ACTION PLAN 2017-18

(April-2017 to March- 2018)

TO BE PRESENTED AT

ANNUAL ACTION PLAN WORKSHOP OF KVKs OF GUJARAT

ORGANIZED BY

DIRECTOR, ATARI ZONE-VI, ICAR, JODHPUR

HELD AT

SARDARKRUSHINAGAR DANTIWADA AGRICULTURAL UNIVERSITY,

SARDARKRUSHINAGAR -385 506,

Dist. Banaskantha (Gujarat)

During December 30-31, 2016

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

ANNUAL ACTION PLAN (April-2017 to March- 2018)

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		
KrishiVigyan Kendra Millet Research Station, JAU Airforce Road , Opp. Digjam Mill Jamnagar- 36 1 006	(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~~ (Attached with university website)

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 Senior Scientist & Head with phone &mobile No

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. K. P. BARAIYA	Senior Scientist & Head 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	Dr. J. H. Chaudhari	Scientist	Horti./ Agronomy	15600-39100	6000	15600	18.01.2017	Temp	Other	9978303111	Jivraj89@gmail.com		
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 H. S. Godhani	Prog. Asstt.	Agril. Ent.	9300-34800	4400	13700	19.09.2015	FixPay	Other	8866255223	hitzgodhani@gmail.com		
9	Programme Assistant	Shri S. N. Galani	Prog. Asstt.	Pl. Breeding	9300-34800	4400	13700	14.2.2012	FixPay	Other	9033341997	shyamgalanis1@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	Temp.	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.)	Totalkms. Run	Presentstatus
Toyota Quallis (GJ-10G 433)	2004-05	490200	421642	Working (it is required to be rightup)
Hero Honda splender (bike) GJ-10 BB-1634	2010-11	46475	18302	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 SAC meeting 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	-	-
13.	25.10.2016	27	As below	As below

Suggestions made by committee members during presentation of 13th SAC is as under :

1.	Dr. A. R. Pathak, Hon'ble Vice Chancellor, Junagadh Agricultural University, Junagadh & Chairman of the SAC suggested following points. ➢ Arrange training about pink bollworm in first quarter. ➢ He suggested to arrange FLD on vegetable (Brinjal : GJBH-4) our university released varieties. ➢ Arrange FLD on Ajwain crop, Wheat GW-463 variety, Pearl millet GHB-732 ➢ Arrange demonstration on sea weed liquid ➢ Arrange demonstration on Bio-fertilizer in horticultural crops ➢ Establish Azola demonstration unit and create awareness among farmers ➢ Arrange training on use low cost feeding technology in fisheries ➢ Arrange training on pearl oyster production in collaboration with Fisheries Research Station, JAU, Sikka (Jamnagar) ➢ He suggested to arrange on campus training with line department on fisheries subject ➢ Arrange training on cage culture ➢ Arrange OFT on animal husbandry ➢ Recast title of training on clean milk production ➢ Arrange OFT/FLT to women fish farmers for raft preparation of *Kappaphycus* spp.
2.	Dr. V. P. Chovatiya, Director of Research, JAU, Junagadh pointed out ➢ Arrange training on Ajwain, Chikori and other spice crop. ➢ Arrange off campus training on production of Medicinal and aromatic plants ➢ Arrange training on reduction of storage losses in farm produce.
3.	Dr. A. M. Parakhia, Director of Extension Education, JAU, Junagadh advice that ➢ Arrange training on use of bio-fertilizers and recycling of farm waste through composting. ➢ Modify objective of OFT on IMC spawn (Fisheries). Recast the OFT after discussion with KVK, Kodinar and experts from Fisheries College. ➢ Study the impact analysis of KVK activity in old operational villages, ➢ Carried out PRA survey of new operational villages. ➢ Kept flex banner throughout season on FLD field.
4.	Dr. V. N. Patel, Associate Director of Research (North Saurashtra Agro-climatic Zone) and Research Scientist (DF), Dry Farming Research Station, JAU, Targhadia suggested to divert farmers towards organic farming.
	Shri J. B. Mathasoliya, District Agricultural Officer, District Panchayat, Jamnagar Recommended ➢ Arrange training on production of bio-products by farmers (Jivamrut) ➢ Arrange training on organic farming
5.	Shri Kishorbhai, a progressive farmer suggested to arrange more training on organic farming with use of “Gaumutra”.
6	Shri Maheshbhai Ghetiya, a progressive farmer suggested to arrange more training on organic farming with use of 30 days old buttermilk.

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 potentialevapo-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 tophysiographically, 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 includemilliolite, 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 degradationareaccelerated water erosion and Salinization.

Basic information of operational district, Jamnagar and Devbhumi Dwarka :

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	Netcultivatedarea	3.53 lakh ha.		2.38 lakh ha	
4	Totalareaunder forest	0.43 lakh ha.		0.1736 lakh ha	
5	Totalirrigatedarea	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 hillyareasfrom 25 to150 metersPhysicalfeatures of the area vary from flat landto150 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 zone in to 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, 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	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 Alghlflor 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.	Mediu m black soils	The major portion of Jamnagar (Some part of Kalyanpur, KHambhaliya& Jamnagar, major part of Lalpur, Dhrol, Jodiataluka 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 Okhamandal, Kalyanpur, Jamkhambhaliya and jamnagartalukas). 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	181000 ha (Jodia, part of Okha, Jamkhambhal ia, Kalyanpur& Jamnagar)

		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.	
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 Jamjodhpurtalukas 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 (January-16 to November-16)

Weekly mean Weather data-at Jamnagar during-2016									
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		
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		
14-A	32.9	22.1	80	38	11.2	9.2	6.6		
15	34.5	23.6	79	42	11.2	10.2	6.6		
16	34.4	23.6	73	46	11.3	10.6	6.9		
17	36.2	24.0	73	37	11.6	10.0	7.6		
18	36.8	26.2	74	37	13.1	10.4	8.0		
19-M	36.1	26.2	81	52	12.9	10.9	7.8		
20	36.3	27.2	85	50	15.2	11.1	8.0		
21	37.2	28.6	77	52	20.2	10.4	8.4		
22	35.9	28.5	73	54	17.5	10.9	8.1		
23-J	36.0	28.5	74	55	16.9	10.9	8.3		
24	36.7	28.9	70	49	21.8	7.9	8.5		
25	34.3	28.6	76	59	14.6	5.4	7.2	4.0	1
26	34.9	27.1	82	65	7.2	6.0	5.9	28.5	3
27-J	33.7	28.1	77	61	15.8	3.2	6.4		
28	31.8	27.1	85	72	12.8	0.1	4.2	15.0	3
29	32.3	26.1	85	65	13.0	3.1	4.5	11.0	2
30	32.4	26.3	82	69	11.6	3.8	4.7	11.5	1
31	29.6	25.8	91	84	13.8	0.8	3.4	136.5	4
32-A	29.1	25.2	94	83	13.0	0.0	3.0	97.0	4
33	32.1	26.2	85	61	13.4	5.0	4.9		
34	30.8	25.4	90	77	14.0	4.6	4.4	39.5	3
35	30.3	25.7	94	77	7.6	3.4	2.8	36.5	3
36-S	31.6	24.5	88	63	9.8	8.1	4.8		
37	32.5	24.8	87	61	6.7	9.5	5.8		
38	31.2	26.0	87	69	11.2	6.0	5.2	1.5	
39	31.3	24.1	86	63	8.8	8.8	5.3		
40-O	30.5	24.8	93	76	6.9	5.0	3.7	54.0	3
41	32.2	23.4	91	61	4.9	8.5	4.0		
42	33.2	20.9	87	44	3.2	9.3	4.7		
43	30.8	19.8	86	47	3.4	9.7	4.6		
44	32.9	16.4	85	31	3.2	9.1	4.5		
45-N	32.9	16.9	91	31	2.0	8.9	4.2		
46	29.7	14.7	65	32	4.2	9.2	4.2		
47	30.1	15.4	81	38	3.3	9.2	4.2		
48	30.2	15.5	86	38	3.4	9.2	3.8		
Mean	**32.1**	**22.0**	**82**	**49**	**9.4**	**7.9**	**5.5**	**435.0**	**27**
Highest	**37.2**	**28.9**	**94**	**84**	**21.8**	**11.1**	**8.5**		
Lowest	**25.9**	**11.8**	**65**	**24**	**2.0**	**0.0**	**2.8**		

