

Extension Education



Chapter-V





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. Dr. R. L. Savalia 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 power vested under Section 62(1) in pursuance of Section 17(5). During the year 2008-09 Extension Education Council meeting was not organized. The members of Extension Education Council during 2008-09 were as under.

No.	Name	Designation
1.	Dr. B.K. Kikani	Vice Chancellor (Chairman)
2.	Dr. R. L. Savalia	Director of Extension Education (Secretary)
3.	Dr. D.B. Kuchhadiya	Director of Research & Dean PG Studies
4.	Dr. S.M. Dadhania	Associate Director of Extension Education
5.	Dr. P.G. Butani	Dean, Agriculture Faculty
6.	Dr. N.C. Patel	Dean, Agril. Engg. & Tech. Faculty
7.	Dr. A.Y. Desai	Dean, Fisheries Science Faculty
8.	Prof. B.A. Kunadia	Research Scientist (Groundnut)
9.	Dr. V.K. Poshia	Research Scientist (Chickpea)
10.	Dr. P.U. Gajbhiye	Research Scientist (Animal Genetics)
11.	Prof. R.H. Ghaghada	Research Scientist (Agril. Engg.)
12.	Dr. V.B. Gadhiya	Training Organizer, KVK
13.	Dr. K.L. Jetani	Research Officer (Fisheries)
14.	Dr. K.A. Khunt	Research Scientist (Agril. Economics)
15.	Dr. M.N. Popat	Professor & Head, Agril. Ext. Edu.
16.	Dr. A.H. Raval	Professor & Head, Agril. Engg. Ext. Edu.
17.	Dr. A.V. Barad	Professor & Head, Horticulture
18.	Dr. B.R. Karkar	Asstt. Ext. Edu., SSK
19.	Dr. L.B. Ranaparia	Asstt. Ext. Edu., Horticulture Diploma School



5.3 Extension Education and Training Centres

Sr. No.	Type	Location
I.	Diploma Certificate Courses	
1.	Agriculture Diploma School	Halvad, Dhari
2.	Horticulture Diploma School	Junagadh
3.	Livestock Inspector Training Centre	Junagadh
4.	School of Baking	Junagadh
5.	<i>Mali</i> Training Centre	Junagadh
II	Training Programmes for Extension Workers	
1.	Training & Visit System Training Centre	Junagadh
2.	Centre of Excellence for Training (Oilseeds)	Junagadh
III.	Training Programmes for Farmers/Farm Women	
1.	<i>Krishi Vigyan Kendra</i>	Jamnagar, Targhadia, Amreli, Khapat, Nana Kandhasar
2.	<i>Sardar Smruti Kendra</i>	Junagadh
IV.	Extension Education Programmes for Rural People	
1.	Farm Advisory Service Centre	Junagadh
2.	Extension Programme for Fisheries	Okha

5.4 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)	Horticulture Diploma	2 years	Junagadh	27
2)	Agriculture Diploma	2 years	Halvad, Dhari	56
3)	Livestock Inspector Training	1 year	Junagadh	30
4)	Bakery Training			
	❖ Basic Course in Baking Science	20 weeks	Junagadh	23 (3 Batches)
	❖ Special Training to Women	1 week	Junagadh	104 (6 Batches)
5)	<i>Mali</i> Training	6 months	Junagadh	5 (1 Batch)



All these courses are aiming to impart skill oriented practical training to farmer's son/daughter in order to provide an opportunity for self-employment and employment in different organizations. There is a provision of monthly stipend in all the courses.

(II) Training Programmes for Extension Workers

(A) Training & Visit System

Junagadh Agricultural University

Sr. No.	Type of programme	Programmes	No of Participants
1.	Bimonthly Workshop	3	40
2.	Pre-seasonal Training Programme	2	49
3.	Short Duration Course	2	60
Total		7	149

(B) Other Training Programmes

The centre has continued to provide better training to the extension personnel to improve their technical competency and

has taken-up the task of training the extension personnel of the Department of Agriculture and Horticulture through T & V System. The details about number of bimonthly workshops, pre-seasonal 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 is as under.

technical personnel of KVKs .The detail about numbers of the attended the programmes are as under.

Sr. No.	Name of Workshop/Training	Duration	Programmes	No. of Participants
1.	Organised by EEI with collaboration	7 Days	1	30
2.	Training Identified Area for Technical Personnel of KVKs	3 Days	3	84
Total			4	114

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

(A) Training Programmes

Training is essential to increase the efficiency of farmers, farm women, 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, 237 on-campus and 257 off-campus training programmes were organized, wherein 12671 participants received training. The details are depicted in Table 5.1.



