

Annual Progress Report

(January, 2022 – December, 2022)



सत्यमेव जयते

Government of India

Submitted

by



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PROFORMA FOR ANNUAL REPORT 2022 (1st January- 31st December 2022)

1. GENERAL INFORMATION ABOUT THE KVK

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

| Name and address of KVK | Telephone | | E-Mail |
|---|------------|-----|----------------------------------|
| | Office | FAX | |
| Krishi Vigyan Kendra, Narkatiaganj, West Champan Pin: 845455 | 6287797161 | – | head.kvk.narkatiaganj@rpcu.ac.in |

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

| Name and address of Host Organization | Telephone | | E mail |
|---|--------------|--------------|---------------|
| | Office | FAX | |
| DRPCA, Pusa, Samastipur- 848125, Bihar | 06274-240226 | 06274-240255 | vc@rpcu.ac.in |

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

| Name | Telephone / Contact | | |
|-------------|---------------------|------------|--|
| | Residence | Mobile | Email |
| Dr RP Singh | - | 9532460717 | head.kvk.narkatiaganj@rpcu.ac.in |
| | | Facebook | Krishi Vigyan Kendra West Champan-II |
| | | WhatsApp's | 6287797161 |

1.4. Year of sanction of KVK: 2019

1.5. Staff Position (as on 31st December 2022)

| Sl. No. | Sanctioned post | Name of the Incumbent | Designation | Discipline | Pay Scale with Present Basic | Date of joining | Permanent/Temporary | Category (SC/ST/OBC/ Others) |
|---------|-----------------------------|-------------------------|---------------------------|---|---|-----------------|---------------------|------------------------------|
| 1. | Senior Scientist& Head | Dr. R. P. Singh | Senior Scientist and Head | Plant Pathology | Rs.131400-217100 with present basic: Rs.139400.00 | 19/09/2020 | Permanent | Others |
| 2. | Subject Matter Specialist | Dr. Bhushan Kumar Singh | Subject Matter Specialist | Animal Science (Veterinary Science) | Rs 56100-177500 with present basic: Rs. 57800.00 | 07/03/2022 | Permanent | OBC |
| 3. | Subject Matter Specialist | Dr. Gagan Kumar | Subject Matter Specialist | Plant Protection (Plant Pathology) | Rs 56100-177500 with present basic: Rs. 57800.00 | 13/03/2022 | Permanent | OBC |
| 4. | Subject Matter Specialist | Mr. Abhik Patra | Subject Matter Specialist | Crop Production (Soil Science) | Rs 56100-177500 with present basic: Rs. 57800.00 | 12/03/2022 | Permanent | OTHERS |
| 5. | Subject Matter Specialist | Er. Pankaj Malkani | Subject Matter Specialist | Agricultural Engineering (Farm machinery and power) | Rs 56100-177500 with present basic: Rs. 57800.00 | 04/05/2022 | Permanent | OTHERS |
| 6. | Subject Matter Specialist | Vacant | | | | | | |
| 7. | Subject Matter Specialist | Vacant | | | | | | |
| 8. | Programme Assistant | Vacant | | | | | | |
| 9. | Computer Programmer | Vacant | | | | | | |
| 10. | Farm Manager | Vacant | | | | | | |
| 11. | Accountant / Superintendent | Vacant | | | | | | |
| 12. | Stenographer | Vacant | | | | | | |
| 13. | Driver | Filled | Driver (Bolero/Jeep) | M. Sc. Physics, MBA | Rs. 21700-69100/- with present basic pay: Rs. 21700/- | 10/03/2021 | Permanent | Others (EWS) |
| 14. | Driver | Filled | Driver (Tractor) | B. Com. | Rs. 21700-69100 with present basic pay: Rs. 21700/- | 01/03/2021 | Permanent | OBC |
| 15. | Supporting staff | Filled | Supporting staff | Graduate | Rs. 18000-56900/- with basic pay: Rs. 18000/- | 27/02/2021 | Permanent | OBC |
| 16. | Supporting staff | Filled | Supporting staff | Graduate | Rs. 18000-56900/- with basic pay: Rs. 18000/- | 27/02/2021 | Permanent | OBC |

1.6. Total land with KVK (in ha):

Total area should be matched with breakup

1.7. Infrastructure Development:

A) Buildings and others

| S. No. | Item | Area (ha) |
|--------|---------------------------|-------------|
| 1. | Under Buildings | 1.25 |
| 2. | Under Demonstration Units | - |
| 3. | Under Crops | 16 |
| 4. | Orchard/Agro-forestry | - |
| 5. | Others with details | 1.45 |
| | Total | 18.7 |

| S. No. | Name of infrastructure | Not yet started | Completed up to plinth level | Completed up to lintel level | Completed up to roof level | Totally completed | Plinth area (sq.m) | Under use or not* | Source of funding |
|--------|---------------------------------|--|------------------------------|------------------------------|----------------------------|-------------------|--------------------|-------------------|-------------------|
| 1. | Administrative Building | Yes | | | | ✓ | | | ICAR-ATARI, Patna |
| 2. | Farmers Hostel | No | | | | ✓ | | | ICAR-ATARI, Patna |
| 3. | Staff Quarters (6) | No | | | | | | | |
| 4. | Piggery unit | No | | | | | | | |
| 5. | Fencing | Old wire fencing almost damaged. Needs to be constructed | | | | | | | |
| 6. | Rain Water harvesting structure | No | | | | | | | |
| 7. | Threshing floor | Yes. Old needs to be repaired | | | | | | Yes | |
| 8. | Farm godown | Old | | | | | | Yes | |
| 9. | Dairy unit | No | | | | | | | |
| 10. | Poultry unit | No | | | | | | | |
| 11. | Goatry unit | No | | | | | | | |
| 12. | Mushroom Lab | No | | | | | | | |
| 13. | Mushroom production unit | No | | | | | | | |
| 14. | Shade house | No | | | | | | | |
| 15. | Soil test Lab | No | | | | | | | |
| 16. | Others, Please Specify | | | | | | | | |

* If not in use then since when and reason for non-use

B) Vehicles

| Type of vehicle | Year of purchase | Cost (Rs.) | Total km. Run | Present status |
|-----------------|------------------|------------|---------------|----------------|
| Bolero | 2020 | 755309.00 | 24263 km | Good |
| Bike | 2020 | 50666.00 | 6976 km | Good |
| Scooty | 2020 | 50248.00 | 1880 Km | Good |