* 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

3.1.A. Details of targeted mandatory activities by KVK

OFT		FLD	
(1)		(2)	
Number of OFTs	Number of Farmers	Area (ha)	Number of Farmers
9	27	120	350

Training		Extension Activities	
(3)		(4)	
Number of Courses	Number of Participants	Number of activities	Number of participants
28	700	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 bloth of garlic	Management of purple blotch of garlic					
4	CP	Groundnut	Low yield of groundnut	Effect of Biofertilizers in Groundnut production					
5	CP	Wheat	Nutrient deficiency	Response of Bio fertilizers to wheat yield					
6	WOE	Drudgery reduction	Muscular skeletal problem of workers Drudgery to rural women Injury due to thorns of brinjal/okra	Assessment of mittens for vegetable harvesting					
7	FIS	IMC	Reduce mortality rate	Assessment of Pen cultures of Indian Major Carp (IMC) spawn to fry before stocking in village Pond/Reservoir					
8	FIS	Fresh water prawn & IMC	Use of Maximum natural resources	Stocking of Freshwater prawn with IMC fingerlings in village pond/Reservoir					
9	LPM	Cow	Role of bypass fat in ration of dairy animals	Role of bypass fat in ration of dairy animals					

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	1	1								2
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction					1					1
Farm machineries										
Value addition										
Integrated Pest Management		1			1					2
Integrated Disease Management					1					1
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL	**1**	**2**			**3**					**6**

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										
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Post Harvest Technology										
Integrated Pest Management										
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL										

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

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Vermi culture	Fisheries	TOTAL
Evaluation of Breeds								
Nutrition Management	1							1
Disease of Management								
Value Addition								
Production and Management							2	2
Feed and Fodder								
Small Scale income generating enterprises								
TOTAL	**1**						**2**	**3**

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								
Feed and Fodder								
Small Scale income generating enterprises								
TOTAL								

3.1.B. Details of On Farm Trial

OFT-1

Title: Management of white grub in groundnut

Objective: To reduce infestation of white grub.

Problem definition: incidence of white grub is increase

1. Lack of seed treatment
2. lack of pre application of pesticides

Problem diagram :-

Improper cultivation practices	**Management of white grub in groundnut**	Multi season cropping system
Mono-cropping system		Heavy infestation of white grub was found

Lack of seed treatment		Lack of knowledge about pest outbreaks and its management
In judicious use of pesticide		In judicious use of chemical fertilizer
Irregular irrigation		Improper use of FYM (without decomposition)
lack of pre application of pesticides		

Treatments:

1. **Farmer's Practices** :- Injudicious use of pesticides.[use of chlorpyriphos, quinalphos, flubendiamide, phorate, cartap hydrochloride, carbofuran, clothianidine, imidacloprid+ Fipronil, Thiamethoxam after infestation of white grub as post application.
2. **Recommendation** :- 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.
3. **Refinement:-** 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.

No. of Replication: 3 (Farmers)

Source of Technology: - Junagadh Agricultural University

Thematic area: IPM

Observations:

1. Record no. of grub per 1 meter row length.
2. Yield data.
3. Cost benefit ratio

OFT-2

Title: Management of thrips in chilli.

Objective: To minimize the thrips incidence in chilli. To reduce injudicious use of chemical pesticide. To minimize residual effect of chemical

Problem definition:

1. Heavy infestation of Thrips was found
2. Lack of seed treatment and improper cultivation practices
3. Lack of knowledge about pest outbreaks and its management
4. Injudicious use of nitrogenous fertilizer

Problem diagram :-

Resurgence of thrips	**Management of thrips in chilli**	Multi season cropping system
Mono-cropping system		Lack of knowledge about pest outbreaks and its management
Lack of seed treatment		Lack of improper cultivation practices
In judicious use of pesticide		In judicious use of chemical fertilizer
Irregular irrigation		Improper use of FYM (without decomposition)

Treatments:

1. **Farmer's Practices**:-Injudicious use of insecticides. [use of chlorpyriphos, quinalphos, flubendiamide, imidacloprid, Fipronil, Thiamethoxam cypermethrin, lamdacyhalothrin after infestation of thrips at weekly interval without follow ETL]

2. **Recommendation** :-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)
3. **Refinement:-** Spray of *Bearuveria bassiana* @ 5 g/lit of water at 15 days interval

No. of Replication: 3 (Farmers)

Source of Technology: - Junagadh Agricultural University

Thematic area: IPM

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 Garlic

Title: Management of purple blotch of garlic.

Objective: To minimize the infestation of purple blotch of garlic. To increase production. To reduce yield loss of garlic

Problem definition: Incidence of Thrips is increase

1. Heavy infestation of Thrips and purple blotch was found
2. Lack of seed treatment and improper cultivation practices
3. Lack of knowledge about pest, diseases outbreaks and its management
4. Injudicious use of nitrogenous fertilizer
5. Lack of fungicides use as preventive measure

Problem diagram :-

Improper cultivation practices	**Management of purple blotch of garlic**	Multi season cropping system
Mono-cropping system		Heavy infestation of purple blotch was found
Lack of seed treatment		Lack of knowledge about diseases outbreaks and its management
In judicious use of pesticide/fungicide		In judicious use of chemical fertilizer
Irregular irrigation		Improper use of FYM (without decomposition)

Treatments:

1. **Farmer's Practices** :-Injudicious use of fungicide (Spray insecticides at weekly interval), spray fungicide after initiation/heavy infestation of diseases.
2. **Recommendation** :-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. **(Junagadh Agricultural University; Director of Onion & Garlic Research Station, ICAR)**
3. **Refinement:-** 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**.**

No. of Replication: 3 (Farmers)

Source of Technology: - Junagadh Agricultural University; Director of Onion & Garlic Research Station, ICAR

Thematic area: IDM

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 : To increase yield of Groundnut

Problem definition:

1. Low yield due to low consumption of fertilizers.
2. Yellowing of groundnut
3. Residual toxicities of chemical fertilizers
4. threat to the sustainability of crop production
5. High cost of chemical fertilizers
6. Lack of well distributed rainfall
7. Unavailability of fertilizer as when require

Problem diagram :-

Improper cultivation practices	**Effect of Bio fertilizers in Groundnut production**	Multi season cropping system
Yellowing of leaves		Residual toxicities of chemical fertilizers
Lack of balance use of nutritional recommendation		Lack of knowledge about pest outbreaks and its management
In judicious use of pesticide		In judicious use of chemical fertilizer
Irregular irrigation/ irregular rainfall		Improper use of FYM (without decomposition)
Unavailability of fertilizer as when require		

Treatments :

1. **Farmer's Practices** :-[fertilizer (36N -50P_2O_5-0K_2O)Kg/ha]
2. **Recommendation** :-Recommended dose of fertilizer (12.5N -25P_2O_5-50K_2O)Kg/ha.
3. **Refinement:-** 75% RDF + Seed treatment of Rhizobium, PSB and PMB culture (Potas Mobilizing Bacteria) each at 25 to 30 ml/kg seed**)**.

