

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. A. M. Parakhia and Dr. P. V. Patel 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. Extension Education Council meeting was organized on 24.08.2018. The members of Extension Education Council as under.

Sr. No.	Na	me / Designation	Position		
	Th	e Vice Chancellor			
1.	Dr.	A. R. Pathak, Hon'ble Vice Chancellor	Chairman		
	The Director of Research				
2.	Dr.	V. P. Chovatia, Director of Research and Dean P.G.	Member		
3.	The	e Deans of Faculties			
	1.	Dr. V. P. Chovatia, Principal & Dean College of Agriculture, JAU, Junagadh	Invitee		
	2.	Dr. N. K. Gontia, Principal & Dean, College of Agril. Engg. & Technology, JAU,	Member		
	Junagadh				
	3. Dr. A.Y. Desai, Principal & Dean, College of Fisheries, JAU, Veraval				
	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	Member		
4.	Fiv	re Officer/ Extension Education Experts (Nominated by the Vice Chancellor)			
	1.	Dr. V. J. Savaliya, Professor & Head, Department of Extension Education, JAU,	Member		
		Junagadh			
	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. Ramesh Rathod, Programme Coordinator, Krishi Vigyan Kendra, Ambujanagar,		Member		
	Kodinar				
	4.	Other Extension Education Expert/ Farm Manager, JAU, Junagadh	Member		
		1. Dr. V. G. Barad, Assistant Extension Educationist, Sardar Smruti Kendra, JAU,			
		Junagadh			



Sr. No.	Na	me / Designation	Position		
5.	Th	e Eminent Extension Education Experts outside the University concern with Farmers			
	training (Nominated by the Vice Chancellor)				
	1.	Dr. A. O. Kher, Retd. Associate Director of Extension Education, GAU, Junagadh	Member		
	2.	Dr. M. N. Popat, Retd. Associate Director of Extension Education, GAU, Junagadh	Member		
	3.	Dr. V. V. Mayani, Retd. Extension Educationist, AAU, Anand	Member		
6.	Th	ree Director of Agriculture/ Horticulture/ Animal Husbandry			
	1.	Director of Agriculture, GoG, Gandhinagar	Member		
	2.	Director of Hoticulture, GoG, Gandhinagar	Member		
	3.	Director of Animal Husbandry, GoG, Gandhinagar	Member		
7.	Two Progressive farmers (Nominated by the Vice Chancellor)				
	1.	Shri Hiteshbhai Domadiya, Vadal (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.	Dir	rector, Information & Technology cell, JAU, Junagadh	Member		
8.	Ass	sociate Director of Extension Education, JAU, Junagadh	Member		
9.	Dr.	A. M. Parkhia, Director of Extension Education, JAU, Junagadh	Member		
	Dr.	P. V. Patel, Director of Extension Education, JAU, Junagadh	Secretary		

5.3 Extension Education and Training Centres

Sr.No.	Course / Programme	Location			
Diploma/Cer	tificate Courses				
1	Agriculture Polytechnic	Halvad			
2	School of Baking	Junagadh			
3	Mali Training Centre	Junagadh			
4	Agro Base ITI Centre	Junagadh, Mahuva			
Training Pro	grammes for Extension Workers				
1	Training & Visit System Training Centre	Junagadh, Targhadia			
2	2 Centre of Excellence for Training (Oilseeds) Junagadh				
Training Pro	grammes for Farmers/Farm Women				
1	1 Krishi Vigyan Kendra Jamnagar, Targhadia (Rajkot-I), Amr				
		Khapat (Porbandar), Nanakandhasar			
		(surendranagar), Pipaliya(Rajkot-II),			
		Gorkhijadiya (Morbi)			
2	Sardar Smruti Kendra	Junagadh			
Extension Ed	Extension Education Programmes for Rural People				
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.

Sr. No.	Name of Course	Duration	Location	No. of Students Completed the Course
1	Agriculture Polytechnic	3 years	Halvad	30
2	Bakery Training			
	Basic Course in Baking Science	15 weeks	Junagadh	22 (2 Batches)
	• Special Training to Women	1 week	Junagadh	220 (12 Batches)
3	Mali Training	6 months	Junagadh	10
4	Agro Base ITI Centre	6 months	Junagadh	
	Seed Production Technology			32
	• Green House Construction &			06
	Systems Management			(Continue)

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. P. V. Patel, DEE, Distributing Certificate in Bakery Training Cource

(II) Training Programmes for Extension Workers / Officers

(A) Training & Visit System

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



Dr. P. V. Patel, DEE, addressing the student of Agro Baise I.T.I., Junagadh

T & V System. The bi-monthly workshops, preseasonal training workshops and short-term training programmes organized for the extension personnel of the Department of Agriculture and the number of SMSs/AEOs who attended the programmes as given below.

