

KRISHI VIGYAN KENDRA, KOTA

(Agriculture University, Kota)

ANNUAL PROGRESS REPORT: 2021

APR SUMMARY

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	57	1394	358	1752
Rural youths	7	149	29	178
Extension functionaries	9	107	129	236
Sponsored Training	4	136	0	136
Vocational Training	4	0	100	100
Total	81	1786	616	2402

2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds (NFSM)	235	100	235
Pulses (NFSM)	150	60	150
Cereals	30	12	30
TSP	114	27.29	114
Nutri-garden Kit	100	1	100
Total	629	200.29	629

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Nutritional management (livestock)	1	05	05
Integrated Disease Management	2	18	18
Varietal evaluation	1	05	05
Total	04	28	28

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	200	21817
Total	200	21817

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
Kota	Text only	5		8		12	20	45
	Voice only							

	Voice & Text both	2			8	25	35
	Total Messages	7		8	20	45	80
	Total farmers Benefitted	1020		645	4500	10250	16415

6. Seed & Planting Material Production

	Quantity/Number	Gross Value (in Lakh)
Pulse seed hub (q)	392.0	30.88
Oilseed hub-Mustard (q)	222.0	15.54
KVK Instructional farm	973.4	47.15
Planting material (No.)		
Fruits (Papaya, guava, jamun, lime)	9500	2.37
Ornamentals (Crotens, moneyplants, Duranta, Iresin)	7000	1.75
Bio-Products (kg)		
vermicompost	120977	1.31
vermi culture	170	0.22
Trichoderma	821.75	1.23
Food Processing Material		
(Juice & Oil (q)	550	0.77
Pickle, Murabba, Chawnprash, (Kg)	250	0.50
Gir Cow Milk Production (Litre)	15379.5	7.65
Goat Milk Production (Litre)	841	0.29
Sale of animal (Breeding Buck-Sirohi breed)	19	3.79
Sale of animal (Female goat)	10	0.95
Total		114.4

7. Soil, water & plant Analysis

Samples	No. Of Beneficiaries	Value Rs.
Soil 130	130	-
Total 130	130	-

8. HRD and Publications

Sr. No.	Category	Number	Sr. No.	Category	Number
1	Workshops	0	8	Research papers	05
2	Conferences	0	9	Lead papers	0
3	Meetings	5	10	Seminar papers	01
4	Trainings for KVK officials	0	11	Extension folder	03
5	Visits of KVK officials	20	12	Proceedings	02
6	Book published	0	13	Award & recognition	02
7	Training Manual	01	14	Ongoing research projects	08

Krishi Vigyan Kendra, Kota

(Directorate of Extension Education)
Agriculture University, Kota

DETAIL REPORT OF APR-2021

GENERAL INFORMATION ABOUT THE KVK

1.1. Name and address of KVK with phone, fax and e-mail

Address	Telephone		E mail
Krishi Vigyan Kendra, Borkhera, Kota (Rajasthan)	Office 0744-2326726	FAX 0744-2326726	kvkborkherakota@gmail.com www.kvkkota.com

1.2 .Name and address of host organization with phone, fax and e-mail

Address	Telephone		E mail
	Office	FAX	
Agriculture University, Borkhera Farm, Baran Road, Kota-324001	0744-2321204	0744-2321203	vcaukota@gmail.com www.aukota.org
Directorate of Extension Education, Kota	0744-2326727	0744-2326727	deeaukota@gmail.com

1.3. Name of the Senior Scientist and Head with phone & mobile No

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Mahendra Singh		94142-13488	kvkborkherakota@gmail.com

1.4. Year of sanction of KVK : 1992



1.5. Staff Position (as on 30th December, 2020)

S. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category	Mobile no.	Age	Email id
1	Sr. Scientist and Head	Dr. Mahendra Singh	SS&H	A.H.	37400-67000	167200	01.08.13	Permanent	Gen.	9414213488	53	mskvktonk@gmail.com
2	SMS	Dr. Ram Asare	Prof.	A.H.	37400-67000	182200	01.07.21	Permanent	SC	9352220553	59	Asare2736@gmail.com
		Dr. Ramraj Meena	A.P.	Hort.	37400-67000	147900	05.05.18	Permanent	ST	7891457212	45	rambarwal1974@gmail.com
3		Dr. Rakesh Kumar Bairwa	A.P.	Agro.	37400-67000	139400	01.10.20	Permanent	SC	9413093805	41	rb_agro@rediffmail.com
4		Dr. Roop Singh	SMS	PP	15600-39100	59500	01.10.20	Permanent	Gen	9571889881	29	roop0008@gmail.com
5		Mrs.Gunjan Sanadhya	SMS	H. Sc.	15600-39100	59500	07.01.12	Permanent	Gen	9462312966	36	sh_gunjan82@gmail.com
8	Programme Assistant	Sarita	TA	Agric.	9300-34800	38900	13.09.18	Permanent	OBC	9785360660	25	Saritabeniwal17@gmail.com
9	Computer Programmer	Vacant										
10	Farm Manager	Sh. Mukesh Choudhary	TA	Agric.	9300-34800	38900	01.10.20	Permanent	OBC	9680750819	31	mukeshnetad2013@gmail.com
11	Accountant / Superintendent	Sh. Radheyshyam Parashar	Assistant		9300-34800	49500	01.03.20					
12	Stenographer	Sh. M.K. Sharma	UDC		17400Fixed	17400	04.02.17	Contractual basis	Gen.	8058197107	62	
13	Driver	Sh.Tara Chand	Driver		5200-20200	38600	04.04.03	Permanent	OBC	9352503640	38	
14		Jagdish Prasad	Driver		9300-34800	68300	01.10.20	Permanent	OBC	9460676913	55	
15	Supporting staff	Smt. Shanti Bai	Class IV	-	5200-20200	33000	18.01.95	Permanent	OBC	9667069259	58	
16		Sh. Rakesh Kumar	Class IV		5200-20200	23100	13.08.13	Permanent	Gen.	9413732410	52	rakeshshrm667@gmail.com

1.6. Total land with KVK (in ha) : 44.0 ha

S. No.	Item	Area (ha.)
1	Under Buildings (KVK/University)	11.0
2.	Under Demonstration Units	2.5
3.	Under Crops	28.0
4.	Orchard/Agro-forestry	2.5
	Total	44.0

1.7. Infrastructural Development

A) Buildings

S. No	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs. In lac)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	GOR	1964	550	-	-	-	-
2.	Farmers Hostel	ICAR	1996	476	-	-	-	-
3.	Staff Quarters (6)	ICAR	2006	400	-	-	-	-
4.	Demonstration Units (2)				-	-	-	-
a	Vermi compost unit	ICAR	2006	200	3.20	-	-	-
b	IPM Lab	ICAR	2006	150	-	-	-	-
5	Fencing	ICAR	2005	300m	-	-	-	-
6	Roof Water harvesting system	ICAR	2006	80	0.80	-	-	-
7	Threshing floor	ICAR	2006	80	1.00	-	-	-
8	Farm godown	GOR	1964	60	-	-	-	-
9.	Model nursery of Medicinal and Aromatic plants	NHM	2011	85	20.00	-	-	-
10	Model nursery	NHM	2009	220	18.00	-	-	-
11	Soil Testing Lab	ICAR	2007		10.00	-	-	-
12.	Automatic weather Station	NHM	2010	9	4.25	-	-	-
13.	Plant Health Clinic	ICAR	2012	30	10.00	-	-	-
14	Model food processing unit	RKVY	2017		90.00	-	-	-
15	Model dairy unit	RKVY	2017		40.00	-	-	-
16	RKVY Building	RKVY	2016	402	104.00	-	-	-
17.	Pulse seed storage & processing unit	ICAR	2017	-	50.00	-	-	-
18.	Model goat unit	RKVY	2018		40.00			

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep Bolero	2006	464992	297243	good
Mini bus	1996	575082	61464	good
Tractor	2012	515000	5776 hr	good
Motor Cycle	2011	50000	87615	good

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Digital Camera	2007		OK
Computer	2005-08		OK
LCD	2007		OK
K-yan	2012		OK
DVD Player	2002		OK
Video Conferencing	2008		Not Working
ERNET Lab.	2009		Not Working
AC 2.0 ton (2) with stabilizer	2016-17	87360	OK
Water cooler with RO	2016-17	85100	OK
Laptop (HP -1 SCS 3006TX)	813/16.12.2019	61850	OK
Water cooler with RO	GOVT00023/26.03.21	80000	Ok
Canon Camera with accessories	20-21/445/27.03.21	98500	OK
Wooden Centre Table	503/15.03.21	9500	OK
Dell desktop computers with accessories	59/24.03.21	73000	OK

D) Furniture & equipments (RKVY- Dairy project)

S.No.	Name of the equipment	Year of purchase	Cost (Rs.)	Present status
1.	Pulverizer	2015-16	4,40,000	OK
2.	Milk parlour & milking machine	2016-17	3,82,000	OK
3.	Bio-gas plant (10 m ³)	2016-17	3,56,000	OK

E) Furniture & equipments (RKVY-food processing project)

S.No.	Name of the equipment	Year of purchase	Cost (Rs.)	Present status
1.	Godrej Revolving Hi Back Chair Model Halo PCH-9201 R-(No.02)	2014-15	77,984	OK
2.	Godrej Regency visitor chair PCH-7003D (No.06)	2014-15	39,237	OK
3.	Godrej 04 Door Bookcase (No.02)	2014-15	35,297	OK
4.	Godrej Single Static's 457 Depth 1 bay pull push type	2014-15	16,247	OK
5.	Godrej Single Last 457 Depth 1 bay pull push type	2014-15	18,260	OK
6.	Godrej Twin Mobile 457 Depth 1 bay pull push type	2014-15	27,929	OK
7.	Lecture Stand	2015-16	14,770	OK
8.	Office table	2016-17	44,800	OK
9.	Demonstration table (02)	2016-17	17,000	OK
10.	Conference Chair (90)	2016-17	1,98,000	OK
11.	Computer table (01)	2016-17	5,700	OK
12.	Vertical Sliding Door Unit (04)	2016-17	80,000	OK
13.	Computer Revolving Chair	2016-17	4,148	OK
14.	Revolving chair in leather (06)	2016-17	62,760	OK
15.	Table with drawer & lock (04)	2016-17	35,680	OK
16.	Conference table (34-seater) coffee colour	2016-17	1,58,000	OK
17.	Display table (02)	2016-17	19,996	OK
18.	Ahuja CMD-4200 (15 pcs)	2016-17	77,100	OK
19.	Ahuja CMC-4100(01 pc)	2016-17	5,770	OK
20.	Ahuja CMA-4400(01 pc)	2016-17	13,600	OK
21.	Ahuja SCM=15 T (04 pcs)	2016-17	3,400	OK
22.	Deep freezer (Quick Freezer) Horizontal, Capacity:6 cu.ft., with Digital Temperature Controller (SONAR)	2014-15	92,459	OK
23.	Laboratory Digital Electronic Balance Capacity: 220	2014-15	89,848	OK

	gm.,Readability:0.001 gm. Built in Motorized Calibration, BSA 223S-CW			
24.	Double Beam UV Vis Spectrophotometer with one pair of 10mm path length Quartz Cuvettes SL-210 (ELICO)	2014-15	2,33,334	OK
25.	Window based Software (Spectra treats) for PC Interface (ELICO)	2014-15	30,086	OK
26.	K-Yan (Community Computer)=UV Premium With Inbuilt Interactivity-Extra Chargable Interactivity Pen	2014-15	97,650	OK
27.	Canon Lxus 265 HS Sony Micro Sc Card 16 Gb	2014-15	9,950	OK
28.	LG Microwave model-2841 sps S/S 2 pic Borosil Bowd	2014-15	14,800	OK
29.	Full SS carrot/Amla stone remover	2015-16	38,930	OK
30.	Full SS Orange Juicer	2015-16	23,473	OK
31.	1.5 HP Mixture	2015-16	13,626	OK
32.	Pulverizer 2 HP motor/Tomato pulpier	2015-16	16,030	OK
33.	2 TB USB Hard Disk make Dell	2015-16	9,450	OK
34.	Shrink Wrapping	2015-16	45,800	
35.	Cup Sealer (Manual)	2015-16	9,732	OK
36.	Bottle Crown Corking Machine	2015-16	8,500	OK
37.	Paneer press (Manual)	2015-16	10,877	OK
38.	Haier D- freeze cap. 780	2015-16	48,980	OK
39.	Stabilizer 1 Kv 90 wt.	2015-16	7,480	OK
40.	Vacuum packing machine	2015-16	56,250	OK
41.	Voltas make AC 1.5 ton split AC 5 star (2)	2015-16	73,675	OK
42.	Vegetable cutting machine	2015-16	25,763	OK
43.	Backing oven single deck	2015-16	28,625	OK
44.	Sealing machine	2015-16	9,733	OK
45.	Dry pulverize machine	2015-16	35,539	OK
46.	Batch Coding/Final sealing Machine	2016-17	79,378	OK
47.	S.S. Jacketed Kettle	2016-17	98,115	OK
48.	Vegetable Washer	2016-17	58,489	OK
49.	Nitrogen Sealing/Flexible Pouch Sealing Machine/Bend Sealer	2016-17	99,170	OK
50.	Pineapple Slicer	2016-17	67,889	OK
51.	Vegetable Dehydrator	2016-17	1,00,267	OK
52.	Alovera Plup Extractor Machine	2016-17	1,01,312	OK
53.	Bottle Starlizer	2016-17	167,536	OK
54.	Blender Mixing Tank 100 Ltr./Blancher	2016-17	93,687	OK
55.	Fully Automatic Atta Chakki	2016-17	21,890	OK
56.	Refrigerator Haier 210-215 Ltr. (2 no.)	2016-17	37,000	OK
57.	Dishwasher/Utensil Cleaner(12 place settings)	2016-17	43,500	OK
58.	SuJata Juicer mix.	2016-17	4,500	OK
59.	UPS-3.6 KVA (1 no.) with 4 battery	2016-17	62,000	OK
60.	PHE(Double Stage) with Cooling Tower	2016-17	99,988	OK
61.	Amla Punching Machine	2016-17	69,833	OK
62.	Soya Paneer Plant	2016-17	1,79,714	OK
63.	Sterlizer/Tomato Processor	2016-17	59,856	OK
64.	Dry Garlic Peeling Machine	2016-17	1,06,404	OK
65.	Compressor for Garlic	2016-17	1,06,404	OK
66.	Boiler	2016-17	1,90,000	OK
67.	Seal packing machine	2016-17	56,436	OK
68.	Juice Extracting machine	2016-17	1,10,513	OK
69.	Bottle washing machine	2016-17	23,250	OK
70.	Multi functional vegetable & fruits cutting machine	2016-17	34,013	OK
71.	Mixing tank with filling nozzle	2016-17	49,000	OK
72.	Interconnecting SS/MS pipe lines, valves &	2016-17	49,000	OK
73.	Seed grading plant, pellet, seed cum fertilizer	2017-18	15,00,000	OK
74.	Grain Cleaning machine	154/5.8.2020	34200	OK

75	Filter Press machine	153/5.8.2020	65501	OK
76	Oil spaler 10 kg	21-42/5.8.2020	152002	OK
77	Crayogenic Grinder (Transferred from KVK Anta)	186/28.3.2020	1428390	OK

F) Furniture & equipments (RKVY drumstick project)

S.No.	Name of the equipment	Year of purchase	Cost (Rs.)	Present status
1.	Visitor chair (6)	2017-18	13200	OK
2.	Revolving chair (2)	2017-18	7200	
3.	Office table (2)	2017-18	14400	OK
4.	Drip irrigation system	2018-19	174748	OK