No. of Replication :- 3 (Farmers)

Source of Technology: - Junagadh Agricultural University

Thematic area: INM

Observations :-

1. Soil analysis at before and after
2. Pod and fodder Yield (Kg/ha)
3. Economics
4. Yellowing of groundnut

OFT:5

1. Title : Response of Bio fertilizers to wheat yield

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

Problem definition:

1. Low yield due to low consumption of fertilizers.
2. Residual toxicities of chemical fertilizers
3. Threat to the sustainability of crop production
4. High cost of chemical fertilizers
5. Unavailability of fertilizer as when require
6. Shortage of water

Problem diagram :-

Improper cultivation practices	**Response of Bio fertilizers to wheat yield**	Multi season cropping system
Residual toxicities of chemical fertilizers		Unavailability of fertilizer as when require
threat to the sustainability of crop production		Lack of knowledge about nutrient management

Lack of knowledge about bio fertilizer		In judicious use of chemical fertilizer
High cost of chemical fertilizers		Improper use of FYM (without decomposition)

Treatments:

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

No. of Replication :- 3 (Farmers)

Source of Technology: - Junagadh Agricultural University

Thematic area: INM

Observation:

1. Soil analysis at before and after
2. No. of tillers per plant
3. Plant height(cm) at harvest time
4. Number of grain per spike
5. Yield (kg/ha)
6. Economics (B:C ratio)

OFT-6

Title : Assessment of mittens for vegetable harvesting.

Objective :

1. To reduce drudgery, injury and musculo skeletal disorders in farm women.
2. To improve the work efficiency

Problem definition:

1. Muscular skeletal problem of workers
2. Drudgery to rural women
3. Injury due to thorns of brinjal/okra

Problem diagram :-

Unavailability of skilled hand tools for harvesting of vegetable	**Assessment of mittens for vegetable harvesting**	Low area of vegetable cultivation
Drudgery to rural women		Do not calculation of work efficiency
Lack of knowledge		Poor economic condition

Treatments :

1. **Farmer's Practices** :- No use any protective wear
2. **Assessment** :- Use of mittens for Okra and Brinjal harvesting.

No. of Replication :- 3 (Farm women)

Source of Technology:- SAUs (MKV- Parbhani, Maharashtra)

Thematic area: Drudgery reduction

Observations :-

1. Effect on skin
2. Drudgery perceived
3. Efficiency of picking per hour

OFT-7 (Assessment)

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

Objectives: 1. To reduce mortality rate during stocking
2. To increase final yield & income

Experimental Animal: IMC spawn

Problem diagram :-

Over stocking of seed	**Assessment of Pen cultures of Indian Major Carp (IMC) spawn to fry before stocking in village Pond/Reservoir**	Mortality rate is higher
Uncertainity about final production		Decrease total production
Wastage of natural resourses		Lack of knowledge about fish farming technology

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

Source of Technology:- Centeral Inland Fishries Research Institute, Barrakpore, Calcutta.

Thematic area: Production and Management

Observations:

1. Total production (in KG.) at the time of harvesting from village pond/reservoir
2. Average body weight at the time of harvesting
3. Total net income

OFT: 8 (Assessment)

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

Objectives: 1. To reduce the farming cost by using use maximum natural resources (Food, water body etc.)
2. To increase total yield and Income.

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

Problem diagram :-

Over stocking of seeds	**Stocking of Freshwater prawn (*Macrobrachium rosenbergii*) with IMC fingerlings in village pond/Reservoir**	Minimun usage of natural resources
Single Species stocking		Total production decrese
Lack of knowledge		Low income

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

Source of Technology:- Centeral Inland Fishries Research Institute, Barrakpore, Calcutta.

Thematic area: Production and management

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

OFT-9 (Assessment)

Title : Role of bypass fat in rations of dairy animals.

Objective :

1. To increase fat persantage in Milk
2. To increase total yield and income
3. Health Improvement in milking animal

Problem diagram :-

Inadequate nutrients in the daily ration	**Role of bypass fat in rations of dairy animals.**	Low fat % in milk
Decreased milk production		Financial loss
Lack of knowledge about Ntrition management		Poor health duo to improper feed

Experimental animal: Cow

Treatments :

1. **Farmer's practices:-** Normal dietary pattern *i.e.* Green fodder, Dry fodder and concentrate.
2. **Assessment:**- Add 100g bypass fat as supplement with normal rations.

No. of Replication: 3 farmers

Source of Technology:- Animal Nutrition Research station, AAU, Anand (SAUs)

Thematic area: Nutrition management

Observations :-

1. Total fat increased (Percentage)
2. Total milk productivity (liter)
3. Total 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	Cotton	Bt. Cotton	IPM/INM	Insecticide, Bio pesticide	Azadirechtin, Profenophos., *Beauveriabassiana*	Kh-17	8	20	Pest population, yield
2	Chilli		IPM	Insecticide, Bio pesticide, Bio fertilizer	Azadirechtin, Profenophos, *Beauveriabassiana* Azotobactor, PSB	Kh-17	2	5	Yield, % fruit damage
3	Brinjal	GJBH-4	Varietal	Variety	seed	Kh-17	2	5	Yield, % fruit damage
4	Okra	JGOH-4	Varietal	Variety	seed	Kh-17	2	5	Yield, % fruit damage
5	Wheat	GW-463	Varietal	Variety	seed	Rabi-17	4	10	Yield
6	Cumin	GC-4	IDM	Bio fungicide	Trichoderma	Rabi-17	4	10	Yield, % Plant damage
7	Ajwain	Gujarat Ajwain-2	Varietal	Variety	seed	Rabi-17	4	10	Yield, % Plant damage
8	Coriander	GC-2	Varietal	Variety	Seed (8 kg)	Rabi-17	8	20	Yield
9	Pearl Millet	GHB-732	Varietal	Variety	Seed (GHB-732) 1.5 kg	Sum-17-18	4	10	Yield

Other Scheme									
10	**NFSM**-Chick pea	GJG-5	IPM, Varietal	Bio pesticide, Variety	NPV, *Beauveria*, Seed (GJG-5)	Rabi-17	20	50	Yield, % pod damage
11	**NFSM**-Pigeon pea	Vaishali (BSMR 853)	IPM/ IDM/ INM	Bio pesticide, Bio fertilize, Bio fungicide Micro nutrient	*beauveria bassiana*, *Trichoderma,* PSB, Rhizobium, Micro mix	Kh-17	20	50	Yield, % pod damage
12	**NMOOP**-Groundnut	GG-20	IPM, IDM, INM	Bio pesticide, Bio fertilize, Bio fungicide Micro nutrient	Beauveria bassiana, Trichoderma, PSB, Rhizobium and Micro nutrient	KH-17	20	50	Yield, % pod damage
13	**NMOOP**-Sesamum		IPM, IDM, INM	Insecticide, Bio fungicide, Bio fertilizer,	DDVP, Cypermethrin, Trichoderma, PSB and Azatobector	Sum-17	20	50	Yield, % pod damage
14	**ATIC**-Kitchen gardening	Vegetable seeds	Nutritional management	Seeds of vegetable for kitchen gardening	Seeds of vegetable for kitchen gardening	2017-18	2	50	Cost saving
15	**ATIC**-Seaweed	Kappaphycus	Income generation	Raft Cultural	Raft, Seaweed	Rabi-17	-	5	Production

