ANNUAL PROGRESS REPORT-2015-16

(APRIL - 2015 TO MARCH-2016)

&

ACTION PLAN

(APRIL - 2016 TO MARCH-2017)

TO BE PRESENTED AT
ANNUAL ZONAL WORKSHOP OF ZONE-VI
(Rajasthan & Gujarat)
HELD AT AAU, ANAND
DURING MAY 2 to 4, 2016

PREPARED/COMPILED By
Dr. K. P. Baraiya, Senior Scientist & Head
Smt. A. K. Baraiya, Scientist
Shri S. H. Lakhani, Scientist
Dr. J. N. Thaker, Scientist

KRISHI VIGYAN KENDRA
JUNAGADH AGRICULTURAL UNIVERSITY
AIRFORCE ROAD, OPP. DIGJAM MILL
JAMNAGAR-361 006
GUJARAT

CONTENT

ANNUAL PROGRESS REPORT-2015-16

(1st APRIL - 2015 TO 31st MARCH-2016)

KRISHI VIGYAN KENDRA
JUNAGADH AGRICULTURAL UNIVERSITY, JAMNAGAR

APR SUMMARY

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	56	2915	766	3681
Rural youths	3	199	0	199
Extension functionaries	5	301	18	319
Sponsored Training	28	779	977	1756
Vocational Training	3	0	96	96
Total	95	4194	1851	6051

2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	20	8	
Pulses	25	10	
Cereals	30	12	
Vegetables	10	4	
Other crops	40	16	
Hybrid crops			
Total	125	50	
Livestock & Fisheries			
Other enterprises	19	19	
Total			
Grand Total	125	50	

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	0	0	0
Livestock	0	0	0
Various enterprises	0	0	0
Total	0	0	0
Technology Refined	0	0	0
Crops	5	15	15
Livestock	0	0	0
Various enterprises	2	19	19
Total	7	34	34
Grand Total	7	34	34

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	669	35601
Other extension activities	36	9012
Total	705	446013

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Lives tock	Weath er	Marke- ting	Aware- ness	Other enterprise	Total
Jamnagar	Text only	2				6	1	9
	Voice only							
	Voice & Text both							
	Total Messages	**2**	**0**	**0**	**0**	**6**	**1**	**9**
	Total farmers Benefitted	**10308**	**0**	**0**	**0**	**25908**	**5219**	**41435**

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	15.55	143696
Planting material (No.)		
Bio-Products (kg)		
Livestock Production (No.)		
Fishery production (No.)		

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	252	--
Water		
Plant		
Total	252	--

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	0
2	Conferences	0
3	Meetings	0
4	Trainings for KVK officials	0
5	Visits of KVK officials	3
6	Book published	0
7	Training Manual	0
8	Book chapters	0
9	Research papers	8
10	Lead papers	0
11	Seminar papers	7
12	Extension folder	25
13	Proceedings	1
14	Award & recognition	0
15	On going research projects	0

DETAIL REPORT OF APR-2015-16

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail	Web address
	Office	FAX		
KrishiVigyan Kendra Millet Research Station, JAU Airforce Road, Opp. Digjam Mill Jamnagar- 361 006	(0288) 2710165	(0288) 2710165	kvkjamnagar@jau.in kvkjamnagar@gmail.com	www.jau.in

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

Address	Telephone		E-mail	Web address
	Office	FAX		
JunagadhAgricultural University, Junagadh – 362 001 (Gujarat)	PBX 2672080-90	(0285) 2672653	dee@jau.in	www.jau.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. K. P. Baraiya	Senior Scientist & Head KrishiVigyan Kendra JunagadhAgricultural University, Airforce Road, Opp. Digjam Mill Jamnagar- 361 006	9427980032	kvkjamnagar@gmail.com kvkjamnagar@jau.in

1.4. Year of sanction: ZARS (KVK) 2001, LetterNo. F.No. 18(4)/99-NATP Dated October 31st, 2001
ICAR (KVK) 2004, LetterNo. F.No. 8(1)/2002-AE-II(Pt.) Dated February 5th, 2004

1.5. Staff Position (as on 30th March, 2016)

Sl. No.	Sanctioned post	Name of the incumbent	Design-ation	Discip-line	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Perman-ent /Temp-orary	Category (SC/ST/ OBC/ Others)	Mobile no.	Age	Email id
1	Programme Coordinator	Dr. K.P. Baraiya	PC	Plant Protection	37400 - 67000	21390	17.08.2006	Temp	Other	9427980032		kpbaraiya@gmail.com
2	Subject Matter Specialist	Shri S. H. Lakhani	SMS	Crop Production	15600 - 39100	15600	30.03.2015	Temp	Other	9537345780		sanjaylakhani1@gmail.com
3	Subject Matter Specialist	Shri. V. C. Gadhiya	SMS	Plant Protection	15600 - 39100	15600	29.06.15	Temp	Other	9727496745		gadhiya_vipul17@yahoo.com
4	Subject Matter Specialist	Vaccant	SMS	Horti.	15600 - 39100	-	-	-	-	-	-	-
5	Subject Matter Specialist	Shri P. S. Gorfad	SMS	Extension Education	15600 - 39100	22650	27.6.1994	Temp.	OBC	9427452291		psgorfad@gmail.com
6	Subject Matter Specialist	Dr. J. N. Thaker	SMS	Fisheries	15600 - 39100	21390	31.08.2006	Temp.	Other	9424224247		jnthaker@rediffmail.com
7	Subject Matter Specialist	Smt. A. K. Baraiya	SMS	Home Science	15600 - 39100	15600	17.08.2006	Temp.	Other	9998227607		anjana1baraiya@gmail.com
8	Programme	Shri S. N.	Prog.	Pl.	9300-	13700	14.2.201	FixPay	Other	90333419		shyamgalanis1@gmail.com

	Assistant	Galani	Asstt.	Breeding	34800		2			97		
9	Computer Programmer	Shri H. S. Godhani	Prog. Asstt.	Agril. Ento	9300-34800	13700	06.4.2015	FixPay	Other	8866255223		hitzgodhani@gmail.com
10	Farm Manager	Shri C. P. Padhiyar	Prog. Asstt.	Computer Operator	9300-34800	11270	29.12.2008	Temp	Other	9428378980		bhavyapadhiyar@gmail.com
11	Accountant / Superintendent	Shri B. H. Joshi	O.S.	Adm.	9300-34800	11270	11.6.2008	Temp.	Other	9426462462		joshibhavik1984@gmail.com
12	Stenographer	Kum. B. N. Dave	Jr. Clerk	Adm.	5200-20200	7810	11.06.2008	Fix	Other	7567195689		joshibhargavi5286@gmail.com
13	Driver	Vacant	Driver	Supt.	5200-20200	-	-	-	-	-		-
14	Driver	Shri. D.M. Chauhan	Driver	Supt. (Fix)	5200-20200	6310	9.10.2007	Temp.	S. T.	9824173712		-
15	Supporting staff	Shri B. B. Bamaniya	Peon	Supt.	4440-7440	4620	01.11.2014	Temp.	S.T.	9904553794		bipin.bamaniya1986@gmail.com
16	Supporting staff	Shri P. S. Damor	Peon	Supt.	4440-7440	4990	1.09.2006	Temp.	S. T.	9638540107		psdamor007@gmail.com

1.6. Total land with KVK (in ha) :20.44 ha

Sl. No.	Item	Area in hectare(s)*
1	Under Building and Road	1.56
2	Under Demonstration units	0.70
3	Under crops	12.00
4	Orchard	3.50
5	Agro-forestry	0.24
6	Others (Farm Pond & Channels)	2.00
	Total	**20.44**

1.7. Infrastructural Development:

A) Buildings

Sl. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Comp-letion Date	Plinth area (Sq.m)	Expen-diture (Rs.)	Star-ting Date	Plinth area (Sq.m)	Status of const-ruction
1.	Administrative Building	KVK	15-8-11	550	5500000			
2.	Farmers Hostel	KVK	15-8-11	305	3000000			
3.	Staff Quarters (6)	KVK	15-8-11	400	4000000			
4.	Demonstration Units of vegetable	KVK + ATMA	31-3-07	-	-	-	-	-
5	Poly House	RKVY	31-3-09	320	281602	-	-	-
	Net House	RKVY	31-3-09	150	64498	-	-	-
	Training Hall	RKVY	20-2-10	190.99	1395800	-	-	-
	Process Plant	RKVY	20-2-10	197.31	1536400	-	-	
	Implement shed	RKVY	11-2-10	77.33	297800	-	-	-
6	Rain Water harvesting system	KVK	31-3-2007	26m×26m (2 Ponds)60m×60m (1 Pond)	999000	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Toyota Qualish (GJ-10G 433)	2004	490200	357651	Working
Hiro Honda(bike) GJ-10 BB-1634	2010-11	46475	16719	Working

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Presentstatus

Captain Mini Tractor	2001-02	166125	Working
Telephoneline	2001-02	19850	Working
Multi tool carrier complete set	2001-02	6500	Working
Photocopier	2001-02	125000	Working
Overhead projector	2001-02	17600	Working
Computer	2002-03	29500	Working
HP Laser printer	2002-03	20390	Working
U.P.S. (3 KVA)	2002-03	38000	Working
Qualish (GJ-10 G-433)	2004-05	490200	Working
Spectrophotometer	2005-06	89160	Working
Flame photometer	2005-06		Working
Physicalbalance	2005-06	10640	Working
Chemicalbalance	2005-06	100000	Working
Water distillation still	2005-06	96118	Working
Kieldahi digestion and distillation	2005-06	49644	Working
Shaker	2005-06	80080	Working
Grinder	2005-06		Working
Refrigerator	2005-06	16772	Working
Oven	2005-06	30550	Working
Hot plate	2005-06		Working
Aspee tractor mounted sprayer	2006-07	32000	Working
Air assisted blower type sprayer	2009	98750	Working
Laptop computer (HCL)	2009	47500	Working
Digital camera (Nikon)P-90 12.1	2009	24300	Working
Cotton stalk shredder	2008-09	121000	Working
Groundnut digger-tractor operated	2009	78500	Working
Cultivator cum rotavator	2009	90000	Working
Groundnut decorticator	2009	95850	Working
Multi crop thresher	2009	114000	Working
Processing Unit	2009	1685000	Working
Plantar-tractor operator	2009	44000	Working
EPBX System	2012	44000	Working
Vertical Autoclave	2012	78190	Working
Laminar Airflow	2012	127440	Working
Electronic Balance (200 gm)	2012	12600	Working
EC/ Conductivity meter	2012	6300	Working
Portable pH Meter	2012	6300	Working
Compound microscope	2012	4410	Working
Trinocular microscope	2012	112000	Working
Digital temperature & humidity indicator cum controller	2012	34750	Working
Digital TDS meter	2012	3985	Working
Research centrifuse with accesaries	2012	42480	Working
Stabilizer	2012	10440	Working
Hot air oven	2012	41580	Working
BOD incubator	2012	46305	Working
Digital camera SLR (Canon)	2012	44750	Working
AC 1.5 tonn	2012	45990	Working

1.8. A). Details SACmeeting conducted in the year

Sl.No.	Date	Number of Participants	Salient Recommendations	Action taken
1.	01-10-2005	21	-	-
2.	07-10-2006	30	-	-
3.	02-11-2007	31	-	-
4.	17-10-2008	30	-	-
5.	14-09-2009	33	-	-
6.	29-4-2010	35	-	-
7.	07.04.2011	37	-	-

8.	10.04.2012	32	-	-
9.	02.04.2013	37	-	-
10.	27.12.2013	26	-	-
11.	21.02.2015	25	-	-
12.	29.01.2016	22	As below	As below

The Twelfth Scientific Advisory Committee meeting of Krishi Vigyan Kendra, JAU, Jamnagar was held at Training Hall, Krishi Vigyan Kendra, JAU, Jamnagar on 29th January, 2016.

Committee made the following recommendation after active interaction.

Sl. No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken
1	29.01. 2016	1. Dr. A.R.Pathak, Hon'ble Vice Chancellor, JAU, Junagadh	➢ Management of white grub he suggested the treatment of urea in groundnut OFT. ➢ He suggested that add the treatment of use of "Jivamrut" or "Gaumutra" for management of thrips in Chilli. ➢ Arrange training about pink bollworm in first quarter. ➢ He suggested that FLD arrange on vegetable (Brinjal : GJBH-4) in our university released varieties. ➢ He suggested that quantify the action taken and write the area of farm produce. ➢ Cluster demonstration in more quantity for detail. ➢ He suggested arrange the training onvalue addition of spices. ➢ He suggested arrange on campus training with line department in fisheries subject ➢ Arrange training on pearl oyster production with coloration of Fisheries Research Station, JAU, Sikka (Jamnagar).	Suggestion accepted and implemented
		Dr. A. M. Parakhia, Director of Extension Education, JAU, Junagadh	➢ Add treatment of *Metarhizium* management of white grub in groundnut OFT. ➢ Arrange the FLD and OFT of Bio-fertilizer in groundnut should be taken on the variety of GJG-22 instead of GG-20. ➢ Specify the host of NPV (HNPV or SNPV) for the FLD in groundnut ➢ He suggested arrange FLD on pheromone trap for management of pink bollwormin cotton ➢ Study the impact analysis of KVK activity in old operational villages, ➢ Carried out PRA survey of new operational villages. ➢ Soil analysis should be done before FLD conduct on farmers field ➢ Arrange FLD on green gram during summer and cluster demonstration on pigeon pea varietal during *kharif*.	Suggestion accepted and implemented
		Dr. V. N. Patel, Associate Director of Research (North Saurashtra Agro-climatic Zone) and Research Scientist (DF), Dry Farming Research Station, JAU, Targhadia	➢ suggested add treatment of spinosad with seed treatment in chilli OFT. ➢ He also suggested arrange training on conservation of soil moisture by breaking hardpan with deep ploughing. ➢ Arrange FLD on bird percher in chickpea.	Suggestion accepted and implemented
		Dr. M.D. Khanpara, Research Scientist (Pearl Millet), Pearl Millet Research Station, JAU, Jamnagar	➢ suggested to provide curry need plant with FLD of kitchen garden. ➢ He also advice to take seed production of fodder sorghum recommended variety on KVK field.	Suggestion accepted and implemented
		Shri Kishorbhai, progressive farmer	➢ suggested to arrange more training on organic farming.	Suggestation accepted and

		At:-Sumri, Ta.&Dist.:Jamnagar		implemented
		Shri Naranbhai, progressive farmer At:-Manpar(Hirapar) Ta.:-Jodiya, Dist.Jamnagar	➢ suggested to more training on pulse production technology for wider spread.	Suggestation accepted and implemented

- 12th SAC proceeding along with list of participants in Annexure -1.

2. DETAILS OF DISTRICT (2015-16)

The district of Jamnagar is lies in North Saurashtra Agro climaticzone(VI) with an area of 35.02 lakh hectare land. The total geographical area of entire district (21.8 – 22 ON, 69.0 – 70.7 E) occupies 14125 km^2 i.e. 14.125 lakh ha area in the west of Gujarat state. The climate is arid (80%) and semi arid (20%) with a mean moisture index of 67.5. About 95 to 98% of annual rainfall comes during the monsoon month of June to October, July and August being the rainiest months. The co-efficient of variation ranges between 50 and 82%. The annual potential evapo-transpiration ranges between 1500 and 1650mm, three times the precipitation, resulting in no flow in the ephemeral channels for the most of the year. The district is a water scarcity area droughts are common in this region draughts of moderate to severe intensity occur once in 2 to 3 years. Although the integrated drainage system from the story/rocky/gravelly surfaces and torrential nature of precipitation generate 40 to 60% of rainfall as runoff, steeper slopes and absence of checks allow the water to quickly flow to the sea. Being is hard rock terrain, the groundwater potential is very low, is already over exploited and mined, resulting in either the saline water ingress in the costal aquifers, or drying up of the ground water up to a depth of 100m. Consequently a need for holistic approach to water resource development in the district. Wind velocity prevailing in the district is higher order (14.1 km) ha on an annual averagebasisdue to sea coast area.

According to physio graphically, major portion of the area in the district have an altitude ranging between 25 to 150 meters, which consists ten taluka having gentle slope to moderate slope. The district is marked by radical drainage pattern. Deccan trap basalt occupies a major part of the district. The Quaternary formations include milliolite, limestone, alluvium and Geolian sediments. The dominant land forms are colluvial plains and rocky uplands. Low hills occur in the southern part of district and are dissected by numerous large and small seasonal streams, most of which drain towards north and form potential drainage basins. The district is characterized by shallow, black soil and coastal alluvial soils with large variations in depth, texture, structure salinity, and water erosion. Nearly two third area of the district is under cultivation. The major factors of land degradation are accelerated water erosion and Salinization.

Basic information of operational district, Jamnagar:

Sr. No.	Details	JAMNAGAR		DEVBHUMI DWARKA	
1	Total geographical area	6.075 lakh ha.		4.07509 lakh ha.	
2	Total cultivable area	4.32 lakh ha.		2.52 lakh ha.	
3	Net cultivated area	3.53 lakh ha.		2.38 lakh ha	
4	Total area under forest	0.43 lakh ha.		0.1736 lakh ha	
5	Total irrigated area	0.939 lakh ha.		0.23092 lakh ha.	
6	Number of holdings	1.44 lakh		1.17 lakh	
7	Average annual rainfall	550 mm.		550 mm.	
8	Soil type	Medium black		Medium black	
9	Total number of villages	419 (8 city)		280 (8 city)	
10	Total population	13.89 lakh (2011)		7.48 lakh (2011)	
	(a) Male	7.18lakh .		3.84lakh .	
	(b) Female	6.71 lakh		3.64lakh .	
11	Literacy percentage	Rural	Urban	Rural	Urban
	a. Male	86.95	79.55	76.14	80.74
	b. Female	76.22	62.18	55.41	61.36
12	Number of Talukas	6 (Six),		4 (Four)	
		Jamnagar		Jamkhambhalia	
		Dhrol		Jamkalyanpur	
		Jodiya		Okha Mandal (Dwarka)	
		Kalavad		Bhanvad	
		Lalpur			
		Jamjodhpur			

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

Sr.No.	Farming systems / enterprise			
1.	Crops	Cereals	:	Pearl millet, sorghum, wheat, maize
		Pulses	:	Greengram, blackgram, chickpea, pigeonpea
		Oilseeds	:	Groundnut, sesamum, castor, mustard
		Cash crops		Cotton
		Spices and condiments	:	Cumin, fennel, coriander, ajwan, ishabagul
		Vegetables	:	Onion, garlic, potato, chilli, brinjal, tomato, caulioflower, cowpea, cabbage, okra, peach, cucurbits
		Horticulture	:	Sapota, pomegranate, lemon (citrus) , jamun, aonla, guava,custard apple, papaya, coconut, ber, almond, banana
		Floriculture	:	Rose, merigold,vevanti
		Other crops	:	Chikori, fenugreek
2.	Live stock	Bullocks and cows	:	
		Buffaloes	:	209616
		Sheep	:	232530
		Goats	:	173022
		Horse and camel	:	410/2260
		Poultry	:	38041
		Other animals	:	-
3.	Fishery	340 km coastal belt	:	4832 tonnes fish production

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

S. No	Agro-climatic Zone	Characteristics
Zone–VI	North Saurashtra	The influence area of North Saurashtra Agro Climatic Zone is spread among five districts *viz*., Amreli (7 taluukas out of 10), Bhavnagar (7 talukas out of 14), Jamnagar (all the 10 talukas), Rajkot (9 talukas of 13) and Surendranagar (6 talukas out of 9) covering 39 talukas in all. The influence area of the zone lies between 21°-02' to 23°-16' North Latitude and 68°-56' to 72°-12' East Longitude. It is founded in the north by the Gulf of Kutch and parts of Rajkot as well as Surendranagar districts, in the East by the Ahmedabad district and coastal part of Bhavnagar district, on the South by the Junagadh district and parts of Amreli as well as Rajkot district, to the west by Arebian sea. The North Saurashtra region which comprises the peninsular part of Gujarat has low to medium rainfall and shallow to medium black soils and also coastal saline alluvial soils. In this Agro-climatic zone, cotton (Bt), groundnut, pearlmillet, wheat are the major crops which contribute considerably to the economy of the state. In Saurashtra, among this zone taking in to consideration the rainfall pattern, the topography, soil characteristics, the climate and the cropping pattern have been identified in Gujarat. The North Saurashtra zone have five main / sub station cum testing centre of University like Dry Farming Research Station with KVK, Targhadia (Rajkot District), Main Millet Research Station with KVK, Jamnagar, Oilseeds Research Station (Sesamum, Mustard, Sunflower) with KVK, Amreli, Dry Farming Research Station, Nanakandhasar, (Surendranagar District) and Dry Farming Research Station, Jamkhambhalia (Jamnagar District).

Agro – Ecological situation in the District

The advent of southwest monsoon greatly influences seasonal patterns of rainfall distribution in the district. Thus, mean annual rainfall provides useful comparison of agricultural potential of a given situation in the district. The mean rainfall in the district 539.17mm

The physiography of entire region of district is more or less flat. However, the region is undulating with slopes having little hilly areas from 25 to150 meters Physical features of the area vary from flat land to 150 meters above mean sea level. Most of the area falls in the range of 25m to 150m above mean sea level.

Based on the soil survey information of the zone, the soils of the district hence been broadly classified in to fine categories Available information about the properties of these soils and their textures has been considered. The types of soils categories are as under: -

Shallow black soils
Medium black soils
Saline alkali soils
Costal alluvial soils
Hilly soils

While delineating the zone into district agro ecological situations, there major factors including various soil types, altitude and the rainfall patterns have primarily been considered. The district can be delineated into five agro ecological situations.

Although, each of the situations has rainfed and irrigated condition, but irrigation has not been considered in identification of the agro ecological situations. While deciding the major crops, cropping patterns and constraints in production, mention has been made of both these conditions one or the other agro ecological situation occurs in the influence area of the district. The fact that this does not preclude the existence of more than one agro ecological situations within the same area.

Sl. No.	Agro Ecological Situation	Soil texture	Altitude	Principal crops	Special features	Approximate area (000ha)	Taluka included	Characteristics
AES-1	Shallow Black soils with 500-600 mm Rainfall	Sandy clay loam to clayey	75 – 150	Groundnut, wheat, sorghum, pearlmillet	Well drained soils with rapid permeability	124	Kalawad, Jamjodhpur, Bhanvad, Okha	Moisture stress, temperature stress
AES-2	Shallow Black soils with 600-700 mm Rainfall	Clayey	75 – 150	Groundnut, wheat, sorghum, pearlmillet	Slightly well drained soils with rapid permeability	180	Part of Kalyanpur, Jamnagar, Jamkhambhalia, Lalpur, Dhrol, Jodia	Moisture stress, temperature stress
AES-3	Coastal Alluvial soils with 300-400 mm Rainfall	Clayey loam to clayey	50	Groundnut, pearlmillet, sorghum, chickpea	Low nitrogen and phosphus	181	Jodia, part of Okha, Jamkhambhalia, Kalyanpur & Jamnagar	Salt affected salinity
AES-4	Coastal Alluvial soils with 500-700 mm Rainfall	Silt clay	25-50	Groundnut, pearlmillet, sorghum, chickpea	Low nitrogen and phosphorus	299	Kalyanpur, Jodia & Jamnagar, Khambhadia, Lalpur, Dwarka	Salt affected salinity
AES-5	Coastal Alluvial shallow black soils with 300-400 mm Rainfall	Sandy loam to clay loam	0-25	Sorghum, Pearlmillet, Groundnut, Sesamum	Arid climate	31	Okha	Known salinity for genus ephedra seacoast very rich in Alghl flor and fanner of economic importance.

2.3 Soil type

As the geographical formation of Saurashtra is to volcanic origin, the soils are generally desired from basaltic rock known as Daccan trap. This is the commonest rock in India and due to its extensive occurrence in south is called “Daccan Traps”. In many parts, they6 have flat top features and hence, are also known as plateau basalt. The trap rocks, which occupy a large part of western cost of India, is also covering North Saurashtra zone. The most common colour of the trap rock in the region is dark grey. On weathering, trap rock form a ferruginous gravelly material known as murrum, which under lie-soil formed in situ. Soils, thus derived are either brown red in colour or regular, the black soil. In district black or brown colour is predominant. The soils are shallow to moderately deep. The detailed soil survey information for the soils of Jamnagar district are as under.

