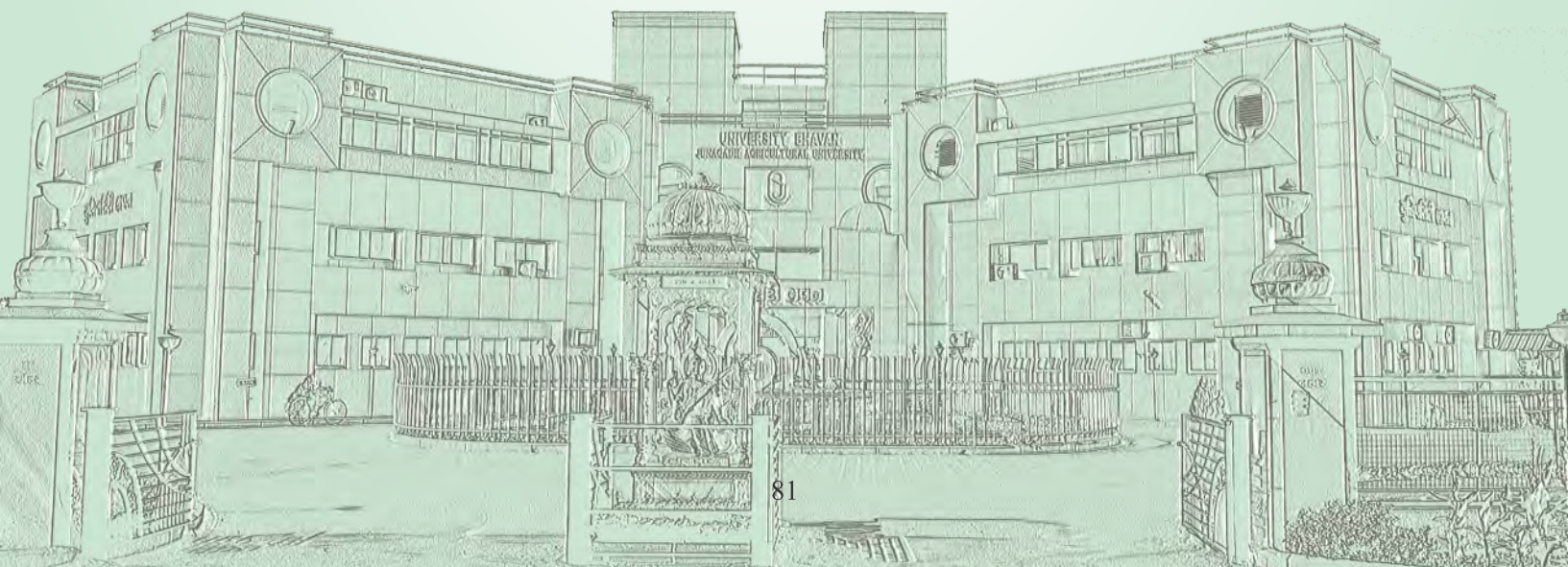




# Chapter - V



# EXTENSION EDUCATION



### 5.1 Directorate of Extension Education

The Directorate of Extension Education was established according to the Chapter-3, Part-IX vide Section 14.1(3) of the Gujarat Agricultural Universities Act-2004, for dissemination of the research findings and technical information through extension education programmes. The main function of the Directorate is to plan, coordinate, organize and guide the extension education programmes in the University and to ensure efficient working of the extension activities in close coordination with other departments and state voluntary organizations, other officers and scientists of the University. Extension Education is one of the triple functions of the Junagadh Agricultural University to boost up the agricultural production. The University has been making substantial contribution in diffusing and

communicating agricultural technologies among the extension personnel and farming community of the region. The technologies generated in agriculture and allied sciences by the University are being transferred to the end users. Dr. P. V. Patel, Dr. V. V. Rajani and Dr. B. K. Sagaraka supervised and guided the extension education activities during the reporting year.

### 5.2 Extension Education Council

The Extension Education Council was constituted according to the provision of the Gujarat Agricultural Universities Act-2004 in exercise of the statutes No S.31 & notification of Registrar No. JAU/Reg/Aca-2/Ext.Edu. Council/13887-13936/2013, date 31-07-2013. The 13<sup>th</sup> Extension Education Council meeting was organized on 13.09.2019. The members of Extension Education Council are under.

SN	Name / Designation	Position
<b>The Vice Chancellor</b>		
1.	Dr. A.R. Pathak, Hon'ble Vice Chancellor	Chairman
<b>The Director of Research</b>		
2.	Dr. V.P. Chovatia, Director of Research and Dean P.G.	Member
<b>3. The Deans of Faculties</b>		
1.	Dr. V.P. Chovatia, Principal & Dean, College of Agriculture, JAU, Amreli	Member
2.	Dr. N.K. Gontia, Principal & Dean, College of Agril. Engg. & Technology, JAU, Junagadh	Member
3.	Dr. A.Y. Desai, Principal & Dean, College of Fisheries, JAU, Veraval	Member
4.	Dr. P.H. Tank, Principal & Dean, College of Veterinary Sci. & A.H., JAU, Junagadh	Member
5.	Dr. K.A. Khunt, Principal & Dean, PGIABM, JAU, Junagadh	Member
6.	Dr. B.K. Sagarka, Principal, College of Agriculture, JAU, Junagadh	Invitee
<b>4. Five Officer/ Extension Education Experts (Nominated by the Vice Chancellor)</b>		
1.	Dr. B.N. Kalsariya, Professor & Head, Department of Extension Education, JAU, Junagadh	Member
2.	Dr. K.D. Patel, Principal, Polytechnic in Horticulture, JAU, Juanagadh	Member
3.	1. Dr. R.K. Odedara, Senior Scientist & Head, KVK, JAU, Khapat	Member
	2. Dr. Jitendra Singh, Programme Coordinator, Krishi Vigyan Kendra, Ambujanagar, Kodinar	Member