C) Equipment & AV aids

| Name of equipment | Year of purchase | Cost (Rs.) | Present status | Source of fund |
|--|------------------|------------|----------------|----------------|
| a. Lab equipment: There is no lab equipment | | | | |
| | | | | |
| b. Farm machinery: No | | | | |
| | | | | |
| c. AV Aids: No | | | | |
| | | | | |

D) Farm implements

| Name of equipment | Year of purchase | Cost (Rs.) | Present status | Source of fund |
|-----------------------------|------------------|------------|----------------|----------------|
| Tractor | 2020 | 702856.64 | Good | ICAR |
| Tractor | 2021 | - | Good | CRA project |
| Disc plough | 2021 | - | Good | CRA project |
| Tractor Trolley | 2021 | - | Good | CRA project |
| Happy seeder (2 nos) | 2021 | - | Good | CRA project |
| Cultivator | 2021 | - | Good | CRA project |
| Laser leveler | 2021 | - | Good | CRA project |
| Rotavetor | 2021 | - | Good | CRA project |
| Multi crop planter (2 nos.) | 2021 | - | Good | CRA project |
| Reeper-cum-binder | 2021 | - | Good | CRA project |
| Zero tillage machine | 2021 | - | Good | CRA project |
| Drum seeder (9 nos.) | 2021 | - | Good | CRA project |

1.8. Details SAC meeting* conducted in the year

| Sl.No. | Date | Number of Participants | Salient Recommendations | Action taken | If not conducted, state reason |
|--------|------------|------------------------|---|--|--------------------------------|
| 1. | 25.08.2022 | 25 | 1. DAHO West Champaran suggested for enhancement of <i>Azolla</i> Production & to test the impact of <i>Azolla</i> in milk production. | Azolla production unit working in the KVK premises & OFT entitled " Assessment of azolla feeding on milk production in dairy cow " taken for observing the impact of Azolla feeding in milk production. | - |
| | | | 2. Dr. Shivendra Kumar Associate Professor COFs, Dholi, Suggested for enhancing the activities in Tilapia fish & Prawn production. | Work is being done in this direction | - |
| | | | 3. Sri Kuwar Singh, Dy. Director Sugarcane development. Motihari suggested for observing the adoption of different varieties of sugarcane & also suggested for establishing the sugarcane cafeteria in KVK farm. | Work is being done in this direction & sugarcane cafeteria with different varieties and different intercropping is developed in KVK farm. | - |
| | | | 4. Sri Rocky Rawat, Associate Director Plant Protection suggested for organisation training programme on disease & pest infestation in different crops. | Training is conducted on disease & pest infestation in different crops. | - |
| | | | 5. Dr. P.K. Gupta Vice President, Magadh sugar mill suggested for taking the work on red-rot in sugarcane. | OFT entitled "Assessment of technology for red rot management in sugarcane" taken for the purpose. | - |
| | | | 6. Sri M.L. Sharma, Assistant General Manager, Harinagar sugar mill suggested for the availability of breeder seeds of Rajendra varieties of sugarcane and also suggested for undertaking the trials on biological control method for management of palasi borer & red-rot disease in sugarcane | Breeder seed of R-1 variety of sugarcane is available in KVK for the farmers, work is being done in this direction. | - |
| | | | 7. SDAO, Narkatiaganj and Bagaha demanded for starting the INM training. | Work is being done in this direction | |

| | | | | | |
|--|--|--|---|--|--|
| | | | 8. Dr. P.P. Srivastava, Dean COFs, Dholi suggested for increasing the publications & also suggested for providing trainings for SMSs from different premium agricultural institution & purchase of good quality cameras for taking good quality pictures & videos. | Work is being started in this direction. | |
| | | | 9. Dr. M S Kundu Director Extension RPCAU, Pusa suggested for displaying flex on complete information on important diseases and pests of different crops, to conduct the soil testing in KVK, to prepare comparative data on STT & Traditional method of sugarcane cultivation, to regular updating of KVK portal, to paste the Newspaper cutting in the register, to prepare record on compression of different parameters of solar energy irrigated & rain water irrigated cultivation also suggested for taking the records on different parameters of drip irrigation in sugarcane field in the month of February, to take records on wheat harvesting by use of riper cum binder & prepare map of KVK for display in the office. | Work is being started in this direction | |
| | | | 10. Sri Gopal Kumar Pandit, DDM, NABARD suggested for establishment of fodder cafeteria, got farming & poultry unit in KVK farm. | Work is being started in this direction | |
| | | | 11. Farmer representative Sri Anand Singh suggested for demonstration of STT method of sugarcane & intercropping in sugarcane. | Sugarcane cafeteria with different varieties and different intercropping is developed in KVK farm. | |
| | | | 12. Farmer representative Sri Raghav Sharan suggested for recording the cost benefit of laser land levelling, direct sowing of rice, zero tillage | Work is being started in this direction. | |

| | | | | | |
|--|--|--|---|--|--|
| | | | cultivation of wheat for propagation among the farmers. | | |
|--|--|--|---|--|--|

* Salient recommendation of SAC in bullet form

Attach a copy of SAC proceedings along with list of participants

2.a. District level data on agriculture, livestock and farming situation (2021)

| Sl. No. | Items | Information |
|---------|--|---|
| 1 | Major Farming system/enterprise | Agriculture + Livestock, Agriculture + Poultry, Agriculture + Fisheries, Crop Production + Vegetable Production, Agriculture + Poultry + Fish farming, Agri. + Goat rearing |
| 2 | Agro-climatic Zone | Zone-I (North West Alluvial Plain Zone) |
| 3 | Agro-ecological situation | Hot Sub-humid (moist), Eco-sub region |
| 4 | Soil type | Sandy loam, Coarse sandy loam, Fine sandy loam and loamy soil |
| 5 | Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others | Sugarcane-680 q/ha, Rice- 30 q/ha, Wheat- 29.6 q/ha |
| 6 | Mean yearly temperature, rainfall, humidity of the district | Max temp- 41.6°C, Min temp- 6°C, Rainfall-1300mm, RH-88% |
| 7 | Production of major livestock products like milk, egg, meat etc. | |

