

# EXTENSION EDUCATION



## Chapter - 5



### 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. 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. H. M. Gajipara and Dr. N. B. Jadav 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, dated 31-07-2013. 17th Extension Education Council meeting was organized on 16.10.2023.

#### 5.2.1 Extension Education Council:

Sr. No.	Designation/ Department		Position
1	Dr. V. P. Chovatia, Hon'ble Vice Chancellor, JAU, Junagadh		Chairman
2	Dr. R. B. Madariya, Director of Research & Dean PG, JAU, Junagadh		Member
3	<b>The Deans of all Faculties</b>		
	i	Dr. S. G. Savalia, Principal & Dean, College of Agriculture, JAU, Junagadh	Member
	ii	Dr. P. M. Chauhan, Principal & Dean, College of Agril. Engg. & Technology, JAU, Junagadh	Member
	iii	Dr. D. K. Varu, Principal & Dean, College of Horticulture, JAU, Junagadh	Member
4	<b>Five Officers/ Extension Education Specialists (Nominated by the Vice Chancellor)</b>		
	i	Dr. B. N. Kalsariya, Professor & Head, Department of Extension Education, CoA, JAU, Junagadh	Member
	ii	Dr. K. B. Parmar, Principal, Polytechnic in Agriculture, JAU, Sidsar	Member
	iii	1. Dr. P. J. Prajapati, Senior Scientist & Head, Krishi Vigyan Kendra, JAU, Amreli	Member
		2. Dr. L. L. Jivani, Senior Scientist & Head, Krishi Vigyan Kendra, JAU, Gor Khijadiya (Morbi)	Member
iv	Dr. M. K. Jadeja, Assistant Extension Educationist, Sardar Smruti Kendra, JAU, Junagadh	Member	





Sr. No.	Designation/ Department		Position
5	<b>The Eminent Extension Education Specialists concerned with farmers' training from outside the University co-opted by the organization</b>		
	i	Dr. P. R. Kanani, Retd. Professor, Block No. 47, Rajmoti Society, B/h. Bilnath Temple, Vanthali Highway, Junagadh	Member
	ii	Dr. G. R. Gohil, Retd. Professor, "Parth", Street No. 1, Om Nagar Society, Ivnagar Road, Gandhigram, Junagadh	Member
	iii	Dr. D. M. Thakrar, Retd. Professor, Block No. 403, Giriraj Palace, Near Rameshwar temple, B/h. Bus Station, Junagadh	Member
6	Director of Agriculture, GoG, Gandhinagar		Member
	Director of Horticulture, GoG, Gandhinagar		
	Director of Animal Husbandry, GoG, Gandhinagar		
7	<b>Two Progressive farmers (Nominated by the Vice Chancellor)</b>		
	i	Shri Vitthalbhai Nanjibhai Sakhiya, Krushna Nagar, Kalavad- Dhoraji Road, Kalavad, Dist. Jamnagar	Member
	ii	Shri Arvindbhai Mohanbhai Patoliya, "Star Plaza", Jin Plot, Najapur Road, Mendarada	Member
8	Dr. H. C. Chhodavadia, Associate Director of Extension Education, JAU, Junagadh		Member
9	Dr. N. B. Jadav, Director of Extension Education, JAU, Junagadh		Member Secretary
10	i	Dr. K. C. Patel, Director (IT), Information Technology Cell, JAU, Junagadh	Invited Member
	ii	Director of Extension Education, AAU, Anand	
	iii	Director of Extension Education, NAU, Navsari	
	iv	Director of Extension Education, SDAU, S.K. Nagar	
	v	Dr. C. D. Lakhlani, Principal, PGI ABM, JAU, Junagadh	
	vi	Dr. A. S. Dudhat, Principal, College of Agriculture, JAU, Amreli	

### 5.2.2 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
<b>Training Programmes for Extension Workers</b>		
1	Training & Visit System Training Centre	Junagadh, Targhadia
2	Centre of Excellence for Training (Oilseeds)	Junagadh



No.	Course / Programme	Location
<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), Pipalia (Rajkot-II), Gorkhijadiya (Morbi)
2	Sardar Smruti Kendra	Junagadh
<b>Extension Education Programmes for Rural People</b>		
1	Farm Advisory Service Centre	Junagadh

### 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.

#### 5.2.3 Diploma/Certificate Courses for Farm Youths

No.	Name of Course	Duration	Location	No. of participants Completed the Course
1	Bakery Training			
	➤ Basic Course in Baking Science	15 weeks	Junagadh	43
	➤ Special Training to Women	1 week	Junagadh	241
2	Mali Training	6 months	Junagadh	05
3	Agro Based ITI Centre			
	➤ Seed Production Technology	6 months	Junagadh	07
	➤ Green House Construction & Systems Management	6 months	Junagadh	07
<b>Total</b>				<b>303</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.



Practical work - Bakery Training



Certificate distribution - Bakery Training





Certificate distribution - Agro Based ITI



Certificate distribution - Agro Based ITI

**(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 were as under.

**5.2.4 Training Programmes for Extension Workers / Officers**

No.	Type of programme	No. of Programmes	No. of Participants
1	Bimonthly Workshop	03	136
2	Pre-seasonal Training Programme	02	92
	<b>Total</b>	<b>5</b>	<b>228</b>



Pre-Seasonal training programme under T & V scheme



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 as under.

**5.2.5 Khedut shibir and Diagnostic team visit**

No.	Subject	No. of Activities	No. of Scientists involved	Beneficiaries
1	<i>Khedut Shibir</i>	19	57	2655
2	Diagnostic Team	102	154	294



Farmers training programme under COC scheme



Farmers training programme under COC scheme



Honeybee Training under COC scheme



Honeybee Training under COC scheme

**5.2.6 Training programmes for Input Dealers during 2023-24:**

No.	Title of course	Duration	Participants
1	Certificate course on Pesticide Management	12 days	92

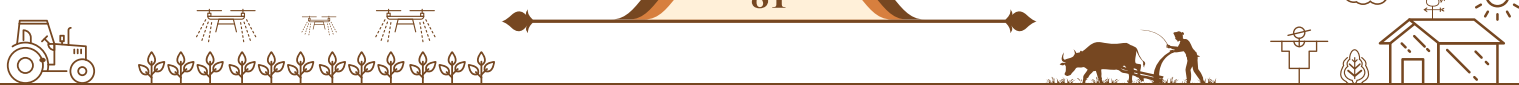




**Certificate Distribution of Dealers course at JAU Junagadh**

**5.2.7 Training programmes for Fertilizer Dealers during 2023-24:**

No.	Title of course	Date	Duration	Participants
<b>J.A.U., Junagadh</b>				
1	Integrated Nutrient Management for Fertilizer Dealers	11/04/2023 to 25/04/2023	15 Days	78
2		01/05/2023 to 15/05/2023		78
3		17/05/2023 to 02/06/2023		71
4		08/06/2023 to 23/06/2023		70
5		03/07/2023 to 17/07/2023		48
6		21/08/2023 to 04/09/2023		89
7		25/09/2023 to 09/10/2023		86
8		19/10/2023 to 02/11/2023		80
9		14/12/2023 to 28/12/2023		76
10		12/03/2024 to 26/03/2024		81