G) Furniture & equipments (NICRA project)

S.No.	Name of the equipment	Year of purchase	Cost (Rs.)	Present status
1.	Grass cutter/power weeder	2018-19	30000	OK
2.	IT equipment	2018-19	5000	OK
3.	Power weeder	886/3.3.20	41000	OK

H) Farm implement (RKVY project)

S.No.	Name of the implement	Bill no./Year of purchase	Cost (Rs.)	Present status
1.	Multicrop Thresher	320/18.3.20	273000	OK
2.	Seed drill	209/18.3.20	33600	OK
3.	Rotavator	296/9.12.20	99400	OK
4.	Irrigation Pipe	5704/18.6.2019	52831	OK

I) Seed processing (Oilseed hub)

S.No.	Name of the equipment	Bill no./Year of purchase	Cost (Rs.)	Present status
1.	Seed processing machine	670/21.3.2020	536849	OK
2.	Pellets	6146911893/3.3.2020	153000	OK

1.8. A) Details of 28th SAC meeting conducted in the year: 16.11.2021

Sl. No.	Name of Participants	Designation
1	Prof. D.C. Joshi	Hon'ble Vice Chancellor, AU, Kota
2	Dr. S. K. Singh	Director, ICAR- ATARI, Jodhpur
3	Dr. S.K. Jain	Director Ext.Edu., AU, Kota
4	Dr. Pratap Singh	Director Research, AU, Kota
5	Dr. Balwant Singh	PD, CAD, Kota
6	Dr. Ashok Kumar	Principal Scientist ICAR-IISWC, R.C, Kota
7	Dr. M. C. Jain	ZDR, ARS, Kota
8	Sh. Khemraj Sharma	Deputy Director Horticulture, Kota
9	Sh. Shanker Lal Jangir	PD, Horticulture, CoE, Kota
10	Sh. R.P. Sharma	DDM, NABARD
11	Dr. Atul Shanker Arora	Incharge, PVK, Kota, Pashu Vigyan Kendra

12	Sh. R. K. Jain	PD(ATMA), Kota
13	Sh. Rahul Kumar	AGT (IFFCO)
14	Dr. A. K. Mishra	Sr. Tech. officer, NHRDF
15	Sh. Harish Nagar	Director Sanand Agro
16	Sh. Baby Rani	SHG
17	Sh. Nemi Chand Malve	Chairman KKSPCL, FPO
18	Sh. Balmukand Bairagi	Director SGVS, FPO
19	Sh. Kaklayn Singh Kushwah	FPO
20	Sh. Narendra Kumar Malav	Progressive farmer
21	Sh. Ram Lal Malav	Progressive farmer
22	Sh. Pankesh Meena	Progressive farmer
23	Dr. Mahendra Singh	Senior Scientist & Head, Kota

Minutes of 28th SAC meeting (Dated: 16.11.2021)

The Scientific Advisory Committee (SAC) meeting of KVK, Kota has been organized online and offline mode on 16.11.2021, Tuesday under the chairmanship of Prof. D.C. Joshi, Hon'ble Vice Chancellor, Agriculture University, Kota to review the performance and progress of different mandatory activities of center. The meeting began with Saraswati Vandana followed by 'Kulgeet' of AU, Kota. Dr. S.K. Singh, Director, ICAR-ATARI Zone II, Jodhpur was the chief guest of meeting. First of all, Dr. Mahendra Singh, Senior Scientist and Head, KVK, Kota welcomed honorable guests and presented the action taken report of previous SAC meeting held on 17.12.2020 and the highlights of progress report (December 2020 to November 2021) of KVK, Kota. Afterthat scientists of KVK, Dr. Rakesh Kumar Bairwa (Agronomy), Dr. R.R. Meena (Horticulture), Smt. Gunjan Sanadhya (Home Science), Dr. Roop Singh (Plant Protection) and Dr. Ram Aasre (Animal Husbandry) presented the progress reports of the year 2021 and action plan 2022 of their respective discipline individually. The session opened for discussion & suggestions before the house.

Prof. D.C. Joshi, Hon'ble Vice Chancellor, Agriculture University, Kota appreciated the work of KVK. He emphasized there is need to work on skill development trainings on mushroom cultivation, food processing, dairy farming, protected vegetable production for rural youth which will helpful for their income generation. He also suggested to conduct interface of research and extension scientists with line departments. He emphasized there is a need of model mushroom unit to promote mushroom cultivation in the district.

Dr. S. K. Singh Director, ICAR-ATARI zone II, Jodhpur emphasized to conduct need based on-farm testing with proper technical & economical observations at similar farming situations. He suggested to prepare lesson plan for each training programme. There is a need of active participation of home scientist in gap analysis and prepare nutritional map of the district. He also emphasized to

conduct the demonstrations on biofortified varieties for nutritional security. He desired on regular updating of KVK activities on KVK portal with timely submission of various reports and other information.

Dr. S. K. Jain, Director Extension Education, AU, Kota appreciated KVK, scientists for their diversified activities which are boon to economic uplifting the farming community of district. He focused that there is need of increase quality seed production and bio-products such as Trichoderma, vermiculture, vermicompost, waste decomposer to provide farming community.

Dr. Ashok Kumar, Head, ICAR-IISWC-regional center, Kota appreciated the work done by the KVK Scientists & emphasized the need to work on Natural Resource Management & Soil Conservation activities.

Dr. Balwant Singh, PD, CAD, Kota suggested to promote micro irrigation system to minimize the losses of water. Dr. R.K. Jain, PD, ATMA, Kota suggested to more jointly visit of KVK, Scientists and officers of department of agriculture at farmer's field.

Sh. Shanker Lal Jangir, O/I, COE-Citrus, Kota congratulated to all and said that our district is selected to make five villages as 'citrus smart village'. He also suggested that to conduct skill development training programme on nursery management and make avail technical help of horticulturist in 'citrus smart villages'

Sh. Khemraj Sharma, Deputy director, Agriculture, Kota suggested to focus on organic farming. Dr. Atul Arora, O/I, Animal Science Center, Kota suggested to promote poultry in the district for livelihood security of Tribals.

Sh. Ramprasad Sharma, DDM, NABARD, Kota focused that the KVK work with existing FPO in the district and also emphasize to promote more FPO in the district by making similar interest group of the farmers.

The meeting was attended by more than 25 officials from university and different line departments. Dr. Ram Raj Meena, Scientist (Horticulture) proposed vote of thanks to the chief guest and all other participants. The meeting adjourned with the permission of chairs.



Prof. D. C. Joshi, HVC, Agriculture University, Kota addressing stakeholders of 28th SAC on 16.11.2021

1.8 B) Agripreneur Summit & Visit of ICAR-PRT at KVK, Kota

ICAR- PRT interacted with innovative farmers, entrepreneurs of Kota district at Agriculture University, Kota in Agripreneur Summit held on 6 September 2021. After that they visited all live units viz., Model Dairy, Goat unit, Food processing & value addition etc., and appreciated the work of KVK, Kota. In this programme 100 entrepreneurs/stackholders participated.



ICAR-PRT visited Madel Dairy and Model Sirohi goat unit of KVK, Kota on 6 Sept. 2021

2. DETAILS OF DISTRICT

2.1 Land use pattern of Kota district

S. No.	Particulars	Area (ha)	Per cent to total
1.	Total Geographical area	5,18,345	100
2.	Forest	1,26,199	24.34
3.	Area under non agriculture use	31,493	6.07
4.	Barren and unculturable land	30,428	5.87
5.	Permanent pastures and other grazing lands	13,950	2.69
6.	Land under misc. trees crops & groves	762	0.14
7.	Cultivable waste land	25,222	4.86
8.	Current fallows	6,726	1.29
9.	Net area sown	2,73,484	52.76
10.	Area sown more than once	2,18,609	-
11.	Total cropped area	4,92,093	-
12.	Cropping intensity (%)		180

2.2 Major farming systems (based on the analysis made by the KVK)

S. No Farming systems/enterprise

1. Crops + dairy animals
2. Crops + horticulture
3. Crops + dairy animals+ horticulture

S. No. Existing cropping system

1. Soybean – wheat

2. Black gram – wheat
3. Paddy – wheat
4. Black gram– mustard / chickpea/garlic
5. Soybean – coriander / garlic

2.3 Agro-climatic zone and major agro ecological situations

(A) Soil Type

S. No	Agro-climatic Zone	Characteristics
1	Humid South Eastern Plain Zone V	The KVK comes under the zone V (Humid South Eastern Plain) of Rajasthan which covers a geographical area of about 2.7m. ha covering Jhalawar, Kota, Bundi, Baran districts, out of which about 1.8m. ha is under cultivation. The percentage of irrigated area is only 25.5 and remaining comes under rain fed & dry land condition. The rain fall varies from 650mm to 1000mm. The max. mean daily temperature ranges from 24.5°C in the month of January & 42.6 °C in May & minimum 10°C in January & 19.7°C in month of May respectively. The predominant soils of the zone has black soils of alluvial origin with clay loam to clay in texture in which some pockets are affected and encountered by ground water salinity.

(B) Topography

S. No.	Agro ecological situation	Characteristics
1	Command area with assured irrigation and heavy soils	Predominantly verti sols having swell and shrink properties responsible for deep creaking
2	Command area with uninsured irrigation and medium soils	Sandy to sandy clay loam of medium to shallow depth
3	Non command area with medium soils and well irrigation	Soils are medium black with varying texture and depth

2.4 Soil types

S. No	Soil type	Characteristics	Area ('000) ha	Per cent (%) of total
1	Deep black clayey	Cracking clay soils are common on plains of basaltic and alluvial parent materials. They are moderately deep and have a light to medium clay surface, which is usually self-mulching, over heavy clay subsoil that cracks during dry periods. Colours include grey, brown and black. The soils' heavy textures coupled with their seasonal shrink-swell characteristics create difficult conditions for plant growth	216.5	42.0
2	Deep brown clayey	Brown gradational soils, common throughout the plain, are moderately deep and well-structured with silty loam to clay loam surface textures and clayey subsoils; in some instances the B horizons are mottled and an A2 horizon is present; buckshot is common in the upper horizons: the brown gradational soils appear to be slightly poorer-drained variants of the red gradational soils, which are restricted to the better-drained crests, the slopes flanking the	78.4	15.0

		volcanic hills and the scarps.		
3	Deep brown loamy	Soils that exhibit a gradual increase in texture with depth are common on basaltic and sedimentary parent materials. Surface textures range from sandy loams to clay loams and sub soils from clay loams to clays. Soil depth varies markedly	57.6	11.0
4	Saline soil	Saline soils defined as soils having a conductivity of the saturation extract greater than 4 dS m ⁻¹ and an exchangeable sodium percentage less than 15 Saline soils defined as soils having a conductivity of the saturation extract greater than 4 dS m ⁻¹ and an exchangeable sodium percentage less than 15. The pH is usually less than 8.5. Formerly these soils were called white alkali soils because of surface crust of white salts.	2.947	0.86
5	Sodic or alkali soil	Alkali or sodic soil is defined as a soil having a conductivity of the saturation extract less than 4 dS m ⁻¹ and an exchangeable sodium percentage greater than 15. The pH is usually between 8.5–10.0. Most alkali soils, particularly in the arid and semi-arid regions, contain CaCO ₃ in the profile in some form and constant hydrolysis of CaCO ₃ sustains the release of OH ions in soil solution. The OH ions so released result in the maintenance of higher pH in calcareous alkali soils than that in non – calcareous alkali soils.	6.223	1.82

2.4 Area, production and productivity of major crops cultivated in the district

Crop	Area (000ha)			Production (000ton)			Productivity (kg/ha)		
	2017-18	2019-18	2019-20	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
Kharif									
Soybean	120.7	127.9	180.33	150.5	150.6	115.75	1247	1177	642
Paddy	21.8	26.1	32.61	63.1	74.1	94.70	2893	2836	2904
Urdbean	102.8	98.7	42.60	78.1	58.0	5.11	760	587	120
Sesame	0.9	0.6	-	0.28	0.31	-	308	508	-
Rabi									
Wheat	120.5	142.1	166.76	502.5	669.5	725.55	4171	4710	4351
Mustard	36.9	61.3	24.89	61.5	118.5	43.84	1665	1932	1761
Chickpea	51.4	35.9	47.10	77.5	62.5	83.36	1508	1739	1770
Coriander	39.6	10.2	18.20	52.2	13.2	22.13	1317	1296	1216
Garlic	23.6	13.1	22.15	153.6	89.0	144.02	6500	6800	6500

Source: Agriculture statistics, GOR, 2017-18, 2018-19 & 2019-20

2.5. Weather data

Month	Rainfall (mm)			Rainy days		
	2019	2020	2021	2019	2020	2021
January	0.0	3.9	57.0	0	1	4
February	0.0	0.0	0.0	0	0	0
March	0.0	20	7.5	0	2	1
April	0.0	3.2	0.0	0	0	0
May	5.0	0.0	65.2	1	0	3
June	60.3	102.5	12.1	2	7	1
July	506.6	97.5	256.8	12	8	7
August	632.5	333.5	751.4	13	13	15
September	172.7	118.6	86.88	11	3	13
October	52.0	0.0	35.55	2	0	1
November	-	0.0	44.88	-	0	2
December	-	17.0	20.11	-	2	1
TOTAL	1429.1	696.2	1337.42	41	36	48

2.6. Production and productivity of livestock, Poultry etc. in the district

Category	Population	Production (000 MT)	Productivity
Cattle			
<i>Crossbred</i>	8151	18.366	8.4 lit.
<i>Indigenous</i>	208192	162.084	5.6 lit.
Buffalo	240628	184.654	7.79lit.
Sheep	22434	36.69 (000 kg)	1.49 kg/animal
Goats	137387	17.381	0.79 lit.
Poultry	22298	58.42 (Lakh)	215 eggs/year

2.7 Details of Operational area / Villages (2021)

Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Ladpura	Charinda, Kitalheda, Arandkhera,	Soybean, Paddy, Gram, Wheat, Mustard, Coriander, Dairy	Wilt in Chickpea, stem gall in Coriander, Tobacco caterpillar in Soybean, Weed infestation	Productivity enhancement of crops through INM, IWM and IPM in crops, seed treatment, improved animal feeding
Sultanpur	Choma Bibu, Choma Maliyan, Chomakot	Soybean, Gram, Wheat, Mustard, vegetables crops, Dairy	Shoot borer in Paddy, FMD in animals, Wilt in Chickpea, Tobacco caterpillar in Soybean Weed infestation	Productivity enhancement of crops through INM, IWM and IPM in crops, improved animal feeding & Vaccination in dairy animals
Kherabad	Raikhera, Dhakiya, Khani, Teliyakheri	Soybean, Gram, Wheat, Mustard, Coriander, Dairy	Wilt in Chickpea, stem gall in Coriander, Tobacco caterpillar in Soybean Weed infestation	Productivity enhancement of crops through INM, IWM and IPM in crops, seed treatment, improved animal feeding
Sangod	Kanwas, Anwa, Gangapur, Gunjara	Soybean, Wheat, Mustard, Coriander Dairy	Wilt in Chickpea, stem gall in Coriander, Tobacco caterpillar in Soybean, Weed infestation	Productivity enhancement of crops through INM, IWM and IPM in crops, improved animal feeding & Vaccination in dairy animals

