ACTION PLAN 2016-17

(April-2016 to March- 2017)

TO BE PRESENTED AT

ANNUAL ACTION PLAN WORKSHOP OF KVKs OF GUJARAT

ORGANIZED BY

DIRECTOR, ATARI ZONE-VI, ICAR, JODHPUR

PREPARED/COMPILED By

Dr. K. P. Baraiya, Senior Scientist & Head

Smt. A. K. Baraiya, Scientist

KRISHI VIGYAN KENDRA

JUNAGADH AGRICULTURAL UNIVERSITY

JAMNAGAR - 361 006

GUJARAT

KRISHI VIGYAN KENDRA
JUNAGADH AGRICULTURAL UNIVERSITY, JAMNAGAR

1. GENERALINFORMATION ABOUT THE KVK

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

Address	Telephone		E mail	Web address
	Office	FAX		
Krishi Vigyan Kendra 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.a. Name and address of host organization with phone, fax and e-mail

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

1.2.b. Status of KVK webside :- Yes/No

1.2.c. No. of visitors (hits) to your KVK website (as on today) :-2789784

1.2.d. Status of ICT lab at your KVK :- ICT lab was established centrally at University Headquarter, Junagadh Agricultrual University, Junagadh. As a part of ICT on KVK is also established.

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. K. P. BARAIYA	Programme Coordinator Krishi Vigyan Kendra Junagadh Agricultural University, Airforce Road, Opp. Digjam Mill Jamnagar- 361 006	9427980032	kvkjamnagar@gmail.com kvkjamnagar@jau.in

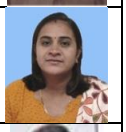
1.4. Year of sanction:

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. StaffPosition (as on 31stMarch, 2016)

Sl. No.	Sanctioned post	Name of the incumbent	Desig-nation	Discipline	Pay Scale	Grad Pay	Present basic (Rs)	Date of joining	Perm-anent /Temp-orary	Category (SC/ST/ OBC/ Others)	Mobile Number	Email ID	Recent Photographs
1	Senior Scientist & Head	Dr. K.P. Baraiya	Senior Scientist & Head	Plant Protection	37400-67000	8000	21390	17.08.2006	Temp	Other	9427980032	kpbaraiya@gmail.com	
2	Scientist	Shri S. H. Lakhani	Scientist	Crop Production	15600-39100	6000	15600	30.03.2015	Temp	Other	9537345780	sanjaylakhani1@gmail.com	

3	Scientist	Dr. V. C. Gadhiya	Scientist	Plant Protection	15600-39100	6000	15600	29.06.2015	Temp	Other	9727496745	gadhiya_vipul17@yahoo.com	
4	Scientist	Vaccant	Scientist	Horti.	15600-39100	6000	-	-	-	-			
5	Scientist	Shri P. S. Gorfad	Scientist	ExtensionEducation	15600-39100	6000	22650	27.6.1994	Temp.	OBC	9427452291	psgorfad@gmail.com	
6	Scientist	Dr. J. N. Thaker	Scientist	Fisheries	15600-39100	6000	21390	31.08.2006	Temp.	Other	9824224247	jnthaker@rediffmail.com	
7	Scientist	Smt. A. K. Baraiya	Scientist	Home Science	15600-39100	6000	15600	17.08.2006	Temp.	Other	9998227607	anjana1baraiya@gmail.com	
8	Farm Manager	Shri S. N. Galani	Prog. Asstt.	Pl. Breeding	9300-34800	4400	13700	14.2.2012	FixPay	Other	9033341997	shyamgalanis1@gmail.com	
9	Programme Assistant	Shri H. S. Godhani	Prog. Asstt.	Agril. Ent.	9300-34800	4400	13700	19.09.2015	FixPay	Other	8866255223	hitzgodhani@gmail.com	
10	Computer Programmer	Shri C. P. Padhiyar	Prog. Asstt.	Computer Operator	9300-34800	4400	11270	29.12.2008	Temp	Other	9428378780	bhavyapadhiyar@gmail.com	
11	Accountant / Superintendent	Shri B. H. Joshi	O.S.	Adm.	9300-34800	4400	11270	11.6.2008	Temp.	Other	9426462462	joshibhavik1984@gmail.com	
12	Stenographer	Kum. B. N. Dave	Jr. Clerk	Adm.	5200-20200	2400	7810	11.06.2008	Fix	Other	7567195689	joshibhargavi5286@gmail.com	
13	Driver	Vacant	Driver	Supt.	5200-20200	1900	-	-	-	-			
14	Driver	Shri. D.M. Chauhan	Driver	Supt. (Fix)	5200-20200	1900	6310	9.10.2007	Temp.	S. T.	9824173712		
15	Supporting staff	Shri B. B. Bamaniya	Peon	Supt.	4440-7440	1300	4620	01.11.2014	Temp.	S.T.	9904553794	bipin.bamaniya1986@gmail.com	
16	Supporting staff	Shri P. S. Damor	Peon	Supt.	4440-7440	1300	4990	1.09.2006	Temp.	S. T.	8141457764	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	Sourceof 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.	StaffQuarters (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 harvestingsystem	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	Presentstatus
Toyota Quallis (GJ-10G 433)	2004-05	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
Over headprojector	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
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	As below	As below
12.	29.01.2016	22		

