content.	-	Food supplement efficacy to increase hemoglobin content.	-	-	Iron-folic acid tablets, Food Supplements.
15	Nutritional Garden	Nutritional Gardening	Use of desi or scattered method	-	Kitchen gardening	Guidance about kitchen gardening	-	Field day Field visit	Improved seed and seedling
16	Drudgery reduction	Farm Women	No use of improve sickle	-	Serrated sickle	Drudgery reduction	-	Field day	Improved sickle



1. Details of each On Farm Trial to be furnished in the following format

**Technology Refinement**

**Trial 1: Improvement in milk production of buffalo**

<b>Title</b>	<b>Improvement in milk production of buffalo</b>
<b>Problem diagnose/defined</b>	Low milk yield
<b>Details of technologies selected for assessment /refinement</b>	T1: Farmers practices T2: Mineral mixture @ 50 g./head/day (Recommendation) T3 : Mineral mixture @ 50 g./head/day + common salt @ 25 g /head/day + de-worming (suggested )
<b>Source of technology</b>	SAU
<b>Thematic area</b>	Nutritional Management
<b>Performance of the Technology with performance indicators</b>	Results showed that feeding of Mineral mixture @ 50 g./head/day + common salt @ 25 g /head/day + de-worming gave higher milk yield as compared to other treatments.
<b>Final recommendation for micro level situation</b>	Feeding of mineral mixture @ 50 gm and common salt @ 25 gm per head/day and regularly deworming increase the milk production.
<b>Constraints identified and feedback for research</b>	Lack of knowledge of mineral mixture feeding.
<b>Process of farmers participation and their reaction</b>	Prior to selection of the farmers, PRA survey was conducted to collect the information regarding the present status of milk production and feeding schedule followed by the farmers. The selection of animal was prepared with the help of opinion leader and progressive animal owner of the village. The aim of the OFT was cleared in the mind of the farmers through discussion during group meeting.

## 1.1 Results of On Farm Trials

Crop/enterprise	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	3	4	5	6	7	8	9	10
Animal	Low milk yield	Improvement in milk production of buffalo	1	Farmers practices	Milk yield ( lit/day)	5.45	Results showed that feeding of Mineral mixture @ 50 g./head/day + common salt @ 25 g /head/day + de-worming gave higher milk yield as compared to other treatments.	Milk production has increased and animals have shown better consumption of fodder.
			2	Mineral mixture @ 50 g./head/day	Milk yield ( lit/day)	6.22		
			3	Mineral mixture @ 50 g./head/day + common salt @ 25 g /head/day + de-worming	Milk yield ( lit/day)	6.41		

\* No. of farmers

Technology Assessed	*Production per unit Milk yield ( lit/day/animal)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Farmers practices	5.45	73.30	1.81
Mineral mixture @ 50 g./head/day	6.22	91.40	1.96
Mineral mixture @ 50 g./head/day + common salt @ 25 g /head/day + de-worming	6.41	96.10	1.99

\*Field crops – kg/ha, \* for horticultural crops -= kg/t/ha, \* milk and meat – litres or kg/animal, \* for mushroom and vermin compost kg/unit area.

2. Details of each On Farm Trial to be furnished in the following format

Technology Refinement

Trial 2: Integrated Nutrient Management in Bt cotton

<b>Title</b>	<b>Integrated Nutrient Management in Bt cotton</b>
<b>Problem diagnose/defined</b>	Low yield of Bt Cotton due imbalanced use of fertilizer
<b>Details of technologies selected for assessment /refinement</b>	T1: Farmers practices T2: 240: 00: 00 Kg. NPK/ha (Recommended) T3 : 240 : 40 :00 Kg. NPK / ha + liquid <i>Azotobactor</i> and Phosphate culture as seed treatment and foliar spray of <i>Azotobactor</i> at 30, 45 and 60 DAS (Suggested)
<b>Source of technology</b>	GAU/SAU
<b>Production system thematic area</b>	Cotton based cropping system
<b>Thematic area</b>	Integrated Nutrient Management
<b>Performance of the Technology with performance indicators</b>	Results showed that application of recommended dose of fertilizer along with seed treatment of <i>Azotobactor</i> and Phosphate culture and foliar application of <i>Azotobactor</i> at 30, 45 and 60 DAS gave higher seed cotton yield as compared to traditional and recommended practices.
<b>Final recommendation for micro level situation</b>	INM approaches increase the yield of cotton and reduce cost of cultivation.
<b>Constraints identified and feedback for research</b>	Farmer can't maintain proper date of spray due to the heavy rainfall.
<b>Process of farmers participation and their +reaction</b>	Training and awareness programme was organized for disseminating the technology for farmers.  The performance of technology was good in terms of growth and development of crops.

## 2.1 Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Cotton	Irrigated	Low yield of Bt Cotton due imbalanced use of fertilizer	Integrated Nutrient Management in Bt cotton	1	Farmers practices	Seed cotton Yield (q/ha)	21.0	Results showed that application of recommended dose of fertilizer along with seed treatment of <i>Azotobactor</i> and <i>Phosphate</i> culture and foliar application of <i>Azotobactor</i> at 30, 45 and 60 DAS gave higher seed cotton yield as compared to other practices.	Farmers were appreciated and convinced to adopt <i>Azotobactor</i> and <i>Phosphate</i> culture as seed treatment as well as foliar application of <i>Azotobactor</i>
				2	240 : 00 :00 Kg. NPK/ha	Seed cotton Yield (q/ha)	22.5		
				3	240 : 40 :00 Kg. NPK / ha + liquid <i>Azotobactor</i> and <i>Phosphate</i> culture as seed treatment and foliar spray of <i>Azotobactor</i> at 30, 45 and 60 DAS	Seed cotton Yield (q/ha)	24.5		

\* No. of farmers

Technology Assessed	*Production per unit (q/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Farmers practices	21.0	68350	2.86
240 : 00 :00 Kg. NPK/ha	22.5	75500	3.04
240 : 40 :00 Kg. NPK / ha + liquid <i>Azotobactor</i> and <i>Phosphate</i> culture as seed treatment and foliar spray of <i>Azotobactor</i> at 30, 45 and 60 DAS	24.5	84000	3.18

\*Field crops – kg/ha, \* for horticultural crops -= kg/t/ha, \* milk and meat – liters or kg/animal, \* for mushroom and vermin compost kg/unit area.

### 3. Technology Refinement

#### Trial 3: Control of stem borer in Paddy

<b>Title</b>	<b>Control of stem borer in Paddy</b>
<b>Problem diagnose/defined</b>	Low yield of paddy due to heavy infestation of stem borer
<b>Details of technologies selected for assessment /refinement</b>	T <sub>1</sub> : Farmers practice T <sub>2</sub> : Clipping of seedling tips and Soil application with Cartap hydrochloride 4% G @ 20 kg/ha. (Recommended) T <sub>3</sub> . : Soil application with Cartap hydrochloride 4% G @ 20 kg/ha. + clipping of seedling tips + spraying of Fipronil 5 SC @ 20 ml/10 litre of water at 45 and 60 DATP (Suggested)
<b>Source of technology</b>	AAU
<b>Production system thematic area</b>	Rice-Wheat cropping system
<b>Thematic area</b>	Integrated Pest Management in Paddy
<b>Performance of the Technology with performance indicators</b>	Results showed treatment T <sub>3</sub> was effectively control the stem borer population in paddy as compared to other treatments.
<b>Final recommendation for micro level situation</b>	Farmer advised to use the soil application with Cartap hydrochloride 4% G @ 20 kg/ha. + clipping of seedling tips + spraying of Fipronil 5 SC @ 20 ml/10 litre of water at 45 and 60 DATP.
<b>Constraints identified and feedback for research</b>	---
<b>Process of farmers participation and their reaction</b>	Prior to selection of the farmers, PRA survey was conducted to gather the information regarding the infestation of stem borer in paddy field. The selection of farmers was prepared with the help of opinion leader and progressive farmers of the village. The aim of the OFT was cleared in the mind of the farmers through discussion during group meeting. The attention was made mainly to the farm size, layout of the field, irrigation facilities etc. so that other nearby farmers can also get the benefited.



### 3.1 Results of On Farm Trials

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology refined	Parameters	Data on the parameter	Results of refinement	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Paddy	Irrigated	Low yield of paddy due to heavy infestation of stem borer	Control of stem borer in Paddy	3	Farmers practice	Yield (q/ha)	42.80	Results showed treatment T <sub>3</sub> was effectively control the stem borer population in paddy as compared to other treatments	Farmers were appreciated and convinced to adopt the suggested treatment
					Clipping of seedling tips and Soil application with Cartap hydrochloride 4% G @ 20 kg/ha.	Yield (q/ha)	44.50		
					Soil application with Cartap hydrochloride 4% G @ 20 kg/ha. + clipping of seedling tips + spraying of Fipronil 5 SC @ 20 ml/10 litre of water at 45 and 60 DATP	Yield (q/ha)	46.50		

\* No. of farmers

Technology Assessed	*Production per unit (q/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Farmers practice	42.80	42540	2.96
Clipping of seedling tips and Soil application with Cartap hydrochloride 4% G @ 20 kg/ha.	44.50	44550	3.00
Soil application with Cartap hydrochloride 4% G @ 20 kg/ha. + clipping of seedling tips + spraying of Fipronil 5 SC @ 20 ml/10 litre of water at 45 and 60 DATP	46.50	46750	3.03

\*Field crops – kg/ha, \* for horticultural crops -= kg/t/ha, \* milk and meat – liters or kg/animal, \* for mushroom and Vermin compost kg/unit area.

\*\* Give details of the technology assessed or refined and farmer's practice

#### 4. Technology Refinement

**Trial 4:** Food supplement efficacy to increase hemoglobin content.

<b>Title</b>	:	<b>Food supplement efficacy to increase hemoglobin content.</b>
<b>Problem diagnose/defined</b>	:	Low hemoglobin in Adolescent girls
<b>Details of technologies selected for assessment /refinement</b>	:	<p style="text-align: center;"><b>Treatments</b></p> <p>T1 : Control</p> <p>T2 : Iron-folic acid tablets</p> <p>T3 : Iron-folic acid tablets + food supplements (Suggested ) Boiled bengalgram(50 gm) + Sprouted greengram (50 gm) + Dates (25 gm)</p>
<b>Source of technology</b>	:	The Journal of Nutrition: Feb 1, 2000, vol. 130, no. 2
<b>Production system &amp; Thematic Area</b>	:	Nutrition management
<b>Thematic area</b>	:	Nutrition management
<b>Performance of the Technology with performance indicators</b>	:	Hemoglobin content
<b>Final recommendation for micro level situation</b>	:	Trial continue
<b>Constraints identified and feedback for research</b>	:	-
<b>Process of farmers participation and their reaction</b>	:	Prior to selection of the adolescent girls, awareness programme was organized for adolescent girls. OFT survey was conducted to gather the information regarding the food intake of them. Then after supplements were given to the selected girls. The performance of technology was good in terms of increase in hemoglobin content

#### 4.1 Results of On Farm Trials

Crop/ enterprise	Problem Diagnosed	Title of OFT	No. of Adolescent girls	Technology Assessed	Parameters of assessment	Average increase in haemoglobin as compared to before treatment (gm/dl)	Results of assessment (%)	Feedback from the farmer
1	2	3	4	5	6	7	8	9
Home Science	The adolescent girls living in this area are anemic or with low haemoglobin level	Food supplement efficacy to increase hemoglobin content in adolescent girls	3	T1- Control	Haemoglobin content	0.16	+ 1.68	-
			3	T2- Iron – folic acid tablets		1.16	+ 12.6 **	Increase in haemoglobin content
			3	T3 - Iron – folic acid tablets + food supplements (Boiled bengalgram (50 gm) + Sprouted greengram (50 gm) + Dates (25 gm)		2.06	+ 20.9 **	
			Total=9			-		

\*\* (+) indicate that percentage of hemoglobin level increased

Technology Assessed	Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
10	11	12	13
T1: Control	<i>Not applicable</i>	<i>Not applicable</i>	<i>Not applicable</i>
T2: Iron-Folic acid tablets			
T3: Iron-Folic acid tablets + food supplements			

### 3.2 Achievements of Frontline Demonstrations

#### 1. Follow-up for results of FLDs implemented during previous year

List of technologies demonstrated during previous year and popularized during 2012-13 and recommended for large scale adoption in the district

Sr. 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	Paddy	Varietal evaluation	New variety Paddy cv.GAR-13	Organized Field day, through training programme	35	520	930
2	Wheat	INM	GW-496	Organized field day, through training programme	15	122	210
3	Wheat	IWM	GW-496	Organized field day, through training programme	20	130	215
4	Greengram	Varietal evaluation	New variety greengram cv. Meha	Organized Field day, through training programme	21	205	208
5	Pigeon pea	ICM	New variety Pigeonpea cv.Vaishali	Organized Field day, through training programme	12	220	480
6	Chickpea	ICM	New variety Chickpea cv. Meha	Organized Field day, through training programme	5	90	90
7	Groundnut	IWM	Weed Management	Organized Field day, through training programme	14	250	120
8	Chilli	INM	Bio-fertilizer and micro-nutrient	Organized Field day, through training programme	5	25	36
9	Tomato	INM	Bio-fertilizer and micro-nutrient	Organized Field day, through training programme	15	90	45
10	Watermelon	INM	Bio-fertilizer and micro-nutrient	Organized Field day, through training programme	3	30	15
11	Animal Husbandry	Crossbred cow	UMMB	Organized Field day, through training programme	10	40	55
12	Fodder Crop	Fodder Production	Lucerne	Organized Field day, through training programme	20	35	65

13	Maize	Varietal evaluation	HQPM-1	Organized Field day, through training programme	2	15	5
14	Nutritional gardening	Recommended Seeds	monthly Savings	Organized Field day, through training programme	9	24	4

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

- b. Details of FLDs implemented during 2013-14 (Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

1. Cereal crops

a. Details of Implementation

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ Demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/S T	Others	Total	
1	Paddy	Varietal	Varietal evaluation	<i>Kharif-13</i>	8.0	8.0	3	17	20	-
2	Wheat	INM	Integrated Nutrient Management	<i>Rabi-13</i>	10.0	10.0	5	20	25	-

b. 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					
Paddy	<i>Kharif.13</i>	Irrigated	Medium Black	L	M	H	Greengram/ Groundnut	July/August	November	1313.00	45
Wheat	<i>Rabi.13</i>	Irrigated	Medium Black	L	M	H	Paddy	Nov./Dec.	March	00.00	0

c. Performance of FLD

Sl. No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield (q/ha)			Yield of local Check (q./ha)	Increase in yield (%)	Data on parameter in relation to technology demonstrated (Yield q/ha)	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Paddy	Varietal evaluation	GAR-13	20	8.0	53.5	42.0	46.45	42.0	9.5	46.45	42.0
2.	Wheat	INM	GW-496	25	10.0	36.0	32.0	33.84	30.5	10.9	33.84	30.5

**Economic Impact (continuation of previous table)**

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
21360	21660	69675	63000	48315	41340	3.26
16775	16300	45684	41175	28909	24875	2.72

**d. Analytical Review of component demonstrations**

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Paddy	<i>Kharif.13</i>	Varietal evaluation	Irrigated	46.45	42.0	9.5
Wheat	<i>Rabi.13</i>	INM	Irrigated	33.84	30.5	10.9

**e. Technical Feedback on the demonstrated technologies**

Sr. No	Feed Back
<b>Paddy</b>	Farmers were convinced to adopt paddy cultivar GAR-13
<b>Wheat</b>	Farmers were convinced to use seed treatment with bio-fertilizer and recommended dose of micronutrient.

**f. Farmers' reactions on specific technologies**

Sr. No	Feed Back
<b>Paddy</b>	<ul style="list-style-type: none"> <li>➤ This variety gave higher yield as compare to other variety</li> <li>➤ This variety was found resistance against BLB and Brown Plant Hopper</li> <li>➤ This variety was found susceptible against false smut.</li> <li>➤ Lodging problem was minimum in this variety as compared to other variety</li> </ul>
<b>Wheat</b>	<ul style="list-style-type: none"> <li>➤ Integrated Nutrient Management increased the yield of wheat</li> </ul>

**g. Extension and Training activities under FLD**

Sr. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
<b>Paddy</b>					
1	Field days	01	19.10.2013	30	-
2	Farmers Training	07	-	303	-
3	Training for extension functionaries	-	-	-	-
<b>Wheat(INM)</b>					
1	Field days	01	05.03.2013	20	-
2	Farmers Training	02	10.12.2012	40	-
3	Training for extension functionaries	-	-	-	-

**2. Oilseeds crops**

**a. Details of Implementation**

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/S T	Others	Total	
1	Groundnut	IWM	Integrated Weed Management	<i>Summer-13</i>	5.0	5.0	0	12	12	-
2	Castor	INM	Integrated Nutrient Management	<i>Kharif-13</i>	8.0	8.0	0	20	20	--

**b. 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					
Groundnut	<i>Summer-13</i>	Irrigated	Sandy	L	M	H	Cotton/Paddy	January	May	--	--
Castor	<i>Kharif-12</i>	Irrigated	Sandy	L	M	H	Cotton / Paddy	October	April	1107.9	--



**c. Performance of FLD**

Sl. No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield (q/ha)			Yield of local Check (q./ha)	Increase in yield (%)	Data on parameter in relation to technology demonstrated (Yield q/ha)	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Groundnut	IWM	GG-2	12	5	30.5	25.6	28.42	25.0	15	28.42	25.0
2	Castor	INM	GCH-7	25	10	28.6	21.5	24.02	22.5	6.75	24.02	22.5

**Economic Impact (continuation of previous table)**

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	15	16	17	18	19	20
26580	27450	113680	100000	87100	72550	4.27
24500	23750	78065	73125	54425	50884	3.18

**d. Analytical Review of component demonstrations**

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Groundnut	Summer-13	IWM	Irrigated	28.42	25.0	15
Castor	Kharif-13	INM	Irrigated	24.02	22.5	6.75

**e. Technical Feedback on the demonstrated technologies**

Crop	Feed Back
Groundnut	Farmers were convinced to adopt Quizalofop-ethyl herbicide
Castor	Farmers were convinced to adopt Sulphur.