S. No	Soiltype	Characteristics	Area in ha
1	Shallow	These soils have developed from basaltic trap especially from granite and	124000 ha

	black soils	gneiss parent materials. They light grey in colour. Taxonomically, they are classified as *Ustorthents* and *Ustochrepts*. Soils depth varies for cm to 45 cm. They are gravelly but mainly they are sandy clay loam to clayey in texture. The clay on tent in surface soil varies from 20% to 77.49% and calcium carbonate content varies from 3.76 to 26.71 per cent. The soil structure is weak, mainly sub angular blocky and occasionally crumb. Since these soils lack district profile layering and are shallow, capacity to retain moisture is not sufficient. The soils are neutral to alkaline in reaction p^H ranges from 7.3 – 8.4) and from fertility point of view, these are medium in available nitrogen, low to medium in available phosphorus and adequate in availability of potash.	(Kalawad, Jamjodhpur, Bhanvad, Okha)
2.	Medium black soils	The major portion of Jamnagar (Some part of Kalyanpur, KHambhaliya & Jamnagar, major part of Lalpur, Dhrol, Jodia taluka is covered under medium black soils. These residual soils have basaltic trap parent materials. These soils vary in depth from 30 to 60 cm or more at few places. They are calcareous in nature. A layer of murrum (Unconsolidated material of decomposed trap and limestone) is generally found in sub soil layer. The drainage does not pose any problem, because of porous sub soil layer. Morphologically, the profile of these soils has A-C horizon characteristics, having moderate sub angular blocky structure. They are plastic and sticky and hard in consistency on drying. The colour of these soils varies from very dark brown to light grey. Taxonomically, these soils are classified as *Ustochrepts* in *Inceptisol* order. The soils are dominated by smectite group of clay minerals which give to mild cracking in dry season, due to which these are further classified as *Vertic – Ustochrepts* at sub group level. The soils are clay loam to clayey in texture. The souls are highly retentive of moisture because higher percentage of clay content. The percentage of clay content in the surface varies from 31.79 to 73.27 per cent, while no definite trend of clay content in different horizon of the profile is observed. The chemical composition of these soils is neutral to alkaline reaction (p^H7.4 to 8.9). Calcium is the dominant exchangeable cation followed by magnesium. The soils are generally low to medium in available nitrogen, phosphorus and adequately supplied with potassium. The calcium carbonate contents various from 5.26 to 20.36 per cent in these soils.	180000 ha (Part of Kalyanpur, Jamnagar, Jamkham-bhalia, Lalpur, Dhrol, Jodia)
3.	Saline alkali soils	Saline alkali souls are extensively distributed on the coastal are3a as well as inlands. These soils are located in the districts of Jamnagar (Jodia, part of Okha mandal, Kalyanpur, Jamkhambhaliya and jamnagar talukas). These soils are originated as a result of higher water table, low rainfall and high evaporation losses during summer months resulting into upward movement of salts, poor drainage, use of saline ground water and ingress of sea water (in coastal areas). The souls are classified as *Fluvaquents, Halaquents,* and *Haplaquents* (Entisol): *Haplaquents* and *Haptaquepts* in order – *Inceptisol.* Texturally these soils vary from sandy loam to clay. The degree of salinity and alkalinity is also highly variable. In Jamnagar district, the saline and alkaly soils are widely distributed mainly termed as coastal soil. The soils are sandy loam to clay loam in texture. The EC varies from 1.54 to 38.6 m.mhos/cm and ESP ranges from 9.2 to 74.64% in surface soil. The p^H varies from 7.6 to 9.00 in surface soils and normally calcareous in nature. Most of these soils are low to medium in available nitrogen and phosphorus and high in available potash.	181000 ha (Jodia, part of Okha, Jamkhambhali a, Kalyanpur & Jamnagar)
4.	Costal alluvial soils	these soils are located in the district of Jamnagar consisting Kalyanpur, Jodia and Jamnagar, Jamkhambhadia, Lalpur, Dwarka (Okha Mandal) and Dhrol, talukas. These soils are sandy clay loam to clay in texture. These soils are also affected with salts and are saline sodic in nature. The surface soil varies from 1.54 to 38.6 m.mhos/cm in Electrical conductivity, and from 9.2 to 74.64 in Exchangeable sodium percentage. The soil reaction varies with situation	299000 ha (Kalyanpur, Jodia & Jamnagar, Khambhadia, Lalpur,

		ranging from moderately alkaline ot highly alkaline (p^H 7.6 to 9.0). The souls are normally medium in fertility. Taxonomically, these souls are classified as *Halaquents* and *Haplaquents* – Entisol and *Helaquepts* and *Hapdaquents* in Inceptisol order.	Dwarka)
5.	Hilly soils	These soils occur in some parts Bhanvad and Jamjodhpur talukas of Jamnagar district. Because of the steep slope and erosion, the profile is not developed. These soils are developed because of weathering of parent materials existing basaltic trap limestone and sand stone. These soils are shallow to moderately deep and are coarse to find in their texture. The texture varies from loamy sand to clay loam to clay. They have under composed rock fragments and are low in fertility status. These soils are placed in to *Ustorthents* and those near foothills and valley are comparatively deeper can be placed under *Ustochrepts* and can be classified under estisol and *Inceptisol* orders respectively.	31000 ha (Some part of Bhanvad and Jamjodhpur)

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

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
	Oilseeds			
1	Groundnut	378335	5675025	15
2	Sesamum	6280	22608	3.6
3	Castor	7375	192487.5	26.1
4	Soybean	8	140	17.5
	Total Oilseeds	**391998**		
	Cash Crops			
5	Cotton	180440	4150120	23
6	sugarcane	150	7500	50
	Total Cash Crops	**180590**		
	Food Grain			
7	Wheat	58600	1881060	32.1
8	Pearlmillet	3520	46112	13.1
9	Sorghum	8100	85050	10.5
10	Maize	2850	20520	7.2
	Total Food Grains	**73070**		
	Pulse Crops			
11	Greengram	4185	23436	5.6
12	Blackgram	2910	17867.4	6.14
13	Cowpea	285	1071.6	3.76
14	Pigeon pea	175	1925	11
15	Moothbean	360	1512	4.2
16	Chickpea	31300	350560	11.2
17	Cluster bean	75	1406.25	18.75
18	Other pulses	15	0	
	Total Pulses	**39305**		
	SPICES AND CONDIMENTS			
19	Cumin	4300	36550	8.5
20	Fenugreek	90	1410	15.7
21	Coriander	2300	33350	14.5
22	Ajwan	5015	42630	8.5
24	Chilli	1550	29450	11.9
25	Garlic	600	47700	79.5
	Total spices	**13855**	**191090**	
	VEGETABLE		0	
27	Onion	200	40800	204.0
28	Potato	100	14650	146.5
29	Brinjal	1755	324680	185.0
30	Tomato	2355	701790	298.0

31	Cauliflower	97	14250	146.9
32	Cowpea	788	58940	74.8
33	Cabbage	811	136570	168.4
34	Okra	2790	200880	72.0
37	Cucurbits	1445	236110	163.4
38	Cluster bean	4524	436570	96.5
39	Other vegetable	160	17680	110.5
	Total Vegetable	**15025**	2182920	
	FRUIT CROPS		0	
40	Chiku	249	28810	115.7
41	Pomegranate	565	50290	89.0
42	Citrus	257	19040	74.1
44	Aonla	35	2100	60.0
45	Guava	12	520	43.3
46	Custard apple	65	4910	75.5
47	Papaya	483	301880	62.5
48	Coconut	505	42470	84.1
49	Ber	351	33270	94.8
50	Kharek	91	4550	50
51	Banana	44	19360	440.0
52	Mango	470	28670	61.0
53	Cashew nut	4	40.0	10.0
54	Other fruits	177	13890	78.5
55	**Total Fruits**	**3308**	549800	
56	**FLOWERS**		0	
57	Rose	66	6150	93.2
58	Merry gold	140	11450	81.8
60	Jasmine	3	260	86.7
62	Lilly	2	170	85.0
63	Other flowers	165	14650	88.8
	Total flowers	**376**	32680	
	OTHER CORPS		0	
64	Chikori	50	4325	86.5
65	Palma Rosa	43	5375	125
	Total Other crops	**93**		
	Fodder crops			
67	Lucern	1105	132600	120
68	Sorghum	16660	2499000	150
69	Maize	2910	0	
	Total Fodder crops	**20675**		

* Source : DAO, & Dy.Dir.Hort., Jamnagar

2.5. Weather data

	Temp. °c		R.H.%		Wind Speed	Bright Sun Shine	Evaporation	Rainfall	Rainy
Week No	Max	Min	Morning	Evening	(kmph)	(hrs)	(mm)	(mm)	Days
1-J	24.8	12.8	78	28	6.6	7.6	4.8		
2	27.1	13.0	92	42	3.5	8.6	4.5		
3	25.4	13.5	71	39	6.5	8.3	5.1		
4	24.5	12.2	72	37	6.7	8.9	4.8		
5	26.1	12.6	72	40	6.2	9.6	5.1		
6-F	27.3	15.5	64	32	6.8	9.8	5.4		
7	29.7	16.0	93	37	7.4	9.7	4.9		
8	32.6	19.0	85	38	6.7	9.0	5.0		
9	26.4	14.0	85	38	6.9	9.5	4.5	9.0	1

10-M	29.3	17.3	70	32	7.7	9.5	5.0		
11	30.5	17.3	77	36	6.7	9.6	4.9		
12	35.6	20.1	77	27	6.8	10.0	6.1		
13	35.4	22.0	86	36	8.2	7.6	6.1		
14-A	33.4	23.2	83	43	11.7	8.2	6.5		
15	36.3	24.4	79	35	8.7	9.1	8.0		
16	38.7	24.6	78	28	9.7	10.0	9.2		
17	37.4	25.0	84	37	12.4	10.5	9.6		
18	37.2	24.5	84	34	11.7	10.7	9.4		
19-M	36.0	26.1	81	45	12.2	10.9	9.1		
20	36.9	26.2	82	40	13.1	11.1	9.8		
21	35.8	27.9	80	53	18.0	10.6	9.8		
22	36.9	27.6	78	52	15.6	10.4	9.7		
23-J	37.3	27.9	74	47	9.9	7.7	8.8	12.0	1
24	35.9	27.7	84	55	11.2	9.6	6.1	29.0	2
25	36.2	27.0	87	59	7.5	6.7	5.4	43.5	4
26	34.7	27.6	81	54	14.4	5.5	5.4	1.0	
27-J	35.8	28.5	73	53	20.1	6.9	7.8		
28	35.0	28.1	74	54	15.5	4.6	7.2		
29	34.6	27.8	79	57	15.8	4.1	6.3	4.0	1
30	30.0	25.9	94	85	15.2	1.6	4.5	152.5	6
31	32.0	26.4	83	63	17.7	3.3	5.1		
32-A	32.1	25.7	85	63	10.3	4.1	5.1		
33	32.1	25.5	89	73	7.7	3.4	4.9	5.0	1
34	32.7	26.3	83	62	13.2	5.0	4.9	5.5	1
35	32.5	24.7	89	62	8.9	6.2	3.9		
36-S	32.9	23.8	91	53	7.5	9.3	5.2	6.0	1
37	33.5	26.2	85	56	8.5	8.4	5.6		
38	32.4	25.6	91	67	9.0	4.4	5.2	35.5	2
39	32.6	22.6	89	52	6.9	9.6	4.9		
40-O	36.7	23.7	80	34	4.6	9.3	5.7		
41	35.9	24.4	87	46	4.8	8.9	5.8		
42	35.7	24.3	83	40	4.0	8.7	6.0		
43	35.3	22.2	80	34	3.7	9.2	5.8		
44	32.1	20.6	61	35	6.8	9.5	5.2		
45-N	32.2	18.5	70	32	4.2	9.4	4.8		
46	32.4	18.6	63	33	5.3	8.8	4.7		
47	31.8	21.1	62	36	6.3	7.9	4.7		
48	28.2	16.3	69	35	5.5	7.3	4.5		
49-D	28.5	13.3	78	37	4.2	8.8	4.5		
50	25.9	12.1	67	29	5.5	8.8	4.4		
51	25.1	9.5	79	31	4.3	8.9	4.2		
52	26.5	12.9	66	31	6.2	8.3	4.8		
1-J	29.7	13.9	81	33	3.7	9.0	4.9		
2	26.9	13.3	89	40	4.3	8.6	4.6		
3	25.9	11.8	75	31	4.7	9.5	4.8		
4	26.3	12.1	75	37	4.8	9.7	4.6		
5	27.9	15.0	83	39	5.4	9.2	4.6		

6-F	28.1	13.1	74	28	6.0	9.9	4.9		
7	27.3	15.6	65	37	7.8	8.7	5.2		
8	29.9	15.7	87	28	5.2	7.2	5.3		
9	34.1	17.9	71	24	5.4	9.6	5.8		
10-M	32.1	19.3	82	37	7.6	9.8	5.5		
11	31.5	20.7	85	39	9.0	10.0	5.6		
12	35.3	21.5	77	24	9.4	9.9	6.5		
13	34.1	21.3	76	29	8.8	9.9	6.5		
Mean	**32.3**	**21.5**	**79**	**44**	**8.9**	**8.1**	**5.9**	**303.0**	**20**
Highest	**38.7**	**28.5**	**94**	**85**	**20.1**	**11.1**	**9.8**		
Lowest	**24.5**	**9.5**	**61**	**27**	**3.5**	**1.6**	**3.9**		

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

Category	**Population**	**Production**	**Productivity**
Cattle	204191	2475.2 qtl total milk	
Crossbred			8.585 lit/day
Indigenous			3.375 lit/day
Buffalo	162812		4.451 lit/ha
Sheep	211290	269.23 lakh kg wool	
Crossbred			
Indigenous			
Goats	179839		0.274 lit/ha
Pigs		290097.9 Qtl meat	
Crossbred			
Indigenous			
Poultry	38041	12.77 lakh eggs	
Hens			
Desi			
Improved			
Horse &	731		
Camels	2205		
Donkey	692		
Total Milk		360.95 tonnes	
Total egg			
Total wool			

Category	**Area**	**Production**	**Productivity**
Fish			
Marine			
Inland			
Prawn			
Scampi			
Shrimp			

2.7 DETAILS OF OPERATIONAL AREA/ VILLAGES (2015 -16) (Approved by competent Authority in meetings/workshops)

Sl. No	Taluka	Name of the village	Major crops& enterprises	Major problems identified	Identified Thrust Areas
1	Kalavad	Mulila, Chhatar, Chelabedi Sanosara, Golaniya, Laxmipur (Dudhala)	**Cash Crop:-** Cotton, **Oilseeds :-** groundnut, mustard, sesamum, castor, **Pulses:-**green gram, Chickpea, Black gram, Soyabean **Spice:-** cumin, Coriander, Ajwain **Cereal:-** wheat, **Horticultural**:- Vegetable, flowers, **Livestock:-** Cow, buffalo, sheep, goat, etc	Heavy infestation of sucking pest in cotton, stem rot disease in Groundnut, Root rot in castor, Less area under horticulture crops, Blight in cumin, salinity	➢ ICM in major crops of the district ➢ Introudction of new crop ➢ Recycling of farm waste ➢ Populirization of MIS ➢ Motivation of fishries cultivation ➢ Soil Reclamation ➢ Farm women empowerment ➢ Farm mechanization
2	Lalpur	Bhangor, Memana, Dharampur, Govana, Pipartoda, Babarjar			
3	Bhanvad	Morjar, Sahidevaliya Dudhala, Rojivada Vanavad, Fatepur			

2.8 PRIORITYTHRUST AREAS

Sl. No	Crop/ Enterprise	Thrust area
1.	Cotton, groundnut, castor, cumin, coriander, wheat, vegetables, fruits, etc.	➢ Integrated Crop Management in major crops ➢ IPM & IDM in major field crops ➢ Whitegrub management in Groundnut ➢ Wireworm management in garlic & Onion ➢ Micro nutriet management in wheat
2.	Organic farming	Enhancement of organic farming through improved technologies
3.	Farm waste/ organic matter	Recycling of farm waste through composting, vermicompost, green manuring, etc.
4.	Micro irrigation	Efficient use of water by micro irrigation system, water harvesting structure, and water conservation techniques
5.	Soil	Reclamation of saline & alkaline soils
6.	Farm Women	Farm women empowerment by training in value addition, handy crafts, and small scale enterprises
7.	Fisheries	Seed production, seed availability, nutrition, value addition
8.	Improved Implements	Popularization of the mechanized technological know how
9.	Plant protection	Pink boll worm in cotton and white grub in groundnut,
10	Horticultural area	Enhancement of pomegranate, date palm
11.	Storage facility	Requirement of storage techniques and value addition in farm produce
12.	Water conservation & use of Micro irrigation	Efficient use of water by micro irrigation system, water harvesting structure, and water conservation techniques

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities by KVK during 2015-16

OFT (Technology Assessment and Refinement)	FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)

1				2			
Number of OFTs		Total no. of Trials		Area in ha		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
9	7	40	34	50	50	125	125

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					Extension Activities			
3					4			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmers & Farm women	43	56	1800	3681	2075	4741	2660	89682
Rural youth	15	3	575	199				
Extn. Functionaries	3	5	75	319				
Sponsored	16	28	600	1756				
Vocationl	5	3	75	96				

Seed Production (Qtl.)				Planting material (Nos.)		
5				6		
Crop	Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers
Sesame	3	3.92	61			
Green gram	7	8.83	148			
Sun hemp	2.5	2.8	Stock			
Total	**12.5**	**15.55**	**209**			

I.A TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops by KVKs

Thematic areas	Crop	Name of the technology assessed	No. of trials	No. of farmers
Integrated Nutrient Management				
Varietal Evaluation				
Integrated Pest Management				
Integrated Crop Management				
Integrated Disease Management				
Small Scale Income Generation Enterprises				
Weed Management				
Resource Conservation Technology				
Farm Machineries				
Integrated Farming System				
Seed / Plant production				
Post Harvest Technology / Value addition				
Drudgery Reduction				

Storage Technique				
Others (Pl. specify)				
Total				

Summary of technologies assessed under livestock by KVKs

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Disease Management				
Evaluation of Breeds				
Feed and Fodder management				
Nutrition Management				
Production and Management				
Others (Pl. specify)				
Total				

Summary of technologies assessed under various enterprises by KVKs

Thematic areas	Enterprise	Name of the technology assessed	No. of trials	No. of farmers

Note: Suppose **IPM in paddy** is the technology assessed by 50 KVKs in the Zone with 5 trials by each KVK, then IPM in paddy needs to be considered as a single technology, with 50*5 = 250 trials and No. of KVKs will be 50. In addition, please note that even if IPM in paddy is done with various combinations of Technology Options (treatments), it may be considered as a single technology only.

I.B. TECHNOLOGY REFINEMENT

Summary of technologies refined under various crops by KVKs

Thematic areas	Crop	Name of the technology refined	No. of trials	No. of farmers
Integrated Nutrient Management	Wheat	Nutrient management in Wheat crop	3	3
Varietal Evaluation				
Integrated Pest Management	Groundnut	Management of whitegrub in groundnut	3	3
	Okra	Management of sucking pest in okra	3	3
Integrated Crop Management				
Integrated Disease Management	Cumin	Application of *Trichoderma* against wilt disease in cumin	3	3
Small Scale Income Generation Enterprises				
Weed Management				
Resource Conservation Technology	Solar cooker	Comparison of solar cooker with traditional cooking system (Mango Murabba, Sweet Potato, Sweet corn, Roasted & Salted groundnut seed)	4	4
Farm Machineries				
Integrated Farming System				
Seed / Plant production				
Value addition	Mango	Effect of salt and oil on spoilage of mango pickle	3	3

Drudgery Reduction				
Storage Technique				
Others (Pl. specify)				
Total				

Summary of technologies refined under various livestock by KVKs

Thematic areas	Name of the livestock enterprise	Name of the technology refined	No. of trials	No. of farmers
Disease Management				
Evaluation of Breeds				
Feed and Fodder management				
Nutrition Management				
Production and Management				
Others (Pl. specify)				
Total				

Summary of technologies refined under various enterprises by KVKs

Thematic areas	Enterprise	Name of the technology assessed	No. of trials	No. of farmers
Women & Children (Nutrition management)	Preschool Children	Low cost high calorie & protein diets made from locally available food materials.	3	15

I.C. TECHNOLOGY ASSESSMENT AND REFINEMENT IN DETAIL

I.C.1.

NUTRIENT MANAGEMENT

Problem definition: Lower productivity in WHEAT cultivation due to imbalance application of nutrients

Technology Assessed or Refined (as the case may be): Nutrient management in wheat crop

KVK, Jamnagar in Gujarat conducted on-farm trial to find out appropriate nutrient management practice to enhance the wheat productivity. The **assessed or refined (as the case may be)** practice of spraying multi mix micronutrient @ 30 g/10 lit. of water at 30 and 45 days after germination was found to be better with 9.56 % increase in yield.

Table Effect of seed soaking of $MnSo_4$ in enhancing germination and yield in black gram

Treatment	Technology Option	No.of trials	Yield (kg./ha)	Increase in Yield (%)	B:C Ratio
T-1.	Injudicious use of fertilizer (Farmers Practice)	03	5063	0.0	2.93
T-2.	Recommended dose of fertilizer 120 N2 – 60 P2O5 – 00 K2O + 25 ZnSO4 per hectare (Recommended Practice)		5319	5.16	3.20
T-3.	T2 + two spray of multi mix micronutrient @ 30 g/10 lit of water at 30 and 45 days after germination (Refinement)		5542	9.56	3.31

I.C.2.

PEST AND DISEASE MANAGEMENT

Problem definition: incidence of white grub is increase

Technology assessed or refined (as the case may be): Management of white grub in groundnut

Groundnut is an important crop of Saurashtra Region (Gujarat). However, there is high Infestation of white grub resulting in yield loss. Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar conducted on-farm trial to refine the control measure. The refined technology application of ready mix combination of Imidacloprid 40% + Fipronil 40% @ 2.5 g/kg seed. Drenching of ready mix combination of Imidacloprid 40% + Fipronil 40% @ 250 g/ha as initiation of pest incidence having minimum pest population and highest yield with farmers practices.

Results of On Farm Trials:

Technology Option	No. of trials	Plant damage (%)	Yield (kg/ha)	% Increase in yield over farmer's practice
Injudicious use of pesticides.	3	37.00	1300	-
Recommended dose of Pesticide as chlorpyriphos or quinalphos @ 25 ml/kg seed. Drenching of Chlorpyriphos or quinalphos @ 4 lit/ha as initiation of pest incidence.		19.67	1900	46.00
Application of ready mix combination of Imidacloprid 40% + Fipronil 40% @ 2.5 g/kg seed. Drenching of ready mix combination of Imidacloprid 40% + Fipronil 40% @ 250 g/ha as initiation of pest incidence.		7.33	3133	41.00
Soil application of *Beauveria bassiana* @ 5 kg/ha		26.00	2133	64.00

I.C.3.

PEST AND DISEASE MANAGEMENT

Problem definition: Heavy incidence of jassid, thrips, whitefly and mite found, yellowing of leaf and early maturity of okra plants due to heavy incidence of sucking pest

Technology assessed or refined (as the case may be): Management of sucking pest in okra

Okra (*Abelmoschus esculentus*), is an important vegetable crop grown throughout the year in India. also known as *"lady's finger"*, or "bamia" is one of the popular nutritious vegetables of North-East African origin. The pods usually gathered while they are green, tender, and at immature stage. The plant is cultivated throughout the tropical and warm temperate regions around the world for their fibrous fruits or "pods." The crop is attacked by number of sucking pests like jassid, thrips, whitefly and mite which is resulting in heavy yield loss. Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar conducted on-farm trial to refine the control measure. Application of alternate spray of *Bearuveria bassiana* @ 5 g/lit of water and thiacloprid 48% SC @ 0.096% at 15 days interval reduced sucking pest population and remain higher in yield.

Results of On Farm Trials:

Technology Option	No. of trials	No. of sucking pests				Yield (kg/ha)	% Increase in yield over farmer's practice
		Jassid	Thrips	W'fly	Mite		
Injudicious use of insecticides (Spray insecticides at weekly interval)	3	14.00	9.33	13.33	12.33	10700	-
Use of bio-pesticides (*Beauveria bassiana*@ 5 g/lit of water)		9.33	9.67	8.33	10.67	11233	4.98
Alternate spray of *Bearuveria bassiana* @ 5 g/lit of water and thiacloprid 48% SC @ 0.096% at 15 days interval		2.67	4.00	3.33	1.67	12467	16.51
Seed treatment with thiomethoxam 35% FS @ 6 ml/kg seed followed by foliar application of *Beuveria bassiana* at 15 days interval starting from 30 days after sowing.		5.33	4.33	4.00	5.33	12067	12.77

Pooled result

Sr. No.	Pooled data on the performance indicators of the technology assessed / refined [Yield (q/ha), No. of sucking pests per 1x1 m^2 quadrate]			
	T_1	T_2	T_3	T_4

	J	T	W	M	Y	J	T	W	M	Y	J	T	W	M	Y	J	T	W	M	Y
1	**14.00**	**8.00**	**12.33**	**9.33**	**71.00**	**9.00**	**7.33**	**7.33**	**11.00**	**73.67**	**2.00**	**3.67**	**3.33**	**1.67**	**83.33**	**5.00**	**3.67**	**4.00**	**4.00**	**79.33**
2	**12.67**	**8.00**	**14.00**	**7.33**	**67.67**	**7.33**	**9.67**	**7.00**	**10.00**	**72.67**	**2.33**	**3.00**	**2.00**	**1.67**	**83.33**	**5.00**	**3.67**	**3.33**	**4.67**	**79.67**
3	**11.67**	**7.33**	**15.67**	**8.67**	**69.33**	**8.00**	**9.67**	**8.33**	**10.33**	**70.00**	**1.67**	**2.33**	**2.00**	**2.00**	**82.33**	**4.33**	**3.33**	**2.33**	**4.33**	**79.67**
Average	**12.79**	**7.78**	**14.00**	**8.44**	**69.33**	**8.11**	**8.89**	**7.55**	**10.43**	**72.11**	**2.00**	**3.00**	**2.44**	**1.78**	**83.00**	**4.78**	**3.55**	**3.22**	**4.33**	**79.56**
N.B.:- J=Jassid, T=Thrips, W=Whitefly, M=Mite and Y=Yield																				

I.C.4.

PEST AND DISEASE MANAGEMENT

Problem definition: Low plant population, Severe Disease problems, High dew frost, Heavy irrigation used for long time, Lack of knowledge for use of recommended control measure

Technology assessed or refined (as the case may be): Application of *Trichoderma* against wilt disease in cumin

Cumin is an important spices crop. Cumin seeds, whose scientific name is *Cuminum cyminum*, are an excellent source of iron, a mineral that plays many vital roles in the body. There is high incidence of cumin wilt disease resulting in yield loss as well as poor quality. Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar conducted on-farm trial to refine the control measure. Application of *Trichoderma* @ 5 kg/ha along with FYM @ 1 tonne/ha by broadcasting method at 15 days after germination. Refinement treatment increase yield 56.90 % and 65.55 % with farmer practices and recommendation, respectively.

Results of On Farm Trials:

Technology Option	No. of trials	Plant infestation (%)	Yield (kg/ha)	% Increase in yield over farmer's practice
No use of trichoderma or fungicide at the time of sowing. But they use fungicides *viz.,* carbendazim, hexaconazole, difenconazole, fosetyl-AL, tebuconazole, propiconazole, tridemorph, etc after of initiation of diseases.	3	52.00	717	-
Application of *Trichoderma* @ 5 kg/ha along with FYM @ 1 tonne/ha at the time of sowing with the help of multipurpose seed drill.		22.00	1125	56.90
Application of *Trichoderma* @ 5 kg/ha along with FYM @ 1 tonne/ha by broadcasting method at 15 days after germination.		19.33	1187	65.55

Pooled Result

Sr. No.	Pooled Data on the performance indicators of the technology assessed/refined					
	Technology Option 1		Technology Option 2		Technology Option 3	
	% Plant infestation	Yield (q/ha)	% Plant infestation	Yield (q/ha)	% Plant infestation	Yield (q/ha)
1	52.00	7.97	23.67	11.92	18.77	12.79
2	51.00	7.83	17.67	12.33	13.67	12.78
3	52.67	7.87	19.00	12.40	14.87	13.30
Average	51.89	7.89	20.11	12.22	15.77	12.96

I.C.5.

RESOURCE CONSERVATION

Problem definition: High cost of fuel (gas), non availability of fire wood, Time consuming process

Technology Assessed or Refined (as the case may be): Comparison of solar cooker with traditional cooking system

Comparison of solar cooker with traditional cooking system OFT was assessed by KVK, JAU, Jamnagar using traditional method, sunlight and heat and solar cooker. Items were murbba, sweet potato, sweet corn and roasted and salted groundnut (khari sing). The objective was to improve quality, reduce drudgery, cooking time and to save the fuel. Observation were time and fuel consumption, cost saving as well as organo laptic tests i.e. test, texture, colour, consistency, overall acceptance including keeping quality also noted. Over all result show that the refinement treatment with solar cooker found low time consumption and fuel less with lower movement as compare to farmers practices and sun drying method. There is no any change in keeping quality. Both the treatment sun drying and solar cooker found also cost less. Organo laptic test having higher acceptance for solar cooker.

Comparison of solar cooker with traditional cooking system for Mango Murbba

Technology Option	*No. of Trial*	*Time Cons.*	*Fuel Cons.*	*Cost saving*	*Organo Laptic Test*					*Keeping quality*
					Test	*Texture*	*Colour*	*Consis-tency*	*Overall acceptance*	
Preparation by traditional method sunlight heat	4	42hrs	0	0	4.17	5.19	4.97	4.92	0	240 days
preparation by chula/Gas		40 min	80 g gas	12.74%	4.53	3.69	3.61	4.75	0	240 days
preparation by solar cooker		8 hrs	0	20.81%	6.25	6.06	5.58	6.08	√	240 days

Comparison of solar cooker with traditional cooking system for Sweet Potato

Technology Option	*No. of Trial*	*Time Cons.*	*Fuel Cons.*	*Cost (Rs.)*	*Organo Laptic Test*			
					Test	*Consistency*	*Colour*	*Overall acceptance*
preparation by Traditional method chula	4	45 Min	2.9 kg f.w	24.21	4.18	4.05	4.60	0
preparation by Gas		40 Min	80 gm gas	16.64	5.24	4.97	4.78	0
preparation by Solar cooker		200 Min	0	0	5.80	6.18	4.50	√

Comparison of solar cooker with traditional cooking system for Sweet corn

Technology Option	*No. of Trial*	*Time Cons.*	*Fuel Cons.*	*Cost (Rs.)*	*Organo Laptic Test*			
					Test	*Consistency*	*Colour*	*Overall acceptance*
preparation by Traditional method chula	4	40 Min	2.7 kg f.w	21.95	4.74	3.96	4.05	
preparation by Gas		30 Min	60 gm gas	12.44	5.11	4.94	4.85	
preparation by Solar cooker		120 Min	0	0	5.08	5.65	4.85	√

Comparison of solar cooker with traditional cooking system for Kharising

Technology Option	*No. of Trial*	*Time Cons.*	*Fuel Cons.*	*Cost (Rs.)*	*Organo Laptic Test*			
					Test	*Consistency*	*Colour*	*Overall acceptance*
preparation by Traditional method chula	4	50 Min	3.4 kg f.w	27.5	4.78	4.50	5.10	
preparation by Gas		40 Min	80 gm gas	16.64	4.90	5.00	5.09	
preparation by Solar cooker		360 Min	0	0	6.03	5.77	4.90	√

I.C.6.