No.	Title of course	Date	Duration	Participants
<b>KVK Amreli</b>				
11	Integrated Nutrient Management for Fertilizer Dealers	10/04/2023 to 24/04/2023	15 Days	62
12		27/04/2023 to 11/05/2023		61
13		17/05/2023 to 31/05/2023		54
14		14/10/2023 to 18/10/2023		61
15		19/10/2023 to 02/11/2023		55
16		01/12/2023 to 15/12/2023		60
<b>KVK Lokbharti Sanosara, Bhavnagar</b>				
17	Integrated Nutrient Management for Fertilizer Dealers	17/04/2023 to 15/05/2023	15 Days	121
<b>KVK Ambuja Ciment Foundation, Kodinar</b>				
18	Integrated Nutrient Management for Fertilizer Dealers	03/05/2023 to 18/05/2023	15 Days	30
<b>Total</b>				<b>1261</b>



Inoguration of Fertilizer Dealers course



Certificate distribution programme of Fertilizer Dealers course



Certificate distribution to Fertilizer Dealers



Certificate distribution to Fertilizer Dealers







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

**(A) Training Programmes**

Training is essential to update the knowledge 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, 201 On-campus and 225 Off-campus training programmes were organized, wherein 19749 participants received training. The details are given in Table 5.2.8

**Table 5.2.8 Training programmes organized by the Transfer of Technology Centres (KVKs) for farmers/farm women during the year 2023-24**

No.	TOT Centre		No. of Trg. Prog.	No. of participants		Total
				Male	Female	
1	KVK, Jamnagar	On Campus	26	847	516	1363
		Off Campus	17	657	212	869
2	KVK, Targhadia	On Campus	44	468	1142	1610
		Off Campus	35	407	726	1133
3	KVK, Amreli	On Campus	40	1435	823	2268
		Off Campus	56	3034	1498	4527
4	KVK, Khapat	On Campus	15	208	99	307
		Off Campus	16	260	94	354
5	KVK, Nanakandhasar	On Campus	40	889	129	1018
		Off Campus	44	786	496	1282
6	KVK, Pipalia	On Campus	16	345	384	729
		Off Campus	34	1457	570	2027
7	KVK, Gor Khijadiya	On Campus	20	772	130	902
		Off Campus	23	1274	86	1360
	<b>Total</b>	On Campus	<b>201</b>	<b>4964</b>	<b>3223</b>	<b>8197</b>
		Off Campus	<b>225</b>	<b>7875</b>	<b>3682</b>	<b>11552</b>
<b>Grand Total</b>			<b>426</b>			<b>19749</b>



On Campus training programme at KVK, Pipalia



Off Campus training programme by KVK, Khapat



### (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 187141 farmers, farm women, youth and other stakeholders benefitted. The details of the extension activities and number of participants are given in Table 5.2.9

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

**Table 5.2.9 Extension activities carried out by TOT centres during 2023-24**

No.	Name of activity	KVK							Total
		Targhadia	Jamnagar	Khapat	Amreli	Nana Kandhasar	Pipalia	Gor Khijadia	
1	Krushi Mela	2 (2168)	1 (10197)	3 (1754)	5 (3058)	5 (2457)	5 (1155)	1 (147)	22 (20936)
2	Field day	8 (242)	12 (192)	2 (60)	35 (885)	9 (342)	2 (44)	0	68 (1765)
3	Guidance on farm	45 (211)	21 (227)	41 (177)	45 (356)	0	10 (124)	30 (251)	192 (1346)
4	Guidance to visitors	47 (2028)	127 (1787)	164 (164)	17 (855)	19 (1288)	20 (524)	10 (690)	404 (7336)
5	Press note	7	14	4	39	14	3	12	93
6	Khedutshibir/ Night shibir/ Group discussion	2 (340)	7 (2075)	1 (58)	1 (140)	0	15 (460)	3 (245)	29 (3318)
7	Guidance through Telephone	(691)	(3617)	(288)	(1236)	(1788)	(3220)	(1218)	(12058)
8	Krushigosthi/ Seminar	6 (173)	8 (1548)	0	0	0	4 (197)	17 (497)	35 (2415)
9	Khedut meeting	4 (40)	1 (12)	0	1 (23)	1 (287)	10 (251)	0	17 (613)
10	T.V. Programme	0	3	0	1	0	2	0	6
11	Radio talk	0	5	0	46	2	10	0	63
12	Popular articles	0	8	7	4	5	0	0	24
13	Video show/ Film show	5 (384)	9 (484)	3 (178)	5	288 (1658)	4 (188)	0	314 (2892)
14	Cattle camp	1 (190)	0	0	0	00	3 (80)	0	4 (270)





No.	Name of activity	KVK							Total
		Targhadia	Jamnagar	Khapat	Amreli	Nana Kandhasar	Pipalia	Gor Khijadia	
15	Literature distribution	6 (1550)	(3432)	5 (2500)	(3025)	22 (2573)	25 (1100)	(2322)	58 (16502)
16	Literature published	11	3	9	20	2	2	0	47
17	Lectures delivered	19 (2536)	153 (18832)	20 (499)	314	192 (10143)	15 (223)	6 (2015)	719 (34248)
18	Scientist's Farm visit	36 (104)	19 (255)	41 (177)	36 (324)	(1099)	17 (234)	42 (303)	191 (2496)
19	Vocational training	2 (67)	3 (91)	0	2 (123)	0	2 (78)	0	9 (359)
20	Sponsored/ Collaboration training	15 (578)	17 (1209)	11 (967)	41 (2084)	17 (1195)	13 (809)	7 (505)	121 (7347)
21	Diagnostic team	36 (104)	6 (36)	0	4 (22)	13	30 (125)	3 (47)	92 (334)
22	Student (RAWE)	2 (67)	2 (36)	2 (63)	3 (122)	7 (183)	3 (15)	0	19 (486)
23	Celebration of Technology Week	1 (328)	1 (402)	1 (514)	1 (721)	1 (365)	1 (305)	1 (274)	7 (2909)
24	Soil Sample Analyzed	(300)	(0)	(203)	(501)	(0)	(0)	(116)	(1120)
25	Participated in Agril. Exhibition	1 (328)	5 (5764)	4 (2371)	1 (40)	6 (4409)	5 (3704)	4 (1773)	26 (18389)
26	Any other please specify	90 (23220)	11 (662)	0	0	0	5 (426)	240 (25694)	346 (50002)
<b>Total</b>								<b>2906</b> <b>(187141)</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, 1235 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 474 ha during *kharif* and *rabi* seasons through KVKs. The results are present in Table 5.2.10



Table 5.2.10 Performance of Frontline Demonstrations organized during 2023-24

No	Centre	Crop	Variety/ Treatment	No. of FLDS	Area (ha)	Av. yield (q/ha)		Increase in yield (%)
						Demo.	Local check	
1.	KVK, Targhadia	Groundnut	Varietal (GJG-32) + INM+IDM + IPM	10	4	19.00	16.00	18.75
		Groundnut	IPM Chlorpyriphos	10	4	23.00	19.38	18.90
		Groundnut (under ATIC project)	Varietal (GJG-32) + INM + IPM	50	20	23.25	20.00	16.25
		Groundnut (under NMOOP project)	Varietal (GJG-32) + INM+IDM + IPM	50	20	23.75	20.30	17.00
		Chickpea	Varietal (GJG-6) + INM+IDM+IPM	10	4	20.00	18.00	11.11
		Chick pea (under ATIC project)	Varietal (GJG-6) + INM+IDM+IPM	50	20	21.25	18.25	16.44
		Chickpea (under NFSM project)	Seed of GJG-6 + Bio fertilizer + <i>Trichoderma</i> + <i>Beauverria</i>	50	20	21.00	18.00	16.66
		Wheat	INM (GW-451)	5	2	39.00	36.00	8.33
		Brinjal	GRB-7	10	4	260	215	20.93
		Cumin	GC-4 + Beuveria	10	4	10.90	7.80	39.74
		Cumin	Line sowing for minimizing the disease intensities	5	2	10.10	8.00	26.25
		Fodder	Jinjvo	10	1	85	72	18.05
		Pear millet	GHB 1129 and GHB 1231	5	2	28.75	26.25	9.52
		Buffalo	Bypass Protein (22%)	20	20	1892 kg/lactat ion	1683 kg/lacta tion	12.42
		Buffalo	By Pass Fat	20	20	8.1% Fat	6.8% Fat	19.12
Buffalo	Chelated Mineral mixture	20	20	1648 kg/lactat ion	1493 kg/lacta tion	10.38		