Note: Please give recent data only

2.b. Details of operational area / villages (2022)

| Sl. No. | Name of Taluk | Name of the block | Name of the villages | Major crops & enterprises | Major problems identified (crop-wise) | Identified Thrust Areas |
|---------|---------------|-------------------|----------------------|--|---|--|
| | Narkatiaganj | Narkatiaganj | Samhauta | Sugarcane, Rice, Wheat and Vegetables | Lack of improved variety, Low socio-economic status, lack of farm mechanization | Promotion of HYVs and farm mechanization |
| | | | Narkatiaganj | Sugarcane, Rice, Wheat and Vegetables | Lack of improved variety, Low socio-economic status, lack of farm mechanization | Promotion of HYVs and farm mechanization |
| | | | Ajauaa | Sugarcane, Rice, Wheat and Vegetables | Lack of improved variety, Low socio-economic status, lack of farm mechanization | Promotion of HYVs and farm mechanization |
| | | | Barnihar | Sugarcane, Rice, Wheat and Vegetables | Lack of improved variety, Low socio-economic status, lack of farm mechanization | Promotion of HYVs and farm mechanization |
| | Bagha | Bagha-2 | Santpur | Sugarcane, Rice, Wheat, Oilseed and Vegetables | Lack of improved variety, Low socio-economic status, lack of farm mechanization | Promotion of HYVs and farm mechanization |

| | | | | | | |
|--|--|---------|-------------------------|---|---|---|
| | | | Rampuwa harijan tola | Sugarcane, Rice, Wheat, Oilseed and Vegetables | Lack of improved variety, Low socio-economic status, lack of farm mechanization | Promotion of HYVs and farm mechanization |
| | | | Jhanduaatola | Sugarcane, Rice, Wheat, Oilseed and Vegetables | Lack of improved variety, Low socio-economic status, lack of farm mechanization | Promotion of HYVs and farm mechanization |
| | | | Bairagi Sonbersa | Sugarcane, Rice, Wheat, Oilseed and Vegetables | Lack of improved variety, Low socio-economic status, lack of farm mechanization | Promotion of HYVs and farm mechanization |
| | | | Gurwaliya | Sugarcane, Rice, Wheat, Oilseed and Vegetables | Lack of improved variety, Low socio-economic status, lack of farm mechanization | Promotion of HYVs and farm mechanization |
| | | Bagha-1 | Salha | Sugarcane, Rice, Wheat, Oilseed and Vegetables | Lack of knowledge about improved variety, Low socio- economic status, lack of farm mechanization | Promotion of HYVs and farm mechanization |
| | | Bagha-1 | Rajwatia | Sugarcane, Rice, Wheat, Oilseed and Vegetables | Lack of knowledge about improved variety, Low socio- economic status, lack of farm mechanization | Promotion of HYVs and farm mechanization |

| | | | | | | |
|--|--|----------|-----------|--|---|--|
| | | Gaunaha | Hardi | Sugarcane, Rice, Wheat, Oilseed and Vegetables | Lack of knowledge about improved variety, Low socio-economic status, lack of farm mechanization | Promotion of HYVs and farm mechanization |
| | | Ramnagar | Sonebersa | Sugarcane, Rice, Wheat, Oilseed and Vegetables | Lack of knowledge about improved variety, Low socio-economic status, lack of farm mechanization | Promotion of HYVs and farm mechanization |
| | | | Katsikari | Sugarcane, Rice, Wheat, Oilseed and Vegetables | Lack of knowledge about improved variety, Low socio-economic status, lack of farm mechanization | Promotion of HYVs and farm mechanization |
| | | | Harpur | Sugarcane, Rice, Wheat, Oilseed and Vegetables | Lack of knowledge about improved variety, Low socio-economic status, lack of farm mechanization | Promotion of HYVs and farm mechanization |

2. c. Details of village adoption programme:

Name of the villages adopted by Sr. Scientist & Head and SMS (in year 2022) for its development and action plan

| Name of village | Block | Action taken for development |
|-----------------|--------------|---|
| Katsikari | Ramnagar | FLD and promotion of intercropping and STT in sugarcane |
| Barnihar | Narkatiaganj | CFLD and promotion of STT in sugarcane |

2.1 Priority thrust areas

| S.No. | Crop/Enterprises | Thrust Area |
|-------|------------------|---|
| 1. | Sugarcane | Promotion of HYVs with intercropping and IPM/IDM practices for quality seed production & yield maximization |
| 2. | Rice | Promotion of HYVs and introduction of IPM/IDM strategies |

| | | | | | | | | | | | | | | | | | | | | | | | |
|----|----------|------|-----|-----|-----|----|------|-----|------|-----|------|-----|----------|-------|-------|------|------|------|-------|------|--------|-------|--------|
| | men t | | M | F | M | F | M | F | M | F | T | | men t | | M | F | M | F | M | F | M | F | T |
| 87 | 87 | 2610 | 368 | 133 | 180 | 21 | 1763 | 132 | 2311 | 317 | 2628 | 700 | 726 | 90500 | 19824 | 9587 | 6705 | 4708 | 77766 | 1851 | 104295 | 16146 | 120441 |

| Impact of capacity building | | | | | | | | | | | | Impact of Extension activities | | | | | | | | | | | |
|--------------------------------|-------------|----|---|---|---|--------|---|-------|---|---|--------|---------------------------------|----|---|----|---|--------|---|-------|---|---|--|--|
| Number of Participants trained | | | | Number of Trainees got employment (self/ wage/ entrepreneur/ engaged as skilled manpower) | | | | | | | | Number of Participants attended | | | | Number of participants got employment (self/ wage/ entrepreneur/ engaged as skilled manpower) | | | | | | | |
| Target | Achievement | SC | | ST | | Others | | Total | | | Target | Achievement | SC | | ST | | Others | | Total | | | | |
| | | M | F | M | F | M | F | M | F | T | | | M | F | M | F | M | F | M | F | T | | |
| | | | | | | | | | | | | | | | | | | | | | | | |

| Seed production (q) | | | | | | Planting material (in Lakh) | | | | | |
|---------------------|--|--|-------------|--|--|-----------------------------|--|--|-------------|--|--|
| Target | | | Achievement | | | Target | | | Achievement | | |
| 400 | | | 511.61 | | | 90000 | | | 93209 | | |

| Livestock strains and fish fingerlings produced (in lakh)* | | | | | | Soil, water, plant, manures samples tested (in lakh) | | | | | |
|--|--|--|-------------|--|--|--|--|--|-------------|--|--|
| Target | | | Achievement | | | Target | | | Achievement | | |
| 0 | | | 0 | | | 0.018 | | | 0.018 | | |