4.	Other Extension Education Expert/ Farm Manager, JAU, Junagadh 1. Prof. V.G. Barad, Assistant Extension Educationist, Sardar Smruti Kendra, JAU, Junagadh	Member
5.	<b>The Eminent Extension Education Experts outside the University concern with Farmers training (Nominated by the Vice Chancellor)</b>	
1.	Dr. A.O. Kher, Retd. Associate Director of Extension Education, JAU, Junagadh	Member
2.	Dr. M.N. Papat, Retd. Associate Director of Extension Education, JAU, Junagadh	Member
3.	Dr. V. V. Mayani, Retd. Extension Educationist, AAU, Anand	Member
6.	<b>Three Director of Agriculture/ Horticulture/ Animal Husbandry</b>	
1.	Director of Agriculture, GoG, Gandhinagar	Member
2.	Director of Horticulure, GoG, Gandhinagar	Member
3.	Director of Animal Husbandry, GoG, Gandhinagar	Member
7.	<b>Two Progressive farmers (Nominated by the Vice Chancellor)</b>	
1.	Shri Hiteshbhai Domadiya, Vadad (Junagadh)- Organic Farming	Member
2.	Shri Sanjaybhai Vagadiya, Dhava (Gir)- Horticulture Farming and Value Addition	Member
8.	1. Director of Extension Education, AAU, Anand	Invitee
	2. Director of Extension Education, NAU, Navsari	Invitee
	3. Director of Extension Education, SDAU, Sardar Krushinagar	Invitee
9.	Director, Information & Technology Cell, JAU, Junagadh	Member
8.	Associate Director of Extension Education, JAU, Junagadh	Member
9.	Dr. V.V. Rajani, Director of Extension Education, JAU, Junagadh	Member Secretary

### 5.1 Extension Education and Training Centres

No.	Course / Programme	Location
<b>Diploma/Certificate Courses</b>		
1	School of Baking	Junagadh
2	Mali Training Centre	Junagadh
3	Agro Based ITI Centre	Junagadh, Mahuva
1	Training & Visit System Training Centre	Junagadh, Targhadia
2	Centre of Excellence for Training (Oilseeds)	Junagadh
<b>Extension activity and Training Programmes Centres for Farmers/Farm Women</b>		
1	Krishi Vigyan Kendra	Jamnagar, Targhadia (Rajkot-I), Amreli, Khapat (Porbandar), Nanakandhasar (Surendranagar), Pipaliya(Rajkot-II), Gorkhijadiya (Morbi)

2	Sardar Smruti Kendra	Junagadh
<b>Extension Education Programmes for Rural People</b>		
1	Farm Advisory Service Centre	Junagadh
2	Extension Programme for Fisheries	Okha

### Extension Education and Training Programmes

#### (I) Diploma/Certificate Courses for Farm Youths

The Junagadh Agricultural University continued various Diploma/ Certificate courses during the year under report as per the details given below.

No.	Name of Course	Duration	Location	No. of participants Completed the Course
1	Bakery Training			
	• Basic Course in Baking Science	15 weeks	Junagadh	26 (2 Batches)
	• Special Training to Women	1 week	Junagadh	197(11 Batches)
3	<i>Mali</i> Training	6 months	Junagadh	05
4	Agro Based ITI Centre	6 months	Junagadh	
	• Seed Production Technology			22
	• Green House Construction & Systems Management			04
<b>Total</b>				<b>254</b>

All these courses are aiming to impart skill oriented practical training to farmers' son/daughter in order to provide an opportunity for self-employment and employment in different organizations.



Dr. B. K. Sagaraka, DEE, distributing certificates in Bakery Training Course



Dr. V. V. Rajani, distributing the certificates to students of Agro Based I.T.I., Junagadh

#### (II) Training Programmes for Extension Workers / Officers

##### (A) Training & Visit System

Junagadh Agricultural University has taken-up the task of training to the extension personnel of the Department of Agriculture and Horticulture,

Government of Gujarat through Training & Visit System. The bi-monthly workshops, pre-seasonal training workshops and short-term training programmes were organized for the participants (DAO/SMSs/AEOs/KVKs) who attended the programmes is as under.



No.	Type of programme	No. of Programmes	No of Participants
1	Bimonthly Workshop	2	64
2	Pre-seasonal Training Programme	2	48
3	Agriculture - 6 (Oilseed) AGR-6	8	308
<b>Total</b>		<b>12</b>	<b>420</b>



Beneficiaries of Dept. of Agriculture & KVKs in Bi-monthly Training programme under T & V scheme



The Officers of Dept. of Agriculture, Dept. of Horticulture and KVKs in Pre-Seasonal Training programme under T & V scheme

### (B) Other Training Programmes

The centre has continued to provide scientific knowledge to the farmers. The detail of the programmes are as under.

#### *Khedut shibir* and Diagnostic team visit

No.	Subject	No. of Activities	No. of Scientists involved	Beneficiaries
1	<i>Khedut Shibir</i>	10	32	584
2	Diagnostic Team	72	173	2270



Farm Women Training Programme Under COC Scheme



Bakery Training Under COC Scheme



Bakery Training Under COC Scheme



Farmers Training Under COC Scheme

**Training programmes for Input Dealers:**

No.	Title of course	Duration	No. of Input Dealers completed course
1	Diploma in Agricultural Extension Services for Input Dealers (DAESI) at JAU, Junagadh	1 Year	200
2	Diploma in Agricultural Extension Services for Input Dealers (DAESI) at Jamnager	1 Year	50
3	Diploma in Agricultural Extension Services for Input Dealers (DAESI) at Targhdiya	1 Year	50
4	Diploma in Agricultural Extension Services for Input Dealers (DAESI) at Veraval	1 Year	50
5	Diploma in Agricultural Extension Services for Input Dealers (DAESI) at Amreli	1 Year	50
6	Diploma in Agricultural Extension Services for Input Dealers (DAESI) at Khapat	1 Year	44
<b>Total</b>			<b>444</b>