No	Centre	Crop	Variety/ Treatment	No. of FLDS	Area (ha)	Av. yield (q/ha)		Increase in yield (%)
						Demo.	Local check	
2.	KVK Jamnagar	Sesame	Improved Var.(G. Til-5), Beauveria bassiana, Trichoderma, PSB, Azotobactor	50	20	11.0	9.6	14.58
		Groundnut	Improved Var.(GJG.-32), Metarhizium, Trichoderma, PSB, Rhizobium Beauveria	50	20	17.49	15.90	9.95
		Chickpea	Seed GG-5 Beauveria, Trichoderma, Azotobactor, PSB	50	20	25.03	22.01	13.72
		Castor (ATIC)	GCH-9	20	8	36.22	31.81	13.85
		Pearl millet	GHB-1129	10	4	38.25	33.13	15.76
		Wheat	Variety –GW 451	10	4	49.88	45.50	9.66
		Ajwain	Beauveria, Trichoderma, Azotobactor, PSB, Mix micro nutrient	10	4	8.75	8.10	8.02
		Cumin (ATIC)	Beauveria, Trichoderma, Azotobactor, PSB	20	8	7.25	6.66	8.86
		Coriander (ATIC)	Beauveria, Trichoderma, Azotobactor, PSB	20	8	14.80	13.80	7.30





No	Centre	Crop	Variety/ Treatment	No. of FLDS	Area (ha)	Av. yield (q/ha)		Increase in yield (%)
						Demo.	Local check	
		Cotton	Beauveria, SNPV, MDP, Azadirachtin	25	10	15.9	13.5	18.5
		Kitchen Garden	Vegetable seed, Beauveria, bassiana	50	2	535.90 kg/unit	438.90	22.10
		Cotton	Cotton picking Apron	5	2	3.38 kg/hr	3.04	11.18
3.	KVK Amreli	Sesame	GJT-5	10	4	10.61	8.62	23.3
		Black Gram	Guj. Urd-2	10	4	12.62	11.12	17.3
		Green Gram	GM-4	10	4	11.59	9.7	19.6
		Castor	GCH-9	10	4	29.20	25.66	15.18
		Cotton	G. Cot. 24 (BT)	10	4	18.31	16.43	14.06
		Soybean	GJS-3	10	4	20.48	16.98	20.78
		Coriander	GC-3	10	4	8.75	15.26	13.23
		Chilli	Plastic mulch	10	4	43.75	37.50	16.67
		Cotton Shredder	Cotton	10	15	-	-	-
		Seed dressing drum	Chickpea	10	0	-	-	-
Revolving milking stool	Drudgery reduction	05	0	-	-	-		
4.	KVK Khatpat	Groundnut	GJG-22	10	4	26.19	24.38	7.44
		Kitchen Gardening (Kharif)	5 var. of different veg.	50	2.5	45.18 kg/demo	-	-
		Cotton	Bt.	25	10	30.25	27.95	8.22
		Chickpea	GG-1/GJG-6	10	4	22.63	20.94	8.09
		Onion	Pilipati	10	4	Awaited		
		Wheat	GW-451	10	4	43.50	39.13	11.21
		Kitchen Gardening (Rabi)	5 var. of different veg.	50	2.5	55.30 kg/demo	-	-





No	Centre	Crop	Variety/ Treatment	No. of FLDS	Area (ha)	Av. yield (q/ha)		Increase in yield (%)
						Demo.	Local check	
5.	KVK Nana Kandhasar	Chickpea	GG-5	10	4	27.61	23.92	15.44
		Chickpea(CFLD)	GJG-6 and Bio Agents	50	20	20.23	17.75	13.97
		Cumin	GC-4	10	4	9.60	8.24	16.50
		Wheat	GW-451	10	4	40.24	35.53	13.25
		Lucerne	AL-3	10	1	395	330	19.69
		Onion	GJWO-3	10	1	303	269	13.75
		Sesame	GT-4	10	4	3.07	2.71	13.28
		Groundnut	Gir Sawaj metarizium	10	4	18.36	16.46	11.54
		Groundnut	Gir Sawaj Trichoderma	10	4	17.66	15.22	16.03
		Groundnut(CFLD D)	GJG-32 and Bio Agents	25	10	19.05	16.33	16.65
		Tomato	GT-6 and Beauveria	10	1	284.53	269.64	5.52
6.	KVK Morbi	Groundnut	Seed treatment of Rhizobium (@)10 ml/kg seed	10	4	21.37	20.24	5.57
		Sesame	GT-6	10	4	7.70	6.80	13.20
		Blackgram	GU-2	10	4	5.13	4.05	26.67
		Chickpea	GG-5	10	4	17.04	14.80	15.14
		Cumin	GC-5	10	4	7.70	6.60	17.20
		Cotton	Pheromone Trap and Beauveria	10	4	21.29	19.65	8.37
		Pearl-millet	GHB-1129	10	4	30.3	30.3	0.02
7.	KVK Pipalia	Groundnut (Tricho)	IDM (GG-20)	10	4	35.9	31.3	14.80
		Groundnut	IPM (GG-20)	10	4	31.9	25.9	23.19
		Sesamum	Variety (GT-6)	10	4	12.3	10.4	18.07
		Cotton	INM (Bt.)	10	4	25.6	23.3	10.22
		Cotton	IPM (Bt.)	5	10	25.0	21.8	14.94
		Tomato	INM	10	4	320.4	297.5	12.46





	Brinjal	IPM	10	4	396.9	340.1	16.69
	Farm Women	Twin wheel hoe	10	0	23 min (Av. Time for weeding)	47 min	51.06
<b>Total</b>			<b>1235</b>	<b>474</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.

**Table 5.2.11 Various Extension Activities carried out by the Centre during 2023-24**

No.	Name of activity	No. of activities	No. of participants
1	Agril. Fair	3	32570
2	Agril. Exhibitions	3	32570
3	Guidance (Telephone & Personal Contact)	8482	8482
4	Visitors	6737	6737

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

**Objectives of COC Scheme:-**

- 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

- 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.