* Give no. only in case of fish fingerlings

| Publication by KVKs | | | | | | | |
|--------------------------------------|--------|----------------|---|--|---|--|---|
| Item | Number | No. circulated | No. of Research papers in NAAS rated Journals | Highest NAAS rating of any publication | Average NAAS rating of the publications | Details of awarded publication, if any | Details of Award given to the publication |
| Research paper | 14 | 14 | 14 | 9.87 | 3.45 | | |
| Review papers | 02 | 02 | | | | | |
| Books | 02 | 02 | | | | | |
| Bulletins | 01 | 01 | | | | | |
| News published in News letter | 05 | 05 | | | | | |
| Popular Articles | 09 | 09 | | | | | |
| Book Chapter | - | - | | | | | |
| Extension Pamphlets/ literature | 97 | 97 | | | | | |
| Folder | 04 | 04 | | | | | |
| Technical reports | 04 | 04 | | | | | |
| Electronic Publication (CD/DVD etc.) | - | - | | | | | |
| Abstract of research paper | 24 | 24 | | | | | |

| | | | | | | | |
|--------------------|-------------|-------------|--|--|--|--|--|
| | (Abstracts) | (Abstracts) | | | | | |
| Newspaper coverage | 52 | 52 | | | | | |
| TOTAL | 214 | 214 | | | | | |

3.1.1 Achievements on technologies assessed and refined

OFT-1 (Plant Protection)

| | | |
|----|--|--|
| 1. | Title of On farm Trial | Integrated approach for management of brinjal fruit and shoot borer |
| 2. | Problem diagnosed | Low yield and poor quality due to severe infestation on fruit and shoot borer |
| 3. | Details of technologies selected for assessment/refinement (Mention either Assessed or Refined) | Farmers practice: Indiscriminate use of chemicals TO 1: Use of pheromone trap @ 80s traps/ha TO 2: Lamdacyhalothrin 5% EC @ 0.6ml/litre of water |
| 4. | Source of Technology (ICAR/ AICRP/SAU/other, please specify) | IIVR, Varanasi |
| 5. | Production system and thematic area | Insect pest Management |
| 6. | Performance of the Technology with performance indicators | Yield (q/ha), No. of affected plants/10m ² , No. of damaged fruits/plant, B:C ratio |
| 7. | Final recommendation for micro level situation | Use of IPM practices for effective management of brinjal fruit and shoot borer |
| 8. | Constraints identified and feedback for research | The farmer is enthusiastic to adopt the scientific package of practices for IPM technology in brinjal. |
| 9. | Process of farmers participation and their reaction | Field visit and field days |

Thematic area: Integrated pest management (IPM)

Problem definition: Low yield and poor quality due to severe infestation on fruit and shoot borer

Technology assessed: Use of pheromone trap @ 80s traps/ha and application of lamdacyhalothrin 5% EC @ 0.6ml/litre of water

Table:

| Technology option | No. of trials | Performance of technology | | | Insect pest incidence (%) | Yield (q/ha) | Cost of cultivation (Rs./ha) | Gross return (Rs./ha) | Net return (Rs./ha) | BC ratio |
|-------------------|---------------|--|--------------------|---------------------------|---------------------------|--------------|------------------------------|-----------------------|---------------------|----------|
| | | No. of affected plants/10 m ² | Total fruits/plant | No of damaged fruit/plant | | | | | | |
| FP | 08 | 6 | 40 | 12 | 30 | 300 | 36500 | 155000 | 118500 | 3:20 |
| TO1 | | 4 | 40 | 9 | 22.5 | 425 | 34500 | 212500 | 178000 | 5:15 |
| TO2 | | 2 | 40 | 7 | 17.5 | 485 | 35000 | 242500 | 207500 | 5:92 |

Results: Performance of IPM technologies were found most effective to control fruit and shoot borer as reported least number of affected plants/10m² as well as damaged fruits/plant. The fruit damage on an average was also reduced by 17.50% compared to 30.00% in farmers practice. The average yield registered 61.67% higher with use of IPM components over farmers' practice. Average net profitability of worth Rs. 207500/ha as compared with farmers practices (Rs. 118500/ha) were obtained and average benefit cost ratio i.e. 5.92 and 3.20 were recorded in demonstrated plot and farmers practice respectively. The integrated pest management technologies were found safe to natural enemies and their efficacy have good impact over crop yield parameters. By this way, the adaptation of IPM technologies and obtaining production can be improved their livelihood insecurity and income of the farming communities as well as environmental protection also.

OFT – 2 (Crop Production)

| | | |
|----|--|---|
| 1. | Title of On farm Trial | Improvement of nitrogen use efficiency in wheat |
| 2. | Problem diagnosed | Excessive use of chemical fertilizer and spiraling price of urea leads to increase in cost of cultivation |
| 3. | Details of technologies selected for assessment/refinement (Mention either Assessed or Refined) | Farmers Practice: RDF (N:P:K :: 100:40:20 kg ha ⁻¹) TO-I: 50% of RDN and 100% PK + nano urea @ 4 ml lt ⁻¹ water (single spray at 35 DAS) TO-II: 50% of RDN and 100% PK + 2 sprays of nano urea at (35 DAS) and (60-65DAS) @ 4 ml lt ⁻¹ water |
| 4. | Source of Technology (ICAR/AICRP/SAU/other, please specify) | Proceeding of OFT finalization workshop on Agronomy/Soil Science for KVKs Bihar and Jharkhand (Zone-IV) held during 01-03 September, 2022 |
| 5. | Production system and thematic area | Nutrient use efficiency enhancement |
| 6. | Performance of the Technology with performance indicators | <ul style="list-style-type: none"> Soil data before and after (pH, EC, OC, NPK) |