Sr. No.	Type of programme	No. of Programmes	No. of Participants
1	Bimonthly Workshop	4	86
2	Pre-seasonal Training Programme	2	43
3	Agriculture - 6 (Oilseed) AGR-6	8	365
4	Other Training	5	185
	Total	19	679





Beneficiaries of Dept. of Agriculture & KVKs in Pre seasonal Training programme under T & V scheme



Dr. P. V. Patel, DEE, addressing the Officers of Dept. of Agriculture & KVKs in Bi-monthly 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 given below.

Khedut shibir and Diagnostic team visit

Sr.No.	Subject	No. of Activities	No. of Scientists allotted	Beneficiaries
1	Khedut Shibir	28	45	4980
2	Diagnostic Team	06	18	204

Training programme of Second year Master degree students of Lok Bharti, Lok Seva Mahavidyalaya, Sanosara, Dist. Bhavnagar.

Sr.No.	No. of Trainees	Period
1	38	24-09-2018 to 28-09-2018



Dr. P. V. Patel, DEE, addressing the Village of Madlikpur Farmer Training Programme Under COC Scheme



Dr. P. V. Patel, DEE, addressing the Mahila Kaushaly Training Programme Under COC Scheme

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Dr. A. R. Pathak, Hon. VC. addressing the Participants' in 15 days Green house/Net house Training Programme



Field trip of Input Dealers at Progresive farmers' Green House

Input dealers' cources:

Sr. No.	Title of cource	Duration	No. of Input dealer completed cource
1	Diploma in Agricultural Extension Services for Input	1 Year	200
	Dealers' (DAESI) at JAU, Junagadh		
2	Diploma in Agricultural Extension Services for Input	1 Year	50
	Dealers' (DAESI) at Jamnager		
3	Diploma in Agricultural Extension Services for Input	1 Year	50
	Dealers' (DAESI) at Targhdiya		
4	Diploma in Agricultural Extension Services for Input	1 Year	50
	Dealers' (DAESI) at Veraval		
5	Diploma in Agricultural Extension Services for Input	1 Year	50
	Dealers' (DAESI) at Amreli		
6	Diploma in Agricultural Extension Services for Input	1 Year	44
	Dealers' (DAESI) at Khapat		



Field visit of Input Dealers at Radhe Farm at Sasan Gir



Felicitation to Hon'ble Vice Chancellor Dr. A. R. Pathak by Fertilizer dealers



Fertilizer dealer's cources:

Sr. No.	Title of cource and Date of Training	Duration	No. of Fertilizer dealer completed cource
1	Intigrated Nutrient Managment for fertilizer dealers	15 Days	38
	Batch-I (27-12-2018 to 10-01-2019)		
2	Intigrated Nutrient Managment for fertilizer dealers	15 Days	38
	Batch-II (26-02-2019 to 14-03-2019)		

Green House Net House Training:

Sr.No.	Title of Cource	Duration	No. of Participants
1	Green House Net House Training For farmers	15 Days	40
	(01-01-2019 to 15-01-2019)		



Hon'ble Vice Chancellor Dr. A.R. Pathak addressing the participants' in 15 days Green house/Net house Training Programme at JAU, Junagadh



Dr. A. R. Pathak, Hon. VC. addressing to input dealers at Auditorium

Collaborative training

Sr.No.	Name of training	Duration	Co- Organizer	No. of Trainees
1	New Technology of Vegetable	14-15/06/2018	Department of Horticulture,	51
			Dy. Dir. Hourticulture,	
			Junagdh	
2	Mango production technology	29/09/2018	Dept of Gujarat Horticulture	85
	organized by Gujarat Horticulture		Mission	
	Mission			

Other trainings

~	8			
Sr.	Name of training	Duration	Organizer	No. of Trainees
No.	Name of training	Duration	Organizer	No. of Trainees
1	Mahila Training Programme on	22/06/18	Directorate of Extension	28
	" Agriculture/Horticulture & Animal		Education JAU, Junagadh	
	Husbandary"			
2	Training Programme on "Crop's	25/08/18	Directorate of Extension	74
	Grown in Green House/ Net house"		Education JAU, Junagadh	
3	Training Programme on "Doubling	22/10/2018	IFFCO, Junagadh	232
	Farmers income"			
4	Mahila Training Progrrame on	03/11/18	Directorate of Extension	60
	"Agriculture/Horticulture & Animal		Education JAU, Junagadh	
	Husbandary"			
5	Training Programme on	20/12/18	Directorate of Extension	39
	"NewAgriculture Technology"	to 22/12/18	Education JAU, Junagadh	
6	Mahila Training Programme on Animal	19/03/2019	Directorate of Extension	71
	Husbandary and Food Preservation		Education JAU, Junagadh	

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

(A) Training Programmes

Training is essential to increase the efficiency of farmers, farmwomen, & rural youths, *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, 145 on-campus and 174 off-campus training programmes were organized, wherein 11352 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 2018-19