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
	Cotton			
1	Field days	1	August	20
2	Farmers Training	1	June	30
3	Media coverage	1	April	
4	Training for extension functionaries	1		
	Chilli			
1	Field days	1	July	20
2	Farmers Training	1	May	30
3	Media coverage	1	May	
4	Training for extension functionaries	1		
	Brinjal/Okra			
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		
	Cumin/Ajwain			
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		
	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		
	Chickpea			
1	Field days	1	November	20
2	Farmers Training	1	October	30
3	Media coverage	1	October	
4	Training for extension functionaries	1		
	Pigeon pea			
1	Field days	1	November	20
2	Farmers Training	1	August	30
3	Media coverage	1	October	
4	Training for extension functionaries	1		
	Groundnut			
1	Field days	1	July	20
2	Farmers Training	1	May	30
3	Media coverage	1	May	
4	Training for extension functionaries	1		
	Sesamum			
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		
	Seaweed			
1	Field days	2	Dec, Jan	20
2	Farmers Training	1	Nov	30
3	Media coverage	1	Nov	
4	Training for extension functionaries			

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		2017-18	5	5	Solar cooker	Time & fuel

(ii) Livestock Enterprises

Enterprise	Breed	No. of farmers	No. of animals, poultry birds/ha. etc.	Critical inputs	Performance parameters / indicators
Fish	IMC	5	5	Rice bran, GOC	Production
Fish	IMC	5	5	Urea, SSP, Cow dung	Production

3.3.1.1 TRAINING (INCLUDING THE SPONSORED AND FLD TRAINING PROGRAMMES):

A. ON CAMPUS

Thematic Area	No. of Courses	No. of participant						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I Crop Production								
Weed Management				0			0	0
Resource Conservation Technologies				0			0	0
Cropping Systems	1	17	3	20	3	2	5	25
Crop Diversification				0			0	0
Integrated Farming				0			0	0
Water management				0			0	0
Seed production				0			0	0
Nursery management				0			0	0
Integrated Crop Management				0			0	0
Fodder production				0			0	0
Production of organic inputs				0			0	0
Total	**1**	**17**	**3**	**20**	**3**	**2**	**5**	**25**
II Horticulture				0			0	0
a) Vegetable Crops				0			0	0
Production of low volume and high value crops	1	19		19	6		6	25
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.)				0			0	0
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				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				0			0	0
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
Total	**1**	**19**	**0**	**19**	**6**	**0**	**6**	**25**
III Soil Health and Fertility Management				0			0	0
Soil fertility management	1	21		21	4		4	25
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				0			0	0
Nutrient Use Efficiency				0			0	0
Soil and Water Testing				0			0	0
Total	**1**	**21**	**0**	**21**	**4**	**0**	**4**	**25**
IV Livestock Production and Management				0			0	0
Dairy Management	1	3	12	15	2	8	10	25
Poultry Management				0			0	0
Piggery Management				0			0	0
Rabbit Management/goat				0			0	0

Disease Management				0			0	0
Feed management				0			0	0
Production of quality animal products				0			0	0
Total	**1**	**3**	**12**	**15**	**2**	**8**	**10**	**25**
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				0			0	0
Gender mainstreaming through SHGs				0			0	0
Storage loss minimization techniques				0			0	0
Value addition	1		19	19		6	6	25
Income generation activities for empowerment of rural Women				0			0	0
Location specific drudgery reduction technologies				0			0	0
Rural Crafts				0			0	0
Women and child care				0			0	0
Total	**1**	**0**	**19**	**19**	**0**	**6**	**6**	**25**
VI Agril. Engineering				0			0	0
Installation and maintenance of micro irrigation systems				0			0	0
Use of Plastics in farming practices				0			0	0
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				0			0	0
Post Harvest Technology				0			0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
VII Plant Protection				0			0	0
Integrated Pest Management				0			0	0
Integrated Disease Management				0			0	0
Bio-control of pests and diseases	1	16	2	18	4	3	7	25
Production of bio control agents and bio pesticides				0			0	0
Total	**1**	**16**	**2**	**18**	**4**	**3**	**7**	**25**

VIII Fisheries				0			0	0
Integrated fish farming				0			0	0
Carp breeding and hatchery management				0			0	0
Carp fry and fingerling rearing				0			0	0
Composite fish culture	1	11		11	14		14	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	1	18		18	7		7	25
Edible oyster farming				0			0	0
Pearl culture				0			0	0
Fish processing and value addition				0			0	0
Total	**2**	**29**	**0**	**29**	**21**	**0**	**21**	**50**
IX Production of Inputs at site				0			0	0
Seed Production				0			0	0
Planting material production				0			0	0
Bio-agents production	1	21		21	4		4	25
Bio-pesticides production				0			0	0
Bio-fertilizer production				0			0	0
Vermi-compost production				0			0	0
Organic manures production	1	16		16	9		9	25
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
Total	**2**	**37**	**0**	**37**	**13**	**0**	**13**	**50**
X Capacity Building and Group Dynamics				0			0	0
Leadership development				0			0	0
Group dynamics				0			0	0
Formation and Management of SHGs				0			0	0
Mobilization of social capital				0			0	0
Entrepreneurial development of farmers/youths				0			0	0
WTO and IPR issues				0			0	0
Total	**0**	**0**	**0**	**0**	**0**	**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
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
XII Others (Pl. Specify)				0			0	0

TOTAL	**10**	**142**	**36**	**178**	**53**	**19**	**72**	**250**
(B) RURAL YOUTH				0			0	0
Mushroom Production				0			0	0
Bee-keeping				0			0	0
Integrated farming				0			0	0
Seed production				0			0	0
Production of organic inputs	1	18		18	7		7	25
Integrated Farming (Medicinal)				0			0	0
Planting material production				0			0	0
Vermi-culture				0			0	0
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				0			0	0
Nursery Management of Horticulture crops				0			0	0
Training and pruning of orchards				0			0	0
Value addition				0			0	0
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				0			0	0
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	**1**	**18**	**0**	**18**	**7**	**0**	**7**	**25**
(C) Extension Personnel				0			0	0
Productivity enhancement in field crops	**1**	20		20	5		5	25
Integrated Pest Management	1	20		20	5		5	25
Integrated Nutrient management				0			0	0

Rejuvenation of old orchards				0			0	0
Protected cultivation technology				0			0	0
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	**2**	**40**	**0**	**40**	**10**	**0**	**10**	**50**
G. Total	**13**	**200**	**36**	**236**	**70**	**19**	**89**	**325**

B. OFF Campus

Thematic Area	**No. of Courses**	No. of participant						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I Crop Production								
Weed Management				0			0	0
Resource Conservation Technologies				0			0	0
Cropping Systems	1	22		22	3		3	25
Crop Diversification				0			0	0
Integrated Farming				0			0	0
Water management				0			0	0
Seed production				0			0	0
Nursery management				0			0	0
Integrated Crop Management				0			0	0
Fodder production				0			0	0
Production of organic inputs	1	17	0	17	8		8	25
Total	**2**	**39**	**0**	**39**	**11**	**0**	**11**	**50**

II Horticulture				0			0	0
a) Vegetable Crops				0			0	0
Production of low volume and high value crops	1	19		19	6		6	25
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.)				0			0	0
b) Fruits				0			0	0
Training and Pruning				0			0	0
Layout and Management of Orchards				0			0	0
Cultivation of Fruit	1	22		22	3		3	25
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				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	17		17	8		8	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
Total	**3**	**58**	**0**	**58**	**17**	**0**	**17**	**75**
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	13	6	19	4	2	6	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				0			0	0
Soil and Water Testing				0			0	0
Total	**1**	**13**	**6**	**19**	**4**	**2**	**6**	**25**
IV Livestock Production and Management				0			0	0
Dairy Management	1	5	12	17	2	6	8	25
Poultry Management				0			0	0
Piggery Management				0			0	0
Rabbit Management/goat				0			0	0
Disease Management				0			0	0
Feed management				0			0	0
Production of quality animal products				0			0	0
Total	**1**	**5**	**12**	**17**	**2**	**6**	**8**	**25**
V Home Science/Women empowerment				0			0	0
Household food security by kitchen gardening and nutrition gardening	1		19	19		6	6	25
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				0			0	0
Gender mainstreaming through SHGs				0			0	0
Storage loss minimization techniques	1		19	19		6	6	25
Value addition				0			0	0