2. DETAILS OF DISTRICT

The district of Jamnagar is lies in North Saurashtra Agro climatic zone(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 meanmoistureindex 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 severeintensity occur once in 2 to 3 years. Although the integrateddrainagesystemfrom 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 resourcedevelopmentin 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 physiographically, majorportion 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 radicaldrainage pattern. Deccantrap basalt occupies a major part of the district. The Quaternary formations include milliolite, limestone, alluvium and Geolian sediments. The dominantland 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 degradationare accelerated water erosion and Salinization.

Basicinformation of operational district, jamnagar:

Sr. No.	Details	JAMNAGAR	DEVBHUMI DWARKA
1	Total geographical area	6.075 lakh ha.	4.07509 lakh ha.
2	Totalcultivablearea	4.32 lakh ha.	2.52 lakh ha.
3	Netcultivated area	3.53 lakh ha.	2.38 lakh ha
4	Totalareaunder forest	0.43 lakh ha.	0.1736 lakh ha

5	Totalirrigated area	0.939 lakh ha.		0.23092 lakh ha.	
6	Number of holdings	1.44 lakh		1.17 lakh	
7	Averageannual rainfall	550 mm.		550 mm.	
8	Soiltype	Medium black		Medium black	
9	Totalnumber of villages	419 (8 city)		280 (8 city)	
10	Totalpopulation	13.89 lakh (2011)		7.48 lakh (2011)	
	(a) Male	7.18lakh .		3.84lakh .	
	(b) Female	6.71 lakh		3.64lakh .	
11	Literacypercentage	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)

S. No	Farming system/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, Ishabgul
		Vegetables	:	Onion, garlic, potato, chilli, binjal, tomato, cauliflower, Cowpea, cabbage, okra, peach, cucurbits etc
		Horticulture	:	Chiku, pomegranate, lemon (Citrus), Jamun, Aonla, guava, custard apple, papaya, coconut, ber, Almond, Banana
		Floriculture	:	Rose, merry gold, vevanti, etc
		Other Crops	:	Chikori, Fenugreek
2	Live stock	Bullocks and cows		
		Buffaloes		
		Sheep		
		Goats		
		Horse and camel		
		Poultry		

		Others 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)

a) Soil type

S. No	Agro-climatic Zone	Characteristics
Zone–VI	North Saurashtra	The influence area of North Saurashtra Agroclimatic 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 ncoastal 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 – Ecologicalsituation in the District

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

The physiography of entireregion of district is more or less flat. However, the region is undulating with slopes having little hillyareas from 25 to150 metersPhysicalfeatures of the area vary from flat landto 150 meters above meansea level. Most of the area falls in the range of 25m to 150m above mean sea level.

Based on the soilsurveyinformation of the zone, the soils of the district hence been broadly classified in tofine 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 zoneinto district agro ecological situations, there major factors including varioussoil 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 irrigationhas 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 influencearea 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 EcologicalSituation	Soiltexture	Altitude	Principal crops	Specialfeatures	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	Moisturestress, temperaturestress
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	Moisturestress, 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 Alluvialshallow black soils with 300-400 mm Rainfall	Sandy loam toclay loam	0-25	Sorghum, Pearlmillet, Groundnut, Sesamum	Aridclimate	31	Okha	Known salinityforgenus 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 desiredfrom 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 Jamnagardistrict are as under.

S. No	Soiltype	Characteristics	Area in ha
1	Shallow black soils	These soils have developed from basaltic trap especially from granite and 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.	124000 ha (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	181000 ha (Jodia, part of Okha,

		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.	Jamkhambhalia, 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 ranging from moderately alkaline or 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.	299000 ha (Kalyanpur, Jodia & Jamnagar, Khambhadia, Lalpur, 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	27690	146757	5.3
20	Fennel	115	241.5	2.1
21	Coriander	1460	15330	10.5
22	Ajwan	1690	6929	4.1
23	Ishabgul	150	1020	6.8
24	Chilli	740	7104	9.6
25	Garlic	7000	518000	74
26	Dill seed	50	275	5.5
	Total spices	**38895**	0	
	VEGETABLE		0	
27	Onion	2980	518520	174
28	Potato	2150	49450	23
29	Brinjal	1560	173160	111
30	Tomato	1980	301950	152.5
31	Cauliflower	440	44000	100
32	Cowpea	840	34356	40.9
33	Cabbage	435	43500	100
34	Okra	1550	85715	55.3
35	Fenugreek	40	460	11.5
36	Peach	5	10	2
37	Cucurbits	42	1596	38
38	Cluster bean	1138	46999.4	41.3
39	Other vegetable	17	484.5	28.5
	Total Vegetable	**13177**	0	
	FRUIT CROPS		0	
40	Chiku	238	21658	91
41	Pomegranate	77	4004	52
42	Citrus	173	7006.5	40.5
43	Jamun	7	14.7	2.1
44	Aonla	76	2964	39
45	Guava	15	600	40
46	Custard apple	70	3605	51.5
47	Papaya	187	86955	465
48	Coconut	380	2850000	7500
49	Ber	300	15750	52.5
50	Almond	55	2200	40
51	Banana	12	1140	95
52	Mango	425	37825	89
53	Cashew nut	7	24.5	3.5
54	Other fruits	165	8250	50
	Total Fruits	**2187**	0	
	FLOWERS		0	
55	Rose	31	1798	58