Sr.		<u> </u>	No. of Trg.	No. of par	ticinants	
No.	TOT Centre		Prog.	Male	Female	Total
1	KVK,	A	14	282	213	495
	Jamnagar	В	30	1542	315	1857
2	KVK,	A	34	673	257	930
	Targhadia	В	29	504	208	712
3	KVK,	A	34	1019	297	1316
	Amreli	В	40	1297	610	1970
4	KVK,	A	11	174	099	273
	Khapat	В	20	443	253	696
5	KVK,	A	18	280	155	435
	Nanakandhasar	В	18	313	079	392
6	KVK,	A	22	484	244	728
	Pipalia	В	26	647	202	849
7	KVK,	A	12	195	166	361
	Gor Khijadiya	В	11	214	124	338
	Total	A	145	3107	1431	4538
	10181	В	174	4960	1791	6814
	Grand Total		319			11352

A= On-campus B= Off-campus





On Campus training programme Organized at KVK Nana Kandhasar

(B) Extension Activities

The Transfer of Technology (TOT) centres also planned and organized extension activities like seminar/workshop/symposium, field/farmer's day, agriculture fair/exhibition, film/slide/video show, field visit, cattle camp, farmers' group/demonstration meeting, *etc*. by which total 1,97,076 beneficiaries benefited. The details of the extension activities organized and number of participants are given in Table 5.2



Off Campus training programme Organized by KVK Jamnagar

KVKs play an important role to provide guidance for income generation to the farmers by imparting skill oriented trainings. Besides, the KVKs conducted variety of extension activities, on farm testing, *etc*. The KVKs are also collecting feed back on farmers' problems, which are sent to the concerned scientists as these will provide guideline in reforming further research.

Table 5.2 Extension activities carried out by TOT centres during 2018-19

Sr.					KVK				
No.	Name of activity	Targhadia	Jamnagar	Khapat	Amreli	Nana Kandhasar	Pipalia	Gor Khijadia	Total
1	Krushi Mela	3	05	1	03	5	00	04	21
			(4969)	(1450)	(7500)	(2924)	(00)	(3144)	(19987)
2	Field day	3	13	7	15	9	17	04	68
		(63)	(294)	(239)	(300)	(329)	(332)	(105)	(1662)
3	Guidance on farm	18	134	220	90	30	15	07	514
		(104)	(1233)		(238)	(701)	(189)	(52)	(2413)
4	Guidance to	110	653	1253	94	8	1751	07	3876
	visitors	(2081)	(2820)		(3535)	(7329)	(1751)	(3547)	(21063)
5	Press note	5	11	1	15	15	2	09	58
6	Khedutshibir/	7	40	19	3	0	12	33	114
	Night shibir/	(297)	(1033)	(377)	(262)		(334)	(763)	(3066)
	Group discussion								
7	Guidance through	2489	5826	1649	3066	3939	2694	2836	22499
	Telephone								
8	Krushigosthi/	11	18	25	8	1	12	21	96
	Seminar	(265)	(2944)	(594)	(218)	(117)	(576)	(257)	(4971)
9	Khedut meeting	9	6	21	27	4	51	28	146
		(370)	(152)	(510)	(876)	(91)	(2464)	(260)	(4723)





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C					KVK				
Sr. No.	Name of activity	Targhadia	Jamnagar	Khapat	Amreli	Nana Kandhasar	Pipalia	Gor Khijadia	Total
10	T.V. Programme	5	1	0	5 (135)	1	0	03 (94)	15 (229)
11	Radio talk	1	0	0	0	0	0	01	02
12	Popular articles	4	3	0	4	0	2	04	17
13	Video show/ Film	13	112	17	10	17	19	21	209
	show	(1692)	(7843)	(457)		(1358)	(569)	(901)	(12820)
14	Cattle camp	1 (102)	0	0	0	0	9 (55)	0	10 (157)
15	Literature	15	480	16	4056	22	12	08	553
	distribution	(8685)	(10863)	(1775)		(11868)	(3211)	(1489)	(41947)
16	Literature published	1	4	4	3	0	0	0	12
17	Lectures delivered	24	183	31	46	193	34	26	537
		(667)	(17513)	(654)	(2225)	(7058)	(1671)	(6184)	(35972)
18	Scientist's Farm	20	90	251	90	30	163	01	645
	visit		(694)		(238)	(701)	(339)	(06)	(1978)
19	Vocational training	1	1	2	3	0	3	0	10
		(35)	(32)	(30)	(57)		(224)		(378)
20	Sponsored/	5	6	9	7	48	17	10	102
	Collaboration training	(215)	(266)	(320)	(300)	(3181)	(831)	(534)	(5647)
21	<i>Krushi-Go-Vidya</i> subscriber Registered	0	0	0	0	0	5	0	05
22	Diagnostic team	4	58 (134)	4	5	0	33 (69)	0	104 (203)
23	Student (RAWE)	1	1	0	80	5	0	0	87
			(19)			(265)			(284)
24	Celebration of	1	1	1	1	1	1	01	07
	technology week	(602)	(645)	(363)	(551)	(672)	(277)	(180)	(3290)
25	Soil Sample Analyzed	50	190	172	210	292	65	0	979
26	Participated in	4	2	1	1	11	1	05	25
	Agril. Exhibition	(1308)	(1974)	(687)	(2447)	(2924)	(48)	(3326)	(12714)
								Total	30711 (197076)

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 farmer's field.

