

# KRISHI VIGYAN KENDRA, KOTA

## (Agriculture University, Kota)

### ANNUAL PROGRESS REPORT: 2023

#### APR SUMMARY

#### 1. Training Programmes

| Clientele               | No. of Courses | Male        | Female     | Total participants |
|-------------------------|----------------|-------------|------------|--------------------|
| Farmers & farm women    | 40             | 766         | 712        | 1478               |
| Rural youths            | 9              | 148         | 76         | 224                |
| Extension functionaries | 1              | 39          | 15         | 54                 |
| Sponsored Training      | 5              | 256         | 95         | 351                |
| Vocational Training     | 2              | 61          | 23         | 84                 |
| <b>Total</b>            | <b>57</b>      | <b>1270</b> | <b>921</b> | <b>2191</b>        |

#### 2. Frontline demonstrations

| Enterprise      | No. of Farmers | Area (ha)     | Units/Animals |
|-----------------|----------------|---------------|---------------|
| Oilseeds (NFMS) | 225            | 70.0          | 225           |
| Pulses (NFMS)   | 125            | 50.0          | 125           |
| TSP             | 114            | 53.2          | 114           |
| Nutri-garden    | 50             | 1.0           | 50            |
| MIDH            | 5              | 2.5           | 5             |
| <b>Total</b>    | <b>559</b>     | <b>176.70</b> | <b>559</b>    |

#### 3. Technology Assessment & Refinement

| Category                   | No. of Technology Assessed & Refined | No. of Trials | No. of Farmers |
|----------------------------|--------------------------------------|---------------|----------------|
| <b>Technology Assessed</b> |                                      |               |                |
| Crops                      | 2                                    | 20            | 20             |
| Livestock                  | 2                                    | 10            | 10             |
| <b>Total</b>               | <b>04</b>                            | <b>30</b>     | <b>30</b>      |

#### 4. Extension Programmes

| Category             | No. of Programmes | Total Participants |
|----------------------|-------------------|--------------------|
| Extension activities | 211               | 101836             |
| <b>Total</b>         | <b>211</b>        | <b>101836</b>      |

#### 5. Mobile Advisory Services

| Name of KVK | Message Type                    | Type of Messages |           |             |           |              |                  |              |
|-------------|---------------------------------|------------------|-----------|-------------|-----------|--------------|------------------|--------------|
|             |                                 | Crop             | Livestock | Weather     | Marketing | Aware-ness   | Other enterprise | Total        |
| Kota        | Text only                       | 10               |           | 5           |           | 10           | 10               | 35           |
|             | Voice only                      |                  |           |             |           |              |                  |              |
|             | Voice & Text both               | 5                |           |             |           | 10           | 10               | 25           |
|             | <b>Total Messages</b>           | <b>15</b>        |           | <b>5</b>    |           | <b>20</b>    | <b>20</b>        | <b>60</b>    |
|             | <b>Total farmers Benefitted</b> | <b>15000</b>     |           | <b>2000</b> |           | <b>13000</b> | <b>10000</b>     | <b>40000</b> |

### 6. Seed & Planting Material Production

|  | Quantity/Number | Gross Value (in Lakh) |
|--|-----------------|-----------------------|
| Pulse seed hub (q)   | 294.50          | 25.43                 |
| Oilseed hub-Mustard (q)  | 258.0           | 30.96                 |
| KVK Instructional farm (q)   | 1658.0          | 97.22                 |
| Planting material (No.)  |                 |                       |
| Fruits (Papaya, guava, jamun, lime)  | 12500           | 2.60                  |
| Ornamentals (Crotens, moneyplants, Duranta, Iresin)                            | 6800            | 0.75                  |
| Bio-Products (kg)  |                 |                       |
| vermicompost   | 10000           | 1.50                  |
| vermi culture  | 120             | 0.15                  |
| Trichoderma  | 980             | 1.96                  |
| Food Processing Material<br>(Juice & Oil (q) Pickle, Murabba, Chawnprash, (Kg) | 1000            | 2.50                  |
| Gir Cow Milk Production (Litre)  | 19244           | 9.92                  |
| Gir Cow Ghee (Litre)   | 67              | 1.00                  |
| Buttermilk (L)   | 700             | 0.14                  |
| Sale of Gir Cow and Male Calf  | 18              | 5.36                  |
| Sale of goat (male and female)   | 58              | 6.75                  |
| <b>Total</b>   |                 | <b>186.24</b>         |

### 7. Soil, water & plant Analysis

| Samples          | No. of Beneficiaries | Value Rs. |
|------------------|----------------------|-----------|
| Soil 100         | 100                  | -         |
| <b>Total 100</b> | <b>100</b>           | <b>-</b>  |

### 8. HRD and Publications

| Sr. No. | Category                    | Number | Sr. No. | Category                  | Number |
|---------|-----------------------------|--------|---------|---------------------------|--------|
| 1       | Workshops                   | 1      | 8       | Research papers           | 09     |
| 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       | 05     |
| 7       | Training Manual             | 01     | 14      | Ongoing research projects | 08     |

# Krishi Vigyan Kendra, Kota

(Directorate of Extension Education)  
Agriculture University, Kota

## DETAIL REPORT OF APR-2023

### 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,<br>Borkhera, Kota<br>(Rajasthan) | Office<br>0744-2326726 | FAX<br>0744-2326726 | kvkborkherakota@gmail.com<br>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,<br>Borkhera, Baran Road,<br>Kota-324001 | 0744-2321204 | 0744-2321203 | vcaukota@gmail.com<br><a href="http://www.aukota.org">www.aukota.org</a> |
| Directorate of Extension<br>Education, Kota                     | 0744-2326727 | 0744-2326727 | <a href="mailto:deeaukota@gmail.com">deeaukota@gmail.com</a>             |

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

| Name               | Telephone / Contact |             |  |
|--------------------|---------------------|-------------|--|
|                    | Residence           | Mobile      | Email  |
| Dr. Mahendra Singh |                     | 94142-13488 | <a href="mailto:kvkborkherakota@gmail.com">kvkborkherakota@gmail.com</a> |

#### 1.4. Year of sanction of KVK : 1992



### 1.5. Staff Position (as on 30<sup>th</sup> December, 2023)

| S. No. | Sanctioned post             | Name of the incumbent   | Designation | Discipline | Pay Scale (Rs.) | Present basic (Rs.) | Date of joining | Permanent /Temporary | Cat. | Mobile no. | Age | Email id   |  |
|--------|-----------------------------|-------------------------|-------------|------------|-----------------|---------------------|-----------------|----------------------|------|------------|-----|--|--|
| 1      | Sr. Scientist and Head      | Dr. Mahendra Singh      | SS&H        | A.H.       | 37400-67000     | 177200              | 01.08.13        | Permanent            | Gen. | 9414213488 | 57  | <a href="mailto:mskvktonk@gmail.com">mskvktonk@gmail.com</a>               |  |
| 2      | SMS                         | Dr. K.C. Meena          | Asso. Prof. | Agri. Ext. | 37400-67000     | 161600              | 07.10.23        | Permanent            | ST   | 9602956432 | 50  | <a href="mailto:kamal@aukota.org">kamal@aukota.org</a>                     |  |
| 3      |                             | Dr. Rakesh Kumar Bairwa | Asso. Prof. | Agro.      | 37400-67000     | 147900              | 01.10.20        | Permanent            | SC   | 9413093805 | 43  | <a href="mailto:rb_agro@rediffmail.com">rb_agro@rediffmail.com</a>         |  |
| 4      |                             | Dr. Roop Singh          | SMS         | PP         | 15600-39100     | 63100               | 01.10.20        | Permanent            | Gen. | 9571889881 | 31  | <a href="mailto:roop0008@gmail.com">roop0008@gmail.com</a>                 |  |
| 5      |                             | Mrs. Gunjan Sanadhya    | SMS         | H. Sc.     | 15600-39100     | 63100               | 07.01.12        | Permanent            | Gen  | 9462312966 | 43  | <a href="mailto:gunjansharma1982@gmail.com">gunjansharma1982@gmail.com</a> |  |
| 6      |                             | Vacant                  |             |            |                 |                     |                 |                      |      |            |     |  |  |
| 7      |                             | Vacant                  |             |            |                 |                     |                 |                      |      |            |     |  |  |
| 8      | Programme Assistant         | Sarita                  | TA          | Agric.     | 9300-34800      | 41300               | 15.07.20        | Permanent            | OBC  | 9785360660 | 27  | <a href="mailto:saritabeniwal17@gmail.com">saritabeniwal17@gmail.com</a>   |  |
| 9      | Computer Programmer         | Vacant                  |             |            |                 |                     |                 |                      |      |            |     |  |  |
| 10     | Farm Manager                | Dr. Mukesh Choudhary    | TA          | Agric.     | 9300-34800      | 41300               | 01.10.20        | Permanent            | OBC  | 9680750819 | 32  | <a href="mailto:mukeshnetad2013@gmail.com">mukeshnetad2013@gmail.com</a>   |  |
| 11     | Accountant / Superintendent | Vacant                  |             |            |                 |                     |                 |                      |      |            |     |  |  |
| 12     | Stenographer                | Vacant                  |             |            |                 |                     |                 |                      |      |            |     |  |  |
| 13     | Driver                      | Sh. Tara Chand          | Driver      | -          | 5200-20200      | 40900               | 04.04.03        | Permanent            | OBC  | 9352503640 | 53  |  |  |
| 14     |                             | Jagdish Prasad          | Driver      | -          | 9300-34800      | 72400               | 01.10.20        | Permanent            | OBC  | 9460676913 | 57  |  |  |
| 15     | Supporting staff            | Vacant                  |             |            |                 |                     |                 |                      |      |            |     |  |  |
| 16     |                             | Vacant                  |             |            |                 |                     |                 |                      |      |            |     |  |  |

\* Sh. Rahul Gupta, Clerk grade I, deputed at KVK from Agriculture University, Kota

**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         |
|        | <b>Total</b>                     | <b>44.0</b> |

**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                    |               |                    |                        |
| 19.   | Common Incubation Center (CIC)                 | MoFPI             | 2022            |                    | 300.39                   |               |                    |                        |

**B) Vehicles**

| Type of vehicle | Year of purchase | Cost (Rs.) | Total Kms. Run | Present status |
|-----------------|------------------|------------|----------------|----------------|
| Jeep Bolero     | 2006             | 464992     | 322846         | Condemn        |
| Tractor-Novo    | 2023             | 858000     | 1171 hr        | good           |
| Motor Cycle     | 2011             | 50000      | 106240         | 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 <sup>3</sup> ) | 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 batteries  | 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 30<sup>th</sup> SAC meeting conducted in the year: 26.05.2023

| S. No. | Name of Participants   | Designation  |
|--------|------------------------|--|
| 1      | Dr. A. K Vyas          | Hon'ble Vice Chancellor, AU, Kota                    |
| 2      | Dr. S.K. Jain          | Director Ext. Edu., AU, Kota                         |
| 3      | Dr. Pratap Singh       | Director Research, AU, Kota                          |
| 4      | Dr. M. C. Jain         | Dean, COA, Kota                                      |
| 5      | Dr. M.S. Meena         | PS (AE), ICAR- ATARI, Jodhpur                        |
| 6      | Dr. Ramavtar Jat       | PS, ICAR-IISWC, R.C, Kota                            |
| 7      | Sh. P. K. Gupta        | Additional Director (Ag), Kota                       |
| 8      | Sh. J. K. Sharma       | Project Director, CAD, Kota                          |
| 9      | Sh. Khemraj Sharma     | Joint. Director Ag. (Ext.), Agriculture deptt., Kota |
| 10     | Dr. P. K. Singh        | Joint. Director (Horti.), Kota                       |
| 11     | Sh. R.P. Sharma        | DDM, NABARD  |
| 12     | Sh. K. R. Meena        | LDM, Kota  |
| 13     | Sh. Shanker Lal Jangir | Assoc. Director SIAM, Kota                           |
| 14     | Sh. Anandi Lal Meena   | Dy. Director Kota Horticulture, Kota                 |



|    |                            |  |
|----|----------------------------|--|
| 15 | Sh. S. L. Meena            | Director, RSETHI, Kota                                   |
| 16 | Sh. B. L. Soni             | RSETHI, Kota   |
| 17 | Dr. Ashok Kumar Malav      | ASCO, RSSOCA, Kota                                       |
| 18 | Dr. Arjun Verma            | Officer Incharge, MAF, Kota                              |
| 19 | Dr. Tanoj choudhary        | DEO, CAD, Sultanpur                                      |
| 20 | Sh. Abdul Khan             | Dy. Director (AG), CAD, Kota                             |
| 21 | Dr. Deva Ram Maghwal       | Nodal Officer, AC&ABC, Kota                              |
| 22 | Sh. A. K. Mishra           | Sr. Tech. Officer(H) NHRDF, Kota                         |
| 23 | Dr. Amirita Pritam Shivani | Assistant Director, Fisheries deptt., Kota               |
| 24 | Sh. Satyaprakash Meena     | Asstt. Director (Horti.), Kota                           |
| 25 | Sh. Lala Ram Chaudhary     | Area Manager, IFFCO, Kota                                |
| 26 | Sh. Mukesh Kumar Verma     | Area Manager, NSC, Kota                                  |
| 27 | Sh. Anil Kumar             | Dy. PD, ATMA, Kota                                       |
| 28 | Sh. Shahil Singh           | DTE-NF, RAJEEVIKA, Kota                                  |
| 29 | Dr. Sandeep Bhuskat        | SVO, AH, Kota  |
| 30 | Smt. Smrita                | District Resource Person, PMFME                          |
| 31 | Sh. Hariom Meena           | Program Head, AIR, Kota                                  |
| 32 | Sh. Suresh Kuma Gautam     | Programm Executive, AIR, Kota                            |
| 33 | Smt. Hemlata Songra        | Progressive farm Women, Kota                             |
| 34 | Smt. Suman Sharma          | Progressive farm Women, Kota                             |
| 35 | Smt. Babi Rani             | Progressive farm Women, Kota                             |
| 36 | Sh. Suresh Meena           | Progressive farmers village Raikheda                     |
| 37 | Durgesh Kumari Kushwah     | FPO, Chechat   |
| 38 | Sh. Santosh Kumar Meghwal  | Bhairwi Kisan Farmers Producer Organization, Fanda, Kota |
| 39 | Dr. Mahendra Singh         | Senior Scientist & Head, Kota                            |

### **Minutes of 30<sup>th</sup> SAC meeting (26.05.2023)**

The 30th Scientific Advisory Committee (SAC) meeting of KVK, Kota was held on 26.05.2023, Friday under the chairmanship of Dr. Abhay Kumar Vyas, Hon'ble Vice Chancellor, Agriculture University, Kota to review the progress of different mandated activities of the centre and the action plan for the ensuing year. The meeting began with Saraswati Vandana \

First of all, Dr. Mahendra Singh, Senior Scientist and Head, KVK, Kota welcomed honorable guests and presented the action taken report on the recommendations of the 29th SAC meeting which was held on 18.05.2022. Senior Scientist and Head, KVK, Kota presented the detailed progress report of 2022-23 and annual workplan for ensuing year 2023-24 of KVK, Kota. The session opened for discussion & suggestions before the house.

Dr. Abhay Kumar Vyas, Hon'ble Vice Chancellor, Agriculture University, Kota appreciated and motivated the scientists to work with zeal. He suggested that hydroponic and vertical farming units should be established at KVK. He emphasized there is a need to organization of workshop of successful agripreneurs of the district. The skill development trainings should be conducted according to guidelines.

Visits of school students need to be increased to increase their knowledge in agriculture. He emphasized there is a need of documentation of successful agripreneurs of the district. He also suggested to identify the needs of stakeholders and share the relevant technology with them. There is need to develop innovative business model for sustainable income generation of the farmers. There should be an approach for feedback of farmers and impact assessment of each technology.

Dr. M.S. Meena, Principal Scientist, ICAR-ATARI zone II, Jodhpur emphasized on income generation demonstration units at farmers field under TSP scheme and crop-based demonstrations should be link up with other schemes like NFSM, MIDH and KVK contingency grant. He suggested that detailed project reports (DPR) should be prepared for farmers/rural youth. He also pointed out that updating of KVK activities on KVK portal on regular basis. There is need to upload list of successful agripreneurs of the district on KVK website. He also suggested that need based training programme should be planned and on farm trials (OFTs) should be problem based.

Dr. S. K. Jain, Director Extension Education, Agriculture University, Kota emphasized on upgradation of the nursery unit and need to increase planting materials i.e., ornamentals, fruit plants and vegetable seedlings to ensure round the year availability. There is need of establishment of mushroom demonstration unit to conduct vocational/skill development training programme.

Dr. Pratap Singh, Director Research, Agriculture University, Kota suggested that pre- and post-harvest soil nutrient compositions should be tested of natural farming plots. There is need to promote direct seeded rice (DSR) in rice growing areas of the district. Dr. M.C. Jain, Dean, College of Agriculture, Kota suggested that each on farm trials (OFTs) should be frame and finalize in ZREAC meeting so the recommendations will be included in package of practices of the zone.

Dr. P. K. Gupta, Additional Director (Agriculture Extension) Kota suggested to increase the vegetable production in the district. He also insisted that the KVK and line departments should work together for uplifting the socio-economic conditions of farmers. There is a need to conduct demonstrations on climate resilient varieties. Sh. Khemraj Sharma, Joint Director (Agriculture Extension), Kota suggested that the sale rate of seeds should be at par with RSSC, NSC etc. There is need to organize more numbers of joint field visits of KVK scientists and officers of line department at farmers field to get more feedback problems.

Dr. Ramavatar Jat, Principal Scientist, ICAR-IISWC-regional center, Kota suggested that marketing intelligence should be focused in each skill development training programme. There is need of intercropping demonstration, pest management inputs demonstration in natural farming. Sh. S.L. Jangir, Associate Director, SIAM, Kota suggested to work for increasing the area under citrus orchard in the district.

Sh. Ram Prasad Sharma, DDM, NABARD, Kota emphasized that there is a need of technical support for FPOs in the district. Mrs. Smrita, Nodal officer, PMFME, MoFPI, Kota suggested to make one working group for entrepreneurs for technical support and guidance of them.