OFT – 3 (Crop Production)

| | | |
|----|--|--|
| 1. | Title of On farm Trial | Diversification of rice-based cropping systems |
| 2. | Problem diagnosed | Low profitability of existing cropping system |
| 3. | Details of technologies selected for assessment/refinement (Mention either Assessed or Refined) | Farmers Practice: Rice – Wheat TO-I: Rice – Maize + Potato TO-II: Rice – Maize + Vegetable Pea TO-III: Rice – Wheat – Green gram |
| 4. | Source of Technology (ICAR/ AICRP/SAU/other, please specify) | Proceeding of OFT finalization workshop on Agronomy/Soil Science for KVKs Bihar and Jharkhand (Zone-IV) held during 01-03 September, 2022 |
| 5. | Production system and thematic area | Crop diversification |
| 6. | Performance of the Technology with performance indicators | <ul style="list-style-type: none"> • Soil data before and after (pH, EC, OC, NPK) • Rice equivalent yield qt ha⁻¹ of all crops • Sole crop and intercropping cost of cultivation |
| 7. | Final recommendation for micro level situation | Crop is standing and results awaited |
| 8. | Constraints identified and feedback for research | |
| 9. | Process of farmers participation and their reaction | |

Thematic area: Crop diversification

Problem definition: Low profitability of existing cropping system

Technology assessed: **Farmers Practice:** Rice – Wheat; **TO-I:** Rice – Maize + Potato; **TO-II:** Rice – Maize + Vegetable Pea; **TO-III:** Rice – Wheat – Green gram

Table:

| Technology option | No. of trials | Yield component | | | Disease/ insect pest incidence (%) | Yield (q/ha) | Cost of cultivation (Rs./ha) | Gross return (Rs/ha) | Net return (Rs./ha) | BC ratio |
|-------------------------|---------------|-------------------------------|-----------------------------|--------------------------|------------------------------------|--------------|------------------------------|----------------------|---------------------|----------|
| | | No. of effective tillers/hill | No. of spikelet per panicle | Test wt. (100 grain wt.) | | | | | | |
| Farmers Practice | 07 | | | | | | | | | |
| TO-I | 07 | | | | | | | | | |
| TO-II | 07 | | | | | | | | | |
| TO-III | 07 | | | | | | | | | |
| | | | | | | | | | | |

Results: Result awaited

Please provide all the OFTs in same format

3.1.2 Technology Assessed by KVK (Discipline wise)

| Technologies assessed under various crop;s by KVKs (Crop Production) | | | | |
|--|---|---|---------------|------------------|
| | Thematic areas | Number of the technologies (Technology Interventions) | No. of trials | No. of Locations |
| 1 | Integrated Nutrient Management | | | |
| 2 | Varietal Evaluation | | | |
| 3 | Integrated Pest Management | | | |
| 4 | Integrated Crop Management | | | |
| 5 | Integrated Disease Management | 1 | 8 | 8 |
| 6 | Small Scale Income Generation Enterprises | | | |
| 7 | Weed Management | | | |
| 8 | Resource Conservation Technology | | | |
| 9 | Farm Machineries | | | |
| 10 | Integrated Farming System | | | |
| 11 | Seed / Plant production | | | |

| | | | | |
|----|--|---|---------------|------------------|
| 12 | Post Harvest Technology / Value addition | | | |
| 13 | Drudgery Reduction | | | |
| 14 | Storage Technique | | | |
| 15 | Others (Pl. specify) (Nutrient use efficiency enhancement) | 1 | 6 | 6 |
| 16 | Cropping Systems | 1 | 7 | 7 |
| 17 | Farm Mechanization | | | |
| 18 | Others | | | |
| | Total | 3 | 21 | 21 |
| | Technologies assessed under livestock by KVKs | | | |
| | Thematic areas | No. of technologies (Technology Interventions) | No. of trials | No. of locations |
| 1 | Disease Management | | | |
| 2 | Evaluation of Breeds | | | |
| 3 | Feed and Fodder management | | | |
| 4 | Nutrition Management | | | |
| 5 | Production and Management | | | |
| 6 | Processing and value addition | | | |
| 7 | Others (Pl. specify) | | | |
| | Total | 0 | 0 | 0 |
| | Technologies assessed under various enterprises by KVKs | | | |
| | Thematic areas | No. of technologies (Technology Interventions) | No. of trials | No. of locations |
| 1 | Drudgery reduction | | | |
| 2 | Entrepreneurship Development | | | |
| 3 | Health and nutrition | | | |
| 4 | Processing and value addition | | | |
| 5 | Energy conservation | | | |
| 6 | Small-scale income generation | | | |
| 7 | Storage techniques | | | |
| 8 | Household food security | | | |
| 9 | Organic farming | | | |
| 10 | Agroforestry management | | | |

| | | | | |
|--|----------------------------------|---|---------------|------------------|
| 11 | Mechanization | | | |
| 12 | Resource conservation technology | | | |
| 13 | Value Addition | | | |
| 14 | Others | | | |
| | Total | 0 | 0 | 0 |
| Technologies assessed under various enterprises for women empowerment | | | | |
| | Thematic areas | No. of technologies (Technology Interventions) | No. of trials | No. of locations |
| 1 | Drudgery Reduction | | | |
| 2 | Entrepreneurship Development | | | |
| 3 | Health and Nutrition | | | |
| 4 | Value Addition | | | |
| 5 | Others | | | |
| | Total | 0 | 0 | 0 |

3.2 Achievements of Frontline Demonstrations during 2022

A. Details of FLDs conducted during the year 2022

Cereals

| Sl. No. | Crop | Thematic area | Technology Demonstrated with detailed treatments | Area (ha) | | No. of farmers/ demonstration | | | | | | | | | Reasons for shortfall in achievement |
|--------------|-----------|--|---|-------------|-------------|-------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|--|
| | | | | Proposed | Actual | SC | | ST | | Others | | Total | | | |
| | | | | | | M | F | M | F | M | F | M | F | T | |
| 1 | Sugarcane | Integrated Crop Management | Sugarcane settling transplanting technique | 0.25 | 0.25 | 01 | 00 | 02 | 00 | 08 | 00 | 10 | 00 | 10 | |
| 2 | Sugarcane | Integrated Crop Management | Sugarcane settling transplanting technique | 0.25 | 0.25 | 00 | 00 | 04 | 00 | 06 | 00 | 10 | 00 | 10 | Sowing in Autumn 2022 and crop is standing |
| 3 | Paddy | Agronomic bio-fortification | Foliar application of Zn at tillering, panicle initiation and pre-flowering stage @ 0.5% Zn | 2.0 | 2.0 | 1 | 0 | 5 | 0 | 14 | 0 | 20 | 0 | 20 | |
| 4 | Wheat | Cultivation of bio-fortified wheat variety | Wheat variety DBW-187 | 2.0 | 2.0 | 0 | 2 | 0 | 0 | 7 | 1 | 7 | 3 | 10 | Rabi crop is standing |
| Total | | | | 4.50 | 4.50 | 2 | 2 | 11 | 0 | 35 | 1 | 47 | 3 | 50 | |