VALUE ADDITION

Problem definition:

1. To prevent soft and slippery pickle
2. To increase self life of pickle
3. Cost saving
4. Lack of knowledge about use of oil and salt quantity

Technology assessed or refined (as the case may be): Effect of salt and oil on spoilage of mango pickle

Mango is the king of fruit and it is seasonal fruit. It consume as various ways *viz*., fresh, juice, slices, dehydration, pickle, murabba etc. Among them, pickle is well famous for throughout consumption. It is a technique to prepare mango pickle and it can be store throughout the year. It can be prepare with the use of salt and oil. But oil, can be dangerous for human being. Therefore, it is to prepare low cost, high self life with use of salt and oil. Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar conducted on-farm trial to refine the quantity of oil and salt. Ingredients use for all treatments:- Mango 1 kg, turmeric powder 5 gm, jaggari/sugar 600 gm, fenugreek 50 gm,

mustard 30 gm, asafoetida (hing) 5 gm, coriander 30 gm, funnel 30 gm, red chilly powder 30 gm. Along with the refined technology application of Salt 20% (200 gm) + Oil 200 ml + acitic acid 7 ml is proved very cost effective and low fat with good taste.

Results of On Farm Trials:

Technology Options	*No. of trials*	*Cost saving*	*Organo Laptic Test*				*Keeping quality*
			Colour	*Texture*	Test	*Overall acceptance*	
Solt 12% (120 gm) + Oil 800ml/ kg mango	3	-	3.31	2.67	2.94	0	240 days
Solt 15% (150 gm) + Oil 250ml/ kg mango+acitic acid 5ml		31 %	4.25	4.03	4.78	0	240 days
Solt 20% (200 gm) + Oil 200ml/ kg mango+acitic acid 7ml		34%	5.00	4.78	5.03	√	240 days

I.C.7.

Nutrition, Health and others

Problem definition:

Child suffered from mal nutrition due to poor dietary pattern

Technology Assessed or Refined : Evaluation of low cost high calorie & protein diets made from locally available food materials.

Many preschool children suffer from mal nutrition due to poor dietary pattern. To overcome this, KVK, Jamnagar conducted OFT on Evaluation of low cost high calorie & protein diets made from locally available food materials to malnourished preschool children, and with recommended dietary allowances. It was observed that body weight, height and health status were increase average 13.6 per cent in weight and 1.82 per cent in height with this dietary pattern.

Table Evaluation of low cost high calorie & protein diets made from locally available food materials.

Technology Option	**No.of trials**	**Per cent increase in preschool children**	
		weight	**Height**
T1-Present poor dietary pattern (control)	5	7.34	1.27
T2- Food Provided by ICDS in ICDS center (Anganvadi)	5	9.21	1.49
T3- - Low cost high calorie & high protein diet prepared from locally available food materials. (roasted Bengal gram-25 g, roasted soya bean -25 g and gerggery-25 g /day /child for 6 month)	5	13.06	1.82

II. FRONTLINE DEMONSTRATION

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

List of technologies demonstrated during previous year and popularized during 2014-15 and recommended for large scale adoption in the district

S. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1	G'nut	Pest management	Beauveria	Field days, Radio talk, On/Off Campus Training and TV Programme, Exhibition and demonstration	02	10	04
2	G'nut	Pest management	NPV		04	05	02
3	G'nut	Disease management	Trichoderma		04	05	02
4	Cotton	IPM	Beauveria Imidachloprid		06	20	08
5	Brinjal	IPM	Azardirectin, Beauveria Profenophos		03	05	02
6	Chilly	IPM			02	05	02
7	Wheat	INM	PSB, Micro nutrients G-4, Azatobacter, Zinc sulphate		07	20	08
8	Cumin	Variety/Disease management	Seed, Trichoderma		05	10	04

9	Gram	IPM	NPV, Beauveria		05	15	06
10	Coriander	Variety	Seed		04	10	04
11	Green Gram	Variety	Seed		07	10	04
12	Pearl Millet	Variety	Seed		07	10	04
13	Kitchen Gardening	Healthy food	vegetable seed		1	5	
14	Sickle	Drudgery reduction	Improved Sickle		2	5	
15	stove	Health	Multi fuel cooking stove		2	5	

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

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

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Prop-osed	Actual	SC/ST	Others	Total	
		Oilseeds								
1	G'nut	Pest management	Beuvaria	Kh-15	02	02	04	06	10	
2	G'nut	Pest management	NPV	Kh-15	02	02	01	04	05	
3	G'nut	Disease management	Trichoderma	Kh-15	04	04	01	04	05	
		Commercial								
4	Cotton	IPM	Beauvaria Imidachloprid	Kh-15	08	08	03	17	20	
		Horticultural								
5	Brinjal	IPM	Azardirectin, Beuvariya Profenophos	Kh-15	02	0	0	05	05	
6	Chilly	IPM		Kh-15	02	02	01	04	05	
7	Cumin	Variety/Disease management	Seed, Trichoderma	Rabi-15	04	04	0	10	10	
8	Coriander	Variety	Seed	Rabi-15	04	04	01	09	10	
		Cereals								
9	Wheat	INM	PSB, Micro nutrients G-4, Azatobacter, Zinc sulphate	Rabi-15	08	08	0	20	20	
10	Pearl Millet	Variety	Seed	Summer-15	04	04	0	10	10	
		Pulses								
11	Gram	IPM	NPV, Beuvariya	Rabi-15	06	06	0	15	15	
12	Green Gram	Variety	Seed	Summer-15	04	04	01	09	10	
		Others								
13	Kitchen Gardening	Healthy food	vegetable seed				0	5	5	
14	Sickle	Drudgery reduction	Improved Sickle				1	4	5	
15	stove	Health	Multi fuel cooking stove				1	4	5	

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					

Oilseeds											
G'nut	Kh	Rainfed	MB	M	M	M	Fellow	15Jun-30Jul	15 to 30 Oct		
G'nut	Kh	Rainfed	MB	M	M	M	G'nut	15Jun-30Jul	15 to 30 Oct		
G'nut	Kh	Rainfed	MB	M	M	M	Cotton	15Jun-30Jul	15 to 30 Oct		
Commercial											
Cotton	Kh	Irrigated	MB	M	M	M	Gram	15Jun-30Jul	10-30 Feb		
Horticultural											
Brinjal	Kh	Irrigated	MB	M	M	M	Wheat	15July-15Aug.	1Nov-15Feb		
Chilly	Kh	Irrigated	MB	M	M	M	Cumin	15July-15Aug.	15Oct-30Jan		
Cumin	Rabi	Irrigated	MB	M	M	M	G'nut	20 Oct-15Nov	10-25 Feb		
Coriander	Rabi	Irrigated	MB	M	M	M	G'nut	20 Oct-15Nov	10-25 Feb		
Cereals											
Wheat	Rabi	Irrigated	MB	M	M	M	G'nut	25Oct-15Nov	15Feb-15Mar		
Pearl Millet	Sum	Irrigated	MB	M	M	M	Cotton	20Feb-10Mar	15-30 May		
Pulses											
Gram	Rabi	Irrigated	MB	M	M	M	G'nut	25Oct-15Nov	10-25 Feb		
Green Gram	Sum	Irrigated	MB	M	M	M	Cotton	20Feb-10Mar	15-30 May		

Technical Feedback on the demonstrated technologies

S. No	Crop/ enterprise	Feed Back
	Kharif	
	Oilseeds	
1	Groundnut (White grub)	➢ Effective to control White grub ➢ Also reduce the damage of pod borer ➢ Easy to apply ➢ Low cost and seed quality improve
2	G'nut (Trichoderma)	➢ Very effective against stem rot (*Sclerotium rolfsii*) in humid and low temperature (during rainy days) ➢ It is effective as good as chemical fungicide ➢ Easy to application ➢ No hazardous ➢ Low cost
3	G'nut (NPV)	➢ Very effective against spodoptera during low radiation ➢ It is effective as good as chemical pesticides ➢ Easy to application ➢ No hazardous ➢ Low cost
	Commercial	➢
4	Cotton	➢ Low cost chemical control for longer time ➢ It prove that prevention is better than cure for pest management ➢ High yielding Bt. varieties require additional feed & micronutrients than local cotton variety ➢ Biopesticide saves useful insects

		➢ Effective against sucking and chewing pest
	Horticultural	➢
5	Brinjal	➢ Biopesticide is eco friendly and do not harmful to useful insects ➢ No residual toxic effect ➢ Lower incidence of whitefly as well as fruit and shoot borer
6	Chilli	➢ Biopesticide is less harmful to health and do not affect to useful insect ➢ The curling of leaf was not found in treated plot ➢ Easy to apply
7	Cumin	➢ Higher yield of grain than local varieties ➢ Tolerant to wilt ➢ Seed are bold and having good quality
8	Coriander	➢ GC-2 is a very good variety ➢ Produces high yield than local ➢ Good seed size and attractive color helps to get more price
	Cereals	
9	Wheat	➢ Bio fertilizers reduces cost of cultivation ➢ Eco friendly ➢ Quality of grains improved ➢ Micro nutrients helps to harvest more production
10	Pearl Millet	➢ Higher yield of grain and fodder ➢ Quality of fodder is good ➢ Good against drought spell ➢ Sweet taste of rotla
	Pulses	➢
11	Chick pea	➢ Beuvaria helps to control sucking and chewing pests ➢ NPV is effective as good as chemical pesticides ➢ Easy to apply and no any harmful residual effect ➢ Seed quality improved ➢ Rhizobium reduces the need of chemical fertilizers
12	Green Gram	➢ Synchronise maturity ➢ High yielding & Short duration variety ➢ Good colour having high market value ➢ Good test for dal and khichadi making
	Others	➢
13	Kitchen Gardening	➢ Fresh vegetable available at doorstep with minimum cost ➢ Regulatory daily nutritious diet. ➢ They produce organic vegetables because farm women are not applying any pesticides or agrochemicals in their backyard. ➢ Cultivation kitchen gardening in scientific way. ➢ They are utilized maximum backyard space and waste water. ➢ Farm women are attracted towards hybrid vegetables. ➢ Income is generated by selling extra vegetables grown in kitchen garden.
14	Sickle	➢ Serrated blade, ferrule and wooden handle sickle fatigue coming on wrist is less and the drudgery reduce drudgery ➢ Serrated sickles does not require the sharpening of cutting edge frequently ➢ Less weight as compare to local sickle ➢ It also provides safety to the workers due to its better construction
15	stove	➢ Less weight as compare to local sickle ➢ Use less fuel ➢ Reduce fuel collection time ➢ Reduce cooking time ➢ Produce less smoke

		➢ Conserve trees ➢ Allow more dung to be used as fertilizer instead of fuel ➢ Provide work for local chulha makers

Farmers' reactions on specific technologies

S. No	Crop/ enterprise	Feed Back
	Kharif	
1	Groundnut (White grub)	➢ Effective to control White grub ➢ Also reduce the damage of podborer ➢ Easy to apply ➢ Low cost and seed quality improve ➢ Fodder quality improved
	G'nut (Trichoderma)	➢ Very effective against stem rot (*Sclerotium rolfsii*) in humid and low temperature (during rainy days) ➢ It is effective as good as chemical fungicide ➢ Easy to application ➢ No hazardous ➢ Low cost as compared to chemicals
	G'nut (NPV)	➢ Very effective against spodoptera during low radiation ➢ It is effective as good as chemical pesticides ➢ Easy to application ➢ No hazardous ➢ Low cost as compared to chemicals
	Commercial	➢
2	Cotton	➢ Low cost chemical control for longer time ➢ It prove that prevention is better than cure for pest management ➢ High yielding Bt. varieties require additional feed & micronutrients than local cotton variety ➢ Biopesticide saves useful insects ➢ Effective against sucking and chewing pest
3	**Horticultural**	➢
4	Brinjal	➢ Biopesticide is eco friendly and do not harmful to useful insects ➢ No residual toxic effect ➢ Lower incidence of whitefly as well as fruit and shoot borer
5	Chilli	➢ Biopesticide is less harmful to health and do not affect to useful insect ➢ The curling of leaf was not found in treated plot ➢ Easy to apply ➢ Low cost as compared to chemicals
6	Cumin	➢ Higher yield of grain than local varieties ➢ Tolerant to wilt ➢ Seed are bold and having good quality
	Coriander	➢ GC-2 is a very good variety ➢ Produces high yield than local ➢ Good seed size and attractive color helps to get more price
	Rabi	
7	Wheat	➢ Bio fertilizers reduces cost of cultivation ➢ Eco friendly ➢ Quality of grains improved ➢ Micro nutrients helps to harvest more production
8	Pearl Millet	➢ Higher yield of grain and fodder ➢ Quality of fodder is good

		➢ Good against drought spell ➢ Sweet taste of rotla
	Pulses	➢
9	Chick pea	➢ Beauveria helps to control sucking and chewing pests ➢ NPV is effective as good as chemical pesticides ➢ Easy to apply and no any harmful residual effect ➢ Seed quality improved ➢ Rhizobium reduces the need of chemical fertilizers
10	Green Gram	➢ Synchronise maturity ➢ High yielding & Short duration variety ➢ Good colour having high market value ➢ High feed and fodder value
	Others	
13	Kitchen Gardening	➢ Fresh vegetable available at doorstep with minimum cost ➢ Regulatory daily nutritious diet. ➢ They produce organic vegetables because farm women are not applying any pesticides or agrochemicals in their backyard. ➢ Utilized maximum backyard space and waste water. ➢ Fresh vegetable can be available at a time ➢ Income is generated by selling extra vegetables grown in kitchen garden.
14	Sickle	➢ Serrated blade, ferrule and wooden handle sickle fatigue coming on wrist is less and the drudgery reduce drudgery ➢ Serrated sickles does not require the sharpening of cutting edge frequently ➢ Less weight as compare to local sickle ➢ It also provides safety to the workers due to its better construction
15	stove	➢ Less weight as compare to local sickle ➢ Use less fuel and reduce fuel collection time ➢ Reduce cooking time ➢ Produce less smoke

Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	8	1. 8.9.15 2. 1.10.15 3. 5.10.15 4. 7.10.15 5. 5.1.16 6. 13.1.16 7. 9.3.16 8. 22.3.16	22 25 26 25 25 25 92 61	
2	Farmers Training	3	1. 27.5.15 2. 26.6.15 3. 3.11.15	49 33 24	
3	Media coverage (Mobile SMS)	15	-	-	
4	Training for extension functionaries	1	14.05.15	16	

Performance of Frontline demonstrations

Frontline demonstrations on oilseed crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Groundnut	IPM (white grub)	IPM (*Beauveria*)	GG-20, GG-2	10	4	18.75	5.63	11	10	10.0	25750	44000	18250	1.71	26960	40000	13040	1.48
	IDM	IDM (*Trichoderma*)	GG-20, GG-2	5	2	27.5	6.25	18.88	17.13	10.22	28780	75500	46720	2.62	29540	68500	38960	2.32
	IPM	IPM (NPV)	GG-20, GG-2	5	2	25	7.5	16.25	15	8.33	29100	65000	35900	2.23	29900	60000	30100	2.01

Frontline demonstration on pulse crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Greengram	Variety	Variety	GM- 4	10	4	11.25	5.0	7.09	6.38	11.13	23340	53203	29863	2.28	24100	47869	23769	1.99
Chickpea	IPM/Variety	IPM	GJG-3, GG-1,2, Deshi	15	6	26.25	5.63	10.71	9.46	13.21	20300	45510	25210	2.24	21975	39506	17531	1.80

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

** BCR= GROSS RETURN/GROSS COST

FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average												
Cereals																			
Wheat	INM	INM (GW-496, Lok-1)	20	8	53.75	10	41.31	37.71	9.55	41.31	37.71	31380	82625	51245	2.63	32435	75425	42990	2.33
Bajra (Pearl Millet)	Variety	Variety (GHB-732)	10	4	31.88	18.75	28.19	25.47	10.67	28.19	25.47	10330	35234	24904	3.41	10910	31836	20926	2.92
Finger millet																			
Vegetables																			
Chilli	IPM	IPM (Rima-1, NS-314)	5	**2**	**111.25**	**87.5**	**101.75**	**95.25**	**6.82**	**101.75**	**95.25**	**67640**	**254375**	**186735**	**3.76**	**69865**	**238125**	**168260**	**3.41**
Brinjal	**IPM**	**IPM** (NS-727, VNR-38), Resam patto	5	**2**	**312.5**	**293.75**	**301**	**279**	**7.89**	**301**	**279**	**91460**	**371563**	**280103**	**4.06**	**94010**	**327825**	**233815**	**3.49**
Flower crops																			
Fruit crops																			
Spices & condiments																			
Cumin	Variety-IDM	G.Cum.-4, IDM	10	4	8.94	3.75	7.13	6.13	13	7.13	6.31	32455	90844	58389	2.80	34605	79695	45090	2.30
Coriander	Variety	G.Cor.-2	10	4	12.5	6.25	9.19	8.28	10.99	9.19	8.28	28270	91875	63605	3.25	29770	80681	50911	2.71

Commercial Crops																			
Sugarcane																			
Cotton	IPM	IPM	20	8	25	6.25	15.25	14.05	8.54	15.25	14.05	31500	64813	33313	2.06	32570	56187	23617	1.73
Medicinal & aromatic plants																			
Fodder Crops																			

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

FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of Units (Animal / Poultry/ Birds, etc)	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Cattle																	
Buffalo																	
Buffalo Calf																	
Dairy																	
Poultry																	
Sheep & Goat																	
Vaccination																	

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

FLD on Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Common Carps																	
Composite fish culture																	
Feed Management																	

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

FLD on Other enterprises

Category	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.) or Rs./unit				Economics of check (Rs.) or Rs./unit			
				Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Oyster Mushroom																

Button Mushroom																
Apiculture																
Maize Sheller																
Value Addition																
Vermi Compost																

FLD on Women Empowerment

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check
Assessment	Multi fuel coking stove	5	Fuel consumption,	-	-

FLD on Farm Implements and Machinery

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit etc.)			
						Demo	Check		Land preparation	Sowing	Weeding	Total	Land preparation	Labour	Irrigation	Total
Improved sickle	Sorghum	Sickle	5	2.5	Man hour /ha	105	134	27.61	-	-	-	-		815	-	815

FLD on Other Enterprise: Kitchen Gardening

Category and Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units	Yield (Kg)		% change in yield	Other parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Vegetable seed	Nutritive & fresh healthy vegetables	Organic Kitchen garden	5	5	5300	4700	12.76	-	-	54300	98764	44464	1.82	47556	78436	30880	1.65

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

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

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

III. TRAINING PROGRAMME

Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	1	42	0	42			0	42	0	42
Resource Conservation Technologies				0			0	0	0	0
Cropping Systems				0			0	0	0	0
Crop Diversification				0			0	0	0	0
Integrated Farming				0			0	0	0	0
Micro Irrigation/irrigation				0			0	0	0	0
Seed production				0			0	0	0	0
Nursery management				0			0	0	0	0
Integrated Crop Management				0			0	0	0	0
Soil & water conservatioin				0			0	0	0	0
Integrated nutrient management				0			0	0	0	0
Production of organic inputs				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total	**1**	**42**	**0**	**42**	**0**	**0**	**0**	**42**	**0**	**42**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops				0			0	0	0	0
Off-season vegetables				0			0	0	0	0
Nursery raising				0			0	0	0	0
Exotic vegetables				0			0	0	0	0
Export potential vegetables				0			0	0	0	0
Grading and standardization				0			0	0	0	0
Protective cultivation				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total (a)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
b) Fruits										
Training and Pruning				0			0	0	0	0
Layout and Management of Orchards				0			0	0	0	0
Cultivation of Fruit				0			0	0	0	0
Management of young plants/orchards				0			0	0	0	0
Rejuvenation of old orchards				0			0	0	0	0
Export potential fruits				0			0	0	0	0
Micro irrigation systems of orchards				0			0	0	0	0
Plant propagation techniques				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total (b)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
c) Ornamental Plants										
Nursery Management				0			0	0	0	0
Management of potted plants				0			0	0	0	0
Export potential of ornamental plants				0			0	0	0	0
Propagation techniques of Ornamental Plants				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total (c)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
d) Plantation crops										
Production and Management technology				0			0	0	0	0
Processing and value addition				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total (d)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
e) Tuber crops										
Production and Management technology				0			0	0	0	0
Processing and value addition				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices										
Production and Management technology	1	24	0	24			0	24	0	24
Processing and value addition				0			0	0	0	0
Others (pl specify)				0			0	0	0	0

Total (f)	**1**	**24**	**0**	**24**	**0**	**0**	**0**	**24**	**0**	**24**
g) Medicinal and Aromatic Plants										
Nursery management				0			0	0	0	0
Production and management technology				0			0	0	0	0
Post harvest technology and value addition				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total (g)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GT (a-g)	**1**	**24**	**0**	**24**	**0**	**0**	**0**	**24**	**0**	**24**
III Soil Health and Fertility Management										
Soil fertility management				0			0	0	0	0
Integrated water management				0			0	0	0	0
Integrated Nutrient Management	2	17	5	22	5	24	29	22	29	51
Production and use of organic inputs	1	39	0	39	3	0	3	42	0	42
Management of Problematic soils				0			0	0	0	0
Micro nutrient deficiency in crops				0			0	0	0	0
Nutrient Use Efficiency				0			0	0	0	0
Balance use of fertilizers				0			0	0	0	0
Soil and Water Testing	1	185	12	197	40	4	44	225	16	241
Others (pl specify)				0			0	0	0	0
Total	**4**	**241**	**17**	**258**	**48**	**28**	**76**	**289**	**45**	**334**
IV Livestock Production and Management										
Dairy Management				0			0	0	0	0
Poultry Management				0			0	0	0	0
Piggery Management				0			0	0	0	0
Rabbit Management				0			0	0	0	0
Animal Nutrition Management	1	0	30	30	0	0	0	0	30	30
Disease Management	2	0	56	56	0	0	0	0	56	56
Feed & fodder technology				0			0	0	0	0
Production of quality animal products				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total	**3**	**0**	**86**	**86**	**0**	**0**	**0**	**0**	**86**	**86**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	71	71	0	0	0	0	71	71
Design and development of low/minimum cost diet				0			0	0	0	0
Designing and development for high nutrient efficiency diet				0			0	0	0	0
Minimization of nutrient loss in processing	1	0	17	17	0	11	11	0	28	28
Processing and cooking				0			0	0	0	0
Gender mainstreaming through SHGs				0			0	0	0	0
Storage loss minimization techniques				0			0	0	0	0
Value addition	1	0	34	34	0	0	0	0	34	34
Women empowerment				0			0	0	0	0
Location specific drudgery reduction technologies				0			0	0	0	0
Rural Crafts	1	0	29	29	0	0	0	0	29	29
Women and child care				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total	**4**	**0**	**151**	**151**	**0**	**11**	**11**	**0**	**162**	**162**
VI Agril. Engineering										
Farm Machinary and its maintenance				0			0	0	0	0
Installation and maintenance of micro irrigation systems	1	55	0	55	8	0	8	63	0	63
Use of Plastics in farming practices				0			0	0	0	0
Production of small tools and implements				0			0	0	0	0
Repair and maintenance of farm machinery and implements				0			0	0	0	0
Small scale processing and value addition				0			0	0	0	0
Post Harvest Technology				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total	**1**	**55**	**0**	**55**	**8**	**0**	**8**	**63**	**0**	**63**
VII Plant Protection										
Integrated Pest Management	3	232	0	232	50	0	50	282	0	282
Integrated Disease Management	2	76	0	76	0	0	0	76	0	76

Bio-control of pests and diseases				0			0	0	0	0
Production of bio control agents and bio pesticides				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total	**5**	**308**	**0**	**308**	**50**	**0**	**50**	**358**	**0**	**358**
VIII Fisheries										
Integrated fish farming				0			0	0	0	0
Carp breeding and hatchery management				0			0	0	0	0
Carp fry and fingerling rearing				0			0	0	0	0
Composite fish culture				0			0	0	0	0
Hatchery management and culture of freshwater prawn				0			0	0	0	0
Breeding and culture of ornamental fishes				0			0	0	0	0
Portable plastic carp hatchery				0			0	0	0	0
Pen culture of fish and prawn				0			0	0	0	0
Shrimp farming				0			0	0	0	0
Edible oyster farming				0			0	0	0	0
Pearl culture				0			0	0	0	0
Fish processing and value addition				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IX Production of Inputs at site										
Seed Production				0			0	0	0	0
Planting material production				0			0	0	0	0
Bio-agents production				0			0	0	0	0
Bio-pesticides production				0			0	0	0	0
Bio-fertilizer production				0			0	0	0	0
Vermi-compost production				0			0	0	0	0
Organic manures production	1	0	30	30	0	0	0	0	30	30
Production of fry and fingerlings				0			0	0	0	0
Production of Bee-colonies and wax sheets				0			0	0	0	0
Small tools and implements				0			0	0	0	0
Production of livestock feed and fodder				0			0	0	0	0
Production of Fish feed				0			0	0	0	0
Mushroom Production				0			0	0	0	0
Apiculture				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total	**1**	**0**	**30**	**30**	**0**	**0**	**0**	**0**	**30**	**30**
X Capacity Building and Group Dynamics										
Leadership development				0			0	0	0	0
Group dynamics	1	0	62	62	0	9	9	0	71	71
Formation and Management of SHGs	1	0	30	30	0	0	0	0	30	30
Mobilization of social capital	1	26	0	26	7	0	7	33	0	33
Entrepreneurial development of farmers/youths	1	25	0	25	0	0	0	25	0	25
WTO and IPR issues				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total	**4**	**51**	**92**	**143**	**7**	**9**	**16**	**58**	**101**	**159**
XI Agro-forestry										
Production technologies				0			0	0	0	0
Nursery management				0			0	0	0	0
Integrated Farming Systems				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GRAND TOTAL	**24**	**721**	**376**	**1097**	**113**	**48**	**161**	**834**	**424**	**1258**

Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	2	45	0	45	27		27	72	0	72
Resource Conservation Technologies	1	21	0	21	8		8	29	0	29
Cropping Systems				0			0	0	0	0

Crop Diversification				0			0	0	0	0
Integrated Farming				0			0	0	0	0
Micro Irrigation/irrigation	1	31	14	45	6	5	11	37	19	56
Seed production				0			0	0	0	0
Nursery management				0			0	0	0	0
Integrated Crop Management	2	166	26	192	30	12	42	196	38	234
Soil & water conservatioin				0			0	0	0	0
Integrated nutrient management	1	26	0	26			0	26	0	26
Production of organic inputs				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total	**7**	**289**	**40**	**329**	**71**	**17**	**88**	**360**	**57**	**417**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops				0			0	0	0	0
Off-season vegetables				0			0	0	0	0
Nursery raising				0			0	0	0	0
Exotic vegetables				0			0	0	0	0
Export potential vegetables				0			0	0	0	0
Grading and standardization				0			0	0	0	0
Protective cultivation	2	114	36	150	5	0	5	119	36	155
Others (pl specify)				0			0	0	0	0
Total (a)	**2**	**114**	**36**	**150**	**5**	**0**	**5**	**119**	**36**	**155**
b) Fruits										
Training and Pruning				0			0	0	0	0
Layout and Management of Orchards				0			0	0	0	0
Cultivation of Fruit				0			0	0	0	0
Management of young plants/orchards				0			0	0	0	0
Rejuvenation of old orchards				0			0	0	0	0
Export potential fruits				0			0	0	0	0
Micro irrigation systems of orchards				0			0	0	0	0
Plant propagation techniques				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total (b)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
c) Ornamental Plants										
Nursery Management				0			0	0	0	0
Management of potted plants				0			0	0	0	0
Export potential of ornamental plants				0			0	0	0	0
Propagation techniques of Ornamental Plants				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total (c)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
d) Plantation crops										
Production and Management technology				0			0	0	0	0
Processing and value addition				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total (d)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
e) Tuber crops										
Production and Management technology				0			0	0	0	0
Processing and value addition				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices										
Production and Management technology	1	20	0	20	3	0	3	23	0	23
Processing and value addition				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total (f)	**1**	**20**	**0**	**20**	**3**	**0**	**3**	**23**	**0**	**23**
g) Medicinal and Aromatic Plants										
Nursery management				0			0	0	0	0
Production and management technology				0			0	0	0	0
Post harvest technology and value addition				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total (g)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GT (a-g)	**3**	**134**	**36**	**170**	**8**	**0**	**8**	**142**	**36**	**178**
III Soil Health and Fertility Management										
Soil fertility management	1	65	0	65	17	0	17	82	0	82