All the SAC members gave their valuable suggestions for strengthening mandated activities of KVK in the forthcoming year. The event was attended by all the members of SAC, comprising officials of line departments, other invitees from government institutes, NGOs, FPOs, NABARD and progressive farmers. All the suggestions received from the participants were noted down for the action to be initiated in the ensuing year. Publication of the scientists were released by the dignitaries during the occasion. Dr. B.L. Nagar, Scientist (Horticulture) proposed vote of thanks to the chief guest and all members of the meeting. The meeting adjourned with the permission of chairs.

**Dr. A. K. Vyas, HVC, Agriculture University, Kota addressing stakeholders of 30<sup>th</sup> SAC on 26.05.2023**

**1.8 B) Visit of Dr. T. C. Jain, Senior Agriculturist, World Bank**

Dr. T.C. Jain, Senior Agriculturist, World Bank visited all live units viz., Model Dairy, Goat unit, Food processing & value addition etc., and appreciated the work of KVK, Kota.

**Dr. T.C. Jain, Senior Agriculturist, World Bank visiting Model Dairy, Goat unit, Food processing & value addition unit of KVK, Kota on 13.09.2023**

## 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                                   | 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 volcanic hills and the scarps.  | 78.4           | 15.0                  |
| 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 <sup>-1</sup> 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 <sup>-1</sup> 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 <sup>-1</sup> 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 <sub>3</sub> in the profile in some form and constant hydrolysis of CaCO <sub>3</sub> 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) |         |         |      |
|---------------|--------------|---------|---------|-------|---------------------|---------|---------|-------|----------------------|---------|---------|------|
|               | 2020-21      | 2021-22 | 2022-23 | 2023  | 2020-21             | 2021-22 | 2022-23 | 2023  | 2020-21              | 2021-22 | 2022-23 | 2023 |
| <b>Kharif</b> |              |         |         |       |                     |         |         |       |                      |         |         |      |
| Soybean       | 185.8        | 188.1   | 187.8   | 182.8 | 254.3               | 188.1   | 80.82   | 182.8 | 1368                 | 1000    | 428     | 1000 |
| Paddy         | 35.9         | 24.2    | 31.2    | 38.2  | 138.9               | 108.6   | 110.8   | 171.8 | 3694                 | 4486    | 3544    | 4499 |
| Urdbean       | 20.9         | 31.89   | 27.6    | 21.4  | 12.22               | 22.3    | 5.62    | 14.9  | 585                  | 142     | 204     | 700  |
| <b>Rabi</b>   |              |         |         |       |                     |         |         |       |                      |         |         |      |
| Wheat         | 149.8        | 120.8   | 108.25  | 99.46 | 655.29              | 568.5   | 517.65  | -     | 4375                 | 4705    | 4782    | -    |
| Mustard       | 28.1         | 62.3    | 82.47   | 72.63 | 51.9                | 119.1   | 139.70  | -     | 1848                 | 1910    | 1694    | -    |
| Chickpea      | 51.8         | 49.7    | 41.49   | 57.90 | 95.1                | 89.7    | 64.89   | -     | 1835                 | 1803    | 1564    | -    |
| Coriander     | 26.7         | 36.2    | 20.19   | 10.13 | 44.1                | 47.4    | 27.84   | -     | 1652                 | 1311    | 1379    | -    |
| Garlic        | 17.3         | 27.5    | 11.90   | 23.55 | 115.8               | 175.8   | 80.92   | -     | 6674                 | 6377    | 6800    | -    |

Source: Agriculture statistics, GOR, 2020-21, 2021-22, 2022-23 & 2023

## 2.5. Weather data

| Month          | Rainfall (mm) | Temperature ° C |             | Relative Humidity (%) |              |
|----------------|---------------|-----------------|-------------|-----------------------|--------------|
|                |               | Maximum         | Minimum     | Maximum               | Minimum      |
| January 2023   | 24.0          | 25.20           | 7.40        | 78.00                 | 60.60        |
| February 2023  | 0             | 34.10           | 14.10       | 67.40                 | 34.20        |
| March 2023     | 15.2          | 34.10           | 16.60       | 42.50                 | 18.20        |
| April 2023     | 0             | 41.40           | 20.30       | 32.40                 | 12.80        |
| May 2023       | 8.5           | 43.70           | 23.10       | 44.40                 | 13.80        |
| June 2023      | 165.0         | 41.50           | 24.20       | 90.00                 | 25.40        |
| July 2023      | 324.0         | 36.20           | 21.60       | 88.40                 | 64.80        |
| August 2023    | 49.20         | 35.00           | 25.10       | 88.00                 | 72.60        |
| September 2023 | 125.20        | 35.10           | 24.40       | 85.00                 | 63.10        |
| October 2023   | 0             | 36.60           | 18.90       | 86.00                 | 55.00        |
| November 2023  | 0             | 33.20           | 14.00       | 84.60                 | 61.10        |
| December 2023  | 41.70         | 23.40           | 9.80        | 95.60                 | 48.50        |
| <b>Total</b>   | <b>752.8</b>  | <b>43.70</b>    | <b>7.40</b> | <b>95.60</b>          | <b>12.80</b> |

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

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

## 2.7 Details of Operational area / Villages (2023)

| Name of the block | Name of the village                         | Major crops & enterprises                              | Major problem identified   | Identified Thrust Areas   |
|-------------------|---|--|--|---|
| Ladpura           | Charinda, Chainpura, Kheda, Tathed, Sogriya | 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 Biboo, Bagtari, Chomakot, Balapura    | Soybean, Gram, Wheat, Mustard, vegetables crops, Dairy | Leaf eating caterpillars in soybean, FMD in animals, Wilt in Chickpea, Weed infestation    | Productivity enhancement of crops through INM, IWM and IPM in crops, improved animal feeding & Vaccination in dairy animals |
| Kherabad          | Raikhera, Kaliyakui                         | 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,                               | 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

| S.N. | Crop/Enterprise               | Thrust Area  |
|------|-------------------------------|--|
| 1.   | Crops                         | To enhance the productivity of major crops of district, Promotion of INM, IPM and Natural farming  |
| 2.   | Fruit crops                   | Diversification in agriculture through fruits, vegetables and spices crops, INM and IPM practices  |
| 3.   | Processing and value addition | Entrepreneurship development through value addition in soybean, coriander, garlic, anola, pulses crop etc.   |
| 4.   | Livestock & Poultry           | Feeding, Breed improvement, & Housing management of livestock & poultry  |
| 5.   | Sustainable agriculture       | Promotion of soil health management for sustainable agriculture, integrated farming system (IFS) for more profitability, promote climate resilient technologies  |
| 6.   | SHGs                          | Empowerment of rural women in agriculture & allied skills through SHGs and drudgery reducing technologies  |
| 7.   | FPOs                          | Formation of FPOs of dairy and value-added products of horticulture crops.   |
| 8.   | Conservation                  | Promotion of soil & water conservation practices.  |
| 9.   | Entrepreneurs                 | Entrepreneurship development in rural youth through vocational trainings like processing and value addition, Dairy farming, goat rearing, mushroom cultivation, protected cultivation, beekeeping etc. |

### 3. TECHNICAL ACHIEVEMENTS

#### 3. A. Details of target and achievements of mandatory activities by KVK during 2023

| 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           | 30                  | 30          | 150   | 174.45      | 500               | 559         |

| 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  | 35      | 40          | 1200                   | 1478        | 180                  | 211         | 50000                  | 101836        |
| Rural youth  | 5       | 9           | 200                    | 224         |                      |             |                        |               |
| Extn. Functionaries  | 2       | 1           | 50                     | 54          |                      |             |                        |               |
| <b>Total</b>   |         | <b>50</b>   | <b>1450</b>            | <b>1756</b> | <b>180</b>           | <b>211</b>  | <b>50000</b>           | <b>101836</b> |

| Seed Production (Qtl.) |             |                               | Planting material (Nos.) |             |                               |
|------------------------|-------------|-------------------------------|--------------------------|-------------|-------------------------------|
| 5                      |             |                               | 6                        |             |                               |
| Target                 | Achievement | Distributed to no. of farmers | Target                   | Achievement | Distributed to no. of farmers |
|                        |             |                               | 15000                    | 19300       | 1820                          |

### 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 Disease Management | Chickpea | Management of Collar rot in chickpea              | 10            | 10             |
| Integrated Pest Management    | Soybean  | Management of leaf eating caterpillars in soybean | 10            | 10             |
| <b>Total</b>                  |          | <b>02</b>   | <b>20</b>     | <b>20</b>      |

#### 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             |
| Nutrition management | Cow               | Assessment of mineral supplements for better productive and reproductive efficiency in cows | 05            | 05             |
| <b>Total</b>         |                   | <b>02</b>   | <b>10</b>     | <b>10</b>      |



## I.B. TECHNOLOGY ASSESSMENT IN DETAIL

### INTEGRATED PEST MANAGEMENT

**Technology Assessed: Management of leaf eating caterpillars in soybean**

**Problem definition: low yield of soybean due to severe incidence (up to 30 %) of foliage feeders**

**Thematic area: Integrated Pest Management**

**Source of technology: ICAR-IISR, Indore (MP)**

Soybean is a major kharif crop which have 1.88 lakh ha area in the Kota district, however, the incidence of leaf eating caterpillars resulting in yield losses. To avoid losses caused by these defoliator pests' microbial insecticide was used under this on farm testing (OFT) because microbial insecticides play an important role in insect pests management. They are biodegradable in nature and making the soybean cultivation more profitable rather than chemical insecticides. The Results indicated that spray of *Beauveria bassiana* ( $1 \times 10^8$  cfu) @ 1 liter/ ha after initial incidence of leaf eating caterpillars and 2<sup>nd</sup> Spray after 15 days interval found effective and 2.33 average larval population per meter row length (mrl) was recorded as compared to farmers practices (4.00).

**Table: Efficacy of *B. bassiana* for management of leaf eating caterpillars in soybean**

| Technology option  | No. of trials | Mean larval population per meter row length (mrl) | Yield q/ha | % Increase in yield over farmer practice | Net return (Rs/ha) | % Increase in Net return | B:C Ratio |
|--|---------------|---|------------|--|--------------------|--------------------------|-----------|
| T <sub>1</sub> - Injudicious use of pesticides (Emamectin benzoate 5 SG @ 180 gm/ha, Cloranthraniliprole 18.5 SC @ 100 ml/ha and Profenophos 50 EC @ 1.25 l/ha after severe incidence of leaf eating caterpillars (FP) | 10            | 3.00  | 14.50      | -  | 31500              | -                        | 1.89      |
| T <sub>2</sub> - Spray of <i>Beauveria bassiana</i> ( $1 \times 10^8$ cfu) @ 1 liter/ ha after initial incidence of leaf eating caterpillars and 2nd Spray after 15 days interval (AP)                                 |               | 2.33  | 15.66      | 8.00                                     | 38036              | 20.74                    | 2.11      |



## INTEGRATED DISEASE MANAGEMENT

### Technology Assessed: Management of Collar rot in Chickpea

**Problem definition: low yield of chickpea due to severe incidence (up to 30 %) of collar rot disease**

**Thematic area: Integrated Disease Management**

**Source of technology: NIPHM, Hyderabad and POP Zone IIIa of Rajasthan**

Chickpea is a major Rabi pulse crop which have 49.70-thousand-hectare area in the Kota district, however, the incidence of collar rot disease at initial stage of plant causes yield losses in chickpea. Therefore, an on-farm testing carried out to assess the efficacy of *Trichoderma* as soil and seed treatment for management of collar rot in chickpea during two consecutive years 2021-22 and 2022-23. The Results indicated that seed treatment with *Trichoderma viride* at 10 g/kg seed plus application of *T. viride* at 5 kg/ha multiplied on decomposed with 100 kg FYM at the time of sowing found lowest mean per cent disease incidence (3.25) as compared to farmers practices (19.49). The average yield of T2 was 23.12 q /ha which was increased by 19.40 per cent over farmers practices (19.20 q/ha).

**Table 1 : Efficacy of *T. viride* for management of Collar rot diseases in Chickpea**

| Technology option  | No. of trials | Percent Disease Incidence (PDI) at 40 DAS |         |       | Yield q/ha |         |       | % Increase in yield over farmer practice |         |       |
|--|---------------|---|---------|-------|------------|---------|-------|--|---------|-------|
|  |               | 2021-22                                   | 2022-23 | Mean  | 2021-22    | 2022-23 | Mean  | 2021-22                                  | 2022-23 | Mean  |
| T <sub>1</sub> - Seed treatment with vitavax (Carboxin 37.5% + Thiram 37.5%) at 1g/kg seed (FP)  | 10            | 18.33                                     | 20.66   | 19.49 | 19.50      | 18.90   | 19.20 | -  | -       | -     |
| T <sub>2</sub> - Seed treatment with <i>T. viride</i> at 10 g/kg seed + Application of <i>T. viride</i> at 5 kg/ha multiplied on decomposed with 100 kg FYM at the time of sowing (AP) |               | 2.50                                      | 4.00    | 3.25  | 23.74      | 22.50   | 23.12 | 19.77                                    | 19.04   | 19.40 |



**Table 2: Economic parameters of the efficacy of *T. viride* for management of Collar rot diseases in Chickpea**

| Technology option  | Net return (Rs/ha) |         |       | % Increase in Net return |         |       | B:C Ratio |         |
|--|--------------------|---------|-------|--------------------------|---------|-------|-----------|---------|
|  | 2021-22            | 2022-23 | Mean  | 2021-22                  | 2022-23 | Mean  | 2021-22   | 2022-23 |
| T <sub>1</sub> - Seed treatment with vitavex (Carboxin 37.5% + Thiram 37.5%) at 1g/kg seed (FP)  | 70885              | 68170   | 69527 | -                        | -       | -     | 3.27      | 3.23    |
| T <sub>2</sub> - Seed treatment with <i>T. viride</i> at 10 g/kg seed + Application of <i>T. viride</i> at 5 kg/ha multiplied on decomposed with 100 kg FYM at the time of sowing (AP) | 92560              | 91750   | 92155 | 30.57                    | 34.58   | 32.54 | 3.93      | 3.75    |

The result (Table 2) indicated that the average net returns of T<sub>2</sub> was Rs.92155 which was 32.54 per cent higher over T<sub>1</sub> (Rs. 69527). The B:C ratio of T<sub>2</sub> was 3.93 and 3.75 during 2021-22 and 2022-23 respectively.

## LIVESTOCK ENTERPRISES

### 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 19<sup>th</sup> 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 during 2022 and 2023. Results indicated that feed + 1.5 % concentrate of body weight recorded maximum mean body weight (kg) 12.45 and 12.80 of 3 months goat kids and 19.60 and 23.25 of 6 months goat kids during 2022 and 2023 respectively. The percent increase in mean body weight was 2.81 and 18.62 of 3 months and 6 months goat kids over farmers practices during 2022 and 2023 respectively.

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

| Technology Option  | Body weight (kg) |      |       |                           |             |      |       |                           | Body weight (g) gain/day |        |
|--|------------------|------|-------|---------------------------|-------------|------|-------|---------------------------|--------------------------|--------|
|  | At 3 months      |      |       |                           | At 6 months |      |       |                           | 2022                     | 2023   |
|  | 2022             | 2023 | Mean  | Per cent increase over FP | 2022        | 2023 | Mean  | Per cent increase over FP |                          |        |
| T <sub>1</sub> = Farmer's practice (Feed + 0.5 % concentrate of body weight) | 12.3             | 12.6 | 12.45 | -                         | 19.4        | 19.8 | 19.6  | -                         | 79.00                    | 80.00  |
| T <sub>2</sub> = (Feed + 1.5 % concentrate of body weight)                   | 12.5             | 13.1 | 12.80 | 2.81                      | 22.9        | 23.6 | 23.25 | 18.62                     | 115.0                    | 116.66 |

## Technology Assessed: Assessment the efficacy of poly-herbal mixture supplementation on milk production and postpartum reproduction in Gir cows

**Problem definition** : Low milk yield in desi cow  
**Thematic area** : Nutrition management  
**Source of technology** : ICAR- NDRI, Karnal

Milk yield of desi cow is low due to poor feeding management. Poly-herbal mixture (25g of each Saunf, Ajwain, Methi, cardamom, Chandrasur mixed with 250 g Gur) are believed to assist in the initiation, augmentation of milk production and improve udder health. Therefore, KVK, Kota conducted on farm trials to assess the efficacy of poly-herbal mixture on milk production and postpartum reproduction in Gir cows during 2022 and 2023. The results indicated that the average milk yield was obtained under T2 (9.5 lt/day) which was 14.37 per cent higher than farmers practices (8.3 lt/day). Its also observed that the timing of expulsion of placenta also lower 3.1 hrs and 3.0 hrs than farmers practices 6.3 hrs and 6.5 hrs during 2022 and 2023 respectively.