During the year a total 1745 FLDs were conducted on various oilseeds and pulses, *viz.*, castor, mustard, groundnut, sesamum, cotton, gram, wheat, pearl millet and cumin in 623.23 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 2018-19

C.				NI. C	A	Av. yie	ld (q/ha)	Increase
Sr. No	Centre	Crop	Variety/ Treatment	No. of FLDS	Area (ha)	•	Local	in yield
					, ,	Demo.	check	(%)
1.	KVK,	Groundnut	GJG-22	10	4.0	19.90	18.20	9.34
	Targhadia	Groundnut	GJG-9	10	4.0	16.10	15.00	7.33
		Groundnut	IPM	10	4.0	18.62	17.50	6.42
		Gram	GJG-3	10	4.0	18.62	15.75	18.25
		Cumin	IPM	10	4.0	9.68	8.20	18.14
		Groundnut	IDM	10	4.0	18.35	16.85	8.90
		Cotton	IPM	10	4.0	31.50	29.42	6.10
		Cumin	GC-4	12	4.0	10.02	8.80	13.86
		Gram	GJG-3	20	8.0	17.20	14.72	16.85
		Sesame (summer)	G.Til-3, INM+IPM	25	20	9.10	7.51	21.17
		Groundnut (<i>Kharif</i>)	GJG-22, INM+IDM+IPM	50	20	16.73	14.61	14.51
		Gram	GJG-3	50	20	18.32	15.35	18.05
		Groundnut	GJG-22	50	20	16.16	15.00	7.75
2.	KVK	Groundnut	ICM, GJG-22	50	20	17.8	15.5	14.84
	Jamnagar	Sesame	ICM, GT-4	50	20	7.8	6.7	16.42
		Groundnut	IPM/INM	100	40	30.14	26.29	15.80
		Pigeon pea	ICM	25	10	12.69	10.9	16.37
		Chickpea	ICM, GG-5	50	20	26	21	23.81
		Brinjal	ICM, GJLB-4	5	2	536.25	496.25	8.06
		Chilli	IPM	5	2	148.75	129.25	15.09
		Okra	ICM, GJO-3	5	2	216.75	190.75	13.66
		Cumin	IDM	10	4	11.14	10.51	8.80
		Coriander	ICM	25	10	16.60	14.84	11.88
		Cumin	ICM	50	20	11.67	10.28	13.55
		Pearl Millet	GHB-732	10	4	41.50	33.63	23.42
		Cotton	IPM/INM	20	8	15.25	13	17.70
		Cotton	ICM	25	10	19.30	16.20	20.61
		Kitchen Gardening	Veg. seed	50	2	581.36	499	29.48
3.	KVK	Castor	GCH-9	10	4	11.94	10.3	16.24
	Amreli	Cotton	GTHH-49 (Bt)	10	4	9.0	8.0	13.9
		Wheat	INM	10	4	45.71	40.14	14.06
		Cumin	IDM	10	4	6.88	6.31	9.91
		Coriander	GC-2	10	4	11.75	9.87	18.51
		Green gram	GAM-5	25	6.25	7.99	6.70	21.34
		Sesame	GT-3	25	6.25	6.82	5.90	20.61
		Cotton	G.Cot.10 (Bt)	20	08	10.07	8.33	26.89
		Cotton	IPM	50	12.5	10.85	9.15	18.62
		Groundnut	GJG-22	20	05	11.05	8.81	30.15
		Groundnut	IPM	50	12.5	10.85	9.15	18.62
		Wheat	GW 463	25	6.25	41.84	31.93	31.04
		Gram	GJG-3	25	6.25	20.10	16.66	20.62
		Cumin	IDM	25	6.25	7.98	6.73	18.58