**f. Farmers' reactions on specific technologies**

<b>Crop</b>	<b>Feed Back</b>
Groundnut	Quizalofop-ethyl herbicide effectively control of annual grasses. (Monocot)
Castor	Sulphur also improves the weight of seed. INM concept increases the yield of crop.

**g. Extension and Training activities under FLD**

<b>Sr. No.</b>	<b>Activity</b>	<b>No. of activities organized</b>	<b>Date</b>	<b>Number of participants</b>	<b>Remarks</b>
<b>Groundnut</b>					
1	Field days	1	27/6/2013	25	-
2	Farmers Training	1	1/3/2013	15	-
3	Training for extension functionaries	-	-	-	-
<b>Castor</b>					
1	Field days	1	11/3/2013	24	-
2	Farmers Training	1	13/09/2013	19	-
3	Training for extension functionaries	-	-	-	-

### 3. Pulse crops

#### a. Details of Implementation

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	Chickpea	ICM	Full demo.	Rabi-12	6	6	10	5	15	--
2	Pigeonpea	ICM	Full demo.	Kharif-13	8	8	10	10	20	--
3	Greengram	Varietal	Varietal evaluation	Summer-13	10	10	10	15	25	--

#### b. 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					
Chickpea	Rabi-12	Irrigated	Medium Black	L	M	H	Paddy-chickpea	October onwards	October onwards	-	-
Pigeonpea	Kharif-13	Irrigated	Medium Black	L	M	H	Cotton/Pigeonpea	June onwards	20 <sup>th</sup> March onwards	1313.00	45
Greengram	Summer-13	Irrigated	Medium Black	L	M	H	Paddy/Cotton	February onwards	May onwards	-	-

#### c. Performance of FLD

Sl. No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check (q/ha)	Increase in yield (%)	Data on parameter in relation to technology demonstrated (Yield q/ha)	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Chickpea	ICM	GG-2	15	6	9.76	7.50	8.63	7.50	30	8.63	7.50
2	Pigeonpea	ICM	Vaishali	20	8	13.50	11.20	12.35	11.20	20.5	12.35	11.20
3	Greengram	Varietal Demo.	Meha	25	10	12.1	8.0	10.27	6.50	58	10.27	6.50

**Economic Impact (continuation of previous table)**

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
14580	13155	40992	31500	26412	18345	2.81
20232	18035	58050	48160	37818	30125	2.86
15600	14450	51350	32500	35750	18050	3.29

**d. Analytical Review of component demonstrations**

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Chickpea	<i>Rabi.12</i>	Full demo.	Irrigated	9.76	7.50	30
Pigeonpea	<i>Kharif.13</i>	Full demo.	Irrigated	13.50	11.20	20.5
Greengram	<i>Summer-13</i>	Varietal	Irrigated	10.27	6.5	58

**e. Technical Feedback on the demonstrated technologies**

S. No	Feed Back
Chickpea	Farmers were convinced to adopt this variety for cultivation
Pigeonpea	Farmers were convinced to adopt Vaishali variety of Pigeonpea for cultivation due to resistance against wilt and Sterility mosaic
Greengram	Farmers are convinced to adopt cv. Meha of Greengram. Area under seed production should be increase.

**f. Farmers' reactions on specific technologies**

S. No	Feed Back
Chickpea	Seed treatment with <i>Trichoderma</i> helps in control of wilt
Pigeonpea	<ul style="list-style-type: none"> <li>• Application of micronutrients as well as bio-fertilizers helps in better growth and yield of crops</li> <li>• IPM modules helps in effective control of pest thereby reduced the cost of pesticide</li> </ul>
Greengram	Greengram cv. Meha performed better and showed resistant to Yellow Vein Mosaic Virus, but unavailability of seeds during sowing season.

**g. Extension and Training activities under FLD**

<b>Sl.No.</b>	<b>Activity</b>	<b>No. of activities organized</b>	<b>Date</b>	<b>Number of participants</b>	<b>Remarks</b>
<b>Chickpea</b>					
1	Field days	1	07/03/2014	30	
2	Farmers Training	1	1.11.2013	20	
<b>Pigeonpea</b>					
1	Field days	1	23/12/2013	27	
2	Farmers Training	3	25.06.2013,09.10.2013,27.11.2013	64	
<b>Greengram</b>					
1	Field days	2	17/05/2013,20/05/2013	46	
2	Farmers Training	1	18/2/2013	30	

**c. Details of FLD on Enterprises**

**(i) Farm Implements**

Name of the implement	crop	No. of farmers	Area (ha)	Performance parameters / indicators	* Data on parameter in relation to technology demonstrated (output/hr)		% change in the parameter	Remarks
					Demon.(kg)	Local check(kg)		
Serrated Sickle	Fodder	20	-	Field Efficiency (Work output/hr)	30	21.27	41.05	-

\* *Field efficiency, labour saving etc.*

\* *Field efficiency, labour saving etc.*

(ii) Livestock, Fisheries, etc.

### Livestock

Category	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
						Demons ration	Check		Demons ration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
<b>Dairy</b>																		
<b>Cow</b>																		
<b>Buffalo</b>	Feed management	Bypass fat	-	25	25	6.92	5.94	16.50	Fat	Fat	134.20	271.26	137.06	2.02	100.20	199.58	99.38	1.99
<b>Poultry</b>																		
<b>Rabbitry</b>																		
<b>Pigerry</b>																		
<b>Sheep and goat</b>																		
<b>Duckery</b>																		
<b>Others (pl.specify)</b>	Feed management	Lucern Anand-2	-	20	4.0 ha	697	650	6.74	-	-	23280	69700	46420	2.99	23250	65500	42250	2.81
<b>Total</b>	<b>2.0</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

## Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
						Demons Ration	Check		Demons ration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Common carps	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mussels	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-Ornamental fishes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</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

## Other enterprises

Category	Name of the technology demonstrated	No. of KVKs	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.) or Rs./unit				*Economics of check (Rs.) or Rs./unit				
					Demons ration	Check		Demons ration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
<b>Vegetable</b>																		
Chilli	INM		12	5	139	123	9.70	-	-	180540	444128	263588	2.46	178430	399683	221253	2.24	
Tomato	INM		12	5	270	245	10.20	-	-	86300	219202	132902	2.54	84850	195155	110305	2.30	
Watermelon	INM		12	5	450	430	6.51	-	-	118400	281792	163392	2.38	120110	258236	138126	2.15	
Nutritional gardening	Nutritional gardening		51	51	-	-	-	-	-	493.0	990.0	497.0	2.01	3081.00	-	-	-	

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

\*\* BCR= GROSS RETURN/GROSS COST



### Women empowerment

Category	Name of technology	No. of KVKs	No. of demonstrations	Name of observations	Demonstration	Check
<b>Women</b>						
Pregnant women						
Adolescent Girl						
Other women						
<b>Children</b>						
Neonats						
Infants						
Children						

### Farm implements and machinery

Name of the implement	Crop	Name of the technology demonstrated	No. of KVKs	No. of Farmer	Area (ha)	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man/day/ha)				Cost reduction (Rs./ha)			
						Demonstration (Area in Sq meter)	Check (Area in Sq meter)		Labour requirement Demo (Man/Day/ha.)	Labour requirement Check (Man/Day/ha.)	Labour Reduction (Man/Day/ha.)	% reduction	Demo (Cost)	Check (Cost)	Cost Reduction (Rs/ha)	% Saving
Serrated Sickle	Lucerne	Improved Serrated Sickle	-	20	0.20	63.18	53.46	18.18	19.78	23.38	3.6	15.39	2373.6	2805.6	432.0	15.39

\*With use of improved serrated sickle there was 18.18 % increase in quantity of Lucerne cut in comparison to conventional sickle (1 day =8 Working Hours and Labour Charge is Rs 120/day/ man)

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	<ul style="list-style-type: none"> <li>➤ The pulling force required for fodder cutting is less.</li> <li>➤ Frequent sharpening of blade is not required.</li> <li>➤ Satisfaction level with use of human power is more as compared to conventional tool.</li> </ul>

Farmers' reactions on specific technologies

S. No	Feed Back
1	Farm women are convinced to use this tool because of saving time, cost and physical energy

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days	04	11.2.14,03.03.14, 11.03.14,21.03.14	85	-
2	Farmers Training	08	26.10.13,28.10.13, 29.11.13,09.12.13, 02.01.14,05.08.13, 14.08.13,28.10.13	175	-
3	Media coverage	-	-	-	-
4	Training for extension functionaries	00	-	00	--

List Enclosed with date wise

### 3.3 Achievements on Training (Including the sponsored, vocational, FLD and trainings under Rainwater Harvesting Unit)

#### A) ON Campus

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>(A) Farmers &amp; Farm Women</b>										
<b>I Crop Production</b>										
Weed Management	1	6	0	6	14	0	14	20	0	20
Resource Conservation Technologies	1	44	0	44	1	0	1	45	0	45
Integrated Farming	5	49	0	49	95	0	95	144	0	144
Nursery management	1	4	8	12	2	9	11	6	17	23
Integrated Crop Management	8	155	0	155	149	0	149	304	0	304
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Protective cultivation (Green Houses, Shade Net etc.)	4	74	22	96	0	0	0	74	22	96
<b>b) Fruits</b>										
<b>c) Ornamental Plants</b>										
<b>d) Plantation crops</b>										
<b>e) Tuber crops</b>										
<b>f) Spices</b>										
<b>g) Medicinal and Aromatic Plants</b>										
<b>III Soil Health and Fertility Management</b>										
<b>IV Livestock Production and Management</b>										
Dairy Management	4	53	20	73	1	0	1	54	20	74
Feed management	5	92	6	98	40	0	40	132	6	138
<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening	2	0	42	42	0	9	9	0	51	51
Gender mainstreaming through SHGs	5	8	27	35	72	50	122	80	77	157
Value addition	1	0	41	41	0	9	9	0	50	50
Income generation activities for empowerment of rural Women	4	0	41	41	0	41	41	0	82	82
Women and child care	1	0	0	0	0	23	23	0	23	23
<b>VI Agril. Engineering</b>										
<b>VII Plant Protection</b>										
Integrated Pest Management	3	49	0	49	11	0	11	60	0	60

<b>VIII Fisheries</b>										
<b>IX Production of Inputs at site</b>										
<b>X Capacity Building and Group Dynamics</b>										
<b>XI Agro-forestry</b>										
<b>TOTAL</b>	45	534	207	741	385	141	526	919	348	1267
<b>(B) RURAL YOUTH</b>										
<b>TOTAL</b>	0	0	0	0	0	0	0	0	0	0
<b>(C) Extension Personnel</b>										
Productivity enhancement in field crops	1	15	0	15	7	2	9	22	2	24
Protected cultivation technology	1	17	0	17	7	0	7	24	0	24
Formation and Management of SHGs	1	0	0	0	5	34	39	5	34	39
<b>TOTAL</b>	3	32	0	32	19	36	55	51	36	87
<b>Grand Total</b>	48	566	207	773	404	177	581	970	384	1354

## B) OFF Campus

Training (including Vocational, Sponsored and FLD training)										
Name of KVK										
Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>(A) Farmers &amp; Farm Women</b>										
<b>I Crop Production</b>										
Weed Management	1	14	10	24	0	0	0	14	10	24
Crop Diversification	1	17	0	17	0	0	0	17	0	17
Integrated Farming	1	20	0	20	0	0	0	20	0	20
Water management	1	0	0	0	0	22	22	0	22	22
Seed production	1	18	0	18	0	0	0	18	0	18
Integrated Crop Management	1	0	0	0	19	0	19	19	0	19
Production of organic inputs	2	41	0	41			0	41	0	41
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Production of low volume and high value crops	4	71	0	71	8	19	27	79	19	98
Off-season vegetables	1	0	0	0	24	0	24	24	0	24
Nursery raising	1	28	0	28	0	0	0	28	0	28
Protective cultivation (Green Houses, Shade Net etc.)	2	45	0	45			0	45	0	45
<b>b) Fruits</b>										
Management of young plants/orchards	1	8	0	8	8	0	8	16	0	16
Micro irrigation systems of orchards	1	0	0	0	28	0	28	28	0	28
<b>c) Ornamental Plants</b>										
<b>d) Plantation crops</b>										
<b>e) Tuber crops</b>										
<b>f) Spices</b>										
<b>g) Medicinal and Aromatic Plants</b>										
<b>III Soil Health and Fertility Management</b>										
Soil fertility management	1	0	0	0	18	0	18	18	0	18

<b>IV Livestock Production and Management</b>										
Dairy Management	8	24	71	95	35	140	175	59	211	270
Disease Management	4	31	16	47	40	0	40	71	16	87
Feed management	2	5	0	5	39	0	39	44	0	44
<b>V Home Science/Women empowerment</b>										
Designing and development for high nutrient efficiency diet	4	0	19	19	0	39	39	0	58	58
Value addition	2	0	56	56	0	0	0	0	56	56
Income generation activities for empowerment of rural Women	1	0	0	0	0	23	23	0	23	23
Women and child care	8	0	69	69	0	117	117	0	186	186
<b>VI Agril. Engineering</b>										
<b>VII Plant Protection</b>										
Integrated Pest Management	3	30	0	30	38	0	38	68	0	68
Integrated Disease Management	2	35	0	35	0	0	0	35	0	35
<b>VIII Fisheries</b>										
<b>IX Production of Inputs at site</b>										
<b>X Capacity Building and Group Dynamics</b>										
Leadership development	3	28	0	28	48	0	48	76	0	76
Formation and Management of SHGs	1	6	15	21	0	0	0	6	15	21
<b>TOTAL</b>	<b>57</b>	<b>421</b>	<b>256</b>	<b>677</b>	<b>305</b>	<b>360</b>	<b>665</b>	<b>726</b>	<b>616</b>	<b>1342</b>
<b>(B) RURAL YOUTH</b>										
<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>(C) Extension Personnel</b>										
<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>57</b>	<b>421</b>	<b>256</b>	<b>677</b>	<b>305</b>	<b>360</b>	<b>665</b>	<b>726</b>	<b>616</b>	<b>1342</b>



<b>f) Spices</b>										
<b>g) Medicinal and Aromatic Plants</b>										
<b>III Soil Health and Fertility Management</b>										
<b>IV Livestock Production and Management</b>										
Dairy Management	12	77	91	168	36	140	176	113	231	344
Disease Management	4	31	16	47	40	0	40	71	16	87
Feed management	7	97	6	103	79	0	79	176	6	182
<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening	2	0	42	42	0	9	9	0	51	51
Designing and development for high nutrient efficiency diet	4	0	19	19	0	39	39	0	58	58
Gender mainstreaming through SHGs	5	8	27	35	72	50	122	80	77	157
Value addition	3	0	97	97	0	9	9	0	106	106
Income generation activities for empowerment of rural Women	5	0	41	41	0	64	64	0	105	105
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Women and child care	9	0	69	69	0	140	140	0	209	209
<b>VI Agril. Engineering</b>										
<b>VII Plant Protection</b>										
Integrated Pest Management	6	79	0	79	49	0	49	128	0	128
Integrated Disease Management	2	35	0	35	0	0	0	35	0	35
<b>VIII Fisheries</b>										
<b>IX Production of Inputs at site</b>										
<b>X Capacity Building and Group Dynamics</b>										
Leadership development	3	28	0	28	48	0	48	76	0	76
Formation and Management of SHGs	1	6	15	21	0	0	0	6	15	21
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
<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
<b>TOTAL</b>	102	955	463	1418	690	501	1191	1645	964	2609
<b>(B) RURAL YOUTH</b>										
<b>TOTAL</b>	0	0	0	0	0	0	0	0	0	0
<b>(C) Extension Personnel</b>										
Productivity enhancement in field crops	1	15	0	15	7	2	9	22	2	24
Protected cultivation technology	1	17	0	17	7	0	7	24	0	24
Formation and Management of SHGs	1	0	0	0	5	34	39	5	34	39
<b>TOTAL</b>	3	32	0	32	19	36	55	51	36	87
	105	987	463	1450	709	537	1246	1696	1000	2696