**Table: Assessment the efficacy of poly-herbal mixture supplementation on milk production and postpartum reproduction in Gir cows**

| Technological options  | No. of trials   | Milk Yield (lt/day) |      |      |                                  | Expulsion of placenta (hrs) |      |
|--|-----------------|---------------------|------|------|----------------------------------|-----------------------------|------|
|  |                 | 2022                | 2023 | Mean | % Increase in milk yield over FP | 2022                        | 2023 |
| T <sub>1</sub> = Farmers practice (standard feeding practice of farmers)   | 05 (10 animals) | 8.2                 | 8.5  | 8.3  | -                                | 6.3                         | 6.5  |
| T <sub>2</sub> = T <sub>1</sub> + Poly herbal mixture supplementation from day of calving day to 10 days of postpartum |                 | 9.3                 | 9.8  | 9.5  | 14.37                            | 3.1                         | 3.0  |



## II. FRONTLINE DEMONSTRATION

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

List of technologies demonstrated during previous year and popularized during 2023 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            | Use of improved variety Giriraj (DRMR IJ-31) and POP | Trainings, Demon. Field day, Literature, Meetings, Farmer fair, FS interaction | 4                               | 50             | 20         |
| 2      | Soybean (NFSM)   | ICM            | Improved variety JS 20-34 and POP                    |  | 5                               | 60             | 30         |
| 3      | Chickpea (NFSM)  | ICM            | Improved variety GNG-2171 and POP                    |  | 5                               | 50             | 20         |
| 3      | Blackgram (NFSM) | ICM            | Improved variety Mukundra urd 2 and POP              |  | 4                               | 75             | 30         |
| 4      | Coriander (TSP)  | ICM            | Improved variety RKD-18 and POP                      |  | 1                               | 10             | 5.0        |

### (B) Details of FLDs implemented during 2023 (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 |
| <b>FLD on oilseeds</b> |                |               |   |                 |           |        |                               |        |       |
| 1                      | Mustard (NFSM) | ICM           | 1. Improved seed (Radhika and DRMR 1165-40)<br>2. Seed treatment with metalaxyl 6 g/ kg seed followed by Imidachlopride 8 ml /kg seed<br>3. Sulphur 90% at 25 kg /ha<br>4. Soil application of <i>Trichoderma</i> at 2.5 kg /ha pre-mix with FYM<br>5. Diamethoate 30 % EC at 1.25 l/ha | Rabi 2022-23    | 20        | 20     | 19                            | 31     | 50    |
| 2                      | Soybean (NFSM) | ICM           | 1. Improved variety JS 20-98<br>2. Seed treatment with Carbendazim 50 WP at 2 g/kg seed<br>3. Soil treatment with <i>Trichoderma viride</i> @ 2.5 kg/ha (mixed with 40-50 kg FYM)<br>4. Sowing of crop in row of 30 cm apart  | Kharif, 2023    | 30        | 30     | 48                            | 27     | 75    |
| 3                      | Mustard (NFSM) | ICM           | 1. Improved seed (Radhika and DRMR 1165-40)   | Rabi 2023-24    | 20        | 20     | 75                            | 25     | 100   |

|                          |                  |     |  |              |      |      |    |    |    |
|--------------------------|------------------|-----|--|--------------|------|------|----|----|----|
|                          |                  |     | <ol style="list-style-type: none"> <li>2. Seed treatment with metalaxyl 6 g/ kg seed followed by Imidachlopride 8 ml /kg seed</li> <li>3. Sulphur 90% at 50 kg /ha</li> <li>4. Soil application of <i>Trichoderma</i> at 2.5 kg /ha pre-mix with FYM</li> <li>5. Diamethoate 30 % EC at 1.25 l/ha</li> </ol>   |              |      |      |    |    |    |
| 4.                       | Mustard (TSP)    | ICM | Improved variety DRMR 1165-40  | Rabi 2023-24 | 12.5 | 12.5 | 23 | 0  | 23 |
| <b>FLD on pulses</b>     |                  |     |  |              |      |      |    |    |    |
| 1                        | Chickpea (NFSM)  | ICM | <ol style="list-style-type: none"> <li>1. Improved seed (GNG 2171) at 75 kg /ha</li> <li>2. Seed treatment with Carbendazim 2 g/ kg seed followed by NPK consortia at 8 ml/kg seed</li> <li>3. Profenophos 50% EC at 1 l/ha</li> <li>4. Soil application of <i>Trichoderma</i> at 2.5 kg /ha pre-mix with FYM</li> </ol>   | Rabi 2022-23 | 20   | 20   | 45 | 30 | 75 |
| 2                        | Blackgram (NFSM) | ICM | <ol style="list-style-type: none"> <li>1. Improved varieties Kota urd 3 and Kota urd 4</li> <li>2. Seed treatment with Carbendazim 50 wp @ 2 g/kg seed</li> <li>3. Soil treatment with <i>Trichoderma viride</i> @ 2.5 kg/ha (mixed with 40-50 kg FYM)</li> <li>4. Sowing at 30 cm. rows</li> <li>5. Zink Sulphate (33%) 15 kg/ha</li> <li>6. Recommended N:P (20:40) kg/ha</li> <li>7. Weed management by application of Imezathapyre 10 S.L. at 550 ml/ha</li> <li>8. Profenophos 50 EC 1 L/ha Diamethoate 30 EC 1 L/ha</li> </ol> | Kharif, 2023 | 30   | 30   | 21 | 29 | 50 |
| 3                        | Chickpea (TSP)   | ICM | <ol style="list-style-type: none"> <li>1. Improved seed (GNG 2144 at 75 kg /ha</li> <li>2. Seed treatment with Carbendazim 2 g/ kg seed</li> <li>3. Soil application of <i>Trichoderma</i> at 2.5 kg /ha pre-mix with FYM</li> </ol>   | Rabi 2023-24 | 0    | 18.4 | 46 | 0  | 46 |
| <b>FLD on other crop</b> |                  |     |  |              |      |      |    |    |    |
| 1.                       | Coriander (TSP)  | ICM | Improved variety RKD-18, Sulphur, Zinc sulphate,   | Rabi 2022-23 | 5.0  | 5.0  | 10 | 0  | 10 |
| 2.                       | Coriander (MIDH) | ICM | Improved variety RKD-18, Hexaconazole, <i>Trichoderma</i> , Carbendazim  | Rabi 2023-24 | 2.5  | 2.5  | 0  | 05 | 05 |
| 3.                       | Coriander (TSP)  | ICM | Improved variety RKD-18  | Rabi 2023-24 | 12.5 | 12.5 | 23 | 0  | 23 |

|    |             |     |                          |              |     |     |    |   |    |
|----|-------------|-----|--------------------------|--------------|-----|-----|----|---|----|
| 4. | Wheat (TSP) | ICM | Improved variety HPBW 01 | Rabi 2023-24 | 4.8 | 4.8 | 12 | 0 | 12 |
|----|-------------|-----|--------------------------|--------------|-----|-----|----|---|----|

### 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 (NFMS)   | Rabi 2022-23 | Irrigated                        | Clay loam | L              | L | H | Soybean, Blackgram       | 10-25.10.2022            | 20-25.03.2023            | 115                    |                   |
| Soybean (NFMS)   | Kharif, 2023 | Rainfed                          | Clay loam | L              | L | H | Chickpea, mustard/ Wheat | 1-7.07.2023              | 5-25.10.2023             | 771                    |                   |
| Mustard (NFMS)   | Rabi 2023-24 | Irrigated                        | Clay loam | L              | L | H | Soybean, Blackgram       | 10-25.10.2022            | 20-25.03.2023            | 115                    |                   |
| Chickpea (NFMS)  | Rabi 2022-23 | Irrigated                        | Clay loam | L              | L | H | Soybean, Blackgram       | 20.10.2022 to 10.11.2022 | 15.03.2023 to 30.03.2023 | 115                    |                   |
| Blackgram (NFMS) | Kharif, 2023 | Rainfed                          | Clay loam | L              | L | H | Chickpea, mustard/ Wheat | 1-10.07.2023             | 25.09.2023 to 05.10.2023 | 771                    |                   |
| Chickpea (TSP)   | Rabi 2023-24 | Irrigated                        | Clay loam | L              | L | H | Soybean, Blackgram       | 20.10.2022 to 10.11.2022 | 15.03.2023 to 30.03.2023 | 115                    |                   |
| Mustard          | Rabi 2023-24 | Irrigated                        | Clay loam | L              | L | H | Soybean, Blackgram       | 15-25.10.2023            | awaited                  |                        |                   |
| Coriander (MIDH) | Rabi 2023-24 | Irrigated                        | Clay loam | L              | L | H | Soybean, Blackgram       | 25.10.23 to 05.11.23     | awaited                  |                        |                   |
| Mustard (TSP)    | Rabi 2023-24 | Irrigated                        | Clay loam | L              | L | H | Soybean, Blackgram       | 15-25.10.2023            | awaited                  |                        |                   |
| Coriander (TSP)  | Rabi 2023-24 | Irrigated                        | Clay loam | L              | L | H | Soybean, Blackgram       | 25.10.23 to 05.11.23     | awaited                  |                        |                   |
| Wheat (TSP)      | Rabi 2023-24 | Irrigated                        | Clay loam | L              | L | H | Soybean, Blackgram       | 15-25.11.2023            | awaited                  |                        |                   |

### Technical Feedback on the demonstrated technologies

| Crop     | Feed Back   |
|----------|---|
| Chickpea | <ol style="list-style-type: none"> <li>Quality seeds to be made available to the farmers before sowing time</li> <li>Fresh Bio-fertilizers to be available at sowing time</li> <li>Farmers to be motivated for use of ferti-seed drill &amp; sowing of crops with appropriate spacing</li> <li>Research on post emergence broad spectrum herbicide in chickpea will be done.</li> </ol> |
| Mustard  | <ol style="list-style-type: none"> <li>Quality seeds of improved varieties to be made available to the farmers before sowing time.</li> <li>Sulphur &amp; Zn fertilizer along with recommended NP to be encouraged. Excess use of urea to be discouraged.</li> <li>Farmers need to convey about importance of sowing the crop at right spacing (30 cm</li> </ol>                        |



|           |   |
|-----------|---|
|           | rows) using optimum seed rate   |
| Blackgram | <ol style="list-style-type: none"> <li>1. Quality seeds to be made available to the farmers before sowing</li> <li>2. Fresh bio-fertilizers should be available at sowing time</li> <li>3. New variety resistant to water logging &amp; YVM should be evolved</li> <li>4. Research on post emergence broad spectrum herbicide in blackgram should be strengthen</li> </ol>  |
| Soybean   | <ol style="list-style-type: none"> <li>1. Availability of quality seeds of newly recommended varieties should be ensured.</li> <li>2. Fresh bio-fertilizers should be available at sowing time</li> <li>3. High yielding short duration variety resistant to water logging should be evolved.</li> <li>4. Farmers should be aware about use of recommended doses of fertilizers.</li> <li>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.</li> </ol> |

### Farmers' reactions on specific technologies

| Crop     | Feed Back  |
|----------|--|
| Chickpea | <ol style="list-style-type: none"> <li>1. GNG-2171 and GNG 2144 varieties is found better yielding, having good branching, more number of pods per plant, moderately resistant to wilt disease.</li> <li>2. Seed treatment with carbendazim found effective for disease management.</li> <li>3. Soil treatment with <i>Trichoderma viride</i> might be effective for diseases.</li> </ol>  |
| Mustard  | <ol style="list-style-type: none"> <li>1. Variety Radhika and DRMR 1165-40 were appreciated due to higher yield, good branching and pod formation.</li> <li>2. Seed treatment with metalaxyl is effective for white rust and imidacloprid check the initial attack of painted bug.</li> <li>3. Sowing at 30-45 cm rows found beneficial for better light interception.</li> <li>4. Sulphur &amp; zinc fertilizers enhanced pod formation &amp; yield</li> </ol>  |
| Urdbean  | <ol style="list-style-type: none"> <li>1. Kota urd 3 and Kota urd 4 varieties were accepted by the farmers for bold seed, good growth &amp; branching, however, good yields could not be achieved due to high rainfall and crop submergence during crop growth.</li> <li>2. Seed treatment with carbendazim found effective for disease management.</li> <li>3. Weed management with application of Pendamethalin 30 EC at 0.1 kg a.i. /ha found effective for most of the weeds</li> <li>4. Spray of Imidacloprid 17.8 SL 250 ml/ha found effective for sucking pest management and increased pod formation.</li> </ol> |
| Soybean  | <ol style="list-style-type: none"> <li>1. Variety JS 20-98 was accepted by the farmers for more number of pods per plant</li> <li>2. Seed treatment with carbondazim found effective for disease management.</li> <li>3. Soil application of trichoderma found effctive to manage soil and seed born diseases at germination stage</li> <li>4. Fertilizer application @ 20-40 kg NP/ha found yield remunerative</li> </ol>   |

### Extension and Training activities under CFLD-Chickpea Rabi 2022-23

| S.No. | Extension Activities Organized                | Date          | No. of participants | Remarks |
|-------|---|---------------|---------------------|---------|
| 1     | Farmers and field selection                   | 21.09.22      | 28                  |         |
| 2     | Farmers and field selection                   | 27.09.23      | 19                  |         |
| 3     | Field visit for monitoring                    | 04.01.23      | 11                  |         |
| 4     | Field visit for monitoring                    | 16.01.23      | 14                  |         |
| 5     | Field visit for monitoring                    | 19.01.23      | 8                   |         |
| 6     | Field day on chickpea                         | 23.01.23      | 64                  |         |
| 7     | Field visit for monitoring                    | 27.01.23      | 14                  |         |
| 8     | On-campus -Nutrients management in rabi crops | 21-22.10.2022 | 21                  |         |
| 9     | Fieldday on Chickpea                          | 27.02.2023    | 385                 |         |

**Extension and Training activities under CFLD-Mustard Rabi 2022-23**

| S.No. | Activities                                       | Date          | No. of participants | Remarks |
|-------|--|---------------|---------------------|---------|
| 1.    | Farmers and field selection                      | 21.09.22      | 25                  |         |
| 2.    | Field visit for monitoring                       | 23.12.2022    | 08                  |         |
| 3.    | Field visit for monitoring                       | 04.01.2023    | 16                  |         |
| 4.    | Field visit for monitoring                       | 16.01.23      | 14                  |         |
| 5.    | Field visit for monitoring                       | 19.01.23      | 8                   |         |
| 6.    | Field day on Mustard                             | 13.2.2023     | 115                 |         |
| 7.    | On-campus -Production techniques of mustard crop | 29-30.09.2022 | 25                  |         |

**Extension and Training activities under CFLD-Blackgram Kharif, 2023**

| S.No | Activity   | Date           | No. of participants | Remarks |
|------|--|----------------|---------------------|---------|
| 1.   | Field day on CFLD Blackgram under NFSM                   | 12.09.2023     | 53                  |         |
| 2.   | On campus- Nutrients and weeds mangement in kharif crops | 29-.30.06.2023 | 24                  |         |
| 3.   | On campus- Production techniques of blackgram            | 03-04.07.2023  | 31                  |         |
| 4.   | On campus- Nutrients mangement in kharif crops           | 11-12.07.2023  | 30                  |         |

**Extension and Training activities under CFLD-Soybean Kharif, 2023**

| S. No | Activity  | Date           | No. of participants | Remarks |
|-------|---|----------------|---------------------|---------|
| 1.    | Field day on CFLD Soybean under NFSM                    | 17.09.2023     | 49                  |         |
| 2.    | On-campus -Production techniques of soybean             | 27-28.06.2023  | 26                  |         |
| 3.    | On campus- Nutrients and weeds mangemnt in kharif crops | 29-.30.06.2023 | 24                  |         |
| 4.    | On campus- Nutrients mangement in kharif crops          | 11-12.07.2023  | 30                  |         |

**Extension and Training activities under CFLD-Mustard Rabi 2023-24**

| S. No | Activities  | Date      | No. of participants | Remarks |
|-------|---|-----------|---------------------|---------|
| 1.    | On-campus: Cultivation practices of mustard under natural farming | 9.10.2023 | 24                  |         |
| 2.    | Field visit for monitoring  | 05.01.24  | 14                  |         |
| 3.    | Field visit for monitoring  | 18.01.24  | 10                  |         |
| 4.    | Field visit for monitoring  | 19.01.24  | 26                  |         |
| 5.    | Field visit for monitoring  | 10.02.24  | 15                  |         |
| 6.    | Fieldday on Mustard   | 15.02.24  | 104                 |         |

**Performance of Frontline demonstrations****Cluster Frontline demonstrations on oilseed 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                  |
| Mustard | ICM           | Variety DRMR 1165-40 & POP | DRMR-1165-40 | 25             | 10        | 25.5         | 16  | 19.21 | 16.74 | 14.76               |
|         |               | Variety DRMR 2017-15 & POP | DRMR-2017-15 | 25             | 10        | 25.5         | 16  | 19.13 | 16.92 | 13.06               |

|               |     |                            |              |    |      |                |      |      |       |       |
|---------------|-----|----------------------------|--------------|----|------|----------------|------|------|-------|-------|
| Soybean       | ICM | Variety JS 20-98 & POP     | JS 20-98     | 75 | 30   | 21.5           | 11.5 | 16.4 | 14.17 | 15.74 |
| Mustard       | ICM | Variety DRMR 2017-15 & POP | DRMR 2017-15 | 50 | 20   | Result awaited |      |      |       |       |
| Mustard       | ICM | Variety DRMR 1165-40 & POP | DRMR 1165-40 | 50 | 20   | Result awaited |      |      |       |       |
| Mustard (TSP) | ICM | Variety DRMR 1165-40       | DRMR 1165-40 | 23 | 12.5 | 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        |
| 23960                                | 104694       | 80734      | 4.37      | 21880                        | 91233        | 69353      | 4.17      |
| 23120                                | 104258       | 81138      | 4.51      | 21140                        | 92214        | 71074      | 4.36      |
| 35200                                | 75506        | 40306      | 2.15      | 36180                        | 65938        | 29758      | 1.82      |

### Cluster Frontline demonstrations on pulse 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                  |
| Chickpea  | ICM           | Variety GNG 2171 & POP   | GNG 2171   | 50             | 20.0      | 26.5         | 17.5 | 22.51 | 19.10 | 17.85               |
|           |               | Variety GNG 2144 & POP   | GNG 2144   | 25             | 10.0      | 26.2         | 18.5 | 22.67 | 18.66 | 21.49               |
| Blackgram | ICM           | Variety Kota urd 3 & POP | Kota urd 3 | 33             | 26.4      | 7.25         | 4.95 | 6.06  | 4.52  | 34.07               |
|           |               | Variety Kota urd 4 & POP | Kota urd 4 | 17             | 13.6      | 6.25         | 4.25 | 5.3   | 3.85  | 37.66               |

| 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        |
| 31370                                | 118170       | 86800      | 3.77      | 29350                        | 99764        | 70414      | 3.40      |
| 29380                                | 120944       | 91564      | 4.12      | 28240                        | 99551        | 71311      | 3.53      |
| 28200                                | 56510        | 28310      | 2.00      | 26480                        | 42064        | 15584      | 1.59      |
| 27690                                | 55065        | 27375      | 1.99      | 26190                        | 42064        | 15874      | 1.61      |

### 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                  |
| Coriander (TSP)  | ICM           | Improved variety RKD 18 | RKD 18  | 10             | 5.0       | 21.87          | 14.62 | 16.26 | 14.80 | 9.86                |
| Coriander (MIDH) | ICM           | Improved variety RKD 18 | RKD 18  | 10             | 5.0       | Result awaited |       |       |       |                     |

|                  |     |                          |         |    |      |                |
|------------------|-----|--------------------------|---------|----|------|----------------|
| Coriander (TSP)  | ICM | Improved variety RKD 18  | RKD 18  | 23 | 12.5 | Result awaited |
| Coriander (MIDH) | ICM | Improved variety RKD 18  | RKD 18  | 05 | 2.5  | Result awaited |
| Wheat (TSP)      | ICM | Improved variety HPBW 01 | HPBW 01 | 12 | 4.8  | 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        |
| 28500                                | 155210       | 126710     | 5.54      | 27500                        | 134300       | 106800     | 4.88      |