Integrated water management				0			0	0	0	0
Integrated Nutrient Management	1	0	30	30	0	0	0	0	30	30
Production and use of organic inputs	4	206	112	318	53	38	91	259	150	409
Management of Problematic soils				0			0	0	0	0
Micro nutrient deficiency in crops				0			0	0	0	0
Nutrient Use Efficiency	1	27	0	27	0	0	0	27	0	27
Balance use of fertilizers	1	67	0	67	0	0	0	67	0	67
Soil and Water Testing				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total	**8**	**365**	**142**	**507**	**70**	**38**	**108**	**435**	**180**	**615**
IV Livestock Production and Management										
Dairy Management				0			0	0	0	0
Poultry Management				0			0	0	0	0
Piggery Management				0			0	0	0	0
Rabbit Management				0			0	0	0	0
Animal Nutrition Management				0			0	0	0	0
Disease Management	1	8	217	225			0	8	217	225
Feed & fodder technology				0			0	0	0	0
Production of quality animal products	1	7	243	250	0	0	0	7	243	250
Others (pl specify)				0			0	0	0	0
Total	**2**	**15**	**460**	**475**	**0**	**0**	**0**	**15**	**460**	**475**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	0	0	0	21	21	0	21	21
Design and development of low/minimum cost diet	1	0	17	17	0	3	3	0	20	20
Designing and development for high nutrient efficiency diet				0			0	0	0	0
Minimization of nutrient loss in processing				0			0	0	0	0
Processing and cooking	1		10	10		10	10	0	20	20
Gender mainstreaming through SHGs				0			0	0	0	0
Storage loss minimization techniques				0			0	0	0	0
Value addition	2	0	65	65	0	15	15	0	80	80
Women empowerment				0			0	0	0	0
Location specific drudgery reduction technologies	1	0	30	30	0	0	0	0	30	30
Rural Crafts				0			0	0	0	0
Women and child care	1	0	30	30	0	0	0	0	30	30
Others (pl specify)				0			0	0	0	0
Total	**7**	**0**	**152**	**152**	**0**	**49**	**49**	**0**	**201**	**201**
VI Agril. Engineering										
Farm Machinary and its maintenance				0			0	0	0	0
Installation and maintenance of micro irrigation systems	1	30	0	30	0	0	0	30	0	30
Use of Plastics in farming practices				0			0	0	0	0
Production of small tools and implements				0			0	0	0	0
Repair and maintenance of farm machinery and implements				0			0	0	0	0
Small scale processing and value addition				0			0	0	0	0
Post Harvest Technology				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total	**1**	**30**	**0**	**30**	**0**	**0**	**0**	**30**	**0**	**30**
VII Plant Protection										
Integrated Pest Management	7	314	36	350	45	6	51	359	42	401
Integrated Disease Management	5	642	174	816	87	31	118	729	205	934
Bio-control of pests and diseases	1	96	0	96	0	0	0	96	0	96
Production of bio control agents and bio pesticides	2	123	0	123	0	0	0	123	0	123
Others (pl specify)				0			0	0	0	0
Total	**15**	**1175**	**210**	**1385**	**132**	**37**	**169**	**1307**	**247**	**1554**
VIII Fisheries										
Integrated fish farming	1	23	8	31			0	23	8	31
Carp breeding and hatchery management	1	17	4	21			0	17	4	21
Carp fry and fingerling rearing				0			0	0	0	0
Composite fish culture	1	38	0	38			0	38	0	38

Hatchery management and culture of freshwater prawn				0			0	0	0	0
Breeding and culture of ornamental fishes				0			0	0	0	0
Portable plastic carp hatchery				0			0	0	0	0
Pen culture of fish and prawn	1	15	0	15			0	15	0	15
Shrimp farming	1	28	6	34			0	28	6	34
Edible oyster farming				0			0	0	0	0
Pearl culture				0			0	0	0	0
Fish processing and value addition				0			0	0	0	0
Others (pl specify)	1	18	7	25			0	18	7	25
Total	**6**	**139**	**25**	**164**	**0**	**0**	**0**	**139**	**25**	**164**
IX Production of Inputs at site										
Seed Production				0			0	0	0	0
Planting material production				0			0	0	0	0
Bio-agents production				0			0	0	0	0
Bio-pesticides production				0			0	0	0	0
Bio-fertilizer production				0			0	0	0	0
Vermi-compost production				0			0	0	0	0
Organic manures production	2	87	19	106	5	2	7	92	21	113
Production of fry and fingerlings				0			0	0	0	0
Production of Bee-colonies and wax sheets				0			0	0	0	0
Small tools and implements				0			0	0	0	0
Production of livestock feed and fodder				0			0	0	0	0
Production of Fish feed				0			0	0	0	0
Mushroom Production				0			0	0	0	0
Apiculture				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total	**2**	**87**	**19**	**106**	**5**	**2**	**7**	**92**	**21**	**113**
X Capacity Building and Group Dynamics										
Leadership development				0			0	0	0	0
Group dynamics	1	75	0	75	5	0	5	80	0	80
Formation and Management of SHGs				0			0	0	0	0
Mobilization of social capital	1	127	0	127	8	0	8	135	0	135
Entrepreneurial development of farmers/youths	1	25	0	25	0	0	0	25	0	25
WTO and IPR issues				0			0	0	0	0
Others (pl specify)	1	21	0	21	4	0	4	25	0	25
Total	**4**	**248**	**0**	**248**	**17**	**0**	**17**	**265**	**0**	**265**
XI Agro-forestry										
Production technologies				0			0	0	0	0
Nursery management				0			0	0	0	0
Integrated Farming Systems				0			0	0	0	0
Others (pl specify)				0			0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GRAND TOTAL	**55**	**2482**	**1084**	**3566**	**303**	**143**	**446**	**2785**	**1227**	**4012**

Farmers' Training including sponsored training programmes – CONSOLIDATED (On + Off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	3	87	0	87	27	0	27	114	0	114
Resource Conservation Technologies	1	21	0	21	8	0	8	29	0	29
Cropping Systems	0	0	0	0	0	0	0	0	0	0
Crop Diversification	0	0	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0	0	0
Micro Irrigation/irrigation	1	31	14	45	6	5	11	37	19	56
Seed production	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Crop Management	2	166	26	192	30	12	42	196	38	234
Soil & water conservatioin	0	0	0	0	0	0	0	0	0	0
Integrated nutrient management	1	26	0	26	0	0	0	26	0	26
Production of organic inputs	0	0	0	0	0	0	0	0	0	0

Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**8**	**331**	**40**	**371**	**71**	**17**	**88**	**402**	**57**	**459**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops	0	0	0	0	0	0	0	0	0	0
Off-season vegetables	0	0	0	0	0	0	0	0	0	0
Nursery raising	0	0	0	0	0	0	0	0	0	0
Exotic vegetables	0	0	0	0	0	0	0	0	0	0
Export potential vegetables	0	0	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0	0	0
Protective cultivation	2	114	36	150	5	0	5	119	36	155
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (a)	**2**	**114**	**36**	**150**	**5**	**0**	**5**	**119**	**36**	**155**
b) Fruits										
Training and Pruning	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	0	0	0	0	0	0	0	0	0	0
Management of young plants/orchards	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (b)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
c) Ornamental Plants										
Nursery Management	0	0	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (c)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
d) Plantation crops										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (d)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
e) Tuber crops										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices										
Production and Management technology	2	44	0	44	3	0	3	47	0	47
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (f)	**2**	**44**	**0**	**44**	**3**	**0**	**3**	**47**	**0**	**47**
g) Medicinal and Aromatic Plants										
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (g)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GT (a-g)	**4**	**158**	**36**	**194**	**8**	**0**	**8**	**166**	**36**	**202**
III Soil Health and Fertility Management										
Soil fertility management	1	65	0	65	17	0	17	82	0	82
Integrated water management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	3	17	35	52	5	24	29	22	59	81
Production and use of organic inputs	5	245	112	357	56	38	94	301	150	451
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	1	27	0	27	0	0	0	27	0	27
Balance use of fertilizers	1	67	0	67	0	0	0	67	0	67
Soil and Water Testing	1	185	12	197	40	4	44	225	16	241
Others (pl specify)	0	0	0	0	0	0	0	0	0	0

Total	**12**	**606**	**159**	**765**	**118**	**66**	**184**	**724**	**225**	**949**
IV Livestock Production and Management										
Dairy Management	0	0	0	0	0	0	0	0	0	0
Poultry Management	0	0	0	0	0	0	0	0	0	0
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	1	0	30	30	0	0	0	0	30	30
Disease Management	3	8	273	281	0	0	0	8	273	281
Feed & fodder technology	0	0	0	0	0	0	0	0	0	0
Production of quality animal products	1	7	243	250	0	0	0	7	243	250
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**5**	**15**	**546**	**561**	**0**	**0**	**0**	**15**	**546**	**561**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	2	0	71	71	0	21	21	0	92	92
Design and development of low/minimum cost diet	1	0	17	17	0	3	3	0	20	20
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	1	0	17	17	0	11	11	0	28	28
Processing and cooking	1	0	10	10	0	10	10	0	20	20
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0
Value addition	3	0	99	99	0	15	15	0	114	114
Women empowerment	0	0	0	0	0	0	0	0	0	0
Location specific drudgery reduction technologies	1	0	30	30	0	0	0	0	30	30
Rural Crafts	1	0	29	29	0	0	0	0	29	29
Women and child care	1	0	30	30	0	0	0	0	30	30
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**11**	**0**	**303**	**303**	**0**	**60**	**60**	**0**	**363**	**363**
VI Agril. Engineering										
Farm Machinary and its maintenance	0	0	0	0	0	0	0	0	0	0
Installation and maintenance of micro irrigation systems	2	85	0	85	8	0	8	93	0	93
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**2**	**85**	**0**	**85**	**8**	**0**	**8**	**93**	**0**	**93**
VII Plant Protection										
Integrated Pest Management	10	546	36	582	95	6	101	641	42	683
Integrated Disease Management	7	718	174	892	87	31	118	805	205	1010
Bio-control of pests and diseases	1	96	0	96	0	0	0	96	0	96
Production of bio control agents and bio pesticides	2	123	0	123	0	0	0	123	0	123
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**20**	**1483**	**210**	**1693**	**182**	**37**	**219**	**1665**	**247**	**1912**
VIII Fisheries										
Integrated fish farming	1	23	8	31	0	0	0	23	8	31
Carp breeding and hatchery management	1	17	4	21	0	0	0	17	4	21
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Composite fish culture	1	38	0	38	0	0	0	38	0	38
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	1	15	0	15	0	0	0	15	0	15
Shrimp farming	1	28	6	34	0	0	0	28	6	34
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	1	18	7	25	0	0	0	18	7	25
Total	**6**	**139**	**25**	**164**	**0**	**0**	**0**	**139**	**25**	**164**

IX Production of Inputs at site										
Seed Production	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0
Organic manures production	3	87	49	136	5	2	7	92	51	143
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Apiculture	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**3**	**87**	**49**	**136**	**5**	**2**	**7**	**92**	**51**	**143**
X Capacity Building and Group Dynamics										
Leadership development	0	0	0	0	0	0	0	0	0	0
Group dynamics	2	75	62	137	5	9	14	80	71	151
Formation and Management of SHGs	1	0	30	30	0	0	0	0	30	30
Mobilization of social capital	2	153	0	153	15	0	15	168	0	168
Entrepreneurial development of farmers/youths	2	50	0	50	0	0	0	50	0	50
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	1	21	0	21	4	0	4	25	0	25
Total	**8**	**299**	**92**	**391**	**24**	**9**	**33**	**323**	**101**	**424**
XI Agro-forestry										
Production technologies	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GRAND TOTAL	**79**	**3203**	**1460**	**4663**	**416**	**191**	**607**	**3619**	**1651**	**5270**

Training for Rural Youths including sponsored training programmes (On campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops				0			0	0	0	0
Training and pruning of orchards				0			0	0	0	0
Protected cultivation of vegetable crops				0			0	0	0	0
Commercial fruit production				0			0	0	0	0
Integrated farming				0			0	0	0	0
Seed production				0			0	0	0	0
Production of organic inputs				0			0	0	0	0
Planting material production				0			0	0	0	0
Vermi-culture				0			0	0	0	0
Mushroom Production				0			0	0	0	0
Bee-keeping				0			0	0	0	0
Sericulture				0			0	0	0	0
Repair and maintenance of farm machinery and implements				0			0	0	0	0
Value addition	1	0	27	27	0	20	20	0	47	47
Small scale processing				0			0	0	0	0
Post Harvest Technology				0			0	0	0	0
Tailoring and Stitching				0			0	0	0	0
Rural Crafts	1	0	36	36	0	0	0	0	36	36
Production of quality animal products				0			0	0	0	0
Dairying				0			0	0	0	0
Sheep and goat rearing				0			0	0	0	0
Quail farming				0			0	0	0	0
Piggery				0			0	0	0	0
Rabbit farming				0			0	0	0	0

Poultry production				0			0	0	0	0
Ornamental fisheries				0			0	0	0	0
Composite fish culture				0			0	0	0	0
Freshwater prawn culture				0			0	0	0	0
Shrimp farming				0			0	0	0	0
Pearl culture				0			0	0	0	0
Cold water fisheries				0			0	0	0	0
Fish harvest and processing technology				0			0	0	0	0
Fry and fingerling rearing				0			0	0	0	0
Any other (pl.specify)				0			0	0	0	0
TOTAL	**2**	**0**	**63**	**63**	**0**	**20**	**20**	**0**	**83**	**83**

Training for Rural Youths including sponsored training programmes (Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops				0			0	0	0	0
Training and pruning of orchards				0			0	0	0	0
Protected cultivation of vegetable crops				0			0	0	0	0
Commercial fruit production				0			0	0	0	0
Integrated farming				0			0	0	0	0
Seed production				0			0	0	0	0
Production of organic inputs	2	48	0	48	9	0	9	57	0	57
Planting material production				0			0	0	0	0
Vermi-culture	1	85	0	85	35	0	35	120	0	120
Mushroom Production				0			0	0	0	0
Bee-keeping				0			0	0	0	0
Sericulture				0			0	0	0	0
Repair and maintenance of farm machinery and implements	1	30	0	30	0	0	0	30	0	30
Value addition	1	0	30	30	0	0	0	0	30	30
Small scale processing	1	42	0	42	7	0	7	49	0	49
Post Harvest Technology				0			0	0	0	0
Tailoring and Stitching				0			0	0	0	0
Rural Crafts				0			0	0	0	0
Production of quality animal products				0			0	0	0	0
Dairying				0			0	0	0	0
Sheep and goat rearing				0			0	0	0	0
Quail farming				0			0	0	0	0
Piggery				0			0	0	0	0
Rabbit farming				0			0	0	0	0
Poultry production				0			0	0	0	0
Ornamental fisheries				0			0	0	0	0
Composite fish culture				0			0	0	0	0
Freshwater prawn culture				0			0	0	0	0
Shrimp farming				0			0	0	0	0
Pearl culture				0			0	0	0	0
Cold water fisheries				0			0	0	0	0
Fish harvest and processing technology				0			0	0	0	0
Fry and fingerling rearing				0			0	0	0	0
Any other (pl.specify)				0			0	0	0	0
TOTAL	**6**	**205**	**30**	**235**	**51**	**0**	**51**	**256**	**30**	**286**

Training for Rural Youths including sponsored training programmes – CONSOLIDATED (On + Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	0	0	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	2	48	0	48	9	0	9	57	0	57
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	1	85	0	85	35	0	35	120	0	120

Mushroom Production	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	1	30	0	30	0	0	0	30	0	30
Value addition	2	0	57	57	0	20	20	0	77	77
Small scale processing	1	42	0	42	7	0	7	49	0	49
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0
Rural Crafts	1	0	36	36	0	0	0	0	36	36
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0	0	0
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	**8**	**205**	**93**	**298**	**51**	**20**	**71**	**256**	**113**	**369**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	1	65	0	65	0	0	0	65	0	65
Integrated Pest Management	1	103	0	103	46	0	46	149	0	149
Integrated Nutrient management	1	16	0	16	2	0	2	18	0	18
Rejuvenation of old orchards				0			0	0	0	0
Protected cultivation technology				0			0	0	0	0
Production and use of organic inputs	1	55	6	61	0	0	0	55	6	61
Care and maintenance of farm machinery and implements				0			0	0	0	0
Gender mainstreaming through SHGs				0			0	0	0	0
Formation and Management of SHGs				0			0	0	0	0
Women and Child care	1	0	10	10	0	2	2	0	12	12
Low cost and nutrient efficient diet designing				0			0	0	0	0
Group Dynamics and farmers organization				0			0	0	0	0
Information networking among farmers				0			0	0	0	0
Capacity building for ICT application				0			0	0	0	0
Management in farm animals				0			0	0	0	0
Livestock feed and fodder production				0			0	0	0	0
Household food security				0			0	0	0	0
Any other (pl.specify)				0			0	0	0	0
TOTAL	**5**	**239**	**16**	**255**	**48**	**2**	**50**	**287**	**18**	**305**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops				0			0	0	0	0
Integrated Pest Management				0			0	0	0	0
Integrated Nutrient management				0			0	0	0	0
Rejuvenation of old orchards				0			0	0	0	0
Protected cultivation technology				0			0	0	0	0
Production and use of organic inputs	1	30	0	30	2	0	2	32	0	32
Care and maintenance of farm machinery and implements				0			0	0	0	0
Gender mainstreaming through SHGs				0			0	0	0	0

Formation and Management of SHGs				0			0	0	0	0
Women and Child care				0			0	0	0	0
Low cost and nutrient efficient diet designing				0			0	0	0	0
Group Dynamics and farmers organization				0			0	0	0	0
Information networking among farmers				0			0	0	0	0
Capacity building for ICT application				0			0	0	0	0
Management in farm animals				0			0	0	0	0
Livestock feed and fodder production				0			0	0	0	0
Household food security				0			0	0	0	0
Any other (pl.specify)				0			0	0	0	0
TOTAL	**1**	**30**	**0**	**30**	**2**	**0**	**2**	**32**	**0**	**32**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	1	65	0	65	0	0	0	65	0	65
Integrated Pest Management	1	103	0	103	46	0	46	149	0	149
Integrated Nutrient management	1	16	0	16	2	0	2	18	0	18
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	2	85	6	91	2	0	2	87	6	93
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Women and Child care	1	0	10	10	0	2	2	0	12	12
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	**6**	**269**	**16**	**285**	**50**	**2**	**52**	**319**	**18**	**337**

Table. Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Increasing production and productivity of crops	**10**	**369**	**154**	**523**	**38**	**38**	**76**	**407**	**192**	**599**
Commercial production of vegetables				**0**			**0**	**0**	**0**	**0**
Production and value addition										
Fruit Plants				**0**			**0**	**0**	**0**	**0**
Ornamental plants				**0**			**0**	**0**	**0**	**0**
Spices crops				**0**			**0**	**0**	**0**	**0**
Soil health and fertility management	**2**	**94**	**0**	**94**	**0**	**0**	**0**	**94**	**0**	**94**
Production of Inputs at site	**2**	**38**	**0**	**38**	**13**	**0**	**13**	**51**	**0**	**51**
Methods of protective cultivation				**0**			**0**	**0**	**0**	**0**
Others (pl. specify)				**0**			**0**	**0**	**0**	**0**
Total	**14**	**501**	**154**	**655**	**51**	**38**	**89**	**552**	**192**	**744**
Post harvest technology and value addition										
Processing and value addition	**3**	**0**	**102**	**102**	**0**	**35**	**35**	**0**	**137**	**137**
Others (pl. specify)				**0**			**0**	**0**	**0**	**0**
Total	**3**	**0**	**102**	**102**	**0**	**35**	**35**	**0**	**137**	**137**
Farm machinery										
Farm machinery, tools and implements	**2**	**85**	**0**	**85**	**8**	**0**	**8**	**93**	**0**	**93**
Others (pl. specify)				**0**			**0**	**0**	**0**	**0**
Total	**2**	**85**	**0**	**85**	**8**	**0**	**8**	**93**	**0**	**93**
Livestock and fisheries										

Livestock production and management	1	7	243	250	0	0	0	7	243	250
Animal Nutrition Management	1	0	30	30	0	0	0	0	30	30
Animal Disease Management	2	8	245	253	0	0	0	8	245	253
Fisheries Nutrition				0			0	0	0	0
Fisheries Management				0			0	0	0	0
Others (pl. specify)				0			0	0	0	0
Total	4	15	518	533	0	0	0	15	518	533
Home Science										
Household nutritional security	1	0	17	17	0	11	11	0	28	28
Economic empowerment of women	1	0	36	36	0	0	0	0	36	36
Drudgery reduction of women	1	0	30	30	0	0	0	0	30	30
Others (pl. specify)				0			0	0	0	0
Total	3	0	83	83	0	11	11	0	94	94
Agricultural Extension										
Capacity Building and Group Dynamics	1	30	0	30	0	0	0	30	0	30
Others (pl. specify)	1	89	36	125	0	0	0	89	36	125
Total	2	119	36	155	0	0	0	119	36	155
GRAND TOTAL	28	720	893	1613	59	84	143	779	977	1756

Name of sponsoring agencies involved: ATMA, DAO, FTC, Spices board of India, Agakhan trust, NGO, GGRC, ICDS

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Commercial floriculture				0			0	0	0	0
Commercial fruit production				0			0	0	0	0
Commercial vegetable production				0			0	0	0	0
Integrated crop management				0			0	0	0	0
Organic farming				0			0	0	0	0
Others (pl. specify)				0			0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition										
Value addition	2	0	73	73	0	2	2	0	75	75
Others (pl. specify)				0			0	0	0	0
Total	2	0	73	73	0	2	2	0	75	75
Livestock and fisheries										
Dairy farming				0			0	0	0	0
Composite fish culture				0			0	0	0	0
Sheep and goat rearing				0			0	0	0	0
Piggery				0			0	0	0	0
Poultry farming				0			0	0	0	0
Others (pl. specify)				0			0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Income generation activities										
Vermicomposting	1	0	0	0	0	21	21	0	21	21
Production of bio-agents, bio-pesticides,				0			0	0	0	0
bio-fertilizers etc.				0			0	0	0	0
Repair and maintenance of farm machinery				0			0	0	0	0
and implements				0			0	0	0	0
Rural Crafts				0			0	0	0	0
Seed production				0			0	0	0	0
Sericulture				0			0	0	0	0
Mushroom cultivation				0			0	0	0	0
Nursery, grafting etc.				0			0	0	0	0
Tailoring, stitching, embroidery, dying etc.				0			0	0	0	0
Agril. para-workers, para-vet training				0			0	0	0	0
Others (pl. specify)				0			0	0	0	0
Total	1	0	0	0	0	21	21	0	21	21
Agricultural Extension										
Capacity building and group dynamics				0			0	0	0	0
Others (pl. specify)				0			0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	3	0	73	73	0	23	23	0	96	96

IV. EXTENSION PROGRAMMES

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	144	336	16	352
Diagnostic visits	42	106	6	112
Field Day	14	431	27	458
Group discussions	17	517	37	554
Kisan Ghosthi	25	2596	68	2664
Film Show	111	6620	776	7396
Self -help groups	5	195	3	198
Kisan Mela	1	1310	50	1360
Exhibition	20	19160	505	19665
Scientists' visit to farmers field	267	924	3	927
Plant/animal health camps	0	0	0	0
Farm Science Club	4	266	0	266
Ex-trainees Sammelan	1	71	0	71
Farmers' seminar/workshop	5	437	20	457
Method Demonstrations	5	110	1	111
Celebration of important days	3	459	88	547
Special day celebration	1	241	61	302
Exposure visits	4	159	2	161
Others (pl. specify)				0
Total	**669**	**33938**	**1663**	**35601**

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	0
Extension Literature	9001
News paper coverage	9
Popular articles	2
Radio Talks	0
TV Talks	0
Animal health amps (Number of animals treated)	0
Others (pl. specify)	
Total	**9012**

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marketing	Aware-ness	Other enterprise	Total
Jamnagar	Text only	2				6	1	9
	Voice only							
	Voice & Text both							
	Total Messages	**2**	**0**	**0**	**0**	**6**	**1**	**9**
	Total farmers Benefitted	**10308**	**0**	**0**	**0**	**25908**	**5219**	**41435**

V. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS (28.09.2015 to 03.10.2015)

Number of KVKs organised Technology Week	Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
	Gosthies	6	584	Concept of Organic Farming, IPM for kharif crop with special emphasis on pink bollworm and mealy bug, Importance of Micro irrigation system in agri, Integrated nutrient management, Ideal animal husbandry, IPM for kharif crop with special emphasis on white grub.
	Lectures organised	36	584	IPM & IDM in Groundnut, ICT importance in Agriculture, More milk produce in scientific way, Value addition in farm products, IPM in Cotton, Importance of Organic farming, Reduce rate of crop cultivation in through Integrated Pest and disease control, Importance of micro irrigation system, Diesis management in Animal , Importance of Kitchen gardening, Pink bollworm management in Cotton, Importance of micronutrients in agriculture, Integrated Pest and disease of major crops, Emphasizes on adverse effect of climate change in agriculture, Importance of soil and water analysis, Mechanization in modern Agriculture, Irrigation management in agricultural crop
	Exhibition	1	584	Farm implements were put for exhibition cum demonstration purpose
	Film show	18	584	Film Show of different technologies were presented
	Fair			
	Farm Visit	6	584	During farm visit farmers were demonstrate reaper demonstration for sorghum cutting. and also other different implements were demonstrated
	Diagnostic Practicals	19	50	
	Distribution of Literature (No.)	10	1800	
	Distribution of Seed (q)	0	0	
	Distribution of Planting materials (No.)	0	0	
	Bio Product distribution (Kg)	0	0	
	Bio Fertilizers (q)	0	0	
	Distribution of fingerlings	0	0	
	Distribution of Livestock specimen (No.)	0	0	
	Total number of farmers visited the technology week		584	

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

Production of seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals						
Oilseeds	Sesamum	GT-3		0.82	16646	22
	Sesamum	GT-3		3.1	38750	39
Pulses	Green gram	GM-4		8.83	88300	148
Commercial crops						

Vegetables						
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Others	Sun hemp			2.8	-	-
Total				**15.55**	**143696**	**209**

Production of planting materials by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Commercial						
Vegetable seedlings						
Fruits						
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices						
Tuber						
Fodder crop saplings						
Forest Species						
Others						
Total						

Production of Bio-Products

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

Table: Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals				
Cows	Gir Cow	27	60960	5
Buffaloes				
Calves				
Others (Pl. specify)				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				

Piggery				
Piglet				
Others (Pl.specify)				
Fisheries				
Indian carp				
Exotic carp				
Others (Pl. specify)				
Total				

VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	**252**	**252**	**34**	**-**
Water				
Plant				
Manure				
Others (pl.specify)				
Total				

VIII. SCIENTIFIC ADVISORY COMMITTEE

Name of KVK	Number of SACs conducted
JAMNAGAR	1

IX. NEWSLETTER/MAGAZINE

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

X. PUBLICATIONS

Category	Number
Research Paper	9
Technical bulletins	
Technical reports	6
Others (pl. specify)	

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

Activities conducted				
No. of Training programmes	**No. of Demonstration s**	**No. of plant materials produced**	**Visit by farmers (No.)**	**Visit by officials (No.)**

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

Introduction of alternate crops/varieties

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

Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds		
Pulses		
Cereals		
Vegetable crops		
Tuber crops		
Total		

Farmers-scientists interaction on livestock management

Livestock components	Number of interactions	No.of participants
Total		

Animal health camps organised

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

Seed distribution in drought hit states

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

Large scale adoption of resource conservation technologies

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

Awareness campaign

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

XIII. DETAILS ON HRD ACTIVITIES

A. HRD activities organized in identified areas for KVK staff by the Directorate of Extension

Name of the SAU	Title of the training programmes	No of programmes	No. of Participants	No. of KVKs involved
Total				

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

Title of the training programmes	No of programmes	No. of Participants	No. of KVKs involved
Total			

TRAINING CUM WORKSHOP ATTENDED BY KVK STAFF

Sr. No.	Period	Name of Officer	Title	Venue or Place	Sponsoring Agency	Duration (days)
1	18/03/2016	19/03/2016	Dr. KANTILAL PARSHOTAMBHAI BARAIYA	National seminar on "Contemporary Innovations for Quantum Extension in Agricultural Development" By SEEG, Gujarat	Conference Hall, Veterinary College, JAU, Junagadh	2
2	18/03/2016	19/03/2016	S. H. Lakhani	- " -	Conference Hall, Veterinary College, JAU, Junagadh	2
3	18/03/2016	19/03/2016	GADHIYA VIPULKUMAR CHHAGANBHAI	- " -	Conference Hall, Veterinary College, JAU, Junagadh	2
4	18/03/2016	19/03/2016	BARAIYA ANJANA KANTILAL	- " -	Conference Hall, Veterinary College, JAU, Junagadh	2
5	18/03/2016	19/03/2016	Dr. P. S. Gorfad	- " -	JAU, Junagadh	2
6	01/02/2016	28/02/2016	GADHIYA VIPULKUMAR CHHAGANBHAI	orientation prograame for all disciplines	UGC, HRDC, Saurashtra University, Rajkot	28
7	01/02/2016	28/02/2016	S. H. Lakhani	Orientation Programme :110 Sub. : All Disciplines	UGC: HRDC, SAURASHTRA UNIVERSITY, RAJKOT	28
8	11/12/2015	12/12/2015	Dr. P. S. Gorfad	Sensitization Workshop cum training programme	CAZRI, Jodhpur	2
9	17/01/2016	21/01/2016	Dr. KANTILAL PARSHOTAMBHAI BARAIYA	3 MDP for programme coordinators of KVKs for training at NAARM for new recruited programme coordinators of KVKs	ATARI	5
10	05/01/2016	14/01/2016	Dr. KANTILAL PARSHOTAMBHAI BARAIYA	3rd MDP for programme Coordinators of KVKs	At Best KVK of INDIA	10
11	15/12/2015	29/12/2015	Dr. KANTILAL PARSHOTAMBHAI BARAIYA	3 MDP for programme coordinators of KVKs for training at NAARM	National Academy of Agricultural Research Management (NAARM), Rajendranagar, Hyderabad-500030	15
12	25/07/2015	26/07/2015	Dr. KANTILAL PARSHOTAMBHAI BARAIYA	9th National Conference on KVK-2015	Patna (Bihar)	2
13	20/07/2015	16/08/2015	BARAIYA ANJANABEN KANTILAL	Orientation Programme for All Disciplines	UGC:Human Resource Development centre, Saurashtra University,Rajkot	28
14	24/06/2015	26/06/2015	Dr. KANTILAL PARSHOTAMBHAI BARAIYA	Office Management and Financial Management	JAU, Junagadh	3

XIV. CASE STUDIES (CASE STUDIES MAY BE GIVEN IN DETAIL AS PER THE FOLLOWING FORMAT)

1. Case Study/ Success Story

Innovation of Groundnut Pod Picking Implement

Biodata of farmer

1.	Name of farmer	:	Mr. Tapubhai Jematbhai Kanzariya
2.	Present address	:	Navapara, Garbi chowk, At. Jamkalyanpur Block: Jamkalyanpur District: Devbhoomi Dwarka PIN:- 361 320
3.	Date of birth / Age	:	01.05.1977 / 33 Years
4.	Contact No.	:	09998354478
5.	Education	:	9th Std. Pass
6.	Land holding	:	6.8 ha

Gujarat is leading State in groundnut cultivation in both area and production. Groundnut cultivation in Gujarat predominantly concentrated in Saurashtra region. Hence, it is well known as an oil pouch of the India. It is also an important crop of Devbhoomi Dwarka district and especially of Jamkalyanpur taluka. Farmers facing prime problem in groundnut cultivation is loss due to remained pods in soil while harvesting.