**Note: Please furnish the details of above training programmes as Annexure in the Performa given below**

Date	Clientele	Title of the training programme	Discipline	Thematic area	Duration in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participants		
							M	F	T	M	F	T	M	F	T
03-06-2013	PF	Scientific cultivation of BT Cotton	Agronomy	ICM	1	On	17	0	17	31	0	31	48	0	48
04-06-2013	PF	Importance of Micro nutrient in BT Cotton	Agronomy	INM	1	On	8	0	8	20	0	20	28	0	28
05-06-2013	PF	Scientific cultivation of BT Cotton	Agronomy	ICM	1	On	39	0	39	32	0	32	71	0	71
06-06-2013	PF	INM in cotton	Agronomy	INM	1	On	0	0	0	15	0	15	15	0	15
13-06-2013	PF	Scientific cultivation of Paddy	Agronomy	ICM	1	On	3	0	3	17	0	17	20	0	20
19-06-2013	PF	Scientific cultivation of Maize	Agronomy	ICM	1	On	65	0	65	2	0	2	67	0	67
25-06-2013	PF	Scientific cultivation of Pigeonpea	Agronomy	ICM	1	On	10	0	10	12	0	12	22	0	22
07-08-2013	PF	Nutrient Management in Paddy	Agronomy	INM	1	On	6	0	6	39	0	39	45	0	45
13-08-2013	PF	Integrated Nutrient Management in Paddy	Agronomy	INM	1	On	35	0	35	0	0	0	35	0	35
16-08-2013	PF	Scientific cultivation of Paddy	Agronomy	ICM	1	On	4	0	4	32	0	32	36	0	36
01-11-2013	PF	Scientific cultivation of Gram	Agronomy	ICM	1	On	14	0	14	6	0	6	20	0	20
19-11-2013	PF	INM in Wheat	Agronomy	INM	1	On	0	0	0	21	0	21	21	0	21
14-02-2014	PF	Scientific cultivation of Green gram	Agronomy	ICM	1	On	3	0	3	17	0	17	20	0	20
18-02-2014	PF	IWM of Groundnut	Agronomy	IWM	1	On	6	0	6	14	0	14	20	0	20
			<b>TOTAL</b>		<b>14</b>		<b>210</b>	<b>0</b>	<b>210</b>	<b>258</b>	<b>0</b>	<b>258</b>	<b>468</b>	<b>0</b>	<b>468</b>
22-04-2013	PF	Importance of Crop Diversification for Soil Health	Agronomy	Crop Diversification	1	Off	17	0	17	0	0	0	17	0	17
06-05-2013	PF	Different Method Preparation of Organic Compost	Agronomy	Production of organic inputs	1	Off	21	0	21	0	0	0	21	0	21
30-07-2013	PF	Weed management in Paddy	Agronomy	IWM	1	Off	14	10	24	0	0	0	14	10	24
21-08-2013	PF	Management of Parthenium	Agronomy	INM	1	Off	20	0	20	0	0	0	20	0	20
27-08-2013	PF	Preparation of compost by Pit method	Agronomy	Production of organic inputs	1	Off	20	0	20	0	0	0	20	0	20
13-09-2013	PF	Scientific cultivation of castor	Agronomy	ICM	1	Off	0	0	0	19	0	19	19	0	19
16-09-2013	PF	Seed production of Paddy	Agronomy	Seed production	1	Off	18	0	18	0	0	0	18	0	18
27-11-2013	PF	Irrigation management In Pigeonpea	Agronomy	Water management	1	Off	0	0	0	0	22	22	0	22	22
03-12-2013	PF	How to take soil sample	Agronomy	Soil fertility management	1	Off	0	0	0	18	0	18	18	0	18
			<b>TOTAL</b>		<b>9</b>		<b>110</b>	<b>10</b>	<b>120</b>	<b>37</b>	<b>22</b>	<b>59</b>	<b>147</b>	<b>32</b>	<b>179</b>

17-10-2013	PF	Integrated Nutrient Management in Chilli	Horticulture	INM	1	On	19	0	19	0	0	0	19	0	19
28-10-2013	PF	INM in tomato	Horticulture	INM	1	On	0	22	22	0	0	0	0	22	22
05-12-2013	PF	Integrated Nutrient Management in Cucumber	Horticulture	INM	1	On	17	0	17	0	0	0	17	0	17
			<b>TOTAL</b>		<b>3</b>	<b>0</b>	<b>36</b>	<b>22</b>	<b>58</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>22</b>	<b>58</b>
10-06-2013	PF	Importance of Greenhouse technology	Horticulture	Protective Cultivation	1	Off	21	0	21	0	0	0	21	0	21
03-07-2013	PF	Management of orchard	Horticulture	Management of orchard	1	Off	8	0	8	8	0	8	16	0	16
07-07-2013	PF	Use and Importance of Control Farming	Horticulture	Protective Cultivation	1	Off	24	0	24	0	0	0	24	0	24
05-08-2013	PF	Nursery Preparation in Vegetable Crops (Chilly and Tomato)	Horticulture	Nursery Management	1	Off	28	0	28	0	0	0	28	0	28
14-08-2013	PF	Scientific cultivation of Chilli	Horticulture	Management of horticultural crops	1	Off	21	0	21	3	0	3	24	0	24
17-08-2013	PF	Management of Parthenium in horticultural crops	Horticulture	Management of horticultural crops	1	Off	15	0	15	0	0	0	15	0	15
07-10-2013	PF	Off season Vegetable Cultivation	Horticulture	Off season Vegetable	1	Off	0	0	0	24	0	24	24	0	24
28-11-2013	PF	Importance of drip irrigation in horticulture crops	Horticulture	Management of horticultural crops	1	Off	35	0	35	0	0	0	35	0	35
01-01-2014	PF	Irrigation management in Veg. Crop	Horticulture	Irrigation management	1	Off	0	0	0	28	0	28	28	0	28
13-02-2014	PF	INM in Summer okra	Horticulture	INM	1	Off	0	0	0	5	19	24	5	19	24
			<b>TOTAL</b>		<b>10</b>	<b>0</b>	<b>152</b>	<b>0</b>	<b>152</b>	<b>68</b>	<b>19</b>	<b>87</b>	<b>220</b>	<b>19</b>	<b>239</b>
11-07-2013	PF	Scientific cultivation of Fodder Crops	Animal Husbandry	Feed Management	1	On	46	0	46	8	0	8	54	0	54
29-08-2013	PF	Calf rearing and calf Management practices for production of healthy cow/ buffalo	Animal Husbandry	Dairy Management	1	On	12	0	12	0	0	0	12	0	12
25-10-2013	PF	Dietary supplementation of Mineral Mixture for Increase reproductive and productive Performance of Dairy Animal	Animal Husbandry	Dairy Management	1	On	24	0	24	0	0	0	24	0	24
22-11-2013	PF	Scientific cultivation of Fodder Production	Animal Husbandry	Feed Management	1	On	19	6	25	0	0	0	19	6	25

03-12-2013	PF	Importance of delectation and A.I in Dairy Animals	Animal Husbandry	Dairy Management	1	On	17	0	17	1	0	1	18	0	18
09-12-2013	PF	Feeding of Bypass nutrient in Dairy Animals	Animal Husbandry	Feed Management	1	On	14	0	14	11	0	11	25	0	25
19-12-2013	PF	Dietary supplementation of Mineral Mixture for Increase reproductive and productive Performance of Dairy Animal	Animal Husbandry	Dairy Management	1	On	0	20	20	0	0	0	0	20	20
02-01-2014	PF	Feed Management in Dairy Animals	Animal Husbandry	Feed Management	1	On	13	0	13	4	0	4	17	0	17
29-01-2014	PF	Feeding of Mineral mixture and its benefits in animal feeding	Animal Husbandry	Feed Management	1	On	0	0	0	17	0	17	17	0	17
			<b>TOTAL</b>		<b>9</b>	<b>0</b>	<b>145</b>	<b>26</b>	<b>170</b>	<b>41</b>	<b>0</b>	<b>41</b>	<b>185</b>	<b>26</b>	<b>212</b>
16-04-2013	PF	Control of ecto-parasites in Dairy Animals	Animal Husbandry	Disease Management	1	Off	0	0	0	17	0	17	17	0	17
03-05-2013	PF	Improvement in Nutritive value of wheat show through urea treatment	Animal Husbandry	Feed Management	1	Off	5	0	5	17	0	17	22	0	22
08-06-2013	PF	Importance of Vaccination and deworming in Dairy animals	Animal Husbandry	Disease Management	1	Off	6	16	22	0	0	0	6	16	22
06-07-2013	PF	Prevention and control of various disease occurring during raining season	Animal Husbandry	Disease Management	1	Off	25	0	25	0	0	0	25	0	25
13-08-2013	PF	Dietary supplement of Mineral mixture for increase reproductive and performance of dairy animals	Animal Husbandry	Dairy Management	1	Off	10	0	10	12	0	12	22	0	22
23-08-2013	PF	Management of newly born calf optimizing reproductive efficiency and to reduce age of first calving	Animal Husbandry	Dairy Management	1	Off	14	0	14	1	0	1	15	0	15
02-09-2013	PF	Causes and prevention of infertility in dairy animals	Animal Husbandry	Dairy Management	1	Off	0	36	36	0	1	1	0	37	37
09-10-2013	PF	Management of newly born calf optimizing reproductive efficiency and to reduce age of first calving	Animal Husbandry	Dairy Management	1	Off	0	0	0	22	0	22	22	0	22
22-10-2013	PF	Dietary supplement of Mineral mixture for increase reproductive and performance of dairy animals	Animal Husbandry	Feed Management	1	Off	0	0	0	22	0	22	22	0	22
25-11-2013	PF	Causes and prevention of infertility in dairy animals	Animal Husbandry	Dairy Management	1	Off	0	35	35	0	0	0	0	35	35
10-12-2013	PF	Deworming of large ruminant Dairy Animals	Animal Husbandry	Disease Management	1	Off	0	0	0	23	0	23	23	0	23
			<b>TOTAL</b>		<b>11</b>		<b>60</b>	<b>87</b>	<b>147</b>	<b>114</b>	<b>1</b>	<b>115</b>	<b>174</b>	<b>88</b>	<b>262</b>

01-04-2013	PF	Different diseases in children and preparation of ORS	Home Science	Women and child care	1	On	0	0	0	0	23	23	0	23	23
27-08-2013	PF	Preparation of Phenyl & dishwasher	Home Science	Income Generation activities	1	On	0	18	18	0	0	0	0	18	18
26-10-2013	PF	Guidance about Kitchen Gardening	Home Science	Household food security by kitchen gardening and nutrition gardening	1	On	0	16	16	0	9	9	0	25	25
28-10-2013	PF	Guidance about Kitchen Gardening	Home Science	" "	1	On	0	26	26	0	0	0	0	26	26
29-11-2013	PF	Importance of serrated sickle and drudgery reduction	Home Science	Income generation activities for empowerment of rural Women	1	On	0	0	0	0	22	22	0	22	22
24-12-2013	PF	Fruits and Vegetable Preservation techniques	Home Science	Value addition	1	On	0	41	41	0	9	9	0	50	50
04-03-2014	PF	Incense stick making	Home Science	Income generation activities for empowerment of rural Women	1	On	0	21	21	0	0	0	0	21	21
05-03-2014	PF	Incense stick making	Home Science	" "	1	On	0	2	2	0	19	19	0	21	21
			<b>TOTAL</b>		<b>8</b>	<b>0</b>	<b>0</b>	<b>124</b>	<b>124</b>	<b>0</b>	<b>83</b>	<b>83</b>	<b>0</b>	<b>207</b>	<b>207</b>
05-04-2013	PF	Awareness Programme about health hygiene and Nutrition among women	Home Science	Women and child care	1	Off	0	20	20	0	0	0	0	20	20
09-04-2013	PF	Training Programme for health Awareness	Home Science	" "	1	Off	0	23	23	0	0	0	0	23	23
08-05-2013	PF	Balanced diet from locally available food material	Home Science	Design and development of low/minimum cost diet	1	Off	0	19	19	0	0	0	0	19	19
27-05-2013	PF	Awareness programme about agricultural technology among women	Home Science	Women and child care	1	Off	0	0	0	0	18	18	0	18	18
06-06-2013	PF	Doormate Making	Home Science	" "	1	Off	0	0	0	0	23	23	0	23	23

20-07-2013	PF	Information about value addition	Home Science	Value addition	1	Off	0	26	26	0	0	0	0	26	26
06-08-2013	PF	Training Programme about agriculture technology & Health awareness	Home Science	Women and child care	1	Off	0	23	23	0	0	0	0	23	23
14-08-2013	PF	Balanced diet from locally available food material	Home Science	Design and development of low/minimum cost diet	1	Off	0	0	0	0	15	15	0	15	15
30-08-2013	PF	Awareness programme about agricultural technology	Home Science	Women and child care	1	Off	0	0	0	0	19	19	0	19	19
05-09-2013	PF	Low cost Nutritious diet from locally available food material	Home Science	Design and development of low/minimum cost diet	1	Off	0	0	0	0	6	6	0	6	6
12-09-2013	PF	Balanced diet from locally available food material	Home Science	Design and development of low/minimum cost diet	1	Off	0	0	0	0	18	18	0	18	18
19-11-2013	PF	Trg. Programme About health awareness and agri. Tech.	Home Science	Women and child care	1	Off	0	0	0	0	35	35	0	35	35
25-02-2014	PF	Trg. programme Agri. tech. among women	Home Science	Women and child care	1	Off	0	3	3	0	22	22	0	25	25
14-03-2014	PF	Preparation of mix vegetable pickle and apple chutney	Home Science	Value addition	1	Off	0	30	30	0	0	0	0	30	30
			<b>TOTAL</b>		<b>14</b>		<b>0</b>	<b>144</b>	<b>144</b>	<b>0</b>	<b>156</b>	<b>156</b>	<b>0</b>	<b>300</b>	<b>300</b>
09-10-2013	PF	IPM in Pigeonpea	Plant Protection	IPM	1	On	10	0	10	10	0	10	20	0	20
24-12-2013	PF	IPM in Chickpea	Plant Protection	IPM	1	On	19	0	19	1	0	1	20	0	20
07-01-2014	PF	IPM in Summer Pulses	Plant Protection	IPM	1	On	20	0	20	0	0	0	20	0	20
			<b>TOTAL</b>		<b>3</b>		<b>49</b>	<b>0</b>	<b>49</b>	<b>11</b>	<b>0</b>	<b>11</b>	<b>60</b>	<b>0</b>	<b>60</b>
27-11-2013	PF	Pest of maize and their management Through integrated approach	Plant Protection	IPM	1	Off	8	0	8	17	0	17	25	0	25
17-01-2014	PF	Precaution during spraying of Pesticides	Plant Protection	IPM	1	Off	22	0	22	0	0	0	22	0	22
01-02-2014	PF	Integrated Disease Management In Gram	Plant Protection	IDM	1	Off	18	0	18	0	0	0	18	0	18
26-02-2014	PF	Store grain pest Management	Plant Protection	IPM	1	Off	0	0	0	21	0	21	21	0	21
21-03-2014	PF	Integrated Disease Management In Chili	Plant Protection	IDM	1	Off	17	0	17	0	0	0	17	0	17
			<b>TOTAL</b>		<b>5</b>		<b>65</b>	<b>0</b>	<b>65</b>	<b>38</b>	<b>0</b>	<b>38</b>	<b>103</b>	<b>0</b>	<b>103</b>

24-12-2013	PF	Awareness about the Mixed farming and mixed cropping	Ext. Edu	Agriculture Production Management	1	Off	0	0	0	23	0	23	23	0	23
31-01-2014	PF	Leadership development in rural people and its Role in Agriculture	Ext. Edu	Leadership development	1	Off	0	0	0	25	0	25	25	0	25
20-02-2014	PF	Leadership development in rural youth & post-harvest Tech. management	Ext. Edu	Leadership development	1	Off	28	0	28	0	0	0	28	0	28
12-03-2014	PF	Role of SHG in Rural area its benefits	Ext. Edu	Formation and Management of SHGs	1	Off	6	15	21	0	0	0	6	15	21
			<b>TOTAL</b>		<b>4</b>		<b>34</b>	<b>15</b>	<b>49</b>	<b>48</b>	<b>0</b>	<b>48</b>	<b>82</b>	<b>15</b>	<b>97</b>

### D) Vocational training programmes for Rural Youth

Crop / Enterprise	Date	Training title*	Identified Thrust Area	Duration (days)	No. of Participants			Self-employed after training			Number of persons employed elsewhere
					Male	Female	Total	Type of units	Number of units	Number of persons employed	
-	-	-	-	-	-	-	-	-	-	-	-

\*training title should specify the major technology /skill transferred

### (E) Sponsored Training Programmes

Sr. No	Date	Discipline	Thematic area	Duration day	Client PF/RV / EF	No. of courses	No. of Participants									Sponsoring agency
							Others			SC/ST			Grant total			
							Male	Female	Total	Male	Female	Total	Male	Female	Total	
1	08-05-13	Agronomy	Nursery management	1	PF	1	4	8	12	2	9	11	6	17	23	ATMA Vadodara
2	06-06-13	Home Sci.	Income Generation	1	PF	1	0	0	0	0	23	23	0	23	23	Forest Dept. Vadodara
3	22-06-13 to 27-06-13	Ani. Hus.	Dairy Management	6	PF	6	0	0	0	0	44	44	0	44	44	BSVS Vadodara
4	27& 28-09-13	Agronomy	Post-harvest technology	2	PF	2	44	0	44	1	0	1	45	0	45	Central Warehousing Corp
5	15-11-13	Horti.	Protected cultivation	1	PF	1	38	0	38	0	0	0	38	0	38	NHM
6	23-12-13	Home Sci.	Formation and Management of SHGs	1	PF	1	0	0	0	32	3	35	32	3	35	DWDU
7	27-12-13	Home Sci.	Formation and Management of SHGs	1	PF	1	3	0	3	32	0	32	32	3	35	DWDU
8	01-01-14	Home Sci.	Formation and Management of SHGs	1	PF	1	0	10	10	0	22	22	0	32	32	DWDU
9	07-01-14	Home Sci.	Formation and Management of SHGs	1	PF	1	0	0	0	8	12	20	8	12	20	DWDU Vadodara