## 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 | Net return |           |
| Nutrigarden (10x10 m <sup>2</sup> ) | Vegetable kit           | 50             | 50           | 700                         | 2200             | 1500       | 3.15      |



**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      |
| <b>I Crop Production</b>                           |                |              |            |            |           |           |            |             |            |            |
| Weed Management                                    | 2              | 15           | 39         | 54         | 0         | 0         | 0          | 15          | 39         | 54         |
| Integrated Crop Management                         | 3              | 23           | 57         | 80         | 0         | 0         | 0          | 23          | 57         | 80         |
| Natural Farming                                    | 3              | 48           | 104        | 152        | 7         | 0         | 7          | 55          | 104        | 159        |
| <b>Total</b>                                       | <b>8</b>       | <b>86</b>    | <b>200</b> | <b>286</b> | <b>7</b>  | <b>0</b>  | <b>7</b>   | <b>93</b>   | <b>200</b> | <b>293</b> |
| <b>II Horticulture</b>                             |                |              |            |            |           |           |            |             |            |            |
| <b>a) Vegetable Crops</b>                          |                |              |            |            |           |           |            |             |            |            |
| Off season vegetable                               | 1              | 2            | 26         | 28         | 0         | 0         | 0          | 2           | 26         | 28         |
| <b>Total (a)</b>                                   | <b>1</b>       | <b>2</b>     | <b>26</b>  | <b>28</b>  | <b>0</b>  | <b>0</b>  | <b>0</b>   | <b>2</b>    | <b>26</b>  | <b>28</b>  |
| <b>b) Fruits</b>                                   |                |              |            |            |           |           |            |             |            |            |
| Layout and Management of Orchards                  | 1              | 27           | 4          | 31         | 13        | 6         | 19         | 40          | 10         | 50         |
| Cultivation of Fruit                               |                |              |            |            |           |           |            |             |            |            |
| <b>Total (b)</b>                                   | <b>1</b>       | <b>27</b>    | <b>4</b>   | <b>31</b>  | <b>13</b> | <b>6</b>  | <b>19</b>  | <b>40</b>   | <b>10</b>  | <b>50</b>  |
| <b>c) Ornamental Plants</b>                        |                |              |            |            |           |           |            |             |            |            |
| Nursey Management                                  | 1              | 16           | 10         | 26         | 5         | 0         | 5          | 21          | 10         | 31         |
| <b>Total (c)</b>                                   | <b>1</b>       | <b>16</b>    | <b>10</b>  | <b>26</b>  | <b>5</b>  | <b>0</b>  | <b>5</b>   | <b>21</b>   | <b>10</b>  | <b>31</b>  |
| <b>d) Plantation crops</b>                         |                |              |            |            |           |           |            |             |            |            |
| <b>Total (d)</b>                                   |                |              |            |            |           |           |            |             |            |            |
| <b>e) Tuber crops</b>                              |                |              |            |            |           |           |            |             |            |            |
| <b>f) Spices</b>                                   |                |              |            |            |           |           |            |             |            |            |
| Production and Management technology               |                |              |            |            |           |           |            |             |            |            |
| <b>Total (f)</b>                                   |                |              |            |            |           |           |            |             |            |            |
| <b>g) Medicinal and Aromatic Plants</b>            |                |              |            |            |           |           |            |             |            |            |
| Production and management technology               |                |              |            |            |           |           |            |             |            |            |
| <b>Total (g)</b>                                   |                |              |            |            |           |           |            |             |            |            |
| <b>GT (a-g)</b>                                    | <b>3</b>       | <b>45</b>    | <b>40</b>  | <b>85</b>  | <b>18</b> | <b>6</b>  | <b>24</b>  | <b>63</b>   | <b>46</b>  | <b>109</b> |
| <b>III Soil Health and Fertility Management</b>    |                |              |            |            |           |           |            |             |            |            |
| <b>Total</b>                                       |                |              |            |            |           |           |            |             |            |            |
| <b>IV Livestock Production and Management</b>      |                |              |            |            |           |           |            |             |            |            |
| Dairy Management                                   | 1              | 25           | 0          | 25         | 15        | 0         | 15         | 40          | 0          | 40         |
| Poultry Management                                 |                |              |            |            |           |           |            |             |            |            |
| Feed and Fodder Management                         | 1              | 60           | 35         | 95         | 5         | 0         | 5          | 65          | 35         | 100        |
| Goat Rearing                                       |                |              |            |            |           |           |            |             |            |            |
| <b>Total</b>                                       | <b>2</b>       | <b>85</b>    | <b>35</b>  | <b>120</b> | <b>20</b> | <b>0</b>  | <b>20</b>  | <b>105</b>  | <b>35</b>  | <b>140</b> |
| <b>V Home Science/Women empowerment</b>            |                |              |            |            |           |           |            |             |            |            |
| Value addition                                     | 1              | 8            | 5          | 13         | 5         | 10        | 15         | 13          | 15         | 28         |
| <b>Total</b>                                       | <b>1</b>       | <b>8</b>     | <b>5</b>   | <b>13</b>  | <b>5</b>  | <b>10</b> | <b>15</b>  | <b>13</b>   | <b>15</b>  | <b>28</b>  |
| <b>VI Agril. Engineering</b>                       |                |              |            |            |           |           |            |             |            |            |
| Others (Energy Efficiency and Energy Conservation) | 1              | 49           | 14         | 63         | 40        | 21        | 61         | 89          | 35         | 124        |
| <b>Total</b>                                       | <b>1</b>       | <b>49</b>    | <b>14</b>  | <b>63</b>  | <b>40</b> | <b>21</b> | <b>61</b>  | <b>89</b>   | <b>35</b>  | <b>124</b> |
| <b>VII Plant Protection</b>                        |                |              |            |            |           |           |            |             |            |            |
| Integrated Pest Management                         | 1              | 17           | 7          | 24         | 0         | 0         | 0          | 17          | 7          | 24         |
| Integrated Disease Management                      | 2              | 8            | 40         | 48         | 0         | 0         | 0          | 8           | 40         | 48         |
| Bio-control of pests and diseases                  | 1              | 17           | 8          | 25         | 0         | 0         | 0          | 17          | 8          | 25         |
| Others (Amrit Internship Programme-3 Months)       | 1              | 43           | 7          | 50         | 5         | 1         | 6          | 48          | 8          | 56         |
| <b>Total</b>                                       | <b>5</b>       | <b>85</b>    | <b>62</b>  | <b>147</b> | <b>5</b>  | <b>1</b>  | <b>6</b>   | <b>90</b>   | <b>63</b>  | <b>153</b> |
| <b>VIII Capacity Building and Group Dynamics</b>   |                |              |            |            |           |           |            |             |            |            |
| Others (Agriculture Marketing)                     | 1              | 62           | 33         | 95         | 4         | 4         | 8          | 66          | 37         | 103        |
| <b>Total</b>                                       | <b>1</b>       | <b>62</b>    | <b>33</b>  | <b>95</b>  | <b>4</b>  | <b>4</b>  | <b>8</b>   | <b>66</b>   | <b>37</b>  | <b>103</b> |
| <b>GRAND TOTAL</b>                                 | <b>21</b>      | <b>420</b>   | <b>389</b> | <b>809</b> | <b>99</b> | <b>42</b> | <b>141</b> | <b>519</b>  | <b>431</b> | <b>950</b> |

## 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      |
| <b>I Crop Production</b>   |                |              |            |            |           |           |            |             |            |            |
| Weed Management  |                |              |            |            |           |           |            |             |            |            |
| Resource Conservation Technologies                                   | 1              | 8            | 10         | 18         | 0         | 0         | 0          | 8           | 10         | 18         |
| Cropping Systems   |                |              |            |            |           |           |            |             |            |            |
| Integrated Farming   |                |              |            |            |           |           |            |             |            |            |
| Integrated Crop Management   | 3              | 20           | 42         | 62         | 0         | 0         | 0          | 20          | 42         | 62         |
| Soil and water conservation  |                |              |            |            |           |           |            |             |            |            |
| Integrated nutrient management                                       | 2              | 20           | 23         | 43         | 2         | 0         | 2          | 22          | 23         | 45         |
| Production of Organic Input  |                |              |            |            |           |           |            |             |            |            |
| <b>Total</b>   | <b>6</b>       | <b>48</b>    | <b>75</b>  | <b>123</b> | <b>2</b>  | <b>0</b>  | <b>2</b>   | <b>50</b>   | <b>75</b>  | <b>125</b> |
| <b>II Horticulture</b>   |                |              |            |            |           |           |            |             |            |            |
| <b>a) Vegetable Crops</b>  |                |              |            |            |           |           |            |             |            |            |
| Off season vegetable   | 1              | 15           | 7          | 22         | 0         | 4         | 4          | 15          | 11         | 26         |
| <b>Total (a)</b>   | <b>1</b>       | <b>15</b>    | <b>7</b>   | <b>22</b>  | <b>0</b>  | <b>4</b>  | <b>4</b>   | <b>15</b>   | <b>11</b>  | <b>26</b>  |
| <b>b) Fruits</b>   |                |              |            |            |           |           |            |             |            |            |
| Cultivation of fruits  | 1              | 26           | 8          | 34         | 0         | 0         | 0          | 26          | 8          | 34         |
| Management of young plants/orchards                                  |                |              |            |            |           |           |            |             |            |            |
| <b>Total (b)</b>   | <b>1</b>       | <b>26</b>    | <b>8</b>   | <b>34</b>  | <b>0</b>  | <b>0</b>  | <b>0</b>   | <b>26</b>   | <b>8</b>   | <b>34</b>  |
| <b>c) Ornamental Plants</b>  |                |              |            |            |           |           |            |             |            |            |
| <b>Total (c)</b>   |                |              |            |            |           |           |            |             |            |            |
| <b>d) Plantation crops</b>   |                |              |            |            |           |           |            |             |            |            |
| <b>Total (d)</b>   |                |              |            |            |           |           |            |             |            |            |
| <b>e) Tuber crops</b>  |                |              |            |            |           |           |            |             |            |            |
| <b>Total (e)</b>   |                |              |            |            |           |           |            |             |            |            |
| <b>f) Spices</b>   |                |              |            |            |           |           |            |             |            |            |
| <b>Total (f)</b>   |                |              |            |            |           |           |            |             |            |            |
| <b>g) Medicinal and Aromatic Plants</b>                              |                |              |            |            |           |           |            |             |            |            |
| <b>Total (g)</b>   |                |              |            |            |           |           |            |             |            |            |
| <b>GT (a-g)</b>  | <b>2</b>       | <b>41</b>    | <b>15</b>  | <b>56</b>  | <b>0</b>  | <b>4</b>  | <b>4</b>   | <b>41</b>   | <b>19</b>  | <b>60</b>  |
| <b>III Soil Health and Fertility Management</b>                      |                |              |            |            |           |           |            |             |            |            |
| <b>Total</b>   |                |              |            |            |           |           |            |             |            |            |
| <b>IV Livestock Production and Management</b>                        |                |              |            |            |           |           |            |             |            |            |
| Dairy Management   | 1              | 30           | 15         | 45         | 0         | 0         | 0          | 30          | 15         | 45         |
| Feed & fodder technology   | 1              | 21           | 15         | 36         | 0         | 0         | 0          | 21          | 15         | 36         |
| Production of quality animal products                                | 1              | 0            | 0          | 0          | 25        | 15        | 40         | 25          | 15         | 40         |
| <b>Total</b>   | <b>3</b>       | <b>51</b>    | <b>30</b>  | <b>81</b>  | <b>25</b> | <b>15</b> | <b>40</b>  | <b>76</b>   | <b>45</b>  | <b>121</b> |
| <b>V Home Science/Women empowerment</b>                              |                |              |            |            |           |           |            |             |            |            |
| Household food security by kitchen gardening and nutrition gardening | 2              | 0            | 10         | 10         | 0         | 50        | 50         | 0           | 60         | 60         |
| Value addition   |                |              |            |            |           |           |            |             |            |            |
| <b>Total</b>   | <b>2</b>       | <b>0</b>     | <b>10</b>  | <b>10</b>  | <b>0</b>  | <b>50</b> | <b>50</b>  | <b>0</b>    | <b>60</b>  | <b>60</b>  |
| <b>VII Plant Protection</b>  |                |              |            |            |           |           |            |             |            |            |
| Integrated Pest Management   | 4              | 68           | 42         | 110        | 2         | 0         | 2          | 70          | 42         | 112        |
| Integrated Disease Management  | 1              | 0            | 18         | 18         | 0         | 8         | 8          | 0           | 26         | 26         |
| Bio-control of pests and diseases                                    | 1              | 10           | 10         | 20         | 0         | 4         | 4          | 10          | 14         | 24         |
| <b>Total</b>   | <b>6</b>       | <b>78</b>    | <b>70</b>  | <b>148</b> | <b>2</b>  | <b>12</b> | <b>14</b>  | <b>80</b>   | <b>82</b>  | <b>162</b> |
| <b>VIII Fisheries</b>  |                |              |            |            |           |           |            |             |            |            |
| <b>IX Production of Inputs at site</b>                               |                |              |            |            |           |           |            |             |            |            |
| <b>Total</b>   |                |              |            |            |           |           |            |             |            |            |
| <b>X Capacity Building and Group Dynamics</b>                        |                |              |            |            |           |           |            |             |            |            |
| <b>Total</b>   |                |              |            |            |           |           |            |             |            |            |
| <b>XI Agro-forestry</b>  |                |              |            |            |           |           |            |             |            |            |
| <b>Total</b>   |                |              |            |            |           |           |            |             |            |            |
| <b>GRAND TOTAL</b>   | <b>19</b>      | <b>218</b>   | <b>200</b> | <b>418</b> | <b>29</b> | <b>81</b> | <b>110</b> | <b>247</b>  | <b>281</b> | <b>528</b> |

## 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       |
| <b>I Crop Production</b>   |                |              |            |             |            |            |            |             |            |             |
| Weed Management  | 2              | 15           | 39         | 54          | 0          | 0          | 0          | 15          | 39         | 54          |
| Resource Conservation Technologies                                   | 1              | 8            | 10         | 18          | 0          | 0          | 0          | 8           | 10         | 18          |
| Integrated Crop Management   | 6              | 43           | 99         | 142         | 0          | 0          | 0          | 43          | 99         | 142         |
| Integrated nutrient management                                       | 2              | 20           | 23         | 43          | 2          | 0          | 2          | 22          | 23         | 45          |
| Natural Farming  | 3              | 48           | 104        | 152         | 7          | 0          | 7          | 55          | 104        | 159         |
| <b>Total</b>   | <b>14</b>      | <b>134</b>   | <b>275</b> | <b>409</b>  | <b>9</b>   | <b>0</b>   | <b>9</b>   | <b>143</b>  | <b>275</b> | <b>418</b>  |
| <b>II Horticulture</b>   |                |              |            |             |            |            |            |             |            |             |
| <b>a) Vegetable Crops</b>  | 2              | 17           | 33         | 50          | 0          | 4          | 4          | 17          | 37         | 54          |
| Off-season vegetables  |                |              |            |             |            |            |            |             |            |             |
| <b>Total (a)</b>   | <b>2</b>       | <b>17</b>    | <b>33</b>  | <b>50</b>   | <b>0</b>   | <b>4</b>   | <b>4</b>   | <b>17</b>   | <b>37</b>  | <b>54</b>   |
| <b>b) Fruits</b>   |                |              |            |             |            |            |            |             |            |             |
| Layout and Management of Orchards                                    | 1              | 27           | 4          | 31          | 13         | 6          | 19         | 40          | 10         | 50          |
| Cultivation of Fruit   | 1              | 26           | 8          | 34          | 0          | 0          | 0          | 26          | 8          | 34          |
| <b>Total (b)</b>   | <b>2</b>       | <b>53</b>    | <b>12</b>  | <b>65</b>   | <b>13</b>  | <b>6</b>   | <b>19</b>  | <b>66</b>   | <b>18</b>  | <b>84</b>   |
| <b>c) Ornamental Plants</b>  |                |              |            |             |            |            |            |             |            |             |
| Nursery Management   | 1              | 16           | 10         | 26          | 5          | 0          | 5          | 21          | 10         | 31          |
| <b>Total (c)</b>   | <b>1</b>       | <b>16</b>    | <b>10</b>  | <b>26</b>   | <b>5</b>   | <b>0</b>   | <b>5</b>   | <b>21</b>   | <b>10</b>  | <b>31</b>   |
| <b>d) Plantation crops</b>   |                |              |            |             |            |            |            |             |            |             |
| <b>e) Tuber crops</b>  |                |              |            |             |            |            |            |             |            |             |
| <b>f) Spices</b>   |                |              |            |             |            |            |            |             |            |             |
| <b>Total (f)</b>   |                |              |            |             |            |            |            |             |            |             |
| <b>g) Medicinal and Aromatic Plants</b>                              |                |              |            |             |            |            |            |             |            |             |
| Production and management technology                                 |                |              |            |             |            |            |            |             |            |             |
| <b>Total (g)</b>   |                |              |            |             |            |            |            |             |            |             |
| <b>GT (a-g)</b>  | <b>5</b>       | <b>86</b>    | <b>55</b>  | <b>141</b>  | <b>18</b>  | <b>10</b>  | <b>28</b>  | <b>104</b>  | <b>65</b>  | <b>169</b>  |
| <b>III Soil Health and Fertility Management</b>                      |                |              |            |             |            |            |            |             |            |             |
| <b>Total</b>   |                |              |            |             |            |            |            |             |            |             |
| <b>IV Livestock Production and Management</b>                        |                |              |            |             |            |            |            |             |            |             |
| Dairy Management   | 2              | 55           | 15         | 70          | 15         | 0          | 15         | 70          | 15         | 85          |
| Feed & fodder technology   | 2              | 81           | 50         | 131         | 5          | 0          | 5          | 86          | 50         | 136         |
| Production of quality animal products                                | 1              | 0            | 0          | 0           | 25         | 15         | 40         | 25          | 15         | 40          |
| <b>Total</b>   | <b>5</b>       | <b>136</b>   | <b>65</b>  | <b>201</b>  | <b>45</b>  | <b>15</b>  | <b>60</b>  | <b>181</b>  | <b>80</b>  | <b>261</b>  |
| <b>V Home Science/Women empowerment</b>                              |                |              |            |             |            |            |            |             |            |             |
| Household food security by kitchen gardening and nutrition gardening | 2              | 0            | 10         | 10          | 0          | 50         | 50         | 0           | 60         | 60          |
| Value addition   | 1              | 8            | 5          | 13          | 5          | 10         | 15         | 13          | 15         | 28          |
| <b>Total</b>   | <b>3</b>       | <b>8</b>     | <b>15</b>  | <b>23</b>   | <b>5</b>   | <b>60</b>  | <b>65</b>  | <b>13</b>   | <b>75</b>  | <b>88</b>   |
| <b>VI Agril. Engineering</b>   |                |              |            |             |            |            |            |             |            |             |
| Others (Energy Efficiency and Energy Conservation)                   | 1              | 49           | 14         | 63          | 40         | 21         | 61         | 89          | 35         | 124         |
| <b>Total</b>   | <b>1</b>       | <b>49</b>    | <b>14</b>  | <b>63</b>   | <b>40</b>  | <b>21</b>  | <b>61</b>  | <b>89</b>   | <b>35</b>  | <b>124</b>  |
| <b>VII Plant Protection</b>  |                |              |            |             |            |            |            |             |            |             |
| Integrated Pest Management   | 5              | 85           | 49         | 134         | 2          | 0          | 2          | 87          | 49         | 136         |
| Integrated Disease Management  | 3              | 8            | 58         | 66          | 0          | 8          | 8          | 8           | 66         | 74          |
| Bio-control of pests and diseases                                    | 2              | 27           | 18         | 45          | 0          | 4          | 4          | 27          | 22         | 49          |
| Others (Amrit Internship Programme- 3 Months)                        | 1              | 43           | 7          | 50          | 5          | 1          | 6          | 48          | 8          | 56          |
| <b>Total</b>   | <b>11</b>      | <b>163</b>   | <b>132</b> | <b>295</b>  | <b>7</b>   | <b>13</b>  | <b>20</b>  | <b>170</b>  | <b>145</b> | <b>315</b>  |
| <b>VIII Capacity Building and Group Dynamics</b>                     |                |              |            |             |            |            |            |             |            |             |
| Others (Agriculture Marketing)                                       | 1              | 62           | 33         | 95          | 4          | 4          | 8          | 66          | 37         | 103         |
| <b>Total</b>   | <b>1</b>       | <b>62</b>    | <b>33</b>  | <b>95</b>   | <b>4</b>   | <b>4</b>   | <b>8</b>   | <b>66</b>   | <b>37</b>  | <b>103</b>  |
| <b>GRAND TOTAL</b>   | <b>40</b>      | <b>638</b>   | <b>589</b> | <b>1227</b> | <b>128</b> | <b>123</b> | <b>251</b> | <b>766</b>  | <b>712</b> | <b>1478</b> |