Priority/thrust areas

The thrust areas as mentioned below are identified by KVK for the Kota district

- To enhance the productivity and quality of major crops viz soybean, urdbean, mustard, wheat, chickpea, coriander and garlic
- To promote integrated nutrient, pest, disease and weed management
- To promote soil health management for sustainable agriculture
- To promote diversification in agriculture through fruits, vegetables and medicinal crops
- To promote floriculture and hi-tech cultivation
- To promote modern dairy farming, goat rearing and back yard poultry
- To develop vocational skills for self employment through food processing & value addition, dairying, goat rearing, gardener, vermi-composting, beekeeping, seed production, mushroom cultivation and back yard poultry
- To create awareness for maintenance and drudgery reduction in agriculture implements
- Women empowerment through vocational education and nutrition
- To promote integrated farming system for more profitability
- To promote climate resilient technologies

3. TECHNICAL ACHIEVEMENTS

3. A. Details of target and achievements of mandatory activities by KVK during 2021

OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)			
1				2			
Number of OFTs		Total no. of Trials		Area in ha		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
4	4	28	28	180	200.29	500	629

Training (including sponsored, vocational and other trainings)					Extension Activities			
3					4			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmers	50	57	1200	1752	180	200	18000	21817
Rural youth	5	7	125	178				
Extn. Functionaries	5	9	125	236				
Total	60	73	1450	2166	180	200	18000	21817

Seed Production (Qtl.)			Planting material (Nos.)		
5			6		
Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers
1200 q	1584.7	2050	50000	16500	1725

I.A TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops by KVKs

Thematic areas	Crop	Name of the technology assessed	No. of trials	No. of farmers
Integrated Nutrient Management	Onion	Varietal assessment of onion	05	05
Integrated Disease Management	Soybean	Management of Charcoal rot in soybean	08	08
	Chickpea	Management of Collar rot in chickpea	10	10
Total		03	23	23

Summary of technologies assessed under livestock by KVKs

Thematic areas	Name of livestock	Name of the technology assessed	No. of trials	No. of farmers
Nutrition management	Goat	Assessment of supplementary feeding of goat kids for higher growth rate	05	05
Total		01	05	05

I.B. TECHNOLOGY ASSESSMENT IN DETAIL

INTEGRATED DISEASE MANAGEMENT

Technology Assessed: Management of Charcoal Rot in Soybean

Problem definition: low yield of soybean due to severe charcoal rot disease incidence (upto 30 %)

Thematic area: Integrated disease management

Source of technology: IISR, Indore (2019)

Soybean is a major kharif crop which have 1.80 lakh hectare area in the Kota district, however, the incidence of charcoal rot disease resulting in yield losses. Therefore, an OFT was carried out to assess the efficacy of novel fungicides for Management of Charcoal rot in soybean. Results indicated that Seed treatment with Penflufen + Trifloxystrobin 38 FS at 1 ml/kg followed by need based two sprays of Pyraclostrobin 13.3 % + Epoxiconazole 5 % SE (Ready mix) at 1 ml per liter water found lowest per cent disease incidence (1.33) as compared to farmers practices (10.50) and yield was increased by 24.60 per cent.

Table: Efficacy of novel fungicides for management of Charcoal rot diseases in Soybean

Technology option	No. of trials	Percent Disease Incidence (PDI)	Yield q/ha	% Increase in yield over farmer practice	Net return (Rs/ha)	B:C Ratio

T1- Seed treatment with Carbendazim 50 WP @ 1 g/kg seed + Spray with Mancozeb @ 600-700 g/ha after disease incidence (FP)	08	10.50	11.50	-	34900	2.18
T2- Seed treatment with Penflufen + Trifloxystrobin 38 FS @ 1 ml/kg followed by need based two sprays of Pyraclostrobin 13.3 % + Epoxiconazole 5 % SE (Ready mix) at 1 ml per liter water (AP)		1.33	14.33	24.60	49448	2.60



INTEGRATED CROP MANAGEMENT

Technology Assessed: varietal assessment of onion

Problem definition: low yield of existing varieties of onion

Thematic area: varietal assessment

Source of technology: NHRDF, Pune

Varietal evaluation trials were conducted during *Kharif 2020* to assess the performance of newly released onion varieties ADR (Agri-found Dark Red) and L-883 in comparison to existing high yielding variety N-53. Results of OFT revealed that variety L-883 recorded maximum yield and observed 32.48 per cent higher over N-53. The next best was Agri-found Dark Red compared to existing N-53. Based on the performance, the farmers of Kota district adopted newly released variety L-883 of onion.

Table: Performance of onion varieties on farmers fields

Technology option	No. of trials	Yield (q/ha)	% Increase in yield over FP	Net Return (₹/ha)	B: C ratio
T ₁ =variety N-53 (Farmer's practice)	05	241.6	-	219400	2.53
T ₂ = variety ADR (Agri-found Dark Red)		341.4	29.23	450520	3.75
T ₃ = variety L-883		357.8	32.48	480040	3.93



LIVESTOCK

Technology Assessed: Assessment of supplementary feeding of goat kids for higher growth rates

Problem Identified : Poor growth rate of goat kids

Thematic area : Nutrition management

Source of technology : ICAR- CSWRI, Avikanagar and ICAR-NRC on goat Makhdoom

Goat husbandary provides glimpses of future hope for employment generation, nutritional security and prosperity of the millions of small and marginal farmers. Goats constitute 26.4 percent of the total livestock population of Rajasthan and the 19th livestock census puts the no. of goats in the Kota district at 1.37 lakhs. KVK, Kota observed poor growth rates of goat kids in Kota district. Therefore, an OFT was conducted to assess supplementary feeding of goat kids for higher growth rates. Results indicated that feed + 2 % concentrate of body weight recored maximum body weight (kg) 11.8 and 22.4 at 3 and 6-months goat kids respectively. The percent increase in body weight was 21.00 over farmers practices.

Table: Assessment of supplementation of supplementary feeding of goat kids for higher growth rates

Technology Option	Body weight (kg)		Per cent increase over FP	Body weight (g) gain/day
	At 3 months	At 6 months		
T1= Farmer's practice (Feed + 0.5 % concentrate of body weight)	11.5	18.5	-	78
T2= (Feed + 2 % concentrate of body weight)	11.8	22.4	21.00	118



II. FRONTLINE DEMONSTRATION

(A). Follow-up for results of FLDs implemented during previous years

List of technologies demonstrated during previous year and popularized during 2021 and recommended for large scale adoption in the district

S. No.	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1	Mustard (NFSM)	ICM	Variety DRMRIJ-31 & POP	Trainings, Demon. Field day, Literature, Meetings, Farmer fair, FS interaction	12	425	350
2	Mustard (TSP)	ICM	Variety DRMRIJ-31 & POP		6	120	80
3	Mustard (NICRA)	ICM	Variety DRMRIJ-31 & POP		5	80	60
3	Soybean (NFSM)	ICM	Variety JS 20-34 & nutrient, weed & insect-pest management		4	60	40
5	Chickpea (NFSM)	ICM	Variety GNG-1958 & POP		5	180	130
6	Chickpea (TSP)	ICM	Variety GNG-1958 & POP		6	140	90
7	Chickpea (NICRA)	ICM	Variety GNG-1958 & POP		6	150	110
8	Blackgram (NFSM)	ICM	Variety Pratap Urd-1 & POP		4	50	40
9	Blackgram (TSP)	ICM	Variety Pratap Urd-1 & POP		5	80	90
10	Blackgram (NICRA)	ICM	Variety Pratap Urd-1 & POP		5	70	60
11	Wheat	ICM	Variety Raj 4079 & Nutrient management		4	150	200
12	Wheat (TSP)	ICM	Variety Raj 4079 & Nutrient management		4	80	60
13	Wheat (NICRA)	ICM	Variety Raj 4079 & Nutrient management		5	80	120
14	Garlic (TSP)	ICM	Variety G 282/G 50		3	40	25
15	Oat (NICRA)	Fodder Prod.	Variety JHO 822		3	30	15
16	Coriander (NICRA)	ICM	Variety RKD 18 and POP		4	60	40

(B) Details of FLDs implemented during 2021 (Information is to be furnished in the following three tables for each category i.e., cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

S. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration		
					Proposed	Actual	SC/ST	Others	Total
FLD on oilseeds									
1	Mustard (NFMS)	ICM	Use of improved variety Giriraj (DRMR IJ-31) Seed treatment with metalaxyl at 6.0 g /kg seed and Imidacloprid 48 FS at 6 ml/kg seed Soil treatment with <i>Trichoderma viride</i> at 2.5 kg/ha (FYM mixed 50 kg) Sowing of crop in row of 30 cm apart and thinning at 15-20 DAS Recommended NP (80:40 kg/ha) and Sulphur bentonite 90 % 25 kg/ha. Soil application of Zinc sulphate (21%) at 25 kg/ha,	Rabi 2020-21	50	50	71	54	125
2	Soybean (NFMS)	ICM	Improved variety JS 20-34 Seed treatment with Carboxine 37.5% + thiram 37.5% at 2.0 g /kg seed and inoculation with Rhizobium cultures Sowing of crop in row of 30 cm apart Recommended doses of NP (20:40 kg/ha) Weed management: Application of Sodium acifluorfen 16.5%+Clodinofof-P 8% EC (Readymix) at 1000 ml/ha 20-25 DAS Plant protection measures: Spray of Thiachlorprid 21.7 SC 750 ml/ha for Girdle beetle, Indoxcarb 14.7 SL 300 ml/ha for semilooper/tobacco caterpillar management	Kharif, 2021	30	30	34	26	60
3	Mustard (NFMS)	ICM	Use of improved variety Giriraj (DRMR IJ-31) Seed treatment with metalaxyl at 6.0 g /kg seed and Imidacloprid 48 FS at 6 ml/kg seed Soil treatment with <i>Trichoderma viride</i> at 2.5 kg/ha (FYM mixed 50 kg) Sowing of crop in row of 30 cm apart and thinning at 15-20 DAS Recommended NP (80:40 kg/ha) and Sulphur bentonite 90 % 25 kg/ha. Soil application of Zinc sulphate (21%) at 25 kg/ha,	Rabi 2021-22	20	20	42	8	50
FLD on pulses									
1	Chickpea (NFMS)	ICM	Improved variety GNG-1958 Seed treatment with carbendazim 50WP at 2.0 g /kg seed and	Rabi 2020-21	20	20	26	24	50

			inoculation with Rhizobium culture Soil treatment with Trichoderma viride at 2.5 kg/ha (FYM mixed 50 kg) Sowing of crop in row of 30 cm apart Recommended NP (20:40 kg/ha) Application of Profenophos 50% EC at 1 l/ha						
2	Blackgram (NFMS)	ICM	Improved variety Pratap urd-1 Seed treatment with Carbendazim 50 wp at 2 g/kg seed & inoculation with Rhizobium & PSB culture Soil treatment with Trichoderma viride at 2.5 kg/ha (mixed with 40-50 kg FYM) Sowing at 30 cm. rows Recommended NP (20:40 kg/ha) Weed management by application of Imizathapyr 10SL at 550 ml /ha at 15-20 DAS Insect pest management- Spray of Imidacloprid 17.8 SL 250 ml/ha for sucking pest (2 sprays)	Kharif, 2021	20	20	45	5	50
3	Chickpea (NFMS)	ICM	Improved variety GNG-2171 Seed treatment with carbendazim 50WP at 2.0 g /kg seed and inoculation with Rhizobium culture Soil treatment with Trichoderma viride at 2.5 kg/ha (FYM mixed 50 kg) Sowing of crop in row of 30 cm apart Recommended NP (20:40 kg/ha) Application of Profenophos 50% EC at 1 l/ha	Rabi 2021-22	20	20	12	38	50
4	Chickpea (TSP)	ICM	Improved variety GNG-2171	Rabi 2021-22	2.25	2.25	6	0	6
FLD on Cereals									
1	Wheat	ICM	Improved variety Raj-4079 Seed treatment with carbendazim 50 WP at 2.0 g /kg seed Irrigation at critical stages Weed management	Rabi 2020-21	12.0	12.0	0	30	30
2	Wheat (TSP)	ICM	Improved variety Raj-4079 Seed treatment with carbendazim 50 WP at 2.0 g /kg seed	Rabi 2020-21	20.4	20.4	51	0	51
FLD on other crop									
1	Garlic (TSP)	ICM	improved variety G 282/G 50 Seed treatment with Carbendazim at 2.0 g /kg seed Soil treatment with <i>Trichoderma viride</i> at 2.5 kg/ha (FYM mixed 50 kg)	Rabi 2020-21	1.76	1.76	22	0	22
2	Garlic (TSP)	ICM	improved variety G 282/G 50 Seed treatment with Carbendazim at 2.0 g /kg seed Soil treatment with <i>Trichoderma viride</i> at 2.5 kg/ha (FYM mixed 50 kg)	Rabi 2021-22	2.88	2.88	35	0	35

3	Coriander (TSP)	ICM	Improved variety RKD-18, Sulphur, Zinc sulphate,	Rabi 2021-22	13.5	13.5	27	0	27
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Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Mustard	Rabi 2020-21	Irrigated	Clay loam	L	L	H	Soybean, Blackgram	20-30.10.2020	5-15.03.2021	81	5
Chickpea	Rabi 2020-21	Irrigated	Clay loam	L	L	H	Soybean, Blackgram	25.10.2020 to 10.11.2020	20.3.2021 to 5.04.2021	81	5
Wheat	Rabi 2020-21	Irrigated	Clay loam	L	L	H	Paddy, Soybean	20.11.2020 to 10.12.2020	25.03.2021 to 10.04.2021	81	5
Wheat (TSP)	Rabi 2020-21	Irrigated	Clay loam	L	L	H	Blackgram, Soybean	20.11.2020 to 10.12.2020	25.03.2021 to 10.04.2021	81	5
Garlic (TSP)	Rabi 2020-21	Irrigated	Clay loam	L	L	H	Soybean, Blackgram	25.10.2020 to 10.11.2020	25.03.2021 to 5.04.2021	81	5
Soybean	Kharif, 2021	Rainfed	Clay loam	L	L	H	Chickpea, mustard/ Wheat	22-27.07.2021	08.10.2021 to 15.10.2021	1130.63	36
Blackgram	Kharif, 2021	Rainfed	Clay loam	L	L	H	Chickpea, mustard/ Wheat	18-25.07.2021	01.10.2021 to 10.10.2021	1130.63	36
Mustard	Rabi 2021-22	Irrigated	Clay loam	L	L	H	Soybean, Blackgram	9.10.2021 to 22.10.2021	awaited		
Chickpea	Rabi 2021-22	Irrigated	Clay loam	L	L	H	Soybean, Blackgram	28.10.2021 to 07.11.2021	awaited		
Garlic (TSP)	Rabi 2021-22	Irrigated	Clay loam	L	L	H	Soybean, Blackgram	15.10.2021 to 28.10.2021	awaited		

Technical Feedback on the demonstrated technologies

Crop	Feed Back
Wheat	<ol style="list-style-type: none"> 1. Farmers to be aware about use of recommended seed rate. 2. Use of ferti-seed drill to be promoted for proper use of fertilizers. 3. Azotobacter & PSB culture to be made available in market 4. Zinc fertilizer application to be promoted
Chickpea	<ol style="list-style-type: none"> 1. Quality seeds to be made available to the farmers before sowing time 2. Fresh Bio-fertilizers to be available at sowing time 3. Farmers to be motivated for use of ferti-seed drill & sowing of crops with appropriate spacing 4. Research on post emergence broad spectrum herbicide in chickpea will be done.
Mustard	<ol style="list-style-type: none"> 1. Quality seeds of improved varieties to be made available to the farmers before sowing time. 2. Sulphur & Zn fertilizer along with recommended NP to be encouraged. Excess use of urea to be discouraged. 3. Farmers need to convey about importance of sowing the crop at right spacing (30 cm

	rows) using optimum seed rate
Blackgram	<ol style="list-style-type: none"> 1. Quality seeds to be made available to the farmers before sowing 2. Fresh bio-fertilizers should be available at sowing time 3. New variety resistant to water logging & YVM should be evolved 4. Research on post emergence broad spectrum herbicide in blackgram should be strengthen
Soybean	<ol style="list-style-type: none"> 1. Availability of quality seeds of newly recommended varieties should be ensured. 2. Fresh bio-fertilizers should be available at sowing time 3. High yielding short duration variety resistant to water logging should be evolved. 4. Farmers should be aware about use of recommended doses of fertilizers. 5. Farmers need to convey about importance of sowing the crop at right spacing (30-45 cm rows) and need to be sown on BBF.