Dr. V. P. Chovatiya Hon' ble Vice Chancellor and Dr. B. K. Sagarka, DEE Supervize the Input dealers examinations at JAU, Junagadh



Field visit of Input Dealers at Radhe Farm at Sasan Gir



**Training Programmes for Fertilizer dealers:**

No.	Title of course and Date of Training	Duration	No. of Fertilizer dealer completed course
1	Intigrated Nutrient Managment for fertilizer dealers Batch-I (27-12-2018 to 10-01-2019)	15 Days	38
2	Intigrated Nutrient Managment for fertilizer dealers Batch-II (26-02-2019 to 14-03-2019)	15 Days	38
3	Intigrated Nutrient Managment for fertilizer dealers Batch-III (16-07-2019 to 01-08-2019)	15 Days	76
4	Intigrated Nutrient Managment for fertilizer dealers Batch-IV (12-09-2019 to 27-09-2019)	15 Days	40
5	Intigrated Nutrient Managment for fertilizer dealers Batch-V (17-02-2020 to 05-03-2020)	15 Days	79
6	Intigrated Nutrient Managment for fertilizer dealers Batch-V (04-03-2020 to 20-03-2020)	15 Days	53
<b>Total</b>			<b>324</b>



Hon'ble Vice Chancellor Dr. V. P. Chovatia addressing participnats in INM Training



Participants of "Integrated Nutrient Management for fertilizer dealers".

**Green House Net House Training:**

No.	Title of Course	Duration	No. of Participants
1	Green House Net House Training for farmers (18-09-2019 to 03-10-2019)	15 Days	40



Dr. V. V. Rajani, DEE addressing the participants in Green House / Net House Training Programme at JAU, Junagadh



Dr. P. M. Chauhan, Registrar addressing the Participants' in Green house/Net House Training Programme at JAU, Junagadh

### Collaborative Training

No.	Name of training	Duration	Co- Organizer	No. of Trainees
1	Organic Farming	7 Days	ATMA-Junagadh	15
2	Agricultural Crop	1 Day	ATMA-Visavadar	25
3	Horticulture Crop	1 Day	ATMA-Mendarda	60

### (III) Training/ Extension Education Programmes for Farmers/Farm Women

#### (A) Training Programmes

Training is essential to increase the efficiency of farmers, farmwomen, rural youth and other stakeholders *etc.* On-campus as well as Off-campus training programmes were organized based on the

need and interest of the farming community.

Through the Transfer of Technology (TOT) Centres, 150 On-campus and 194 Off-campus training programmes were organized, wherein 14420 participants received training. The details are given in Table 5.1.

**Table 5.1 Training programmes organized by the Transfer of Technology Centres (KVKs) for farmers/farm women during the year 2019-20**

No.	TOT Centre	No. of Trg. Prog.	No. of participants		Total	
			Male	Female		
1	KVK, Jamnagar	A	22	709	325	1034
		B	42	2042	747	2789
2	KVK, Targhadia	A	17	357	207	564
		B	31	730	542	1272
3	KVK, Amreli	A	37	1058	846	1904
		B	34	1159	575	1734
4	KVK, Khapat	A	15	265	65	330
		B	15	145	234	379
5	KVK, Nanakandhasar	A	28	513	200	713
		B	32	611	130	741



6	KVK, Pipalia	A	21	560	256	816
		B	27	855	480	1335
7	KVK, Gor Khijadiya	A	10	160	200	360
		B	13	274	180	454
	Total	A	150	3622	2099	5721
		B	194	5816	2888	8704
<b>Grand Total</b>			<b>344</b>			<b>14425</b>

A= On-campus    B= Off-campus



On Campus training programme  
at KVK Amreli



Off Campus training programme  
at KVK Pipalia

### (B) Extension Activities

The Transfer of Technology (TOT) centres also planned and organized extension activities like seminars/workshops/symposium, field/farmers' day, agriculture fair/exhibitions, film/slide/video shows, field visits, cattle camps, farmers' group/demonstration meetings *etc.* by which total **12,96,909** farmers, farm women, youth and other stakeholders benefited. The details of the extension activities and

number of participants are given in Table 5.2

KVKs play an important role to provide guidance for income generation to the farmers by imparting skill-oriented trainings. Besides the KVKs conducted different types of extension activities, on farm testing, *etc.* The KVKs are also collecting feedback on farmers' problems, which were sent to the concerned scientists, to scientists for guidance and solution with guideline in reforming further research.

**Table 5.2 Extension activities carried out by TOT centres during 2019-20**

No.	Name of activity	KVK							Total
		Targhadia	Jamnagar	Khapat	Amreli	Nana Kandhasar	Pipalia	Gor Khijadia	
1	Krushi Mela	4	2 (2241)	1 (1000)	2 (1500)	3 (5177)	-	6 (5636)	18 (15554)
2	Field day	5 (345)	9 (188)	3 (80)	16 (199)	10 (274)	13 (341)	3 (77)	59 (1504)
3	Guidance on farm	18 (173)	85 (1047)	13 (86)	(277)	(3638)	45 (189)	02 (34)	163 (5444)