### 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      |
| Mushroom Production | 1              | 18                  | 6         | 24         | 4         | 0         | 4         | 22          | 6         | 28         |
| Value addition      | 2              | 15                  | 2         | 17         | 42        | 7         | 49        | 57          | 9         | 66         |
| Dairying            | 1              | 25                  | 10        | 35         | 2         | 3         | 5         | 27          | 13        | 40         |
| Goat rearing        | 1              | 29                  | 6         | 35         | 0         | 0         | 0         | 29          | 6         | 35         |
| RAWE/FET            | 4              | 8                   | 33        | 41         | 5         | 9         | 14        | 13          | 42        | 55         |
| <b>TOTAL</b>        | <b>9</b>       | <b>95</b>           | <b>57</b> | <b>152</b> | <b>53</b> | <b>19</b> | <b>72</b> | <b>148</b>  | <b>76</b> | <b>224</b> |

### 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      |
| Mushroom Production | 1              | 18                  | 6         | 24         | 4         | 0         | 4         | 22          | 6         | 28         |
| Value addition      | 2              | 15                  | 2         | 17         | 42        | 7         | 49        | 57          | 9         | 66         |
| Dairying            | 1              | 25                  | 10        | 35         | 2         | 3         | 5         | 27          | 13        | 40         |
| Goat rearing        | 1              | 29                  | 6         | 35         | 0         | 0         | 0         | 29          | 6         | 35         |
| RAWE/FET            | 4              | 8                   | 33        | 41         | 5         | 9         | 14        | 13          | 42        | 55         |
| <b>TOTAL</b>        | <b>9</b>       | <b>95</b>           | <b>57</b> | <b>152</b> | <b>53</b> | <b>19</b> | <b>72</b> | <b>148</b>  | <b>76</b> | <b>224</b> |

### 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     |
| Integrated Nutrient management | 1              | 39                  | 15        | 54        | 0        | 0        | 0        | 39          | 15        | 54        |
| <b>TOTAL</b>                   | <b>1</b>       | <b>39</b>           | <b>15</b> | <b>54</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>39</b>   | <b>15</b> | <b>54</b> |

### 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     |
| Integrated Nutrient management | 1              | 39                  | 15        | 54        | 0        | 0        | 0        | 39          | 15        | 54        |
| <b>TOTAL</b>                   | <b>1</b>       | <b>39</b>           | <b>15</b> | <b>54</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>39</b>   | <b>15</b> | <b>54</b> |

### 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      |
| Processing and value addition              | 1              | 8                   | 5         | 13         | 5         | 10        | 15         | 13          | 15        | 28         |
| Energy Efficiency and Energy Conservation) | 1              | 49                  | 14        | 63         | 40        | 21        | 61         | 89          | 35        | 124        |
| Livestock production and management        | 1              | 25                  | 0         | 25         | 15        | 0         | 15         | 40          | 0         | 40         |
| Agriculture Marketing)                     | 1              | 62                  | 33        | 95         | 4         | 4         | 8          | 66          | 37        | 103        |
| Amrit Internship Programme- 3 Months)      | 1              | 43                  | 7         | 50         | 5         | 1         | 6          | 48          | 8         | 56         |
| <b>GRAND TOTAL</b>                         | <b>5</b>       | <b>187</b>          | <b>59</b> | <b>246</b> | <b>69</b> | <b>36</b> | <b>105</b> | <b>256</b>  | <b>95</b> | <b>351</b> |

Name of sponsoring agencies involved: RRECL, Jaipur, CCSNIAM, Jaipur, ICRO, New Delhi, ATMA, Shivpuri (MP), NIFTEM

### 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                        | 1              | 8                   | 5         | 13        | 5         | 10        | 15        | 13          | 15        | 28        |
| Amrit Internship Programme- 3 Months) | 1              | 43                  | 7         | 50        | 5         | 1         | 6         | 48          | 8         | 56        |
| <b>Total</b>                          | <b>2</b>       | <b>51</b>           | <b>12</b> | <b>63</b> | <b>10</b> | <b>11</b> | <b>21</b> | <b>61</b>   | <b>23</b> | <b>84</b> |

# Training Programmes



Shot on OnePlus  
Kota,Kota Division : 20230220 13:47  
Powered by Triple Camera

**On Campus training on Mushroom Production technology**



**On Campus training on Orchard Establishment**



**Training on Energy Efficiency and Energy Conservation**



**Training on Agriculture Marketing**



**Natural Farming Training**



**On campus training on Goat Rearing**

#### IV. Extension Programmes

| Activities  | No. of programmes | No. of farmers | No. of Extension Personnel | TOTAL        |
|---|-------------------|----------------|----------------------------|--------------|
| <b>Farmers Seminar/Workshop</b>   |                   |                |                            |              |
| Farmers seminar on Seed Spices (27.02.2023)                                       | 01                | 385            | 10                         | 395          |
| One Day Workshop of FPO/FPC of Kota Division                                      | 01                | 94             | 10                         | 104          |
| <b>Sub total</b>  | <b>02</b>         | <b>479</b>     | <b>20</b>                  | <b>499</b>   |
| <b>Field days</b>   |                   |                |                            |              |
| Mustard (DRMR 2017-15) (13.02.23)   | 01                | 105            | 3                          | 108          |
| Coriander (RKD 18) (20.02.23)   | 01                | 30             | 3                          | 33           |
| Blackgram (Kota Urd 3) (12.09.23)   | 01                | 63             | 8                          | 71           |
| Soybean (JS 20-98) (17.9.23)  | 01                | 49             | 4                          | 53           |
| <b>Sub Total</b>  | <b>04</b>         | <b>247</b>     | <b>18</b>                  | <b>265</b>   |
| <b>Exhibitions</b>  |                   |                |                            |              |
| Krishi Mahotsav - Pradarshani evm Prshikshan (24-25.02.23)                        | 01                | 20000          | 1000                       | 21000        |
| Farmers Seminar on Seed Spices Crops  | 01                | 385            | 10                         | 395          |
| Exhibition of processed millets food products at University (18.03.23)            | 01                | 140            | 8                          | 148          |
| State Level Farmers Fair, Jaipur  | 01                | 15000          | 500                        | 15500        |
| <b>Sub Total</b>  | <b>04</b>         | <b>35525</b>   | <b>1518</b>                | <b>37043</b> |
| <b>Celebration of important days</b>  |                   |                |                            |              |
| International Women Day (08.03.23)  | 01                | 35             | 3                          | 38           |
| World Environment Day (05.06.23)  | 01                | 40             | 3                          | 43           |
| Celebration of 95th ICAR foundation and Technology Day (16-18.07.23)              | 03                | 284            | 10                         | 294          |
| 18 <sup>th</sup> Parthenium Awareness Week (16-22.08.23)                          | 03                | 109            | 10                         | 119          |
| Special Swachhta Campaign 3.0 (02-31 Oct., 2023)                                  | 01                | 32             | 5                          | 37           |
| World Soil Day (05.12.23)   | 01                | 75             | 8                          | 83           |
| National Farmer Day (Kisan Diwas) 23.12.23  | 01                | 45             | 5                          | 50           |
| <b>Sub Total</b>  | <b>11</b>         | <b>620</b>     | <b>44</b>                  | <b>664</b>   |
| <b>Extension activities</b>   |                   |                |                            |              |
| Awareness programme on natural Farming (20.01.2023)                               | 01                | 30             | 5                          | 35           |
| Awareness programme on natural Farming (13.02.23)                                 | 01                | 105            | 3                          | 108          |
| PM Samman Nidhi Awareness Programme (27.02.23)                                    | 01                | 385            | 10                         | 395          |
| Live Telecasted of Global Millets Conference (18.03.23)                           | 01                | 140            | 8                          | 148          |
| Live telecasted of 100th episode of Mann Ki Baat of Shri Narendra Modi (30.04.23) | 01                | 72             | 5                          | 77           |
| Awareness Programme on Natural and Organic Farming under LiFE Mission (01.06.23)  | 01                | 59             | 3                          | 62           |
| Awareness Programme on LiFE Mission   | 01                | 50             | 1                          | 51           |
| Orientation Programme for Amrit Interns   | 01                | 65             | 5                          | 70           |
| Live Telecasted of PM Kisan Samman Nidhi Programme (27.07.23)                     | 01                | 112            | 5                          | 117          |
| Millet Recipe Competition   | 01                | 55             | 2                          | 57           |
| Awareness Programme on Commodity Derivatives                                      | 01                | 72             | 2                          | 74           |
| Live telecasted of Hon'ble PM (VBSY) 09.12.23                                     | 01                | 160            | 10                         | 170          |
| Millionaire Farmers Award ceremony 12.12.23                                       | 01                | 150            | 10                         | 160          |
| Participation in VBSY 2023 (16-29.12.23)  | 20                | 12579          | 500                        | 13079        |

|                                    |            |              |             |               |
|------------------------------------|------------|--------------|-------------|---------------|
| <b>Sub Total</b>                   | <b>33</b>  | <b>14034</b> | <b>569</b>  | <b>14603</b>  |
| <b>Other activities</b>            |            |              |             |               |
| Advisory Services                  | 27         | 38809        | 500         | 39309         |
| Diagnostic visits                  | 10         | 170          | 20          | 190           |
| Group discussions                  | 4          | 172          | 3           | 175           |
| Kisan Ghosthi                      | 3          | 180          | 10          | 190           |
| Film Show                          | 10         | 350          | 20          | 370           |
| Scientists' visit to farmers field | 23         | 292          | 10          | 392           |
| Method Demonstrations              | 12         | 250          | 8           | 258           |
| Exposure visits                    | 27         | 1562         | 50          | 1612          |
| Farmers visit to KVK               |            | 3766         | 450         | 4216          |
| Farmers Scientist Interaction      | 1          | 35           | 5           | 40            |
| Lecture delivered                  | 40         | 2000         | 100         | 2100          |
| <b>Sub Total</b>                   | <b>157</b> | <b>47586</b> | <b>1164</b> | <b>48840</b>  |
| <b>Grand Total</b>                 | <b>211</b> | <b>98491</b> | <b>3345</b> | <b>101836</b> |

**Celebration of important days**



**95th ICAR Foundation Day Technology Day Celebration**



**World Environment Day 05.06.23**



**Parthenium Awareness Week (16-22.08.2023)**



**Swachhata Abhiyan (02-31.10.2023)**



**Kisan Diwas on 23.12.2023**



**World Soil Day on 05.12.2023**

**Extension Activities**



**Farmers Seminar on Seed Spices at Kanwas on 27.02.23**



**Field visit of HVC, AU, Kota at Kanwas**



**Orientation Programme of Amrit Interns on 28.06.2023**



**Agriculture Technology Exhibition of KVK Kota at Krishi Mahotsav - Pradarshani evm Prshikshan (24-25.02.23), Kota**



**Workshop of FPO/FPC of Kota Division on 26.08.23**



**Scientist Visit to Farmers Field**

**Details of other extension programmes**

| Particulars               | Number |
|---------------------------|--------|
| Electronic Media (CD/DVD) | 2      |
| Extension Literature      | 5      |
| News paper coverage       | 15     |
| Popular articles          | 8      |
| Radio Talks               | 8      |
| TV Talks                  | 2      |
| <b>Total</b>              |        |

**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 |
|-----------------------|------------------|---------------------|----------|----------------------|--------------------|-------------------|
| <b>Cereals</b>        | Wheat            | Raj 4037            | F/S      | 259.5                | 9.86               |                   |
|                       | Wheat            | Raj 4037            | C/S      | 579.5                | 19.70              |                   |
|                       | Wheat            | Raj. 4079           | C/S      | 19.0                 | 0.64               |                   |
|                       | Wheat            | Raj. 4238           | F/S      | 19.0                 | 0.72               |                   |
|                       | Barley           | RD 2794             | TL       | 18.0                 | -                  |                   |
|                       | Paddy            | Pusa Basmati 1509   | TL       | 68.0                 | 4.76               |                   |
|                       | Paddy            | Pusa Basmati 1718   | CS       | 296.0                | 20.72              |                   |
|                       | Paddy            | Pusa Basmati 1692   | CS       | 136.0                | 9.52               |                   |
| <b>Subtotal</b>       |                  |                     |          | <b>1395</b>          | <b>65.92</b>       |                   |
| <b>Oilseeds</b>       | Mustard          | DRMR 2017-15        | F/S      | 55.5                 | 6.66               |                   |
| <b>Subtotal</b>       |                  |                     |          | <b>55.5</b>          | <b>6.66</b>        |                   |
| <b>Pulses</b>         | Chickpea         | GNG 2144            | C/S      | 6.0                  | 0.41               |                   |
|                       | Chickpea         | GNG 2171            | C/S-II   | 41.0                 | 2.82               |                   |
|                       | Chickpea         | Kota Kabuli 3       | TL       | 1.50                 | 0.10               |                   |
|                       | Lentil           | Kota masoor 3       | TL       | 2.0                  | 0.18               |                   |
|                       | Greengram        | MH 1142             | FS       | 30.0                 | 4.50               |                   |
|                       | Greengram        | MH 1142             | CS       | 21.0                 | 2.52               |                   |
|                       | Blackgram        | Kota urd 3          | FS       | 13.5                 | 2.0                |                   |
|                       | Blackgram        | Kota urd 4          | FS       | 7.0                  | 1.0                |                   |
|                       | <b>Subtotal</b>  |                     |          |                      | <b>122.0</b>       | <b>13.53</b>      |
| <b>Spices</b>         | Coriander        | RKD 18              | TL       | 37.0                 | 4.81               |                   |
|                       | Garlic           | G 282               | TL       | 48.50                | 6.30               |                   |
| <b>Subtotal</b>       |                  |                     |          | <b>85.5</b>          | <b>11.11</b>       |                   |
| <b>Grand Total</b>    |                  |                     |          | <b>1658.0</b>        | <b>97.22</b>       |                   |
| <b>Pulse seed hub</b> | Chickpea         | GNG 2144            | C/S      | 6.0                  | 0.41               |                   |
|                       | Chickpea         | GNG 2171            | C/S-II   | 41.0                 | 2.82               |                   |
|                       | Chickpea         | Kota Kabuli 3       | TL       | 1.50                 | 0.10               |                   |
|                       | Chickpea         | GNG-2144            | CS-I     | 172.5                | 11.90              |                   |
|                       | Lentil           | Kota masoor 3       | TL       | 2.0                  | 0.18               |                   |
|                       | Greengram        | MH 1142             | FS       | 30.0                 | 4.50               |                   |
|                       | Greengram        | MH 1142             | CS       | 21.0                 | 2.52               |                   |
|                       | Blackgram        | Kota urd 3          | FS       | 13.5                 | 2.0                |                   |
|                       | Blackgram        | Kota urd 4          | FS       | 7.0                  | 1.0                |                   |
| <b>Total</b>          |                  |                     |          | <b>294.5</b>         | <b>25.43</b>       |                   |
| <b>Oilseed hub</b>    | Mustard          | DRMR 2017-15        | F/S      | 55.5                 | 6.66               |                   |
|                       |                  | DRMR 2017-15        | FS-I     | 202.5                | 24.30              |                   |
| <b>Total</b>          |                  |                     |          | <b>258.0</b>         | <b>30.96</b>       |                   |
| <b>Grand Total</b>    |                  |                     |          | <b>2210.5</b>        | <b>153.61</b>      |                   |