Farmers' reactions on specific technologies

Crop	Feed Back
Wheat	<ol style="list-style-type: none"> 1. Farmers accepted variety Raj-4079 for better yield performance. 2. Zn fertilizer found yield remunerative. 3. Fresh bio-fertilizers PSB & Azatobacter found to be beneficial & low cost technique
Chickpea	<ol style="list-style-type: none"> 4. GNG-1958 variety is found better yielding, having good branching, more number of pods per plant, moderately resistant to wilt disease. 5. Seed treatment with carbendazim found effective for disease management. 6. Soil treatment with <i>Trichoderma viride</i> might be effective for diseases.
Mustard	<ol style="list-style-type: none"> 1. Variety Giriraj was appreciated due to higher yield, good branching and pod formation. 2. Seed treatment with metalaxyl is effective for white rust and imidacloprid check the initial attack of painted bug. 3. Sowing at 30-45 cm rows found beneficial for better light interception. 4. Sulphur & zinc fertilizers enhanced pod formation & yield
Urdbean	<ol style="list-style-type: none"> 1. Pratap urd-1 variety was accepted by the farmers for bold seed, good growth & branching, however, good yields could not be achieved due to lack of rainfall during pod formation and maturity stage. 2. Seed treatment with carbendazim found effective for disease management. 3. Weed management with application of Imizathapyr 10SL at 550 ml /ha found effective for most of the weeds 4. Spray of Imidacloprid 17.8 SL 250 ml/ha found effective for sucking pest management and increased pod formation.
Soybean	<ol style="list-style-type: none"> 1. Variety JS 20-34 was accepted by the farmers for more number of pods per plant & however, due to late onset of monsoon and low rainfall during pod formation & maturity higher yield could not be achieved. 2. Seed treatment with Vitavax power found effective for disease management. 3. Use of recommended NP (20:40 kg/ha) improved growth and yield of soybean.

Extension and Training activities under CFLD-Chickpea Rabi 2020-21

S.No.	Extension Activities Organized	Date	No. of participants	Remarks
1	Field visit for monitoring	25.12.20	18	
2	Field visit for monitoring	26.12.20	24	
3	Field visit for monitoring	15.02.21	9	
4	Field visit for monitoring	02.03.21	11	
5	Field day on chickpea	18.02.21	62	
6	Trainings conducted for FLD farmers			
7	On campus: Agrotechniques for chickpea	14.10.2020	25	
8	On campus: Weeds and nutrients management in pulses	15.10.2020	21	

Extension and Training activities under CFLD-Mustard Rabi 2020-21

S.No.	Activities	Date	No. of participants	Remarks
1	Field visit for monitoring	25.12.20	18	
2	Field visit for monitoring	02.02.21	16	
3	Field visit for monitoring	10.02.21	15	
4	Field visit for monitoring	04.03.21	23	
5	Field day on Mustard	05.02.21	89	
6	Field day on Mustard	11.02.21	62	
7	Trainings conducted for FLD farmers			
8	On-campus -Nutrients management in mustard	7.10.2020	25	
9	On-campus –Weeds management in mustard	13.10.2020	24	

Extension and Training activities under FLD-Wheat Rabi 2020-21

S.No.	Activities	Date	No. of participants	Remarks
1	Field visit for monitoring	10.02.21	16	
2	Field visit for monitoring	11.02.21	12	
3	Field day on Wheat	17.03.21	19	
4	Trainings conducted for FLD farmers			
5	On-campus Resource conserving technologies of wheat	24-25.11.2020	30	

Extension and Training activities under CFLD-Blackgram Kharif, 2021

S.No	Activity	Date	No. of participants	Remarks
1	Monitoring of CFLD blackgram	14.07.21	23	
2	Monitoring of CFLD blackgram	21.08.21	12	
3	Monitoring of CFLD blackgram	04.09.21	25	
4	Monitoring of CFLD blackgram	25.09.21	18	
5	Field day on CFLD Blackgram under NFSM	08.10.21	93	

Extension and Training activities under CFLD-Soybean Kharif, 2021

S.No	Activity	Date	No. of participants	Remarks
1	On-campus: Production techniques of soybean	21-22.06.2021	24	
2	Monitoring of CFLD soybean			
3	Field visit for monitoring	17.06.21	21	
4	Field visit for monitoring	19.07.21	15	
5	Field visit for monitoring	28.07.21	16	
6	Field visit for monitoring	11.08.21	14	
7	Field visit for monitoring	12.08.21	13	
8	Field visit for monitoring	24.08.21	18	
9	Field visit for monitoring	28.08.21	21	
10	Field visit for monitoring	04.09.21	21	
11	Field visit for monitoring	25.09.21	23	
12	Field day on CFLD Soybean under NFSM	30.09.21	29	

Extension and Training activities under CFLD-Chickpea Rabi 2021-22

S.No	Extension Activities Organized	Date	No. of participants	Remarks
1	Field visit for selection of site	02.10.21	22	
2	Field visit for selection of site	04.10.21	18	
3	Field visit for selection of site	20.10.21	21	
4	Field visit for selection of site	23.10.21	14	
5	Field visit for monitoring	17.11.21	12	
6	On Campus- Production techniques of chickpea	25-26.10.2021	22	

Extension and Training activities under CFLD-Mustard Rabi 2021-22

S.No	Activities	Date	No. of participants	Remarks
1	Field visit for selection of site	02.10.21	22	
2	Field visit for selection of site	04.10.21	18	
3	Field visit for selection of site	11.10.21	15	
4	Field visit for monitoring	17.11.21	22	
5	On-campus Production techniques of mustard	21-22.10.2021	24	

Performance of Frontline demonstrations

Cluster Frontline demonstrations on oilseed crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)			Check	% Increase in yield
						Demo				
						High	Low	Ave.		
1	2	3	4	5	6	7	8	9	10	11
Mustard	ICM	Variety Giriraj & POP	DRMR-IJ-31	125	50	26	14.5	20.1	17.62	14.07
Soybean	ICM	Variety JS 20-34 & POP	JS 20-34	60	30	21.5	13.5	16.66	13.71	21.52
Mustard	ICM	Variety Giriraj & POP	DRMR IJ 31			Result awaited				

Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
12	13	14	15	16	17	18	19
25685	110385	84700	4.29	24160	96910	72750	4.01
30792	93296	62504	3.03	31330	76776	45446	2.45

Cluster Frontline demonstrations on pulse crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)			Check	% Increase in yield
						Demo				
						High	Low	Ave.		
1	2	3	4	5	6	7	8	9	10	11
Chickpea	ICM	Variety Giriraj & POP	GNG 1958	50	20.0	28.5	18.5	23.53	19.32	21.79
Blackgram	ICM	Variety Pratap urd 1 & POP	Pratap urd 1	50	20.0	9.6	6.5	7.59	6.21	22.22
Chickpea	ICM	Variety GNG 2171 & POP	GNG 2171	50	20.00	Result awaited				

Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
12	13	14	15	16	17	18	19
25027	122356	97329	4.89	23500	100464	76964	4.28
24441	47058	22617	1.93	23270	38502	15232	1.65

Cluster Frontline demonstrations on cereal crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield
						Demo			Check	
						High	Low	Ave.		
1	2	3	4	5	6	7	8	9	10	11
Wheat	ICM	Variety Raj. 4079 & POP	Raj. 4079	30	12	61.50	47.0	51.87	47.07	10.19
Wheat (TSP)	ICM	Variety Raj. 4079 & POP	Raj. 4079	50	50	56.50	46.8	49.47	45.83	7.94

Economics of demonstration (Rs. /ha)				Economics of check (Rs. /ha)			
Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
12	13	14	15	16	17	18	19
42333	102443	60110	2.42	42927	92963	50036	2.17
41250	97703	56453	2.37	42920	90514	47594	2.11

Cluster Frontline demonstrations on other crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield
						Demo			Check	
						High	Low	Ave.		
1	2	3	4	5	6	7	8	9	10	11
Garlic (TSP)	ICM	Improved variety G-282	G 282	15	6	112	83.50	94.50	82.60	14.41
Garlic TSP	ICM	Improved variety G-282				Result awaited				

Economics of demonstration (Rs. /ha)				Economics of check (Rs. /ha)			
Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
12	13	14	15	16	17	18	19
82450	661500	579050	8.02	84580	578200	493620	6.84



CFLD on Chickpea



CFLD on Mustard



CFLD on Blackgram



Field day on Soybean



Field day on Mustard



Field day on Blackgram

Demonstration on nutri garden

Category of crop	Technology demonstrated	No. of farmers	No. of units	Economics of demonstrations			BCR (R/C)
				(A) Gross cost	(B) Gross return	I Net return	
Nutrigarden (10x10 m ²)	Vegetable kit	100	100	500	1800	1300	3.60



Nutrigardern Demonstration



Nutrigardern Demonstration Unit at KVK Kota

Training Programme

Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Resource Conservation Technologies	1	20	0	20	2	0	2	22	0	22
Integrated Crop Management	3	42	0	42	23	0	23	65	0	65
Soil and water conservation	3	55	21	76	70	3	73	125	24	149
Total	7	117	21	138	95	3	98	212	24	236
II Horticulture										
a) Vegetable Crops										
Protected cultivation	1	27	0	27	5	0	5	32	0	32
Total (a)	1	27	0	27	5	0	5	32	0	32
b) Fruits										
Layout and Management of Orchards	3	61	0	61	20	0	20	81	0	81
Total (b)	3	61	0	61	20	0	20	81	0	81
c) Ornamental Plants										
Total (c)										
d) Plantation crops										
Total (d)										
e) Tuber crops										
f) Spices										
Production and Management technology	2	35	0	35	30	0	30	65	0	65
Total (f)	2	35	0	35	30	0	30	65	0	65
g) Medicinal and Aromatic Plants										
Production and management technology	1	80	15	95	12	0	12	92	15	107
Total (g)	1	80	15	95	12	0	12	92	15	107
GT (a-g)	7	203	15	218	67	0	67	270	15	285
III Soil Health and Fertility Management										
Total										
IV Livestock Production and Management										
Dairy Management	2	45	3	48	9	0	9	54	3	57
Feed & fodder technology	1	0	0	0	25	0	25	25	0	25
Goat Rearing	1	28	2	30	10	0	10	38	2	40
Total	4	73	5	78	44	0	44	117	5	122
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	2	8	10	10	5	15	12	13	25
Value addition	4	40	19	59	22	0	22	62	19	81
Women empowerment	1	0	25	25	0	0	0	0	25	25
Total	6	42	52	94	32	5	37	74	57	131
VI Agril. Engineering										
VII Plant Protection										
Integrated Pest Management	2	0	0	0	58	0	58	58	0	58
Integrated Disease Management	1	13	0	13	6	0	6	19	0	19
Total	3	13	0	13	64	0	64	77	0	77
VIII Production of Inputs at site										
Bio-pesticides production	1	22	10	32	8		8	30	10	40
Mushroom Production	1	15	3	18	3	0	3	18	3	21
Total	2	37	13	50	11	0	11	48	13	61
GRAND TOTAL	29	485	106	591	313	8	321	798	114	912

Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	3	60	0	60	0	0	0	60	0	60
Resource Conservation Technologies	1	0	0	0	12	14	26	12	14	26
Cropping Systems	1	3	0	3	21	0	21	24	0	24
Nursery Management	1	8	0	8	15	0	15	23	0	23
Integrated Crop Management	1	3	0	3	20	4	24	23	4	27
Soil and water conservation	2	47	16	63	43	13	56	90	29	119
Integrated nutrient management	1	7	5	12	4	7	11	11	12	23
Total	10	128	21	149	115	38	153	243	59	302
II Horticulture										
a) Vegetable Crops										
Total (a)										
b) Fruits										
Layout and Management of Orchards	2	38	12	50	6	0	6	44	12	56
Management of young plants/orchards	1	48	3	51	9	0	9	57	3	60
Total (b)	3	86	15	101	15	0	15	101	15	116
c) Ornamental Plants										
Total (c)										
d) Plantation crops										
Total (d)										
e) Tuber crops										
Total (e)										
f) Spices										
Total (f)										
g) Medicinal and Aromatic Plants										
Total (g)										
GT (a-g)	3	86	15	101	15	0	15	101	15	116
III Soil Health and Fertility Management										
Total										
IV Livestock Production and Management										
Dairy Management	1	25	0	25	0	0	0	25	0	25
Goat Management	2	40	4	44	3	0	3	43	4	47
Feed & fodder technology	2	0	0	0	36	28	64	36	28	64
Total	5	65	4	69	39	28	67	104	32	136
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	40	40	0	0	0	0	40	40
Value addition	2	0	52	52	0	15	15	0	67	67
Total	3	0	92	92	0	15	15	0	107	107
VII Plant Protection										
Integrated Pest Management	2	31	5	36	12	6	18	43	11	54
Integrated Disease Management	3	21	5	26	36	10	46	57	15	72
Bio-control of pests and diseases	1	0	0	0	26	5	31	26	5	31
Production of bio control agents and bio pesticides	1	6	0	6	16	0	16	22	0	22
Total	7	58	10	68	90	21	111	148	31	179
VIII Fisheries										
IX Production of Inputs at site										
Total										
X Capacity Building and Group Dynamics										
Total										
XI Agro-forestry										
Total										
GRAND TOTAL	28	337	142	479	259	102	361	596	244	840

Farmers' Training including sponsored training programmes – CONSOLIDATED (On + Off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	3	60	0	60	0	0	0	60	0	60
Resource Conservation Technologies	2	20	0	20	14	14	28	34	14	48
Cropping Systems	1	3	0	3	21	0	21	24	0	24
Nursery management	1	8	0	8	15	0	15	23	0	23
Integrated Crop Management	4	45	0	45	43	4	47	88	4	92
Integrated nutrient management	1	7	5	12	4	7	11	11	12	23
Soil and Water conservation	5	102	37	139	113	16	129	215	53	268
Total	17	245	42	287	210	41	251	455	83	538
II Horticulture										
a) Vegetable Crops										
Protected cultivation	1	27	0	27	5	0	5	32	0	32
Total (a)	1	27	0	27	5	0	5	32	0	32
b) Fruits										
Layout and Management of Orchards	5	99	12	111	26	0	26	125	12	137
Management of young plants/orchards	1	48	3	51	9	0	9	57	3	60
Total (b)	6	147	15	162	35	0	35	182	15	197
c) Ornamental Plants										
Total (c)										
d) Plantation crops										
e) Tuber crops										
f) Spices										
Production and Management technology	2	35	0	35	30	0	30	65	0	65
Total (f)	2	35	0	35	30	0	30	65	0	65
g) Medicinal and Aromatic Plants										
Production and management technology	1	80	15	95	12	0	12	92	15	107
Total (g)	1	80	15	95	12	0	12	92	15	107
GT (a-g)	10	289	30	319	82	0	82	371	30	401
III Soil Health and Fertility Management										
Total										
IV Livestock Production and Management										
Dairy Management	3	70	3	73	9	0	9	79	3	82
Goat Management	3	68	6	74	13	0	13	81	6	87
Feed & fodder technology	3	0	0	0	61	28	89	61	28	89
Total	9	138	9	147	83	28	111	221	37	258
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	2	2	48	50	10	5	15	12	53	65
Value addition	6	40	71	111	22	15	37	62	86	148
Women empowerment	1	0	25	25	0	0	0	0	25	25
Total	9	42	144	186	32	20	52	74	164	238
VI Agril. Engineering										
Total										
VII Plant Protection										
Integrated Pest Management	4	31	5	36	70	6	76	101	11	112
Integrated Disease Management	4	34	5	39	42	10	52	76	15	91
Bio-control of pests and diseases	1	0	0	0	26	5	31	26	5	31
Production of bio control agents and bio pesticides	1	6	0	6	16	0	16	22	0	22
Total	10	71	10	81	154	21	175	225	31	256
VIII Production of Inputs at site										
Bio-pesticides production	1	22	10	32	8		8	30	10	40
Mushroom Production	1	15	3	18	3	0	3	18	3	21
Total	2	37	13	50	11	0	11	48	13	61
GRAND TOTAL	57	822	248	1070	572	110	682	1394	358	1752