10	09-01-14	Home Sci.	Formation and Management of SHGs	1	PF	1	5	17	22	0	13	13	5	30	35	DWDU Vadodara
11	07-02-14 to 12-02-14	Ani. Hus.	Dairy Management	6	PF	6	0	0	0	0	50	50	0	50	50	BSVS Vadodara
12	07-02-14 to 12-02-14	Ani. Hus.	Dairy Management	6	PF	6	0	0	0	0	45	45	0	45	45	BSVS Vadodara

### 3.4. Extension Activities (including activities of FLD programmes)

Nature of Extension Activity	No. of activities	Participants											
		Farmers (Others)			SC/ST (Farmers)			Extension Officials			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	13	205	38	243	40	13	53	0	0	0	245	51	296
Kisan Mela	0			0			0	0	0	0	0	0	0
Kisan Ghosthi	1	0	0	0	54	12	66	0	0	0	54	12	66
Exhibition	5	2425	600	3025	20	0	20	0	0	0	2445	600	3045
Film Show	27	252	0	252	335	300	635	0	0	0	587	300	887
Method Demonstrations	2	7		7	10	-	10	0	0	0	17	0	17
Farmers Seminar	3	603	99	702	-	-	0	0	0	0	603	99	702
Group meetings	33	227	135	362	51	141	192	0	0	0	278	276	554
Lectures delivered as resource persons	45	2866	261	3127	2585	438	3023	0	0	0	5451	699	6150
Newspaper coverage	8	-	-	-	-	-	-	0	0	0	0	0	0
Popular articles	4	-	-	-	-	-	-	0	0	0	0	0	0
Extension Literature	125	2100	750	2850	715	450	1165	0	0	0	2815	1200	4015
Advisory Services	291	1170		1170	-	-	-	0	0	0	1170	0	1170
Scientific visit to farmers field	34	68	21	89	6	6	12	0	0	0	74	27	101
Farmers visit to KVK	121	760	168	928	25	0	25	0	0	0	785	168	953
Diagnostic visits	118	165	1	166	74	0	74	74	148	222	313	149	462
Exposure visits	3	40	0	40	13	87	100	-	-	0	53	87	140
Animal Health Camp	7	207	4	211	68	0	68	1	2	3	276	6	282
Self Help Group Conveners meetings	7	0	66	66	0		0			0	0	66	66
Mahila Mandals Conveners meetings	0	0	0	00	0		0			0	0	0	0
Celebration of important days (6)	6	129	169	298	101	138	239			0	230	307	537
<b>Total</b>	<b>853</b>	<b>11224</b>	<b>2312</b>	<b>13536</b>	<b>4097</b>	<b>1585</b>	<b>5682</b>	<b>75</b>	<b>150</b>	<b>225</b>	<b>15396</b>	<b>4047</b>	<b>19443</b>

<b>Number of Technology weeks celebrated</b>	<b>Types of Activities</b>	<b>No. of Activities</b>	<b>Number of Participants</b>	<b>Related crop/livestock technology</b>
	Gosthies			
	Lectures organised			
	Exhibition			
	Film show			
	Fair			
	Farm Visit			
	Diagnostic Practicals			
	Distribution of Literature (No.)			
	Distribution of Seed (q)			
	Distribution of Planting materials (No.)			
	Bio Product distribution (Kg)			
	Bio Fertilizers (q)			
	Distribution of fingerlings			
	Distribution of Livestock specimen (No.)			
	Total number of farmers visited the technology week			

**Kisan Mobile Advisory**  
**No. of Farmers registered : 3040**  
**Details of SMSs**

Content Category	No. of Messages	No. of Farmers	Feed back of farmers if any
<b>Crop Production</b>	<b>06</b>	<b>2979</b>	
<b>Crop Protection</b>	<b>15</b>	<b>3040</b>	
<b>Livestock &amp; Fisheries Advisory</b>	<b>13</b>	<b>3040</b>	
<b>Weather Advisory</b>	<b>0</b>	<b>0</b>	
<b>Market Information</b>	<b>06</b>	<b>1170</b>	
<b>Events Information</b>	<b>02</b>	<b>1170</b>	
<b>Input availability</b>	<b>00</b>	<b>00</b>	
<b>Others (specify)</b>	<b>00</b>	<b>00</b>	
<b>Total</b>	<b>42</b>	<b>11399</b>	

## **INTERVENTIONS ON DROUGHT MITIGATION**

Introduction of alternate crops/varieties

State	Crops/cultivars	Area (ha)	Number of beneficiaries
-	-	-	-
-	-	-	-

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

State	Livestock components	Number of interactions	No. of participants
-	-	-	-
-	-	-	-
<b>Total</b>			

Animal health camps organized

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

Seed distribution in drought hit states

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

Large scale adoption of resource conservation technologies

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

Awareness campaign

KVK	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
-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-

### 3.5 Production and supply of Technological products

#### SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
Truthful seed	Greengram	Meha	10.43	1,04,300	56

#### SUMMARY

Sl. No.	Major group/class	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	Truthful seed	10.43	1,04,300	56
	<b>TOTAL</b>	10.43	1,04,300	56

#### PLANTING MATERIALS

- NIL-

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
vegetable Seedlings	Brinjal, Chilli, Tomato	F1	60000	30000	51

#### SUMMARY

Sl. No.	Major group/class	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	vegetable Seedlings	60000	30000	51
	<b>TOTAL</b>			

#### BIO PRODUCT -NIL--

Major group/class	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
BIO PESTICIDE	NPV	SNPV	12	1.2	Free Sample	12

#### SUMMARY

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	(kg)		
1	BIOAGENTS	-	-	-	-	-
2	BIO FERTILIZERS	-	-	-	-	-
3	BIO PESTICIDE	SNPV	12	1.2	Free Sample	12
	<b>TOTAL</b>	-	-	-	-	-

#### LIVESTOCK

- NIL -

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	Kgs		
Others (Specify)	-	-	-	-	-	-

**SUMMARY -- NIL --**

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	Kgs		
	<b>TOTAL</b>	-	-	-	-	-

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

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

**Date of start: - June-2012**

**Periodicity: - Six month (Half yearly)**

**No.of copies distributed: - 400**

**(B) Literature developed/published**

Item	Title	Authors name	Number of copies
<b>Total</b>	<b>1</b>		
Technical reports	1. Annual Progress Report of KVK	Programme Coordinator	10
	2. Annual Action Plan of KVK	Programme Coordinator	10
	3. Zonal Research Extension and Action Committee (ZREAC) report	Programme Coordinator	100
	4. AGRESCO report	Programme Coordinator	100
	6. TDHPP, Report	Programme Coordinator	05
<b>Total</b>	<b>5</b>		<b>225</b>
Popular articles	1. Integrated management of Parthenium.	C.R.Patel	10,000
	2. Management of rat.	M.L.Patel	10,000
	3. Khao Ragi – Raho nirogi	Krishana J Soni	10,000
	4 KVK working for the Quality production of Agricultural Produce	B.M Mehta	10000
Total	<b>4</b>		40000
<b>Grand TOTAL</b>	<b>9</b>		<b>40225</b>

**N.B.** Please enclose a copy of each. In case of literature prepared in local language please indicate the title in English

**(C) Details of Electronic Media Produced**

S. No.	Type of media (CD / VCD / DVD / Audio-Cassette)	Title of the programme	Number
-	-	-	-

**3.7. Success stories/Case studies, if any (two or three pages write-up on each case with suitable action photographs)**

**Case Study**

**Title:- Vegetable cultivation in Nethouse is highly profitable enterprises for farmer.**

**1. Socio economic Status of the farmer**

Name of the Farmer: - Mr. Nimeshbhai Babarbhair patel

Name of Village: - Amreshwar

Taluka: - Dabhoi

District:-Vadodara

Age: - 40

Phone no: - 9426782366/8156099804

Education: - Literate

If Literate then Standard:-Graduate

Size of Land Holding: - Large (13.00 Acre.)

Source of Irrigation: - Bore well with Drip irrigation and lifting of water from farm pond

Type of Project: - Net House

Details of net house- 1.0 Acre

Cost- Rs. 2500000

Subsidy- Rs. 1250000

**Resources:-**

Land (Acre.)	Animals		Orchard			Machinery		
	Cow	Buffalo	Pomegranate (Acre.)	Horticulture Crop (Capsicum) Acre.	Cucumber	Tractor	Harvester	Any other(specify)
13.0	1	1	5.00	1.00	1.00	1.00	Ag. Equipment	net house



## 2. Technology adopted-

After guidance from Krishi Vigyan Kendra, Mangalbharti he constructed net house(FLD) under NHM project at his field and started cultivation of capsicum. In case of paddy-wheat cropping pattern he use to get net profit of 30000/-Rs. per year/acre whereas after adopting cultivation of capsicum under net house, he get profit of Rs.270000 in year 2010-11/ acre and Rs.350000 in the year 2012-13/acre. Thus adoption of net house technology gave him much more returns as compare to traditional cultivation practice. He has utilized the net house to prepare the seedlings of capsicum (plug nursery) by his own to get good quality seedlings for plantation. He has also started horticultural crop cultivation and planted 2700 tissue culture pomegranate plants which will start fruiting in next season. He is being recognized as progressive farmer of the area and also awarded best ATMA farmer award for district level in the year 2012-13.

3. **Innovative interventions inducted in the farming system:** - He has adopted protected cultivation with growing of high value vegetable crops. He also practices mulching as well as use of bio fertilizer and Bio pesticide to improve the quality of final product.
4. **Improvement in productivity/profitability/sustainability etc.:-** In Rice–Wheat cultivation pattern he use to earn profit of 30000 Rs per year per acre, but after adoption of protected cultivation the annual income has increased up to Rs.3.50 lacs per acre which has given good profit.
5. **Other income generating activities:** - Plantation of Pomegranate orchard and cucumber in net house with other field crops likes cotton, cereals and pulses.
6. **Income, cost benefit ratio, gross and net income year wise for last 5 years :-**  
Annexure-I
7. **Spread effect in fellow farmers/technology dissemination:** - The success of this farmer has motivated 3 farmers of his area to adopt protected cultivation.
8. **Linkages with KVK/ICAR/SAUs or development departments:** - Regular contact from Krishi Vigyan Kendra, Mangalbharti, Department of Horticulture and SAUs.
9. **Membership/office bearers in local organizations like SHGs, farmers association etc.:-** Member of AGB & AMC of ATMA project as well as president of FIG group.

10. **Description of best practices followed:** - Adoption of net house technology with drip irrigation and mulching in off season capsicum production gave him much more returns as compare to traditional cultivation practice. The cultivation of other crops like cucumber, tomato and raising of seedlings of vegetable crops under net house condition in off season will give quick rise to economic condition of farmer in short period.
11. **Farm magazine and newspapers subscribed:-** Krishi govidhya. Krushi jivan.
12. **Training obtained-name of institute, duration and area:** – Training on Protected cultivation at IHITC Jaipur (one week), Training on Protected cultivation (floriculture) at HTC Pune (one week).
13. **Farmer field photographs/news in newspapers:** - Photos and News attached herewith.
14. **Awards, if any- Awards /Recognition Received by the Farmer:** Progressive farmer of the area and winner of Best ATMA farmer Award in year 2012-13 at District level.
15. **Any other relevant information:** - He has also started horticultural crop cultivation and planted 2700 tissue culture pomegranate plants which will start fruiting in next season.

## Annexure:- Performance of vegetable and Crops in Farmers Field

Area in Acre, Cost in Rs. thousand

S. No.	Crop	2009				2010				2011				2012				2013			
		Area	Cost	Return	Net Profit	Area	Cost	Return	Net Profit	Area	Cost	Return	Net Profit	Area	Cost	Return	Net Profit	Area	Cost	Return	Net Profit
1	Wheat	4.0	28	67	39	4	32	80	48	3	27	60	33	2	20	50	25	1	10	25	15
2	Paddy	4.0	32	100	68	3	27	80	53	2	20	40	20	2	22	50	28	2	11	27	16
3	Cotton	2	14	50	36	2	16	60	44	1	9	40	23	1	10	42	32	1	10	30	20
4	Pomegranate	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	5	-	Awaiting for fruiting	
5	Capsicum	-	-	-	-	-	-	-	-	1	150	275	-	1	90	300	-	1	100	340	240
6	Cucumber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	85	200	115

\*Cost is calculated with total area

**3.8 Give details of innovative methodology/technology developed and used for Transfer of Technology during the year**

Kisan Mobile Advisory Service and Voice Message Service (Vkvk) has been started and its response from farmers is very effective.

**3.9 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)**

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

- Identification of courses for farmers/farm women
- Rural Youth &
- In-service personnel

Methodology adopted:           1. PRA  
  2. Personal interview  
  3. Group discussion during training and field visit  
  4. Questionnaire

**3.11 Field activities**

i.	Number of villages adopted	:	14
ii.	No. of farm families selected	:	200
iii.	No. of survey/PRA conducted	:	05

**3.12. Activities of Soil and Water Testing Laboratory**

<b>Status of establishment of Lab</b>	:	
1. Year of establishment	:	2005-06
2. List of equipment's purchased with amount	:	

Sr. No	Name of items	Qty.	Amount (Rs.)	Date of purchased
1	Storage cupboard	05	25,250=00	31/03/2006
2	Storage cupboard	01	5,150=00	31/03/2006
3	Cupboard	01	4,500=00	31/03/2006
4	Angel rake	04	7,100=00	31/03/2006
5	Store well	03	12,300=00	31/03/2006
6	Office table	02	7,500=00	31/03/2006
7	Stand frame rake	04	6,200=00	31/03/2006
8	Revolving chair	02	43,10=00	31/03/2006
9	Revolving stool	02	2,700=00	31/03/2006
10	Plastic stool	04	755=00	31/03/2006
11	Store well cupboard	03	15,000=00	31/03/2006
12	Fixed wall steel cupboard	--	85,021=00	31/03/2006
13	Hot Plate Rectangular (Nova-NV-8535)	01	7,500=00	28/02/2006
14	Rotary shaker (Nova-NV-853)	01	25,250=00	28/02/2006
15	Voltage stabilizer (Nova-NV/14)	01	16,000=00	28/02/2006
16	“EI” Microprocessor Flame Photometer (Model-1381)	01	35,250=00	28/02/2006
17	“EI” Microprocessor based pH meter (Model-1012)	01	15,275=00	28/02/2006
18	“EI” Microprocessor based Conductivity/TDS meter (Model-1601)	01	17,450=00	28/02/2006
19	“EI” Microprocessor based Conductivity/TDS meter (Model-1601)	01	17,450=00	28/02/2006
20	Single pan balance ‘K-Roy’ (Model: K-14 Deluxe)	01	11,950=00	28/02/2006
21	Electronic Balance: Multi-function series (Model: Swis-310)	01	14,900=00	28/02/2006
22	Visible Spectrophotometer (FGSL-177 Scanning)	01	55,944=00	02/03/2006
23	Electronic Automatic Kel Plus Microprocessor based Twelve Place macro block Digestion System (Model: KES 12 L)	01	96,020=00	16/03/2006
24	Electronic Kel Plus Microprocessor based Automatic Distillation System (Model: DISTY-EM)	01	1,25,350=00	16/03/2006
25	Sampling Augers (Hand size 3”)	01	1,200=00	25/03/2006
26	Sampling Augers (Hand size 6”)	01	2,150=00	25/03/2006
27	Extension Rod - Size: 3”	01	800=00	25/03/2006
	Size: 6”	01	1,050=00	25/03/2006
28	Refrigerator 330 Lit (Ken star-SR)	01	15,000=00	27/03/2006
29	Stabilizer	01	500=00	27/03/2006
30	‘Nova’ Willey mill stainless steel body	01	21,550=00	06/03/2006
31	‘Nova’ Horizontal shaker-Kahn-Platform	01	24,975=00	06/03/2006
32	“Mac” Electrically Heated all glass Distillation apparatus (Model: MSW-193)	01	16,350=00	06/03/2006
33	Test Sieves Size: 3.35mm	01	475=00	25/03/2006

34	Size: 2.00 mm	01	475=00	25/03/2006
35	Soil Hydrometer Range: 58-92%	01	700=00	25/03/2006
36	High speed stirrer: IS: 2720IV)	01	11,400=00	25/03/2006
37	Hand/Sugar Refractometer	01	2,500=00	25/03/2006
38	Hanna Pocket pH Meter	01	2,600=00	25/03/2006
39	Hanna Pocket TDS Meter	01	2,450=00	25/03/2006

**3.13 Details of samples analyzed so far :**

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	40	40	07	-
Water Samples	-	-	-	-
Total	40	40	07	-

## **4.0 IMPACT**

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

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

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

### **4.2. Cases of large scale adoption: Green Gram varietal replacement**

In low fertile hilly and sloppy area farmers of Chhotaudaipur district the locals prefer to grow late maturing GM-4 Green Gram with higher seed rate. The Gm-4 varieties are susceptible to Yellow Vein Mosaic disease, a limiting factor in production. Average production is less than 700 kg/ha. The Anand Agriculture University introduced the Improved Variety Meha in 2009. The variety Meha is resistant to yellow vein mosaic disease and early maturing and suitable for rainfed region with about 35-40% high production potentiality. The KVK laid down OFT and FLD of Variety Meha. KVK also produce truthful seed of Meha and distributed to farmers. Last three year KVK produce 3500 kg of seed and distributed to more than 500 farmers and covers approximately 300ha area under this improved variety Meha.