### 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.                    | 12500        | 260000        | 1180              |
| Ornamental plants | Crotens, moneyplants, Duranta, Iresin, Erenthum etc. | 6800         | 75000         | 640               |
|                   | <b>Total</b>   | <b>19300</b> | <b>335000</b> | <b>1820</b>       |

### Production of Bio-Products

| Bio Products                         | Name of the bio-product   | Quantity | Value (Rs.)   | No. of Farmers |
|--------------------------------------|---------------------------|----------|---------------|----------------|
|                                      |                           | Kg       |               |                |
| Bio Fertilizers (Vermi compost unit) | Vermicompost              | 10000    | 150000        | 860            |
|                                      | Vermicompost              | 500      | KVK, Farm     |                |
|                                      | Vermiculture              | 120      | 15000         |                |
| <b>Total</b>                         |                           |          | <b>165000</b> |                |
| Bio-fungicide (Trichoderma unit)     | <i>Trichoderma viride</i> | 980      | 196000        | 50             |
|                                      | <i>Trichoderma viride</i> | 50       | KVK, Farm     |                |
| <b>Total</b>                         |                           |          | <b>196000</b> |                |



### Production of Food Products

| Food Products             | Name of the Food Product            | Quantity | Value (Rs.)   | No. of Farmers |
|---------------------------|-------------------------------------|----------|---------------|----------------|
|                           |                                     | Kg       |               |                |
| Mustard oil               | Mustard oil                         | 1000     | 250000        | 430            |
| Amla/garlic/soya products | Juice                               |          |               |                |
|                           | Murraba, Pickle, Candy, Chawanprash |          |               |                |
| Drumstick product         | Powder, Capsule, Pickle             |          |               |                |
| <b>Total</b>              |                                     |          | <b>250000</b> |                |

### Production of livestock materials

| Particulars of Livestock | Name of the breed                    | Number(quantity) | Value (Rs.)    | No. of Farmers |
|--------------------------|--------------------------------------|------------------|----------------|----------------|
| <b>Dairy animals</b>     |                                      |                  |                |                |
| Gir cow                  | Gir milk                             | 19244            | 992056         |                |
|                          | Ghee                                 | 67 L             | 100500         |                |
|                          | Buttermilk                           | 700 L            | 14000          |                |
|                          | Gir cow/ male calf                   | 18               | 536000         |                |
| Goatery                  | Sirohi Breeding Buck and Female Goat | 58               | 675000         |                |
| <b>Total</b>             |                                      |                  | <b>2317556</b> |                |

### 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         | 100            | 100            | 03              |                       | 100                                  |
| <b>Total</b> | <b>100</b>     | <b>100</b>     | <b>03</b>       |                       | <b>100</b>                           |

### VIII. SCIENTIFIC ADVISORY COMMITTEE

| Name of KVK | Date of SAC Meeting | Participants |
|-------------|---------------------|--------------|
| Kota        | 26.05.2023          | 43           |

### IX. NEWSLETTER/MAGAZINE

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

### X. PUBLICATIONS

| Category            | Number |
|---------------------|--------|
| Research Paper      | 10     |
| Book Chapter        | 02     |
| Technical bulletins | 02     |
| Technical reports   | 02     |

### Research papers :

| S.No. | Title  | Author (s)  | Name of Journal/ Magazine/ book/ chapter | year & month | Vol No.& page   | NAAS Score |
|-------|--|---|--|--------------|-----------------|------------|
| 1.    | Efficacy of Trichoderma viride against Fusarium wilt of chickpea | Roop Singh, R. K. Bairwa, Irfan Khan, Kamla Mahajani and Sarita | Journal of Krishi Vigyan                 | 2023         | 11 (2) : 97-100 | 4.55       |
| 2.    | Productivity and   | R. K. Bairwa,   | Journal of Krishi                        | 2023         | 11 (2):         | 4.55       |

|    |  |  |  |      |                 |      |
|----|--|--|--|------|-----------------|------|
|    | Profitability Analysis of Late Sown Wheat under Paddy-Wheat Cropping System  | <b>Roop Singh</b> , Kamla Mahajani, Gunjan Sandhya and Sarita  | Vigyan   |      | 293-297         |      |
| 3. | Impact of Training on Knowledge Levels of Goat Rearing Farmer's in Bundi District of Rajasthan   | G. S. Meena, Deepak Kumar, K Mahajani, <b>R. K. Bairwa, Roop Singh, Anita</b>                            | Journal of Krishi Vigyan   | 2023 | 11 (2): 192-195 | 4.55 |
| 4. | Influence of wheat based intercropping system by irrigation scheduling under limited water conditions.   | Meena, H.P., Yadav, R.K., Singh, P., Manoj, Yadav, S.L., Dhakar, U. and <b>Bairwa, R.K.</b>              | International Journal of Agriculture Sciences                    | 2023 | 19 (1):309-314  |      |
| 5. | Effect of irrigation scheduling and foliar fertilization on productivity, profitability and water use efficiency of soybean [Glycin max (L.) Merrill] under climatic variability of south eastern Rajasthan. | Meena, H.P., Yadav, R.K., Singh, P., Manoj, Yadav, S.L., <b>Bairwa, R.K.</b> , Dhakar, U., and Kumar, R. | International Journal of Plant Science                           | 2023 | 18(1):63-68     |      |
| 6. | Validation of QUEFT model for nutrient management of potato (Solanum tuberosum) in humid plains of Rajasthan.  | Nagar, B.L., <b>Bairwa, R.K.</b> , Singh, J. and Yadav, D.L.2023.  | Indian Journal of Agricultural Sciences                          | 2023 | 93 (7):101-105  |      |
| 7. | Effect of sowing windows and nitrogen levels on growth and fodder yield of ryegrass (Lolium multiflorum) under south eastern Rajasthan.  | Meena, H.P., Manoj, Yadav, R.K., Yadav, S.L., <b>Bairwa, R.K.</b> , Bhaskar, M.L. and Singh, Pratap      | International Journal of Agriculture Sciences                    | 2023 | 19 (2):463-468  |      |
| 8. | Nutrient management technologies of millets for increasing productivity and nutritional security.  | Manoj, Meena, H.P, Yadav, R.K., Yadav, S.L. and <b>Bairwa, R.K.</b>                                      | International Journal of Agriculture Sciences                    | 2023 | 19 (2):708-717  |      |
| 9. | Role of sulphur nutrition in oilseed crop production in India  | Manoj, Yadav, R.K., Meena, H.P., Yadav, S.L. and <b>Bairwa, R.K.</b>                                     | International Journal of Plant Science                           | 2023 | 18(2):177-185   |      |
| 10 | Effect of feeding moringa leaves to Sirohi goat kids on their growth performance   | Anita Kumari Meena, <b>Mahendra Singh</b> and Deepak Kumar   | International Journal of Veterinary Science and Animal husbandry | 2023 | 8(4):380-383    |      |

### Book Chapters:

- (1) **Roop Singh** and Irfan Khan (2023) Bacterial Wilt of Ginger: An Overview. Pests and Disease Management of Horticultural Crops. Biotech Books, New Delhi: 245-253.
- (2) Irfan Khan, **Roop Singh**, Abhishek Sharma and Wajid Hasan (2023) Serological and Molecular Detection Techniques of Viruses Infecting Onion and Garlic. Biotech Books, New Delhi: 64-72.

**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 |
|-----------------|----------------------------------|------------------|---------------------|----------------------|
|                 |                                  |                  |                     |                      |
| <b>Total</b>    |                                  |                  |                     |                      |

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

| S. No. | Name of scientist       | Subject  | Date     |          | Place  |
|--------|-------------------------|--|----------|----------|--|
|        |                         |  | From     | To       |  |
| 1      | Dr. Mahendra Singh      | Online Meeting of KVK's of Rajasthan   | 15.05.23 | 15.05.23 | ICAR-ATARI, Jodhpur                              |
| 2      | Dr. Mahendra Singh      | Online Meeting of all KVKs Heads to discuss the format for zonal review meeting and APR 2022   | 30.05.23 | 30.05.23 | ICAR-ATARI, Jodhpur                              |
| 3      | Dr. Rakesh Kumar Bairwa | Annual Workplan Workshop of Natural farming  | 01.02.23 | 02.02.23 | ICAR-ATARI, Jodhpur                              |
| 4      | Dr. Roop Singh          | 21 days National Orientation Course on Teaching Learning Evaluation Technology Programme organized by ICAR-ATARI Zone -I, Ludhiana and RVSKVV, Gwalior | 05.04.23 | 25.04.23 | ICAR-ATARI Zone -I, Ludhiana and RVSKVV, Gwalior |
| 5      | Dr. Roop Singh          | Consultative Workshop on "Technological Intervention & Innovation in the Honey/Beekeeping Sector"  | 12.04.23 | 12.04.23 | DA&FW, New Delhi                                 |
| 6      | Dr. Roop Singh          | Orientation Training to the Master Trainers for 'Safe and Judicious use Glyphosate' by PCOs (Online)   | 16.06.23 | 16.06.23 | NIPHM, Hyderabad                                 |
| 7.     | Dr. Rakesh Kumar Bairwa | Annual Review Meeting of Scheduled Tribe Component (STC) and Pulses seed hub   | 11.10.23 | 12.10.23 | ICAR-ATARI, Jodhpur                              |

**Award/Recognition of KVK Scientist**

| S.No. | Name of Scientist       | Name of Award                                  | Conferred by  | Year of Award |
|-------|-------------------------|--|---|---------------|
| 1.    | Dr. Mahendra Singh      | Swami Keshwanand Distinguished Scientist Award | National Conference on Millet: Magical Crops for Nutritional Sustainability (MMCNS 2023), Jaggnath University, Jaipur | April, 2023   |
| 2.    | Dr. Rakesh Kumar Bairwa | Best Extension Educationist                    | Agriculture University, Kota  | Jan, 2023     |
| 3.    | Smt. Gunjan Sanadhya    | Appreciation Certificate                       | District Administration, Kota   | Jan, 2023     |

#### **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                                       |
| 2021-22      |                     |                    |                   |   |
| 2022-23      |                     |                    |                   |   |
| <b>Total</b> |                     |                    |                   |   |

| Year                          | Opening balance as on 1 <sup>st</sup> April | Income during the year | Expenditure during the year | Net balance in hand as on 1 <sup>st</sup> January of each year |
|-------------------------------|---|------------------------|-----------------------------|--|
| January 2021 to December 2021 |   |                        |                             |  |
| January 2022 to December 2022 |   |                        |                             |  |
| January 2023 to December 2023 |   |                        |                             |  |

#### **Feed Need to be furnished**

##### **Feedback for policy makers:**

- There is great need for regular capacity development of the KVK staffs.

##### **Feedback for Researchers (Technology, Research and Future Research as per demand of farming community of particular district):**

- Provide the complete package of practices of natural farming for major field crops, vegetables, fruit crops of the district.
- Development of climate resilient varieties of major field crops.

- Development of complete package of management practices for blight disease in tomato.
- Need to work on BBF painting especially for soybean and blackgram in Kharif season.
- Need to work on disease resistant varieties of major field crops of the district.

### **Feedback for Development Department**

- Active participation in SAC meeting of the KVK for proper planning of ensuing year for farming community.

### **Impact of most acceptable interventions/technologies**

- KVK has pivotal role for conducting skill development training programmes on food processing and value addition, dairy farming, goat rearing, beekeeping and mushroom production for rural youth. As the impact of these training programmes more than 300 agripreneurs adopted the technology and started their own enterprise and earning 2.00-10.00 lakhs annually.
- Promotion of improved varieties of black gram (Pratap urd 1, Mukundra urd 2, Kota Urd 3) and chickpea (GNG 1958, GNG 1581, GNG 2171, GNG 2144) through CFLDs and seed production under pulses seed hub and make available to the farmers of the district.
- Promotion of improved varieties of mustard (DRMR IJ 31, DRMR 1165-40) through CFLDs and seed production under oilseed (mustard) hub and make available to the farmers of the district.
- Application of *Trichoderma viride* as soil and seed treatment found lowest per cent disease incidence, the farmers like to adopt this technology.
- Use of waste decomposer at large scale for waste/crop residue management.

## **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 seedings | 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.  | Insect Proof Net House                         | Off season vegetables                                    | For skill development training   | Developed under TSP and 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



Sh. Mahadev Singh Khandela, Hon'ble Chairman and Other respected members of Rajasthan Farmers Commission 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

Dr. A.K. Vyas, HVC, AU, Kota visiting dairy unit

**MODEL GOAT UNIT**



Hon'ble Chairman and other members of Rajasthan Farmer's Commission visiting Model Dairy and Model Sirohi goat unit of KVK, Kota on 16 Nov., 2022

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. R. P. Singh, Ex Project Director, IIFSR, Modipuram and Dr. A. K. Vyas, HVC, Agriculture University, Kota visiting nursery



## MODEL BIO-AGENT - TRICHODERMA UNIT



Trichoderma Unit

## CROP TECHNOLOGY PARK



Rabi 2022-23 crop technology park

## Vermicompost 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



Insect Proof Net House 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<br>(₹ 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.<br>To establish model dairy unit of gir cow at KVK.<br>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.<br>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.<br>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.<br>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.<br>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.<br>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         | To provide incubation facilities to the start-ups, FPOs, SHGs, micro entrepreneurs, co-operatives and other stakeholders.                                   |
| <b>Total</b> |   |         | <b>1755.23</b> |   |

### 1. Pulse seed hub under ICAR (2016-2023)

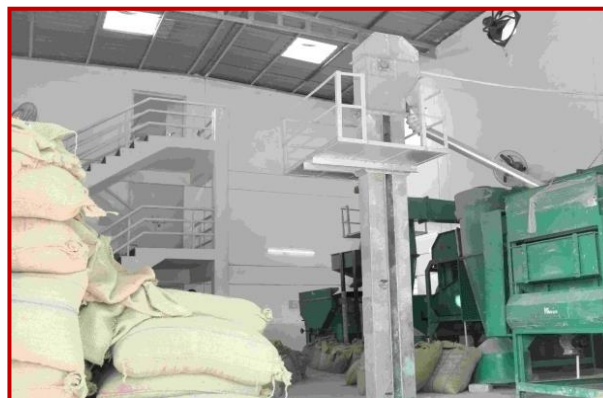
ICAR sanctioned a pulse seed hub project costing Rs.150.0 lakh to this KVK with the aim of production, procurement and promotion of quality seeds of urdbean, mungbean and chickpea, target of 2600 q in five years. During 2016-21, ICAR released total amount of Rs.150.0 lakhs for this project, out of which 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 3600 q of seed during

2016-23, out of which KVK produced 3564.90 q of seed during 2016-23 as per target as detailed below:

### Quality seed production under pulse seed hub during 2016-2023

| Crop           | Variety       | Year of release | Seed production (q) |               |               |
|----------------|---------------|-----------------|---------------------|---------------|---------------|
|                |               |                 | Target              | Production    | Disposal      |
| <b>2016-17</b> |               |                 |                     |               |               |
| 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         |
| <b>Total</b>   |               |                 | <b>500</b>          | <b>488.9</b>  | <b>488.9</b>  |
| <b>2017-18</b> |               |                 |                     |               |               |
| 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          |
| <b>Total</b>   |               |                 | <b>600</b>          | <b>623.7</b>  | <b>623.7</b>  |
| <b>2018-19</b> |               |                 |                     |               |               |
| 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         |
| <b>Total</b>   |               |                 | <b>1000</b>         | <b>1086.5</b> | <b>358.7</b>  |
| <b>2019-20</b> |               |                 |                     |               |               |
| Mungbean       | Sikha         | 2016            | -                   | 28.5          | 28.5          |
| Chickpea       | GNG-1958      | 2013            | -                   | 65.3          | 793.1         |
| <b>Total</b>   |               |                 |                     | <b>93.8</b>   | <b>821.6</b>  |
| <b>2020-21</b> |               |                 |                     |               |               |
| 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         |
| <b>Total</b>   |               |                 | <b>500</b>          | <b>392.0</b>  | <b>392.0</b>  |
| <b>2021-22</b> |               |                 |                     |               |               |
| Urdbean        | Kota Urd 3    | 2020            | 100                 | 60.0          | 60.           |
| Urdbean        | Kota Urd 3    | 2020            | 50                  | 8.0           | 8.0           |
| Mungbean       | MH 1142       | 2020            | 50                  | 42.0          | 45.0          |
| Chickpea       | GNG-2144/2171 | 2016/2017       | 300                 | 451.50        | 451.50        |
| <b>Total</b>   |               |                 | <b>500</b>          | <b>561.50</b> | <b>561.50</b> |

| <b>2022-23</b>     |               |         |             |                |                |
|--------------------|---------------|---------|-------------|----------------|----------------|
| Urdbean            | Kota urd 3    | 2020    | 100         | 13.5           | 13.5           |
| Chickpea           | GNG 2144/2171 | 2016/17 | 300         | 247.0          | 247.0          |
| Mungbean           | MH 1142       | 2020    | 50          | 51.0           | 51.0           |
| Urdbean            | Kota urd 4    | 2020    | 50          | 7.0            | 7.0            |
| <b>Total</b>       |               |         | <b>500</b>  | <b>318.50</b>  | <b>318.50</b>  |
| <b>Grand Total</b> |               |         | <b>3600</b> | <b>3564.90</b> | <b>3564.90</b> |



**Seed storage and grading unit under pulse seed hub**



**Dr. A.K. Vyas, HVC, AU, Kota and other officials of line departments visiting Blackgram Var. Kota Urd 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**

## **2. Oilseed hub under ICAR (2018-23)**

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 2022-23

| Crop               | Variety         | Year of release | Target (q)  | Production (q) | Disposal (q) | Category of seed |
|--------------------|-----------------|-----------------|-------------|----------------|--------------|------------------|
| <b>2018-19</b>     |                 |                 |             |                |              |                  |
| Mustard            | DRMR IJ-31      | 2013            | 400         | 496.32         | 147.32       | FS & CS          |
| <b>2019-20</b>     |                 |                 |             |                |              |                  |
| Mustard            | DRMR IJ-31      | 2013            | 500         | 574.50         | 923.50       | FS & CS          |
| <b>2020-21</b>     |                 |                 |             |                |              |                  |
| Mustard            | DRMR IJ-31      | 2013            | 250         | 222.00         | 222.00       | FS & CS          |
| <b>2021-22</b>     |                 |                 |             |                |              |                  |
| Mustard            | Pusa Mustard 32 |                 | 250         | 24.00          | -            | FS               |
|                    | DRMR 1165-40    |                 |             | 51.00          | -            | FS               |
|                    | DRMR IJ 31      | 2013            |             | 257.50         | -            | CS               |
|                    | Total           |                 | 250         | 332.50         |              |                  |
| <b>2022-23</b>     |                 |                 |             |                |              |                  |
| Mustard            | DRMR 2017-15    | 2021            | 250         | 258.0          | -            | FS & CS          |
| <b>Grand Total</b> |                 |                 | <b>1400</b> | <b>1883.32</b> |              |                  |



### 3. Establishment of Sirohi goat demonstration unit for raising income and skill development of rural youth of south eastern Rajasthan: under RKVY (2017-2022)

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 ₹ 186.34 lakhs during 2017-23 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.