**5.2.12 Training Programmes under Centre of Communication (COC) Scheme during 2023-24**

No.	Subject	No. of Training Programmes	No. of Beneficiaries
1	Honeybee Training	2	99
2	Farmers Training	9	472
3	Khedut Shibirs	2	71
<b>Total</b>		<b>13</b>	<b>642</b>

**5.2.13 Formation of *Gram Kisan Samitis* during the year 2023-24**

No	Date	Village	Taluka	District	Beneficiaries
1	24/04/2023	Alidhara	Mendrada	Junagadh	12
2	09/05/2023	Moviya	Gondal	Rajkot	14
3	25/05/2023	Choki	Junagadh	Junagadh	12







No	Date	Village	Taluka	District	Beneficiaries
4	06/06/2023	Rafala	Bagasara	Amreli	14
5	16/06/2023	Amodara	Una	Gir Somnath	12
6	11/07/2023	Nani Khodiyar	Mendarada	Junagadh	12
7	24/07/2023	Alidra	Kodinar	Gir Somnath	12
8	02/08/2023	Khodu	Wadhvan	Surendranagar	14
9	07/08/2023	Pipali (Bavani)	Keshod	Junagadh	14
10	25/08/2023	Mota Ankevaliya	Dhagandhra	Surendranagar	11
11	14/06/2023	Kenedipur	Mendrada	Junagadh	12
12	26/09/2023	Ghantiyan	Bagasara	Amreli	12
<b>Total</b>					<b>151</b>

#### 5.2.14 Khedut Shibirs organized during the year 2023-24 under COC scheme

No.	Date	Village	Taluko	District	Beneficiaries
1	29/01/2024	Pipali (Bavani)	Keshod	Junagadh	32
2	26/03/2024	Choki	Junagadh	Junagadh	39
<b>Total</b>					<b>71</b>

#### 5.2.15 Bakery Talim organized during the year 2023-24 under COC scheme

No.	Date	Village	Taluko	District	Beneficiaries
1	06/03/2024	Manavadar	Manavadar	Junagadh	120
2	07/03/2024	Khijadiya	Visavadar	Junagadh	27
3	14/03/2024	Khamdhrol	Junagadh	Junagadh	17
4	18/03/2024	Ghantiyan	Bagasara	Amreli	28
<b>Total</b>					<b>192</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.

#### 5.2.16 Extension Activities carried out by Extension Education Centres

No.	Name of activity	Sardar Smruti Kendra, Junagadh	School of Baking, Junagadh	Total
1	Krushi Mela (Agril. Fairs)	3 (32570)	2 (31500)	5 (64070)
2	Guidance to visitors	(6737)	(146)	(6883)
3	Press note	0	14	14



**5.2.16 Extension Activities carried out by Extension Education Centres**

No.	Name of activity	Sardar Smruti Kendra, Junagadh	School of Baking, Junagadh	Total
4	Khedutshibir/ Night shibir/ Group discussion	09 (748)	0	09 (748)
5	Guidance through Telephone	(1745)	(173)	(1918)
6	Khedut talim/Khedut Mahila talim	69 (3781)	0	69 (3781)
7	Literature Publication	05	0	05
8	Bakery Training	0	56 (3075)	56 (3075)
9	Agri. Exhibitions	3 (32570)	2 (31500)	5 (64070)
10	Agri. Literature show	3 (32680)	0	3 (32680)
			<b>Total</b>	<b>166 (1,77,225)</b>

Figures in parentheses indicate numbers of beneficiaries/copies



**Off campus Training Programme by SSK**



**On Campus Farmers Training at SSK**





Exposure visit of Farm Women at SSK



Exposure visit of Farm Women at SSK

**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, total 20 such talks were delivered on different topics related to agriculture, horticulture, agricultural engineering, fisheries, animal husbandry, etc.

In all, total 16 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.

**Different activities of AGRISNET Studio**

Sr No	Subject	No of Programs	Beneficiaries
1	Broadcasting through Radio	7,320	Farmers, students and people of Junagadh city and surrounding 55 villages
2	Agriculture related events/ documentaries	32	These documentaries were visited by >22 lakh viewers so far.
3	Small Video Clips	15	Farmers of various whatsapp groups of JAU scientist / centers
4	Live broadcasting of program by Junagadh Janvani in collaboration with District Education Officer, Govt. of Gujarat on Topic “Pariksha par Charcha” on dated 27 <sup>th</sup> Feb, 2024.	01	Broadcasting of 120 minutes episode thru Junagadh Janvani You Tube Account. Programme is having 3.7 K subscribers

**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.

The CRS is transmitting FOUR hours program daily. It covers about 15 km area having 55 villages and Junagadh city. AGRISNET studio is established with objective to produce and disseminate agricultural technologies to farmers through electronic media/ format.



Sr No	Subject	No of Programs	Beneficiaries
5	Talks Through Doordarshan, Rajkot	16	Broadcasting of 25 minutes episode on agri related programs of JAU scientists Doordarshan, Rajkot.
6	Talks through Akashvani, Rajkot	20	Broadcasting of 25 minutes radio episode on agri related programs of JAU scientists Akashvani, Rajkot.
7	Visitors	705	Farmers, students and others for participation in audio recording visited CRS station.
8	Photography	117 Events (7020 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.
9	No. of You Tube Subscribers (Junagadh Janvani)	7.49 K	For You tube viewers

**Different activities Photographs of AGRISNET Studio**



**Radio Interview of Dr. R. C. Agrawal, DDG Division of Agricultural Education, ICAR, New Delhi**



**Visit of Dr. R. C. Agrawal, DDG Division of Agricultural Education, ICAR, New Delhi with AGRISNET Studio Team**



**Celebration of Radio Day**



**Farmers Visit at AGRISNET Studio**





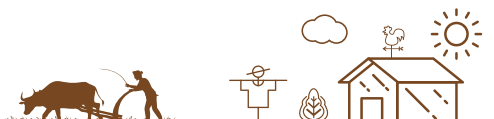
**GNFC and Community Radio Station Collaborated Radio Talk as per MOU Signed Between both Organizations**



**Celebration of Kisan Diwas at AGRSINET Studio, JAU, Junagadh**



**Visit of Students from Noble University, Junagadh**



### 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 AGRESO, 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 mela, group discussion, film show, etc. were organized through collaborative efforts.

#### 5.3 Orientation Training Programme

During the year under report, 196 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.

#### 5.4 Ravi Krishi Mahotsav - 2024

The Ravi Krishi Mahotsav was organized by Government of Gujarat during 24th-25th November, 2023 in all the talukas of Gujarat State. Agricultural exhibitions, seminars and visits to model farms of Natural Farming were arranged during this programme. During this Ravi Krishi Mahotsav, 83 events were organized in 75 talukas of 10 districts of Saurashtra region. The JAU exhibited new technologies and improved practices about agriculture, horticulture, agricultural engineering and allied fields in the stalls of exhibitions in 75 talukas of Saurashtra region.

The scientists of Junagadh Agricultural University delivered lectured on "Importance of millets in food for health benefits", "Efficient use of inputs for reduction of farming costs and increase of organic carbon through organic farming", "Production of ethanol from agricultural crops" and "Improved technologies in horticulture crops" during the seminars. The Senior Agriculture Scientists were deputed as District Nodal Scientist in ten districts of Saurashtra region for coordinating the activities of JAU. During the Mahotsav, 250 Agricultural Scientists and other staff were deputed for seminars and agricultural exhibition activities. More than 66000 farmers and farm women participated in 83 events in 10 districts of Saurashtra region.



Ravi Krishi Mahotsav - 2024





Ravi Krishi Mahotsav - 2024

## 5.5 ICAR projects

### 5.5.1 Farmer FIRST Programme

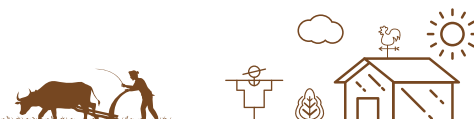
The Farmer FIRST (Farm, Innovations, Resources, Science and Technology) Programme aims at enriching Farmers-Scientist interface with focus on technology assemblage, application and feedback, partnership and institutional building and content mobilization. This project was started on January 30, 2017 in Junagadh Agricultural University under ICAR.

Farmers tend to face problems related to production and natural resource management but they might not have found out solutions to overcome them. In such situations, Farmer FIRST Programme is an opportunity for the researchers, extension professionals and farmers to work together and find appropriate ways through assessing different solutions. The scientists working as investigators in this project prepared different interventions through technology assemblage considering the availability and applicability of technologies and resources of farmers.