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Sr.				No. of	Area	Av. yie	ld (q/ha)	Increase
No	Centre	Crop	Variety/ Treatment	FLDS	(ha)	Demo.	Local	in yield
	123712	C 1	INIM DI: I: + DCD		` ′		check	(%)
4.	KVK	Groundnut	INM – Rhizobium + PSB	25	10	17.95	16.75	7.20
	Khapat	Groundnut	GJG - 22	10	4	20.10	16.75	20.00
		Gram Cotton	GJG-3 IPM – Pheromone trap +	20 25	8	16.52 24.67	14.20 21.35	16.34 15.55
		Cotton	Beuveria bassianna	23	10	2 4 .07	21.55	13.33
		Animal Husbandry	Chilated Mineral	20	_	3000	2600	15.38
		7 minut Trasounary	Mixture	20		(lit/lec)	(lit/lec.)	13.30
		Animal Husbandry	Bypass fat	20	-	4500	3600	25.00
5.	KVK	Sesame	GT-4	10	4	3.63	3.13	15.81
	Nankhadhasar	Groundnut	Mancozeb,	10	4	11.29	9.98	13.10
			Chlorothalonil					
		Groundnut	Trichoderma	05	2	3.98	3.74	6.28
		(Bioagent)						
		Cotton-20	Azotobactor, PSB,	20	8	9.69	8.97	8.00
			Micromix Grade IV					
		Groundnut	Rhizobium, PSB,	25	20	17.59	15.05	16.86
		****	Trichoderma, Beauveria	20	0	# 0.04	70.07	1= 10
		Wheat	GW-463	20	8	59.01	50.35	17.19
		Cumin	Mancozeb, Carbendazim	20	8	12.12	11.00	10.17
		Gram	GJG-6	10	4	18.96	16.55	14.58
		Chick pea	GJG-6, Rhizobium, PSB,	25	20	17.54	14.65	19.74
		Lucerne	Trichoderma, Beauveria Anand Lucerne -3	10	1.0	273	206	32.52
		Lucerne	Anana Lucerne -3	10			(3Cutting)	32.32
							(Seuting)	
		Tomato	JT-3	10	0.1	306.8	255.1	19.9
		Brinjal	GJLB-4	10	0.1	322.76	276.5	16.8
6.	KVK	Groundnut	GJG-22	10	4	19	16	18.75
	Pipalia	Groundnut	IDM	10	4	19	16	16.97
		Groundnut	IPM	10	4	18.8	16	17.50
		Chick pea	GG-5	10	4	28.3	23.3	21.18
		Wheat	GW-496	10	5	49.4	46.4	6.60
		Onion	GJRO-11	3	1.2	314.6	297.9	5.59
		Brinjal	IPM	10	4.04	384.3	335	17.70
		Tomato	INM	10	4.04	269	248.8	8.14
		Cumin	IDM	10	4	9.2	7.5	22.50
		Cotton	INM	10	4	25.7	23	11.74
		Cotton	IPM	50	20	25.5	22.4	14.13
		Animal Husbandry	Nutritional Management Nutritional security	10 50	0.5	8.27	7.95 201.4	4.00 5.6
		Kitchen Gardening Groundnut (CFLD)	GJG-22	125	50	213.6 19.73	15.15	23.19
7.	KVK	Groundnut (CFLD)	GJG-22 GJG - 22	123	4.0	16.14	15.15	7.3%
/.	Gor Khijadia	Cotton	INM	10	4.0	11.5	10.4	10.2%
	Joi Kilijaula	Cotton	IPM	10	4.0	15.1	14.4	4.5%
		Gram	GG - 5	10	4.0	11.18	09.57	16.8%
		Cummin	GC - 4	10	4.0	12.0	10.8	11.4%
		Total		1745	623.23	12.0	10.0	11.1/0
		10001		1/70	023.23			





(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 visit. 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.

Sr.No.	Name of activity	No. of activities	No. of participants
1	Agricultural Fair	03	5,10,800
2	Agricultural Exhibitions	01	800
3	Guidance (Telephone & Personal Contact)	2851	2,851
4	Visitors	62850	62,850
		65705	5,77,301

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

- a. To establish the *Gram Kisan Samitis* (GKS) in the rural areas.
- b. To train the members of *Gram Kisan Samitis* in leadership, communication and cooperation for transfer of technologies.
- c. To disseminate the latest agricultural and allied technologies through *Gram Kisan Samitis* in rural areas.
- d. To carry out different extension activities through GKS in different villages.
- e. To know the feedbacks from the farmers.

Three-day on campus training programme under Centre of Communication (COC) Scheme

Sr. No.	Subject	No. of Training Programmes	No. of Beneficiaries
1	Training programmes for farmers on	02	96
	scientific farming		
	Total	02	96

Two-day on campus training programme under Centre of Communication (COC) Scheme

Sr. No.	Subject	No. of Training Programmes	No. of Beneficiaries
1	Training programmes for farmers on	01	30
	Improved Agricultural Practices		
	Total	01	30

One-day on campus training programme under Centre of Communication (COC) Scheme

Sr. No.	Subject	No. of Training Programmes	No. of Beneficiaries
1	Training programmes for farmers on scientific farming	06	528
	Total	06	528

Formation of Gram Kisan Samitis during the year 2018-19

Sr. No.	Date	Village	Taluko	District	Beneficiaries
1.	05/04/2018	Khalilpur	Junagadh	Junagadh	12
2.	25/04/2018	Alidhr	Kodinar	Junagadh	12
3.	06/05/2018	Mandlikpur	Jetpur	Rajkot	12
4.	26/05/2018	Fgas	Kalavd	Jamnagar	12
5.	15/06/2018	Vdal	Junagadh	Junagadh	12