The Dark Green seeded Meha variety is demanded by farmers because of resistance to YVM; hence it is the best alternative to replace the older variety of Green gram with Meha, in this region. To increase the productivity of the green gram crop, KVK has taken up seed production programme to produce and distribute the seed of improved variety of Green gram-Meha. Result of KVK activities , increase the yield of green gram and to overcome YVM problem, ultimately increasing the income of the tribal farmers. Farmers were motivated about benefit of variety replacement.

Farmers view:

- A. Reduction in seed rate.
- B. Higher net return.
- C. Meha variety yielded about 40 per cent more as compared to local variety
- D. Most suitable for rainfed condition.
- E. Yellow Vein Mosaic incidence is very low as compared to GM-4.

### **4.3 Details of impact analysis of KVK activities carried out during the reporting period**

#### **A Study on Knowledge and Adoption of Chilli Production Technology by Chilli Growers in Chhotaudaipur District.**

##### **Objectives:**

1. To study the characteristics of Chilli growers.
2. To study the knowledge level of Chilli growers about Chilli production technology.
3. To study the adoption level of Chilli growers about Chilli production technology
4. To study constrains faced by Chilli growers in adoption of Chilli production technology.

##### **Name of the scientists involved:**

1. Dr. B.L.Dhayal
2. Milan C. Brahmhatt
3. Dr. Bharat M Mehta

##### **METHODOLOGY:**

The study was conducted in Chhotaudepur district of Gujarat state. From the district Sankheda taluka was selected, purposively and from that 5 villages and 20 farmers from each village were selected randomly for the study. Thus, 100 farmers were selected randomly for the study. Data were collected through personal interview method. The questionnaire was developed in view of the objectives of the study. The result of the study was presented in terms of frequency and percentage.

## MAJOR FINDINGS:

### 1. Distribution of chilli farmers according to characteristics.

It is observed from Table 1 that majority (65 per cent) of the farmers belonged to middle age group, with high school and higher secondary level of education (55 per cent), Majority (78 per cent) of the farmers were dependent on farming along with the animal husbandry, (42 per cent) of them had medium size of land holdings with the soil type of medium black soil (62 per cent).

Majority (68 per cent) of them are possessing more than 3 to 5 milch animals and 76 per cent of them belongs to joint family and 30 per cent of them had taken information from KVK.

Followed by Any other source of information (22 per cent) in which the seeking information from Agro Science center and private company extension personnel's etc.

**Table.1: Distribution of farmers according to characteristics**

**n=100**

No.	Category	Per cent
<b>1.</b>	<b>Age</b>	
	Young (Up to 30 years)	19
	Middle(31 to 45 years)	65
	Old age ( above 50 years)	16
<b>2.</b>	<b>Education</b>	
	Illiterate	05
	Primary Level	22
	High school and higher secondary	55
	Above higher secondary	18
<b>3.</b>	<b>Occupation</b>	
	Farming	19
	Farming+ Animal husbandry	78
	Farming+ Service	03
<b>4.</b>	<b>Size of land holding</b>	
	Up to 1ha.	20
	1 to 2 ha	42
	2 to 4 ha	30
	above 4 ha	08
<b>5.</b>	<b>Type of soil</b>	
	Black soil	05
	Medium black Soil	62
	Sandy Loam soil	33
<b>6.</b>	<b>Animal Possession</b>	
	No Animal	02
	Up to 2 animal	20
	3 to 5 animal	68
	above 5 animal	10
<b>7.</b>	<b>Type of family</b>	
	Single	24
	Joint	76
<b>8.</b>	<b>Source of information</b>	
	KVK	30



	Agril. Department (AO,AAO, Agril. Supervisor)	<b>08</b>
	Neighbour/Progressive Farmers	<b>18</b>
	Extension workers	<b>15</b>
	Agril. Bulletin /Newspaper	<b>07</b>
	Any other	<b>22</b>

## 2. Knowledge of the farmers about chilly production technology.

n=100

No.	Chilly production technology	Percent
1	Land preparation	<b>100</b>
2	Improved varieties	<b>95</b>
3	Seed rate	<b>10</b>
4	Seed treatment	
	Name of fungicide	<b>72</b>
	Dose of fungicide	<b>60</b>
5	Time of sowing/TP	<b>98</b>
6	<b>Fertilizer</b>	
A	<b>Basal application</b>	
	-Organic manures	<b>75</b>
	-Nitrogen	<b>10</b>
	-Phosphorus	<b>96</b>
	-Method of application	<b>90</b>
B	<b>Top dressing</b>	
	-Urea/AS/MOP	<b>84</b>
	-Quantity of fertilizer	<b>58</b>
	-Time of application	<b>89</b>
7	Spacing	<b>05</b>
8	Gap filling	<b>83</b>
9	<b>Weed management</b>	
	1. Manual	<b>100</b>
	2. Chemical	
	-Name of herbicide	<b>59</b>
	-Quantity of herbicide	<b>41</b>
10	<b>Insect control</b>	
	<b>1. Chilly thrips</b>	
	-Nature of damage	<b>85</b>
	-Control measure	<b>92</b>
	-Name of pesticide	<b>90</b>
	-Dose of pesticide	<b>68</b>
	<b>2. Aphids/White fly</b>	
	-Nature of damage	<b>96</b>
	-Control measure	<b>95</b>
	-Name of pesticide	<b>95</b>
	-Dose of pesticide	<b>86</b>
	<b>3. Termite</b>	
	-Nature of damage	<b>65</b>

	-Control measure	52
	-Name of pesticide	80
	-Dose of pesticide	51
11	<b>Disease Control</b>	
	<b>1.Leaf curl</b>	
	-Symptoms	98
	-Control measure	80
	-Name of fungicide/insecticide	48
	-Dose of fungicide/insecticide	46
	<b>2.Powdery Mildew</b>	
	-Symptoms	83
	-Control measure	60
	-Name of fungicide	60
	-Dose of fungicide	44
	<b>3.Fruit rot</b>	
	-Symptoms	86
	-Control Measure	76
	-Name of fungicide	75
	-Dose of fungicide	57
12	<b>Irrigation</b>	
	No. of irrigation	96
	Critical stage of irrigation	80

We can observe from Table 2 that a great majority of the farmers have knowledge about recommendation such as land preparation (100 per cent), improved varieties (95 per cent), Manual weed control (100 per cent), Time of sowing/TP (98 per cent), Knowing about basal application of phosphorus fertilizer (96 per cent), and No. of irrigation (96 per cent).

Whereas in case of spacing (05 per cent) and seed rate (10 per cent) very poor knowledge observed. Moreover, knowledge in regards of symptoms of leaf curl (98 per cent), Powdery mildew (83 per cent) and fruit rot (86 per cent) was found good among the chilli growers.

In case of fertilizers management (90 per cent) and phosphors application (96 per cent) of the farmers had knowledge about the method of basal application and top dressing application of fertilizers, respectively. Whereas (58 per cent) and (89 per cent) of them had knowledge about quantity of fertilizer for top dressing and time of application respectively.

### 3. Adoption of recommended chilly production technology

		n=100
No.	Chilli Production Technology	Per cent
1	<b>Improved Varieties</b>	
	GVC-101	00
	GVC-111	00
	GAVC-112	00
	GVC – 121	00
	GAVNPC – 131	00
	GAVCH – 01	00
	Other Private varieties- (Sigma/Sitara/Agnisikha etc)	100

2	<b>Seedlings rate</b>	
	As per recommendation(60.000 ha)	00
	Above recommendation	00
	Below recommendation	100
3	<b>Time of Sowing</b>	
	Timely sowing (15 Aug. to 15 September)	86
	Early sowing	03
	Late sowing	11
4	<b>Sowing Distance</b>	
	As per recommendation (60 X 60 cm/ 2 seedling)	00
	-Below recommendation	00
	Above recommendation	100
5.	Time of sowing/TP	90
6	<b>Fertilizer</b>	
<b>A</b>	<b>Basal Application</b>	
	<b>Organic manures(FYM)</b>	
	-Not added	15
	As per recommendation (15 to 20 ton/ha)	70
	-Below recommendation	10
a	<b>Nitrogen</b>	
	-Not adopted	87
	As per recommendation (50 kg/ha)	00
	-Above recommendation	00
	-Below recommendation	13
b	<b>Phosphorus</b>	
	-Not adopted	00
	-As per recommendation(50 kg/ha)	10
	-Above recommendation	90
	-Below recommendation	00
c	<b>Micro Nutrients (Grade-V@20 kg/ha)</b>	
	-Not adopted	100
	As per recommendation	00
	-Above recommendation	00
	-Below recommendation	00
<b>B</b>	<b>Top dressing</b>	
a	<b>Nitrogen</b>	
	-Not adopted	00
	As per recommendation (50 kg./ha)	32
	-Above recommendation	63
	-Below recommendation	05
b	<b>Potash</b>	
	-Not adopted	00
	As per recommendation (50 kg./ha)	54
	-Above recommendation	46
	-Below recommendation	00
9	<b>Weed management</b>	
	1. Manual	96
	2. Chemical	

	Pendimethalin 1.0 kg/ha or flucloralin 1.0 kg/ha of oxadiazon 0.50 kg/ha	<b>04</b>
10	<b>Insect Control</b>	
	<b>1.Chilly thrips</b>	
	Spray of Triazophos 10 ml or Imidacloprid 10 ml or Acephate 10 ml	
	-Not adopted	<b>00</b>
	-As per recommendation	<b>32</b>
	-Above recommendation	<b>65</b>
	-Below recommendation	<b>03</b>
	<b>2.Aphid white fly</b>	
	<b>a. Spray of Neem oil (5%)</b>	
	-Not adopted	<b>55</b>
	-As per recommendation	<b>10</b>
	-Above recommendation	<b>09</b>
	-Below recommendation	<b>26</b>
	<b>b. spray of Imidacloprid (5 ml)</b>	
	-Not adopted	<b>00</b>
	As per recommendation	<b>65</b>
	-Above recommendation	<b>31</b>
	-Below recommendation	<b>04</b>
	<b>3.Termite</b>	
	<b>Clorpyriphos or Quinalphos 4 lit/ha</b>	
	-Not adopted	<b>56</b>
	-As per recommendation	<b>22</b>
	-Above recommendation	<b>08</b>
	-Below recommendation	<b>14</b>
11	<b>Disease control</b>	
	<b>1.Leaf curl</b>	
	<b>a.Remove affected plant</b>	
	-Not adopted	<b>62</b>
	-As per recommendation	<b>28</b>
	-Above recommendation	<b>00</b>
	-Below recommendation	<b>10</b>
	<b>c. Spray of neem oil (5%)</b>	
	-Not adopted	<b>65</b>
	-As per recommendation	<b>10</b>
	-Above recommendation	<b>12</b>
	-Below recommendation	<b>13</b>
	<b>d. Spray of Triazophos 10 ml or Imidacloprid 10 ml or Acephate 10 ml</b>	
	-Not adopted	<b>00</b>
	As per recommendation	<b>58</b>
	-Above recommendation	<b>42</b>
	-Below recommendation	<b>00</b>
	<b>2.Powdery mildew</b>	
	Wettable sulphur 80% W.P. 35 g. or Carbendazim 50 WP 10 g or Hexaconazol 5 EC 15 ml	
	-Not adopted	<b>05</b>
	As per recommendation	<b>58</b>

	-Above recommendation	<b>37</b>
	-Below recommendation	
	<b>3.Fruit rot</b>	
	Spray of Mencozeb 75% W.P. 27 g or Thiophanate methyl 7 gm or clorotheloni 75% W.P. 20 g	
	-Not adopted	<b>08</b>
	-As per recommendation	<b>52</b>
	-Above recommendation	<b>36</b>
	-Below recommendation	<b>04</b>
<b>12</b>	<b>Irrigation</b>	
	12 to 15 Irrigation	
	-As per recommendation	<b>20</b>
	-Above recommendation	<b>80</b>
	-Below recommendation	<b>00</b>

It can be observe from Table 3 that (100 per cent) of the farmers had adopted the other private varieties of the chilly and 100 per cent of farmers had adopted the below recommendation of the seedlings rate, 86 per cent farmers had adopted the timely sowing their crop as per recommended time (15 August to 15 September), 100 per cent had adopted above recommendation of the sowing distance, while 90 per cent adopted the time of sowing/TP.

In case of fertilizer management 70 per cent of the farmers used organic manure as per the basal recommendation, whereas (87 per cent) farmers had not adopted the nitrogen fertilizers as basal dose and 90 per cent farmers had adopted the above recommendation of phosphorous fertilizers as basal application, while 100 per cent farmers had not adopted the micro nutrient (Grade-V@20kg/ha) as per recommendation on basal application, 63 per cent of farmers adopted the top dressing of above recommendation of nitrogen fertilizers and 96per cent used manual weed management.

In case of control of Chilli thrips (65per cent) of the farmers used above recommended dose of pesticides, whereas 32 per cent and 03 per cent of them used dose of pesticides as per recommendation and below recommendation respectively. For the control of Aphid white fly (65 per cent) used spray of Imidacloprid (5.0 ml) as per recommendation rest were (31 per cent) and (04 per cent) used above and below recommendation respectively.

In case of disease control like leaf curl and powdery mildew in both (58 per cent) farmers used the chemical as per recommendation and 52 per cent used spray of Mencozeb 75% wp, 27 gm or Thiophanate methyl 7 gm or chlorotheloni 75% wp 20 gm as per recommendation for fruit rot.

In case of irrigation 80 per cent farmers applied irrigation as per above recommendation and 20 per cent as per recommendation and negligible are found in below recommendation.

#### 4. Constraints faced by the farmers in adoption of chilli production technology.

**Table.4: Constraint faced by farmers in adoption of Chilli Production technology**

No.	Constraint	Degree of Constraints	Rank
1	Lack of knowledge of production technology	<b>1.66</b>	<b>VI</b>
2	High cost of inputs	<b>2.21</b>	<b>IV</b>
3	Irregular supply of electricity	<b>1.56</b>	<b>VIII</b>

4	Non availability of labours in time	<b>1.80</b>	<b>V</b>
5	Non availability of inputs in time	<b>1.62</b>	<b>VII</b>
6	Non availability of resistant variety	<b>2.35</b>	<b>II</b>
7	Less awareness about micro nutrient	<b>2.22</b>	<b>III</b>
8	High cost of Water soluble fertilizer	<b>2.42</b>	<b>I</b>
9	Mono Cropping of Chilli in same piece of land	<b>1.42</b>	<b>IX</b>

Table shows that High cost of Water soluble fertilizer, Non availability of resistant variety, Less awareness about micro nutrient and Lack of knowledge of production technology were get the rank 1 to 4 respectively of major constraints faced by the farmers.

**Conclusion:**

Majority of Chilli producers have knowledge about Improved Variety, Time of Sowing, Uses of Fertilizers, and Insect pest, Diseases in Chilli and its control measures while majority of chilli growers have very low knowledge about the spacing and seed rate of chilli. Majority of farmers had adopted the other private varieties of the chilli and adopted the below recommendation of the seedlings rate, adopted the timely sowing their crop as per recommended time (15 August to 15 September),

In case of fertilizer management 70 per cent of the farmers used organic manure as per the basal recommendation, whereas (87per cent) farmers had not adopted the nitrogen fertilizers as basal dose and 90.00 per cent farmers are applying more phosphorous fertilizers than the recommended dose as basal application.

The major problems faced by chilli producers are High cost of Water soluble fertilizer, Non availability of resistant variety, less awareness about micro nutrients, High cost of inputs and Non availability of labours in time.