Table 5.1 : Training programmes organized by the Transfer of Technology Centres for farmers/farm women during the year 2008-09

Sr. No.	TOT Centre		No. of Trg Prog.	No. of Participants				Total
				Male	Female	Rural Youth	Other	
(i)	KVK, Jamnagar	A	82	1156	498	-	-	1654
		B	74	1003	817	-	-	1820
(ii)	KVK, Targhadia	A	46	691	371	108	5	1175
		B	38	633	192	80	7	912
(iii)	KVK, Amreli	A	23	266	281	-	-	547
		B	40	256	891	-	-	1147
(iv)	KVK, Khapat	A	24	606	-	-	-	606
		B	52	1691	-	-	-	1691
(v)	KVK, Nana Kandhasar	A	34	587	109	-	98	794
		B	46	694	222	-	139	1055
(vi)	SSK, Junagadh	A	28	785	165	-	-	950
		B	7	125	195	-	-	320
Total		A	237	3485	1424	108	103	5120
		B	257	2711	2317	80	146	5254
Grand Total			494	8493	3741	188	249	12671

A= On-campus B=Off-campus

(B) Extension Activities

The 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 2,71,395 beneficiaries benefited. The details of the extension activities organized and number of participants are given in Table 5.2.

KVKs play an important role to provide an opportunity for income generation to the farmers by imparting skill oriented trainings. Besides, the KVKs conduct 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 feed backs provide guideline in reforming further research.



Table 5.2: Extension activities carried out by TOT centres during 2008-09

Sr. No.	Name of Activity	KVK					SSK, Junagadh	Total
		Jam-nagar	Targ-hadia	Amreli	Khapat	Nana Kandhesar		
1)	Farmers' / Field Day	25 (555)	5 (117)	1 (25)	6 (122)	12 (199)	-	49 (1018)
2)	Agril. Fair/ Exhibition	1 (9000)	3 (5590)	1 (40000)	-	-	14 (143060)	19 (197650)
3)	<i>Khedut Shibir</i> / Group Discussion	19 (471)	28 (6428)	-	36 (769)	-	13 (2919)	96 (10587)
4)	Agril. Tour/ Field Visit	-	15 (417)	14	- (189)	-	-	29 (606)
5)	Seminar/Workshop/ <i>Kisan Goshti</i>	195 (5562)	-	7 (117)	-	6 (311)	-	208 (5990)
6)	Cattle camp	-	8	-	-	4	-	12
7)	Film/Slide/Video Show/ Radio TalkTV Prog. etc.	(4660)	(479)			(38)		(5177)
		9	9	2	8	2	-	30
8)	Guidance through Letters/Personal Contact	(123)	(20)	(297)	(194)	(106)	(261)	(1001)
			13	2	8	5	-	28
9)	Publication and Distribution of Farm Literature	(23500)	(6280)	(4500)	(1658)	(1740)		(37678)
10)	Press Notes Released	18	29	7	8	2	-	64
11)	Demonstrations	165	187	-	-	75	-	427
12)	<i>Krush-Go-Vidya</i> Subscriber Registered	-	-	-	-	-	277	277
13)	Escorting the Visitors	(110)	(1354)	(230)	(388)	(813)	(8684)	(11579)
14)	Extension of Research Prog.	-	-	3 (109)	-	-	-	3 (109)
15)	On farmer Trial	2	-	7	4	-	-	13
	Total							1255(271395)

Figures in parenthesis indicates no. of beneficiaries/copies

(C) Frontline Demonstrations

The frontline demonstration aims to demonstrate the production potentialities

of newly released and pre-released production technologies of pulses and oilseeds on farmer's fields.



In all, 649 FLDs were conducted on various oilseeds and pulses viz., castor, mustard, groundnut, sesamum, cotton, gram,

wheat, pearl millet and cumin in 399.8 ha during *kharif* and *rabi* seasons through KVKs. The results are appended in Table 5.3.