Accordingly, Crop based modules (wheat, chickpea, sesame and green gram), Crop diversification module, Horticultural based module and NRM based module (Soil-Water Testing and Advisory) were prepared for implementation in selected villages i.e. Rafala and Ghantiyan of Amreli district. The selected farmers of these villages were given different inputs i.e. seeds of improved varieties, fertilizers, compost and pesticides as well as advisory through personal

discussion, trainings, field visits for implementing the experiments in their farms. The results of experiments showed increase in yield of crops and income of the farmers. The farm women were motivated for the kitchen gardening and the kit of seeds of various vegetables were given them with advisory. This resulted empowerment of farm women through increased participation in cultivation of diverse nutritious vegetables primarily for household consumption and earning from selling the surplus produce in local market.

During the year, 128 extension activities such as demonstrations, training programmes on improved agricultural practices, bakery items preparations, value addition in fruits, exposure visits, group meetings, field days, diagnostic visits as well as video clips and messages through social media, providing agricultural literature etc. were carried out for successful implementation of experiments, wider adoption of improved technologies and practices for increasing farm income. These extension activities benefited more than 2100 farmers and farm women.



**Table No. 5.5.1 Details of extension activities under FFP during 2023-24**

Sr. No.	Name of activity	Number of Programmes
1	Advisory Services/ Diagnostic visits	84
2	Group discussions/ Kisan Ghosthi/ Field Day	29
3	Training Programmes/ Exposure visits	05
4	Method Demonstrations	08
5	Innovative farmers identified/ case studies	02
<b>Total</b>		<b>128</b>

**Photographs of different activities carried out under FFP 2023-24**



**Hon'ble Vice Chancellor addressing farmers in training programme**



**Inputs distribution to the selected farmers**



**Scientists explaining use of pheromone trap in chickpea crop**



**Training for farm women at FFP Village**







Exposure visits to processing and value addition unit



Visit of Junagadh Agricultural University Research Satation



On farm advisory



Visit of Greenhouse/Net House in JAU Campus

### 5.5.2 Mera Gao Mera Gaurav (MGMG)

Mera Gao Mera Gaurav (MGMG) is a program by the Indian Council of Agricultural Research (ICAR)

that aims to improve the relationship between farmers and scientists. The program's goal is to speed up the transfer of technology from the lab to the farm.

Table 5.5.2.1 Institute Summary

Year	Total No. of Groups/team formed	No. of Scientists Involved	No. of villages covered
2023-24	30	115	150



**Table 5.5.2.2 Activities organised under MGMG**

Sr. No.	Name of activity	2023-24	
		No. of activities conducted/provided	No. of farmers participated & benefitted
1.	Visit to village by all teams	142	2122
2.	Interface meeting/ <i>Goshthies</i>	99	1710
3.	Training organized	62	1739
4.	Demonstrations conducted	75	1465
5.	Mobile based advisories	2819	12977
6.	Literature support provided	1109	5307
7.	Awareness programmes	140	3135
	<b>Total</b>	<b>4446</b>	<b>28455</b>

**Table 5.5.2.3 Linkages developed with other agencies under MGMG**

Year	No. of Agency	Farmers Benefitted (No.)
2023-24	20	2004

**Table 5.5.2.4 Facilitation under MGMG**

Facilitation	2023-24				
	Crop	Variety	Seeds provided in kg. /No.	Farmers Benefitted (No.)	
i) Seeds	Pearl Millet	GHB-1129	4.5 Kg.	03	
	Groundnut	GJG-32	0.3	04	
	Sesame	GT-6	0.01	02	
	Brinjal	GRB-7	0.003	03	
	Tomato	GT-6	0.003	03	
	Vegetable	Go-6	25.0 gm.	15	
	Cumin	GC-4	-	20	
	Wheat	GW-451	-	20	
	Sesame	GT-4	-	20	
	Cotton	1.Bt Cotton GCH-24-BG-ii			
		2.Bio fertilizer ( <i>Azotobacter</i> and PSB) <i>Beauveria bassiana</i>		-	20
Coconut	Dwarf Green	3500	450		





Facilitation		2023-24		
ii) Seedlings	Vegetable	AVC-1	30.0 gm	WOMAN
		GJB-3	7.00 gm	
		Pusa navin	10.0 gm	
		GJSG-2	10.0 gm	
		Gujrat kakadi- 1	7.0 gm	
		Gujarat papadi-3	7.0 gm	
	Go-6	-		
	Gram	GG-5	-	05
	Coconut	Dwarf Green	15000	745
		DT	7000	2500
F2		45000	753	
Dwarf Orange		120	15	
Dwarf Yellow		80	19	
iii) Nutrient management	Crop	Quantity (kg)	Farmers Benefitted (No.)	
a) Fertilizer	Coriander	as per experimental treatment	2	
	Coriander	80 kg	40	
b) Bio-fertilizer	Brinjal	1 Litter/Acre	3	
iv) Technology (No)	Numbers	Name of technology	Area (ha)	Farmers Benefitted (No.)
	1	Agri drone	1	42
		Chelated mineral mixture	-	19
	4	Seed and Bio Agents	32	80
v) Livestock/poultry/fisheries	Numbers	Farmers Benefitted (No.)		
a) Livestock	Nutrition supplement	2 kg/farmer	10	
b) Poultry chicks	-	-	-	
c) Fingerlings	-	-	-	

Activities-wise action photographs for 2023-24



Training organized at Targhdiya village



Training organized at Konjali village



Training organized at Targhdiya village



Training organized at Otha village

### 5.5.3 Attracting and Retaining Youth in Agriculture (ARYA)

#### A. KVK Targhadiya

##### Objectives of the ARYA Project:

1. To attract and empower the youth in rural areas to take up various agriculture, allied and service sector enterprises for sustainable income and gainful employment in selected districts.
2. To enable the farm youth to establish network groups to take up resources and capital intensive activities like post-harvest technology, processing & value addition, nursery management, milk processing and marketing.
3. To demonstrate functional linkage with different institutions and stakeholders for convergence of opportunities available under various schemes/program for sustainable development of youth.

#### Enterprise started during year 2023-24

##### Name of Enterprise (No.1):

Mini Oil Mill Enterprise (Village: Kuvadava)  
(Groundnut Processing & Value Addition)

- **The month and year of establishment:** 2023
- **No. of youths established their own entrepreneurial units:** 10
- (A group of 10 youth started their own Mini oil mill enterprise during the year 2023 under technical guidance of KVK)
- **No. of groups formed:** 1 (A group of 10 youths)
- **Number of youths associated with each group:** 10

- **No. of training programmes organized (Year: 2023):** 1
- **No. of youths oriented/trained/skilled in the enterprise (Year: 2023):**
- **Oriented:** 25, **Trained:** 25, **Skilled:** 15
- **No. of youths/groups who are running the entrepreneurial units in a sustainable manner:** 10 youths in one group (own unit)
- **Average Size of each entrepreneurial unit:** Mini oil mill unit extraction capacity: 3000 kg groundnut per 24 hour
- **Total quantity of products produced per year:**
- **Groundnut Oil:** 42,750 kg (2850 Tin) and **Groundnut Cake:** 51,500 kg per year
- **Per unit cost of production:** 42,750 kg groundnut oil and 51,500 kg groundnut cake, **Total production cost:** Rs. 91,61,250 per year
- **Sale value of the produce in the market:** Groundnut oil: 195 Rs/kg and Groundnut cake: 30 Rs/kg 42,750 kg groundnut oil and 51,500 kg groundnut cake,
- **Total sale value:** Rs. 98,81,250 per year
- **Economic gains from the entrepreneurial units Rs/unit/year:** Rs. 7,20,000 unit/year
- **Employment generated due to establishing entrepreneurial units: No. of youths who got employment for how many days in a year:** 8 youths employed 180 days in a year
- **Average income of youths before ARYA project (Rs. /year):** 1,40,000
- **Average income of youths after ARYA project (Rs. /year):** 2,26,000