| | | | | | | | | | | | | | | | | | | | |
|-------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Total Veg. Crops | | | | | | | | | | | | | | | | | | | |
| Commercial Crops | | | | | | | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | | | | | | | |
| Coconut | | | | | | | | | | | | | | | | | | | |
| Others (Pl. specify) | | | | | | | | | | | | | | | | | | | |
| Total Commercial Crops | | | | | | | | | | | | | | | | | | | |
| Fodder crops | | | | | | | | | | | | | | | | | | | |
| Napier (Fodder) | | | | | | | | | | | | | | | | | | | |
| Maize (Fodder) | | | | | | | | | | | | | | | | | | | |
| Sorghum (Fodder) | | | | | | | | | | | | | | | | | | | |
| Others (Pl. specify) | | | | | | | | | | | | | | | | | | | |
| Total Fodder Crops | | | | | | | | | | | | | | | | | | | |

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Livestock

| Category | Thematic area | Name of the technology demonstrated | No. of Farmer | No. of units | Major parameters | | % change in major parameter | Other parameter | | *Economics of demonstration (Rs.) | | | | *Economics of check (Rs.) | | | | | |
|----------------------|--------------------|--|---------------|--------------|--|----------------------------------|--|-----------------|----------|-----------------------------------|---------------|---------------|-------------|---------------------------|---------------|---------------|-------------|--|--|
| | | | | | Demonstration | Check | | Demonstration | Check | Gross Cost | Gross Return | Net Return | ** BCR | Gross Cost | Gross Return | Net Return | ** BCR | | |
| Dairy | | | | | | | | | | | | | | | | | | | |
| Cow | | | | | | | | | | | | | | | | | | | |
| Buffalo | | | | | | | | | | | | | | | | | | | |
| Poultry | | | | | | | | | | | | | | | | | | | |
| Rabbitry | | | | | | | | | | | | | | | | | | | |
| Pigerry | | | | | | | | | | | | | | | | | | | |
| Sheep and goat | Disease Management | PPR vaccination and Fenbendazole deworming | 25 | 100 | Live animal- 97 Mortality- 3 animal | Live animal- 63 Mortality- 37 | Mortality rate in demo- 3.09% Mortality rate in check- 58.73% | - | - | 201100 | 485000 | 274000 | 2.41 | 200000 | 315000 | 115000 | 1.57 | | |
| Duckery | | | | | | | | | | | | | | | | | | | |
| Others (Pl. specify) | | | | | | | | | | | | | | | | | | | |
| Total | | | 25 | 100 | 97 | 63 | 34 | - | - | 201100 | 485000 | 274000 | 2.41 | 200000 | 315000 | 115000 | 1.57 | | |

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Fisheries

| Category | Thematic area | Name of the technology demonstrated | No. of Farmer | No. of units | Major parameters | | % change in major parameter | Other parameter | | *Economics of demonstration (Rs.) | | | | *Economics of check (Rs.) | | | |
|---------------------|---------------|-------------------------------------|---------------|--------------|------------------|-------|-----------------------------|-----------------|-------|-----------------------------------|--------------|------------|--------|---------------------------|--------------|------------|--------|
| | | | | | Demonstration | Check | | Demonstration | Check | Gross Cost | Gross Return | Net Return | ** BCR | Gross Cost | Gross Return | Net Return | ** BCR |
| Common carps | | | | | | | | | | | | | | | | | |
| Mussels | | | | | | | | | | | | | | | | | |
| Ornamental fishes | | | | | | | | | | | | | | | | | |
| Others (pl.specify) | | | | | | | | | | | | | | | | | |
| Total | | | | | | | | | | | | | | | | | |

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Other enterprises

| Category | Name of the technology demonstrated | No. of Farmer | No. of units | Major parameters | | % change in major parameter | Other parameter | | *Economics of demonstration (Rs.) or Rs./unit | | | | *Economics of check (Rs.) or Rs./unit | | | | |
|---------------------|-------------------------------------|---------------|--------------|------------------|-------|-----------------------------|-----------------|-------|---|--------------|------------|--------|---------------------------------------|--------------|------------|--------|--|
| | | | | Demonstration | Check | | Demonstration | Check | Gross Cost | Gross Return | Net Return | ** BCR | Gross Cost | Gross Return | Net Return | ** BCR | |
| Oyster mushroom | Enterprise development | | | | | | | | | | | | | | | | |
| Button mushroom | | | | | | | | | | | | | | | | | |
| Vermicompost | | | | | | | | | | | | | | | | | |
| Sericulture | | | | | | | | | | | | | | | | | |
| Apiculture | | | | | | | | | | | | | | | | | |
| Others (pl.specify) | | | | | | | | | | | | | | | | | |
| Total | | | | | | | | | | | | | | | | | |

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Women empowerment

| Category | Name of technology | No. of demonstrations | Observations | | Remarks |
|-----------------|--------------------|-----------------------|---------------|-------|---------|
| | | | Demonstration | Check | |
| Farm Women | | | | | |
| Pregnant women | | | | | |
| Adolescent Girl | | | | | |
| Other women | | | | | |
| Children | | | | | |
| Neonatal | | | | | |
| Infants | | | | | |

Farm implements and machinery

| Name of the implement | Crop | Name of the technology demonstrated | No. of Farmer | Area (ha) | Grain Yield (q/ha) | | % Change in major parameter | Gross return Rs/ha and B:C ratio | | | | Cost reduction (Rs./ha or Rs./Unit) |
|-----------------------------|-------|-------------------------------------|---------------|-----------|--------------------|-------|-----------------------------|----------------------------------|-------|--------|-------|-------------------------------------|
| | | | | | Demonstration | Check | | Demons Ration (Rate 1750) | Check | Demons | Check | Demo |
| Manual Rice - wheats seeder | Paddy | Manual rice wheat seeder | 10 | 2 | 50.2 | 49 | 2.45 | 89858 | 87710 | 2.14 | 1.71 | 9225 |