Generally, groundnut is harvested by blade harrow. At the time of harvesting many pods are remaining in the soil. Ground nut is a costlier oilseed crop and wastage of this farm product is very painful for farmers. It reduces the profit of farmers. They have to collect the pods from the soil by labour manually which is wastage of man power and time too. Many times return is less than cost of labor charges.

Each and every year same situation was arising hence, Shri Tapubhai decided to overcome this problem permanently. He started to think over it and after many trial and error finally developed an implement which is automatically picks up pods from the soil.

This implement can be attached with tractor and run over furrow of groundnut and it collects pods detached from the plant and remained in the soil at the time of harvesting. The collected pods are stored in attached separate collector. The small stone, soil clots and other impurities which are come with groundnut pods are separated and finally pure pods can be collected. With the help of this implement the pod can be collected from three rows at a time. Generally minimum 15 labours required to collect the pods from 1 hectare area in a day, while with the help of this implement, a single man can do this job within 2 to 3 hours. With the help of this implement not only we can save revenue, man power and time but also made the land available for next season.

Generally, to collect the pods from 1 hectare area per day 15 labour are required. If we consider Rs. 200 charge per labour, total Rs. 3000 is required for 1 hectare area. While with the help of this new developed implement, the costing of same job is only Rs. 700 (Rs. 200 labour charge for one person and Rs. 500 for diesel). So Rs. 2300 can be saved per hectare.

This implement is developed with the help of available materials and other sources at the cost of Rs. 40,000 but if we are going at large production, manufacturing cost can be reduced.

The successful trial of this implant is carried out in 2014-15. After successful trial on his field many farmers were tried this implement on their field and got successful result. This implement can generate the sources of side income by giving it to other farmers on rental basis.

In present agricultural scenario, shortage of labour and high labour cost, with the help of this implement, very easily, in less time and less expenditure farm operation could be carried out. If consider district or state level we can save man power, time, and the revenue at a large scale.

2. Case study/ Success story

PROFILE OF FARM INNOVATORS
Thematic Area: Horticultural Production
"Organic production of date palm in Gujarat"

Personal Profile		**Organic date palm (Tissue culture & Local) with drip irrigation system**	
Name of farmer	:	Sureshbhai Damjibhai Savaliya	**Shri Sureshbhai Damjibhai Savaliya** is very enthusiastic, hard worker, 8 pass and animal owner of JAGA village of Jamnagar district. Jaga village in interior village having undulating land. It is also very less rainfall area having hardly 300 to 350 mm rainfalls. Groundwater is also scar in this area. The possibility of horticultural crops in negligible in this area. There is also major problem of wild animal's viz., blue bull, deer and pig. Sureshbhai have protected the field with wire-net fencing. Sureshbhai having completely dependent on farming. He has no any side income from any business, but he took farming as a business and started cultivation of date palm since last 8 years.
Contact No.	:	9429557495	
Address	:	At.- Jaga gam, Ta.- Jamnagar, Dist.- Jamnagar	
Age	:	52 Years	
Education (highest level and subject)	:	8 pass	
Land holding	:	3 acres 5 guntha	**Practical Utility of the Innovation/ Mode etc.**
Crops grown	:	Date palm	Shri Sureshbhai Damjibhai Savaliya is innovative farmer. He started Farming since last 25 years with common farming practices *viz.,* Groundnut, cotton, maize, sorghum, Lucerne and other fodders; and after some experience, he started brinjal growing in his farm. During Krushi Mahotshav he heard about the cultivation of date palm and he decide cultivation of date palm but initially he started with local date palm brought from Kutch. After that he comes in contact with Scientist from Krishi Vigyan Kendra, JAU, Jamnagar and he knows about the cultivation tissue culture date palm. Then he decided to some innovation and he started cultivation of tissue culture date palm in his farm. He observes clear difference between tissue culture plant and local plant. Uniform vegetative growth is observed in tissue culture plantation of date palm whereas in case of local cultivars uneven growth is observed and fruit set is also different while in tissue culture plantation flowering and fruit setting is same time and fruit are found at the bottom of the tree so it is very easy for picking. The test of tissue culture plant is sweeter than local plant. The fruit size and yield is higher in tissue culture plant. One most importance advantages of tissue culture date palm is fruit setting in tissue culture date palm is in three year while in case of local date palm fruit setting is observed in six year.
Livestock	:	5 - Cow, 1 - buffalo	
Business	:	Farming	
Special recognition	:	Innovative and Progressive farmer	

He also used drip irrigation system and he did not use any type of chemical fertilizer or chemical pesticide. He used bio fertilizer, liquid fertilizer, FYM, vermicompost and bio pesticide.

He harvesting 120 kg date fruit per palm or tree and earned 2.25 lac/vigha.

During the era of organic farming, he has appreciated for the cultivation of organic date palm cultivation and started one steps in a innovative work within 3 acre of land since last eight years. He has also marketing himself from his farm as retail counter by embossed branding "Shree Bhojalram Organic Kharekh" of Sureshbhai's farm.

Farmer with tissue culture plant of date

Crop grown in field with drip irrigation system in tissue culture crop

Barahi (Tissue culture) Date palm

Fruiting in tissue culture plant of Date palm

Fruiting in Local date palm plant

Farmers - Scientist interaction

3. Case study/ Success story

Value addition in groundnut – additional income to rural farm women

Name : Hansaben Kishorbhai Pedhadiya
At. : Sumari
Ta. : Jamnagar
Dist. : Jamnagar
Mo. :- 9925410324

Profile		
Age		34
Education		9 std.
Land holding		2.3 ha
Farming Experience		15 year
Crops Grown		Groundnut, sorghum, coriander, chickpea
Live stock		Cow-2, Heafer-1

Thematic area : Value addition of farm

Before contact with KVK :

- In the past year she do traditional farming and use chemicals, and fertilizers for more production.
- She grow groundnut and selling directly to marketing yard.
- She earn hardly Rs. 35 to 45 per kg groundnut.

Hansaben attend Krishi Mahotshav during 2010 and came in contact with Scientist of Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar. She discuss with scientist for groundnut cultivation. Afterward she visited KVK and attend training at KVK regularly. The she started organic farming.

She attend vocational training on value addition of farm products. Then she started preparation of roasted salted groundnut at home base. Primarily she sold at village level. She provided exposure from KVK for broad marketing of organic roasted salted groundnut (Khari Sing). She packing the groundnut sing in small attractive packing. Now a days she supply in different cities, by advance ordering of **"organic roasted salted groundnut seed"** @ Rs. 200 per kg. where as Rs. 70 per kg of simple seed. Normal groundnut pod production of 2500 kg per hectare which earn Rs. 100000/- for directly selling. After value addition, get 1500 kg seed kernel of groundnut and value addition she got Rs. 200 per kg value added seed kernels. Then overall Rs. 300000/- per hectare earned. It is widely difference of Rs. 200000/- of 1 hectare extra from traditional to value addition.

Many female farmers visited her activity and joined her activity. They decided to done this job in group approach.

XV. FUND UTILIZATION

Utilization of KVK funds during the year2015-16

S. No.	Particulars	Sanctioned	Released	Expenditure
A.	**Recurring Contingencies**			
1	**Pay& Allowances**	**66000000**	**6600000**	**6549493**
2	**Traveling allowances**	**155000**	**155000**	**142142**
3	**Contingencies**	**750000**	**750000**	**749914**
	TOTAL (A)	**750000**	**750000**	**7441549**
B.	**Non-Recurring Contingencies**	**0**	**0**	**0**
C.	**REVOLVING FUND**	0	0	0
GRAND TOTAL (A+B+C)		**7505000**	**7505000**	**7441549**

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2014 to March 2015	3512724	679076	351515	3840285
April 2015 to March 2016	3840285			**4423807**

XVI. OTHER SCHEME :

List of 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.)
Establishment of Agricultural Technology Information Centre (ATIC)	2015-16	State Government	1700000/-
Pre *kharif* sammelan	2015-16	ICAR	80000/-
Pre *rabi* sammelan	2015-16	ICAR	80000/-
Training Cum Awareness Programme On Protection Of Plant Varienties, Farmers Right Act2001 (PPV&FRA)	2015-16	ICAR	80000/-
Soil Health Card	2015-16	ICAR	125000/-
Cluster Frontline demonstration of rabi OIlseeds under NMOOP	2015-16	ICAR	700000/-
Cluster Frontline demonstration of rabi pulses under NSFM	2015-16	ICAR	150000/-

(a). ESTABLISHMENT OF AGRICULTURAL TECHNOLOGY INFORMATION CENTRE (ATIC)

Annual Progress Report of ATIC Scheme for the year 2015-16

A. Details of ATIC:

Sr. No.	Name of ATIC	Name of host institute	Name of ATIC manager	Telephone No.			E-mail address
				Office	Fax	Mobile	
1.	KVK, Jamnagar	Junagadh Agricultural University, Junagadh	Programme Coordinator	(0288) 2710165	(0288) 2710165	+919427980032	kvkjamnagar@jau.in

B. Details of farmers visit:

Sr. No.	Name of ATIC	Purpose of visit	No. of farmers visited
1.	KVK, Jamnagar	For Agricultural information	362

C. Facilities in ATIC (Operational):

Sr. No.	Particulars	No. of ATIC
1.	Reception Counter	No
2.	Exhibition/technology measures	Nil
3.	Touch screen kiosk	Nil
4.	Cafeteria	Yes
5.	Sales Counter	No
6.	Farmers feed back register	Yes
7.	Others	Nil

D. Technologies Information Provided

D. 1. Details technology information, category of information:

Name of ATIC	Information Category	No. of farmers benefitted	Variety	Pest Management	Disease management	Agro tech.	SWT	PHT	AH
KVK, Jamnagar	1. Kisan call Centre/ phone calls	203	24	37	20	9	69	15	29
	2. Video Shows	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	3. Letters Received	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	4. Letter replied	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	5. Training to famers/ technocrates/ students	199	81	50	17	-	25	Nil	26
	6. Others	-	-	-	-	-	-	-	-

D. 2. Publication (Print & Electronic media):

S.No.	Name of ATIC	Particular	No. sold/ distributed	Revenue generate	No. of farmers benefitted
1.	KVK, Jamnagar	Tech. bulletin	Nil	Nil	Nil
		Tech. inventory	Nil	Nil	Nil
2.		Leaflet	2239	Nil	2239
3.		Books	Nil	Nil	Nil
4.		Folders	Nil	Nil	Nil
5.		CDs	Nil	Nil	Nil
6.		DVDs	Nil	Nil	Nil
7.		Others	Nil	Nil	Nil

E. Technology products provided:

S.No.	Particular	Quantity	Unit of quantity	Value in Rs.	No. of farmers benefitted
1.	**Seeds**				
(i)	Green Gram (GM-4)	10.86	Quintal	107879	257
(ii)	Wheat (GW-496)	2.00	Quintal	2615	4
(iii)	Groundnut (GG-5)	3.90	Quintal	11973	3
(iv)	Sesame (GT-10)	0.92	Quintal	22326	14
(v)	Sesame (GT-3)	3.30	Quintal	39550	56
(vi)	Sesame (GT-2)	0.439	Quintal	2195	6
2.	**Planting materials**	-	No.	-	-
3.	**Live stock**	-	No.	-	-
4.	**Poultry birds**	-	No.	-	-
5.	**Bio Product**	-	Quintal	-	-
6.	**Others**	-	-	-	-
	(i) Fruits				
	1. Sapota	6.82	Quintal	6820	38
	2. Guava	0.56	Quintal	840	10
	(ii) Milk	1395	Lit.	39057	22

F. Technology services provided:

Name of ATIC	Particulars	No. of farmers benefitted
KVK, Jamnagar	Soil and Water testing	250
	Plant diagnosis	65
	Services to line department	27
	Others (Group Meeting, Field Visit, Field Day)	130

A. FLD conducted:

Sr. No.	Month	Crop/Inputs	Season	Variety	No. of Farmers/ Demonstration		
					Others	SC/ST	**Total**
1.	April-15 to March-	**Groundnut** PSB, Rizobium	Kharif	-	10	-	10
2		**Groundnut**	Kharif	-	10	-	10

	16	Beuvaria					
3		**Cotton** PSB, Azatobactor	Kharif	-	10	-	10
4		**Cotton** Beuvaria, Trichoderma	Kharif	-	10	-	10
5		**Brinjal** PSB, Azatobactor	Kharif	-	5	-	5
6		**Tomato** 1. Sea weed liquid fertilizer	Kharif	-	5	-	5
7		**Garlic** Beuvaria	Rabi	-	10	-	10
8		**Ridge gouard**	Rabi	PUSA Nasdar	7	3	10
9		**Brinjal**	Rabi	GJB-2	2	-	2
10		**Brinjal**	Rabi	GJB-3	2	-	2
11		**Indian bean**	Rabi	GJIB-2	1	-	1
12		**French bean**	Rabi	GJJB-11	1	-	1
13		**Cow Pea**	Rabi	AVC-1	6	2	8
14		**Wheat** PSB culture, Azatobactor	Rabi	-	50	-	50
15		**Cumin** Trichoderma	Rabi	-	50	-	50
	Total				179	5	184

B. Short term training courses:

Sr. No.	Month	Title of the Training	No. of Beneficiaries			No. of SC/ST Beneficiaries		
			M	F	Total	M	F	Total
1.	April-15 to March-16	1. Production technology of Kharif crop	25	-	25	5	-	5
2.		2. Soil Management and importance of soil testing	25	-	25	3	-	3
3.		3. Nutrition management in Rabi crops	27	26	53	-	-	-
4.		4. Management of Storage Pest	35	-	35	-	-	-
5.		5. Efficient use of water thorough micro irrigation system	27	26	53	-	-	-
	Total	**-**	**139**	**52**	**191**	**8**	**-**	**8**

C. Extension Activity:

Name of ATIC	Information Category	No. of farmers benefitted	Variety/INM	IPM	IDM	Agro Tech	SWT	PHT	AH/ FISH
KVK, Jamnagar	Kisan call Centre phone	**203**	24	37	20	9	69	15	29
	Training	**199**	81	50	17	-	25	-	26

Sr. No.	Name of Activity	No. of Activity	No. of Participant		
			M	F	T
1	Group meeting,	**5**	75	-	**75**
2	Field visit/Field Day	**11**	55	-	**55**
3	Night meeting etc.	**-**	-	-	**-**
4	Literature	**2239 no.**	-	-	**-**
5	Plant Diagnosis services	**65**	65	-	**65**

(b). WORD SOIL DAY REPORT (5th DECEMBER, 2015)

This is regarding celebration of WORLD SOIL DAY and distribution of soil health card to farmers on 5th December, 2015 by ICAR institute and SAUs. You are requested to furnish one page report on following points along with 1-2 photographs of the said events latest by 07th December 2015.

"World Soil Health Day" on 5th December 2015 at KVK, JAU, Jamnagar. Dr. P. B. Vasoya, President of District Panchayat; Shri Meghjibhai Chavda- MLA (76-Kalavad); Dr. A. Y. Desai, Director of Research, JAU, Junagadh; Dr. C. S. Chaudhary, DDO, Jamnagar; Dr. K. P. Baraiya, Programme Coordinator, KVK, JAU, Jamnagar and Dr. M. D. Khanpara, Research Scientist (Pearl Millet), Pearl Millet Research Station, JAU, Jamnagar inaugural the function by lightening the lamp. The team of scientist from KVK, JAU, Jamnagar delivered the lecture on different topic. 250 Soil Health Cards distributed and 302 participates take benefits.

Sr. No	**Particulars**	**Detail**
1	Name of the ICAR Institute /SAUs	Junagadh Agricultural University, Junagadh
2	Venue	Krushi Vigyan Kendra, JAU, Jamnagar
3	Total No. of participants attended the function	302
4	No. of Soil Health Card Distributed	250
5	Name of the Dignitary(s) graced the occasion	Dr. P. B. Vasoya, President of District Panchayat Shri Meghjibhai Chavda- MLA (76-Kalavad) Dr. A. Y. Desai, Director of Research, JAU, Junagadh Dr. C. S. Chaudhary, DDO, Jamnagar Dr. B. H. Pathak, Director, DRDA, Jamnagar

(c). FARMERS EXHIBITION AT KVK, JAMNAGAR

Farmers Exhibition were arranged at Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar on 5th December, 2015. The following dignitaries were present on this occasion.

1. Dr. P. B. Vasoya, President of District Panchayat
2. Shri Meghjibhai Chavda- MLA (76-Kalavad)

3. Dr. A. Y. Desai, Director of Research, JAU, Junagadh
4. Dr. C. S. Chaudhary, DDO, Jamnagar
5. Dr. B. H. Pathak, Director, DRDA, Jamnagar

Attraction of the exhibition

- Exhibition were arranged,
- Arrange Live demonstration,
- Arrange Soil Sample Method demonstration,
- Field visit

(d). MERA GAUV MERA GAURAV

Name of Village	Quater 1		
	Baseline Survey	Mobile-based Advisory	Other activity
Bhadara	8.10.15	68 Farmers	
Majoth	8.10.15	37 Farmers	
Nana Badanpar	6.10.15	220 Farmers	
Mota Thavaria	6.10.15	95 Farmers	Crop advisory & Field visit (12.10.15)
Moti Banugar	6.10.15	89 Farmers	
Karana	4.10.15	83 Farmers	
Vinjalpar	5.10.15	32 Farmers	
Dhaturiya	5.10.15	104 Farmers	
Sadodar	4.10.15	87 Farmers	
Jashapur	4.10.15	63 Farmers	

Activity carried out

Sr.	Activity	No. of Activity	No. of Farmer
1	Visit to village	24	235
2	Gosthis/Meeting Conducted	25	498
3	Mobile based advisory (No. of massage)	1163	1016
4	Literature Support provided	30	456
5	Facilitation for new varieties, seeds, technology(Area in ha)	29	106
6	Major problems Diagnosed	48	--
7	General Awareness Created	24	414
8	Linkages created with other Departments/Organization	2	26

(e). PINK BALL WORM CAMPAIGN

Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar during August month conducted 8 training programme for management of pink bollworm in cotton, 607 farmers benefited and also provide literature regarding the management of pink bollworm to the each farmer.

(f). ADARSH SANSAD GRAM (JAMBUDA)

Activity	Date	Number of Participants
Farmers Sammelan	16/07/2015	544
Kishan Gosthi	23/12/2015	53
Kishan Gosthi	05/03/2016	47
Field Visit	05/03/2016	4
GGRC Survey	-	4
Soil sample analyzed	5/12/2015	16
Field visit	01/11/2015	8

(g). PLANT VARIETIES & FARMERS' RIGHT ACT, 2001

Training-cum-Awareness Program on Protection of Plant Varieties & Farmers' Right Act, 2001 on 01.03.2016

Kendra, Junagadh Agricultural University, Jamnagar Celebrated "PPV & FRA" programme on Krishi Vigyan 1st March 2016 at KVK, JAU, Jamnagar. Dr. A. M. Parkhiya, Director of Extension Education, JAU, Junagadh. Dr. K. P. Baraiya, Programme Coordinator, KVK, JAU, Jamnagar and Dr. M. D. Khanpara, Research Scientist (Pearl Millet), Pearl Millet Research Station, JAU, Jamnagar inaugural the function by lightening the lamp. The team of scientist from KVK, JAU, Jamnagar delivered the lecture on different topic. 138 farmers participates take benefits.

Name of KVK	**Date of PPV&FRA Awareness Programme Conducted**	**Number of participants**	**Remarks if any**
Krishi Vigyan Kendra, Junagadh Agricultural University, JAMNAGAR	1/03/2016	138	List of Dignitaries remain present at this occasion **Dr. A. M. Parkhiya,** (Director of Extension Education, JAU, Junagadh) **Dr. H. R. Jadav** (Project Director-ATMA) **Dr. M. D. Khanpara** (Research Scientist(Pearl Millet), Pearl Millet Research Station, JAU, Jamnagar

(h). PRE-*KHARIF* CAMPAIGN ON 16.07.2015

A training jointly organized by Department of Horticulture, ATMA Project and Krushi Vigyan Kendra , Junagadh Agricultural University, Jamnagar at JAMBUDA, Village of Jamnagar District on 16th July 20, 2015. Dr. K. P. Baraiya, Dr. P. S. Gorfad, Shri V. C. Gadhiya and Shri S. H. Lakhani,

deliverd the lecture regarding the organic farming, Why organic farming is necessary?, benefits of organic farming, Pest management through bio agents.

Sl. No.	Name of the state	Name of district/KVK	Date on which conducted	Number of participants		Name of public representative
				Farmers	Others	
1	Gujarat	Jamnagar	16/07/2015	527	17	1

(i). PRE-*RABI* CAMPAIGN ON 01.03.2016

"Pre-*rabi* campaign" was celebrated on 5th December 2015 at KVK, JAU, Jamnagar. Dr. P. B. Vasoya, President of District Panchayat; Shri Meghjibhai Chavda- MLA (76-Kalavad); Dr. A. Y. Desai, Director of Research, JAU, Junagadh; Dr. C. S. Chaudhary, DDO, Jamnagar; Dr. K. P. Baraiya, Programme Coordinator, KVK, JAU, Jamnagar and Dr. M. D. Khanpara, Research Scientist (Pearl Millet), Pearl Millet Research Station, JAU, Jamnagar inaugural the function by lightening the lamp. The team of scientist from KVK, JAU, Jamnagar delivered the lecture on different topic. 250 Soil Health Cards distributed and 302 participates take benefits.

(j). SWACHCHHATA ABHIYAAN

Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar celebrated "**Swachchhata Abhiyaan"** at KVK, JAU, Jamnagar on 2nd October 2015.

(k). WOMEN EMPOWERMENT WEEK

Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar celebrated "**Women Empowerment Week**" at KVK, JAU, Jamnagar on 6th August, 171 women farmer of Jamnagar district participated. For the grant success of this celebration District Development Officer, Jamnagar and President of District Panchayat, Jamnagar remains present.

(l). JAY KISHAN JAY VIGYAN DIVAS

Jay Kishan Jay Vigyan Divas was celebrated by Krishi Vigyan Kendra, JAU, Jamnagar at Adarsh Sansad Gram Jambuda on 23rd December, 2015.

Name of KVK	Date of Kisan gosthi organized	Name of village of Adarsh Sansad Gram	Number of Participants
Krishi Vigyan Kendra, J.A.U. Jamnagar	23/12/2015	Jambuda	53

(m). NEEM COATED UREA SURVEY

Neem coated urea survey carried out by Krishi Vigyan Kendra, JAU, Jamnagar

Name of District	No of Taluka	No. of Farmers
Jamnagar	6	60
Devbhumi Dwarka	4	40
Total		100

(n). GGRC – MIS SURVEY

Name of District	Name of Taluka	No. of Farmers	Remark
Jamnagar	Jamnagar	36	Survey carried out by all KVK, Scientist
II	Jodia	8	
II	Dhrol	30	

(o). ONION DEMONSTRATION TRIALS

Season : *kharif*

Onion Seed varieties provide by: Director of Onion and Garlic Research (DOGR), Indian Council of Agricultural Research (ICAR), Pune (Maharashtra). The varietal trial conducted at KVK, JAU, Jamnagar under drip irrigation condition during *kharif* season.

Sr. No.	Name of Variety	Photograph of variety
1	Bhima Supar	
2	Bhima Raj	
3	Bhima Shubhra	
4	Bhima Dark Red	

(p). SHIV YOG HEALING EXPERIMENT

Report on comparative study of our recommended / scientific package of practices and Shivyog-healing process for various crop production.