Income generation activities for empowerment of rural Women				0			0	0
Location specific drudgery reduction technologies	1		19	19		6	6	25
Rural Crafts				0			0	0
Women and child care				0			0	0
Total	**3**	**0**	**57**	**57**	**0**	**18**	**18**	**75**
VI Agril. Engineering				0			0	0
Installation and maintenance of micro irrigation systems				0			0	0
Use of Plastics in farming practices				0			0	0
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				0			0	0
Post Harvest Technology				0			0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
VII Plant Protection				0			0	0
Integrated Pest Management	2	30	10	40	7	3	10	50
Integrated Disease Management	2	26	8	34	12	4	16	50
Bio-control of pests and diseases				0			0	0
Production of bio control agents and bio pesticides				0			0	0
Total	**4**	**56**	**18**	**74**	**19**	**7**	**26**	**100**
VIII Fisheries				0			0	0
Integrated fish farming	1	13		13	12		12	25
Carp breeding and hatchery management				0			0	0
Carp fry and fingerling rearing				0			0	0
Composite fish culture				0			0	0
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				0			0	0
Total	**1**	**13**	**0**	**13**	**12**	**0**	**12**	**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
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
X Capacity Building and Group Dynamics				0			0	0
Leadership development				0			0	0
Group dynamics				0			0	0
Formation and Management of SHGs				0			0	0
Mobilization of social capital				0			0	0
Entrepreneurial development of farmers/youths				0			0	0
WTO and IPR issues				0			0	0
Total	**0**	**0**	**0**	**0**	**0**	**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
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
XII Others (Pl. Specify)				0			0	0
TOTAL	**15**	**184**	**93**	**277**	**65**	**33**	**98**	**375**
(B) RURAL YOUTH				0			0	0
Mushroom Production				0			0	0
Bee-keeping				0			0	0
Integrated farming				0			0	0
Seed production				0			0	0
Production of organic inputs				0			0	0

Integrated Farming (Medicinal)				0			0	0
Planting material production				0			0	0
Vermi-culture				0			0	0
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				0			0	0
Nursery Management of Horticulture crops				0			0	0
Training and pruning of orchards				0			0	0
Value addition				0			0	0
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				0			0	0
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	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
(C) Extension Personnel				0			0	0
Productivity enhancement in field crops				0			0	0
Integrated Pest Management				0			0	0
Integrated Nutrient management				0			0	0
Rejuvenation of old orchards				0			0	0

Protected cultivation technology				0			0	0
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	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
G. Total	**15**	**184**	**93**	**277**	**65**	**33**	**98**	**375**

C) Consolidated table (ON and OFF Campus)

Thematic Area	No. of Courses	No. of participant						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I Crop Production								
Weed Management	0	0	0	0	0	0	0	0
Resource Conservation Technologies	0	0	0	0	0	0	0	0
Cropping Systems	2	39	3	42	6	2	8	50
Crop Diversification	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0
Water management	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0
Integrated Crop Management	0	0	0	0	0	0	0	0
Fodder production	0	0	0	0	0	0	0	0
Production of organic inputs	1	17	0	17	8	0	8	25
Total	**3**	**56**	**3**	**59**	**14**	**2**	**16**	**75**
II Horticulture				0			0	0
a) Vegetable Crops				0			0	0

Production of low volume and high value crops	2	38	0	38	12	0	12	50
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	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0
Protective cultivation (Green Houses, Shade Net etc.)	0	0	0	0	0	0	0	0
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	1	22	0	22	3	0	3	25
Management of young plants/orchards	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0
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	1	17	0	17	8	0	8	25
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
Total	**4**	**77**	**0**	**77**	**23**	**0**	**23**	**100**
III Soil Health and Fertility Management				0			0	0
Soil fertility management	1	21	0	21	4	0	4	25
Soil and Water Conservation	0	0	0	0	0	0	0	0

Integrated Nutrient Management	1	13	6	19	4	2	6	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	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0
Soil and Water Testing	0	0	0	0	0	0	0	0
Total	**2**	**34**	**6**	**40**	**8**	**2**	**10**	**50**
IV Livestock Production and Management				0			0	0
Dairy Management	2	8	24	32	4	14	18	50
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	0	0	0	0	0	0	0	0
Feed management	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0
Total	**2**	**8**	**24**	**32**	**4**	**14**	**18**	**50**
V Home Science/Women empowerment				0			0	0
Household food security by kitchen gardening and nutrition gardening	1	0	19	19	0	6	6	25
Design and development of low/minimum cost diet	0	0	0	0	0	0	0	0
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0
Storage loss minimization techniques	1	0	19	19	0	6	6	25
Value addition	1	0	19	19	0	6	6	25
Income generation activities for empowerment of rural Women	0	0	0	0	0	0	0	0
Location specific drudgery reduction technologies	1	0	19	19	0	6	6	25
Rural Crafts	0	0	0	0	0	0	0	0
Women and child care	0	0	0	0	0	0	0	0
Total	**4**	**0**	**76**	**76**	**0**	**24**	**24**	**100**
VI Agril. Engineering				0			0	0
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0

Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
VII Plant Protection				0			0	0
Integrated Pest Management	2	30	10	40	7	3	10	50
Integrated Disease Management	2	26	8	34	12	4	16	50
Bio-control of pests and diseases	1	16	2	18	4	3	7	25
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0
Total	**5**	**72**	**20**	**92**	**23**	**10**	**33**	**125**
VIII Fisheries				0			0	0
Integrated fish farming	1	13	0	13	12	0	12	25
Carp breeding and hatchery management	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0
Composite fish culture	1	11	0	11	14	0	14	25
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	0	0	0	0	0	0	0	0
Shrimp farming	1	18	0	18	7	0	7	25
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	0	0	0	0	0	0	0	0
Total	**3**	**42**	**0**	**42**	**33**	**0**	**33**	**75**
IX Production of Inputs at site				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	1	21	0	21	4	0	4	25
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	1	16	0	16	9	0	9	25
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
Total	**2**	**37**	**0**	**37**	**13**	**0**	**13**	**50**
X Capacity Building and Group Dynamics				0			0	0
Leadership development	0	0	0	0	0	0	0	0
Group dynamics	0	0	0	0	0	0	0	0

Formation and Management of SHGs	0	0	0	0	0	0	0	0
Mobilization of social capital	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	0	0	0	0	0	0	0	0
WTO and IPR issues	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
XI Agro-forestry				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
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
XII Others (Pl. Specify)				0			0	0
TOTAL	**25**	**326**	**129**	**455**	**118**	**52**	**170**	**625**
(B) RURAL YOUTH				0			0	0
Mushroom Production	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0
Production of organic inputs	1	18	0	18	7	0	7	25
Integrated Farming (Medicinal)	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0
Nursery Management of Horticulture crops	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0
Ornamental fisheries	0	0	0	0	0	0	0	0
Para vets	0	0	0	0	0	0	0	0
Para extension workers	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0