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Farm Machinery

| Category | Name of the implement / Equipment / Tool | Crop (if applicable) | No. of Technologies | No. of Demos | Area (ha) |
|--|--|----------------------|---------------------|--------------|-----------|
| Sowing and planting tools and machineries | | | | | |
| Total | | | | | |
| Intercultural operation tools and machineries | | | | | |
| Total | | | | | |

| | | | | | |
|---|--|--|--|--|--|
| Irrigation management tools and machineries | | | | | |
| Total | | | | | |
| Plant protection tools and machineries | | | | | |
| Total | | | | | |
| Harvesting tools and machineries | | | | | |
| Total | | | | | |
| Postharvest processing tools and machineries | | | | | |
| Total | | | | | |
| Total mechanization tools and machineries | | | | | |
| Total | | | | | |
| Others | | | | | |
| Total | | | | | |
| Grand Total | | | | | |

Technical Feedback on the demonstrated technologies

| Sl. No | Crop | Feed Back |
|--------|--|--|
| 1. | Paddy | Due to low and late rainfall causes damage to the early paddy growth and predominant zinc deficiency symptoms appears in the check plots |
| 2. | Wheat | Due to late sowing the wheat crop growth performance is hampered and crop – weed competition suppresses the wheat growth |
| 3. | PPR vaccination and Fenbendazole deworming in goat | Outbreak of PPR disease is prevented in covered goat population and also improvement in weight gain from past years. |
| | | |
| | | |

Extension and Training activities under FLD

| Sl.No. | Activity | Date | No. of activities organized | Number of participants | Remarks |
|--------|--------------------------------------|--|-----------------------------|------------------------|---|
| 1. | Field days | 03/10/2022, 16/10/2022, 16/11/2022 and 21/11/2022 | 4 | 45 | |
| 2. | Farmers Training | 20/11/2022, 23/04/ 2022, 14/07/2022, 21/07/2022, 26/08/2022, 23/06/2022, 02/07/2022, 08/11/2022 and 23/12/2022 | 09 | 250 | Aware for the PPR disease and endo-parasites in goat and their prevention method. |
| 3. | Media coverage | 28/06/2022 | 1 | | |
| 4. | Training for extension functionaries | | | | |
| 5. | Animal Health Camp | 21/11/2022 | 01 | 25 | PPR vaccination and deworming done in goats. |

Performance of the demonstration under CFLD on Pulse and Oilseed Crops during Kharif, Rabi and summer 2022

A. Technical Parameters:

| Sl. No. | Crop demonstrated | Existing (Farmer's) variety name | Existing yield (q/ha) 7 years | Yield gap (Kg/ha) w.r.to | | | Name of Variety + Technology demonstrated | Number of farmers | Area in ha | Yield obtained (q/ha) | | | Yield gap minimized (%) | | |
|---------|-------------------|----------------------------------|-------------------------------|--------------------------|-----------------|---------------------|---|-------------------|------------|--|------|------|-------------------------|------|-------|
| | | | | District yield (D) | State yield (S) | Potential yield (P) | | | | Max. | Min. | Av. | D | S | P |
| 1 | Mustard | Local and mixed | 8.50 | 7.68 | 11.8 | 580 | Mustard var. Rajendra suflam-1 @ 5 kg/ha, Sulphur @ 30 kg/ha, PSB, Mancozeb, Imidacloprid | 103 | 40 | 16.8 | 9.80 | 12.2 | 37.05 | 3.28 | 32.22 |
| 2 | Lentil | Local and mixed | 670 | 600 | 1124 | 1400-1500 | IPL-316, PSB, Rhizobium, Mancozeb, Imamactin benzoate | 50 | 20 | Crop is standing in field and result awaited | | | | | |

| | | | | | | | | | | | | | | | |
|---|----------|-----------------|------|------|------|-----------|--|-----|----|--|--|--|--|--|--|
| 3 | Chickpea | Local and mixed | 560 | 520 | 1052 | 1800-2000 | RVG-202, PSB, Rhizobium, Mancozeb, Imamactin benzoate | 50 | 20 | Crop is standing in field and result awaited | | | | | |
| 4 | Mustard | Local and mixed | 8.50 | 76.8 | 118 | 250 | Mustard var. DRMRIJ-31 (Giriraj) @ 5 kg/ha, Sulphur @ 5 kg/ha, Zinc @ 0.5% foliar, Boron @ 0.2% foliar, Mancozeb, Imidacloprid | 100 | 40 | Crop is standing and result awaited | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

B. Economic parameters

| Sl. No. | Variety demonstrated & Technology demonstrated | Farmer's Existing plot | | | | Demonstration plot | | | |
|---------|--|------------------------|----------------------|--------------------|-----------|--------------------|----------------------|--------------------|-----------|
| | | Gross Cost (Rs/ha) | Gross return (Rs/ha) | Net Return (Rs/ha) | B:C ratio | Gross Cost (Rs/ha) | Gross return (Rs/ha) | Net Return (Rs/ha) | B:C ratio |
| 1. | Mustard | 21850 | 42925 | 21075 | 1.96 | 24299 | 61610 | 37311 | 2.54 |
| | | | | | | | | | |

C. Socio-economic impact parameters 2022

| Sl. No. | Crop and variety Demonstrated | Total Produce Obtained (kg) | Produce sold (Kg/household) | Selling Rate (Rs/Kg) | Produce used for own sowing (Kg) | Produce distributed to other farmers (Kg) | Purpose for which income gained was utilized | Employment Generated (Mandays/house hold) |
|---------|--------------------------------|-----------------------------|-----------------------------|----------------------|----------------------------------|---|--|---|
| 1. | Mustard var. Rajendra suflam-1 | 125810 | 88067 | 50.5 | 6290.5 | 31452.5 | To improve the livelihood of the farmer | 26/acre demo plot |