4	Guidance to visitors	1925	3234	411	243	2247	1521	1594	(11175)
5	Press note	7	10	3	21	20	2	16	79
6	Khedutshibir / Night shibir / Group discussion	5 (327)	27 (1464)	11 (140)	10 (312)	6 (336)	12	20 (330)	91 (2909)
7	Guidance through Telephone	1389	5588	513	1185	3108	2071	1393	(15247)
8	Krushigosthi/ Seminar	15 (548)	16 (1757)	3 (181)	5 (153)	2 (257)	4 (179)	16 (218)	61 (3293)
9	Khedut meeting	5 (82)	2 (33)	9 (104)	-	3 (275)	9 (517)	21 (209)	49 (1220)
10	T.V. Programme	2	5	-	-	-	-	1	8
11	Radio talk	7	-	-	-	-	-	3	10
12	Popular articles	-	1	2	5	-	4	36	48
13	Video show/ Film show	6 (1044)	35 (2626)	-	8 (604)	42 (2419)	8	9 (489)	108 (7182)
14	Cattle camp	2 (221)	-	1 (56)	1 (145)	-	4 (55)	-	8 (477)
15	Literature distribution	8 (4950)	(4088)	(1600)	(3426)	38 (7545)	1850 (1963)	6 (5927)	1902 (29499)
16	Literature published	-	2	3	-	-	5	-	10
17	Lectures delivered	17 (750)	150 (12722)	22 (362)	78 (3910)	264 (13804)	18 (825)	9 (804)	558 (33177)
18	Scientist's Farm visit	18 (173)	80 (468)	13 (86)	37 (277)	41 (609)	45 (189)	3 (29)	237 (1831)
19	Vocational training	1 (33)	1 (32)	1 (15)	1 (26)	-	1 (64)	-	5 (170)
20	Sponsored/ Collaborati on training	9 (212)	4 (186)	4 (78)	13 (576)	61 (4078)	23 (1204)	8 (255)	122 (6589)



21	Krushi-Go-Vidya subscriber Registered	35	-	-	-	-	-	-	35
22	Diagnostic team	3 (37)	32 (157)	3 (20)	10 (62)	4 (27)	37 (55)	-	89 (358)
23	Student (RAWE)	2 (70)	2 (34)	-	2 (50)	2 (50)	-	-	8 (204)
24	Celebration of Technology Week	1 (782)	1 (811)	1 (230)	1 (400)	1 (423)	1 (319)	1 (50)	7 (3015)
25	Soil Sample Analyzed	15	163	53	132	-	45	-	408
26	Participated in Agril. Exhibition	3 (9137)	2 (1432)	1	-	12 (4891)	-	6 (5638)	24 (21098)
27	Any other please specify	13 (6445)	9 (1124788)	-	-	10 (2305)	-	57 (3425)	89 (1136963)
<b>Total</b>									<b>4196 (1296909)</b>

Figures in parentheses indicate number of beneficiaries/copies

### (C) Front Line Demonstrations (FLD)

The aim of Front Line Demonstration is to demonstrate the production potentialities of newly released and pre-released production technologies of cotton, wheat, cumin, vegetables, pulses and oilseeds on farmers' fields.

In all, **1514** FLDs were conducted on various oilseeds and pulses, Crop technologies *viz.*, castor, mustard, groundnut, sesamum, cotton, gram, wheat, pearl millet and cumin crop technologies in **491.2 ha** during *kharif* and *rabi* seasons through KVKs. The results are present in Table 5.3

**Table 5.3: Performance of Frontline Demonstrations organized during 2019-20**

No	Centre	Crop	Variety/ Treatment	No. of FLDS	Area (ha)	Av. yield (q/ha)		Increase in yield (%)
						Demo.	Local check	
1.	KVK, Targhadia	Groundnut	GJG-22	10	4.0	27.25	23.25	17.20
		Groundnut	IPM	10	4.0	18.62	17.5	6.40
		Gram	GJG-3	10	4.0	18.62	15.75	18.22
		Cumin	IPM	10	4.0	9.68	8.2	18.05
		Kitchen garden	-	23	-	-	-	-
		Fodder crop	-	5	0	82	70	17.14

		Groundnut	IDM	20	8.0	18.35	16.85	8.90
		Cotton	IPM	10	10.0	30.46	29.42	6.10
		Gram	GJG-3	20	8.0	17.20	14.72	16.85
		Gram	GJG-3	50	20	18.20	13.50	34.81
		Groundnut (Kharif)	GJG-22, INM+IDM+IPM	50	20	25.46	22.46	13.35
		Groundnut	GJG-22	50	20	24.40	21.50	13.48
2.	KVK Jamnagar	Groundnut	ICM	50	20	23.78	20.90	13.78
		Groundnut	Variety GJG-22	75	30	28	23.15	20.95
		Pearl Millet	Variety GHB-732	10	4	43.75	41.75	4.79
		Cumin	IDM	10	04	11.14	10.51	5.99
		Coriander	ICM	25	10	16.60	14.84	11.86
		Cumin	ICM	50	20	11.67	10.28	13.52
		Cotton	IPM/IDM	25	10	13.37	11.09	20.56
		Cotton	ICM	50	20	16.80	14.30	17.48
		Chickpea	IPM, Varietal	50	20	26	21	23.81
		Water melon	Plastic Mulching	10	10	86.75	71.19	21.86
		Sea weed	Raft + sea weed material	5	5	118 Kg/unit	-	-
		Drudgery reduction	Cotton picking apron	5	2	3.66 picked kg/hr	3.48 picked kg/hr	5.17
		Kitchen Gardening	Vegetable seed	50	2	564	424	33.08
3.	KVK Amreli	Castor	GCH-9	10	4	24.82	21.66	15.21
		Cotton	INM	10	4	19.58	17.61	11.31
		Groundnut	GJG-22	10	4	21.97	19.25	16.47
		Wheat	INM	10	4	45.12	40.91	10.42
		Cumin	IDM	10	4	7.86	6.62	18.6
		Coriander	GC-2	10	4	11.04	9.03	22.0
4.	KVK Khapat	Groundnut	GJG-22	10	4.0	19.25	17.13	12.49
		Home science-Kitchen Gardening	5 var. of veg.	50	2.5	48.12	-	-