Table 5.3: Performance of frontline demonstrations organized during 2008-09

Sr. No.	Center	Crop	Variety/ Treatment	No. of FLDs	Area (ha)	Av. yield (q/ha)		Increase in yield (%)	
						Demo.	Check		
1)	KVK, Targhadia	<i>Kharif</i>							
		Groundnut	GG-5	10	4.00	13.43	11.62	15.58	
		Groundnut	Chlorothalonil	10	4.00	13.67	11.83	15.55	
		Green gram	GM-4	17	6.80	5.5	4.75	17.74	
		Black gram	GU-1	5	4.00	13.67	11.83	15.55	
		Sesamum	GT-2	10	4.00	3.05	2.66	14.66	
		Cotton	RCH-2(Akka)	50	20.00	35.00	30.00	16.66	
		Cotton	IPM	50	50.00	37.00	32.00	15.62	
		<i>Rabi</i>							
		Gram	GG-1	10	4.00	15.00	12.5	15.58	
		Cumin	GC-4	15	6.00	13.67	11.83	15.55	
		Wheat	GW-366	10	4.00	3.05	2.66	14.66	
2)	KVK, Jamnagar	<i>Kharif</i>							
		Groundnut	GG-5	20	10.00	20.62	16.85	21.21	
		Cotton	Mallika	70	35.00	25.00	20.31	18.75	
		Chillies	Resham Patto	10	5.00	120.00	102.05	140.58	
		Brinjal	PLR-1	10	5.00	512.05	452.05	11.70	
		Tomato	TP-3	10	5.00	575.00	502.05	12.60	
		<i>Rabi</i>							
		Mustard	GM-2	20	10.00	17.90	14.90	16.76	
		Cumin	G-4	20	10.00	13.75	11.25	18.18	
		Wheat	GW-366	40	20.00	47.05	47.05	21.05	
3)	KVK, Amreli	<i>Kharif</i>							
		Groundnut	Fertilizer	10	5.00	9.67	9.44	2.49	
		Sesame	G.Til-2	10	5.00	4.58	4.19	9.3	
		Green gram	GM-4	10	5.00	6.5	5.15	25.9	
		Cotton	Tulsi	50	20.00	42.09	37.62	11.88	
		Cotton	IPM	50	20.00	42.09	37.62	11.88	
		<i>Rabi</i>							
		Onion	Pesti.and fungi	5	2.50	310.0	282	11.84	
Gram	GG-2	15	7.50	14.51	12.00	15.83			



Sr. No.	Center	Crop	Variety/ Treatment	No. of FLDs	Area (ha)	Av. yield (q/ha)		Increase in yield (%)
						Demo.	Check	
4)	KVK, Khapat	<i>Kharif</i>	GG-20	8	16.00	17.43	14.97	16.40
		Groundnut	BDN-2	5	10.00	22.00	18.96	16.05
		Pigeon pea	GHB-558	5	10.00	36.46	31.10	17.02
		Pearl millet	<i>T. harzianum</i>	5	10.00	16.70	14.41	15.90
		<i>Rabi</i>						
		Wheat	GW-366	10	20.00	35.70	30.30	17.90
		Gram	GG-4	5	10.00	17.88	15.32	16.70
		Cumin	GC-4	5	10.00	8.62	7.45	15.70
	NPV	-	5	10.00	17.74	15.52	14.30	
5)	KVK, Nana Kandhasar	<i>Kharif</i>						
		Groundnut	GG-20	10	5.00	14.84	12.49	18.81
		Sesamum	Guj.Til-2	10	5.00	5.14	4.41	16.55
		Green gram	Gujarat-4	10	5.00	7.10	6.15	15.44
		Mothbean	Guj. Muth-2	10	5.00	6.42	5.53	16.09
		Cotton	Bt	10	5.00	19.30	16.29	12.78
		Bio-agent	<i>Trichoderma</i> culture	4	2.00	15.80	14.01	12.78
			Total			649.00	399.80	

(D) Farm Advisory Service Scheme

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.	Agril. Fair	7	700600
2.	Agril. Exhibitions (participation)	14	143015
3.	<i>Khedut/Mahila Shibir/Group Meeting/Crop Seminar</i>	13	2919
4.	Spot Guidance/Guidance through Letters	261	-
5.	Agril. Literature Exhibition	14	143015
	Total	309	989549

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

a. To establish the *Gram Kisan Samities* (GKS) in the rural areas.

- b. To train the members of *Gram Kisan Samities* in leadership communication and cooperation for transfer of technologies.
- c. To disseminate the latest agricultural and allied technologies through *Gram Kisan Samities* in rural areas.



- d. To carry out different extension activities through GKS in different villages.
- e. To know the feedbacks from the farmers.

Formulation of Gram Kisan Samities during the year 2008-09

Sr. No.	District	Taluka / Village	No. of GKS
1.	Bhavnagar	Sanosara	10
2.	Junagadh	Mangrol	5
3.	Junagadh	Veraval	7
Total			22

Khedut Shibirs organized during the year 2008-09 under COC scheme

Sr. No.	Name of Taluka / Village	No. of Shibirs	No. of Participants	Subject covered
1.	Veraval (Junagadh)	1	23	Agriculture,
2.	Mangarol (Junagadh)	1	28	Horticulture &
3.	Sanosara (Bhavnagar)	1	33	Animal Husbandary
Total		3	84	

(F) Extension Activities carried out by Extension Education Centres

Extension activities carried out by various Extension Education Centres during the year are as under.