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Sr. No.	Date	Village	Taluko	District	Beneficiaries
6.	28/06/2018	Ddvi	Jamkandorna	Rajkot	12
7.	29/06/2018	Manvar khijadiya	Kalavd	Jamnagar	12
8.	30/07/2018	Obrdi	Gondal	Rajkot	12
9.	05/08/2018	Mespar	Gondal	Rajkot	12
10.	15/09/2018	Keshvala	Gondal	Rajkot	12
11.	20/09/2018	Thorala	Jamkandorna	Rajkot	12
12.	12/10/2018	Harmdiya	Gondal	Rajkot	12
13.	16/11/2018	Dothiji khdla	Jamjodhpur	Jamnagar	12
14.	21/11/2018	Kalmeghda	Kalavd	Jamnagar	12
15.	25/01/2018	Bangda	Kalavd	Jamnagar	12
16.	05/01/2018	Sarsai	Visavadar	Junagadh	12
17.	07/02/2018	Bhader	Dhari	Amreli	12
18.	21/02/2018	Namdiya	Manavder	Junagadh	12
19.	05/02/2018	Klyanpur	Drangdhra	Surendranagar	12
20.	16/02/2018	Madhapr	Morbi	Morbi	12
				Total	240

Khedut Shibirs organized during the year 2018-19 under COC scheme

Sr. No.	Date	Village	Taluko	District	Beneficiaries
1.	24/04/2018	Pipaliya	Dhoraji	Rajkot	30
2.	03/08/2018	Bagasara	Bagasara	Amreli	21
3.	15/09/2018	Bagasara	Bagasara	Amreli	25
4.	25/09/2018	Bagasara	Bagasara	Amreli	13
5.	01/10/2018	Datrana	Menderda	Junagadh	23
6.	22/12/2018	Bagasara	Bagasara	Areli	28
7.	11/01/2019	Devki galola	Jetapur	Rajkot	30
8.	15/01/2019	Meshpar	Gondal	Rajkot	68
9.	15/01/2018	Meshpar	Gondal	Rajkot	46
10.	28/01/2019	Bhiyal	Junagadh	Junagadh	38
				Total	320

Bakery Talim organized during the year 2018-19 under COC scheme

Sr. No.	Date	Village	Taluko	District	Beneficiaries
1.	09/05/2018	Bhenshan	Bhenshan	Junagadh	21
2.	09/05/2018	Bhenshan	Bhenshan	Junagadh	37
3.	03/05/2018	Bagasara	Bagasara	Amreli	31
4.	11/09/2018	Keshod	Keshod	Junagadh	35
5.	15/09/2018	Bagasara	Bagasara	Amreli	42
6.	25/09/2018	Bagasara	Bagasara	Amreli	29
7.	01/10/2019	Datrana	Menderda	Junagadh	20
8.	30/11/2018	Pranchi	Sutrapada	Gir Somnath	15



Sr. No.	Date	Village	Taluko	District	Beneficiaries
9.	22/12/2018	Natavarnagar	Bagasara	Amreli	33
10.	11/01/2019	Khirsara	Jetapur	Rajkot	71
11.	11/01/2019	Devki galola	Jetapur	Rajkot	20
12.	14/01/2019	Katrasa	Maliya	Gir Somnath	20
13.	15/01/2019	Meshpar	Gondal	Rajkot	27
14.	29/01/2019	Choki	Junagadh	Junagadh	35
15.	07/02/2019	Pipariya	Bagasara	Amreli	35
16.	07/02/2019	Bhader	Dhari	Amreli	42
17.	08/02/2019	Choki	Junagadh	Junagadh	15
18.	26/03/2019	Ita	Menderda	Junagadh	36
19.	25/03/2019	Dhari	Amreli	Amreli	34
20.	23/04/2019	Pipaliya	Dhoraji	Rajkot	33
				Total	631

(F) Extension Activities carried out by Extension Education Centres

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

Sr. No.	Name of activity	Sardar Smruti Kendra, Junagadh	Fisheries Res. Station, Okha	School of Baking, Junagadh	Total
1	KrushiMela	03	01	00	03
		(510800)	(433)	(00)	(511233)
2	Guidance on farm	-	38	2	40
			(2102)	(22)	(2124)
3	Guidance to visitors		83	08	91
		(8672)	(1997)	(479)	(11148)
4	Press note	17		-	17
5	Khedutshibir / Night shibir / Group	02		3	05
	discussion	(97)		(135)	(232)
6	Guidance through Telephone	(2851)	(43)		(2894)
7	Khedut talim/Khedut Mahila talim	64			64
		(2849)			(2849)
8	Video show/ Film show	=	-	-	-
9	Literature distribution	(13080)	312	-	13392
			(9286)		(22366)
10	Literature Publication	03	-	-	03
11	Fisheries Training	=	25	-	25
			(685)		(685)
12	Bakery Training			51	51
				(2168)	(2168)
13	Agri. Exibition	03	-	-	03
		(510800)			(510800)
14	Agri. Literature show	13080	-	-	13080
				Total	26774 (10,66,499)

^{*} Figures in parentheses indicate no. of beneficiaries/copies









One day Training Programm at SSK



Off campus Backry training

ICAR project - Farmers' FIRST programme

The farmers' FIRST programme (FFP) was started on 30th, January 2017 jointly through ICAR and Junagadh Agricultural University under by the Directorate of Extension Education. 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.