56	Merry gold	52	4576	88
57	Shevanti	1	0	
58	Lilly	7	18.9	2.7
59	Other flowers	55	1540	28
	Total flowers	**146**	0	
	OTHER CORPS		0	
60	Chikori	50	4325	86.5
61	Palma Rosa	43	5375	125
	Total Other crops	**93**		
	Fodder crops			
62	Lucern	1105	132600	120
63	Sorghum	16660	2499000	150
64	Maize	2910	0	
	Total Fodder crops	**20675**		

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

2.5. Weather data (January-15 to March-16)

Week No	Temp. C°		R.H.%		WS	BSS	Eo	Rain	Rainy
	Max	Min	I	II	(kmph)	(hrs)	(mm)	(mm)	Days
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		
Mean	**29.1**	**15.3**	**79**	**34**	**5.8**	**9.2**	**5.1**	**0.0**	**0**
Highest	**34.1**	**20.7**	**89**	**40**	**9.0**	**10.0**	**5.8**		
Lowest	**25.9**	**11.8**	**65**	**24**	**3.7**	**7.2**	**4.6**		

* Source: Meteorological observatory, Millet Research Station, JAU, Jamnagar;

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

Category	Population	Production	Productivity
Cattle	349229	2475.2 qtl total milk	
Crossbred			8.585 lit/day
Indigenous			3.375 lit/day
Buffalo	209616		4.451 lit/ha
Sheep	232530	295.16 lakh kg wool	
Crossbred			
Indigenous			
Goats	173022		0.274 lit/ha
Pigs		290097.9 Qtl meat	
Crossbred			
Indigenous			
Poultry	38041	12.77 lakh eggs	
Hens			
Desi			
Improved			
Horse &	410		

Camels	2260		
Donkey	2577		
Total Milk			
Total egg			
Total wool			

Category	Area	Production	Productivity
Fish			
Marine			
Inland			
Prawn			
Scampi			
Shrimp			

Source: Assistant Directorate of Fishries, Jamnagar

2.7 Details of Operational area/ Villages (2015-16 to 2018-19)

Sl No	Taluka	Name of the village	Major crops & enterprises	Major problem identified	Identified thrust area
1	Kalavad	Mulila, Chhatar, Chelabedi, Sanosara Golaniya, Laxmipur (Dudhala)	Cotton, groundnut, sesamum, castor, greengram, wheat, Gram, cumin, mustard, Vegetable, Soyabean, flowers, live stock	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, pink bollworm in cotton	- 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 Priority thrust areas

Sl. No	Crop/ Enterprise	Thrustarea
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 ➢ Micronutriet 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, handi crafts, and small scale enterprises
7.	Fisheries	Fish Farming
8.	Improved Implements	Popularization of the mechanized technological know how
9.	Plant protection	Pinkboll worm in cotton and white grub in groundnut,
10	Horticultural area	Enhancement of pomegranate, datepalm
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 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

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	Critical inputs	Performance parameters /

			birds/ha. etc.		**indicators**

3.3.1.1 **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 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	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 implements	1	47		47	3		3	50
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**

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			
		Total	

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				

2.6. 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	District AgriculturalOfficer, Deptt. of Agriculture, District Panchayat, Jamnagar	➢ Joint diagnostic teamvisit at farmers field ➢ Organizing collaborative trainingto 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
2	District Rural Development Agency, Jamnagar	
3	Deputy Director of Veterinary, Department of veterinary & Animal Husbandry, Jamnagar	
4	Deputy Director of Horticulture, Jamnagar	
5	Deputy Director of Agriculture (Training), Farmer Training Centre, Jamnagar	
6	Deputy Director of Agriculture (Extension), Jamnagar	
7	Asstt. Director of Fisheries, Jamnagar	
8	Range Forest Officer, Jamnagar	
9	Asstt. Director of GLDC, Jamnagar	
10	Estate Engineer, Department of Irrigation, Jamnagar	
11	All Taluka Development Officers, 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 campus training programme ➢ Sponsor training programme
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 campus training programme
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 Chemical Society for Rural Development 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	Celeberate 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 inovolve in NHM

4.4 Nature of linkage with National Fisheries Development Board

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		
3		
4		
	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 Spp.	3	15	10	25	0	0	0	25
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	3	25	0	25	0	0	0	25

		Farmers/rural youth								
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	1	33	12	45	3	2	5	50

		management in summer crops								
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								