Place : Krishi Vigyan Kendra, JAU, Jamnagar Crop : Greengram

Variety : GM-4 Plot No. : 2 Area : 0.2 ha

Sr. No.	Item		Our recommended / scientific package of practices	Shivyog-healing process
1	Soil analysis	EC ds/m	0.22	0.32
		pH	8.56	8.38
		O.C. %	0.54 (Medium)	0.39 (Low)
		P_2O_5 kg/ha	52.32 (Medium)	24.11 (Low)
		K_2O kg/ha	184.0 (Medium)	153.0 (Medium)
2	Germination		Good	Good
	Vigour		Good	Good
	Growth of plant/crop		Good	25 % less
3	Record pest and diseases incidence/intensity			
	incidence of Helicoverpa		10-11 %	10-11 %
	Infestation of Powdery Mildew		20-21%	25-27 %
4	Flowering (50%)		45-47 DAS	45-47 DAS
	Maturity (DAS)		120	95
5	Quality of the product		Seeds are big in size	Seeds are smaller in size
6	Yield (Kg/ha)		469	612

Scientific cultivation	Shiv Yog Healing Cultivation
	
	

(q) CLUSTER FRONTLINE DEMONSTRATION OF RABI PULSES UNDER NSFM

Technical Parameter

Sl. No.	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated
				District yield (D)	State yield	Potential yield (P)	

					(S)		
1.	Chickpea	Local	12.78	158	300	-442	Variety (GJG-3)

Number of farmers (Area in acre)	Yield obtained (q/ha)			Yield gap minimized (%)		
	Max.	Min.	Av.	D	S	P
50	31.25	3.75	14.03	9.11	14.34	-8.15

Economic parameter

Farmer's Existing plot				Demonstration plot			
Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio
26828	53367	26539	1.90	24670	59633	34963	2.31

Extension Activities organized	**No. of activity**	**Number of farmer attended**
Field Day	2	123
Field visit	4	34

(r) CLUSTER FRONTLINE DEMONSTRATION OF RABI OILSEEDS UNDER NMOOP

S. N.	Crop Demonstration	Existing (Farmer's) variety name	Existing Yield (q/ha)	Yield gap (Kg./ha.) w.r.t.o			Name of Variety + Technology demonstrated	(Area under demonstration ha)	
				District yield (D)	State Yield (S)	Potential Yield (P)			Number of Farmers
1	G'nut	GG-2, TG-37A,					Rhizobium, PSB, Beuvariya, Trichoderma	14	35
2	Til	G.Til.-2 G.Til.-10					Azatobacter, PSB, Beuvariya, Trichoderma	14	35

ANNEXURE –I

PROCEEDING OF THE 12th SCIENTIFIC ADVISORY COMMITTEE MEETING OF KRISHI VIGYAN KENDRA, JAU, JAMNAGAR HELD ON 29th January, 2016

The Twelfth Scientific Advisory Committee meeting of Krishi Vigyan Kendra, JAU, Jamnagar was held at Training Hall, Krishi Vigyan Kendra, JAU, Jamnagar on 29th January, 2016.

The following members were remain present in the meeting.

Sr. No.	Name & Designation	Position
1	Vice Chancellor, Junagadh Agricultural University, Junagadh	Chairman
2	Director of Extension Education, Junagadh Agricultural University, Junagadh - 362001.	Member
3	Associate Director of Research, Main Dry Farming Research Station, Junagadh Agricultural University, Targhadia (Rajkot).	Member
4	Research Scientist (Millet), Main Millet Research Station, Junagadh Agricultural University, Jamnagar- 361 006.	Member
5	District Agricultural Officer, District Panchayat, Jamnagar	Member
6	Project Director, District Watershed Development Unit, District Rural Development Agency, SardarBhavan, Rameshwarnagar, Jamnagar (NavagamGhed).	Member
7	Dy. Director of Agriculture, Farmers Training Centre, Air Force Road, Opp. Digjam Mill, Jamnagar.	Member
8	Project Director, Agricultural Technology Management Agency (ATMA), Air Force Road, Opp. DigjamMill,Jamnagar.	Member
9	Asstt. Director of Fisheries, Sumer club road, Jamnagar	Member
10	Shri Kishorbhai Laljibhai Pedhadiya, At:-Sumri, Ta.&Dist. :-Jamnagar Via:-Dhutarpur	Member
11	Shri Hansaben Kishorbhai Pedhadiya, At:-Sumri, Ta.&Dist. :-Jamnagar Via:-Dhutarpur	Member
12	Shri Naranbhai Kanjibhai Makvana, At:-Manpar(Hirapar) Ta.:-Jodiya, Dist.Jamnagar Via:-Balambha	Member
13	Shri Kantaben Naranbhai Makvana, At:-Manpar(Hirapar) Ta.:-Jodiya, Dist.Jamnagar Via:-Balambha	Member
14	Shri Jagdishsinh Bapubha Jadeja, At:- Memana, Ta.:-Lalpur, Dist.:-Jamnagar	Member
15	Shri Jayshreeba Jagdishsinh Jadeja, At:- Memana, Ta.:-Lalpur, Dist.:-Jamnagar	Member
16	Shri Maheshbhai Ramjibhai Ghetiya, At.:-Kharva, Ta.:-Dhrol, Dist.:-Jamnagar	Member
17	Programme Coordinator, KrishiVigyan Kendra, Junagadh Agricultural University, Jamnagar	Member Secretary
18	Shri V. C. Gadhiya, SMS, Plant Protection, KVK, JAU, Jamnagar	
19	Dr. P.S. Gorfad, SMS, KVK, JAU, Jamnagar	
20	Smt. Anjanaben K. Baraiya, SMS, KVK, JAU, Jamnagar	
21	Dr. J.N. Thaker, SMS, KVK, JAU, Jamnagar	
22	Shri S. H. Lakhani, SMS, KVK, JAU, Jamnagar	

Dr. M. D. Khanpara, Research Scientist (Pearl Millet), Pearl Millet Research Station, JAU, Jamnagar welcomed the dignitaries and all the members of the Scientific Advisory Committee and highlighted the brief achievements of the centre.

Dr. A. R. Pathak, Hon'ble Vice-Chancellor and Chairman of Scientific Advisory Committee chaired the meeting.

After garlanding the guests and dignitaries on the Dias, and inaugurating the meeting by lightening a lamp. Dr. A. M. Parakhia, Director of Extension Education, JAU, Junagadh give introductory speech and his review, Reduce cost of cultivation, use of micro irrigation system, reduce the chemical fertilizer and pesticides. He emphasis on organic farming and promote farmers towards organic farming, guiding the farmers for registration of organic farming certificate with GOPCA. He also noted on animal husbandry in group and promote them for group activity. His emphasis on mass campaigning soil testing and aware the farmers for soil health card. Government declare year-2016 as a "International Year of Pulses", though promote the farmers for pulse cultivation.

Dr. K. P. Baraiya, Programme Coordinator, Krishi Vigyan Kendra, JAU, Jamnagar presented action taken report of the minutes of 11th SAC meeting, progress report (April- 2015 to January-2016) and Action Plan (April 16 to March- 2017) in brief. Dr. V. C. Gadhiya, SMS (Plant Protection), KVK, JAU, Jamnagar presented progress report (April- 2015 to January-2016) and Action Plan (April 16 to March- 2017) for discipline of Plant Protection. Shri S. H. Lakhani, SMS (Crop production), KVK, JAU, Jamnagar presented progress report (2015-16) and Action Plan (2016-17) for discipline of crop production and Soil Health Fertility Management. Dr. P. S. Gorfad SMS (Ext. Edu.), KVK, JAU, Jamnagar presented progress report (2015-16) and Action Plan (2016-17) for discipline of capacity building and horticulture. Smt. A. K. Baraiya, SMS (Home Science), KVK, JAU, Jamnagar presented progress report (2015-16) and Action Plan (2016-17) for discipline of home science. Dr. J. N. Thaker, SMS (Fisheries), KVK, JAU, Jamnagar presented progress report (2015-16) and Action Plan (2016-17) for discipline of fisheries and animal science. He also presented ATIC Scheme Progress report.

Suggestions made by committee members during presentation:

1.	Dr. A. R. Pathak, Hon'ble Vice Chancellor, Junagadh Agricultural University, Junagadh & Chairman of the SAC suggested following points. ➢ Management of white grub he suggested the treatment of urea in groundnut OFT. ➢ He suggested that add the treatment of use of "Jivamrut" or "Gaumutra" for management of thrips in Chilli. ➢ Arrange training about pink bollworm in first quarter. ➢ He suggested that FLD arrange on vegetable (Brinjal : GJBH-4) in our university released varieties. ➢ He suggested that quantify the action taken and write the area of farm produce. ➢ Cluster demonstration in more quantity for detail. ➢ He suggested arrange the training on value addition of spices. ➢ He suggested arrange on campus training with line department in fisheries subject ➢ Arrange training on pearl oyster production with coloration of Fisheries Research Station, JAU, Sikka (Jamnagar).
2.	Dr. A. M. Parakhia, Director of Extension Education, JAU, Junagadh advice that ➢ Add treatment of *Metarhizium* management of white grub in groundnut OFT. ➢ Arrange the FLD and OFT of Bio-fertilizer in groundnut should be taken on the variety of GJG-22 instead of GG-20. ➢ Specify the host of NPV (HNPV or SNPV) for the FLD in groundnut ➢ He suggested arrange FLD on pheromone trap for management of pink bollworm in cotton

	➢ Study the impact analysis of KVK activity in old operational villages, ➢ Carried out PRA survey of new operational villages. ➢ Soil analysis should be done before FLD conduct on farmers field ➢ Arrange FLD on green gram during summer and cluster demonstration on pigeon pea varietal during *kharif*.
3.	Dr. V. N. Patel, Associate Director of Research (North Saurashtra Agro-climatic Zone) and Research Scientist (DF), Dry Farming Research Station, JAU, Targhadia suggested add treatment of spinosad with seed treatment in chilli OFT. He also suggested arrange training on conservation of soil moisture by breaking hardpan with deep ploughing. Arrange FLD on bird percher in chickpea.
4.	Dr. M. D. Khanpara, Research Scientist (Pearl Millet), Pearl Millet Research Station, JAU, Jamnagar suggested to provide curry need plant with FLD of kitchen garden. He also advice to take seed production of fodder sorghum recommended variety on KVK field.
5.	Shri Kishorbhai, a progressive farmer suggested to arrange more training on organic farming.
6	Shri Naranbhai, a progressive farmer suggested to more training on pulse production technology for wider spread.

After above suggestions from the house Dr. A. R. Pathak, Hon'ble Vice Chancellor, Junagadh Agricultural University, Junagadh, delivered the chairmen's remarks. He weightage on activeness of farmers and scientist should be more for development of overall development of the district. He emphasizes on use of bio-product and gobargas slurry for protection of environment and promotes organic farming. He noted KVK activity spread through FIGs and SHGs in the district. He advise to go through integrated farming for reduction of risk. He advise to done mass campaigning for soil health and aware farmers about soil health card. He pointed out to use of micro irrigation system and protected cultivation for maximize the per unit income. Government declare “International Year of Pulse-2016” then promote the farmers for pulse production. At the end he appreciated the tune of to work made by the KVK team. He gave very positive remarks on convergence made by the KVK with other concern departments. He also focused that it is the high time to disseminate the eco-friendly technologies among the farmers.

The meeting ended with the vote of thanks by Dr. P. S. Gorfad, Subject Matter Specialist, KVK, J.A.U., Jamnagar.

Member Secretary, SAC &
Programme Coordinator
KrishiVigyan Kendra
Junagadh Agricultural University
Jamnagar

Director of Extension Education,
Junagadh Agricultural University
Junagadh

Note: Proceeding for approval please.

Chairman, SAC
KVK, JAU, Jamnagar
&
Vice Chancellor
Junagadh Agricultural University
Junagadh

ANNEXURE-II

District Level Awarded farmers

Sr. No	Name of Farmer	Village	Block	District	Mobile No.	Subject
1	Jadeja Kishorsinh Shaktisinh	Gorakhadi	Jam jodhpur	Jamnagar	9427256254	Cereal, Pulse, Oil seed and Cash crops farming under irrigated condition
2	Bhalodiya Renishbhai Chandulal	Lalpur	Lalpur	Jamnagar	9427226659	Cash crop cultivation with less water use
3	Faldu Lavjibhai Nagjibhai	Kalavad	Kalavad	Jamnagar	9537308113	Cotton cultivation under irrigated condition
4	Nakum Harilal Veljibhai	Dharampur	Khambhalia	Devbhumi Dwarka	9824818346	Fruit, Vegetable and Flower crops Farming

Block level awarded farmers

Sr. No	Name of Farmer	Village	Block	District	Mobile No.	Subject
1	Kachhadiya vashrambhai Arjanbhai	Moti Veraval	Lalpur	Jamnagar	9427775170	Intercropping Groundnut and Ajwain
2	Vachhani Mahendrabhai Ramjibhai	Lalpur	Lalpur	Jamnagar	9825562652	Oil seed and Cash crops farming under irrigated condition
3	Dalsaniya Chandrikaben Amarsibhai	Lakhtar	Jodiya	Jamnagar	8511783288	Cereal, Pulse, Oil seed and Cash crops farming under irrigated condition
4	Kavdiya Dayaljibhai Mohanbhai	Jam Dudhai	Jodiya	Jamnagar	9978560946	Cereal, Pulse, Oil seed and Cash crops farming under irrigated condition
5	Jadeja Jambha Bhurubha	Sanosara	Dhrol	Jamnagar	9898153240	Fruit crops, Vegetable and Flower crop farming
6	Bhimani Rameshbhai Ambabhai	Vankiya	Dhrol	Jamnagar	9909165054	Cereal, Pulse, Oil seed and Cash crops farming under irrigated condition
7	Sanghani Maheshbhai Harjibhai	Bodi	Kalavad	Jamnagar	9727201880	Cereal, Pulse, Oil seed and Cash crops farming under irrigated condition
8	Faldu Girdharbhai Veljibhai	Jivapar	Kalavad	Jamnagar	8758721222	Oil seed (Ground nut) crop cultivation under irrigated condition
9	Thumar Prafulbhai Nathabhai	Jalansar	Kalavad	Jamnagar	9879195037	Use of Drip irrigation, less use of water, Maintenance of implements
10	Pansuriya Rameshbhai Valjibhai	Makrani Sanosara	Kalavad	Jamnagar	9909576306	Cash crop cultivation under irrigated condition
11	Nakum Bhagvanjibhai Narshibhai	Amara	Jamnagar	Jamnagar	9824973916	Vegetable farming
12	Sanghani Maganlal Dayabhai	Chavda	Jamnagar	Jamnagar	9429141187	Cereal, Pulse, Oil seed and Cash crops farming under irrigated condition
13	Gadara Parsotambhai Ambabhai	Dhrangda	Jamnagar	Jamnagar	9924499464	Cereal, Pulse, Oil seed and Cash crops farming under irrigated condition
14	Solanki Parbatbhai Nathubhai	Vijaypur	Bhanvad	Devbhumi Dwarka	9428989493	Cereal, Pulse, Oil seed and Cash crops farming under irrigated condition
15	Mintuben Pradipbhai	Sai Devaliya	Bhanvad	Devbhumi Dwarka	8511074663	Animal Husbandry: Compost and milk producer
16	Bhalani Damyantiben Kantibhai	Navagam	Bhanvad	Devbhumi Dwarka	9974636473	Animal Husbandry

ANNEXURE- III

LITERATURE DEVELOPED/PUBLISHED (with full title, author & reference)

Item	Title	Authors name	Number of copies
Research papers	Impact Of Training Programme In Terms Of Gain In Knowledge For Nutritional Diet. **International Journal of Agriculture Sciences** ISSN: 0975-3710&E-ISSN: 0975-9107, Volume 8, Issue 22, 2016, pp.-1450-1452	Smt. A. K. Baraiya, Dr. K. P. Baraiya, Dr. A. M. Parakhia	
	Impact of Front Line Demonstration (FLDs) of Pulse Crops in Improved Technology Transfer. **International Journal of Agriculture Sciences** ISSN: 0975-3710&E-ISSN: 0975-9107, Volume 8, Issue 13, 2016, pp.-1228-1229	Dr.P. S. Gorfad, Dr. K. P. Baraiya, Dr. A. M. Parakhia	
	Flowers visited by stingless bees, *Tetragonula laeviceps* Smith. *AGRES – An International e-Journal,* **4** (4) : 323-330. **(ISSN: 2277-9663).**	**Gadhiya VC and Pastagia JJ** (2015)	
	Effect of some organic amendaments on termite infestation in wheat. *Gujarat Agricultural Universities Research Journal,* 40 (1) : 36-38. **(ISSN: 0250-5193)**	**Gadhiya VC,** Borad PK and Deb Sushma (2015)	
	Evaluation of some botanical materials and synthetics insecticides against *Sitophilus oryzae* L. on stored maize. *Pesticide Research Journal*, 27 (2) : 237-241. **(ISSN 0970-6763, Online ISSN 2249-524X).**	Deb S, Borad PK and **Gadhiya VC** (2015)	
	Toxicity of some newer insecticides to stingless bees, *Tetragonula laeviceps* workers. *Pestology,* XXXIX (11) : 16-18. **(ISSN 0970-3012)**	**Gadhiya VC and Pastagia JJ** (2015)	
	Heterosis for Fruit Borer Resistance in Brinjal (*Solanum melongena* L.). Trends in Biosciences 8 (11), ISSN 0974-8, 2948-2951, 2015	S. N. Galani, H. J. Senjaliya, K.S. Mungra and P.S. Gorfad	
	Heterosis for Fruit Yield and its Component Traits in Brinjal (*Solanum melongena* L.). Trends in Biosciences 8 (11), ISSN 0974-8, 2952-2956, 2015	S. N. Galani, H. J. Senjaliya, K.S. Mungra and P.S. Gorfad	
	Managerial Efficiency Of Coconut Plantation Growers In Coastal Area Of Saurashtra Region . International Journal Of Agriculture Sciences Issn: 0975-3710&E-Issn: 0975-9107, Volume 8, Issue 13, 2016, Pp.-1169-	Kalsariya B.N., Khodifad P.B., Gorfad P.S., And Markana J.G.	

	1172		
Total			
Technical reports	Annual Progress Report	KVK, JAU, Jamnagar	
	12th AGRESCO Report	KVK, JAU, Jamnagar	
	23rd ZREAC Report	KVK, JAU, Jamnagar	
	24th ZREAC Report	KVK, JAU, Jamnagar	
	12th SAC Report	KVK, JAU, Jamnagar	
	Monthly Report	KVK, JAU, Jamnagar	
	Quarterly Reports	KVK, JAU, Jamnagar	
Popular articles	Kapasni gulabi eyalna niyantranni lagam khedutona hathma. Lokvat (Gujarati daily news paper):Date: 13.01.2016	Baraiya KP and **Gadhiya VC** (2016)	
	Madhmakhi Palan ma vaprata juda juda sadhano ane teno upyog. Ek Prayas, **4** (40) : 40-42	**Gadhiya VC,** Baraiya KP, Baraiya AK, Lakhani SL and Godhani HS (2016)	
Leaflets/folders	Kichan Gardening : Aajni Jaruriyat	Smt. A. K. Baraiya, Dr. K P. Baraiya, Shri S. H. Lakhani	1000
	Dadamma Rog Jivatnu Sankalit Vyasthapan	Shri S. H. Godhani, Dr. K. P. Baraiya, Dr. V. C. Gadhiya, Shri S. H. Lakhani	1000
	Sangrah Karel Bij/Anajma Nukshan Karti Jivaoni Olakh, Nukshan Ane Tenu Niyantran	Dr. V. C. Gadhiya, Dr. K. P. Baraiya, Smt. A. K. Baraiya, Shri S. H. Lakhani	1000
	Kapasma Gulabi Iyalnu Sankalit Vyavasthapan	Dr. V. C. Gadhiya, Dr. K. P. Baraiya, Shri S. H. Godhani	5000
	Divelana Paakma Sankalit Jivat Vyasthapan	Dr. V. C. Gadhiya, Dr. K. P. Baraiya, Shri S. H. Godhani	1000
	Kerinu Proessing Ane Temathi Banti Vividh Vangio	Smt. A. K. Baraiya, Dr. K. P. Baraiya, Shri S. H. Godhani	1000
	Animiya (Pandurog) : Vishe Aatalu Jano	Smt. A. K. Baraiya, Dr. K. P. Baraiya, Dr. V. C. Gadhiya	1000
	Haalarnu Krusi Yatra Dham Kvk, Jamnagar	Dr. P. S. Gorfad, Dr. K. P. Baraiya, Dr. J. N. Thaker, Dr. V. C. Gadhiya	1000
	Magphalima Jivat Niyantran	Shri S. H. Godhani, Dr. V. C. Gadhiya, Dr. K. P. Baraiya, Dr. K. P. Baraiya, Shri S. N. Galani	1000
	Jantunashak Dava Chhantavana Sadhano Ane Teno Abhyas	Dr. V. C. Gadhiya, Dr. K. P. Baraiya, Shri S. H. Lakhani, Dr. P. S. Gorfad	1000
	Rasayanik Khatarni Ganatri Edhok Bhalaman Mujab	Shri S. N. Galani, Shri S. H. Godhani, Dr. K. P. Baraiya	1000
	Rasayanik Khatarno Karyakram Upyog Mate Dhyanma Raakhvana Muddao tatha Sanshodhanna Tarano	Shri S. N. Galani, Dr. K. P. Baraiya, Dr. J. N. Thaker	1000
	Varmi Compost Banavvani Rita ne teni Agatyata	Shri S. H. Lakhani, Smt. A. K. Baraiya, Dr. K. P. Baraiya	1000
	Jaivik Khatarono Upyog	Shri S. H. Lakhani, Dr. V. C. Gadhiya, Dr. K. P. Baraiya	1000
	Nadap Compost	Shri S. H. Lakhani, Dr. K. P. Baraiya, Shri S. H. Godhani	1000
	Ghauni Sajiv Kheti Paddhati	Shri S. H. Lakhani, Dr. K. P. Baraiya, Shri S. H. Godhani	1000
	Magphalini Sajiv Kheti	Shri S. H. Lakhani, Dr. K. P. Baraiya, Smt. A. K. Baraiya	1000

	"GOPCA" na Orgenic Dhorano	Shri S. H. Lakhani, Dr. V. C. Gadhiya, Dr. K. P. Baraiya	2000
	Jamin ane Panini Chakasaninin Agatyata ane Jaminno Namuno Levani Paddhati	Shri S. H. Lakhani, Dr. K. P. Baraiya, Dr. V. C. Gadhiya, Dr. P. S. Gorfad	5000
	Jantunashak Davaonu vargikaran Ane Teni Upyog	Dr. V. C. Gadhiya, Dr. K. P. Baraiya, Shri S. H. Lakhani	3000
	Shakbhajini Vaigyanik Kheti	Dr. K. P. Baraiya, Shri S. H. Godhani, Smt. A. K. Baraiya	1000

ANNUAL ACTION PLAN
(APRIL-2016 TO MARCH-2017)
KRISHI VIGYAN KENDRA
JUNAGADH AGRICULTURAL UNIVERSITY, JAMNAGAR

3. TECHNICAL PROGRAMME

3. A. Details of targeted mandatory activities by KVK

OFT		FLD	
(1)		(2)	
Number of OFTs	Number of Farmers	Area (ha)	Number of Farmers
10	42	48	219

Training		Extension Activities	
(3)		(4)	
Number of Courses	Number of Participants	Number of activities	Number of participants
90	3435	506	56306

Seed Production (Qtl.)	Planting material (Nos.)	Fish seed prod. (Nos)	Soil Samples
(5)	(6)	(7)	(8)
10	100	0	500

3. B. Abstract of interventions to be 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.
1	PLP	Groundnut	Heavy infestation of white grub	Management of whitegrub in groundnut					
2	PLP	Chilli	Minimize the incidence of thrips in chilli.	Management of thrips in chilli.					
3	PLP	Garlic	To minimize the infestation of purple blotch of garlic	Management of purple blotch of garlic					
4	CP	Groundnut	Low yield of groundnut	Effect of Biofertilizers in Groundnut production					
5	CP	Onion	Nutrient deficiency	Response of Bio fertilizers to wheat yield					
6	CP	Wheat	Nutrient deficiency	Nutrient management in wheat crop					
7	WOE	Mango	Spoilage in mango pickle	Effect of salt and oil on Spoilage of mango pickle					
8	WOE	Food Material	Imbalance nutritional pattern,	Evaluation of low cost high calorie & protein diets made from locally available food materials.					
	FIS	IMC	Reduce mortality rate	Pen cultures of Indian Major Carp (IMC) spawn to fry before stocking in village Pond/Reservoir					
	FIS	Fresh water prawn & IMC	Use of natural resources	Stocking of Freshwater prawn (*Macrobrachiumrosenbergii*) with IMC fingerlings in village pond/Reservoir					

3.1 Technologies to be assessed and refined

A.1 Abstract on the number of technologies to be assessed in respect of **crops**

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation										
Seed / Plant production										
Weed Management										
Integrated Crop Management										
Integrated Nutrient Management										
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Value addition										
Integrated Pest Management										
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL										

A.2. Abstract on the number of technologies to be refined in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Kitchen garden	Tuber Crops	TOTAL
Varietal Evaluation										
Seed / Plant production										
Weed Management										
Integrated Crop Management										
Integrated Nutrient Management	2	1								3
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Post Harvest Technology						1				1
Integrated Pest Management		1			1					2
Integrated Disease Management					1					1
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL	2	2			2	1				7

A.3. Abstract on the number of technologies to be assessed in respect of livestock / enterprises

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

A.4. Abstract on the number of technologies to be refined in respect of livestock / enterprises

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitary	Fisheries	TOTAL
Evaluation of Breeds								
Nutrition Management								
Disease of Management								
Value Addition								
Production and Management							2	2
Feed and Fodder								
Small Scale income generating enterprises								
TOTAL							2	2

B. Details of On Farm Trial

OFT-1

Title : Management of whitegrub in groundnut

Objective : To manage the whitegrub incidence

Treatments :

1. Injudicious use of pesticides. ***(Farmers Practices).***
2. Recommended dose of Pesticide as chlorpyriphos or quinalphos @ 25 ml/kg seed. Drenching of Chlorpyriphos or quinalphos @ 4 lit/ha as iniciation of pest incidence. ***(*Recommended practices*).***
3. Application of ready mix combination of Imidacloprid 40% + Fipronil 40% @ 2.5 g/kg seed. Drenching of ready mix combination of Imidacloprid 40% + Fipronil 40% @ 250 g/ha as iniciation of pest incidence. **(Refinement-1)**.
4. Soil application of *Beauveriabassiana* @ 5 kg/ha **(Refinement-2)**.
5. Soil application of *Metarhizium anisopliae* @ 5 kg/ha **(Refinement-3)**.
6. Application urea followed by flood irrigation **(Refinement-4)**

No. of Replication :- 3 (Farmers)

Observations :-

1. Record no.of grub per 1 metre row lenth. 2. Yield data.

OFT-2

Title: Management of thrips in chilli.

Objective: To minimize the thrips incidence in chilli.

Treatments:

1. Injudicious use of insecticides (Spray insecticides at weekly interval) **(Farmers practices)**
2. Seed treatment with imidacloprid 70 WS (7.5 g/kg seed) and dipping of seedling before transplanting for two hours in solution of imidacloprid 17.8 SL (10 ml/10 litre water) or thiamethoxam 25 WG (10 g/10 litre water). Spraying of spinosad 45 SC (3 ml/10 litre water) **(Recommended practices)**
3. Spray of *Bearuveria bassiana* @ 5 g/lit of water at 15 days interval **(Refinement 1).**
4. Spray of jeevamrutham or Gaumutra @ 100 ml/lit of water at 15 days interval **(Refinement 2)**

No. of Replication: 3 (Farmers)

Observations:

1. Record thrips population from five randomly selected plants from each plot at 7 days after spray
2. Record yield at every picking.

OFT-3

Title: Management of purple blotch of garlic.

Objective: To minimize the infestation of purple blotch of garlic.

Treatments:

1. Injudicious use of fungicide (Spray insecticides at weekly interval) **(Farmers practices).**
2. Foliar sprays of Mancozeb @0.25%, Tricyclazole @ 0.1% and Hexaconazole @0.1% at 30, 45 and 60 days respectively after transplanting helps in checking disease incidence. **(Recommended practices) (Director of Onion & Garlic Research Station, ICAR)**
3. Application ofTrichoderma @ 5 kg/ha along with FYM @ 1 tonne/ha by broadcasting method **+** Foliar sprays of Hexaconazole @ 0.1% and Tebuconazole @0.1% at 40 and 60 days respectively after transplanting helps in checking disease incidence **(Refinement).**

No. of Replication: 3 (Farmers)

Observations:

1. Record no. of infected plant per 1 meter row length
2. Yield data

OFT :-4

Title :Effect of Bio fertilizers in Groundnut production

Objective : Use of Bio-fertilizer; minimize use of chemical fertilizers as well as cost

Treatments :

1. Farmers Practices
2. Recommended dose of fertilizer (12.5N -25P_2O_5-50K_2O)Kg/ha.***(*Recommendationed practices*).***

3. 75% RDF + Seed treatment of Rhizobium, PSB and KMB culture (Potas Mobilizing Bacteria) each at 25 to 30 ml/kg seed **(Refinement)**.