Small scale processing	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0
TOTAL	**1**	**18**	**0**	**18**	**7**	**0**	**7**	**25**
(C) Extension Personnel				0			0	0
Productivity enhancement in field crops	1	20	0	20	5	0	5	25
Integrated Pest Management	1	20	0	20	5	0	5	25
Integrated Nutrient management	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0
Capacity building for ICT application	0	0	0	0	0	0	0	0
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0
WTO and IPR issues	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0
Any other (Pl. Specify)	0	0	0	0	0	0	0	0
TOTAL	**2**	**40**	**0**	**40**	**10**	**0**	**10**	**50**
G. Total	**28**	**384**	**129**	**513**	**135**	**52**	**187**	**700**

Summary of Training Programme
ON Campus

(A) Farmers & Farm Women	**No. of couses**	No. of participant						
		others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
I Crop Production	1	17	3	20	3	2	5	25
II Horticulture	1	19	0	19	6	0	6	25
III Soil Health and Fertility Management	1	21	0	21	4	0	4	25
IV Livestock Production and Management	1	3	12	15	2	8	10	25
V Home Science/Women empowerment	1	0	19	19	0	6	6	25
VI Agril. Engineering	0	0	0	0	0	0	0	0
VII Plant Protection	1	16	2	18	4	3	7	25
VIII Fisheries	2	29	0	29	21	0	21	50

IX Production of Inputs at site	2	37	0	37	13	0	13	50
X Capacity Building and Group Dynamics	0	0	0	0	0	0	0	0
XI Agro-forestry	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)	0	0	0	0	0	0	0	0
Total (A)	**10**	**142**	**36**	**178**	**53**	**19**	**72**	**250**
(B) RURAL YOUTH	1	18	0	18	7	0	7	25
(C) Extension Personnel	2	40	0	40	10	0	10	50
Grand Total (A+B+C)	**13**	**200**	**36**	**236**	**70**	**19**	**89**	**325**

Off Campus

(A) Farmers & Farm Women	**No. of couses**	No. of participant						
		others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
I Crop Production	2	39	0	39	11	0	11	50
II Horticulture	3	58	0	58	17	0	17	75
III Soil Health and Fertility Management	1	13	6	19	4	2	6	25
IV Livestock Production and Management	1	5	12	17	2	6	8	25
V Home Science/Women empowerment	3	0	57	57	0	18	18	75
VI Agril. Engineering	0	0	0	0	0	0	0	0
VII Plant Protection	4	56	18	74	19	7	26	100
VIII Fisheries	1	13	0	13	12	0	12	25
IX Production of Inputs at site	0	0	0	0	0	0	0	0
X Capacity Building and Group Dynamics	0	0	0	0	0	0	0	0
XI Agro-forestry	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)	0	0	0	0	0	0	0	0
Total (A)	**15**	**184**	**93**	**277**	**65**	**33**	**98**	**375**
(B) RURAL YOUTH	0	0	0	0	0	0	0	0
(C) Extension Personnel	0	0	0	0	0	0	0	0
Grand Total (A+B+C)	**15**	**184**	**93**	**277**	**65**	**33**	**98**	**375**

Consolidated (On + Off Campus)

(A) Farmers & Farm Women	**No. of couses**	No. of participant						
		others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
I Crop Production	3	56	3	59	14	2	16	75
II Horticulture	4	77	0	77	23	0	23	100
III Soil Health and Fertility Management	2	34	6	40	8	2	10	50
IV Livestock Production and Management	2	8	24	32	4	14	18	50
V Home Science/Women empowerment	4	0	76	76	0	24	24	100
VI Agril. Engineering	0	0	0	0	0	0	0	0
VII Plant Protection	5	72	20	92	23	10	33	125
VIII Fisheries	3	42	0	42	33	0	33	75
IX Production of Inputs at site	2	37	0	37	13	0	13	50
X Capacity Building and Group Dynamics	0	0	0	0	0	0	0	0
XI Agro-forestry	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)	0	0	0	0	0	0	0	0
Total (A)	**25**	**326**	**129**	**455**	**118**	**52**	**170**	**625**
(B) RURAL YOUTH	1	18	0	18	7	0	7	25
(C) Extension Personnel	2	40	0	40	10	0	10	50
Grand Total (A+B+C)	**28**	**384**	**129**	**513**	**135**	**52**	**187**	**700**

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
KisanMela	1	1000	250	1250	200	50	250	1200	300	1500
KisanGhosthi	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
MahilaMandals 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
KrishiMohostva	5	0	20	20	0	20	20	0	40	40
KrishiRath	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			8988
2	Trichoderma			3773
	PSB		711	
	Azaobactor		495	
	Rhizobium		492	
	Pheromone trap		3095	
	NPV		100	

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 :- Coriander
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 : 2005-06

2. List of equipments purchase with amount

Sl. No.	Name of the equipment	Quantity	Cost (Rs)
1	Soil testing star kit	1	49250

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	**510**	**510**		

4. LINKAGE

4.1 Functional linkage with different organizations

Sr.	Name of organization	Nature of linkage
A	**State corporation and state deptt.**	
1	District Agricultural Officer, Deptt. of Agriculture, District Panchayat, Jamnagar	➢ Joint diagnostic teamvisit at farmers field ➢ Organizing collaborative training to farmers ➢ For collaborative off campus training ➢ For collaborative training and demonstration Programme ➢ Collaborative on campus training programme ➢ For providing hostel facilities to 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	DeputyDirector of Agriculture (Training), Farmer Training Centre, Jamnagar	
6	Deputy Director 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 Development Officers, and their team at Talukalevel	
12	Rajkot-Jamnagar Gramin Bank, Jamnagar	
13	Project Director, ATMA, Jamnagar	
14	Project Director, DWDU, Jamnagar	
B	**Private Corporation**	
1	Territory Manager, GSFC, Jamnagar	➢ Imparttraining on Agril. aspects ➢ Collaborative on/off campustraining 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
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	➢ Collaborative on/off campustraining programme
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		
	Total	

6.0 Convergence with departments :

Sr.	Name of organization	Nature of linkage
	1. ATMA 2. DWDU 3. DAO 4. DRDA 5. GGRC 6. NABARD 7. SPICE BOARD	➢ Organizing collaborative training to farmers ➢ For collaborative off campus training ➢ For collaborative training and demonstration Programme ➢ Collaborative on campus training programme ➢ For providing hostel facilities to participants and organizing collaborative Mahila Krishi Mela

	8. STATE HORTICULTURE 9. CENTRAL WEREHOUSE 10. TATA CHEMICAL	➢ Celebrating important days and programmes by central government as well as state government ➢ Field visit to gather ➢ Diagnostic visit on farmers field with line department

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

- Demonstrated new variety
- Introduction of newer crop by KVK through different FLD as well as OFT
- Information of any crop diversification get from KVK
- Frequently visit to farmers
- Telephonic information is available 24 hours through scientist mobile

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

- Grant for the contingency for handling diferent programmes is in sufficient
- Limit of food provision during training and other cost should be increase along with stipend and transportation fascility (Approximately Rs. 500 to 1000 per head per training required)
- Timely release of grant for successful and perfect conducting of FLD and OFT
- Required new vehicle for field visit and other extension programme. It is also required minimum two vehicle in KVK due to work load and it is among farmers field
- Contingency grant is in sufficient (It should be minimum 30 lakhs per KVK)
- Provide grant for farm protection wall and other infrastructure fascilities

Annexure - I

TRAINING PROGRAMMES

Details of Training programmes to be conducted by the KVKs.