## 5.0 LINKAGES

### 5.1 Functional linkage with different organizations

Name of organization	Nature of linkage
Anand Agricultural University, Anand	For technical guidance and arranging extension activities, Arrangement of RAWE programme for Students
Model farm, Anand Agricultural University, Vadodara	For technical guidance
District Rural Development Agency, Vadodara	For arranging In-service training programme
State Department of Agriculture, and Dept. of Agriculture, District Panchayat, Vadodara	For arranging In-service training programme and extension activities under TMC-II (ICDP), ATMA, RKVY, NFS Scheme
State Dept. of Horticulture, Vadodara National Horticulture Mission, Vadodara	For arranging training , Seminar & Exposure tour
Dept. of Animal Husbandry, Vadodara	For arranging training, Animal Health Camp and Vaccination camp
Central ware housing Corporation	PHT in food grain trg
APMC	For daily market rate and inform to farmers.
District Watershed Development Unit, Vadodara	For training programme and tour
Main Research Station ( Cotton), Surat, Navsari Agricultural University	For technical know-how, educational tour
National Bank for Agriculture and Rural Development (NABARD), Ahmedabad	For Farm Science Club and extension activities
Bank Of Baroda/State Bank of India	For technical guidance for Self Help Groups and Farm Science Club
Jan Shikshan Sanstha, Bodeli	For arranging vocational training programme
Cohesion Foundation, Bodeli	For arranging the kitchen gardening programme for farm women
GGRC	For arranging the training programme of drip irrigation
GSFC	For arranging training programme.
Baroda Swarojgar Vikas Sansthan, Vadodara	For arranging income generation activities programme

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

**5.2 List special programmes undertaken by the KVK, which have been financed by State Govt./Other Agencies**

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

**5.3 Details of linkage with ATMA**

a) Is ATMA implemented in your district? : Yes

S. No.	Programme	Nature of linkage	Remarks
1.	Training	7	-
2.	FLD / OFT	1	<b>100 (Farmers)</b>
3.	Kisan Ghosthi	2	153 (Farmers)
4.	Farmers Scientist Interaction	5	Scientific Cultivation of Bt Cotton, Importance of Micro Nutrient in Bt. Cotton, INM in Cotton, Scientific cultivation of Maize,
5.	Exposure visit	10	344 ( Farmer)
6.	Farmers Field School ( Lecture delivered in FFS)	8.0	181 ( Farmers)
7.	Kisan Mela	4.0	2916 (Farmer and Farm Women)

**5.4 Give details of programmes implemented under National Horticultural Mission**

No.	Programme	Nature of linkage	Constraints if any
1	Exposure visit for farmers to outer state ( Maharashtra)	1.0	--
2	Seminar on Protected cultivation .	2.0	--

**5.5 Nature of linkage with National Fisheries Development Board**

S. No.	Programme	Nature of linkage	Remarks
-	-	-	-

**6. PERFORMANCE OF INFRASTRUCTURE IN KVK**

**6.1 Performance of demonstration units (other than instructional farm)**

Sl. No.	Demo Unit	Year of estt.	Area (ha)	Details of production			Amount (Rs.)	
				Variety	Produce	Qty. (kg)	Cost of inputs	Gross income
1	Vegetable unit	2013	0.2	Fenugreek	Leafy vegetables	41.0	160.0	410.0
2	Fodder Unit	2013	0.4	Lucerne	Fodder	500	100	500



## 6.2 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.)	
				Variety	Type of Produce	Qty. (q)	Cost of cultivation	Gross income
<b>Pulse</b>								
Greengram	12.3.2013	04.6.2013	3.5	Meha	Seed	20.72	37832	181575
Greengram	01.03.14	-	2.5	Meha	seed	Crop is standing		
<b>Cereals</b>								
Paddy	27.07.13	15.11.2013	3.3	GAR-13	Seed	110.04	84067	165050
Wheat	10.12.12	07.04.13	3.0	GW-496	Seed	110.40	68498	149066
Wheat	09.12.13	-	4.0	GW-496	Seed	Crop at harvesting stage		

## 6.3 Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,)

Sl. No.	Name of the Product	Qty (lit)	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	SNPV	1.2	-	-	-

## 6.4 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	
-	-	-	-	-	-	-	-

## 6.5 Rainwater Harvesting

### Training programmes conducted by using Rainwater Harvesting Demonstration Unit

Date	Title of the training course	Client (PF/RV/EF)	No. of Courses	No. of Participants including SC/ST			No. of SC/ST Participants		
				Male	Female	Total	Male	Female	Total
-	-	-	-	-	-	-	-	-	-

### 6.5 Utilization of hostel facilities

Accommodation available (No. of beds) :

Months	Title of the training course/Purpose of stay	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2013	Training	50	02	No fixture and furniture grant sanctioned by ICAR, so farmer hostel is not utilized properly.
Total		<b>50</b>	<b>02</b>	
May 2013				
Total				
June 2013	Training	48	02	
Total		<b>48</b>	<b>02</b>	
July 2013				
Total				
August 2013				
Total				
September 13	Training	90	02	
Total		<b>90</b>	<b>02</b>	
October 2013				
Total				
November 13				
Total				
December 13	Training	120	20	
Total		<b>120</b>	<b>20</b>	
January 2014	Training	83	30	
Total		<b>83</b>	<b>30</b>	
February 2014	Training	07	07	
Total		<b>07</b>	<b>07</b>	
March 2014				
Total				
Grand total		398	63	

5 X 25= 125

(Duration of the training course X No. of trainees)

## 7. FINANCIAL PERFORMANCE

### 7.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
A. With Host Institute	Bank of Baroda	At : Bahadarpur, Ta : Sankheda, Dist : Baroda	02050100001695
B. (1) With KVK	State Bank of INDIA	Ajwa Road, Vadodara (Guj.)	10395204341
(2) With KVK	State Bank of INDIA	At : Sankheda, Dist : Vadodara	10683587608
(3) With KVK	Bank of Baroda	At : Bahadarpur, Ta : Sankheda, Dist : Baroda	02050100002478

### 7.2 Utilization of funds under FLD on Oilseed (Rs. In Lakhs)

Item	Released by ICAR		Expenditure		Unspent balance as on 1 <sup>st</sup> April 2014
	Kharif 2013-14	Summer 2013-14	Kharif 2013-14	Summer 2013-14	
Inputs	-	-	-	-	-
Extension activities	-	-	-	-	
TA/DA/POL etc.	-	-	-	-	
<b>TOTAL</b>	-	-	-	-	<b>158443.20</b>

### 7.3 Utilization of funds under FLD on Pulses (Rs. In Lakhs)

Item	Released by ICAR		Expenditure		Unspent balance as on 1 <sup>st</sup> April 2014
	Kharif 2013-14	Summer 2013-14	Kharif 2013-14	Summer 2013-14	
Inputs	-	-	-	-	
Extension activities	-	-	-	-	
TA/DA/POL etc.	-	-	-	-	
<b>TOTAL</b>	-	-	-	-	<b>-37177.46</b>

### 7.4 Utilization of funds under FLD on Cotton (Rs. In Lakhs)

Item	Released by ICAR		Expenditure		Unspent balance as on 1 <sup>st</sup> April 2014
	Kharif 2013-14	Summer 2013-14	Kharif 2013-14	Summer 2013-14	
Inputs	-	-	-	-	
Extension activities	-	-	-	-	
TA/DA/POL etc.	-	-	-	-	
<b>TOTAL</b>	-	-	-	-	<b>40918.50</b>

### 7.5 Utilization of funds under FLD on Maize (DMR) (Rs. In Lakhs)

Item	Released by ICAR		Expenditure		Unspent balance as on 1 <sup>st</sup> April 2014
	2013-14	2013-14	2013-14	2013-14	
Inputs	-	-	0	-	
Extension activities	-	-	-	-	
TA/DA/POL etc.	-	-	-	-	
<b>TOTAL</b>	-	-	<b>00</b>	-	<b>-12296.00</b>

## 7.5 Utilization of KVK funds during the year 2013-14

Sr.No	Items/ Head	Sanctioned grant (Council's share)	Grant received (council's share)	Expenditure (Council's share)
<b>A</b>	<b>Recurring Contingencies Items</b>			
1	Pay & Allowances	6500000	6500000	6487957.00
2	Traveling Allowances	100000	100000	53878.00
3	Contingencies	1100000	1100000	1099280.50
a	Stationery, Telephone, Postage & other expenditure on office running,	440000	440000	439844.00
b	POL, repair of Vehicles, tractor & equipment's			
c	Meals/refreshment of trainees (Rs.75/- day/trainee for the training programmes of residential nature and Rs. 40/- day/trainee for the training programmes of non-residential nature.			
d	Training materials (Posters, charts demonstration materials including chemicals etc required for conducting the training)			
g	Training of extension functionaries			
e	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year) and technology demonstration for harnessing pulses production for different pulse crops namely pigeonpea 20 acre@ Rs.5000/- per acre, chickpea 15 acre@ 5000/- per acre)	660000	660000	659436.50
f	On farm testing (on need based, location specific and newly generated information in the major production system of the area)			
h	Maintenance of building			
	<b>Total (A)</b>	<b>7700000</b>	<b>7700000</b>	<b>7641115.50</b>
<b>B</b>	<b>Non-Recurring Contingencies</b>			
1	Works	0	0	0
2	Equipment & Furniture	0	0	0
3	Vehicle (Motor cycle)	0	0	0
4	Library	0	0	0
	<b>Total (B)</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Grand total (A+B)</b>	<b>7700000</b>	<b>7700000</b>	<b>7641115.50</b>

**7.5 Status of revolving fund (Rs. in lakhs) for the three years**

<b>Year</b>	<b>Opening balance as on 1<sup>st</sup> April</b>	<b>Income during the year</b>	<b>Expenditure during the year</b>	<b>Net balance in hand as on 1<sup>st</sup> April of each year</b>
April 2011 to March 2012	278467=36	332637=00	223140=00	387964=36
April 2012 to March 2013	387964=36	382600=00	228794=00	541770=00
April 2013 to March 2014	541770=00	499640=00	253841=00	787569=00

**8.0 Please include information which has not been reflected above (write in detail)**

**8.1 Constraints**

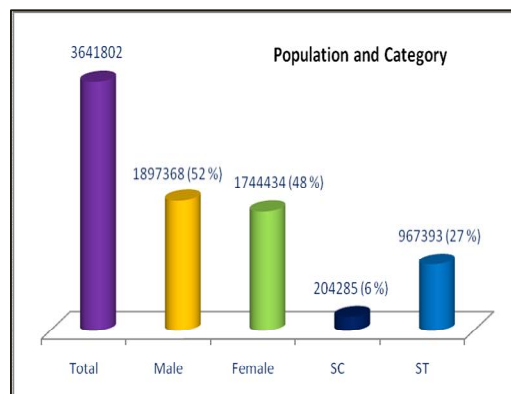
(a) Administrative : NIL

.

(b) Financial : NIL

**District Profile - I****Include the details of****General census**

Vadodara District has 12 talukas with 1543 villages. Total population of the district is about 36.42 lakhs. Male population is 52 per cent, while 48 per cent of the population consists of female. 6 per cent of the population belongs to scheduled caste category. However, the percentage of scheduled tribe population is 27 per cent.

**Table 1. General information of the district**

Sl No.	Name of the block/Taluka/ Mandal	Geographical Area	No. of gram panchayats	No. of revenue villages
1	Savali	79681	103	24
2	Vadodara	66998	83	10
3	Vaghodia	56442	67	20
4	Jetpur Pavi	80519	91	52
5	Chhota Udepur	76820	42	32
6	Kavant	60501	45	36
7	Nasvadi	53469	59	44
8	Sankheda	72297	88	51
9	Dabhoi	63150	83	26
10	Padara	53460	76	7
11	Karjan	60188	84	8
12	Shinor	29251	40	1
	<b>Total</b>	<b>752776</b>	<b>861</b>	<b>311</b>

**Table 2: Demographic Information for the Vadodara District**

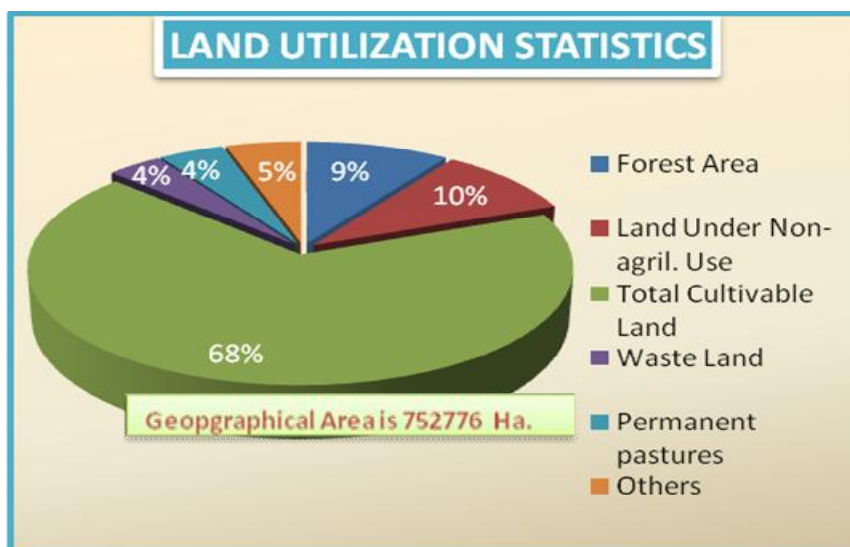
Sl. No.	Name of Block	Population (As per 2001 census total)	% of Literacy	Male No.	Female No.	Categories No.			
						SC	ST	OBC	Gen.
1	Savali	237929	65	125292	112637	12407	17065	70560	137897
2	Vadodara	1705989	75	112529	102415	15341	21063	78456	100084
3	Vaghodia	133240	64	68480	63799	6275	38198	40789	47017
4	Jetpur Pavi	225894	48	116158	109736	5463	175183	6589	38659
5	Chhota Udepur	202697	34	90310	89176	5396	169818	263	4009
6	Kavant	170524	42	86335	84189	4195	157738	563	8028
7	Nasvadi	124828	42	63783	61045	1672	107547	7586	8023
8	Sankheda	185856	56	91263	84103	5610	82047	2365	85344
9	Dabhoi	183029	65	66852	61225	9367	48890	8563	61257
10	Padara	240236	72	106017	95014	13984	6950	7589	172508
11	Karjan	162486	69	71280	64848	9401	38766	9586	78375
12	Shinor	69094	58	36039	33055	5185	25020	9685	29204
	<b>Total</b>	<b>3641802</b>	<b>57.5</b>	<b>1034338</b>	<b>961242</b>	<b>94296</b>	<b>888285</b>	<b>242594</b>	<b>770405</b>

## 2. Agricultural and allied census

### Land utilization Pattern

Total geographical area of the district is about 36.41 lakhs hectares. It is noteworthy to find that about 68 per cent of the geographical area is under cultivation in the district. 8 talukas out of 12 have about more than 70 per cent of their geographical area under cultivation. However, the coverage of forest area is only 4 per cent. there is need to increase the coverage of forest. Pasture land forms 5.00 per cent of geographical area.

Out of 509144 hectares of cultivated land, 242776 ha (48 per cent) are irrigated land. The remaining land (52 per cent) is un-irrigated one.



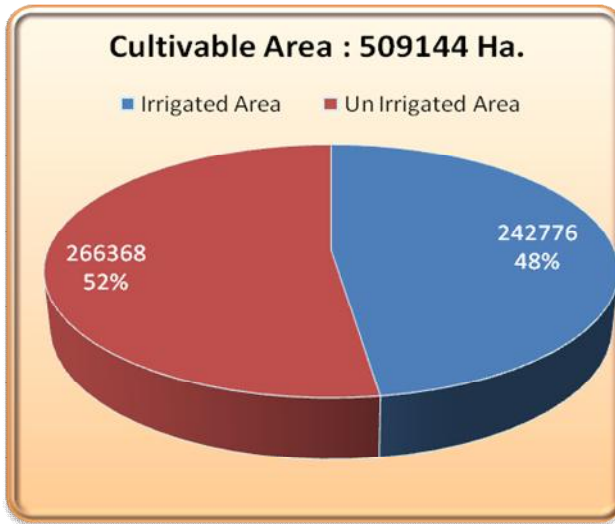
**Table 3: Information on Land use pattern in the Vadodara District**

Sl No.	Name of the Block	Geographical Area (Ha.)	Cultivable Area (Ha.)	Cultivated Area (Ha.)	Cultivable waste	Current Fallow (Ha.)
1	Savali	79681	55914	13967	7962	1838
2	Vadodara	66998	42455	16066	6954	1523
3	Vaghodia	56442	42531	10943	1412	1556
4	Jetpur Pavi	80519	51748	23948	720	4103
5	Chhota Udepur	76820	34999	33801	2696	5324
6	Kavant	60501	33965	18292	5269	2975
7	Nasvadi	53469	29775	18908	2316	2470
8	Sankheda	72297	54430	12662	1092	4113
9	Dabhoi	63150	48023	7438	5130	2559
10	Padara	53460	41487	8845	1764	1364
11	Karjan	60188	50048	7792	2205	143
12	Shinor	29251	23769	4960	486	36
	<b>Total</b>	<b>752776</b>	<b>509144</b>	<b>177622</b>	<b>38006</b>	<b>28004</b>

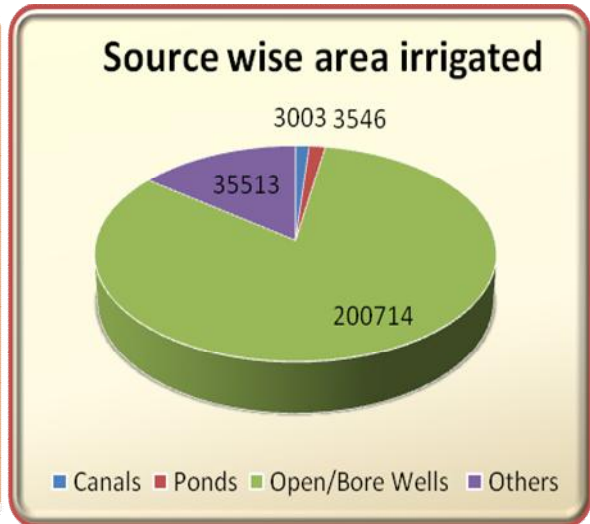


### Irrigated/Unirrigated land

Out of 509144 hectares of cultivated land, 242776 ha (48per cent) are irrigated land. The remaining land (52per cent) is un-irrigated one. Open/bore wells are important sources of irrigation as 83per cent of irrigated area are irrigated by Open well and Bore well.