**Name of Enterprise (No.2):**

**Castor & Groundnut Decorticator and Cleaning Unit (Village: Dungarka)**

(Post-harvest management of agriculture commodities)

- **The month and year of establishment:** 2023
- **No. of youths established their own entrepreneurial units:** 3 (A group of 3 youth started their own Castor & groundnut decorticator and cleaning unit during the year 2023 under technical guidance of KVK)
- **No. of groups formed:** 1 (A group of 5 youths)
- **Number of youths associated with each group:** 5
- **No. of training programmes organized (Year: 2023):** 1
- **No. of youths oriented/trained/skilled in the enterprise (Year: 2023):** Oriented: 25, Trained: 23, Skilled: 10
- **No. of youths/groups who are running the entrepreneurial units in a sustainable manner:** 3 youths in one group (own unit)
- **Average Size of each entrepreneurial unit:** Castor & groundnut decorticator and cleaning machine: Decorticate and cleaning capacity: 500 kg per hour Total quantity of products produced per year:
- Seasonal 550 hours run on Rent (Job work) basis for decorticate & cleaning of Castor seed and groundnut pod
- **Per unit cost of production:** 180 Rs. /hour for decorticate & cleaning of castor seed and groundnut pod (Rent basis/ job work) Total Rent (Job work) cost: Rs. 99,000 per season/year
- **Sale value of the produce in the market:** 400 Rs. /hour for decorticate & cleaning of castor seed and groundnut pod (Rent basis/ job work)
- **Total Rent (Job work) value:** Rs. 2,20,000 per season/year
- **Economic gains from the entrepreneurial units Rs/unit/year:** Rs. 1,21,000 unit/year.
- **Employment generated due to establishing entrepreneurial units:** No. of youths who got employment for how many days in a year: 3 youths employed 120 days in a year

- Average income of youths before ARYA project (Rs./year): 1,45,000
- Average income of youths after ARYA project (Rs./year): 2,00,000

**Name of Enterprise (No.3):**

**Nursery Unit**

(Vegetable plug & Ornamental plant Nursery)

- The month and year of establishment: 2023
- No. of youths established their own entrepreneurial units: 2 (A group of 2 youth started their own Nursery unit during the year 2023 under technical guidance of KVK)
- **No. of groups formed:** 1 (A group of 5 youths)
- Number of youths associated with each group: 5
- No. of training programmes organized (Year: 2023): 1
- **No. of youths oriented/trained/skilled in the enterprise (Year: 2023):** Oriented: 25, Trained: 19, Skilled: 10
- **No. of youths/groups who are running the entrepreneurial units in a sustainable manner:** 2 youths in one group (own unit)
- **Average Size of each entrepreneurial unit:** 42,000 seedling and Ornament plant per year
- **Per unit cost of production:** Rs. 0.75 to 1.00 per seedling and Rs. 10 to 20 per Ornament plant 42,000 seedling and Ornament plant, Total production cost: Rs. 1,40,000 per year
- **Sale value of the produce in the market:** Rs. 1 to 1.50 per seedling Rs. 1 to 1.50 per seedling and Rs. 30 to 50 per Ornament plant 42,000 seedling and Ornament plant, Total sale value: Rs. 3,60,000 per year
- **Economic gains from the entrepreneurial units Rs/unit/year:** Rs. 2,20,000 unit/year.
- Employment generated due to establishing entrepreneurial units: No. of youths who got employment for how many days in a year: 2 youth employed in a year
- Average income of youths before ARYA project (Rs./year): 1,30,000
- Average income of youths after ARYA project (Rs./year): 2,53,000



**Table No. 5.5.3.1 Details about enterprises-based modules**

(Enterprises started during year 2017 to 2023-24)

Name of Enterprise	No. of youths involved	Products generated with units	No. of youths started enterprise	Average income of farmers before ARYA project (Rs.)	Average income of farmers after ARYA project (Rs.)	Increase in average income (Rs.) per year
Mini oil mill unit at Targhadi village	22	Groundnut oil and groundnut cake	22 (15 youth in one group under ARYA) & (7 youth in 3 group has own units)	150000	329000	179000
Mini oil mill unit at Raningpar village	20	Groundnut oil and groundnut cake	20 (15 youth in one group under ARYA) & (5 youth in 2 group has own units)	135000	278000	143000
Pulverizer ( <i>Masala</i> mill) unit	9	Chilies and Cumin-coriander powder	9 (7 youth in one group under ARYA) & (2 youth has own units)	140000	287000	147000
Milk- <i>Mava</i> making unit	11	Milk- <i>Mava</i> and Sweet ( <i>Penda</i> )	11 (8 youth in one group under ARYA) & (3 youth has own units)	125000	248000	123000
Namkeen ( <i>Farsan</i> ) making unit	8	Namkeen (i.e. <i>Farsan</i> : <i>Gathiya</i> , <i>Fafada Sev</i> )	8 (5 youth in one group under ARYA) & (3 youth has own units)	125000	269000	144000
Mini grading and cleaning unit	10	Grading & cleaning of wheat, chick pea, cumin, etc work on rent (Job work) basis	10 (8 youth in one group under ARYA) & (2 youth has own units)	140000	252000	112000
Mini dal mill unit	10	Pigeon pea, Mung & Urad bean Dal	10 (10 youth in one group under ARYA)	125000	234000	109000





Name of Enterprise	No. of youths involved	Products generated with units	No. of youths started enterprise	Average income of farmers before ARYA project (Rs.)	Average income of farmers after ARYA project (Rs.)	Increase in average income (Rs.) per year
Nursery unit	6	Vegetable saplings and seedling	6 (4 youth in one group under ARYA) & (2 youth has own units)	145000	380000	235000
Mini oil mill unit at Kuvadava village	10	Groundnut oil and groundnut cake	10 (10 youth in one group has own unit)	140000	226000	86000
Castor & Groundnut decorticator and cleaning unit	3	Castor seed and groundnut pod decorticated & cleaning work on rent (Job work) basis	3 (3 youth in one group has own unit)	145000	200000	55000
Nursery unit	2	Vegetable seedling and Ornament plant	2 (2 youth in one group has own unit)	130000	253000	123000

**Table No. 5.5.3.2 Capacity building program for rural youths (Year: 2023-24)**

Name of training/ awareness programmes	No. courses	No. of youths	No. of youth started enterprise	Average income of farmers before ARYA project (Rs.)	Average income of farmers after ARYA project (Rs.)	Increase in average income (Rs.) per year
Small scale processing and value addition	1	25	10	140000	226000	86000
Post-harvest management and value addition	1	23	3	145000	200000	55000
Nursery management and raising of seedling	1	19	2	130000	253000	123000



**CASE STUDY- 1: Mini Oil Mill Enterprise**  
(Groundnut Processing & Value addition)

**Name of Entrepreneur:** Mr. Devendrabhai S.Moliya  
(Group leader of 15 rural youths)

**Age:** 40 years

**Educational Qualification:** Graduate

**Address :** Nandlal Mini Oil Mill  
Village: Targhadi, Block: Paddhari, Dist: Rajkot (Gujarat)



**Table No. 5.5.3.3 Impact of ARYA project**

Impact factor	Before start of ARYA	After adoption of ARYA
Name of enterprise	Agriculture	Nandlal Mini Oil Mill
Year of establishment	-	2017
Size of enterprises	-	Mini Oil Mill unit extraction capacity: 3000 kg groundnut per 24 hour
Individual/Group	Individual	Group (A group of 15 youths)
Production	-	Groundnut Oil: 93,000 kg (6200 Tin) per year and Groundnut Cake: 1,11,600 kg per year
Cost of Production/unit	-	1,99,20,000
Gross income	-	2,14,83,000
Net income per year	1,50,000	15,63,000 per unit/year 2,54,000 per youth/year (Rs. 1,50,000 + 1,04,000 additional income)
Marketing	-	Direct selling in local market as well as nearby area of Rajkot city

Mr. Devendrabhai Moliya is progressive farmer of Targhadi village. He is engaged in farming activities with his family. He is a group leader of 15 rural youths of Mini oil mill enterprise. Other members of group are also engaged in farming and agriculture allied activities.