		Cotton	IPM (pheromone trap+beuveria)	25	10.0	23.95	22.75	5.41
		Cotton	IPM (MDP)	1	1.2	28.75	27.50	4.55
		Home Science	Revolving milking stool	5	-	-	-	-
4.	KVK Khapat	Groundnut	GJG-22	10	4.0	19.25	17.13	12.49
		Home science-Kitchen Gardening	5 var. of veg.	50	2.5	48.12	-	-
		Cotton	IPM (pheromone trap+beuveria)	25	10.0	23.95	22.75	5.41
		Cotton	IPM (MDP)	1	1.2	28.75	27.50	4.55
		Home Science	Revolving milking stool	5	-	-	-	-
		Wheat	GJW-463	10	4.0	33.93	32.00	5.97
		Wheat	INM-ZnSO <sub>4</sub>	20	8.0	31.81	30.87	3.04
		Wheat	INM-Biofertilizer	10	4.0	31.50	30.50	3.27
		Chickpea	IPM-HNPV+Beuveria	10	4.0	16.08	15.50	3.74
		Home Science-Kitchen Gardening	5 var. of veg.	50	2.5	50.50	-	-
		Ani. Hus.	Mineral mixture	20	-	2800 (lit/year)	2400 (lit/year)	16.66
		Ani. Hus.	Bypass fat	20	-	3100 (lit/year)	2700 (lit/year)	14.81
		Ani. Hus.	Mineral mixture + Fenbendazole Bolus	10	-	3050 (lit/year)	2600 (lit/year)	17.30
		Sorghum	INM-biofertilizer	25	10.0	14.21	13.90	2.34

5.	KVK Nanakhadh asar	Sesame	GT-4	10	04	6.49	5.59	16.06
		Groundnut	GJG-31/ <i>Metarizium</i>	10	04	18.96	16.18	17.20
		Groundnut	GG-20/ <i>Trichoderma</i>	05	02	18.60	16.54	12.45
		G'nut (CFLD)	GJG-31 & JAU bio products	50	20	21.13	17.28	22.28
		Cotton/	Bt-Cotton/ Gir Sawaj MDP	10	04	19.40	16.35	18.65
		Cumin	GC-4/ Mancozeb & Carbendazim	20	08	9.99	8.74	14.34
		Wheat	GW-451	20	08	48.81	43.21	12.98
		Chickpea	GG-3	10	04	18.34	15.29	19.93
		Chickpea (CFLDs)	GG-3 & JAU bio products	50	20	19.94	16.14	23.48
		Brinjal	GRB-5	10	01	324.5	256.10	26.79
		Tomato	GAT-5	10	01	307.74	247.47	24.35
6.	KVK Morbi	Groundnut	GJG – 22	10	4.0	14.70	13.20	11.70
		Cotton	Pink Ball Warm Management	10	4.0	15.60	13.20	15.20
		Cumin	Wilt Management	10	4.0	12.30	10.81	11.40
		Chickpea	GG – 5	10	4.0	11.18	09.57	16.80
		Pearl millet	GJG – 538	10	4.0	34.75	35.70	-2.60
7.	KVK Pipalia	Groundnut	Variety	10	1.5	26.1	22.3	17.42
		Groundnut (Tricho- derma)	IDM	10	4	25.1	22.1	13.56
		Groundnut	IPM	10	4	25.9	22.3	16.29
		Chick pea	Varietal	10	4	28.3	23.3	21.18
		Wheat	INM	10	4	49.4	46.4	6.60
		Cotton	INM	10	4	15.6	14.3	9.65
		Cotton	IPM	50	20	18.4	17.3	6.52
		Cumin	IDM	10	4	9.2	7.5	22.50
		Brinjal	IPM	10	4	134.8	113.0	19.25
Tomato	INM	10	4	272.0	248.8	9.35		



	Brinjal	Varietal	10	4	380	319.8	18.64
	Garlic	INM	10	4	85.8	70.8	21.20
	Kitchen gardening	Nutritional security	50	0.5	214	207.2	3.87
	Livestock	Nutrition	20	-	-	-	-
	Livestock	Nutrition	20	-	-	-	-
<b>Total</b>			<b>1514</b>	<b>491.2</b>			

#### (D) Farm Advisory Service Scheme / SSK, Junagadh

The Farm Advisory Service Scheme has been continued at SSK, Junagadh with a view to provide guidance and the latest information to the farmers on scientific farming. The farmers were advised

regarding their farm problems through correspondence and field visits. This centre acted as a link among research scientists, extension workers and farmers. During the year under report, various extension activities carried out by the centre are given below.

No.	Name of activity	No. of activities	No. of participants
1	Agril. Fair	01	50000
2	Agril. Exhibitions	04	33850
3	Guidance (Telephone & Personal Contact)	14889	14889
4	Visitors	11854	11854

#### (E) Extension Activities under Centre of Communication (COC) Scheme

Objectives of COC Scheme

- To establish the *Gram Kisan Samitis* (GKS) in the rural areas.
- To train the members of *Gram Kisan Samitis* in leadership, communication and cooperation for

- transfer of technologies.
- To disseminate the latest agricultural and allied technologies through *Gram Kisan Samitis* in rural areas.
- To carry out different extension activities through GKS in different villages.
- To know the feedbacks from the farmers.

#### Three-days On Campus Training Programmes under Centre of Communication (COC) Scheme

No.	Subject	No. of Training Programmes	No. of Beneficiaries
1	Agriculture & Animal Husbandry	01	60
2	Horticulture & Agriculture	01	62
3	Agriculture	01	22
<b>Total</b>		<b>03</b>	<b>144</b>

#### Two-days On Campus Training Programmes under Centre of Communication (COC) Scheme

No.	Subject	No. of Training Programmes	No. of Beneficiaries
1	Organic Farming	01	60
2	Honeybee Training	01	40
<b>Total</b>		<b>02</b>	<b>100</b>

**One-days On Campus Training Programme under Centre of Communication (COC) Scheme**

No.	Subject	No. of Training Programmes	No. of Beneficiaries
1	Agriculture	01	39
<b>Total</b>		<b>01</b>	<b>39</b>