Category	Training Type	Thematic area	Training Title	No. of Courses	Duration (Days)	Participants				
						General		SC/ST		G. Total
						M	F	M	F	
Quarter- 1st (1st April to 30th June, 2017)										
PF	ONC	CP	Scientific production technology of major *kharif* crops (Pigeon pea, Cotton, Groundnut)	1	4	17	3	3	2	25
PF	OFC	HO	Production Technology of Vegetable crops	1	4	19		6		25
PF	OFC	WOE	House hold food security by kitchen gardening and nutrition gardening	1	4	0	19	0	6	25
PF	OFC	PLP	IPM & IDM in protected cultivation	1	4	15	5	3	2	25
PF	OFC	PLP	Management of pink bollworm in cotton & management of white grub in groundnut and other kharif crops	1	4	13	4	6	2	25
RY	ONC	FIS	Importance & techniuqes of cage culture and pen culture	1	4	18	0	7	0	25
EF	ONC		Pre-seasonal training on *kharif* crops (Pigeon pea, Green gram, Groundnut, Cotton)	1	4	20	0	5	0	25
Quarter- 2nd (1st July to 30th September, 2017)										
PF	OFC	CP	Organic farming : Todays need for integrated crop management	1	4	22	0	3	0	25
PF	OFC	HO	Production Technology of spices and condiments (Coriander, cumin, ajwain)	1	4	19	0	6	0	25
PF	ONC	SFM	Use of biofertilizers and recycling of farm waste through composting	1	4	21	0	4	0	25
RY	ONC	LPM	Higher Milk Production by Improving breed, Nutrition & Feed Management.	1	4	3	12	2	8	25
PF	OFC	WOE	Location specific drudgery reduction technology	1	4	0	19	0	6	25
PF	ONC	PLP	IPM and IDM in vegetable, groundnut & cotton crops	1	4	16	2	4	3	25
PF	OFC	PLP	IPM & IDM in fruit, vegetable and rabi field crops	1	4	15	5	4	1	25
PF	ONC	FIS	Shrimp farming : culture, feed management, diseases and its prevention	1	4	11	0	14	0	25
RY	ONC	Voc.	Production of Bio-agents and it use in agriculture	1	4	18	0	7	0	25
Quarter-3rd (1st Oct to 31st Dec, 2017)										
PF	OFC	HO	Scientific production of fruit crops (Pomegranate, papaya, ber, date palm)	1	4	22	0	3	0	25
PF	OFC	SFM	Integrated Nutrient Managenet in Coriander, gram and cumin	1	4	13	6	4	2	25
PF	ONC	WOE	Value addition in fruits, vegetables and agriculture produce	1	4	0	19	0	6	25

Category	Training Type	Thematic area	Training Title	No. of Courses	Duration (Days)	Participants				
						General		SC/ST		G. Total
						M	F	M	F	
PF	OFC	FIS	Sea weeds : types, importance, culture technique and various use	1	4	13	0	12	0	25
RY	ONC	PI	Production technology of different bio-agents	1	4	21	0	4	0	25
EF	ONC		Crop production technology in Cumin, Gram, Wheat, Onion, Garlic	1	4	20	0	5	0	25
Quarter- 4th (1st Jan to 31st March, 2018)										
PF	OFC	CP	Crop production technology of summer green gram, sesame and groundnut	1	4	17	0	8	0	25
PF	ONC	HO	Production Technology of major horticultural crops of the district (Pomegranate, papaya, spices and condiments)	1	4	17	0	8	0	25
PF	OFC	LPM	Dairy management : selection, housing, feed breeding and health	1	4	5	12	2	6	25
PF	OFC	WOE	storage loss minimization techniques and food processing and value addition in fruit, vegetable, spices and other agricultural produce	1	4	0	19	0	6	25
PF	OFC	PLP	Store grain pests and its management	1	4	13	4	6	2	25
RY	ONC	PI	Production of organic input at a site	1	4	16	0	9	0	25
			TOTAL	**28**	**112**	**384**	**129**	**135**	**51**	**700**

Quarter and discipline wise summary of training programme :

Discipline	Subject Code	On-Campus					Off-Campus					GT
		Quarter					Quarter					
		I	II	III	IV	Total	I	II	III	IV	Total	
(A) Farmers & Farm Women, Rural Youth												
I Crop Production	CP	1	0	0	0	**1**	0	1	0	1	**2**	**3**
II Horticulture	HO	0	0	0	1	**1**	1	1	1	0	**3**	**4**
III Soil Health and Fertility Management	SFM	0	1	0	0	**1**	0	0	1	0	**1**	**2**
IV Livestock Production and Management	LPM	0	1	0	0	**1**	0	0	0	1	**1**	**2**
V Home Science/Women empowerment	WOE	0	0	1	0	**1**	1	1	0	1	**3**	**4**
VI Agril. Engineering	AEG	0	0	0	0	**0**	0	0	0	0	**0**	**0**
VII Plant Protection	PLP	0	1	0	0	**1**	2	1	0	1	**4**	**5**
VIII Fisheries	FIS	1	1	0	0	**2**	0	0	1	0	**1**	**3**
IX Production of Inputs at site	PI	0	0	1	1	**2**	0	0	0	0	**0**	**2**
X Capacity Building and Group Dynamics	CBD	0	0	0	0	**0**	0	0	0	0	**0**	**0**
(B) Extension Functionaries	EF	1	0	1	0	**2**	0	0	0	0	**0**	**2**
(C) Rural youth		0	0	1	0	**1**	0	0	0	0	**0**	**1**
Total		**3**	**4**	**4**	**2**	**13**	**4**	**4**	**3**	**4**	**15**	**28**

Table 3.2 Details of Vocational training programmes for Rural Youth to be conducted by the KVKs

Sr. No.	Training title	Crop / Enterprise	Identified Thrust Area	Duration of training (days)	No. of Beneficiaries					
					SC		ST		Others	
					M	F	M	F	M	F
1	Production of Bio-agents and it use in agriculture	Bio-agent	Production of input	21	5	3			17	

Table 3.3 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	20	0	20	5	0	5	25
Quarter-3	Extension functionaries	Crop production technology in Cumin, Gram, Wheat, Onion, Garlic	1	20	0	20	5	0	5	25

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								

Annexure-II

PROCEEDING OF THE 13th SCIENTIFIC ADVISORY COMMITTEE MEETING OF KRISHI VIGYAN KENDRA, JAU, JAMNAGAR HELD ON 25th October, 2016

The Thirteenth Scientific Advisory Committee meeting of Krishi Vigyan Kendra, JAU, Jamnagar was held at Training Hall, Krishi Vigyan Kendra, JAU, Jamnagar on 25th October, 2016.

The following members were remain present in the meeting.