The group of these 15 rural youths has established the mini oil mill enterprise in the year 2017 at Targhadi village under ARYA project.

The monthly average 350 quintal groundnut is being processed for production of pure groundnut oil and about 11,625 kg pure groundnut oil (775 Tin) is obtained and approximately 13,950 kg groundnut cake is produced. So, the group generated net profit of Rs.

1,95,500 per month through this enterprise by selling pure groundnut oil & cake. This enterprise is run 8 months during the year and employed 10 youths. This enterprise earning net profit of Rs. 15,63,000 per year. Therefore, income of each member of group is increased up to Rs. 1,04,000 per year in addition to agriculture income. The youth of this group marketing and selling pure groundnut oil with “ARYA” brand under Nandlal Mini Oil Mill enterprise in local market as well as nearby area of Rajkot city.

This enterprise is a good example to attract and retain of youth in agriculture at village level. This enterprise also motivates rural youths to processing and value addition of farm produce.







Mini Oil Mill Enterprise at Targhadi village under ARYA project

**A. KVK Amreli**

Enterprise established:

Total No. of Enterprise	Total No. of Group
08	08

No. of entrepreneurial units established (FY 2023)		Entrepreneurial Unit Size related to production capacity		Entrepreneurial unit Establishment Cost (Rs.)	
Male	Female	unit no.	unit capacity (No./kg/qt/ltr)	fixed cost	variable cost
01	01	02	300 q	1,85,000/-	4000
01	00	01	100 q	49,0000/-	3500





Total products produced/ unit (No./kg/qt/ltr)	Gross cost of Production/unit (Rs.)	Gross Return per unit (Rs.)	Net benefit / Unit (Rs.)	Employment generated (No.)		No. of persons visited entrepreneur unit (2023)
				Family	Other than Family	
45 q	6000/q	562500	270000	04	06	34
18 q	4500/q	360000	279000	02	03	14

### 5.5.4. DAMU District Agro-Meteorological Unit (DAMU)

#### Gramin Krishi Mausham Seva (GKMS):

#### A. KVK Jamnagar:

#### District Agromet Unit in KVK, Jamnagar

The District Agromet Unit is started at KVK, JAU, Jamnagar on 2nd November 2018. The unit preparing Agro weather bulletin for all the 6 blocks viz. Dhrol, Jamjodhpur, Jodiya, Kalavad, Jamnagar, Lalpur of the Jamnagar district.

#### Activity of DAMU at KVK Jamnagar

- Preparation of Agromet advisory bulletin Block and District wise
- Conducting Farmer awareness program (FAP)
- Maintaining Weather data record
- Dissemination of weather bulletin through different social media level

#### Weather Bulletin

Preparation of weather bulletin on the basis of medium range forecast provided by IMD supported by GFS model for the blockwiseweather bulletin. Preparationof advisory is in both Bothlanguage (English and Local language) twice in a week on Tuesday and Friday. There are several weather parameters forecast received from IMD i.e. Rainfall, Maximum temperature, Minimum temperature, Relative humidity (maximum and minimum), Cloud cover, Wind speed and direction. The bulletin preparation is for main crops of Jamnagar district i.e. Cotton, Groundnut, Wheat, Pigeon pea, Cumin, Chickpea, Castor, Sesame, Pearl millet etc.

Table No. 5.5.4.1 Number of Weather Bulletin prepare from Jan-Dec, 2023

District Name	No. of Bulletins
Jamnagar	103
<b>Jamnagar District Block name</b>	
Dhrol	103
Jamjodhpur	103
Jodiya	103
Jamnagar	103
Kalavad	103
Lalpur	103
<b>Total</b>	<b>618</b>

District Name	No. of Bulletins
<b>Devbhumi Dwarka District Block name</b>	
Kalyanpur	103
Khambhaliya	103
Okhamandal	103
<b>Total</b>	<b>309</b>

#### Dissemination of weather bulletin.

Individually these bulletins are sent sending to farmers group by short message service (mKisan portal), and by social media by making farmers WhatsApp groups, Facebook etc.





**Table No. 5.5.4.2 Number of farmers**

Particular	No. of farmers
Whats app Group-19	4110
KVK Facebook page	4170 followers
SMS (mKisan Portal)	70750
KVK Telegram Channel	120 Subscribers

**Farmer Awareness Programmes**

Climate based farming is drawing farmer near to precision agriculture. So, farmer awareness is very

important for cover more number can receive Agro advisories. Farmers can mitigate their crops itself against uneven weather patterns.

**Table No. 5.5.4.3 Farmer Awareness Program (FAP) organized by KVK, JAU, Jamnagar under DAMU Project**

Sr. No.	Date	Location			Approx. No. of Farmers/ Participant
		Village	Block	District	
1	03-05-2023	Matva	Jamnagar	Jamnagar	8
2	04-05-2023	Satapar	Jamjodhpur	Jamnagar	42
3	11-05-2023	Sarvaniya	Kalavad	Jamnagar	8
4	06-07-2023	Sonvadiya	Jamjodhpur	Jamnagar	26
5	07-07-2023	daldevadiya	Jamjodhpur	Jamnagar	26
6	27-07-2023	KVK, Jamnagar	Jamnagar	Jamnagar	75
7	02-08-2023	Jayva	Dhrol	Jamnagar	26
8	31-08-2023	Khengarka	Dhrol	Jamnagar	26
9	24-09-2023	KVK, Jamnagar	Jamnagar	Jamnagar	65
10	27-09-2023	Theba	Jamnagar	Jamnagar	280
11	30-09-2023	Dwarka	Dwarka	Devbhumi Dwarka	350
12	26-10-2023	KVK, Jamnagar	Jamnagar	Jamnagar	60
13	30-10-2023	FTC hall	Jamnagar	Jamnagar	25
14	24-11-2023	latipar	dhrol	Jamnagar	539
15	04-12-2023	KVK, Jamnagar	Jamnagar	Jamnagar	50
16	15-12-2023	Haripar	Lalpur	Jamnagar	30
17	18-12-2023	Jamjodhpur	Jamjodhpur	Jamnagar	161
<b>Total</b>					<b>1797</b>





Table No. 5.5.4.4 Meghdoot Application Popularization Activity

Sr. No.	Date	Location			Approx. No. of Farmers/ Participant
		Village	Block	District	
1	04-01-2023	Juvangadh	Khambhadiya	Devbhumi Dwarka	2
2	18-01-2023	Luvarsar	Jamjodhpur	Jamnagar	6
3	13-04-2023	Jashapar	Jodiya	Jamnagar	6
4	04-05-2023	Satapar	Jamjodhpur	Jamnagar	20
5	27-07-2023	KVK, Jamnagar	Jamnagar	Jamnagar	75
<b>Total</b>					<b>109</b>