**Formation of Gram Kisan Samitis during the year 2019-20**

No.	Date	Village	Taluko	District	Beneficiaries
1.	24/04/2019	Devaki Galol	Jetpur	Rajkot	12
2.	27/04/2019	Dhari	Dhari	Amreli	12
3.	05/05/2019	Bagdana	Mahuva	Bhavnagar	12
4.	16/05/2019	Rod Vadala	Jamjodhpur	Jamnagar	12
5.	28/05/2019	Barvala	Jasdan	Rajkot	12
6.	05/06/2019	Bhet suda	Chotila	Surendranagar	12
7.	08/06/2019	Ramaliya	Jasdan	Rajkot	12
8.	10/06/2019	Pipalia	Chotila	Surendranagar	12
9.	28/07/2019	Lilapur	Jasdan	Rajkot	12
10.	30/07/2019	Fagas	Kalavad	Jamnagar	12
11.	06/08/2019	Kamalapur	Jasdan	Rajkot	12
12.	13/08/2019	Beram	Jamnagar	Jamnagar	12
13.	19/08/2019	Naranpur	Jamnagar	Jamnagar	12
14.	14/09/2019	Hadmatiya	Jamnagar	Jamnagar	12
15.	21/09/2019	Bजारंगपुर	Jamnagar	Jamnagar	12
16.	01/10/2019	Bharatpur	Jamnagar	Jamnagar	12
17.	19/10/2019	Koza	Jamnagar	Jamnagar	12
18.	22/10/2019	Ali Abadi	Jamnagar	Jamnagar	12
19.	21/11/2019	Suvarada	Jamnagar	Jamnagar	12
20.	25/11/2019	Mota Thavariya	Jamnagar	Jamnagar	12
21.	05/12/2019	Anandpar	Kalavad	Jamnagar	12
22.	07/12/2019	Zialariya	Padadhari	Rajkot	12
23.	20/12/2019	Rasnaal	Gadhada	Botad	12
24.	25/12/2019	Bagasara	Bagasara	Amreli	12
25.	02/01/2020	Kolada	kukavav	Amreli	12
26.	05/02/2020	Kukavavmoti	kukavav	Amreli	12
27.	07/02/2020	Jithudi	kukavav	Amreli	12
28.	05/03/2020	Khajuri	kukavav	Amreli	12
<b>Total</b>					<b>336</b>



***Khedut Shibirs organized during the year 2019-20 under COC scheme***

No.	Date	Village	Taluko	District	Beneficiaries
1.	19/04/2019	Bavana barvala	Vadiya	Amreli	65
2.	24/05/2019	Zilariya	Padadhari	Rajkot	65
3.	08/08/2019	Anandpur	Kalavad	Jamnagar	109
4.	21/08/2019	Morjar	Dhari	Amreli	41
5.	24/09/2019	Bhankh	Upaleta	Rajkot	90
6.	27/11/2019	Dungari	Vanthali	Junagadh	36
7.	17/12/2019	Koyali	Vanthali	Junagadh	27
8.	21/12/2019	Vadal	Junagadh	Junagadh	43
9.	21/12/2019	Azadchok	Junagadh	Junagadh	48
10.	02/03/2020	Katharota	Dhari	Amreli	60
<b>Total</b>					<b>584</b>

***Bakery Talim organized during the year 2019-20 under COC scheme***

No.	Date	Village	Taluko	District	Beneficiaries
1.	18/03/2019	Vadal	Junagadh	Junagadh	53
2.	18/04/2019	Shivrajgadh	Gondal	Rajkot	23
3.	18/04/2019	Shapar Veraval	Rajkot	Rajkot	30
4.	24/05/2019	zilariya	Paddhari	Rajkot	35
5.	08/08/2019	Majevadi	Junagadh	Junagadh	99
6.	21/08/2019	Morzar	Dari	Amreli	22
7.	21/09/2019	Danapith sosayati	Junagadh	Junagadh	19
8.	24/09/2019	Bhankh	Upaleta	Rajkot	17
9.	17/12/2019	Koyali	Vanthli	Junagadh	74
10.	03/02/2020	Samadhiyala	Mendarda	Junagadh	69
11.	06/02/2020	Mota kajaliyara	Vanthli	Junagadh	66
12.	02/03/2020	Kathrota	Dari	Amreli	46
13.	05/03/2020	Prempara	Visavadar	Junagadh	50
<b>Total</b>					<b>603</b>

**(F) Extension Activities carried out by Extension Education Centres**

Extension activities carried out by various Extension Education Centres during the year are given below.

No.	Name of activity	SardarSmruti Kendra, Junagadh	Fisheries Res. Station, Okha	School of Baking, Junagadh	Total
1	Krushimela	1 (50000)	2 (2230)	-	3 (52230)
2	Guidance on farm	-	2 (14)	2 (24)	4 (38)
3	Guidance to visitors	(11854)	(2079)	(143)	(14076)
4	Press note	29	-	-	29
5	Khedutshibir/ Night shibir/ Group discussion	4 (8761)	-	46 (2109)	50 (10870)
6	Guidance through Telephone	(3035)	(24)	-	(3059)
7	Khedut talim/Khedut Mahila talim	63 (2669)	2 (2230)	50 (2276)	115 (7175)
8	Video show/ Film show	-	-	-	-
9	Literature distribution	(3245)	-	-	(3245)
10	Literature Publication	5	-	-	5
11	Fisheries Training	-	2 (2230)	-	2 (2230)
12	Bakery Training	-	-	50 (2276)	50 (2276)
13	Agri.Exhibition	-	1 (1500)	-	1 (1500)
14	Agri.Literature show	4 (33850)	-	-	4 (33850)
				<b>Total</b>	<b>263 (130583)</b>

Figures in parentheses indicate numbers of beneficiaries





Training Programme for Farm Women of Dist. Anand at SSK



Training Programme for Farm Women of Dist. Surendranagar at SSK



Exposure Visit of Farmers of Dist. Jodhpur (Raj.)