To carry out basic survey 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 under FFP project in respective villages (Nava vaghaniya, Mavjinjava, Hadala and Deri pipaliya).



Farm Women Training at SSK

- To distribute inputs among selected farmers for experiments on crop based module, NRM (Natural Resources Management) based Module, Crop diversification based module, Enterprise based module and Livestock based module under FFP project.
- To conduct field day on experiment on crop based module, NRM based Module, Crop diversification based module, Enterprise based module and Livestock based module under FFP project (Off campus).
- To take technical observation & farmer's feedback and to conduct kishan ghosthi on experiments on crop based module, NRM based Module, Crop diversification based module, Enterprise based module and Livestock based module under FFP project.



Farmers- scientists interface

Sr. No.	Name of the Activities	No. of Activities carried out
1.	Village meetings	4
2.	Nos. of trainings	36
3.	Nos. of visit by project team members	76
4.	Nos. of Exposure visits of farmers	29
5.	Nos. of Field days	6
6.	Nos. of Innovative Farmers	18
7.	Involvement of multi-stakeholders	Scientist of Agronomy, Soil Science, Agril.
		Entomology, Plant pathology and Animal science

Photographs of different activities carried out under FFP



PI of the project Dr. S. G. Savalia and team member Dr. A. M. Bharadiya discussing about the trials to be continued in different modules of the project at different villages.



Introduction of inputs to the farmers under CBM (G'nut) module at different villages by PI Dr. S. G. Savalia and Co-PI Dr. A. M. Bharadiya



On Farm Training at different villages



Dr. S. G. Savalia, PI, Dr. A. M. Bharadiya Co-PI, Dr. M.S. Solanki, Dr. R. K. Mathukiya celebrate the field day at different villages

ICAR project - Mera Gao Mera Gavarav (MGMG)

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



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Activities undertaken

Activities organised by JAU under MGMG

Sr. No.	Name of activity	No. of activities conducted	No. of farmers participated & benefitted
1.	Visit to village by teams	355	4963
2.	Interface meeting/ Goshthies	280	4544
3.	Training organized	61	1485
4.	Demonstrations conducted	101	334
5.	Mobile based advisories (No of message)	3632	8078
6.	Literature support provided (No)	1833	8895
7.	Awareness created (No)	430	8096
8.	Other, if any	35	604
	Total	6727	36999

Table 2 Other activities organized by JAU under MGMG

Sr.No.	Name of activity	No./Area (ha)	No. of farmers benefitted
1.	Linkages developed with other agencies (No. of agency)	49	4431
2.	Facilitation for new varieties, seeds, technol	ogy	
	i. New varieties (No.)	241	1362
	ii. Technology (No.)	136	231
	iii. Seeds (q)	473	1305
	iv. New crops (No.)		
	V. Other	20	20



Interface meeting

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, 28 such talks were delivered on different



On campus trainig

topics related to agriculture, horticulture, agricultural engineering, fisheries, animal husbandry, *etc*.

In all, 34 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.



5.5 Publication of Literature

Sr.No	Name of Office	Publication	
51.110	Name of Office	Booklet/Book	
1	Sardar Smruti Kendra, Junagadh	03	
2	DEE Office, Junagadh	03	
	Total	06	

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 an objective to produce and disseminate agricultural technologies to the farmers through electronic media/ format. Under LIFE (Live Interaction with Farmers' through Electronic media) two innovative programs started. One, LIVE MOBILE AUDIO CONFERRENCE in which

scientists at AGRISNET Studio and farmers are linked with mobile platform created by Reliance Foundation. Second program, LIVE YOUTUBE STREAMING, started from 01-01-2019, in which Live program is broadcast through YouTube. Reliance Foundation and ATMA project, Junagadh popularized these programs through their farmer related WhatsApp contacts.

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

Sr. No.	Subject	No. of Programs	Beneficiaries
1	Broadcasting through Radio	665	Farmers, students and people of Junagadh city and surrounding 55 villages
2	Agriculture related events/documentaries	80	These documentaries were visited by 5,57,863 visitors.
3	Live Audio Conference through mobiles	3	155 farmers of 51 villages participated and got latest information on agricultural subjects from scientists of JAU
4	Live YouTube Broadcasting	8	A more than 20000 farmers were informed about programs by ATMA and Reliance Foundation of Junagadh. Total 7000 farmers viewed the program so far.
5	Live broadcasting of program by JAU expert on TV channel Vande Gujarat 04	12	Broadcasting of 60 minutes episode on agri related programs of JAU scientists thru BISAG, Gandhinagar on TV Channel <i>Vande Gujarat</i> 04.
6	Visitors	859	Farmers, students and others for participation in audio recording visited CRS station.
7	E-sahitya samput	21 sets	To popularize agricultural technologies amongst farmers, 21 sets of DVD, each containing 19 DVDs on 31 technologies and 30 video songs distributed to JAU centers and ATMA for display to farmers during various programs through out the year.
8	Photography	158 (8120 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 other 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 mela, group discussion, film show, etc. were organized through collaborative efforts.