Sr. No.	Name & Designation	Position
1	Dr. A. R. Pathak, Hon'ble Vice Chancellor, Junagadh Agricultural University, Junagadh	Chairman
2	Dr. A. M. Parakhia, Director of Extension Education, Junagadh Agricultural University, Junagadh -362001.	Member
3	Dr. V. P. Chovatia, Director of Research, Junagadh Agricultural University, Junagadh	Member
4	Dr. V. N. Patel, Associate Director of Research, Main Dry Farming Research Station, Junagadh Agricultural University, Targhadia (Rajkot).	Member
5	Dr. M. D. Khanpara, Research Scientist (Millet), Main Millet Research Station, Junagadh Agricultural University, Jamnagar- 361 006.	Member
6	District Agricultural Officer, District Panchayat, Jamnagar,	Member
7	Director, District Rural Development Agency, Sardar Bhavan, Rameshwarnagar, Jamnagar (Navagam Ghed).	Member
8	Project Director, District Watershed Development Unit, District Rural Development Agency, Sardar Bhavan, Rameshwarnagar, Jamnagar (Navagam Ghed).	Member
9	Dy. Director of Animal Husbandry, Dept. of Veterinary & Animal Husbandry, District Panchayat, Jamnagar	Member
10	Dy. Director of Horticulture, 30, Digvijay Plot, Jodiyawala Building, Jamnagar	Member
11	Dy. Director of Agriculture (Extension), Lalbunglow, Nr. Trazery office, Jamnagar	Member
12	Dy. Director of Agriculture, Farmers Training Centre, Air Force Road, Opp. Digjam Mill, Jamnagar.	Member
13	Project Director, Agricultural Technology Management Agency (ATMA), Air Force Road, Opp. Digjam Mill, Jamnagar.	Member
14	Deputy Director, Gujarat Land Development Corporation Ltd., Near: Shubhash Market, Jamnagar.	Member
15	Asstt. Director of Fisheries, Sumer club road, Jamnagar	Member
16	Station Director, Doordarshan Kendra, Aji Dam Road, Rajkot	Member
17	Research Officer, Fisheries Research Station, Okha,	Member
18	Progressive farmer (G): Shri Kishorbhai Laljibhai Pedhadiya, At:- Sumari, Ta. & Dist.- Jamnagar., Via:- Dhutarpur	Member
19	Progressive farm women (G): Shri Hansaben Kishorbhai Pedhadiya, At:- Sumari, Ta. & Dist.- Jamnagar., Via:- Dhutarpur	Member
20	Shri Maheshbhai Ramjibhai Ghetiya, At:- Kharva, Ta:- Dhrol , Dist:- Jamnagar	Member
21	Shri Arunbhai Bijalbhai Chavada, At:- Shethvadala, Ta:- Jamjodhpur, Dist:- Jamnagar	Member
22	Shri Mukeshbhai Bijalbhai Vaghela, At:- Shethvadala, Ta:- Jamjodhpur, Dist:- Jamnagar	Member
23	Dr. K. P. Baraiya, Senior Scientist & Head, Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar	Member Secretary

Sr. No.	Name & Designation	Position
24	Smt. Anjanaben K. Baraiya, Scientist (Home Science), KVK, JAU, Jamnagar	
25	Dr. P.S. Gorfad, Scientist (Extension Education), KVK, JAU, Jamnagar	
26	Shri S. H. Lakhani, Scientist (Crop Production), KVK, JAU, Jamnagar	
27	Dr. J.N. Thaker, Scientist (Fisheries), 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 and grant permission for proceed 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 gave introductory speech and his review on to Reduce cost of cultivation, use of micro irrigation system, replace the chemical fertilizer and pesticides with increased use of bio-products. He emphasized on organic farming and promote farmers towards organic farming, guiding the farmers for registration of organic farming certificate with GOPCA.

Dr. K. P. Baraiya, Senior Scientist & Head, Krishi Vigyan Kendra, JAU, Jamnagar presented action taken report of the minutes of 12th SAC meeting, progress report (April- 2016 to September-2016) and Action Plan (April 2017 to March- 2018) in brief. On behalf of Dr. V. C. Gadhiya, Scientist (Plant Protection), KVK, JAU, Jamnagar Dr. K. P. Baraiya, Senior Scientist & Head, Krishi Vigyan Kendra, JAU, Jamnagar presented progress report (April- 2016 to September-2016) and Action Plan (April 2017 to March- 2018) for discipline of Plant Protection. Smt. A. K. Baraiya, Scientist (Home Science), KVK, JAU, Jamnagar presented progress report (April- 2016 to September-2016) and Action Plan (April 2017 to March- 2018) for discipline of home science. Dr. P. S. Gorfad, Scientist (Ext. Edu.), KVK, JAU, Jamnagar presented progress report (April- 2016 to September-2016) and Action Plan (April 2017 to March- 2018) for discipline of capacity building and horticulture. Shri S. H. Lakhani, Scientist (Crop production), KVK, JAU, Jamnagar presented progress report (April- 2016 to September-2016) and Action Plan (April 2017 to March- 2018) for discipline of crop production and Soil Health Fertility Management. Dr. J. N. Thaker, Scientist (Fisheries), KVK, JAU, Jamnagar presented progress report (April- 2016 to September-2016) and Action Plan (April 2017 to March- 2018) 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. ➢ Arrange training about pink bollworm in first quarter. ➢ He suggested to arrange FLD on vegetable (Brinjal : GJBH-4) our university released varieties. ➢ Arrange FLD on Ajwain crop, Wheat GW-463 variety, Pearl millet GHB-732 ➢ Arrange demonstration on sea weed liquid ➢ Arrange demonstration on Bio-fertilizer in horticultural crops ➢ Establish Azola demonstration unit and create awareness among farmers

	➢ Arrange training on use low cost feeding technology in fisheries ➢ Arrange training on pearl oyster production in collaboration with Fisheries Research Station, JAU, Sikka (Jamnagar) ➢ He suggested to arrange on campus training with line department on fisheries subject ➢ Arrange training on cage culture ➢ Arrange OFT on animal husbandry ➢ Recast title of training on clean milk production ➢ Arrange OFT/FLT to women fish farmers for raft preparation of *Kappaphycus* spp.
2.	Dr. V. P. Chovatiya, Director of Research, JAU, Junagadh pointed out ➢ Arrange training on Ajwain, Chikori and other spice crop. ➢ Arrange off campus training on production of Medicinal and aromatic plants ➢ Arrange training on reduction of storage losses in farm produce.
3.	Dr. A. M. Parakhia, Director of Extension Education, JAU, Junagadh advice that ➢ Arrange training on use of bio-fertilizers and recycling of farm waste through composting. ➢ Modify objective of OFT on IMC spawn (Fisheries). Recast the OFT after discussion with KVK, Kodinar and experts from Fisheries College. ➢ Study the impact analysis of KVK activity in old operational villages, ➢ Carried out PRA survey of new operational villages. ➢ Kept flex banner throughout season on FLD field.
4.	Dr. V. N. Patel, Associate Director of Research (North Saurashtra Agro-climatic Zone) and Research Scientist (DF), Dry Farming Research Station, JAU, Targhadia suggested to divert farmers towards organic farming.
	Shri J. B. Mathasoliya, District Agricultural Officer, District Panchayat, Jamnagar Recommended ➢ Arrange training on production of bio-products by farmers (Jivamrut) ➢ Arrange training on organic farming
5.	Shri Kishorbhai, a progressive farmer suggested to arrange more training on organic farming with use of “Gaumutra”.
6	Shri Maheshbhai Ghetiya, a progressive farmer suggested to arrange more training on organic farming with use of 30 days old buttermilk.

After above suggestions from the house Dr. A. R. Pathak, Hon'ble Vice Chancellor, Junagadh Agricultural University, Junagadh, delivered the chairmen's remarks. He emphasized on active participation of farmers and scientists in specific technology development. He directed to crop diversification according to rainfall pattern and pest-diseases attack on regular farming. He pointed out that animal husbandry is most useful for agriculture and it should be increased day by day in district. He also commented on vegetable cultivation for profitable farming. He advised to take up mass campaigning for soil health and aware farmers about soil health card and to create awareness of use of sea weed liquid. He emphasizes on use of bio-product and gobargas slurry for protection of environment and promotes organic farming.

The meeting ended with the vote of thanks by Dr. P. S. Gorfad, Scientist (Extension Education), KVK, J.A.U., Jamnagar.

Member Secretary, SAC &
Senior Scientist & Head
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

BUDGET ESTIMATION-2017-18

S. No.	Particulars	Budget Expend 2016-17	Budget Estimation 2017-18
A.	Recurring Contingencies		
1	Pay & Allowances	75.00	90.00
2	Traveling allowances	1.50	3.00
3	Contingencies	9.00	42.00
	TOTAL (A)	**85.50**	135.00
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 (for laboratory)		50.00
	TOTAL (C)		225.00
GRAND TOTAL (A+B+C)		**85.50**	**380.00**