Exposure Visit of Farm Women of Dist. Patan

### ICAR projects – Farmer FIRST programme

The farmer FIRST programme was started on 30th, January 2017 jointly through ICAR and Junagadh Agricultural University. Under this programme total 650 small and marginal farmers including SC farmers and women farmers were selected on the basis of the land holdings, irrigation facilities, crops grown, available resources and their interest in particular module with consideration of prescribed objectives and norms as per the ICAR guidelines for the project. The basic survey was carried out of villages for planning to conduct experiment on Crop-based module, NRM based

Module, Crop diversification based module, Enterprise based module and Livestock based module in respective villages (Nava vaghaniya, Mavjinjava, Hadala and Deri pipaliya of Amreli districts). The inputs were distributed to the farmers of these village according to modules. They were given training and knowledge to utilize these inputs with available resources in their farms. The results of different modules were presented in annual meeting of FFP. The results showed significant increase in the income of farmers. During the year, various extension activities were carried out for Stakeholders, Farmers-Scientists interface as under.





**Farmers- scientists interface**

Sr. No.	Name of the Activities	No. of Activities carried out
1.	Village meetings	21
2.	Training Programmes	34
3.	Visits by project team members	123
4.	Exposure visits of farmers	29
5.	Field days	23
6.	Innovative Farmers identified	28
7.	Involvement of multi-stakeholders	Scientists of Agronomy, Soil Science, Agril. Entomology, Plant pathology and Animal science, Officers of Bank

**Photographs of different activities carried out under FFP**



Dr. A.M.Bharadiya, Co- PI crop based module (Groundnut), Dr.P.J.Gohil, Co- PI crop based module (cotton) discussing with farmers about modules.



Dr. A.M.Bharadiya and Dr.P.J.Gohil, Co- PIs of crop based module observing fungal infestation in groundnut crop experiment at selected village.



Dr. S. G. Savalia, PI, Prof. D. M. Panara, team member, highlighted well developed pods bearing in Groundnut crop and obtaining feedbacks



Distribution of inputs under Crop based module (cotton) by Dr.P.J.Gohil Co PI-and Mr.N.R.Kavar (S.R.F) at Deripaliya village





Dr.P.J.Gohil, Co-PI, Dr. M V. Variya and team member crop based module at the site of selected village



Dr. S. G. Savalia, PI and team member monitored Crop based module at the site of selected village

### Mera Gao Mera Gavarav (MGMG)

No. of Team of Scientists	No. of Scientists	No. of Villages	No. of Blocks	No. of Districts	Bench Mark Survey conducted (No. of villages)
34	119	169	23	8	169

#### Activities undertaken

Activities organised under MGMG

Sr. No.	Name of activity	No. of activities conducted	No. of farmers participated & benefitted
1.	Visit to village by teams	251	3507
2.	Interface meeting/ <i>Goshthies</i>	214	3873
3.	Training organized	72	1613
4.	Demonstrations conducted	54	56
5.	Mobile based advisories (Number of message)	4788	10916
6.	Literature support provided	7576	7856
7.	Awareness created	223	5940
8.	Other	30	523
<b>Total</b>		13208	34284

Table -2: Other activities organized under MGMG

S. No.	Name of activity	No. /Area (ha)	No. of farmers benefitted
1.	Linkages developed with other agencies (No. of agency)	91	2828
2.	Facilitation for new varieties, seeds, technology		
	i. New varieties (No.)	36	89
	ii. Technology (No.)	121	157



iii. Seeds (q)	-	-
iv. New crops (No.)	-	-
V. Other	115	165



### Radio Talks and TV Programmes

The scientists of the university delivered radio talks from time to time on various agricultural and allied subjects from All India Radio, Rajkot. Moreover, the broadcast of agricultural messages were also made from All India Radio, Rajkot. During the year, 19 such talks were delivered on different topics related to agriculture, horticulture, agricultural

engineering, fisheries, animal husbandry, etc.

In all, 26 television programmes covering various aspects of agriculture, animal husbandry, agricultural engineering, horticulture, fisheries, home science, etc. were telecast through Doordarshan Kendra, Rajkot in “Gram Jagat” “Krishi Darshan” programme for the benefit of farming community.

### 5.1 Publication of Literature

No	Name of Office	Publication
		Booklet/Book
1	Sardar Smruti Kendra, Junagadh	05
2	DEE Office, Junagadh	00
<b>Total</b>		<b>05</b>



University news bulletin “*JAU News letter*” is being published regularly on quarterly basis by Directorate of Extension Education.

### **Establishment of AGRISNET studio and Community Radio Station (CRS)**

AGRISNET studio is established with objective to produce and disseminate agricultural technologies to farmers through electronic media/format. Under LIFE (Live Interaction with Farmers' through Electronic media) two innovative programs started.

One, LIVE MOBILE AUDIO CONFERENCE in which scientists at AGRISNET

Studio and farmers are linked with mobile platform created by Reliance Foundation. Second program, LIVE YOUTUBE STREAMING, started from 2019, in which Live program is broadcasted through YouTube. Reliance Foundation and ATMA project, Junagadh popularized these programs through their farmer related WhatsApp contacts.

The broadcasting hours of CRS increased from **TWO** hours/ day to **FOUR** hours/day since 2<sup>nd</sup> October, 2019.

The CRS is transmitting FOUR hours program daily. It covers about 12 km area having 45 villages and Junagadh city.

<b>Sr No</b>	<b>Subject</b>	<b>No of Programs</b>	<b>Beneficiaries</b>
1	Broadcasting thru Radio	930	Farmers, students and people of Junagadh city and surrounding 55 villages
2	Agriculture related events/ documentaries	61	These documentaries were visited by 5,57,863 visitors.
3	Live Audio Conference thru mobiles	02	110 farmers of 30 villages participated and got latest information on agricultural subjects from scientists of JAU
4	Live YouTube Broadcasting	7	More than 5,00,000 farmers were informed about programs by ATMA and Reliance Foundation of Junagadh. Total 84,000 farmers viewed the program so far.
5	Live broadcasting of program by JAU expert on TV channel Vande Gujarat 04 Talks through <b>BISAG</b>	11	Broadcasting of 60 minutes episode on agri related programs of JAU scientists thru BISAG, Gandhinagar on TV Channel <i>Vande Gujarat</i> 04.
6	Talks Through <b>Doordarshan</b> , Rajkot	10	Broadcasting of 25 minutes episode on agri related programs of JAU scientists Doordarshan, Rajkot.
7	Talks through <b>Akashvani</b> , Rajkot	10	Broadcasting of 25 minutes radio episode on agri related programs of JAU scientists Akashvani, Rajkot.
8	Visitors	1746	Farmers, students and others for participation in audio recording visited CRS station.