#### 4. Establishment of Common Incubation centre for processing of Coriander, Garlic and Bakery products under the scheme of PMFME, from Ministry of Food Processing Industries (GOI)

Krishi Vigyan Kendra, Kota (Raj.) has received an approval for Establishment of Common Incubation centre for processing of Coriander, Garlic and Bakery products under the scheme of PMFME, from Ministry of Food Processing Industries (GOI), New Delhi-110049 with a budget provision of Rs 300.39 lakh vide letter No. FM-11/75/2020-AS-FME dated 24.05.2021 with the recommendation of ICAR, New Delhi under the component of ODOP of the district Kota i.e. Coriander along with garlic and bakery products as identified by Govt. of India. As per project approval the following machineries and equipment's are to be procured and construction of building & the details are as under:

| S. No.       | Particulars  | Approved Grant in Aid (Rs in lakh) |
|--------------|--|------------------------------------|
| 1            | Construction of new building   | 83.46                              |
| 2            | Flooring, minor renovation, power supplies, boiler, RO plant etc                         | 3.04                               |
| 3            | Processing lines on Cleaning, grading and packaging of whole coriander seeds and powders | 77.16                              |
| 4            | Processing lines on Bakery products manufacturing  | 34.31                              |
| 5            | Processing lines on Garlic flakes unit   | 85.31                              |
| 6            | Food testing laboratory  | 17.11                              |
| <b>Total</b> |  | <b>300.39</b>                      |

#### Objectives of CIC:

1. To provide incubation facilities to the start-ups, FPOs, SHGs, micro entrepreneurs, co-operatives and other stakeholders.
2. To organize skill trainings for the development of entrepreneurship in youth, farm women, FPOs, and to increase the efficiency and effectiveness of food industry operations.

3. To mentor and support start-ups/incubates/entrepreneurs for their establishment and operation of new enterprises.
4. To work as centre of excellence in coriander and garlic processing for different stakeholders, farmers, entrepreneurs, researchers, policy makers and others.

**Salient feature of Incubation Centre:**

- i. Processing line 1: Cleaning, grading and packing of whole coriander seeds and powder (capacity-250 kg per hour).
- ii. Processing line 2: Bakery products manufacturing line (capacity-100 kg per hour).
- iii. Processing line 3: Garlic flake unit (capacity-250 kg per hour).
- iv. Support and mentoring the start-ups, entrepreneurs, rural youth and other stakeholders.

**Present status:**

- Construction works of new building and the installation & trial run of machineries for all three processing lines have been completed.
- The selection of operator for O & M agency has been finalized.
- The physical verification by joint committee of SNA, Mentor institute and host institute completed on 23.02.2024.



### **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 and Chomabibu for various activities of NARI.

| Activity                       | Types                                 | Units/Trainings | Area (Sqm) | No of beneficiaries |
|--------------------------------|---------------------------------------|-----------------|------------|---------------------|
| Nutrition Garden Demonstration | Backyard/Kitchen garden               | 30              | 3000       | 120                 |
|                                | Community level                       | 10              | 1000       | 100                 |
| Trainings                      | Soya Processing                       | 01              |            | 25                  |
|                                | Millet Processing                     | 01              |            | 25                  |
|                                | Nutri thali and nutri garden          | 01              |            | 25                  |
| Awareness programme            | Poshan vatika kaise lagae             | 01              |            | 45                  |
|                                | Sway sahayta samuh kaise kare vyavsay | 01              |            | 35                  |
|                                | poshan thali mai ahar ka santulan     | 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                | 02        | 50                  |
|                     | Drumstick processing                               | 01        | 25                  |
|                     | Amla processing and value addition                 | 01        | 25                  |
| Awareness programme | Sway sahayta samuh hetu khadya prasnsakaran udhyog | 03        | 84                  |
|                     | Haldi prasnsakaran kauise kare                     | 01        | 22                  |



## समन्वित कृषि प्रणाली : किसानों की खुशहाली

कृषि के विभिन्न उद्यमों जैसे फसल उत्पादन, पशुपालन, फल एवं सब्जी उत्पादन इत्यादि का समायोजन जिससे संसाधनों की क्षमता एवं उत्पादकता में वृद्धि हो सके। कृषि विज्ञान केन्द्र पर आयोजित प्रशिक्षणों एवं तकनीकी मार्गदर्शन से श्री घनश्याम यादव ग्राम सुहाना द्वारा 3.00 है। क्षेत्र में समन्वित कृषि प्रणाली मॉडल अपनाया। इसमें 1.00 है। में अमरूद का बगीचा, 0.5 है। में पपीता 0.5 है। में आलू एवं अन्तराशष्य तकनीक से नगदी फसलो की खेती कर रहे हैं तथा इनके पास 2 भैंस एवं 1 गाय है। इस समन्वित कृषि प्रणाली मॉडल से वार्षिक 8.00–9.00 लाख रुपये शुद्ध आय अर्जित कर रहे है।

### क्षैतिज प्रसार

कृषि विज्ञान केन्द्र द्वारा कृषि विज्ञान मेला 2022 में श्री यादव को समन्वित कृषि प्रणाली मॉडल विकसित करने हेतु प्रशस्ति पत्र मिला। श्री यादव के समन्वित कृषि प्रणाली के "सुहाना मॉडल" को जिले के दूसरे किसान भी अपना रहे हैं।

### केन्द्र के तकनीक मार्गदर्शन द्वारा किसानों के खेतों में स्थापित आईएफएस मॉडल

| क्र.सं. | नाम             | पता           | मोबाईल नं. | वार्षिक शुद्ध आय (लाख में) |
|---------|-----------------|---------------|------------|----------------------------|
| 1       | सत्यनारायण यादव | सुहाना, दीगोद | 9414179545 | 5.00–6.00                  |
| 2       | परमानन्द        | सुहाना, दीगोद | 9928476044 | 4.00–5.00                  |
| 3       | बृजमोहन मीणा    | चौमाकोट       | 9928259037 | 3.00–4.00                  |
| 4       | सुरेश मीणा      | राईखेडा       | 8290409774 | 4.00–5.00                  |



## बागवानी : किसान समृद्धि की कहानी

कृषि विज्ञान केन्द्र द्वारा जिले में बागवानी को बढ़ावा देने हेतु कौशल विकास प्रशिक्षण आयोजित किये जाते हैं। कोटा जिले के पीपल्दा निवासी श्री मनोज खण्डेलवाल ने परम्परागत खेती की जगह बागवानी को अपनाकर अपने खेत में केन्द्र के तकनीकी मार्गदर्शन से 5.00 है. अमरूद (किस्म – वीएनआर-वीही, थाईपिंक, बर्फखानगोला) का बगीचा स्थापित किया। जिससे प्रतिवर्ष 15.00–18.00 लाख रुपये की शुद्ध आय अर्जित कर रहे हैं। वर्तमान में श्री खण्डेलवाल द्वारा और 4.00 है. में नया अमरूद का बगीचा स्थापित किया गया है।

### अमरूद बगीचा स्थापना का आर्थिक विश्लेषण (5.00 है.)

|                          |   |
|--------------------------|---|
| स्थापना खर्च             | : 8.00– 10.00 लाख रुपये (ड्रिप सिंचाई के साथ) |
| कुल फल उत्पादन प्रतिवर्ष | : 100–110 टन                                  |
| फल विक्रय दर             | : 20–25 रुपये प्रति कि.ग्रा.                  |
| कुल वार्षिक आय           | : 20.00–25.00 लाख रुपये                       |
| कुल वार्षिक लागत         | : 5.00–6.00 लाख रुपये                         |
| कुल वार्षिक शुद्ध लाभ    | : 15.00–20.00 लाख रुपये                       |
| लाभ लागत अनुपात          | : 3.00  |

### क्षैतिज प्रसार

- केन्द्र से प्रशिक्षण प्राप्त कर एवं श्री खण्डेलवाल द्वारा प्रेरणा लेकर जिले के 20 से अधिक ग्रामीण युवाओं ने बागवानी को रोजगार के रूप में अपनाकर 8.00–15.00 लाख रुपये प्रति वर्ष कमा रहे हैं।
- श्री खण्डेलवाल को उद्यानिकी के क्षेत्र में उत्कृष्ट कार्य करने हेतु भारतीय जैविक किसान उत्पादक संघ एवं कृषि विज्ञान केन्द्र द्वारा जिला स्तरीय कृषक प्रशस्ति पत्र एवं अन्य पुरस्कार प्राप्त हुए हैं।

### केन्द्र के तकनीक मार्गदर्शन से किसानों के खेतों में स्थापित मुख्य बागवानी इकाई

| क्र.सं. | नाम                 | पता              | मोबाईल नं. | वार्षिक शुद्ध आय (लाख में) |
|---------|---------------------|------------------|------------|----------------------------|
| 1       | गिर्राज प्रसाद मीणा | बूढादीत, कोटा    | 9680840702 | 8.00–10.00                 |
| 2       | मुकेश कुमार मीणा    | उमरहेड़ी, कोटा   | 6375443261 | 12.00–15.00                |
| 3       | जयप्रकाश गहलोट      | अर्जुनपुरा, कोटा | 9530013508 | 10.00–12.00                |
| 4       | प्रहलाद मीणा        | राईखेड़ा, कोटा   | 8107952451 | 8.00–10.00                 |



किसान की आय दोगुनी करने का बेहतर विकल्प है बागवानी

## बागवानी ने बदली किस्मत, युवाओं को दे रहे रोजगार



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कोटा, कोटा संगम के युवा किसान बागवानी को अपनाकर अपना नाम बदलने में लगे हैं। यहाँ ही एक युवा किसान ने पारम्परिक खेती को छोड़ बागवानी को अपनाया और आज एक कुशल जीवन का विधा। युवा किसान ने तीन साल पहले 10 बीघा में अमरूद की बागवानी शुरू की, जो आज बरकर 40 बीघा में हो गई है। पहले युवा किसान प्रोडक्ट डेलिवरी करने का जीवन अब 20 लोगों को रोजगार दे रहा है। अपनी कीमत बढ़ाते तो किसान सालाना 20 लाख रूप्य कमा सकते हैं।



### 10 हजार से ज्यादा पौधे

का अमरूद पैदा होता है, इसमें फल ज्यादा जोड़े हैं और रसदार रस का रस का फल होता है। इसका फल 300 ग्राम तक होता है। अमरूद की 15 किस्में के कृषि कर्मचारी का है। इसे खेती के बाद 15 से 20 दिन तक रख सकते हैं। इसमें मिष्ठान कम होता है। एक अमरूद का वजन 700 ग्राम से 1

### बागवानी के लिए छोड़ी नौकरी

कोटा जिले के किसान निहारी युवा किसान मनोज खण्डेलवाल ने बताया कि पहले उनके पास अमरूद की ही पारंपरिक खेती पर खेती करते थे। वह प्रोडक्ट डेलिवरी के साथ खेती में निहारी का रस बढ़ता था। खेती-खेती खेती में लगाने लगे। 2018 में कृषि विज्ञान केन्द्र कोटा में आयोजित बागवानी प्रशिक्षण शिविर में भाग लिया।

इसके बाद वेव के अलावा अलग बागवानी में अमरूद बागवानी का काम शुरू हो गया कि पारम्परिक खेती के जगह बागवानी में आया। इसके बाद निहारी छोड़ दी। तीन साल पहले 10 बीघा में अमरूद का बगीचा लगाया। अमरूद उत्पादक होने लगने लगे बागवानी 40 बीघा में करने लगे।



### बागवानी से आय दोगुनी

कृषि विज्ञान केन्द्र के प्रमुख वैज्ञानिक डॉ. रमजान मीणा ने बताया कि बागवानी के साथ किसान अपनी पर्सों को खेती कर आज दोगुना कर सकते हैं। समय-समय पर बागवानी का प्रशिक्षण शिविर



सम्पादक जगत है। इसमें किसानों को बागवानी का तरीका, बुद्धि, बुद्धि, शिवाई, उच्च किस्म के फलों का बागवानी के साथ अन्य क्षेत्रों परामर्श से सकते हैं, इसकी जानकारी दी जाती है। बागवानी का किसान को 50 से 60 प्रतिशत तक अनुमान में मिलता है।

## News Coverage

## दैनिक नवज्योति

Kota City - 27 May 2023 - Page 7

कृषि विज्ञान केन्द्र की वैज्ञानिक सलाहकार समिति की वार्षिक बैठक सम्पन्न

नवज्योति/कोटा।

कृषि विज्ञान केन्द्र की 30 वीं वैज्ञानिक सलाहकार समिति की वार्षिक बैठक शुक्रवार को कृषि विश्वविद्यालय के कुलपति डॉ. अभय कुमार व्यास की अध्यक्षता में सम्पन्न हुई, जिसमें केन्द्र की वर्ष 2022-23 की प्रगति एवं वर्ष 2023-24 की कार्य योजना पर विचार विमर्श किया गया।

कुलपति ने कहा कि कृषि विज्ञान केन्द्र के कार्यक्रम स्टैक होल्डर्स किसान, महिलाएं, स्टार्टअप उद्यमी, इण्डस्ट्रीज, विद्यार्थियों की मांग एवं फ्रीडबैक के आधार पर बनाए जाने चाहिए। उन्होंने कहा कि कोटा केन्द्र द्वारा किए जा रहे कार्य देश के अन्य केन्द्रों के लिए अनुकरणीय हैं। केन्द्र पर हाइड्रोपोनिक, वर्टीकल फार्मिंग मशरूम उत्पादन की मॉडल इकाइयों की शीघ्र ही स्थापना की जाएगी। जिससे राज्य के हजारों कृषक लाभान्वित होंगे। किसानों की आय में बढ़ोतरी के लिए समन्वित कृषि प्रणाली को बढ़ावा दिया जाना चाहिए।

### नर्सरी इकाइयों में तैयार होंगे सजावटी पौधे

इस अवसर पर समिति के सदस्यों को केन्द्र के फार्म पर मूंग किस्म एमएच 1142, उड़द किस्म 3 व 4 के लिए बीज उत्पादन कार्यक्रम का अवलोकन कराया गया। बैठक में केन्द्र के वैज्ञानिकों द्वारा प्राकृतिक खेती पर तैयार किए फोल्डर का विमोचन किया गया। निदेशक प्रसार शिक्षा कृषि विश्वविद्यालय डॉ. एस्के जैन ने नर्सरी इकाई में सजावटी पौधे तैयार करने एवं गिर गाव के दूध के सही मूल्य के लिए एक सोसायटी बनाने का सुझाव दिया। निदेशक अनुसंधान कृषि विश्वविद्यालय डॉ. प्रताप सिंह ने किसानों को और अधिक उच्च उत्पादकता वाली किस्मों के बीज उपलब्ध कराए जाने एवं अधिष्ठाता कृषि महाविद्यालय डॉ. एमसी जैन ने अधिक से अधिक विद्यार्थियों को केन्द्र का भ्रमण कराये जाने की आवश्यकता बतायी।

## केवीके में हाइड्रोपोनिक, वर्टीकल फार्मिंग व मशरूम उत्पादन की स्थापित होगी मॉडल इकाइयां

### प्राकृतिक खेती पर दिया जोर



अतिरिक्त निदेशक कृषि खण्ड कोटा पीके गुप्ता ने केन्द्र द्वारा तैयार किये गये उद्यमियों का सम्मेलन आयोजित करने की सलाह दी जिससे जिले में और अधिक युवाओं को कृषि उद्यमी बनाये जाने के लिए प्रेरित किया जा सके। प्रधान वैज्ञानिक आईसीएआर अटारी डॉ. मोहर सिंह मोषा ने सफल उद्यमियों की कहानियों को डोक्यूमेंट करने एवं आईसीएआर, डडवाडा डॉ. रामवतार जाट ने प्राकृतिक खेती को बढ़ावा दिये जाने की जानकारी दी।

संयुक्त निदेशक कृषि डॉ. खेमराज शर्मा ने खरीफ में बुवाई रिज प्लॉटर, डॉ. शंकर लाल जागिड़ ने उद्यमिता विकास, परियोजना निदेशक सीएडी नान्ता जेके शर्मा ने समन्वित उर्वरक प्रबन्धन, संयुक्त निदेशक उद्यान पीके सिंह ने सब्जी उत्पादन को बढ़ावा देने, उपनिदेशक

उद्यान आनन्दी लाल मोषा ने फल उत्पादन को बढ़ावा देने दिया। डॉ. तनोज चौधरी ने सीएडी एरिया में हरा चारा उत्पादन को बढ़ावा देने का सुझाव दिया। लीड बैंक अधिकारी के आर मोषा ने किसानों को प्राथमिकता के आधार पर ऋण उपलब्ध करवाने, नाबार्ड के अधिकारी, रामप्रसाद शर्मा ने एफपीओ को बढ़ावा देने, इफको के लालाराम चौधरी ने नैनो यूरिया, एनएससी के मुकेश वर्मा ने बीज उत्पादन के बारे में बताया। मत्स्यपालन की डॉ. अमृता शिवानी ने मछली पालन को बढ़ावा देने, डॉ. डीआर मेघवाल ने युवाओं को कृषि से जोड़ने, आकाशवाणी के हरिओम मोषा, डॉ. अर्जुन वर्मा, दुर्गा कुमारी, संतोष कुमार सुरेश मोषा, सुमन शर्मा, हेमलता सोनगरा ने भी अपने विचार रखे।