No. of Replication :- 3 (Farmers)

Observations :-

1. Soil analysis at before and after
2. Yield (Kg/ha)
3. Economics

OFT:5

1. Title : Response of Bio fertilizers to wheat yield

2. Objective:: Use of bio fertilizer, to increase yield of wheat

Treatments:

1. **Farmer's practice:-** Application of only DAP & Urea in different doses
2. **Recommended practice :-** 120-60-40 NPK kg/ha
3. **Intervention:-** Application of Azatobacter, PSB &KMB culture (each at 25 to 30 ml/kg seed) + 75% of RDF

No. of Replication :- 3 (Farmers)

Observation:

1. Soil analysis at before and after
2. Yield (kg/ha)
3. Economics (B:C ratio)

OFT-6

Title : Nutrient management in wheat crop

Objective : To increase yield of wheat

Treatments :

1. Injudicious use of fertilizer (200 N - 90 P_2O_5 - 0 K_2O). ***(Farmers Practices).***
2. Recommended dose of fertilizer (120 N - 60 P_2O_5 - 40 K_2O) + $ZnSO_4$ @ 25 kg/ha ***(*Recommendationed practices*).***
3. T_2 + two spay of multi mix micronutrient @ 30 g/10 lit of water at 30, and 45 days after germination. **(Refinement)**.

No. of Replication :- 3 (Farmers)

Observations :-Grain and fodder yield of wheat.

OFT-7

Title : Effect of salt and oil on spoilage of mango pickle

Objective:1. To prevent soft and slippery pickle2. To increase self life of pickle3. Cost saving

Treatments :

Common ingredients use for all treatments:- Mango 1 kg, turmeric powder 5 gm, jaggari/sugar 600 gm, fenugreek 50 gm, mustard 30 gm, asafoetida (hing) 5 gm, coriander 30 gm, funnel 30 gm,redchilly powder 30 gm.

1. Solt 12% (120 gm) + Oil 800ml/ kg mango **(Farmers practices)**
2. Solt 15% (150 gm) + Oil 250ml/ kg mango **(Recommended practices)**
3. Solt 20% (200 gm) + Oil 200ml/ kg mango **(Refinement)**

No. of Replication :- 3 (Farm women)

Observations :-

1. Self life (days) 2. Colour 3. Texture 4. Cost

OFT-8

Title : Evaluation of low cost high calorie & protein diets made from locally available food materials.

Objective : To study the effect of low cost high calorie diet on the growth of pre school children.

Treatments :

1. Existing dietary pattern ***(Control).***
2. Diet provided by ICDS ***(*Recommended practices*).***

3. Low cost high calorie & high protein diet prepared from locally available food materials. **(Refinement)**.

No. of Replication :- 3 repetition 5 children in each treatment (3-5 year children)

Observations :-

1. Height, weight measurement at an interval of every month up to six month.

OFT-9

Title:Pen cultures of Indian Major Carp (IMC) spawn to fry before stocking in village Pond/Reservoir.

Objectives: 1. Mortality rate is too much higher.

2. Uncertainty about final production.

Experimental Animal: IMC spawn

Treatment: 1. Farmer's practices- Direct stocking of spawn into village ponds/reservoir.

2. Assessment- Rearing of IMC spawns in pen up to fry stage and then release into the village pond/reservoir.

No of Replications: 3 farmers

Observations:

1. Survival rate in Pen (percentage)
2. Growth rate in Pen (average body weight)
3. Total production (in KG.) at the time of harvesting from village pond/reservoir
4. Average body weight at the time of harvesting
5. Total net income

OFT: 10

Title: Stocking of Freshwater prawn (*Macrobrachiumrosenbergii*) with IMC fingerlings in village pond/Reservoir

Objectives: 1. Use maximum natural resources (Food, water body etc.)

2. To increase total yield and Income.

Experimental Animal: IMC fingerlings (*Catlacatla*) and *M. rosenbergii*

Treatment: 1. Farmer's practices- stocking a single species *Catlacatla* into ponds/reservoir.

2. Assessment- stocking of *M. rosenbergii* with *Catlacatla* fingerlings into ponds/reservoir

No of Replications: 3 farmers

Observations:

1. Average body weight of IMC and Prawn at the time of harvesting
2. Total production of fish and prawn (in KG.) at the time of harvesting from village pond/reservoir
3. Total Net income

3.2 FRONTLINE DEMONSTRATIONS (FLD)

A. Details of FLDs to be organized –

Sr. No.	Name of Crop/ Enterprise	Name of Variety Enterprises	Thematic area	Technology demonstrated	Critical Inputs	Season and year	Area (ha.)	No. of farmers /Demo.	Parameters identified
1	Groundnut	GG-20	IPM (White grub)	Insecticide	Beauveria,	**Kharif-16**	**4**	**10**	% plant Damage, population of Whitegrub per sq.m.
2	Groundnut	GG-20	Disease mana.(Trich)	*Biological control*	*Trichoderma* 1 kg	Kh-16	2	5	% plant damage
3	Groundnut	GG-20	Pest mana.(NPV)	Boilogical control	NPV-250 LE	Kh-16	2	5	No. of larvae per meter, % infested larvae,

4	Cotton	Bt. Cotton	IPM	Insecticide (	Azadirechtin ; Profenophos.; Bio pesticide (*Beauveriabassiana*)	Kh-16	8	20	Pest population, yield
5	Brinjal	-	IPM	Insecticide	(Azadirechtin ; Profenophos).; Bio pesticide (*Beauveriabassiana*)	Kh-16	2	5	Yield, % fruit damage
6	Chilly	-	IPM	Insecticide	(Azadirechtin ; Profenophos).; Bio pesticide (*Beauveriabassiana*)	Kh-16	2	5	Yield, % fruit damage
7	Wheat	-	INM	Micronutrient	Mix micronutrient, Bio fertilizers	Rabi-16	4	10	Yield, yellowing
8	Chick pea	GJG-3	IPM, Varietal	Biopesticide, Seed (GJG-3)	NPV, *Beauveria*, Seed (GJG-3)	Rabi-16	4	10	Yield, % pod damage
9	Cumin	GC-4	IDM	IDM	Trichoderma, Fungicide, Seed (GC-4)6kg	Rabi-16	4	10	Yield, % Plant damage
10	Coriander	GC-2	Varietal	Variety	Seed (8 kg)	Rabi-16	8	20	Yield
11	Green gram	GM-4	Varietal	Variety	Seed (GM-4) 10 kg	Sum-16-17	4	10	Yield
12	Pearl Millet	GHB-538	Varietal	Variety	Seed (GHB-538) 1.5 kg	Sum-16-17	4	10	Yield
13	Kitchen gardening	Vegetable seeds	Nutritional management	Seeds of vegetable for kitchen gardening	Seeds of vegetable for kitchen gardening	2016-17	100	100	Cost saving

Sponsored Demonstration

Crop	Area (ha)	No. of farmers
-	-	-

B. Extension and Training activities under FLDs

S. No.	Activity	No. of activities	Month	Number of participants
	Groundnut (Whitegrub)			
1	Field days	1	July	20
2	Farmers Training	1	May	30
3	Media coverage	1	May	
4	Training for extension functionaries	1		
	Groundnut (Trichoderma)			
1	Field days	1	July	20
2	Farmers Training	1	May	30
3	Media coverage	1	May	
4	Training for extension functionaries	1		
	Groundnut (NPV)			
1	Field days	1	July	20
2	Farmers Training	1	May	30
3	Media coverage	1	May	
4	Training for extension functionaries	1		
	Cotton			
1	Field days	1	August	20
2	Farmers Training	1	June	30
3	Media coverage	1	April	
4	Training for extension functionaries	1		
	Brinjal			
1	Field days	1	July	20
2	Farmers Training	1	May	30
3	Media coverage	1	May	
4	Training for extension functionaries	1		
	Chilly			

1	Field days	1	July	20
2	Farmers Training	1	May	30
3	Media coverage	1	May	
4	Training for extension functionaries	1		
	Wheat			
1	Field days	1	November	20
2	Farmers Training	1	October	30
3	Media coverage	1	October	
4	Training for extension functionaries	1		
	Chickpea			
1	Field days	1	November	20
2	Farmers Training	1	October	30
3	Media coverage	1	October	
4	Training for extension functionaries	1		
	Cumin			
1	Field days	1	November	20
2	Farmers Training	1	October	30
3	Media coverage	1	October	
4	Training for extension functionaries	1		
	Coriander			
1	Field days	1	November	20
2	Farmers Training	1	October	30
3	Media coverage	1	October	
4	Training for extension functionaries	1		
	Green Gram			
1	Field days	1	March	20
2	Farmers Training	1	February	30
3	Media coverage	1	February	
4	Training for extension functionaries	1		
	Pearl Millet			
1	Field days	1	March	20
2	Farmers Training	1	February	30
3	Media coverage	1	February	
4	Training for extension functionaries	1		
	Kitchen gardening			
1	Field days	1	July	20
2	Farmers Training	1	June	30
3	Media coverage	1	May	
4	Training for extension functionaries	1		

C. Details of FLD on Enterprises

(i) Farm Implements

Name of the implement	Crop	Season and year	No. of farmers	Area (ha)	Critical inputs	Performance parameters / indicators
Solar Cooker		2016-17	5	5	Solar cooker	Time & fuel
Tractor mounted sprayer	Groundnut	2016-17	3	2	-	Time & fueld
Cotton shredder	Cotton	Rabi	2	2	-	

(ii) Livestock Enterprises

Enterprise	Breed	No. of farmers	No. of animals, poultry birds/ha. etc.	Critical inputs	Performance parameters / indicators

3.3 TRAINING (Including the sponsored and FLD training programmes):

A. ON Campus

Thematic Area	No. of couses	No. of participant						
		oters			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women				0			0	0
I Crop Production				0			0	0
Weed Management				0			0	0
Resource Conservation Technologies				0			0	0
Cropping Systems	1	23	0	23	2		2	25
Crop Diversification				0			0	0
Integrated Farming				0			0	0
Water management	1	22		22	3		3	25

Seed production				0			0	0
Nursery management				0			0	0
Integrated Crop Management	1	20		20	5		5	25
Fodder production				0			0	0
Production of organic inputs	1	23		23	2		2	25
II Horticulture				0			0	0
a) Vegetable Crops				0			0	0
Production of low volume and high value crops	1	25	0	25	0	0	0	25
Off-season vegetables				0			0	0
Nursery raising				0			0	0
Exotic vegetables like Broccoli				0			0	0
Export potential vegetables	1	25	0	25	0	0	0	25
Grading and standardization				0			0	0
Protective cultivation (Green Houses, Shade Net etc.)	1	25	0	25	0	0	0	25
b) Fruits				0			0	0
Training and Pruning				0			0	0
Layout and Management of Orchards				0			0	0
Cultivation of Fruit				0			0	0
Management of young plants/orchards				0			0	0
Rejuvenation of old orchards				0			0	0
Export potential fruits				0			0	0
Micro irrigation systems of orchards	1	25	0	25	0	0	0	25
Plant propagation techniques				0			0	0
c) Ornamental Plants				0			0	0
Nursery Management				0			0	0
Management of potted plants				0			0	0
Export potential of ornamental plants				0			0	0
Propagation techniques of Ornamental Plants				0			0	0
d) Plantation crops				0			0	0
Production and Management technology				0			0	0
Processing and value addition				0			0	0
e) Tuber crops				0			0	0
Production and Management technology				0			0	0
Processing and value addition				0			0	0
f) Spices				0			0	0
Production and Management technology	1	25		25			0	25
Processing and value addition				0			0	0
g) Medicinal and Aromatic Plants				0			0	0
Nursery management				0			0	0
Production and management technology				0			0	0
Post harvest technology and value addition				0			0	0
III Soil Health and Fertility Management				0			0	0
Soil fertility management				0			0	0
Soil and Water Conservation				0			0	0
Integrated Nutrient Management	1	23	0	23	2	0	2	25
Production and use of organic inputs				0			0	0
Management of Problematic soils				0			0	0
Micro nutrient deficiency in crops				0			0	0
Nutrient Use Efficiency	1	23	0	23	2	0	2	25
Soil and Water Testing				0			0	0
IV Livestock Production and Management				0			0	0
Dairy Management	1	10	15	25			0	25
Poultry Management				0			0	0
Piggery Management				0			0	0
Rabbit Management/goat				0			0	0
Disease Management				0			0	0
Feed management	2	10	35	45			0	45
Production of quality animal products				0			0	0
V Home Science/Women empowerment				0			0	0
Household food security by kitchen gardening and nutrition gardening				0			0	0
Design and development of low/minimum cost diet				0			0	0
Designing and development for high nutrient efficiency diet				0			0	0
Minimization of nutrient loss in processing	1		25	25		0	0	25
Gender mainstreaming through SHGs				0			0	0
Storage loss minimization techniques				0			0	0
Value addition	2		45	45		5	5	50
Income generation activities for empowerment of rural Women	1		17	17		8	8	25

Location specific drudgery reduction technologies				0			0	0
Rural Crafts				0			0	0
Women and child care				0			0	0
VI Agril. Engineering				0			0	0
Installation and maintenance of micro irrigation systems	1	23		23	2		2	25
Use of Plastics in farming practices	1	22		22	3		3	25
Production of small tools and implements				0			0	0
Repair and maintenance of farm machinery and implements				0			0	0
Small scale processing and value addition	1	15	10	25			0	25
Post Harvest Technology				0			0	0
VII Plant Protection				0			0	0
Integrated Pest Management	2	47		47	3	0	3	50
Integrated Disease Management	2	50		50			0	50
Bio-control of pests and diseases				0			0	0
Production of bio control agents and bio pesticides				0			0	0
VIII Fisheries				0			0	0
Integrated fish farming	1	15	10	25			0	25
Carp breeding and hatchery management	1	17	8	25			0	25
Carp fry and fingerling rearing				0			0	0
Composite fish culture	1	15	10	25			0	25
Hatchery management and culture of freshwater prawn				0			0	0
Breeding and culture of ornamental fishes				0			0	0
Portable plastic carp hatchery				0			0	0
Pen culture of fish and prawn				0			0	0
Shrimp farming				0			0	0
Edible oyster farming				0			0	0
Pearl culture				0			0	0
Fish processing and value addition	1	15	10	25			0	25
IX Production of Inputs at site				0			0	0
Seed Production				0			0	0
Planting material production				0			0	0
Bio-agents production				0			0	0
Bio-pesticides production				0			0	0
Bio-fertilizer production				0			0	0
Vermi-compost production				0			0	0
Organic manures production				0			0	0
Production of fry and fingerlings				0			0	0
Production of Bee-colonies and wax sheets				0			0	0
Small tools and implements				0			0	0
Production of livestock feed and fodder				0			0	0
Production of Fish feed				0			0	0
X Capacity Building and Group Dynamics				0			0	0
Leadership development	1	22		22	3		3	25
Group dynamics				0			0	0
Formation and Management of SHGs				0			0	0
Mobilization of social capital	1	18	5	23	2	0	2	25
Entrepreneurial development of farmers/youths	2	47		47	3		3	50
WTO and IPR issues				0			0	0
XI Agro-forestry				0			0	0
Production technologies				0			0	0
Nursery management				0			0	0
Integrated Farming Systems				0			0	0
XII Others (Pl. Specify)				0			0	0
TOTAL	33	585	190	775	32	13	45	820
(B) RURAL YOUTH								
Mushroom Production								
Bee-keeping								
Integrated farming								
Seed production								
Production of organic inputs	2	22	17	39	1	0	1	40
Integrated Farming (Medicinal)				0			0	0
Planting material production				0			0	0
Vermi-culture	1	19	0	19	1	0	1	20
Sericulture				0			0	0
Protected cultivation of vegetable crops				0			0	0
Commercial fruit production				0			0	0
Repair and maintenance of farm machinery and	1	14	0	14	1	0	1	15

implements								
Nursery Management of Horticulture crops				0			0	0
Training and pruning of orchards				0			0	0
Value addition	2	0	44	44	0	6	6	50
Production of quality animal products				0			0	0
Dairying				0			0	0
Sheep and goat rearing				0			0	0
Quail farming				0			0	0
Piggery				0			0	0
Rabbit farming				0			0	0
Poultry production				0			0	0
Ornamental fisheries	1	13	7	20	0	0	0	20
Para vets				0			0	0
Para extension workers				0			0	0
Composite fish culture				0			0	0
Freshwater prawn culture				0			0	0
Shrimp farming				0			0	0
Pearl culture				0			0	0
Cold water fisheries				0			0	0
Fish harvest and processing technology				0			0	0
Fry and fingerling rearing				0			0	0
Small scale processing				0			0	0
Post Harvest Technology				0			0	0
Tailoring and Stitching				0			0	0
Rural Crafts				0			0	0
TOTAL	7	68	68	136	3	6	9	145
(C) Extension Personnel								
Productivity enhancement in field crops	**1**	30	5	35	5	0	5	40
Integrated Pest Management	1	30	5	35	5	0	5	40
Integrated Nutrient management				0			0	0
Rejuvenation of old orchards				0			0	0
Protected cultivation technology	1	30	5	35	5	0	5	40
Formation and Management of SHGs				0			0	0
Group Dynamics and farmers organization				0			0	0
Information networking among farmers				0			0	0
Capacity building for ICT application				0			0	0
Care and maintenance of farm machinery and implements				0			0	0
WTO and IPR issues				0			0	0
Management in farm animals				0			0	0
Livestock feed and fodder production				0			0	0
Household food security				0			0	0
Women and Child care				0			0	0
Low cost and nutrient efficient diet designing				0			0	0
Production and use of organic inputs				0			0	0
Gender mainstreaming through SHGs				0			0	0
Any other (Pl. Specify)				0			0	0
TOTAL	**3**	**90**	**15**	**105**	**15**	**0**	**15**	**120**
G. Total	43	743	273	1016	50	19	69	1085

B. OFF Campus

Thematic Area	No. of Courses	No. of participant						
		oters			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women				0			0	0
I Crop Production				0			0	0
Weed Management	1	35	6	41	7	2	9	50
Resource Conservation Technologies				0			0	0
Cropping Systems	1	30	10	40	7	3	10	50
Crop Diversification				0			0	0
Integrated Farming				0			0	0
Water management				0			0	0
Seed production	1	30	15	45	5	0	5	50
Nursery management				0			0	0
Integrated Crop Management				0			0	0
Fodder production				0			0	0
Production of organic inputs	1	35	10	45	5		5	50
II Horticulture				0			0	0

a) Vegetable Crops				0			0	0
Production of low volume and high value crops	1	50		50			0	50
Off-season vegetables				0			0	0
Nursery raising				0			0	0
Exotic vegetables like Broccoli				0			0	0
Export potential vegetables				0			0	0
Grading and standardization				0			0	0
Protective cultivation (Green Houses, Shade Net etc.)	1	35	15	50			0	50
b) Fruits				0			0	0
Training and Pruning				0			0	0
Layout and Management of Orchards				0			0	0
Cultivation of Fruit				0			0	0
Management of young plants/orchards	1	50		50			0	50
Rejuvenation of old orchards				0			0	0
Export potential fruits				0			0	0
Micro irrigation systems of orchards				0			0	0
Plant propagation techniques				0			0	0
c) Ornamental Plants				0			0	0
Nursery Management				0			0	0
Management of potted plants				0			0	0
Export potential of ornamental plants				0			0	0
Propagation techniques of Ornamental Plants				0			0	0
d) Plantation crops				0			0	0
Production and Management technology				0			0	0
Processing and value addition				0			0	0
e) Tuber crops				0			0	0
Production and Management technology				0			0	0
Processing and value addition				0			0	0
f) Spices				0			0	0
Production and Management technology	1	50		50			0	50
Processing and value addition				0			0	0
g) Medicinal and Aromatic Plants				0			0	0
Nursery management				0			0	0
Production and management technology				0			0	0
Post harvest technology and value addition				0			0	0
III Soil Health and Fertility Management				0			0	0
Soil fertility management	1	45		45	5		5	50
Soil and Water Conservation				0			0	0
Integrated Nutrient Management				0			0	0
Production and use of organic inputs				0			0	0
Management of Problematic soils				0			0	0
Micro nutrient deficiency in crops	1	19	12	31	17	2	19	50
Nutrient Use Efficiency				0			0	0
Soil and Water Testing	1	38		38	12		12	50
IV Livestock Production and Management				0			0	0
Dairy Management	1	18	32	50			0	50
Poultry Management				0			0	0
Piggery Management				0			0	0
Rabbit Management/goat				0			0	0
Disease Management	1	18	32	50			0	50
Feed management	1	35	15	50			0	50
Production of quality animal products	1	18	32	50			0	50
V Home Science/Women empowerment				0			0	0
Household food security by kitchen gardening and nutrition gardening				0			0	0
Design and development of low/minimum cost diet	1		42	42		8	8	50
Designing and development for high nutrient efficiency diet				0			0	0
Minimization of nutrient loss in processing	1		48	48		2	2	50
Gender mainstreaming through SHGs				0			0	0
Storage loss minimization techniques				0			0	0
Value addition	2		97	97		3	3	100
Income generation activities for empowerment of rural Women				0			0	0
Location specific drudgery reduction technologies	1		45	45		5	5	50
Rural Crafts	1		45	45		5	5	50
Women and child care	1		45	45		5	5	50
VI Agril. Engineering				0			0	0
Installation and maintenance of micro irrigation systems	1	50		50			0	50
Use of Plastics in farming practices	2	83	17	100			0	100
Production of small tools and implements	1	47		47	3		3	50
Repair and maintenance of farm machinery and	1	47		47	3		3	50

implements								
Small scale processing and value addition				0			0	0
Post Harvest Technology				0			0	0
VII Plant Protection				0			0	0
Integrated Pest Management	5	150	84	234	10	6	16	250
Integrated Disease Management	2	70	26	96	4	0	4	100
Bio-control of pests and diseases	1	50		50			0	50
Production of bio control agents and bio pesticides				0			0	0
VIII Fisheries				0			0	0
Integrated fish farming	1	50		50			0	50
Carp breeding and hatchery management	1	25	25	50			0	50
Carp fry and fingerling rearing				0			0	0
Composite fish culture	1	25	25	50			0	50
Hatchery management and culture of freshwater prawn				0			0	0
Breeding and culture of ornamental fishes				0			0	0
Portable plastic carp hatchery				0			0	0
Pen culture of fish and prawn	2	75	25	100			0	100
Shrimp farming	2	50	50	100			0	100
Edible oyster farming				0			0	0
Pearl culture				0			0	0
Fish processing and value addition	1	25	25	50			0	50
IX Production of Inputs at site				0			0	0
Seed Production				0			0	0
Planting material production				0			0	0
Bio-agents production				0			0	0
Bio-pesticides production				0			0	0
Bio-fertilizer production				0			0	0
Vermi-compost production				0			0	0
Organic manures production				0			0	0
Production of fry and fingerlings				0			0	0
Production of Bee-colonies and wax sheets				0			0	0
Small tools and implements				0			0	0
Production of livestock feed and fodder				0			0	0
Production of Fish feed				0			0	0
X Capacity Building and Group Dynamics				0			0	0
Leadership development	1	30	15	45	5		5	50
Group dynamics	1	47		47	3		3	50
Formation and Management of SHGs				0			0	0
Mobilization of social capital	1	30	15	45	3	2	5	50
Entrepreneurial development of farmers/youths	1	34	14	48	2		2	50
WTO and IPR issues				0			0	0
XI Agro-forestry				0			0	0
Production technologies				0			0	0
Nursery management				0			0	0
Integrated Farming Systems				0			0	0
XII Others (Pl. Specify)				0			0	0
TOTAL	**47**	**1394**	**822**	**2216**	**91**	**43**	**134**	**2350**

c) Consolidated table (ON and OFF Campus)

Thematic Area	No. of Courses	No. of Participant						
		oters			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women	0	0	0	0	0	0	0	0
I Crop Production	0	0	0	0	0	0	0	0
Weed Management	1	35	6	41	7	2	9	50
Resource Conservation Technologies	0	0	0	0	0	0	0	0
Cropping Systems	2	53	10	63	9	3	12	75
Crop Diversification	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0
Water management	1	22	0	22	3	0	3	25
Seed production	1	30	15	45	5	0	5	50
Nursery management	0	0	0	0	0	0	0	0
Integrated Crop Management	1	20	0	20	5	0	5	25
Fodder production	0	0	0	0	0	0	0	0
Production of organic inputs	2	58	10	68	7	0	7	75
II Horticulture	0	0	0	0	0	0	0	0
a) Vegetable Crops	0	0	0	0	0	0	0	0
Production of low volume and high value crops	2	75	0	75	0	0	0	75
Off-season vegetables	0	0	0	0	0	0	0	0

Nursery raising	0	0	0	0	0	0	0	0
Exotic vegetables like Broccoli	0	0	0	0	0	0	0	0
Export potential vegetables	1	25	0	25	0	0	0	25
Grading and standardization	0	0	0	0	0	0	0	0
Protective cultivation (Green Houses, Shade Net etc.)	2	60	15	75	0	0	0	75
b) Fruits	0	0	0	0	0	0	0	0
Training and Pruning	0	0	0	0	0	0	0	0
Layout and Management of Orchards	0	0	0	0	0	0	0	0
Cultivation of Fruit	0	0	0	0	0	0	0	0
Management of young plants/orchards	1	50	0	50	0	0	0	50
Rejuvenation of old orchards	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	1	25	0	25	0	0	0	25
Plant propagation techniques	0	0	0	0	0	0	0	0
c) Ornamental Plants	0	0	0	0	0	0	0	0
Nursery Management	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0
d) Plantation crops	0	0	0	0	0	0	0	0
Production and Management technology	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0
e) Tuber crops	0	0	0	0	0	0	0	0
Production and Management technology	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0
f) Spices	0	0	0	0	0	0	0	0
Production and Management technology	2	75	0	75	0	0	0	75
Processing and value addition	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0
III Soil Health and Fertility Management	0	0	0	0	0	0	0	0
Soil fertility management	1	45	0	45	5	0	5	50
Soil and Water Conservation	0	0	0	0	0	0	0	0
Integrated Nutrient Management	1	23	0	23	2	0	2	25
Production and use of organic inputs	0	0	0	0	0	0	0	0
Management of Problematic soils	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	1	19	12	31	17	2	19	50
Nutrient Use Efficiency	1	23	0	23	2	0	2	25
Soil and Water Testing	1	38	0	38	12	0	12	50
IV Livestock Production and Management	0	0	0	0	0	0	0	0
Dairy Management	2	28	47	75	0	0	0	75
Poultry Management	0	0	0	0	0	0	0	0
Piggery Management	0	0	0	0	0	0	0	0
Rabbit Management/goat	0	0	0	0	0	0	0	0
Disease Management	1	18	32	50	0	0	0	50
Feed management	3	45	50	95	0	0	0	95
Production of quality animal products	1	18	32	50	0	0	0	50
V Home Science/Women empowerment	0	0	0	0	0	0	0	0
Household food security by kitchen gardening and nutrition gardening	0	0	0	0	0	0	0	0
Design and development of low/minimum cost diet	1	0	42	42	0	8	8	50
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	2	0	73	73	0	2	2	75
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0
Value addition	4	0	142	142	0	8	8	150
Income generation activities for empowerment of rural Women	1	0	17	17	0	8	8	25
Location specific drudgery reduction technologies	1	0	45	45	0	5	5	50