9	Book in Gujarati: Esha Shabda esha siddhay એષા શબ્દો, એષા સિદ્ધય: (આ શબ્દો, આ સિદ્ધિઓ) કૃષિ મહોત્સવ – ૨૦૧૨ અંતર્ગત ગુજરાતના મુખ્યમંત્રી શ્રી નરેન્દ્ર મોદીનો વિડીયો કોન્ફરન્સીંગ દ્વારા ખેડૂતોને સંદેશ	500	Compilation of Interactive lectures of Shri Narendra Modi, Hon'ble PM delivered through video conferencing with farmers of Gujarat state as part of Krushi Mahotsav – 2012 and its publication in book and distribution to MLAs MPs of Gujarat, Board, SAUs, various agencies, Institutions related to agriculture and allied fields of Gujarat state.
10	Photography	115 (programs) 6023 (photographs)	For documentation, publication and exhibition/ display of various activities/ events on education, research and extension education of JAU, photography and archive maintenance is carried out at AGRISNET studio.

### Coordination of Extension Activities with Department of Agriculture, Horticulture, Animal Husbandry and Other Line Departments

Junagadh Agricultural University planned and organized various extension education programmes/activities in coordination with different line departments of the state. The structural linkages exist under T & V system by constituting the technical committee at district, zonal and state level. The agricultural programmes of All India Radio as well as Doordarshan were finalized by such coordinated efforts. In AGRESCO, the officers of line departments are the members and they contribute in formulation of technical programmes as well as in finalizing the recommendations for the farmers. The functional linkages also exist under T & V system through bi-monthly workshops, pre-seasonal workshops, fortnightly training, diagnostic team, state level crop seminars/workshop, etc. The coordination exists in follow-up programmes as well as in planning of farm trials. For transfer of technologies to the farmers, the farmer's day, *krushi melo*, group discussion, film show, etc. were organized through collaborative efforts.

#### 5.1 Orientation Training Programme

During the year under report, 29 scientists/teachers of the University were deputed in the orientation training programmes/ seminars/

workshops/ symposium, etc. organized within and outside the state to upgrade their knowledge and skill for improving faculty competence in respective disciplines.

#### *Krushi Mahotsav-2019*

Junagadh Agricultural University celebrated the *Kharif* Krishi Mahotsav-2019 during 16-17 June, 2019 declared by Government of Gujarat. During the Krushi Mahotsav, Seminars and Exhibitions were organized in 72 Talukas of 9 District of Junagadh Agricultural University on different subjects like Agriculture, Horticulture, Animal Husbandry and Fisheries. In addition, The information on various agricultural schemes of Government of Gujarat were delivered to the farmers. In Porbandar District, Krushi Mahotsav was postponed by the Govt. of Gujarat. A total 9 Agricultural Scientists of Junagadh Agricultural University were assigned the duty of Nodal officers for the coordination of the Programmes. A total 216 scientists as well as officers were assigned duty to deliver the lectures in the seminars and to provide information to the participants in the exhibitions. More than 64000 farmers, farm women, dairy farmers and other stakeholders were participated deliberated latest information on different agricultural aspects. The different Ministers of the State, Members of Parliament, Members of Legislative Assembly,

Collectors, District Development Officers, Mamlatdars, Taluka Development Officers and other agriculture related Scientists / Officers and community leaders remained present during the programme.

The Cattle Camps were also organized at different taluka places and more than 96000 animals got treated. The details of Krushi Mahotsav programme is given below.

Sr. No.	Name of the District	No of Talukas	No of Visitors	No of Animals
1	Junagadh	09	5631	7041
2	Gir Somnath	06	3894	10421
3	Amreli	11	9631	9422
4	Bhavnagar	10	8555	8892
5	Surendranagar	10	10640	7757
6	Morbi	05	4786	6485
7	Rajkot	11	10678	16527
8	Jamnagar	06	6906	6207
9	Dev. Dwarka	04	3659	23752
<b>Total</b>		<b>72</b>	<b>64380</b>	<b>96504</b>

### Photographs



Hon'ble Mayor Shrm. Adhyashaktiben visited  
Exhibition at JAU, Junagadh



Dr. Vallabhbai Kathiriya visited JAU, Junagadh



MOU with Petroleum Conservation Research  
Association





Hon' ble Governershri addressing the participants during SPNF Karyashala at JAU, Juanagdh



Hon'ble Vicechancellor addressing the participants during SPNF Karyashala at JAU, Juanagdh



Varsa Vigyan Parisanvad at JAU, Junagadh



Hon'ble Vice Chancellor Dr. V. P. Chovatiya in Collobrative Training with KRIBHKO Ltd.



Krushi Sangam Programme at JAU, Junagadh





Participants of SPNF workshop at JAU, Junagadh



Training Programme of Quality Seed Growers & Organic Growers



Technology Week Celebration by KVK Pipalia



Trining Programme by EEI, Anand at JAU, Junagadh



Thechnology Week Celebration by KVK Targhadiya





Scientist of Krishi Vigyan Kendra, JAU, Nana Kandhasar receiving Dr. APJ Abdul Kalam National award



Training Programme on Green House & Net House at JAU, Junagadh



Tree Plantation at Agro Based ITI JAU, Junagadh



Krushi Mahotsav programme at JAU, Junagadh



Field Day by KVK Khapat