Training for Rural Youths including sponsored training programmes (On campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Dairy farming	1	30	3	33	7	0	7	37	3	40
Goat rearing	1	30	0	30	8	2	10	30	10	40
Mushroom production technology	1	12	4	16	5	0	5	17	4	21
Soya Processing	3	38	5	43	2	7	9	40	12	52
ASCI (Quality Seed Grower)	1	14	0	14	11	0	11	25	0	25
TOTAL	7	124	12	136	33	9	42	149	29	178

Training for Rural Youths including sponsored training

Training for Rural Youths including sponsored training programmes – CONSOLIDATED (On + Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Dairy farming	1	30	3	33	7	0	7	37	3	40
Goat rearing	1	30	0	30	8	2	10	30	10	40
Mushroom production technology	1	12	4	16	5	0	5	17	4	21
Soya Processing	3	38	5	43	2	7	9	40	12	52
ASCI (Quality Seed Grower)	1	14	0	14	11	0	11	25	0	25
TOTAL	7	124	12	136	33	9	42	149	29	178

Training programmes for Extension Personnel including sponsored training programmes (on campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Protected cultivation technology	02	40	0	40	5	0	5	45	0	45
RAWE, FET	05	52	10	62	10	33	43	62	43	105
Plant Clinic Training	01	0	20	20	0	14	14	0	34	34
Poshan Thali and Nutrigarden	01	-	42	42	0	10	10	0	51	51
TOTAL	9	92	72	164	15	57	72	107	129	236

Training programmes for Extension Personnel including sponsored training programmes – CONSOLIDATED (On + Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Protected cultivation technology	02	40	0	40	5	0	5	45	0	45
RAWE, FET	05	52	10	62	10	33	43	62	43	105
Plant Clinic Training	01	0	20	20	0	14	14	0	34	34
Poshan Thali and Nutrigarden	01	-	42	42	0	10	10	0	51	51
TOTAL	9	92	72	164	15	57	72	107	129	236

Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Commercial production of vegetables	1	30	0	30	10	0	10	40	0	40
Increasing production and productivity of crops	3	67	0	67	29	0	29	96	0	96
GRAND TOTAL	4	97	0	97	39	0	39	136	0	136

Name of sponsoring agencies involved: IARI-Horticulture Division, ATMA, Kota

Details of vocational training programmes carried out by KVKs

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Value addition	2	0	0	0	0	50	50	0	50	50
Rural Crafts	2	0	0	0	0	50	50	0	50	50
Total	4	0	0	0	0	100	100	0	100	100

Training Programmes



On Campus training on Mushroom Production technology



On Campus training on food processing



Training on Dairy Management



On Campus training on Nursery Establishment



Diagnostic visit at farmers field



Off campus training on dairy farming

ASCI skill training

ICAR sanctioned one training programme on Quality seed for skill development. Total 25 rural youths participated in the training. Total funds received 225000 lakhs.



Skill development training on Quality Seed Grower during 01.03.2021 to 25.03.2021

IV. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Field days				
Mustard (DRMR IJ 31) (05.2.2021)	01	86	3	89
Mustard (DRMR IJ 31) (11.2.2021)	01	58	4	62
Chickpea (GNG 1958) (18.2.2021)	01	58	2	60
Wheat (Raj 4079) (14.3.2021)	01	22	3	25
Wheat (Raj 4079) (17.3.2021)	01	40	5	45
Blackgram (Pratap urd 1) (8.10.2021)	01	85	8	93
Soybean (JS 20-34) (30.9.2021)	01	65	4	69
Sub Total	07	414	29	443
Exhibitions				
Pre-rabi Sammelan/Kisan Mela	01	390	15	405
CoA,Ummadganj Kota	01	515	40	555
Sub Total	02	905	55	960
Celebration of important days				
National Science Day (28.02.21)	01	56	5	61
International Women Day (08.03.21)	01	133	10	143
World Water Day (22.03.21)	01	193	8	201
World Bee Day (20.05.21)	01	215	12	227
World Milk Day (01.06.21)	01	45	8	53
World Environment Day (05.06.21)	01	38	10	48
National Fish Farmer Day	01	25	05	30
ICAR 93 rd Foundation Day (16.07.21)	01	69	10	79
16 th Parthenium Awareness Week (16-22.08.21)	04	118	20	138
Special Swachhta Campaign	01	405	20	425
Farm women day (15.10.2021)	01	68	4	72
World Food Day (16.10.21)	01	57	3	60
Poshan Maah (Sep., 2021)	03	216	10	226
Agriculture Education Day (03.12.21)	01	150	15	165

World Soil Day (05.12.21)	01	116	8	124
Jai Kisan Diwas (23.12.2021)	01	33	5	38
Sub Total	21	1937	153	2090
Extension activities				
Agripreneur summit	01	97	5	102
Farmers Awareness programme on balanced used of fertilizers	01	25	3	28
Awareness programme on pesticides residues in farm produces	01	22	3	25
Interaction with agri- entrepreneurs with ICAR-PRT team	01	69	10	79
Poshan vatika maha abhiyan and plantation	01	136	8	144
PM Live programme on climate resilient technologies	01	134	12	146
Farmer's awareness program waste to wealth	01	35	5	40
Zero Budget Natural Farming "Pre-Vibrant Gujarat Summit 2021"	01	182	12	194
Jai Jawan- Jai Kisan (Uttam Kheti: Unnat Kisan)	02	118	8	126
Sub Total	10	818	66	884
Other activities				
Advisory Services		6404	100	6504
Diagnostic visits	8	88	4	92
Group discussions	2	59	2	61
Kisan Ghosthi	8	726	18	744
Film Show	12	250	40	290
Scientists' visit to farmers field	24	405	5	410
Farmers' seminar/workshop	03	240	25	265
Webinar	03	198	8	206
Method Demonstrations	12	188	5	193
Exposure visits	15	415	22	437
Farmers visit to KVK	0	4200	258	4458
Farmers Scientist Interaction	03	120	10	130
Lecture delivered	70	3500	150	3650
Sub Total	160	16793	647	17440
Total	200	20867	950	21817

Celebration of important days



ICAR 93rd Foundation Day on 16.07.21



National Science Day on 28.02.2021



Parthenium Awareness Week (16-22.08.2021)



Virtual World Milk Day on 01.06.2021



Virtual World Bee Day on 20.05.2021



World Food Day on 16.10.2021

Extension Activities



Pre-Rabi Sammelan on 06.10.2021



Poshan vatika maha abhiyan and plantation on 17.09.21



Farmers awareness program waste to wealth on 12.10.21



Hon'ble PM Live programme on climate resilient technologies on 28.09.21



Agriculture Technology Exhibition



Diagnostic Visit

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	2
Extension Literature	8
News paper coverage	21
Popular articles	16
Radio Talks	12
TV Talks	8
Total	67

VI. PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS**Production of seeds by the KVKs**

Crop	Name of the crop	Name of the variety	Category	Quantity of seed (q)	Value (Rs in lakh)	Number of farmers
Cereals						
	Wheat	Raj 4037	CS	229.00	5.72	290
	Wheat	Raj 4037	FS	143.50	3.57	08
	Barley	RD 2794	TL	17.00	0.37	18
	Paddy	Pusa Basmati 1509	TL	225.0	11.25	-
	Paddy	Pusa Basmati 1609	TL	48.50	2.42	-
Subtotal				663	23.33	
Oilseeds						
	Mustard	DRMR IJ 31	FS	70.50	4.90	25
	Mustard	DRMR IJ 31	CS	41.0	2.87	205
	Soybean	JS 20-34	TL	15.50	1.08	-
Subtotal				127	8.85	
Pulses						
	Chickpea	GNG-2144	FS	27.50	1.65	05
	Chickpea	GNG-2171	FS	34.00	2.38	04
	Chickpea	GNG-2171	CS	29.50	2.06	62
	Greengram	IPM 410-3	FS	22.0	2.20	03
	Greengram	IPM 410-3	TL	20.0	1.80	47
	Blackgram	Kota urd 3	BS	11.0	0.88	01
Subtotal				144.0	10.97	
Spices						
	Coriander	RKD-18	TL	11.00	0.55	41
	Garlic	G-282/G 50	TL	38.40	3.45	25
Subtotal				39.40	4.00	
Grand Total				973.4	47.15	
Pulse seed hub						
	Chickpea	GNG-2144/2171	FS/CS	260.0	20.80	360
	Mungbean	IPM 410-03	FS/CS	42.0	3.78	50
	Urdbean	Pratap urd 1	FS/CS	90.0	6.30	350
Total				392.0	30.88	
Oilseed hub						
	Mustard	DRMR IJ-31	FS/CS	222.0	15.54	580
Total				222.0	15.54	
Grand Total				1587.4	93.57	



Seed production programme at KVK farm

Production of planting materials by the KVKs

Crop	Name of the crop	Number	Value (Rs.)	Number of farmers
Fruit plants	Papaya, Guava, Karonda, Lime etc.	9500	237000	325
Ornamental plants	Crotens, moneyplants, Duranta, Iresin, Erenthum etc.	7000	175000	1400
Total		16500	412000	1725

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity	Value (Rs.)	No. of Farmers
		Kg		
Bio Fertilizers (Vermi compost unit)	Vermicompost	12097	131205	800
	Vermiculture	170	22100	40
Total			153305	
Bio-fungicide (Trichoderma unit)	Trichoderma	821.75	123262	150
Total			123262	

Production of Food Products

Food Products	Name of the Food Product	Quantity	Value (Rs.)	No. of Farmers
		Kg		
Mustard oil	Mustard oil	300	60000	200
Amla/garlic/soya products	Juice	250	17000	250
	Murraba, Pickle, Candy, Chawanprash	200	40000	100
Drumstick product	Powder, Capsule, Pickle	50	10000	100
Total		800	127000	650

Production of livestock materials

Particulars of Livestock	Name of the breed	Number(quantity)	Value (Rs.)	No. of Farmers
Dairy animals				
Gir cow milk	Gir	15379.5 Lt	765077	
Goat milk	Sirohi	841 Lt	29435	
Goatery	Sirohi Breeding Buck	19	379548	

	Sirohi Female Goat	10	95420	
Total			1269480	

VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)	No. of soil health cards distributed
Soil	130	130	04		130
Total	130	130	04		130

VIII. SCIENTIFIC ADVISORY COMMITTEE

Name of KVK	Date of SAC Meeting	Participants
Kota	16.11.2021	23

IX. NEWSLETTER/MAGAZINE

Name of News letter/Magazine	No. of Copies printed for distribution

X. PUBLICATIONS

Category	Number
Research Paper	05
Book	
Technical bulletins	02
Technical reports	02

Research paper :

- (1) Sarita, SS Sharma, Somdutt, Chirag Gautam and Roop Singh (2021) Optimization of spawn rate for Oyster Mushroom cultivation in southern Rajasthan. *The Pharma Innovation Journal* 10(9): 1783-1787.
- (2) Irfan Khan, Pokhar Rawal and Roop Singh (2020) Efficacy of Different Fungitoxicant, Antagonists and De-Oiled Cakes for the Management of Sclerotinia Stem Rot of Indian Mustard Caused by *Sclerotinia sclerotiorum* (Lib) de Bary. *J Mycol PI Pathol.*,50 (2): 155-167.
- (3) Roop Singh, Pokhar Rawal and Irfan Khan (2020) Survey and Integrated Management of Opium Poppy Downy Mildew Caused by *Peronospora arborescens* (Berkeley) de Bary. *J Mycol PI Pathol.*,50 (4): 409-416.
- (4) Roop Singh, Pokhar Rawal and Irfan Khan (2021) Effect of different inoculum levels of *P. arborescens* in disease development and yield losses of opium poppy. *International Journal of Plant Sciences.*, 16(2):93-98.
- (5) Irfan Khan Pokhar Rawal and Roop Singh, (2021) Incidence, yield losses and symptomatology of sclerotinia stem rot (SSR) of Indian mustard (*Brassica juncea* L.) incited by *Sclerotinia sclerotiorum*. *International Journal of Plant Sciences.*, 16(2):102-110.

XI. DETAILS ON RAIN WATER HARVESTING STRUCTURE AND MICRO-IRRIGATION SYSTEM

Activities conducted				
No. of Training programmes	No. of Demonstrations	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)

XII. INTERVENTIONS ON DISASTER MANAGEMENT/UNSEASONAL RAINFALL/HAILSTORM/ COLD WAVES ETC**XIII. DETAILS ON HRD ACTIVITIES****A. HRD activities organized in identified areas for KVK staff by the Directorate of Extension**

Name of the SAU	Title of the training programmes	No of programmes	No. of Participants	No. of KVKs involved
Total				

B. HRD activities organized in identified areas for KVK staff by ATARI

S. No.	Name of scientist	Subject	Date		Place
			From	To	
1					
2					
3					

Award/Recognition of KVK Scientist

S.No.	Name of Scientist	Name of Award	Conferred by	Year of Award
1.	Dr. Roop Singh	Best Poster Presentation Award	UHS Shivmogga, ISMPP Udaipur	Jan., 2021

XIV. CASE STUDIES (CASE STUDIES MAY BE GIVEN IN DETAIL AS PER THE FOLLOWING FORMAT)

Each Zone should propose a minimum of three case studies with good action photographs (with captions on the backside of the hard copy of the photos) on the following topics

- Effective popularization on a larger scale of any one FLD technology and its role in transformation of district agriculture with respect to that particular crop or enterprise
- Performance of the end results of any one technology assessed, its refinement if any and its impact in district agriculture with respect to that crop or enterprise
- Effect of production and supply of seeds and planting material / animal breed / or bio-product and its impact on district agriculture with respect to that crop/ enterprise/ bio-product

XV. STATUS REVOLVING FUNDS

Year	Gross Income (lakh)	Expenditure (lakh)	Net Income (lakh)	Income deposited to the university (lakh)
2016-17	46.79	42.56	4.23	0
2017-18	53.36	39.83	13.53	9.89
2018-19	33.83	27.45	6.38	10.0
2019-20	41.19	40.1	1.09	5.0
2020-21	52.13	39.77	12.36	5.0
Total	227.3	189.71	37.59	29.89

4. Feedback System

4.1 Feedback of Farmers to KVK

Name of KVK	Feedback			
	Technology appropriations	Methodology used	Benefits of OFT/FLD	Future adoption
KVK, Kota	Management of Charcoal Rot in Soybean	Seed treatment with Penflufen + Trifloxystrobin 38 FS @ 1 ml/kg followed by need based two sprays of Pyraclostrobin 13.3 % + Epoxiconazole 5 % SE (Ready mix) at 1 ml per liter water	Lowest per cent disease incidence (1.33) as compared to farmers practices (10.50) and yield was increased by 24.60 per cent.	Farmers are adopting this technology and likely to be adopt more in future
	Varietal assessment of onion	Variety (L -883)	Variety L-883 recorded maximum yield (357.8 q/ha) and observed 32.48 per cent higher over N-53.	Based on the performance, the farmers of Kota district adopted newly released variety L-883 of onion.
	Assessment of supplementary feeding of goat kids for higher growth rates	Feed + 2 % concentrate of body weight	feed + 2 % concentrate of body weight recored maximum body weight (kg) 11.8 and 22.4 at 3 and 6-months goat kids respectively. The percent increase in body weight was 21.00 over farmers practices.	