Sr. No.	Name of activity	LITC, Junagadh	School of Banking, Junagadh	Fisheries Res. Station, Okha	Total
1)	Diagnostic and Treatment Services through Mobile Ambulatory Clinic	(10,000)	-	-	(10,000)
2)	Farmers/ Animal Owners Visit	-	-	(2915)	(2915)
3)	Farmers' Meeting/ Shibirs/Seminar, etc.	36 (1608)	-	-	36 (1608)
4)	Guidance on Farm		-	-	-
5)	Guidance through letters	78	-	60 (2100)	138 (2100)
6)	Literature Published	5	-	-	5
7)	Literature Distribution	(21,177)	-		(21,177)



Sr. No.	Name of activity	LITC, Junagadh	School of Banking, Junagadh	Fisheries Res. Station, Okha	Total
8)	Off Campus Training		-	-	(21,177)
9)	On Campus Training:	3(280)	-	-	3(280)
a)	<i>Gopal Mitra</i> Certi. Course (4 months)		-	4 (60)	4 (60)
b)	B.V.Sc. Internship	1 (9)	-	-	1 (9)
c)	BRS Internship (1 month)	5 (26)	-	-	5 (26)
d)	LITC-II Representatives	10 (111)	-	-	10 (111)
10)	One Day Camp	-	11 (630)	-	11 (630)
11)	Film/Slide/Video Show	-	-	-	-
12)	TV Programmes	4	-	-	4
13)	Radio Talk	-	-	6	6
14)	Guidance to Visitors		53 (1236)	-	53 (3387)
	Total	142 (34447)	64 (2781)	70 (5075)	276 (42303)

5.5 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 agricultural messages were also broadcasted from All India Radio, Rajkot. During the year under report, nearly 22 such talks were delivered on different topics related to agriculture, horticulture, agricultural engineering, fisheries, animal husbandry, etc.

In all, 17 television programmes

covering various aspects of agriculture, animal husbandry, agricultural engineering, horticulture, fisheries, home science, etc. were telecasted through Doordarshan Kendra, Rajkot in “Gram Jagat” programme regularly for the benefit of farming community.

5.6 Publication of Extension Education Literature

During the year report, total 39 publications (34 folders and 5 books) were published by different departments.



Sr. No.	Name of Office	Type of Publication		Total
		Folders	Books	
1)	Directorate of Extension Education, JAU, Junagadh	-	2	2
2)	Sardar Smruti Kendra, JAU, Junagadh	8	3	11
3)	Cattle Breeding Farm JAU, Junagadh	5	-	5
4)	Vegetable Research Station, JAU, Junagadh	3	-	3
5)	Soil & Water Engg. Deptt., CAET, JAU, Junagadh	1	-	1
6)	Krishi Vigyan Kendra, JAU, Targhadia	7	-	7
7)	Farm Power & Machinery, CAET, JAU, Junagadh	3	-	3
8)	Krishi Vigyan Kendra, JAU, Khapat	5	-	5
9)	Millet Research Station, JAU, Jamnagar	1	-	1
10)	Cotton Research Station, JAU, Junagadh	1	-	1
Total		34	5	39

University news bulletin named as “JAU News letter” is being published regularly by Directorate of Extension Education.

5.7 Agriculture Literature Exhibition

During the year under report, 14 agricultural literatures exhibitions were availed for farmers and extension workers. Total 143015 farmers and farm women participated in agricultural literature exhibition.

5.8 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 Door-darshan were finalized by such coordinated efforts. In AGRESCO, the officers of other 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 work-shops, 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.

5.9 Orientation Training Programme

During the year under report, 16 scientists/teachers of the university were deputed for orientation training outside the Gujarat state to upgrade knowledge and

skill for improving their faculty competence in respective disciplines.

5.10 *Krushi Mahotsav-2008*

It is important that the innovations in agricultural field should reach the farmers at the earliest. Revolution could be brought in agriculture only if such recommendations are used by the farmers in their fields and hence stress was laid that these recommendations reach the farmers through '*Krushi Rath*' along with agricultural scientists with their new recommendations. Meetings with farmers in villages were held by these scientists to appraise them with the new techniques and even their problems were solved in the meetings. With the help of transfer of technology, 9953 farmers were benefitted.

No.	District	No. of <i>Shibirs</i>	No. of beneficiaries
1	Junagadh	4	1500
2	Rajkot	2	453
3	Bhavnagar	4	3200
4	Amreli	3	2400
5	Surendranagar	1	1000
6	Jamnagar	1	700
7	Porbandar	1	700
Total		16	9953