Irrigated/Un-irrigated Area



Source wise Area Irrigated

### Sources of irrigation:

The main sources of irrigation for crop production are tube-well and Canal. The excess irrigation to the crop has badly affected to soil fertility and productivity.

Sr. No.	Source of irrigation	Area covered (ha)
1.	By Canal	16200
2.	By Well or Tube well	180226
3.	By Pond	5137
4.	Other source	11367

Source: Director of agri., Gandhinagar

Table : Agricultural statistics Crops, Area, Production and Productivity

Sr. No	Crop	Area (ha)	Production (t/ha)	Productivity (qt. /ha)
<b>A</b>	<b>Kharif:</b>			
1	Cotton Irrigated	99100	3,71,100	6.37 (Lint)
	Unirrigated	67400	1,83,200	4.62 (Lint)
2	Paddy Irrigated	16500	31,200	18.90
	Un irrigated	43900	35,900	8.18
3	Sorghum	1700	2,100	12.38
4	Bajara	7900	12,700	16.10

5	Castor	18200	27,900	15.34
6	Pigeon Pea	75900	83,800	11.04
7	Greengram	1600	700	4.33
8	Kidneybean	1200	300	2.32
9	Blackgram	13300	10,800	8.14
10	Groundnut	1900	2,500	13.69
11	Tobacco	8100	8,300	10.25
<b>B</b>	<b>Rabi:</b>			
1	Wheat	24400	55,300	22.63
2	Sorghum	3100	32,00	10.35
3	Gram	2700	27,00	10.08
4	Maize	48600	1,01,400	20.86
<b>C</b>	<b>Summer</b>			
1	Groundnut	14600	26,200	17.96
2	Sugarcane	66	46,100	70.13
3	Bajara	3700	4,400	11.83
4	Sesamum	1100	400	3.16

#### SEASON WISE CROPS GROWN

Sr.	<i>Kharif</i>	<i>Rabi</i>	Summer
1	Cotton	Wheat	Groundnut
2	Paddy	Maize	Greengram
3	Castor	Sorghum	Vegetables
4	pigeon pea	Gram	Per millets
5	Banana	Cucurbits	Sesamum
6	Maize	Pigeonpea	Bajara
7	Soya bean		
8	Papaya		
9	Chilli		
10	Tomato		

#### Agro-climatic zones

Gujarat is divided in to eight agro-climatic zones and Vadodara district falls under Middle Gujarat agro-climatic zone - III

## Agro-ecosystems

Based on important features of Agro-climatic zone and other important aspects like edaphic factors (soil texture, structure and depth); source of irrigation, climatic factors at micro level (rainfall, temperature variation, relative humidity) and existing farming system. The entire district is divided into four agro-ecological situations (AES).

Sl. No.	Name of AES	Situation	Crop grown	Cropping pattern	Taluka/Mandal covered
1	AES-I	Sandy Loam soil with high rainfall	Predominately Maize, Cotton , Tur, Tobacco, Vegetables & Horticulture crops	Cotton based Paddy-Wheat Pigeonpea based Tobacco-Bajra Vegetable based Sesamum-Jowar	Vadodara, Savli, Padara, Vaghodia, Part of Dabhoi
2	AES-V	Medium Black soil with high rainfall	Predominately Maize Pulses, Drilled Paddy, Hill millets	Drilled Paddy- Groundnut Maize –Pulse Hill millets- fallow	Pavi Jetpur, Naswadi, Part of Chhota Udaipur
3.	AES-IX	Deep Black soil with high rainfall	Major Banana, Cotton, Vegetables, Sugarcane	Cotton based Banana based Sugarcane based Paddy-Wheat	Karjan, Part of Dabhoi, Sankheda, Shinor
4.	AES-XII	Hilly Light soil with high rainfall	Drilled Paddy, Maize, Pulses	Drilled Paddy- - Groundnut Maize –Pulse Hill millets- -fallow	Part of Chhota Udaipur & Kavant

## Major and micro-farming systems

Paddy, Pulses, Cotton and Maize are main *Kharif* crops grown over an area of 424359 Ha. Cotton is grown over 40per cent of area under *Kharif* crops in Vadodara district.

Wheat, Tobacco, Sugarcane and Maize are main *Rabi* Crops grown over an area of 69059 ha which covered 79 per cent of the total cultivated *Rabi* area (87151 Ha). Sugarcane is the main crop covering 23per cent (19847 Ha) of area under *Rabi* crops, followed by wheat – 22 per cent.

### Major production systems like rice based (rice-rice, rice-green gram, etc.), cotton based, etc.

1. Cotton
2. Rice- Wheat
3. Rice-Gram
4. Pigeonpea based
5. Castor based
6. Cotton
7. Banana
8. Rice-Maize
9. Maize

**Major agriculture and allied enterprises**

**Major:** Agriculture- Animal husbandry

**Agro-ecosystem Analysis of the focus/target area - II**

**1. Names of villages focus area, target area etc.**

**Cluster- I (Sankheda Taluka)**

1. Kathmandva
2. Saradiya
3. Raipur
4. Sundapura
5. Amalpur
6. Navapura
7. Deroli
8. Timbi
9. Vagetha

**Cluster- II (Dabhoi Taluka)**

1. Khatiyawat
2. Baladgam

**Cluster-III (Waghodiya Taluka)**

1. Goraj
2. Godhara
3. Rojyapura
4. Nurpuri

**Cluster-III (Naswadi Taluka)**

1. Dhamasiya
2. Pochamba
3. Payakui

**2. Survey methods used (survey by questionnaire, PRA, RRA, etc.)**

Through survey and questionnaire

**3. Various techniques used and brief documentation of process involved in applying the techniques used like release transect, resource map etc.**

Based on the personal discussion with farmers during On and Off campus training programme, field visit and field day and benchmark survey.

#### **4. Analysis and conclusions**

Lack of knowledge about latest technology in various crops is emerged out and to fulfil the gapes, need based On and OFF campus training programmes as well as Front Line Demonstration as well as On Farm Testing were planned and Organized.

#### **5. List of location specific problems and brief description of frequency and extent/intensity/severity of each problem**

##### **Discipline: Agronomy**

1. No seed treatment
2. Fertilizer application not as per soil test basis
3. Low yield in Bt cotton due to reddening
4. Non utilization of crop residues
5. Saline sodic and alkali soil tracts
6. Limited farmers opting soil & water testing
7. Improper soil nutrient management
8. Imbalance use of fertilizer
9. Less use of organic fertilizer
10. Less or no use of secondary / micronutrients

##### **Discipline: Horticulture**

1. Uneven planting distance in vegetable crops.
2. Low adoption of INM and IPM in Banana .
3. Imbalance nutrient management.
4. Low production from vegetables.
5. Improper management practices in orchards.
6. Lack of knowledge about protected cultivation
7. Value addition in horticulture crops is negligible.

##### **Discipline: Plant Protection**

1. Low yield due to pest and disease incidence in crops
2. No adoption of ETL based pest management practices as well as neem based formulation
3. Incidence of sucking pests in initial crop growth stage
4. Indiscriminate use of pesticides
5. Use of higher dose and mixing of three to four chemical pesticides

##### **Discipline: Veterinary Science**

1. Low milk yield in local breed.
2. Improper management of cattle reproduction as well as housing.
3. Non availability of nutritious feed and fodder.
4. Improper animal health Management.
5. Non availability of high milking animals.
6. High mortality rate in calf.
7. Non availability green fodder round the year

##### **Discipline: Home Science**

1. Poor economic condition.
2. Lack of awareness about marketing skills due to low education level.
3. No use of soybean in daily diet.
4. Nutritional and health problem in women.
5. No use of drudgery reduction technologies.
6. Iron deficiency in farm women.
7. Loss of food grains due to insects and pest during storage.
8. Nutritional imbalance in diet.
9. Health and sanitation of rural adolescent girl.

## 6. Matrix ranking of problems

### 1. Agriculture production system

#### Crop: Paddy

Sr. No.	Problems	Matrix Ranking
1	Use of local seeds in larger area	ii
2	High seed rate	i
3	Use of untreated seeds	iii
4	Low use of FYM	vii
5	High use of phosphorus	vi
6	No use of zinc sulphate	iv
7	Pest and diseases in Paddy	v

#### Crop: Cotton

Sr. No.	Problems	Matrix Ranking
1	Instability in Bt. Variety	iii
2	Imbalanced use of fertilizer	ii
3	Low / High plant population	v
4	Poor weed management	viii
5	Flower dropping	vii
6	Higher dose of pesticide	iv
7	Excessive irrigation	vi
8	No use of micronutrients	i

#### Crop: Wheat

Sr. No.	Problems	Matrix Ranking
1	Use of local variety	i
2.	Use of excessive seed rate	ii
3	Imbalanced use of fertilizer	v
4	Excessive irrigation	iii
5	Poor weed management	vi
6	Termite problem	iv

#### Crop: Castor

Sr. No.	Problems	Matrix Ranking
1	Improper spacing	iii
2	Imbalanced use of fertilizer	v
3	Excessive irrigation	vi
4	Late sowing	i
5	Pest problem	iv
6	No use of sulphur	ii

#### Crop: Maize

Sr. No.	Problems	Matrix Ranking
1	Imbalanced use of fertilizer	ii
2	No use of zinc sulphate	i
3	Pest problem	iii

## 2. Horticulture production system

Sr. No.	Problems	Matrix Ranking
1	Low adoption of INM and IPM in Banana .	ii
2.	Uneven planting in Vegetable crops	iii
3.	Inadequate apply of FYM & Chemical fertilizer	v
4.	Low / excessive irrigation	iv
5.	Negligence for plant protection	i
6.	Follow traditional package of practices	vi

### 1. List of location specific thrust areas

#### 1. To Improve crop productivity through:

- a. Creating awareness regarding latest varieties of different crops
- b. Educate the farmers about adoption of seed treatment
- c. Integrated Weed management in Cotton, Paddy, Wheat, Maize, Castor, Banana and vegetable crops.
- d. To introduce SRI technology in paddy.
- e. Integrated Pest management in field crops and vegetables.

#### 2. To encourage farmers for sustainable agriculture production through:

- a. Use of organic manures and Bio-fertilizers in various crops to improve the soil health
- b. Integrated Nutrient Management in field crops as well as Vegetable crops
- b. Water management in Cotton, paddy, wheat and Banana
- d. Adoption of crop rotation
- e. IPM for reduction in cost of cultivation as well as reduce the use of insecticides.

#### 3. To improve the Animal health and milk productivity through:-

- a. Management of newly born calf
- b. Cultivation of green fodder for availability of round the year
- c. Vaccination and deworming of large and small animals
- d. Supplementary feeding of mineral mixture
- e. Backyard poultry production
- f. Clean milk production
- g. Management of Dairy animal for maximize the milk production
- h. Control of ecto- Parasite in dairy animal.

#### 4 Home science

- a. Nutritional Security for women and child.
- b. Drudgery reduction technology
- c. Value addition

d. Income generation activity

**2. List of location specific technology needs for FLD and OFT**

**1. Front Line Demonstration**

- INM in Wheat
- INM in Paddy
- INM in Cotton
- INM in Cucurbits
- IPM in Cotton
- IWM in Cotton
- IWM in Groundnut

**2. On Farm Testing**

- INM in Cotton
- IPM in Paddy
- Nutrition Management in Milch Animal
- Nutrition Management

**3. Matrix ranking of technologies**

- I. INM in Cotton
- II. INM in wheat
- III .IPM in paddy
- IV. INM in Castor
- V. INM in Maize
- VI. ICM in Horticulture



### **3. List of location specific training needs**

1. Integrated Crop Management in Cereals, oilseed, pulses, Banana and Vegetable crops
2. Integrated Pest Management in Cereals, oilseed, pulses, Banana and Vegetable crops
3. Integrated Nutrient Management in Cereals, oilseed, pulses, Banana and Vegetable Crops
4. Integrated Weed Management in Cereals, oilseed, pulses, Banana and Vegetable crops
5. Water management in cereals, oilseed, Banana and vegetable crops
6. System of Rice Intensification in Paddy
7. Soil fertility management
8. Organic farming
9. Deficiency and corrective measure of Micro nutrient deficiency in crops
10. Pest and disease management in melons
11. Role of micronutrients and PGR in melons
12. Health and nutrient management in Animal
13. Clean milk production technology
14. Breed improve in milch animals
15. Nutritional food security in Tribal women
16. Women empowerment of tribal people
17. Value Addition in agriculture and horticultural crops
18. Popularize the Drudgery reduction technologies

## Technology Inventory and Activity Chart - III

### Include

1. Names of research institutes, research stations, regional centres of NARS (SAU and ICAR) and other public and private bodies having relevance to location specific technology needs

2. Inventory of latest technology available

Sl. No	Technology	Crop/ enterprise	Year of release or recommendation of technology	Source of technology	Reference/ citation
1.	IPM	Cotton	2004	Pro & Head, Dept.of Agril. Entomology, AAU, Anand	Booklet of DR, AAU, Anand
2.	Application of Methyl parathion 2% @ 25kg/ha or Carbaryl 50 WP 0.2% or Triazophos 40 EC 0.1% or Methyl-O-demeton 25 EC 0.05%	Cotton	2009	Prof. & Head, Dept. of Agril. Entomology , AAU, Anand	Proceedings/Notification no. AAU/DR/RES/T-3/1707/2009 dated 11-8-09 of AAU, Anand
3.	Cv. GCH-7	Castor	2005	Res. Sci. Castor, SDAU, SK Nagar	Proceedings/Notification no. AAU/DR/RES/T-3/8331-80/2005 dated 14-9-05 of AAU, Anand
4.	Spacing	Castor (GCH-5)	2006	Asso.Res. Sci. NARP-Agro, AAU, Anand	Proceedings/Notification no. AAU/DR/RES/T-3/351/2006 dated 14-8-06 of AAU, Anand
4a	<i>Trichoderma</i>	Chick pea	2005	SAU	Recommendation Booklet of DR , GAU, SKN
5.	Water management	Castor (GCH-5)	2006	Res. Sci. ARS, Thasra, AAU, Anand	Proceedings/Notification no. AAU/DR/RES/T-3/351/2006 dated 14-8-06 of AAU, Anand
6.	Date of sowing	Castor	2008	Prof & Head (Agro)	Proceedings/Notific

	& spacing	(GCH-5)		BACA, AAU, Anand	ation no. AAU/DR/RES/T-3/1086/2009 dated 22-1-09 of AAU, Anand
7.	INM	Castor (GCH-5)	2009	Res. Sci. RRS, AAU, Anand	Proceedings/Notification no. AAU/DR/RES/T-3/1707/2009 dated 11-8-09 of AAU, Anand
8.	INM	Rice	1995	Res. Sci. Rice, AAU, Navagam	Booklet of DR, GAU, SK Nagar
9.	Weed management	Rice	1999	Res. Sci. Rice, AAU, Navagam	Booklet of DR, GAU, SK Nagar
10.	IPM in paddy	Paddy	2005	Res. Sci. Rice, AAU, Navagam	Proceedings/Notification no. AAU/DR/RES/T-3/8331-80/2005 dated 14-9-05 of AAU, Anand
11.	Time of T.P	Paddy	2005	Res. Sci. Rice, AAU, Navagam	Proceedings/Notification no. AAU/DR/RES/T-3/8331-80/2005 dated 14-9-05 of AAU, Anand
12.	Cv. Guj.Rice-12 (GR-12)	Rice	2005	Res. Sci. Rice, AAU, Navagam	Proceedings/Notification no. AAU/DR/RES/T-3/8331-80/2005 dated 14-9-05 of AAU, Anand
13.	Rice organic manure ( <i>Sesbania</i> )	Rice	2006	Res. Sci. Rice, AAU, Navagam	Proceedings/Notification no. AAU/DR/RES/T-3/351/2006 dated 14-8-06 of AAU, Anand
14.	System of Rice Intensification (SRI)	Paddy	2009	Res. Sci. Rice, AAU, Navagam	Proceedings/Notification no. AAU/DR/RES/T-3/1707/2009 dated 11-8-09 of AAU, Anand
15.	Time of sowing	Wheat	-	Res Sci. (Wheat) Main Wheat Res. Station Vijapur	www.sdau.org.
16.	Seed rate	Wheat	-	Res Sci. (Wheat) Main Wheat Res. Station Vijapur	www.sdau.org.
17.	Spacing	Wheat	-	Res Sci. (Wheat) Main Wheat Res. Station Vijapur	www.sdau.org.
18.	Nutrient	Wheat	-	Res Sci. (Wheat)	www.sdau.org.