Table No. 5.5.4.5 AWS Site Visit

Sr. No.	Date	Location	Approx. No. of Farmers/ Participant
1	17-01-2023	KVK, Jamnagar	74
2	23-02-2023	KVK, Jamnagar	19
3	01-03-2023	KVK, Jamnagar	83
4	22-08-2023	KVK, Jamnagar	45
<b>Total</b>			<b>221</b>

Table No. 5.4.6 Field Visit

Sr. No.	Date	Location			Approx. No. of Farmers/ Participant
		Village	Block	District	
1	04-01-2023	Juvangadh	Khambhadiya	Devbhumi Dwarka	2
2	18-01-2023	Luvarsar	Jamjodhpur	Jamnagar	6
3	13-04-2023	Jashapar	Jodiya	Jamnagar	5
4	03-05-2023	Matva	Jamnagar	Jamnagar	6
5	07-07-2023	daldevadiya	Jamjodhpur	Jamnagar	2
6	31-08-2023	Khengarka	Dhrol	Jamnagar	26
7	13-09-2023	Jamdudhai	Jodia	Jamnagar	7
8	20-10-2023	Falla	Jamnagar	Jamnagar	4
9	25-11-2023	latipar	dhrol	Jamnagar	20
<b>Total</b>					<b>78</b>





AWS site visit at KVK Jamnagar



FAP at Khnegarka, Jamnagar



Meghdoot app. Popularization activity



Meghdoot app. Popularization activity

**B. KVK Amreli:**

The District Agrometeorological Unit, KVK, JAU, Amreli is making Agro weather bulletin for all the 11 blocks viz. Amreli, Babra, Bagasara, Dhari, Jafrabad, Khambha, Lathi, Liliya, Kunkavav-vadiya, Rajula and Savarkundla of the Amreli district and also for the District itself.

**Activity of DAMU at KVK Amreli**

- Preparation of Agromet advisory bulletin Block and District wise
- Conducting Farmer awareness program (FAP)
- Maintaining Weather data record
- Dissemination of weather bulletin through different social media level

**Weather Bulletin**

Preparation of weather bulletin on the basis of medium range forecast provided by IMD supported by GFS model for the blockwise weather bulletin. Preparation of advisory in both languages (English and Gujarati) twice in a week on every Tuesday and Friday. There are several weather parameter forecast received from IMD i.e. Rainfall, Maximum temperature, Minimum temperature, Relative humidity (maximum and minimum), Cloud cover, Wind speed and direction. The bulletin preparation is for main crops of Amreli district i.e. Cotton, Groundnut, Sesame, Wheat, Pigeon pea, Cumin, Chickpea, Castor, Sesame, Pearl millet etc.



**Table No. 5.5.4.7 Number of Weather Bulletin prepare from January–December 2023**

District Name	No. of Bulletins
Amreli	104
<b>Block name</b>	
Amreli	104
Babra	104
Bagasara	104
Dhari	104
Jafrabad	104
Khambha	104
KunkavavVadiya	104
Lathi	104
Liliya	104
Rajula	104
Savarkundla	104
Total No. of Block wise Weather Bulletin	1144

**Dissemination of weather bulletin**

Individually these bulletins are sending to farmers group by social media by making farmers Whats App groups, Telegram Facebook.

**Table No. 5.5.4.8 Number of farmers Connected**

Particular	No. of farmers
WhatsApp Group- 19	3887
Telegram Group - 1	161 Subscribers
Facebook page	3010 followers

**Table No. 5.5.4.9 Detail of farmers connected through WhatsApp**

Name of the Block	Total Village in Block	No. of WhatsApp Group Created by DAMU	No. of Farmers Covered	No. of Villages Covered	No. of Extension Workers at panchayat/village level
Amreli	71	5	816	65	10
Babra	57	2	573	53	7
Bagasara	34	2	456	29	4
Dhari	75	1	295	47	8
Jafrabad	42	1	120	22	5
Khambha	57	1	213	50	3
Kunkavav-Vadia	45	2	441	42	5
Lathi	49	1	198	31	8
Lilia	37	1	122	33	6
Rajula	72	1	226	28	4
Savarkundla	80	2	427	56	15
<b>Total</b>	<b>619</b>	<b>19</b>	<b>3887</b>	<b>456</b>	<b>75</b>

**Farmer Awareness Programmes:**

Climate based farming is drawing farmer near to precision agriculture. So, farmer awareness is very important for cover more number can receive Agro advisories. Farmers can mitigate their crops itself

against uneven weather patterns.

Farmer Awareness Program (FAP) organized by KVK, JAU, Amreli under DAMU Project during 2023-24



**Table No. 5.5.4.10 Farmer Awareness Program (FAP)**

Sr. No.	FAP/ Farmers meet /Meghdoot Popularization activities	Date	Location		Approx. No. of Farmers attended the Program
			Village	Block	
1	Farmer awareness programme	06/02/2023	Varsada	Amreli	77
2	Farmer awareness programme	13/03/2023	Kolda	Amreli	103
3	Farmer awareness programme	05/07/2023	Aamba	Lilia	30
4	Farmer awareness programme	27/07/2023	KVK	Amreli	95
5	Farmer awareness programme	03/08/2023	Lunidhar	Kunkavav-vadia	46
6	Technology week Lecture	16/09/2023	KVK	Amreli	42
7	Farmer awareness programme	25/09/2023	Randhiya	Amreli	79
8	Farmer awareness programme	30/11/2023	Varsada	Amreli	70
9	Vikasit Bharat Sankalp Yatra, Lecture delivered.	02/12/2023	Morjar	Dhari	229
10	Vikasit Bharat Sankalp Yatra, Lecture delivered.	12/12/2023	Khijadiya Khari	KunkavavVadiya	163
<b>Total</b>					<b>934</b>

**Automatic Weather Station**

Installation of A.W.S. (Automatic Weather Station) has been completed in January 2021 and Working in March-2022.

**Photographs of different activities carried out under DAMU Amreli**



**Farmers Visit of Automatic weather station**



**Farmers Awareness Programme by KVK Amreli**



Farmers Awareness Programme by KVK Amreli



Farmers Awareness Programme by KVK Amreli

Photographs of different activities during 2023-24



Dr. R. C. Agrawal visit JAU museum



International year of millet - Mela at JAU



17<sup>th</sup> Extension Education Council meeting



Best Film Award to Agrisnet studio



HRD training for KVKs staff



Rabi Krushi Mahotsav – 2024 Orientation Programme







**Vrux Rath inauguration**



**Varsha Vigyan Parisamvad at JAU**



**Master Trainer training on natural farming**



**Celebration of Sardar Patel Jayanti**



**Natural farming FLD kit distribution by KVK- Amreli**



**Drone Demonstration by KVK Jamnagar**



**Field Day by KVK Nana Kandhasar**



**SAC Meeting at KVK Khapt**





**FLD Kit Distribution by KVK Jamnagar**



**OFT by KVK - Amreli**



**Participants of Ravi Krushi Mahotsav at KVK Khapat**



**SAC Meeting KVK-Nana Kandhasar**



**Honeybee Training by KVK Nana Kandhasar**



**“Best Presentation Award” KVK Pipalia**



**Off Campus Training by KVK-Pipalia**



**Hon'ble VC Dr. V. P. Chovatia Visit KVK Morbi**