4.2 Feedback from KVK to Research System

Name of KVK	Feedback from OFT on technology tested
KVK, Kota	Need of resistant varieties soybean against pest/diseases.

4.3 Documentation of the need assessment conducted by the KVK for the training programme

Name of KVK	Category of the training	Methods of the need assessment	Date and Place	No. of participants involved
KVK, Kota	Skill development	Questionnaires	15.02.2021, Bagatari	48

Major Demonstration units at KVK

Demonstration units

KVK has 20 different units, out of which 11 are live demonstration units such as dairy, food processing & value addition, vermi-composting, nursery, mother orchard, bio- pesticide, beekeeping, mushroom production, azolla unit, mineral mixture etc. These live demonstration units are used for imparting skill-oriented trainings to rural and unemployed youths for profitable enterprises and horizontal expansion of these activities in the district. The details of live and other units are given as under:

S.N.	Name of demonstration unit	Brief description	Products	Remarks
1.	Seed production unit	44.00 ha area	100-ton quality seeds per year	Instructional farm
2.	Model unit of food processing & value addition	Capacity- 50q per year	Soya, aonla, fruits, vegetables, spices juices, syrups, pickles etc.	Model unit established under RKVY project costing ₹ 86.15 lakh
3.	Model dairy unit of Gir cow	16 Gir cow	Milk, <i>Go mutra</i> products	Model unit established under RKVY project costing ₹ 91.10 lakh
4.	Model unit of Sirohi goat	30+2 Sirohi breed goat	Meat and milk	Model Unit established under RKVY costing ₹ 40.00 lakh
5.	Model nursery Unit	Capacity 30000 fruit plants and 50000 vegetable seedlings	Plants- papaya, guava, mango, citrus, karonda. Seedlings – tomato, chilly, cabbage, cauliflower and medicinal plants	Model unit established under NHM costing ₹ 38.00 lakh
6.	IPM unit	Capacity 20 q per year	<i>Trichoderma viride</i>	Model unit established under ICAR costing ₹ 20.00 lakh
7.	Plant health clinic	Diagnosis of Plant Insect, Pest and Disease	To diagnose and solve the problem of farmers	Model Unit established under ICAR costing around ₹ 10.00 lakh
8.	Vermicompost unit	Capacity: vermicompost 20 ton, vermi culture 500 kg	Vermicompost and vermiculture	Model Unit established under NHM and RF costing ₹ 5.00 lakh
9.	Bee keeping	20 colony	Honey	Developed under RF
10.	Solar energy water pump	5 HP	To lift water	Developed under NHM costing around ₹ 4.28 lakh
11.	Mother orchard	2.0 ha area	Mango, aonla, guava,	Developed under RF
12.	Azolla unit	100 sqm	Azolla	Developed under RF
13.	Mineral mixture unit for cattle	10 ton per year	Area specific mineral mixture	Developed under RKVY
14.	Agriculture implements	Farm machinery	Different implements	Developed under RF
15.	Automatic weather station	For recording weather data	To generate weather data	Developed under NHM costing around ₹ 4.25 lakh
16.	Roof water harvesting structure	Runoff and roof water harvested	For recycling	Developed under RF
17.	Soil & water testing lab	2500 soil samples	Soil sample & soil health cards	Developed under ICAR

18.	Crop museum unit	latest crop varieties	To demonstrate for farmers	Seasonal at instructional farm
19.	Hydroponics unit	Seasonal vegetables	For skill development training	Developed under RF
20.	Mushroom unit	For skill development training	Oyster & pleurotus mushroom	Developed under RF

MODEL FOOD PROCESSING & VALUE ADDITION UNIT



Newly constructed food processing & milk product unit under RKVY



Hon'ble State Minister for Agriculture and Farmer Welfare of Government of India Sh. Kailash choudhary, and Dr. D.C. Joshi HVC, AU, Kota viewing processed products



Dr. G. L. Keshwa HVC ,AU, Kota and Dr. S.K.Singh, Director, ATARI-Jodhpur visiting soya processing plant at KVK



Sh. Lalchand Kataria Hon'ble Agriculture Minister of Rajasthan and HVC AU,Kota Prof. D.C.Joshi visiting food processing unit

MODEL DAIRY UNIT



Model cattle shed for 20 Gir cows



Mineral mixture unit



Hon'ble State Minister for Agriculture and Farmer Welfare of Government of India Sh. Kailash choudhary, and Dr. D.C. Joshi HVC, AU, Kota visiting dairy unit

Sh. Lalchand Kataria Hon'ble Agriculture Minister and Dr. D.C. Joshi HVC, AU, Kota visiting dairy unit

MODEL GOAT UNIT



Hon'ble State Minister for Agriculture and Farmer Welfare, Government of India Sh. Kailash choudhary , Dr. D.C. Joshi ,HVC, AU, Kota and QRT members visiting model goat unit on 02.10.2020

MODEL NURSERY UNIT



Sh. Bharat Singh Hada, Hon'ble MLA, Sangod, Kota and Prof. DC Joshi, HVC, AU, Kota visiting nursery

Dr. S. K. Singh, Director, ATARI-Jodhpur visiting nursery

MODEL BIO-AGENT - TRICHODERMA UNIT



Dr. S. K. Singh, Director, ATARI-Jodhpur visiting IPM unit

CROP TECHNOLOGY PARK



Rabi crop technology park

Vermi Compost Unit



Dr. S.L. Mehta Chairman QRT , Dr. D.C. Joshi ,HVC, AU, Kota and QRT members visiting vermi compost unit on 10.01.2020



Azolla Unit



Hydroponic Unit

Details of major projects under taken by the KVK

KVK Kota has **10** projects as detailed below which are unique strength for the service of the farming community.

Major projects: KVK was sanctioned ICAR, RKVY projects of worth ₹ 1755.23 lakh for infrastructural development, out of which ₹ 645.05 lakh has been utilized for the creation of national level infrastructure facilities i.e., model units of dairy, food processing & value addition, seed storage & processing and goat. The basic infrastructure like boundary wall, farm approach road was created at KVK. The details of projects are given as under:

S.N.	Projects	Duration	Outlay (₹ in lakh)	Major focus area
1.	Skill empowerment of women in dairy cattle management through adoption of improved livestock production techniques in Kota district of Rajasthan (RKVY)	2014-18	275.76	To enhance the productivity of indigenous cows through feeding and management. To establish model dairy unit of gir cow at KVK. To establish milk parlour and biogas plant.
2.	Processing & value addition of seasonal foods for maximum profitability and income generation among rural youth of south east Rajasthan (RKVY)	2014-19	142.97	Skill development of 150 rural youth per year for their employment through entrepreneurship development. To establish model food processing & value addition unit.
3.	National innovations in climate resilient agriculture (ICAR)	2016-21	45.79	Technology demonstrations on climate resilient technology.

4.	Seed-hub for increasing indigenous production of pulses (ICAR)	2016-19	150.00	To produce, procure and promote of quality seeds of pulses. To establish seed grading & storage unit.
5.	Strengthening of infrastructure facilities at KVK for increasing seed production (RKVY)	2016-21	164.00	To strengthen the infrastructural facilities for quality seeds, planting material and bio-agents.
6.	Establishment of "Agriculture Technology and Management Quality Improvement Centre" (RKVY)	2016-21	292.70	To transfer of technology through different module from a single window delivery system. To establish ATMQIC for rapid transfer of developed technology.
7.	Standardization of crop geometry for enhancing quality tonnage and yield of annual and perennial drumstick in Kota district (RKVY)	2017-22	47.28	Standardization of crop geometry and popularization of drumstick cultivation and its better utilisation.
8.	Establishment of Sirohi goat demonstration unit for raising income and skill development of rural youth of south eastern Rajasthan (RKVY)	2017-22	186.34	To establish model Sirohi goat unit at KVK. Skill development of rural youth.
9.	Seed-hub for increasing indigenous production of oilseeds (mustard) (ICAR)	2018-21	150.00	To produce, procure and promote quality seeds of mustard. To create basic infra structure for mustard seed production.
10.	Establishment of Common Incubation centre for Processing of Coriander, Garlic and Bakery Products (MoFPI)	2021-23	300.39	
Total			1755.23	

1. Food Processing & value addition project under RKVY (2014-2019)

KVK got a project under RKVY during 2014-15 for five years costing Rs. 142.97 lakh on processing & value addition of seasonal foods for increasing profitability and income generation of rural youth of south east Rajasthan. The rural youths have been trained in such a way so that they have established their own entrepreneurship.

The project aims

- ✓ To develop knowledge of rural youths for enhancing their income from their produce through its processing & value addition.
- ✓ Development of skills to become an entrepreneur through processing & preservation technologies, value addition, packaging and marketing of the products
- ✓ To motivate rural youths for establishing small scale processing unit of agro based products in their village for their entrepreneurship development.

The project expected outputs

- ✓ Development of value added products of fruits, vegetables and crops grown in Kota region
- ✓ Skill development in youths for food processing and value addition

Significant achievements

- i. Skill development trainings: During 2018-19, total of 06 training programme for 15-30 days duration were conducted for 150 rural youths. During 2014-20 total 30 training programme for 15-30 days duration were conducted for 750 rural youths out of which, 160 youths have started their own enterprise and rest youth are planning to start their enterprises.
- ii. Infrastructure development:
 - i. Construction of seminar hall of costing Rs.66.0 lakh
 - ii. Renovation of food processing & value addition lab of costing Rs.10.0 lakh
- iii. Equipments for food processing Lab : Procured equipments of Rs. 36.0 lakh.
- iv. Preparation of food products under experimental expenditure.
- v. Exhibitions displayed at MPUAT, Udaipur during 24-26 Oct.,2018.
- vi. 12 research papers published and developed 190 entrepreneurs in different fields of processing some important are:
 - i. Soya processing entrepreneurs who established plants – 20
 - ii. Amla processing entrepreneurs who established plants – 20
 - iii. Garlic processing entrepreneurs who established plants –15
 - iv. Fruit & vegetable processing small units - 135

2. Pulse seed hub under ICAR (2016-2021)

ICAR sanctioned a pulse seed hub project costing Rs.150.0 lakh to this KVK with the aim of production, procurement and promotion of quality seeds of urdbean, mungbean and chickpea, target of 2600 q in five years. During 2016-21, ICAR released total amount of Rs.150.0 lakhs for this project, out of which 50 lakhs were for infrastructure development (seed storage & seed grading unit) and Rs.100.0 lakhs were for revolving fund. Construction of seed storage along with seed cleaning and grading unit has been completed which is functional from October, 2017. The progress of infrastructure development at KVK Kota well in time, was highly appreciated by the Joint Secretary (Crops), Govt. of India during the review meeting of pulse seed hub held at ICAR-IIPR, Kanpur on 07.11.2017 and the Joint Secretary directed all the Nodal officers of pulse seed hub to work on the line of KVK, Kota. Under pulse seed hub KVK target of 2600 q of seed during 2016-21, out of which KVK produced 2684.9 q of seed during 2016-21 as per target as detailed below:

Quality seed production under pulse seed hub during 2016-2021

Crop	Variety	Year of release	Seed production (q)		
			Target	Production	Disposal
2016-17					
Urdbean	PU-31	2008	150	200.0	200.0
Mungbean	IPM 02-3	2009	100	33.2	33.2
Chickpea	GNG-1958	2013	250	255.7	255.7
Total			500	488.9	488.9
2017-18					
Urdbean	PU-31	2008	200	126.0	126.0
Mungbean	IPM 02-3	2009	100	66.0	66.0
Chickpea	GNG-1958	2013	300	422.5	422.5
Lentil	KRL 14-20	2017	-	9.20	9.20
Total			600	623.7	623.7
2018-19					
Urdbean	Pratap urd-1	2013	300	254.5	54.5
Mungbean	IPM 02-3	2009	100	58.2	58.2
Chickpea	GNG-1958	2013	600	773.8	246.0
Total			1000	1086.5	358.7
2019-20					
Mungbean	Sikha	2016	-	28.5	28.5
Chickpea	GNG-1958	2013	-	65.3	793.1
Total				93.8	821.6
2020-21					
Urdbean	Pratap urd-1	2013	150	90.0	90.0
Mungbean	IPM 410-03	2016	50	42.0	42.0
Chickpea	GNG-2144/2171	2016/2017	300	260.0	260.0
Total			500	392.0	392.0
Grand Total			2600	2684.9	2684.9



Seed storage and grading unit under pulse seed hub



Dr. Prabhu Lal Saini Hon'ble Agriculture Minister visiting Mungbean (IPM-02-3) of pulse seed hub



Dr. A. K Singh, DDG (AE) ICAR- New Delhi, and Dr. S K Singh, Director, ICAR-ATARI visiting Chickpea variety GNG-1958 of pulse seed hub

3. Oilseed hub under ICAR (2018-21)

ICAR sanctioned oilseed hub project on mustard costing Rs.150.0 lakh to this KVK with the aim of production, procurement and promotion of quality seeds of mustard targeting of 1150 q in three years. During 2018-19, ICAR released total amount of Rs.107.50 lakhs for this project, out of which 50 lakhs for infrastructure development (seed storage & seed grading unit) and Rs.57.5 lakhs for revolving fund.

Progress of Oilseed hub 2018-19 to 2020-21

Crop	Variety	Year of release	Target (q)	Production (q)	Disposal (q)	Category of seed
2018-19						
Mustard	DRMR IJ-31	2013	400	496.32	147.32	FS & CS
2019-20						
Mustard	DRMR IJ-31	2013	500	574.50	923.50	FS & CS
2020-21						
Mustard	DRMR IJ-31	2013	250	222.00	222.00	FS & CS
Total			1150	1292.82	1292.82	



Sh. Mukhtananad Agrawal, IAS District Collector, Kota visiting Mustard seed production programme at KVK, Kota

4. Establishment of Sirohi goat demonstration unit for raising income and skill development of rural youth of south eastern Rajasthan: under RKVY (2017-2021)

KVK got a project under RKVY during 2017-18 for four years total costing ₹ 186.34 lakh for establishment of model Sirohi goat unit at KVK and skill development of rural youths. KVK received a grant of ₹ 156.00 lakhs during 2017-21 which has been utilized for establishment of model demonstration units at KVK, Kota, Bundi and Karauli of siroht goat and training for rural youth on goat rearing. 40 breeding bucks provided to farmers for breed improvement.