	management			Main Wheat Res. Station Vijapur	
19.	INM	Wheat	2000	Res. Sci. (Wheat) Main Wheat Res. Station Vijapur	Booklet of DEE, GAU, SK Nagar
20.	Weed management	Wheat	-	Asso. Res. Sci. Dept. of weed control, AAU, Anand	www.sdau.org.
21.	Bio fertilizer	Wheat	2003	Res. Sci.(Bio- ferti.) AAU, Anand	Booklet of DR, GAU, SK Nagar
22.	Water management	Wheat (GW-496)	2006	Res. Sci. ARS, Dabhoi, AAU, Anand	Proceedings/Notification no. AAU/DR/RES/T-3/351/2006 dated 14-8-06 of AAU, Anand
23.	Sowing time& irrigation	Wheat ( GW-496)	2009	Prof. & Head, Dept. of Agril. Meteorology , AAU, Anand	Proceedings/Notification no. AAU/DR/RES/T-3/1707/2009 dated 11-8-09 of AAU, Anand
24.	Micronutrient (Zn application)	Rice- Wheat system	2006	Res. Sci. Rice, AAU, Navagam	Proceedings/Notification no. AAU/DR/RES/T-3/351/2006 dated 14-8-06 of AAU, Anand
25.	Cv. GM-3	Mustard	2004	Res. Sci. Mustard SK Nagar	www.sdau.org.
26.	Liquid biofertilizer	Pigeonpea	2006	Res. Scientist (Chem.) and Res. Sci. (Biofertilizer), AAU, Anand	Booklet of DEE, AAU, Anand
27.	Water management	Chickpea	2006	Res. Sci. Dabhoi AAU, Anand	Booklet of DEE, AAU, Anand
28.	INM	Maize	2007	Prof. & Head Dept. of Agronomy, AAU, Anand	Booklet of DEE, AAU, Anand
29.	Water management	Maize	2007	Res. Scientist. Maize Rse. Station, Godhra	Booklet of DEE, AAU, Anand
30.	Weed management	Maize	2007	Agronomist, AICRP on WS, Anand	Booklet of DEE, AAU, Anand
31.	cv. AT-3	Tomato	2008	Res. Scientist, Main vegetable Res. Station, AAU, Anand	Booklet of DEE, AAU, Anand
32.	Irrigation Management	Wheat	2008	Asstt. Res. Scientist, Model Farm, Dabhoi, AAU, Anand and Res. Scientist. NAU, navsari	Booklet of DEE, AAU, Anand
32a	ZnSO <sub>4</sub> application	Wheat	2008	AAU	Recommendation Booklet of DR , AAU, Anand

33.	Fertilizer and Irrigation Management	Hy. Maize	2008	Res. Scientist, Maize, AAU, Godhra	Booklet of DEE, AAU, Anand
34.	Disease management	Sesamum	2008	HOD, Plant Pathology, AAU, Anand	Booklet of DEE, AAU, Anand
35.	Sowing time and Spacing	Semi Rabi Castor	2008	HOD, Agronomy, AAU, Anand	Booklet of DEE, AAU, Anand
36.	IPM in Cotton	Hy. Cotton	2008	Res. Scientist, Bio-control, AAU, Anand	Booklet of DEE, AAU, Anand
37.	Fertilizer management	Papaya	2008	HOD, Horticulture, AAU, Anand	Booklet of DEE, AAU, Anand
38.	Drip irrigation and Fertilizer management	Papaya	2008	HOD, Horticulture, AAU, Anand	Booklet of DEE, AAU, Anand
39.	Organic farming	Kagdi Lime	2008	HOD, Horticulture, AAU, Anand	Booklet of DEE, AAU, Anand
40.	Micronutrient and Fertilizer management	Banana	2008	HOD, Horticulture, AAU, Anand	Booklet of DEE, AAU, Anand
41.	IPM	Okra	2008	Asstt. Res. Scientist (Ento.), Main vegetable Res. Station, AAU, Anand	Booklet of DEE, AAU, Anand
42.	Sowing time	Rabi Jowar (Fodder)	2008	Res. Scientist, Agril. Res. Station, AAU, Arnej.	Booklet of DEE, AAU, Anand
43.	Sowing time& irrigation	Wheat ( GW-496)	2009	Prof. & Head, Dept. of Agril. Meteorology , AAU, Anand	Proceedings/Notification no. AAU/DR/RES/T-3/1707/2009 dated 11-8-09 of AAU, Anand
44.	INM	Castor (GCH-5)	2009	Res. Sci. RRS, AAU, Anand	Proceedings/Notification no. AAU/DR/RES/T-3/1707/2009 dated 11-8-09 of AAU, Anand
45.	Cropping sequence	Rice-Castor (GR-7-GCH-5)	2009	Res. Sci. Rice, AAU, Navagam	Proceedings/Notification no. AAU/DR/RES/T-3/1707/2009 dated 11-8-09 of AAU, Anand
46.	By pass fat	Cross Bred Cow	2009	Res. Sic. (Animal Res. Sta. & Ani.Nutri. Res. Sta. )AAU, Anand	Booklet of DEE, AAU, Anand
46.	GAR-13	Rice	2010	Res. Sci. Rice, AAU, Navagam	Booklet of DEE, AAU, Anand
47.	AGT-2	Pigeon pea	2010	Asstt. Res. Scientist, Pulse Research Station, AAU, Vadodara	Booklet of DEE, AAU, Anand

48.	CO-3	Fodder grass	2010	Res. Scientist, Main Fodder Research Station, AAU, Anand	Booklet of DEE, AAU, Anand
49.	HQPM-1	Maize	2010	Res. Scientist, Maize Research Station, AAU, Godhra	Booklet of DEE, AAU, Anand
50.	SIRA technology	Paddy	2010	Res. Sci. Rice, AAU, Navagam	Booklet of DEE, AAU, Anand
51.	Nutrient management	Sweet corn maize	2010	Research Scientist, RRS, AAU, Anand	Booklet of DEE, AAU, Anand
52.	Earthing up	Maize	2010	Res. Scientist, Maize Research Station, AAU, Godhra	Booklet of DEE, AAU, Anand
53.	Water management	<i>Kharif</i> Groundnut	2010	Prof. & head, Dept. of Agril. meteorology, BACA, AAU, Anand	Booklet of DEE, AAU, Anand
54.	Weed management	<i>Kharif</i> Groundnut	2010	Res. Scientist, DWSR, AAU, Anand	Booklet of DEE, AAU, Anand
55.	Nutrient management	<i>Summer</i> Groundnut	2010	Research Scientist, RRS, AAU, Anand	Booklet of DEE, AAU, Anand
56.	Spacing	Semi <i>rabi</i> pigeon pea	2010	Asstt. Res. Scientist, Pulse Research Station, AAU, Vadodara	Booklet of DEE, AAU, Anand
57.	Weed management	Pigeonpea	2010	Asstt. Res. Scientist, Pulse Research Station, AAU, Vadodara	Booklet of DEE, AAU, Anand
60	Pest management	Chickpea	2010	Res. Scientist (Ento.), AAU, Arnej	Booklet of DEE, AAU, Anand
61.	Sucking pest management	Cotton	2010	Res. Scientist (Bio-control.), AAU, Anand	Booklet of DEE, AAU, Anand
62.	YVMV in Okra	Okra	2010	Prof. & head, Dept. of Plant Pathology, BACA, AAU, Anand	Booklet of DEE, AAU, Anand
63.	GAR-2	Paddy	2011	Res. Sci. Rice, AAU, Navagam	Booklet of DEE, AAU, Anand
64.	INM	Mustard	2011	Research Scientist, RRS, AAU, Anand	Booklet of DEE, AAU, Anand
65.	INM	Soyaben	2011	Res. Sci. (Micro Nutrient) & Professor (Soil Sci.), BACA, AAU, Anand	Booklet of DEE, AAU, Anand
66.	INM	BT Cotton	2011	Res.Sci., Irrig. Crop Res. Cen., AAU, Dhasra	Booklet of DEE, AAU, Anand
67.	GAYMH-2	Maize	2012	Res.Sci.(Maize), Maize Research Station, AAU, Godhra	Booklet of DEE, AAU, Anand
68.	GAWHM-2	Maize	2012	Res.Sci.(Maize), Maize Research Station, AAU, Godhra	Booklet of DEE, AAU, Anand
69.	GAFS-11	Sorghum	2012	Res.Sci.(Fodder),	Booklet of DEE,

				Fodder Res.Station, AAU,Anand	AAU, Anand
70.	SRI	Paddy	2012	Res. Sci. Rice, AAU, Navagam	Booklet of DEE, AAU, Anand
71.	INM	Soyabean	2012	Asso.Res.Sci.,AAU,D evgadhbariya	Booklet of DEE, AAU, Anand
72.	INM	Cotton	2012	Prof. and Head, Agronomy Dept., BACA,AAU,Anand	Booklet of DEE, AAU, Anand
73	GAR-3	Paddy	2013	Research Scientist (Rice), Main Rice Research Station , AAU, Nawagam	News Letter, AAU, Anand, Oct. – Dec- 2013
74	GAYMH-1	Maize	2013	Research Scientist (Maize), Main Maize Research Station , AAU,Godhra	News Letter, AAU, Anand, Oct. – Dec- 2013
75	CoFS-29	Grassy Sorghum	2013	Research Scientist (Forage), Main Forage Research Station , AAU,Anand	News Letter, AAU, Anand, Oct. – Dec- 2013
76	JHGG-8-1	Guinea grass	2013	Research Scientist (Forage), Main Forage Research Station , AAU,Anand	News Letter, AAU, Anand, Oct. – Dec- 2013
77	GAOB-2	Brinjal	2013	Research Scientist (Veg.), Main Vegetable Research Station , AAU,Anand	News Letter, AAU, Anand, Oct. – Dec- 2013

## Activity Chart

Crop/ Enterprise	Problem	Cause	Solution	Activity	Reference of Technology
Cotton	Low productivity of cotton	<ul style="list-style-type: none"> <li>i. Imbalance use of fertilizer application</li> <li>ii. Sucking pest and disease</li> <li>iii. Micronutrient deficiency</li> <li>iv. Reddening of leaves &amp; square dropping</li> </ul>	<ul style="list-style-type: none"> <li>i. Application of recommended dose of fertilizer</li> <li>ii. IPM adoption</li> <li>iii. Application of micronutrients</li> </ul>	<ul style="list-style-type: none"> <li>1. Single component FLD on INM</li> <li>2. Training and FLD on IPM</li> </ul>	Sl. No. 1, 2 and 36 of technology Inventory
Pigeon pea	Low productivity of pigeon pea	<ul style="list-style-type: none"> <li>i. No use of micronutrients/bio-fertilizer</li> <li>ii. Improper pest management</li> <li>iii. Depends only on manual weeding</li> </ul>	<ul style="list-style-type: none"> <li>i. Application of micronutrients &amp; bio-fertilizer</li> <li>ii. IPM Technology</li> <li>iii. Chemical weed control</li> </ul>	<ul style="list-style-type: none"> <li>1. Training on ICM</li> <li>2. FLD on Integrated Crop Management</li> </ul>	Sl. No. 26 of technology Inventory
Maize		<ul style="list-style-type: none"> <li>1. Only use private company hybrid</li> <li>2. No use of micronutrients</li> <li>3. Improper pest management</li> <li>4. Improper water management</li> </ul>	<ul style="list-style-type: none"> <li>i. introduction of HQPM-1 variety</li> <li>ii. Whorl application of pesticide</li> </ul>	<ul style="list-style-type: none"> <li>1. Training and FLD</li> </ul>	Sl. No. 28 & 49 of technology Inventory
Paddy	Low productivity of paddy	<ul style="list-style-type: none"> <li>i. Use of old variety</li> <li>ii. Imbalance application of fertilizer</li> <li>iii. Improper water management</li> <li>iv. Low plant population per unit area</li> <li>v. Pest and diseases occurrence</li> <li>vi. No use of micronutrients</li> </ul>	<ul style="list-style-type: none"> <li>i. Demonstrate recently released variety</li> <li>ii. Application of recommend dose of Nutrients</li> <li>iii. SRI technology</li> <li>iv. IPM technology</li> <li>v. Application of Micro-nutrient i.e Zn application</li> </ul>	<ul style="list-style-type: none"> <li>i. Single component FLD to demonstrate new variety</li> <li>ii. Training programme on INM and IPM in paddy</li> <li>iii. Training and OFT in SRI paddy</li> <li>iv. Training programme on integrated crop management of paddy</li> </ul>	<ul style="list-style-type: none"> <li>i. Sl. No. 12 of Technology Inventory</li> <li>ii. Sl. No. 8 and 10 of technology Inventory</li> <li>iii. Sl. No. 14 technology Inventory</li> </ul>



<b>Crop/ Enterprise</b>	<b>Problem</b>	<b>Cause</b>	<b>Solution</b>	<b>Activity</b>	<b>Reference of Technology</b>
Wheat	Low productivity of wheat	i. Late sowing  ii. Improper water management  iii. Improper nutrient management  iv. No use of bio-fertilizer	i. Create awareness about time of sowing  ii. Create awareness about critical stages of irrigation  iii. Application of recommend dose of Nutrients iv. Application of recommended dose of Liquid bio-fertilizer	i. Training and OFT on date of sowing of wheat  ii. Training programme on water management  iii. Single component FLD & training to demonstrate effect of INM iv. Single component FLD & training to demonstrate effect of liquid bio fertilizer	1. Sl. No. 15 of technology Inventory  2. Sl. No. 22 and 32 & 32a of technology Inventory  3. Sl. No. 18 of technology Inventory  4. Sl. No. 21 of technology Inventory
Chickpea	Low productivity of Chickpea	Wilt disease	Create awareness about seed treatment	Training and FLD programme on Cumin	Sl. No 4a of Technology Inventory
Chilli	Low yield of chilli	1.No seed treatment 2. no use of bio agents 3.No use of micro nutrients	1.Application of recommended dose of bio – fertilizer 2. Application of recommend dose of micro Nutrients	1.Training programme on integrated nutrient management 2.Taining on use and role of bio fertilizers	
Tomato	Low yield of tomato	1.No seed treatment 2. no use of bio agents 3.No use of micro nutrients	1.Application of recommended dose of bio – fertilizer 2. Application of recommend dose of micro Nutrients	1.Training programme on integrated nutrient management 2.Taining on use and role of bio fertilizers	
Watermelon	Imbalance use of fertilizers	1.No seed treatment 2. no use of bio agents 3.No use of micro nutrients	1.Application of recommended dose of bio – fertilizer 2. Application of recommend dose of micro Nutrients	Training programme on fertilizer management and importance of use and role of bio fertilizers	

#### 4. Details of each of the technology under Assessment, Refinement and demonstration

##### Include

- Detailed account on varietal/breed characters for each of the variety/breed selected for FLD and OFT
- Details of technologies that may include formulation, quantity, and time, methods of application of nutrients, pesticides, fungicides etc., for technologies selected under FLD and OFTs
- Details of location/area specificity of recommended technology viz., for each of the variety/breed/technology selected for FLD and OFT

##### OFT

SR. NO	Title of OFT	Variety / Breed / Technology	Details of Character / Technologies / formulation/	Source of Technology
1	Integrated Nutrient Management (INM) in BT Cotton	INM In Bt cotton	240:40:00 Kg NPK/ha + liquid azotobactor and Phosphate culture as seed treatment and foliar spray at 30,45,60 DAS	GAU / SAU
2	Control of Stem borer in Paddy	IPM in Paddy	Soil application with cartap hydrochloride 4% G @ 20kg/ha. + Clipping of seedling tips + spraying of fipronil 5 SC @ 20 ml / 10 litre of water at 45 and 60 DATP	SAU/AAU
3	Improvement in Milk Production in Buffalo	Nutrient Management in Milch Animals	Mineral Mixture @ 50g/head/day + common salt @ 25 g/head/day + de-worming	SAU/ AAU
4	Food supplement efficacy to increase hemoglobin content	Nutrient Management in human	Iron folic acid tablets + food supplements	The Journal of Nutrition: Feb.1,2000, Vol.130, No. 2

## FLD

SR. NO	Crop	Variety / Breed / Technology	Details of Character / Technologies / formulation/	Source of Technology
1	Paddy	GAR – 13	Varietal Demo., Resistant to wilt, blast, high yield compared to local	AAU, Anand
2	Wheat	Integrated Nutrient Management	Grade-IV micronutrient	Main Wheat Research Station, Vijapur,
3	Pigeonpea	Vaishali	Under TDHPP (Integrated Crop Management)	AAU, Anand
4	Chickpea	GG – 2	Under TDHPP (Integrated Crop Management)	SAU / AAU
5	Watermelon	Integrated Nutrient Management	Azotobactor, Phosphate Solubilizing Bacteria, Grade – V micronutrient	AAU, Anand
6	Lucerne	Anand Lucerne-2	High green fodder production and Nutritive	AAU, Anand
7	Maize	HQPM -1	DMR, New Delhi	AAU, Godhra
8	Groundnut	Integrated Weed Management	Quizalfop-ethyl	SAU
9	Greengram	Meha	Resistant to YVM and High Yielding	AAU, Anand
10	Chilli	Integrated Nutrient Management	Grade – V micronutrient	AAU, Anand
11	Tomato	Integrated Nutrient Management	Grade – V micronutrient	AAU, Anand
12	Farm Implements	Serrated Sickle	Drudgery reduction	CIAE, Bhopal
13	Kitchen Garden	Nutritional Garden	Improved high yielding variety and tolerance against disease, more number of Vegetable.	SAU
14	Buffalo	Bypass fat	Feed Supplements	SAU