Kishan Kalyan Karyashala at Porbandar District

5.6 Orientation Training Programme

During the year under report, 29 scientists/ teachers of the University were deputed for participating in the orientation training programmes/ seminar/workshop/symposium, etc. organized within and outsite the state to upgrade their knowledge and skill for improving faculty competence in respective disciplines.

Krushi Mahotsav-2018

The Mass Communication Programme, "Kishan Kalyan Karyashala" was organized by Junagadh Agricultural University for one day on at selected Taluka of Saurashtra region on 2nd May, 2018 under the aegis of Krushi Mahotsav-2018. The main aim of this campaign "Kishan Kalyan Karyashala" was "doubling the Farmers Income by 2022". More than 150 Scientists of this university communicated new agricultural technologies to more than 1,07,000 farmers, farm women, dairy farmers and other stake holders. They were advised to adopt "Integrated and Diversified Farming' including horticulture, drip irrigation, water harvesting methods, dairy, bee keeping, organic farming for increasing the crop production and productivity on sustainable basis to enhance their income.



Kishan Kalyan Karyashala at Jamanagar District





Celebration of World Soil Health Day on 5th December, 2018

On 5th December, 2018 All Krishi Vigyan Kendra working under Junagadh Agricultural University, Junagadh were celebrated World Soil Health Day in collaboration with State Agricultural Department and ATMA Project at their respective district. Different Scientists of the university and the officers of state department were participated the programme. During



Kishan Kalyan Karyashala at Porbandar District

this programme number of activities like Farmer-Scientist Interactions, Exhibitions on soil health management, soil sampling and soil testing demonstrations, plant nutrient deficiency diagnostics and advisories for balanced nutrition of crops, field visits and distribution of soil health cards were organized on the occasion. The detail of participants participated at varies programme are as under.



Celebration of World Soil health Day by KVK Pipalia

Sr. No.	Name of KVK	No. of Participants
1	KVK, Jamnagar	115
2	KVK, Targhadia (Rajkot-I)	053
3	KVK, Amreli	124
4	KVK, Khapat (Porbandar)	150
5	KVK, Nanakandhasar (Surendranagar)	111
6	KVK, Pipalia (Rajkot-II)	200
7	KVK, Gor Khijadiya (Morbi)	045
	Total	798



Live Demonstration of Soil sampleing"



Celebration of World Soil health Day by KVK Nana Kandhasar



Pradhan mantri Kisan Samman Nidhi 2019 launching programme

The all the KVKs of Junagadh Agricultural University organized live telecast programme "PRADHAN MANTRI KISAN SAMMAN NIDHI" for farmers with briefed the major highlights of "PM—KISAN" scheme assured as an income support to the

small and marginal farmers and other programme was "Mann Ki Baat", telecasted through Doordarshan. Finally, the inaugural programme of national level launching of PM - KISAN scheme by Hon'ble PM from Gorakhpur, Uttar Pradesh was telecasted through DD National. In this programme listed farmers and KVK staff member actively participated.

Sr. No.	Name of KVK	No. of Participants
1	KVK, Jamnagar	230
2	KVK, Targhadia (Rajkot-I)	160
3	KVK, Amreli	286
4	KVK, Khapat (Porbandar)	385
5	KVK, Nanakandhasar (Surendranagar)	107
6	KVK, Pipalia (Rajkot-II)	100
7	KVK, Gor Khijadiya (Morbi)	054
	Total	1322

GLIMPSES OF ACTIVITIES OF DIRECTORATE OF EXTENSION EDUCATION



Hon'ble chancellor Dr. O. P. Kohali inogurate Central Museum "KRUSHI DARSHNALAY" at JAU, Junagadh



Hon'ble Agriculture Minister, Shri R. C. Faladu visited JAU, Stall at Vibrant Agri. Expo Gandhinagar





Hon'ble Vice Chancellor Dr. A. R. Pathak Innogural Solar Water pump at KVK Targhadiya





Hon'ble Director ATARI Dr. Lakhansingh attend SAC meeting at KVK Nana Kandhasar



Dr. A.R.Pathak, Vice Chancellore Inougurate Technology Week at KVK Targhadiya



Agril Exhibition and Agri Fair at Surendranagar



Animal Husbandary Shibir at Chotila, Surendranagar



Pradhan Mantri Kisan Sanman Niddhi Programme at KVK Amreli



Celebration of Soil health Campaign by KVK Amreli



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Celebration of "Mahila Krushi Divas" by KVK Nana Kandhasar



PM Kisan Sannman Nidhi Programme at KVK Jamnagar



Farmers Visited University museum "Krushi Darshnalay"



JAU Junagadh honoured Padmashree Vallbhbhai Vasarambhai Marvaniya at JAU, Junagadh



Celebration of "Sardar Patel Nirvan Divas" at JAU, Junagadh



Dr. A. Pathak Hon' Vice Chancellor advised during SAC Meeting at KVK Amreli