## दैनिक नवज्योति

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## कृषि विज्ञान केन्द्र में कार्यशाला आयोजित

### कृषि प्रोडक्ट के उत्पादन व गुणवत्ता के विपणन पर ध्यान देना जरूरी

नवज्योति/कोटा। कृषि विज्ञान केन्द्र कोटा में सोमवार को कार्यशाला का आयोजन किया गया। यह कार्यक्रम चौधरी चरण सिंह राष्ट्रीय कृषि विपणन संस्थान, जबपुर एवं कृषि विश्वविद्यालय कोटा के संयुक्त तत्वावधान में आयोजित हुआ। जिसमें 5 दर्जन स्टोक होल्डर्स, कृषि उद्यमी, एफपीओ, प्रगतिशील कृषकों ने भाग लिया। कार्यशाला को संबोधित करते हुए कृषि विश्वविद्यालय के प्रसार शिक्षा निदेशक डॉ. एस्के जैन ने कहा, हमें कृषि उत्पादों के उत्पादन व गुणवत्ता के विपणन पर भी ध्यान देना होगा। किसानों की आय में वृद्धि के लिए कृषि उत्पादों का प्रसंस्करण, भण्डारण एवं उचित मूल्य पर विपणन आवश्यक है। अधर, चौधरी चरण सिंह राष्ट्रीय कृषि विपणन संस्थान के उपनिदेशक डॉ. एसआर सिंह ने देश में कृषि विपणन की स्थिति एवं सम्भावनाएं, कृषक उत्पादक संगठन की भूमिका के बारे में बताया। साथ ही कृषि विपणन के लिए भारत सरकार द्वारा संचालित विभिन्न ऐप के माध्यम से उत्पादन विपणन की प्रक्रिया समझाई। केन्द्र के वरिष्ठ वैज्ञानिक डॉ. महेन्द्र सिंह ने बताया कि केन्द्र द्वारा स्टोक होल्डर्स में उद्यमिता विकास कर उन्हें मार्केट से जोड़कर



उद्यमी बनाने का कार्य किया जा रहा है। जिससे सैंकड़ों युवा, महिलाएं स्वरोजगार प्राप्त कर रही हैं। कार्यशाला प्रभारी, डॉ. रूपसिंह ने विपणन के विभिन्न प्लेटफार्म, डॉ. राकेश कुमार बैरवा ने उच्च गुणवत्ता के कृषि उत्पादों के

उत्पादन, डॉ. बीएल नागर ने फल सब्जी, उत्पादन एवं प्रसंस्करण, गुंजन सनाढ्य ने खाद्य प्रसंस्करण एवं सरिता बेनीवाल ने खाद्य पदार्थों के संरक्षण की जानकारी दी।

### लार्स वलब कोटा शक्ति ने किया सीए व डॉक्टरों का सम्मान

नवज्योति/कोटा। लार्स वलब कोटा शक्ति की ओर से सीए व डॉक्टरों का सम्मान किया गया। क्लब सचिव सुबाश्री जैन सर्राफ ने बताया कि कार्यक्रम में डॉ. रेनु वर्मा, डॉ. बीआर मीना, सीए अंकित गुप्ता, सीए प्रतीक बाबेल, सीए कल्पेश जैन व सीए कृतिक जैन को सम्मानित किया गया। क्लब अध्यक्ष अल्का जैन ने प्रशस्ति पत्र देकर सम्मानित किया।



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## कृषि विज्ञान केन्द्र में चार दिवसीय शिविर का समापन युवा बकरी पालन को व्यवसाय के रूप में अपनाएं

नवज्योति/कोटा

कृषि विज्ञान केन्द्र में बकरी पालन पर चार दिवसीय शिविर का आयोजन किया गया। जिसमें संभाग के 35 पशुपालकों ने भाग लिया। प्रशिक्षण शिविर के समापन अवसर पर कृषि विज्ञान केन्द्र, वरिष्ठ वैज्ञानिक एवं अध्यक्ष, डॉ. महेन्द्र सिंह ने बताया कि संभाग के युवा बकरी पालन को व्यवसाय के रूप में अपनाकर उद्यमी बन सकते हैं। बकरी पालन व्यवसाय, कम लागत एवं कम स्थान के साथ शुरू किया जा सकता है तथा इसमें जाखिम भी बहुत कम है। प्रशिक्षण शिविर के प्रभारी प्रोफेसर रामआसरे ने बताया कि सिराही नस्ल की बकरी से उच्च गुणवत्ता का मांस एवं दूध मिलता है। कृषि विज्ञान केन्द्र, बून्दी के पशुपालन विशेषज्ञ, डॉ. घनश्याम मौणा ने बकरियों के आहार तथा बकरियों में खुर काटना, टैग लगाना, शरीर तापमान ज्ञात करना आदि की जानकारी पशुपालकों को दी। कार्यक्रम में एग्री. क्लोनिक एवं एग्री. विजनिंस सेन्टर

उदयपुर के डॉ. मुकेश सुधार ने बताया कि नेशनल लाइवस्टोक मिशन के अन्तर्गत पशुपालक 100 बकरियों की यूनिट पर 10 लाख रुपये की कैपिटल सब्सिडी ले सकते हैं। उन्होंने पशुपालकों को इसकी विस्तृत जानकारी भी प्रदान की। नाबार्ड के डीडीएम रामप्रसाद शर्मा ने बताया कि बकरी पालन को बढ़ावा देने के लिए बैंकों द्वारा ऋण को प्राथमिकता दी जाएगी। केन्द्रीय भेड़ एवं ऊन अनुसंधान संस्थान के वरिष्ठ वैज्ञानिक डॉ. सत्यवीर सिंह ने बताया कि बकरी पालक हेल्थ कलेण्डर को अपनाकर बकरियों में मृत्युदर को 5 प्रतिशत से कम कर सकते हैं। पशुपालन विभाग के वरिष्ठ पशुचिकित्सक, डॉ. भंवरलाल ने बकरियों में टीकाकरण एवं कुमिनाशक दवा पिलाने की जानकारी दी। शिविर में बकरियों की नस्ल एवं आवास, बकरी के दूध प्रसंस्करण, हराचारा उत्पादन, बकरी फार्म स्थापना के समय ध्यान रखने योग्य मुख्य बातों की भी जानकारी दी गई।

# दैनिक नवज्योति

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## कृषि विज्ञान केंद्र में दो दिवसीय शिविर का शुभारंभ प्राकृतिक खेती से बढ़ेगी किसानों की आय

नवज्योति/कोटा।

कृषि विभाग एवं इस्टीट्यूट ऑफ एग्रिकल्चर साइंसेज एंड टेक्नोलॉजी ट्रस्ट के तत्वावधान में बुधवार को कृषि विज्ञान केन्द्र में प्राकृतिक खेती पर शिविर आयोजित किया गया। जिसमें कोटा जिले के प्राकृतिक खेती से जुड़े 100 से अधिक कृषकों ने भाग लिया। कृषि विश्वविद्यालय के कुलपति प्रो. अभय कुमार व्यास ने बताया कि खाद्य सुरक्षा के लिए आधुनिक खेती पर जोर दिया गया। इसके बाद आर्गेनिक फार्मिंग का दौर चला तथा वर्तमान में प्राकृतिक खेती को अपनाने की जरूरत है। उन्होंने वन हेल्थ कॉन्सेप्ट की जानकारी देते हुए बताया कि हमें मृदा को स्वस्थ रखना होगा, जिससे स्वस्थ फसल, चारा, पशु आहार, स्वस्थ वातावरण होगा। उन्होंने कहा कि प्राकृतिक खेती को अपनाने से कृषि की लागत में कमी होगी और कृषि उत्पादों की गुणवत्ता में सुधार होगा। जिससे बाजार में अधिक मूल्य प्राप्त होगा।

अतिरिक्त जिला कलक्टर राजकुमार सिंह ने बताया कि हमें उपभोक्ताओं के स्वास्थ्य का ध्यान रखते हुए रसायनिक उर्वरकों एवं कीटनाशकों के उपयोग में कमी लाकर प्राकृतिक खेती को अपना



चाहिए। प्राकृतिक खेती से कृषि के उत्पादन में कमी नहीं होती बल्कि उपभोक्ताओं के अच्छे स्वास्थ्य के कारण लाभ प्राप्त होता है। किसानों को नागरिकों के स्वास्थ्य का भी ध्यान रखना चाहिए।

इस्टीट्यूट ऑफ एग्रिकल्चर साइंसेज एंड टेक्नोलॉजी ट्रस्ट के सैजल स्वामी ने बताया कि विश्व को भारत ने खेती करना सिखाया। उन्होंने बताया कि शिविर में किसानों को बीजामृत, जीवामृत, घनजीवामृत, नौमास्र, बहामास्र, अग्निस्त्र, तामुदही, पंचगव्य बनाना सिखाया जाएगा।

जिनका उपयोग कर हाडौती के किसान प्राकृतिक खेती को अपना सकेंगे।

कृषि विभाग के अतिरिक्त निदेशक पीके गुप्ता ने बताया कि हाडौती के किसान उर्वरक एवं रसायनों का अधिक उपयोग करते हैं, जो कि चिन्ताजनक है। शिविर में डॉ. एस. के. जैन, निदेशक प्रसार शिक्षा, पीएम एंड ई के निदेशक डॉ. एमसी गोयल, संयुक्त निदेशक कृषि (विस्तार) खेमराज शर्मा, सहायक निदेशक कृषि एवं कृषि विज्ञान केन्द्र राजवीर सिंह, कोटा के वरिष्ठ वैज्ञानिक डॉ. महेन्द्र सिंह मौजूद रहे।

## आकाश शहर जिलाध्यक्ष नियुक्त

नवज्योति/कोटा।

गौराक्षत विराट बजरंग दल के राष्ट्रीय अध्यक्ष राजवीर बंजारा व प्रदेश महामंत्री गुड्डू मरचुनिया की सहमति से आकाश मेहरा को कोटा शहर जिलाध्यक्ष नियुक्त किया।



कोटा 06-12-2023

## विश्व मृदा दिवस • कृषि विज्ञान केंद्र में आयोजित संगोष्ठी में बोले कृषि वैज्ञानिक रासायनिक खाद-कीटनाशक से घट रही मिट्टी की उर्वरा क्षमता

सिटी रिपोर्टर / कोटा

कृषि विज्ञान केंद्र, जलसहज विकास एवं भू-संरक्षण विभाग एवं कृषि विभाग के संयुक्त तत्वावधान में मंगलवार को कृषि विज्ञान केन्द्र पर विश्व मृदा दिवस का आयोजन किया।

कृषि विज्ञान केन्द्र के वरिष्ठ वैज्ञानिक एवं अध्यक्ष डॉ. महेन्द्र सिंह ने बताया कि इस बार विश्व मृदा दिवस की थीम मिट्टी और जल जीवन का एक स्रोत है रही। उन्होंने बताया कि मृदा दिवस का मुख्य उद्देश्य लोगों को स्वस्थ मिट्टी के महत्व के बारे में जागरूक करना है। कृषि विभाग के संयुक्त निदेशक खेमराज शर्मा ने बताया



कि खेतों में अत्यधिक रासायनिक खाद एवं कीटनाशक के प्रयोग से मिट्टी के जैविक गुणों में कमी आ रही है और मिट्टी की उपजाऊ क्षमता घटती जा रही है। जलसहज विकास एवं भू-संरक्षण विभाग के अधीक्षण अभियन्ता उमेश गुप्ता ने बताया कि

खराब भूमि प्रबंधन प्रणालियों ने कई स्थानों पर मिट्टी की गुणवत्ता को खराब कर दिया है, जिससे मृदा क्षरण, मृदा उर्वरता में कमी और कार्बनिक पदार्थों की खानि हो रही है। वैज्ञानिक डॉ. राकेश कुमार बैरवा ने बताया कि कृषक उर्वरकों का उपयोग

सॉल्ल हेल्थ कार्ड की सिफारिश के अनुसार करें। डॉ. अरविन्द नागर ने बताया कि मृदा के स्वास्थ्य को बनाए रखने के लिए देशी खाद की उपयोग की जानकारी दी। डॉ. रूपसिंह ने वेस्ट डी-कम्पोजर एवं ट्राईकोडम के उपयोग की जानकारी दी।

# दैनिक नवज्योति

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## जिला स्तरीय मिलेनियर फार्मर सम्मान समारोह नवीन कृषि प्रौद्योगिकी अपनाकर बिलेनियर फार्मर बनें: कलक्टर



जिला कलक्टर कृषि विज्ञान केन्द्र पर सम्मानित करते हुए।

### नवज्योति/कोटा

कृषि जागरण एवं एग्रीकल्चर वर्ल्ड तथा कृषि विज्ञान केन्द्र की सहभागिता से जिला स्तरीय मिलेनियर फार्मर सम्मान समारोह का आयोजन मंगलवार को कृषि विज्ञान केन्द्र पर आयोजित किया गया। जिसमें जिले के मिलेनियर फार्मरस का सम्मान किया गया। समारोह के मुख्य अतिथि जिला कलक्टर एमपी मोना ने मिलेनियर फार्मरस को प्रशस्ति पत्र एवं ट्रॉफी देकर सम्मानित किया। उन्होंने किसानों को आव्हान किया कि कृषि विज्ञान केन्द्र एवं कृषि जागरण के मार्गदर्शन में कृषक, कृषि की नई प्रौद्योगिकी को अपनाकर मिलेनियर

से बिलेनियर फार्मर बनें। जिले में कृषि की अपार संभावनाओं को देखते हुए जिले के युवा कृषक, कृषि, डेयरी, उद्यानिकी, मधुमक्खी पालन, खाद्य प्रसंस्करण, मशरूम उत्पादन आदि को अपनाकर कृषि उद्यमी बनें। उन्होंने मिलेनियर फार्मरस से संवाद किया तथा केन्द्र की मॉडल डेयरी एवं खाद्य प्रसंस्करण इकाई का अवलोकन किया। उन्होंने बताया कि कृषि विज्ञान केन्द्र पर स्थित मॉडल प्रदर्शन इकाई देश के अन्य केन्द्रों के लिए भी रोल मॉडल है। इस केन्द्र पर देश के विभिन्न क्षेत्रों से किसानों को प्रशिक्षण के लिए भेजे जाने की आवश्यकता है।

### विभिन्न केन्द्रों पर होगा सम्मान समारोह

कृषि जागरण एवं एग्रीकल्चर वर्ल्ड के संस्थापक एवं प्रधान सम्पादक एमसी डोमिनिक ने बताया कि आने वाला समय किसानों का है तथा देश भविष्य में बिलेनियर किसानों के नाम से जाना जाएगा।

किसानों की आय में बढ़ोतरी के लिए कृषि जागरण देश के विभिन्न केन्द्रों पर मिलेनियर फार्मर सम्मान समारोह का आयोजन करेगा। कृषि विज्ञान केन्द्र के वरिष्ठ वैज्ञानिक एवं अध्यक्ष डॉ. महेन्द्र सिंह ने बताया कि केन्द्र जिले के किसानों को मिलेनियर किसान बनाने के लिए विभिन्न विभागों, एजेंसियों के साथ मिलकर विभिन्न कार्यक्रमों को आयोजन करेगा। कृषि विभाग के संयुक्त निदेशक खेमराज शर्मा ने कृषि विभाग एवं आमन्तौलाल मोना ने उद्यान विभाग

की विभिन्न योजनाओं की जानकारी दी। इस अवसर पर केन्द्र के वैज्ञानिक डॉ. राकेश बैरवा ने प्राकृतिक खेती, डॉ. रूप सिंह ने रबी फसलों में रोग प्रबंधन, डॉ. अरविन्द्र नागर ने उद्यानिकी एवं गुंजन सनाहव ने खाद्य प्रसंस्करण की जानकारी दी। इस अवसर पर खाद्य प्रसंस्करण में बेबीरानी, सुमन शर्मा, हेमलता सोनगय, गायत्री वैष्णव, मधुमक्खी पालन में नरेन्द्र मालव, हरिप्रसाद मीना, रामवीर, हरिओम मेहरा, डेयरी फार्मिंग में जिनेन्द्र चौधरी, रोहित सिंह, जैविक खेती में युधिष्ठिर चान्सी, प्रहलाद बैरवा, ईश्वर गौतम, समन्वित कृषि प्रणाली में घनश्याम यादव, वृजमोहन मोना, सुरेश मोना बागवानी में मनोज खण्डेलवाल, गौरव खण्डेलवाल को किए जा रहे उत्कृष्ट कार्य के लिए सम्मानित किया।

## समन्वित कृषि प्रणाली पर कोटा के किसान घनश्याम को अवार्ड



कोटा. कृषि में नवाचार व समन्वित कृषि पर कोटा जिले के सुहाना निवासी किसान घनश्याम यादव को भारतीय अनुसंधान परिषद नई दिल्ली के मेला ग्राउण्ड में आयोजित कार्यक्रम में डिस्ट्रिक्ट मिलेनियर फार्मर ऑफ इंडिया अवार्ड 2023 से सम्मानित किया। यादव ने बताया कि कृषि जागरण की ओर से 6 से 8 दिसम्बर तक दिल्ली में आयोजित कार्यक्रम में देशभर से खेती में नवचारा, बागवानी यानी समन्वित खेती करने वाले किसानों का चयन कर उन्हें सम्मानित किया गया। कार्यक्रम में मुख्य अतिथि सर्वोच्च न्यायालय के पूर्व न्यायाधीश व गुजरात के राज्यपाल

आचार्य देवकृत ने अवार्ड प्रदान किया। उन्होंने बताया कि कोटा कृषि विश्वविद्यालय, केवीके कोटा व आत्मा से तकनीकी ज्ञान व प्रशिक्षण के बाद साल 2018 से उद्यानिकी के साथ अन्य फसलों की बुवाई शुरू की गई। इसमें पपीता, अमरूद, चीकू, संतरा, नींबू, सेब के साथ खरबूजा, मसूर, आलू, धनिया सहित अन्य फसलें करने लगा। उन्होंने बताया कि पपीता के 1800, अमरूद के 1100, चीकू 22, नींबू 150, संतरा 42 व सेब के 5 पौधे हैं। उन्होंने बताया कि समन्वित खेती पर पहले भी आत्मा की ओर से जिले में द्वितीय पुरस्कार 25 हजार रुपए मिल चुका है।

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Source : <https://epaper.patrika.com/>