Rural Crafts	1	0	45	45	0	5	5	50
Women and child care	1	0	45	45	0	5	5	50
VI Agril. Engineering	0	0	0	0	0	0	0	0
Installation and maintenance of micro irrigation systems	2	73	0	73	2	0	2	75
Use of Plastics in farming practices	3	105	17	122	3	0	3	125
Production of small tools and implements	1	47	0	47	3	0	3	50
Repair and maintenance of farm machinery and implements	1	47	0	47	3	0	3	50
Small scale processing and value addition	2	62	10	25	3	0	0	25
Post Harvest Technology	0	0	0	0	0	0	0	0
VII Plant Protection	0	0	0	0	0	0	0	0
Integrated Pest Management	7	197	84	281	13	6	19	300
Integrated Disease Management	4	120	26	146	4	0	4	150
Bio-control of pests and diseases	1	50	0	50	0	0	0	50
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0
VIII Fisheries	0	0	0	0	0	0	0	0
Integrated fish farming	2	65	10	75	0	0	0	75
Carp breeding and hatchery management	2	42	33	75	0	0	0	75
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0
Composite fish culture	2	40	35	75	0	0	0	75
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	2	75	25	100	0	0	0	100
Shrimp farming	2	50	50	100	0	0	0	100
Edible oyster farming	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0
Fish processing and value addition	2	40	35	75	0	0	0	75
IX Production of Inputs at site	0	0	0	0	0	0	0	0
Seed Production	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0
X Capacity Building and Group Dynamics	0	0	0	0	0	0	0	0
Leadership development	2	52	15	67	8	0	8	75
Group dynamics	1	47	0	47	3	0	3	50
Formation and Management of SHGs	0	0	0	0	0	0	0	0
Mobilization of social capital	2	48	20	68	5	2	7	75
Entrepreneurial development of farmers/youths	3	81	14	95	5	0	5	100
WTO and IPR issues	0	0	0	0	0	0	0	0
XI Agro-forestry	0	0	0	0	0	0	0	0
Production technologies	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)	0	0	0	0	0	0	0	0
TOTAL	80	1979	1012	2991	123	56	179	3170
(B) RURAL YOUTH	0	0	0	0	0	0	0	0
Mushroom Production								
Bee-keeping								
Integrated farming								
Seed production								
Production of organic inputs	2	22	17	39	1	0	1	40
Integrated Farming (Medicinal)				0			0	0
Planting material production				0			0	0

Vermi-culture	1	19	0	19	1	0	1	20
Sericulture				0			0	0
Protected cultivation of vegetable crops				0			0	0
Commercial fruit production				0			0	0
Repair and maintenance of farm machinery and implements	1	14	0	14	1	0	1	15
Nursery Management of Horticulture crops				0			0	0
Training and pruning of orchards				0			0	0
Value addition	2	0	44	44	0	6	6	50
Production of quality animal products				0			0	0
Dairying				0			0	0
Sheep and goat rearing				0			0	0
Quail farming				0			0	0
Piggery				0			0	0
Rabbit farming				0			0	0
Poultry production				0			0	0
Ornamental fisheries	1	13	7	20	0	0	0	20
Para vets				0			0	0
Para extension workers				0			0	0
Composite fish culture				0			0	0
Freshwater prawn culture				0			0	0
Shrimp farming				0			0	0
Pearl culture				0			0	0
Cold water fisheries				0			0	0
Fish harvest and processing technology				0			0	0
Fry and fingerling rearing				0			0	0
Small scale processing				0			0	0
Post Harvest Technology				0			0	0
Tailoring and Stitching				0			0	0
Rural Crafts				0			0	0
TOTAL	7	68	68	136	3	6	9	145
(C) Extension Personnel								
Productivity enhancement in field crops	**1**	30	5	35	5	0	5	40
Integrated Pest Management	1	30	5	35	5	0	5	40
Integrated Nutrient management				0			0	0
Rejuvenation of old orchards				0			0	0
Protected cultivation technology	1	30	5	35	5	0	5	40
Formation and Management of SHGs				0			0	0
Group Dynamics and farmers organization				0			0	0
Information networking among farmers				0			0	0
Capacity building for ICT application				0			0	0
Care and maintenance of farm machinery and implements				0			0	0
WTO and IPR issues				0			0	0
Management in farm animals				0			0	0
Livestock feed and fodder production				0			0	0
Household food security				0			0	0
Women and Child care				0			0	0
Low cost and nutrient efficient diet designing				0			0	0
Production and use of organic inputs				0			0	0
Gender mainstreaming through SHGs				0			0	0
Any other (Pl. Specify)				0			0	0
TOTAL	**3**	**90**	**15**	**105**	**15**	**0**	**15**	**120**
G. Total	90	2137	1095	3232	141	62	203	3435

Details of training programmes attached in **Annexure -I**

3.4. Extension Activities (including activities of FLD programmes)

Nature of Extension Activity	No. of activities	Farmers			Extension Officials			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	10	188	32	220	60	43	103	248	75	323
Kisan Mela	1	1000	250	1250	200	50	250	1200	300	1500
Kisan Ghosthi	12	350	150	500	210	110	320	560	260	820

Exhibition	20	5690	1060	6750	2150	920	3070	7840	1980	9820
Film Show	104	2230	330	2560	840	290	1130	3070	620	3690
Method demonstration	5	30	10	40	20	10	30	50	20	70
Farmers Seminar	3	140	0	140	50	0	50	190	0	190
Workshop	1	200	100	300	100	80	180	300	180	480
Group meetings	10	100	30	130	40	30	70	140	60	200
Lectures delivered as resource persons	50	9660	1620	11280	3650	1400	5050	13310	3020	16330
Newspaper coverage	5	0	0	0	0	0	0	0	0	0
Radio talks	0	0	0	0	0	0	0	0	0	0
TV talks	0	0	0	0	0	0	0	0	0	0
Popular articles	3	0	20	20	0	20	20	0	40	40
Extension Literature	10	3560	150	3710	1350	130	1480	4910	280	5190
Advisory Services	15	120	10	130	50	10	60	170	20	190
Scientific visit to farmers field	100	370	20	390	140	10	150	510	30	540
Farmers visit to KVK	100	390	60	450	150	50	200	540	110	650
Diagnostic visits	10	50	10	60	20	10	30	70	20	90
Exposure visits	2	60	0	60	30	0	30	90	0	90
Ex-trainees Sammelan	1	25	6	31	8	4	12	33	10	43
Soil health Camp	1	130	10	140	50	10	60	180	20	200
Animal Health Camp	0	0	0	0	0	0	0	0	0	0
Agri mobile clinic	1	2700	10010	12710	1020	40	1060	3720	10050	13770
Soil test campaigns	1	110	10	120	40	10	50	150	20	170
Farm Science Club Conveners meet	2	100	10	110	40	10	50	140	20	160
Self Help Group Conveners meetings	3	40	20	60	20	20	40	60	40	100
Mahila Mandals Conveners meetings	6	10	50	60	10	40	50	20	90	110
Celebration of important days (specify)	3	150	40	190	60	30	90	210	70	280
Krishi Mohostva	5	0	20	20	0	20	20	0	40	40
Krishi Rath	3	40	0	40	20	0	20	60	0	60
Pre Kharif workshop	3	80	0	80	30	0	30	110	0	110
Pre Rabi workshop	7	250	40	290	100	30	130	350	70	420
PPVFRA workshop	4	190	10	200	80	10	90	270	20	290
Any Other (Specify)	5	220	20	240	90	10	100	310	30	340
Total	**506**	**28183**	**14098**	**42281**	**10628**	**3397**	**14025**	**38811**	**17495**	**56306**

QUARTER AND DISCIPLINE WISE SUMMARY OF TRAINING PROGRAMME

Sr. No.	Subject/ Discipline	Subject Code	On-Campus					Off-Campus					GT
			Quarter					Quarter					
			I	II	III	IV	Total	I	II	III	IV	Total	
1	Crop production	CP	2	1	2	0	**5**	1	1	1	1	**4**	**9**
2	Soil Health and Fertility Management	SFM	1	0	1	0	**2**	1	1	1	0	**3**	**5**
3	Plant Protection	PLP	1	2	1	1	**5**	2	2	2	2	**8**	**13**
4	Fisheries	FIS	1	1	1	1	**4**	2	2	2	2	**8**	**12**
5	Extension Edu.	CBD	1	1	1	1	**4**	1	1	1	1	**4**	**8**
6	Horticulture	HO	1	1	2	1	**5**	1	1	1	1	**4**	**9**
7	Home Science	WOE	1	1	1	1	**4**	2	2	2	1	**7**	**11**
8	Agri engineering	AEG	0	1	1	1	**3**	1	1	2	1	**5**	**8**

9	Animal Science	LPM	0	1	1	1	**3**	2	1	1	0	**4**	**7**
	Total		**8**	**9**	**11**	**7**	**35**	**13**	**12**	**13**	**9**	**47**	**82**

3.5 Target for Production and supply of Technological products

SEED MATERIALS

Sl. No.	Crop	Variety	Quantity (qtl.)
CEREALS	Wheat	GW-496	3
OILSEEDS	Groundnut	GG-20	3
PULSES	Green gram	GM-4	4
VEGETABLES			
OTHERS (Specify)	Papaya	Madhubindu	0.05

PLANTING MATERIALS

Sl. No.	Crop	Variety	Quantity (Nos.)
FRUITS			
SPICES			
VEGETABLES			
FOREST SPECIES			
ORNAMENTAL CROPS			

Bio-products

Sl. No.	Product Name	Species	Quantity	
			No	(kg)
BIO PESTICIDES				
1	Beauveria			
2	NPV			

LIVESTOCK

Sl. No.	Type	Breed	Quantity	
			(Nos)	Unit
Cattle				
GOAT				
SHEEP				
POULTRY				
Pig farming				
FISHERIES				

3.6 Literature to be Developed/Published

(A) KVK News Letter

Date of start :

Number of copies to be published :

(B) Literature developed/published

S.No.	Topic	Number
1	Research paper each scientist	2
2	Technical reports	3
3	News letters	1
4	Training manual all discipline	14
5	Popular article	6
6	Extension literature	3
	Total	

(C) Details of Electronic Media to be Produced

S. No.	Type of media (CD / VCD / DVD / Audio-Cassette)	Title of the programme	Number
1			

3.7. Success stories/Case studies identified for development as a case. -

a. Brief introduction
b. Interventions
c. Output
d. Outcomes
e. Impact
   i) Social economic

ii) Bio-Physical

f. Good Action Photographs

3.8 Indicate the specific training need analysis tools/methodology followed for

Practicing Farmers

a)

b)

c)

Rural Youth

a)

b)

c)

d)

In-service personnel

a)

b)

c)

3.9 Indicate the methodology for identifying OFTs/FLDs

For OFT :

i) PRA

ii) Problem identified from Matrix

iii) Field level observations

iv) Farmer group discussions

v) Others if any

For FLD :

i) New variety/technology

ii) Poor yield at farmers level

iii) Existing cropping system

iv) Others if any

3.10 Field activities

i. Name of villages identified/adopted with block name (from which year) -

ii. No. of farm families selected per village :

iii. No. of survey/PRA conducted :

iv. No. of technologies taken to the adopted villages

v. Name of the technologies found suitable by the farmers of the adopted villages:

vi. Impact (production, income, employment, area/technological– horizontal/vertical)

vii. Constraints if any in the continued application of these improved technologies

3.11. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab:

1. Year of establishment :

2. List of equipments purchase with amount

Sl. No.	Name of the equipment	Quantity	Cost (Rs)
1			

3. Targets of samples for analysis:

Details	No. of Samples	No. of Farmers	No. of Villages	Amount to be realized
Soil Samples	500	500	15	
Water	10	10	5	
Plant				
Total				

4. LINKAGE

4.1 Functional linkage with different organizations

Sr.	Name of organization	Nature of linkage
A	**Statecorporation and state deptt.**	
1	DistrictAgriculturalOfficer, Deptt. of Agriculture, District Panchayat, Jamnagar	➢ Joint diagnostic teamvisit at farmers field
2	DistrictRuralDevelopment Agency, Jamnagar	➢ Organizing collaborative trainingto

3	DeputyDirector of Veterinary, Department of veterinary &Animal Husbandry, Jamnagar	farmers ➢ For collaborative off campus training ➢ For collaborative training and demonstration Programme ➢ Collaborative on campustrainingprogramme ➢ For providing hostel facilitiesto participants and organizing collaborative Mahila Krishi Mela
4	DeputyDirector of Horticulture, Jamnagar	
5	DeputyDirector of Agriculture (Training), Farmer Training Centre, Jamnagar	
6	DeputyDirector of Agriculture (Extension), Jamnagar	
7	Asstt. Director of Fisheries, Jamnagar	
8	RangeForest Officer, Jamnagar	
9	Asstt. Director of GLDC, Jamnagar	
10	Estate Engineer, Department of Irrigation, Jamnagar	
11	All Taluka DevelopmentOfficers, and their team at Taluka level	
12	Rajkot-Jamnagar Gramin Bank, Jamnagar	
13	Project Director, ATMA, Jamnagar	
14	Project Director, DWDU, Jamnagar	
B	**PrivateCorporation**	
1	Territory Manager, GSFC, Jamnagar	➢ Imparttraining on Agril. aspects ➢ Collaborative on/off campustrainingprogramme ➢ Sponsortrainingprogramme
2	Territory Manager, GNFC, Jamnagar	
3	Territory Manager, IFFCO, Jamnagar	
4	Reliance Industries, Dept. of Green Belt, Jamnagar	
C	**NGOs**	
1	Murlidhar Trust, Opp. Trajitpara Branch School, Bhanvad	➢ Imparttraining on Agril. aspects ➢ Collaborative on/off campustrainingprogramme
2	V.D.R.F. Trust, Momai Xerox, B.P. Road, Bhanvad	
3	Late J.V. Nariya Educational and Charitable Trust, 49, Modern Market, First Floor, Nr. Amber Cinema	
4	Jay Ashapura Charitable Society, Madhav Nivas, Karmachari Society, Trikonban, Dhrol (Dist.-Jamnagar)	
5	Shekhpat Jalstrav Vikas Mandal, At.-Shekhpat, Post-Aliyabada, Ta.&Dist.-Jamnagar	
6	Lakhtar Jalstrav Gram Vikas Trust, 55, Shiv Complex, At.- Bhadra (Patiya), Ta.-Jodia, Dist.- Jamnagar	
7	Umiya Mataji Mandir Trust, At.- Sidsar, Ta.-Jamjodhpur, Dist.-Jamnagar	
8	Shardapith Education Trust, 104-Shrusti complex, Nr. Gurudwara, Jamnagar	
9	Chachara Education&Charitable Trust, 104- Shrusti complex, Nr. Gurudwara, Jamnagar	
10	Tata ChemicalSocietyforRuralDevelopment Foundation, At. Mithapur, Ta.-Dwarka, Dist.-Jamnagar	
11	Agakhan Rural Development Trust	

4.2 Details of linkage with ATMA

a) Is ATMA implemented in your district (Yes/No) :- Yes

S. No.	Programme	Nature of linkage	Remarks
1	District Level Training	Impart Training on Agricultural Aspects	Celebrate Technology week Arrangement of Krishi Mela
2.	Block level training	Lecture delivered	
3.	Village level training		

4.3 Give details of programmes implemented under National Horticultural Mission

S. No.	Programme	Nature of linkage	Constraints if any
1	-	-	District is not involve in NHM

4.4 Nature of linkage with NationalFisheriesDevelopmentBoard

S. No.	Programme	Nature of linkage	Remarks
1.	-	-	-

5.0 Utilization of hostel facilities

S. No.	Programme	No. of days
1	As per requirement	
2		
	Total	

6.0 Convergence with departments :

- **ATMA**
- **DWDU**
- **DAO**
- **DRDA**

7.0 Feedback of the farmers about the technologies demonstrated and assessed :

8.0 Feedback from the KVK Scientists (Subject wise) to the research institutions/universities :

ANNEXURE - I

Training Programme

i) Farmers & Farm women (On Campus)

Date	Clientele	Title of the training programme	Duration in days	Number of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
Crop Production										
Quarter-1st	PF/FW	Production technology of major *kharif* crops(Pigeon pea, Green gram, Groundnut, Cotton)	2	23	0	23	2	0	2	25
Quarter-2nd	PF/FW	Water management through micro irrigation system	2	22	0	22	3	0	3	25
Quarter – 3rd	PF/FW	Organic Farming	2	23	0	23	2	0	2	25
Horticulture										
Quarter-1st	PF/FW	Production technology of vegetable crops	3	25	0	25	0	0	0	25
Quarter-2nd	PF/FW	Water management through MIS in horticultural crops	3	25	0	25	0	0	0	25
Quarter – 3rd	PF/FW	Organic farming in horticulture	3	25	0	25	0	25	0	25
Quarter – 3rd	PF/FW	Production & Management practices of spices (cumin & coriander)	3	25	0	25	0	25	0	25
Quarter-4th	PF/FW	Protected cultivation (Green House, shed net etc.)	3	25	0	25	0	25	0	25
Livestock prod.										
Quarter-2nd	PF/FW	Scientific approach towards increase milk production	3	10	15	25	0	0	0	25
Quarter – 3rd	PF/FW	Animal Nutrition and feed management	3	10	15	25	0	0	0	25
Quarter-4th	PF/FW	Animal Nutrition and feed management	3	0	25	25	0	0	0	25
Agril. Engg.										
Quarter-2nd	PF/FW	Use of MIS in field crops	3	23	0	23	2	0	2	25
Quarter – 3rd	PF/FW	Use of plastics mulch in farming practices	3	22	0	22	3	0	3	25
Quarter – 3rd	PF/FW	Food processing and value addition	3	15	10	25	0	0	0	25
Home Sc.										
Quarter-1st	PF/FW	Value addition in mango	2	0	20	20	0	5	5	25
Quarter-2nd	PF/FW	Women empowerment through income generation activity	2	0	17	17	0	8	8	25
Quarter– 3rd	PF/FW	Value addition in fruits and vegetables through jam, jelly, catchup, pickles, etc.	3	0	25	25	0	0	0	25
Quarter-4th	PF/FW	Minimization of nutrient loss in processing	3	0	25	25	0	0	0	25
Plan prot.										
Quarter-1st	PF/FW	IPM in vegetable and summer crops	2	22	0	22	3	0	3	25
Quarter-2nd	PF/FW	IPM and IDM in vegetable and field crops	2	25	0	25	0	0	0	25
Quarter– 3rd	PF/FW	IPM and IDM in rabi crops	3	25	0	25	0	0	0	25
Quarter-4th	PF/FW	Integrated pest management in fruit and vegetable crops	3	25	0	25	0	0	0	25
Fisheries										
Quarter-1st	PF/FW	Value addition through Crab fattening	3	15	10	25	0	0	0	25
Quarter-2nd	PF/FW	To create awareness about environment protection among fishermen	3	17	8	25	0	0	0	25
Quarter– 3rd	PF/FW	Importance of composite fish culture of Indian Major Carp and Exotic Crap	3	15	10	25	0	0	0	25

		Spp.								
Quarter-4th	PF/FW	Development of Small Scale ornamental fish hatchery	3	25	0	25	0	0	0	25
Soil Health										
Quarter-1st	PF/FW	Integrated nutrient management	2	23	0	23	2	0	2	25
Quarter– 3rd	PF/FW	Importance of major and micro nutrient in crops production	2	23	0	23	2	0	2	25
Capacity building/Extension Education										
Quarter-1st	PF/FW	Use of Information &Commu. Technology in agriculture	3	22	0	22	3	0	3	25
Quarter-2nd	PF/FW	Agro tourism - A new concept of modern agriculture	3	18	5	23	2	0	2	25
Quarter – 3rd	PF/FW	Entrepreneurial Development of Farmers/rural youth	3	25	0	25	0	0	0	25
Quarter-4th	PF/FW	Market led extension	3	22	0	22	3	0	3	25

i) Farmers & Farm women (Off Campus)

Date	Clientele	Title of the training programme	Duration in days	No. of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
Crop Production										
Quarter-1st	PF/FW	Importance of Organic manure and bio fertilizers for crop production	1	35	10	45	5	0	5	50
Quarter-2nd	PF/FW	Techniques of weed management in Groundnut, Cotton	1	35	6	41	7	2	9	50
Quarter – 3rd	PF/FW	Crop production technology of Gram, Wheat, Cumin	1	30	10	40	7	3	10	50
Quarter-4th	PF/FW	Production technologies of Sesamum, Green gram, Groundnut	1	30	15	45	5	0	5	50
Horticulture										
Quarter-1st	PF/FW	Production technology of vegetable crops	1	50	0	50	0	0	0	50
Quarter-2nd	PF/FW	Weed management techniques in horticultural crops	1	50	0	50	0	0	0	50
Quarter – 3rd	PF/FW	Production & Management practices of spices (cumin & coriander)	1	50	0	50	0	0	0	50
Quarter-4th	PF/FW	Protective cultivation (Green House, shed net etc.)	1	35	15	50	0	0	0	50
Live Stock Production.										
Quarter-1st	PF/FW	Animal Nutrition and feed management	1	35	15	50	0	0	0	50
Quarter-1st	PF/FW	Higher milk production by improving of breed, nutrition and feed management	1	18	32	50	0	0	0	50
Quarter-2nd	PF/FW	Animal health : Important diseases and its remedies	1	18	32	50	0	0	0	50
Quarter – 3rd	PF/FW	Higher milk production by improving of breed, nutrition and feed management	1	18	32	50	0	0	0	50
Agril. Engg.										
Quarter-1st	PF/FW	Use of Plastick mulch in farming practices	1	33	17	50	0	0	0	50
Quarter-2nd	PF/FW	Installation, maintenance and fertigation through MIS	1	50	0	50	0	0	0	50
Quarter – 3rd	PF/FW	Use of plastics mulch MIS in farming practices	1	50	0	50	0	0	0	50
Quarter – 3rd	PF/FW	Repairs and maintenance of farm implements	1	48	0	48	0	0	0	48
Quarter-4th	PF/FW	Operation and maintenance of farm implements	1	47	0	47	3	0	3	50
Home Sc.										
Quarter-1st	PF/FW	Importance of nutrition and balance diet	1	0	42	42	0	8	8	50

Quarter-1st	PF/FW	Use of Solar cooker	1	0	48	48	0	2	2	50
Quarter-2nd	PF/FW	Women and child care	1	0	45	45	0	5	5	50
Quarter-2nd	PF/FW	Location specific drudgery reduction technologies	1	0	45	45	0	5	5	50
Quarter – 3rd	PF/FW	Rural crafts	1	0	45	45	0	5	5	50
Quarter – 3rd	PF/FW	Nutitional importance of aonla and its value addition	1	0	47	47	0	3	3	50
Quarter-4th	PF/FW	Value addition in fruit and vegetable	1	0	50	50	0	0	0	50
Plant Protection										
Quarter-1st	PF/FW	Management of pink bollworm in cotton	1	34	14	48	2	0	2	50
Quarter-1st	PF/FW	Integrated pest and disease management in summer crops	1	33	12	45	3	2	5	50
Quarter-2nd	PF/FW	Management of store grain pests	1	28	18	46	2	2	4	50
Quarter-2nd	PF/FW	Management of diseases in *kharif*crops	1	35	13	48	2	0	2	50
Quarter – 3rd	PF/FW	Integrated Disease and pest management in cumin and gram	1	30	15	45	3	2	5	50
Quarter – 3rd	PF/FW	IPM in vegetable crops: onion & garlic	1	25	25	50	0	0	0	50
Quarter-4th	PF/FW	Integrated diseases management in rabi crops	1	35	13	48	2	0	2	50
Quarter-4th	PF/FW	Non Chemical methods of pest management	1	50	0	50	0	0	0	50
Fisheries										
Quarter-1st	PF/FW	Importance and Techniques of Cage Culture and Pen culture	1	40	10	50	0	0	0	50
Quarter-1st	PF/FW	Mix culture of Carp spp. with fresh water prawn.	1	25	25	50	0	0	0	50
Quarter-2nd	PF/FW	Fishing technology for Ghol and Dhara Spp.	1	25	25	50	0	0	0	50
Quarter-2nd	PF/FW	Create awareness about environment protection among fishermen	1	50	0	50	0	0	0	50
Quarter – 3rd	PF/FW	Use of waste land in shrimp farming	1	25	25	50	0	0	0	50
Quarter – 3rd	PF/FW	Importance of composite fish culture of Indian Major Carp and Exotic Carp Spp.	1	25	25	50	0	0	0	50
Quarter-4th	PF/FW	Skill development for value addition in fisheries sector	1	25	25	50	0	0	0	50
Quarter-4th	PF/FW	Importance and techniques for cage culture and pen culture	1	35	15	50	0	0	0	50
Soil health										
Quarter-1st	PF/FW	Soil sampling methods and Awareness about the soil health card	1	38	0	38	12	0	12	50
Quarter-2nd	PF/FW	Importance of micronutrient in crop production	1	19	12	31	17	2	19	50
Quarter – 3rd	PF/FW	Importance of crop residue and their recycling	1	45	0	45	5	0	5	50
Capacity building/Extension Education1										
Quarter-1st	PF/FW	Entrepreneurial Development of farmers/rural youth	1	34	14	48	2	0	2	50
Quarter-2nd	PF/FW	Use of ICT for Agril. Development	1	30	15	45	3	2	5	50
Quarter – 3rd	PF/FW	New Horizons of Agro-tourism	1	47	0	47	3	0	3	50
Quarter-4th	PF/FW	Market led extension	1	30	15	45	5	0	5	50

ii) Vocational training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title*	Month	Duration (days)	No. of Participants			SC/ST participants			G.Total
					M	F	T	M	F	T	
Fruit & Vegetable	Value addition	Preservation of vegetables and fruits	Nov	4	0	22	22	0	3	3	25

Fruit & Vegetable	Value addition	Preservation of mango	May	4	0	22	22	0	3	3	25
Organic matter	Self employment	Production of varmi compost	Sept	1	19	0	19	1	0	1	20
Organic matter	Self employment	Preparation of NADEP compost pit	Feb	1	12	7	19	1	0	1	20
Farm implement	Self employment	Repairs and maintenance of tractor and farm implements	June	4	14	0	14	1	0	1	15
Ornamental Fish	Self employment	Preparation and maintenance of Aquarium	July	4	13	7	20	0	0	0	20
Sea weed	Organic fertilizer	Preparation of sea weed fertilizer	Dec	4	10	10	20	0	0	0	20

iii) Training programme for extension functionaries

Date	Clientele	Title of the training programme	Duration in days	No. of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
On Campus										
Quarter- 1	Extension functionaries	Pre-seasonal training on *kharif* crops(Pigeon pea,Green gram,Groundnut,Cotton)	1	30	5	35	5	0	5	40
Quarter- 2	Extension functionaries	Integrated Pest and Disease management in *Kharif* crops	1	30	5	35	5	0	5	40
Quarter-3	Extension functionaries	Crop production technology in Cumin, Gram, Wheat, Onien, Garlic	1	30	5	35	5	0	5	40

iv) Sponsored programme

Discipline	Sponsoring agency	Clientele	Title of the training programme	No. of course	No. of participants			Number of SC/ST			G. Total
					M	F	T	M	F	T	
a) Sponsored training progdramme											
AEG	ATMA	PF	Importance of MIS	2	80	0	80	20	0	20	100
PLP	ATMA	PF	Kharif crop protection and production technology	3	100	40	140	10	10	20	160
SFM, AEG	AGAKHAN	PF	INM and MIS in rabi crops	2	50	50	100	5	5	10	110
PLP	DAO	PF	Integrated pest and diseases management in cumin	1	60	0	60	0	0	0	60
PLP	ATMA	PF	IPM & IDM in groundnut, cotton crops	1	55	0	55	5	0	5	60
PLP	DAO	PF	IPM, IDM, INM in groudnnut and cotton	1	55	0	55	5	0	5	60
PLP	ATMA	PF	IPM & IDM in kharif crop	1	55	0	55	5	0	5	60
PLP	Dy.D.Hort.	PF	IPM, IDM, INM in Horticultural Crops	1	55	0	55	5	0	5	60
PLP	ATMA	PF	IPM, IDM, INM in Horticultural Crops	1	55	0	55	5	0	5	60
PLP	DWDU	PF	IPM & IDM in kharif crop	1	55	0	55	5	0	5	60
PLP, CP	ATMA	PF	Seed Production technology and IPM in these crops	1	55	0	55	5	0	5	60
PLP	ATMA	PF	Storage Techniques and IPM in summer crops	1	0	55	55	0	5	5	60
			Total	16	675	145	820	70	20	90	910
b) Sponsored research programme											
			Total								
c) Any special programmes											
			Total								

BUDGET ESTIMATION-2016-17

S. No.	Particulars	Budget Expend 2015-16	Budget Estimation 2016-17
A.	Recurring Contingencies		
1	Pay & Allowances	66.00	76.00
2	Traveling allowances	1.55	3.00
3	Contingencies	7.50	16.00
	TOTAL (A)	75.05	95.00
B.	Non-Recurring Contingencies	0	
	Vehicle		16.00
	Photo Copier		2.50
	Computer with Printer and Acessories		1.50
	TOTAL (B)		20.00
C.	Works		
	Threshing and Drying yard		25.00
	Fencing Cum Boundary wall		150.00
	Over Head Water tan with all facilities		50.00
	TOTAL (C)		225.00
GRAND TOTAL (A+B+C)		75.05	340.00