Female goat of Sirohi breed



Male goat of Sirohi breed

NARI (Nutri-Sensitive Agricultural Resources and Innovation) Project

KVK Kota stressed on creating awareness for right nutrition under NARI programme, the basic objective of the project is to emphasized on making the women aware about right nutrition through women-centric programmes. KVK Kota selected two villages Raikheda Chomabibu and Chadinda for various activities of NARI

Activity	Types	Units/Trainings	Area (Sqm)	No of beneficiaries
Nutrition Garden Demonstration	Backyard/Kitchen garden	40	4000	160
	Community level	70	14000	900
	Vertical Garden	20	2000	80
Trainings	Soya Processing	01		25
	Drumstick Processing	01		25
	Nutri thali and nutri garden	01		37
OFT on Drumstick powder and Soya sattu	Drumstick leave powder rich in calcium and vitamin A and soya is the good source of protein and fat, so we prepare a mix of processed soya and drumstick leaf leaves powder to combat the problem of malnutrition in school going children we demonstrated the technology to rural women and incorporate this powder in children daily diet			30 school going children
Awareness programme	Bhojan mai poshak tatv-Food pyramid	01		45
	Varsh bhar kam lagat mai uchit poshan -poshan vatika	01		35
	poshan abhiyan jagrukta karyakram	01		125



Value Addition Technology Incubation Centre in Agriculture (VATICA)

Kota is the major trading centre for Soybean and garlic. The Kota division of the state covering 95.4 per cent acreage of Rajasthan (181712 ha) and enjoying the status of monopoly of coriander production. Whereas processing of all these three crops is very less this region KVK Kota organised various training and awareness programmes under VATICA project in the year 2021. The basic objective of the project is to create awareness and develop skills regarding locally available food crops processing and enhance farmers income. A model unit of food processing & value addition has been established at KVK Kota for providing skill development trainings to the youths. 160 youths have already started their own entrepreneurial units in processing and they earn average income of 6.0 lakhs annually.

Activity	Types	Trainings	No of beneficiaries
Trainings	Soya milk allied product Processing	03	68
	Masala processing	02	42
	Amla processing	01	25
	Long duration Training on Food Processing and value addition (15 Days)	03	75
Awareness programme	Drumstick processing	02	47
	Aushadhiya podho ka prasansakaran	02	32



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SOYBEAN PROCESSING-A SUITABLE REMUNERATIVE ENTERPRISE

Smt.Suman Sharma, Vill: Balita, Tehsil: Ladpura, Dist: Kota, Rajasthan,
Contact No.9460853746



INTRODUCTION:

- Smt. Suman Sharma resides in village Balita, with her husband Sh. Akhil Sharma and other family members. Recently, she is residing at Nayapura, Kota, Rajasthan.
- She is a graduate and having joint family of eight members, including her two children and in laws. Smt. Suman Sharma belongs to a lower middle-class farm family.
- She always wanted to find a better way to earn income to become self-dependent and her dreams come true with establishment of a small Soya Processing Unit in the year 2014.

TRAINING AND MOTIVATION:

- She participated in one-month training programme on food processing & value addition of regional crops in the year 2014 organized at Krishi Vigyan Kendra, Kota. During training, she learned about processing techniques, value addition, packaging, marketing, labelling, cost calculation of products.
- After completion of training, she engaged herself in experimental work for 2-3 months for standardization of her processed products of soybean & aonla, finally established her own Small Unit of Soybean Processed products viz. Soybean *Laddu*, Nuts, Flour etc.

ACHIEVEMENTS:

- At the time of starting of the venture of Soybean processing Smt. Suman Sharma was having her own saving of Rs. 2 lakhs, which become her capital investment, a very crucial resource for her dare and adventure. She used roof top area of her house converting to it hall of 20'x 15' by covering with tin shed to install the processing machinery and working space.
- She constituted an NGO of 100 women entrepreneurs named as "*Siddi Vinayak*" and a Self-Help Group "*RISHI-TANVT*" for food processing entrepreneurship development.
- She procured 'FSSAI' number and 'Shop Act Number', to become a registered entrepreneur.
- She formulated group sale processed products on order basis as home delivery and also exhibited products in different melas and now she is earning about Rs.40, 000

per month.

- As master trainer she attended more than 75 training programmes and trained more than 1000 women and earned approximately Rs. 1-1.5 Lakhs in a year.
- She has also demonstrated her products in Organic festival Delhi (organised by Ministry of Food Processing Industry) and earned more than Rs.30,000/-. She also got order to supply 200 quintal amla candy @ Rs.300kg, recently.
- The Economics of her entrepreneurial venture of processed products of soybean (*Laddu*, Nuts, Flour etc.) is briefed here under-

Establishment Expenditure (Rs.)	2, 00, 000.00
Annual Soya Product Production (Qtl)	12
Average Sale Price of Soya Products (Rs. per kg)	120-300
Annual income (Rs.)	10,00,000.00
Annual expenditure (Rs.)	4,00,000.00
Annual net income (Rs.)	5,00,000 to 6,00,000

CONTRIBUTING FACTORS:

- Smt. Suman Sharma is self-confident, well educated, having very good communicative skills, and have basic entrepreneurial skills of dealing with wide range of people.

AWARDS/RECOGNITION:

- She got appreciation award as women entrepreneur by former Agriculture Minister Sh. Prabhu Lal Saini; Mayor of Kota; and FEGC, Jaipur for her achievements.
- She has been invited to share her success with masses on AIR,Kota and DD, Kisan channel.

IMPORTANCE FOR OTHER FARMERS:

- Smt. Suman Sharma is working as a master trainer and gave her services in more than 75 training programmes organized by *Jan Shikshan Sansthan*, *Prodh Shiksha*, *CFCL*, *Gadhean* and *KVK*, Kota and trained more than 1000 women.



Farmer Earn Sustained Profit through IFS Model



Name of farmer: Ghanshyam Yadav

Village: Suhana, Digod, Kota

Contact No.: 6376223863

Education: 12th pass

Farmer Ghanshyam Yadav is a dedicated and innovative farmer resides in Suhana village of Kota district. He is working hard in his field for his family survival. But due to lack of resources and technical knowledge he is not getting the desirable output even with his sufficient land holding for his existence. To overcome the problems faced by him, he started searching the new method which improves the farm productivity, soil health and income. Later on, he came in contact of Krishi Vigyan Kendra (KVK) Kota in the year 2016-17. KVK scientist provide training and technical guidance to sh. Ghanshyam Yadav. With the guidance of KVK, in a total of 10.0 acres of land area, he practices integrated farming system in his farm by growing guava, papaya, onion, garlic, pumpkin, muskmelon, potato, dairy, vermicompost etc.

Component Description		Period 2020-21			
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Black gram	3	14 q	98000	74800
Field Crop 2	Chickpea	2	25 q	130000	112300
Field Crop 3	Garlic (Intercropping in guava)	3	98 q	520000	380000
Hort. Crop 1	Guava	6 (950 Plant)	240 q	432000	307000
Hort. Crop 2	Papaya (Intercropping)	1	300 q	240000	140000
Hort. Crop 3	Potato	1	120 q	132000	92000
Livestock 1	Buffalo	3	3600 liters	144000	80000
Organic manure	Vermicompost 4 beds (6x3x1.5 feet size)		40 q	used in orchards and vegetables	
Total				1696000	1186100



Intercropping of Chickpea (var. GNG-1581) in Guava Orchard



Cultivation of Potato (Var. Kufri Bahar) with drip irrigation

Successful Case of Direct Marketing

KVK, Kota Model For providing SHG National level platform

To provide SHG National level platform for marketing their food products and exposure on national level. The 10 SHG groups who are preparing value added food products with the technical guidance of KVK, Kota were invited with Home Scientist to exhibit their products in the Organic Festival organized by MOFPI during 21-23 December, 2019. The SHG also sold their products costing Rs.1.26 lacs After participating the festival the SHG obtain the supply order of food products (Amla candy 200 kg@300/kg) and Aalu papad 240 kg@100/kg).



70 किसानों ने लिया प्रशिक्षण 15 किसानों ने शुरू किया उत्पादन

किसानों को रास आने लगी मशरूम की खेती

नवज्योति/कोटा

हाइड्रोपोनिक के किसान इन दिनों खेती में नवाचार कर अपनी आय को दृढ़ान करने के लिए उन्नत खेती के साथ ही नगदी फसलों पर ज्यादा जोर दे रहे हैं। किसान बाजार की डिमांड के अनुसार उत्पादन कर अच्छा मुनाफा कमाने की ओर अग्रसर है। कृषि विज्ञान केन्द्र कोटा से 70 से अधिक किसानों ने मशरूम की खेती करने का प्रशिक्षण लेकर उत्पादन शुरू कर दिया है। 15 से अधिक किसान मशरूम की खेती कर उसके विभिन्न प्रोडक्ट बाजार में लॉन्च कर दिए हैं।

कोविड ने बदला खेती का ट्रेंड

कोरोना महामारी के बाद किसानों ने अपनी खेती का ट्रेंड बदला है। अब किसान इम्यूनिटी बढ़ाने वाली चीजों को खेती ज्यादा कर रहे हैं। हाइड्रोपोनिक इन्ड्री, सफेद मसुरी, दाहसुन, अरबमोम की खेती शुरू की है। बाजार के अभाव पकड़ते ही अब किसानों का रुझान मशरूम की खेती की ओर बढ़ रहा है। इसकी बड़ी होटलों के साथ इम्यूनिटी बढ़ाने में काफी डिमांड आ रही है। इस की भूमिहीन किसान भी आसानी से उगा सकते हैं जिससे यह कामो पासपोर्ट हो रही है। कोविड संक्रमण के बाद लोगों का ध्यान इम्यूनिटी बढ़ाने की तरफ निरंतर बढ़ रहा है। इम्यूनिटी, एनर्जी बढ़ाने तथा अच्छे प्रोटीन के स्रोत के रूप में मशरूम एक बेहतर विकल्प है। मशरूम की खेती भूमिहीन किसान एक बंद कमरे छोड़ने में आसानी से कर सकते हैं।

हृदय व मधुमेह रोगियों के लिए है फायदेमंद

जरनल फिजीशियन डॉ. अमिषी मीणा ने बताया कि मशरूम में कोलेस्ट्रॉल



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की अनुपस्थिति कम स्टाच और बसा होने से यह हृदय रोग व मधुमेह रोगियों के लिए लाभदायक है। बीटा ग्लूकन नामक तत्व उपस्थित होता है, जो कैंसर रोग में प्रभावकारी होता है। बसा कम होने से मोटापा कम करने में सहायक है। रेशेदार एवं क्षारीय तत्वों की बहुलता से यह कब्ज और अजीर्ण रोग से ग्रसित रोगियों के लिए फायदेमंद है। मशरूम अनेक बीमारियों के प्रति रोग प्रतिरोधक क्षमता विकसित करने में सहायक है।

40 दिन में तैयार हो जाता है 60 किलो तक मशरूम

प्रगतिशील किसान अंकित झाला ने बताया कि बटन मशरूम 40 से 45 दिन में तैयार हो जाता है। एक बार में 60-70 किलो तक उत्पादन होता है। बाजार में 180 से 200 रुपए किलो तक बिक रहा है। अभी जगन्नाथपुरा, मंडलाना, कोटा में कई युवा किसान मशरूम का उत्पादन कर रहे हैं।

युवाओं का मशरूम उत्पादन पर ज्यादा रुझान

केन्द्र के पादप रोग विशेषज्ञ डॉ. रूपसिंह ने बताया कि केन्द्र युवा किसानों, ग्रामीण खेरोजित युवाओं के लिए मशरूम की खेती पर कौशल विकास प्रशिक्षण आयोजित करता है। दो साल में अभी तक 70 से अधिक किसान इसका प्रशिक्षण ले चुके हैं। प्रशिक्षण के बाद कोटा जिले के युवा किसान हेमन्त, दिव्या मेहता, रिशी, धर्मेश, लोकेश सिंह, शोभा आदि मशरूम की खेती कर रहे हैं व अच्छा मुनाफा कमा रहे हैं।



40 से 45 दिन में तैयार हो जाती है फसल

मशरूम की खेती में कोटा जिले के युवा किसानों का रुझान भी परम्परागत खेती से आधुनिक खेती की तरफ बढ़ रहा है। इनमें से ही एक युवा किसान अंकित झाला जो रंगवाड़ी कोटा से है। वह ओपेनटैर मशरूम की खेती कर उसके विभिन्न मूल्य वर्धित उत्पाद बनाकर अच्छी आय प्राप्त कर रहे हैं। अंकित बताते हैं की उनके मन में खेती में कुछ नया करने की सोचा और मशरूम की खेती करने के बारे में डान ली।

इन्होंने मशरूम के बारे में जानकारी जुटाई और कृषि विज्ञान केन्द्र, बोरखेड़ा कोटा में मशरूम की खेती में प्रशिक्षण भी लिया। उन्होंने ओपेनटैर मशरूम के 50 बैग से शुरुआत की। जो मात्र 40-45 दिन की फसल है। अत्यंत कम लागत इसकी शुरूआत की जा सकती है। मशरूम के उत्पादन के बाद बाजार में कम कीमत मिलने के कारण इन्होंने मशरूम को सुरक्षाकर इसके पाउडर से पाउडर, बुजिया, कूकीन, प्रोटीनरिच पाउडर व अन्य उत्पाद बना डाले। इन उत्पादों की बिक्री आसानी से हो जाती है और यह किसान व्यवसाय कर अच्छा मुनाफा कमा रहे हैं।

इनका कहना है

किसानों की आय बढ़ाने के लिए कृषि विज्ञान केन्द्र ग्रामीण युवा किसानों, महिलाओं को रोजगार से जोड़ने के लिए व्यवसायिक प्रशिक्षण आयोजित करता है। केन्द्र से कई युवा किसान मशरूम की खेती का प्रशिक्षण लेकर अपना व्यवसाय कर अच्छा मुनाफा कमा रहे हैं।

डॉ. महेंद्र सिंह, चरिच्छ वैज्ञानिक केंद्राध्यक्ष

राजस्थान पत्रिका

कोटा, रविवार, 14 नवम्बर, 2021

04

SUNDAY
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किसान की आय दोगुनी करने का बेहतर विकल्प है बागवानी

बागवानी ने बदली किस्मत, युवाओं को दे रहे रोजगार



पत्रिका
एगो
प्राइड

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कोटा. कोटा संभाग के युवा किसान बागवानी को अपनाकर अपना भाग्य बदलने में लगे हैं। ऐसे ही एक युवा किसान ने पारम्परिक खेती को छोड़ बागवानी को अपनाया और आज एक मुकाम हासिल कर लिया। युवा किसान ने तीन साल पहले 10 बीघा में अमरूद की बागवानी शुरू की, जो आज बढ़कर 40 बीघा में हो रही है। पहले युवा किसान प्राइवेट नौकरी करता था, लेकिन अब 20 लोगों को रोजगार दे रहा है। आमदनी की बात करें तो किसान सालाना 20 लाख रुपए तक कमा रहा है।



10 हजार से ज्यादा पौधे

खण्डेलवाल ने बताया कि 40 बीघा में अमरूद की 10 किस्मों के करीब 10 हजार पौधे लगे हैं। मुख्य किस्मों में बर्फ गोला, वीएनआर वीड्री, ताड़वान पिक, इशार सफेदा, अरका किरण हैं। बर्फ गोला : इस किस्म

का अमरूद मीठा होता है, इसमें फल ज्यादा आते हैं और स्थानीय स्तर पर खूब पसंद किया जाता है। वीएनआर वीड्री : यह एक्सपोर्ट क्वालिटी का है। इसे तोड़ने के बाद 15 से 20 दिन तक रख सकते हैं। इसमें मिठास कम होती है। एक अमरूद का वजन 700 ग्राम से 1

किलो 200 ग्राम तक हो सकता है। ताड़वान पिक : इस किस्म में सबसे ज्यादा मिठास होती है। इसका वजन 300 ग्राम तक होता है। अरका किरण : इस किस्म का अमरूद अंदर से लाल होता है। इसे 2-3 दिन से ज्यादा नहीं रख सकते। इसे जूस बनाने में काम लेते हैं।

बागवानी के लिए छोड़ी नौकरी

कोटा जिले के पीपल्वा निवासी युवा किसान मनोज खण्डेलवाल ने बताया कि पहले उनके पास जर्मनी नहीं थी। पिताजी बंटाई पर खेती करते थे। वह प्राइवेट नौकरी के साथ खेती में पिताजी का हाथ बंटता था। धीरे-धीरे खेती से लगाव होने लगा। 2018 में कृषि विज्ञान केन्द्र बोरखेड़ा में आयोजित बागवानी प्रशिक्षण शिविर में भाग लिया।

इसके बाद देश के अलग-अलग शहरों में उन्नत बागवानी का काम देखा तो लगा कि पारम्परिक खेती से ज्यादा फायदा तो आधुनिक खेती या बागवानी में है। इसके बाद नौकरी छोड़ दी। तीन साल पहले 10 बीघा में अमरूद का बगीचा लगाया। अच्छा मुनाफा होने लगा तो इसे बढ़ाकर 40 बीघा में करने लगा।



बागवानी से आय दोगुनी

कृषि विज्ञान केन्द्र के शस्य वैज्ञानिक डॉ. रामराज मीणा ने बताया कि बागवानी के साथ किसान अपने फसलों की खेती कर आय दोगुनी कर सकते हैं। समय-समय पर बागवानी का प्रशिक्षण शिविर

लगाया जाता है। इसमें किसानों को बागवानी का तरीका, बूंद बूंद सिंचाई, उन्नत किस्म के पौधों व बागवानी के साथ अन्य कौनसी फसल ले सकते हैं, इसकी जानकारी दी जाती है। बागवानी पर किसान को 50 से 60 प्रतिशत तक अनुदान भी मिलता है।

KVK in Media

कृषि वैज्ञानिकों के अनुसार तम्बाकू तथा सेमीलूपर इल्लियों का प्रकोप

सोयाबीन फसल को चट कर रही इल्ली



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कोटा. अतिवृष्टि की तबाही देख चुके किसान अब सोयाबीन की फसल में इल्लियों के प्रकोप से परेशान हैं। जिले में जहां कहीं भी अतिवृष्टि से सोयाबीन की फसल बच गई तो उसमें अब रोग लग गया है। किसान महंगे कीटनाशकों का छिड़काव कर रहे हैं, लेकिन बीमारी नियंत्रण में नहीं आ रही है।

हालत को देखते हुए गुरुवार को कृषि विज्ञान केन्द्र, बोरखेड़ा के वैज्ञानिकों ने कैथून, झालीपुरा, गोदल्याहेड़ी समेत कई गांवों में



कोटा. कृषि विभाग की सर्वे टीम खेतों में सोयाबीन की फसल में कीट प्रकोप का सर्वे करते हुए।

सोयाबीन की फसल में लगे कीट एवं रोग का जायजा लिया। कृषि विज्ञान केन्द्र, बोरखेड़ा के पादप रोग वैज्ञानिक डॉ. रूपसिंह, उद्यान वैज्ञानिक डॉ. रामराज मीना ने

अतिवृष्टि व जल भराव से बची हुई सोयाबीन की फसल में रोग कीट प्रभावित खेतों का निरीक्षण किया। उन्होंने बताया कि सोयाबीन की फसल में इन दिनों तम्बाकू तथा

सेमीलूपर इल्लियों का प्रकोप देखा जा रहा है। केन्द्र के पादप रोग वैज्ञानिक डॉ. रूपसिंह ने बताया कि इन इल्लियों के प्रबंधन के लिए किसान कीटनाशी जैसे इन्डोक्साकार्ब 14.5 एस.सी. 350 मिलीलीटर या फ्ल्यूबेंडामाईड 39.35 एस.सी. 150 मिलीलीटर या स्पिनोटोरम 11.7 एस.सी. 400 मिलीलीटर दवा प्रति हेक्टेयर के हिसाब से छिड़काव कर सकते हैं।

वैज्ञानिक डॉ. रामराज ने बताया कि किसान कीटनाशी दवाइयों को फेरबदल कर तथा उचित मात्रा में छिड़काव करें, जिससे कीटों में कीटनाशी के प्रति प्रतिरोधक क्षमता विकसित न हो साथ ही छिड़काव में पानी की मात्रा 500 से 600 लीटर प्रति हेक्टेयर की दर से रखें।

खबर को विस्तार से पढ़ें
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खाद्य प्रसंस्करण उद्यमियों, इनक्यूबेटीज नवाचारियों को नए उद्योग लगाने में मिलेगी मदद

स्टार्टअप व्यवसाय को विकसित करने के लिए तैयार होगा धनिया इनक्यूबेशन सेंटर

नवसंख्यति/कोटा

कृषि विज्ञान केन्द्र में अब किसानों के धनिया, लहसुन, सोया उत्पादों के प्रसंस्करण के लिए इनक्यूबेशन सेंटर शीघ्र आकार लेने वाला है। इस सेंटर के निर्माण के लिए खाद्य प्रसंस्करण मंत्रालय में 300.39 लाख की स्वीकृति जारी कर दी है। इस इनक्यूबेशन सेंटर के खुलने से लघु प्रसंस्करण उद्यमियों, नए इनक्यूबेटीज नवाचारियों को अब नए उद्योग लगाने में मदद मिलेगी। परिचयना प्रभारो विषय विशेषज्ञ गुनन सनाध्य ने बताया कि स्टार्टअप व्यवसाय को विकसित करने के लिए धनिया इनक्यूबेशन सेंटर खोला जा रहा है। इस इनक्यूबेशन सेंटर की स्थापना से किसान उत्पादक संगं स्वयं सहायता समूह, लघु उद्यम, सहकारी संस्थाओं व स्ट्रेक होल्डर्स को इनक्यूबेशन की सुविधा उपलब्ध कराई जाएगी। इनक्यूबेशन सेंटर में



उद्यमिता विकास हेतु कृषकों, महिलाओं, उद्यमियों, किसान उत्पादक संगं को खाद्य प्रसंस्करण पर कौशल विकास प्रशिक्षण उपलब्ध कराया जाएगा जिससे उनमें खाद्य प्रसंस्करण उद्यम को कुशलता प्रभावी



रूप आ सकेगी। खाद्य प्रसंस्करण उद्यमियों, नए प्रशिक्षणार्थियों, इनक्यूबेटीज नवाचारियों को नए उद्योग की स्थापना हेतु तकनीकी सहायता व मार्गदर्शन मिलेगा।

लघु उद्यमों का होगा विकास

इस इनक्यूबेशन सेंटर की स्थापना से हाड़ीली में खाद्य प्रसंस्करण के क्षेत्र में लघु उद्यमों के विकास में सहायता मिलेगी, नवाचारी, युवाओं में खाद्य प्रसंस्करण के क्षेत्र में उद्यमिता विकास किया जाएगा, जिससे हाड़ीली में स्वरोजगार के नए स्रोत खुलेंगे। कृषि विज्ञान केन्द्र के उद्यान विशेषज्ञ डॉ. रामराज मीणा ने बताया कि इनक्यूबेशन सेंटर के उत्पादों के गुणवत्ता की जांच हेतु फूड टेस्टिंग लेब को स्थापना भी की जाएगी। जिसका साथ हाड़ीली के लघु उद्यमों भी उठा सकेगी कृषि विज्ञान केन्द्र, कोटा के परिसर वैज्ञानिक एवं अल्पध, डॉ. मोहन सिंह ने बताया कि इनक्यूबेशन सेंटर में तीन मुख्य प्रसंस्करण लाइन होंगी। जिसमें धनिया कर्लींग, ड्रॉइंग, पाउडर, पैकेजिंग की स्वचालित प्रसंस्करण लाइन। सोया प्रकरी उत्पाद लाइन में सोयाबीन प्रसंस्करण तथा लहसुन प्रसंस्करण लाइन में लहसुन के उत्पाद का व्यवसायिक उत्पादन किया जाएगा।

खाद्य प्रसंस्करण मंत्रालय भारत सरकार द्वारा एक जिले एक उत्पाद स्वयं के लक्ष्य (वन डिस्ट्रिक्ट वन प्रोडक्ट) कृषि विज्ञान केन्द्र, कोटा पर धनिया, लहसुन व सोया उत्पादों के प्रसंस्करण हेतु बोरखेड़ा में एक इनक्यूबेशन सेंटर स्थापित करने के लिए 300.39 लाख रुपये की स्वीकृति जारी की गई है। इस इनक्यूबेशन सेंटर की स्थापना से उद्यमिता विकास हेतु कृषकों, महिलाओं, उद्यमियों, किसान उत्पादक संगं को खाद्य प्रसंस्करण पर कौशल विकास प्रशिक्षण उपलब्ध कराया जाएगा।

प्रो डी.डी. जोशी,
कुलपति कृषि विज्ञान केन्द्र कोटा

डेयरी फार्मिंग उद्यम के रूप में अपनाए

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कोटा. कृषि विज्ञान केन्द्र में डेयरी प्रबंधन पर चल रहे तीन दिवसीय प्रशिक्षण शिविर का गुरुवार को समापन हो गया। समापन सत्र में विशेषज्ञों ने किसानों, पशुपालकों व ग्रामीण युवाओं को डेयरी फार्मिंग को उद्यम के रूप में अपनाने का आग्रह किया।

कृषि विश्वविद्यालय के प्रसार शिक्षा निदेशक डॉ. एस.के. जैन ने बताया कि करोड़ों सीमांत एवं लघु पशुपालकों के सहयोग से देश में 200 मिलियन टन से अधिक दूध उत्पादन हो रहा है। विश्व में भारत सबसे अधिक दूध उत्पादक देश है। ग्रामीण क्षेत्र में पशु चारे एवं श्रम की उपलब्धता को देखते हुए डेयरी फार्मिंग की विपुल सम्भावनाएं हैं। कृषि विज्ञान केन्द्र के वरिष्ठ वैज्ञानिक एवं अध्यक्ष डॉ. महेन्द्र सिंह



ने बताया कि डेयरी फार्मिंग, बकरीपालन, मुर्गीपालन को व्यवसाय के रूप में अपनाने के इच्छुक युवाओं के लिए प्रशिक्षण शिविर के आयोजित किए जा रहे हैं। युवा इन्हें व्यवसाय के रूप में अपनाकर लाभ कमा सकते हैं। बोरखेड़ा फार्म पर डेयरी व बकरी पालन की मॉडल इकाइयों की स्थापना की गई है। शिविर में

प्रशिक्षण प्रभारी प्रो. आम आसरे, नाबार्ड के जिला विकास प्रबंधक रामप्रसाद शर्मा, जोबनेर कृषि विश्वविद्यालय के प्रो. महेशदत्त, उपनिदेशक पशुपालन डॉ. लक्ष्मण राव, डॉ. अतुल अरोड़ा, डॉ. राकेश कुमार बैरवा ने प्रशिक्षणार्थियों को पशुओं की नस्लें, पशु किसान क्रेडिट कार्ड, संतुलित पशु आहार, बीमारियों व हरे चारे के बारे में जानकारी दी।

दैनिक नवज्योति

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वैज्ञानिकों का सुझाव, युवाओं को कृषि उद्यमी बनाना होगा

कृषि विज्ञान केन्द्र पर 28 वीं वैज्ञानिक सलाहकार समिति की बैठक हुई

नवज्योति/कोटा

कृषि विज्ञान केन्द्र पर मंगलवार को 28 वीं वैज्ञानिक सलाहकार समिति की बैठक हुई। बैठक को अध्यक्षता कृषि विश्व विद्यालय के कुलपति प्रो. डी सी जोशी ने की। जिसमें जिले के विभिन्न विभागों-कृषि, उद्यान, पशुपालन, नाबार्ड, कृषक उत्पादक संगठन, प्रगतिशील कृषकों के प्रतिनिधियों ने भाग लिया। जोशी ने बताया कि युवाओं को कृषि उद्यमी बनाने के लिए केन्द्र को खाद्य प्रसंस्करण, मशरूम उत्पादन, मधुमक्खीपालन, डेयरी फार्मिंग, सब्जी उत्पादन आदि पर और अधिक कौशल विकास प्रशिक्षण किए जाने की आवश्यकता है। प्रशिक्षण में तकनीक कौशल के



साथ-साथ युवाओं को टैको-इकोनॉमिक विजनिस्पलान एवं उद्यम स्थापना को ऋण के लिए बैंक से जोड़े जाने की आवश्यकता है। छोटे किसानों को उत्पादक संगठन बनाए जाने की

आवश्यकता है। प्रो. जोशी ने अनुसंधान एवं प्रसार वैज्ञानिकों को इन्टरफेस आयोजित करने तथा कोटा संभाग में मशरूम उत्पादन को बढ़ावा देने के लिए केन्द्र पर एक मॉडल मशरूम

उत्पादन इकाई की स्थापित की जाने की आवश्यकता बताई। कार्यक्रम के मुख्य अतिथि डॉ. एस के सिंह, निदेशक जोधपुर ने बताया कि कृषि विज्ञान केन्द्रों को लघु एवं सीमान्त

किसानों को आजीविका को स्थायीत्व प्रदान करने के लिए तकनीकी मॉडल विकसित कर प्रदर्शन किए जाने की आवश्यकता है।

डॉ. एसके जैन निदेशक प्रसार शिक्षा कृषि विश्वविद्यालय कोटा ने बताया कि किसानों को उच्च गुणवत्ता के बीज उपलब्ध कराने के लिए बीज उत्पादन को बढ़ावा तथा तकनीकी उत्पाद जैसे ट्रैक्टर, डीजल, वेस्टी-कम्पोजर आदि का उत्पादन बढ़ा कर किसानों को उपलब्ध कराया जाए। डॉ. अशोक कुमार, केन्द्राध्यक्ष, भाकू अनुप- भारतीय मूदा एवं जल संरक्षण संस्थान, अनुसंधान केन्द्र, कोटा ने प्राकृतिक संसाधनों के यूडिसिवस उपयोग की सलाह दी।

डॉ. बलवन्त सिंह, परियोजना निदेशक, सोएडी, कोटा ने पानी के समुचित उपयोग हेतु सुष्मसिंचाई प्रणाली का बढ़ावा देने, डॉ. आर.के. जैन,

उपनिदेशक एवं पदेन परियोजना निदेशक (आत्मा) ने कृषकों के भ्रमण, शंकर लाल जागिड़, प्रभारी अधिकारी, गेन्टर ऑफिसर सीलेन्स, सिट्टस, कोटा ने सिट्टस स्मार्ट विलेज, खेमराज शर्मा, उपनिदेशक कृषि ने जैविक खेती को बढ़ावा देने, डॉ. अतुल अरोड़ा, प्रभारी पशु विज्ञान केन्द्र ने मुर्गी पालन को बढ़ावा देने के लिए जानकारी दी।

डॉ. महेन्द्र सिंह वरिष्ठ वैज्ञानिक एवं अध्यक्ष, कृषि विज्ञान केन्द्र, केन्द्र की वर्ष 2021 की प्रति प्रतिविदन एवं वर्ष 2022 की कार्य योजना समिति के समर्थ प्रस्तुत की।

डॉ. आर.के. बैरवा ने फसल प्रदर्शन, डॉ. रामराज मीणा ने जिले में उद्यानिकी कार्य, गुजान सनाहय ने खाद्य प्रसंस्करण, न्यूट्रो गार्डन, डॉ. रूप सिंह ने फसल संरक्षण एवं डॉ. राम आसरे ने पशुपालन गतिविधियों की जानकारी दी।