D. Pulses/Oilseed Farmers' perception of the intervention demonstrated 2022

| Sl. No. | Technologies demonstrated (with name) | Farmers' Perception parameters | | | | | |
|---------|---------------------------------------|--|--|---|---------------------|---|--|
| | | Suitability to their farming system | Likings (Preference) | Affordability | Any negative effect | Is Technology acceptable to all in the group/village | Suggestions, for change/improvement, if any |
| 1. | Mustard var. Rajendra suflam-1 | Technology is suitable to the existing farming system. | The technology is preferred to the farmers of rice-mustard cropping sequence | The input distributed among the farmers | Not at all | The farmer was satisfied with the technology transferred. The farmer is enthusiastic to adopt the scientific package of practices for oilseed production. | Short duration high yielding and fertilizer responsive variety |

E. Specific Characteristics of Technology and Performance

| Specific Characteristic | Performance | Performance of Technology vis-a-vis Local Check | Farmers Feedback |
|--------------------------------------|-------------|---|--|
| No. of siliquae/plant | 419.5 | 210.2 | High plant survival/unit area, performance of germination higher, plant height, no. of branches, seeds/siliqua found more. It may be up-scaled in 500 ha |
| Seed per siliquae | 12 | 5 | |
| Length of siliquae | 4.5 | 2.1 | |
| Seed weight | 5.2-6.3 g | 3.1-3.5 g | |
| No. of primary branches | 5.6 | 3.8 | |
| No. of secondary + tertiary branches | 419.5 | 219.4 | |

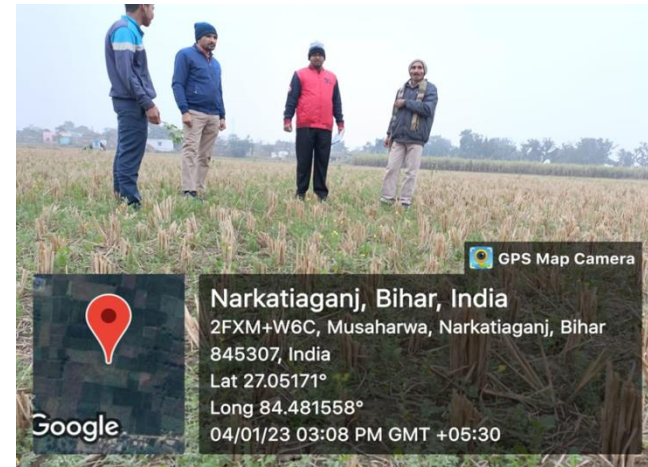
F. Extension activities under FLD conducted:

| Sl. No. | Extension Activities organized | Date and place of activity | Number of farmer attended |
|---------|---|----------------------------------|---------------------------|
| 1. | Training on production and protection technology in mustard | 02.11.2021; Hardi | 40 |
| 2. | Training on production and protection technology in mustard | 17.11.2021; Gurwaliya | 30 |
| 3. | Training on disease management in mustard crop | 09.12.2021; Gurwaliya | 29 |
| 4. | Training, field visit & advisory services | 02.11.2021; Hardi | 40 |
| 5. | Training, field visit & advisory services | 17.11.2021; Gurwaliya | 30 |
| 6. | Training, field visit & advisory services | 09.12.2021; Gurwaliya | 29 |
| 7. | Field day, field visit & advisory services | 23.02.2022; Gurwaliya | 35 |
| 8. | Field day, field visit & advisory services | 24.02.2022; Katsikri | 56 |
| 9. | Field day, field visit & advisory services | 23.03.2022; Barnihar | 25 |
| 10. | Training on production and protection technology in Lentil and critical input distribution | 11/11/2022, KVK, Narkatiaganj | 50 |
| 11. | Training on production and protection technology in Lentil and critical input distribution | 12/11/2022, KVK, Narkatiaganj | 50 |
| 12. | Training on production and protection technology in mustard and critical input distribution | 08/11/2022; Majhaulia | 25 |
| 13. | Training on production and protection technology in mustard and critical input distribution | 15/11/2022; At KVK, Narkatiaganj | 30 |
| 14. | Training on production and protection technology in mustard and critical input distribution | 14/11/2022; At KVK, Narkatiaganj | 7 |
| 15. | Training on production and protection technology in mustard and critical input distribution | 16/11/2022; Katsikri | 9 |
| 16. | Training on production and protection technology in mustard and critical input distribution | 16/11/2022; Hardi | 21 |
| 17. | Training on production and protection technology in mustard and critical input distribution | 17/11/2022; At KVK, Narkatiaganj | 8 |

G. Sequential good quality photographs (as per crop stages i.e. growth & development)



Data collection and advisory service at different growth stages of mustard



Data collection and advisory service at different growth stages of lentil



Zinc application and advisory service at different growth stages of paddy in FLD



Data collection and advisory service at different growth stages of wheat in FLD





Data collection and advisory service at different growth stages of crops in OFT

H. Farmers' training photographs



Input distribution in CFLD mustard



Training in CFLD mustard



Chelated Zn distribution in FLD



Input distribution in OFT



I. Quality Action Photographs of field visits/field days and technology demonstrated.



Field day in mustard



Goat's health checkup



Field visit in paddy under FLD





Nano urea spray on wheat at different growth stages in OFT



Pesticide spray on potato in OFT



A view of training and input distribution for on-farm trial on shoot and fruit borer management in brinjal



A view of filed visit photograph of on-farm trial on shoot and fruit borer management in brinjal



Organized training program on sugarcane settling transplanting technique (STT) and seedlings distributed to the selected farmers by respected Dr MS Kundu, DEE and Dypt, DE, RPCAU, Pusa under FLD program

J. Details of budget utilization

| Crop (provide crop wise information) | Items | Budget Received (Rs.) | Budget Utilization (Rs.) | Balance (Rs.) |
|---|---------------------------------------|-----------------------------|--------------------------------|------------------|
| Pulses | i) Critical input | 328000 | 326100 | 1900 |
| | ii) TA/DA/POL etc. for monitoring | 12000 | 4000 | 8000 |
| | iii) Extension Activities (Field Day) | 10000 | 00 | 10000 |
| | iv) Publication of literature | 10000 | 5000 | 5000 |
| | Total | 360000 | 335100 | 24900 |
| Oilseeds | i) Critical input | 216000 | 204680 | 11320 |
| | ii) TA/DA/POL etc. for monitoring | 24000 | 10720 | 13280 |
| | iii) Extension Activities (Field Day) | | | |
| | iv) Publication of literature | | | |
| | Total | 240000 | 240000 | |

| Thematic Area | No. of Courses | No. of Participants | | | | | | | | | Grand Total | | |
|----------------------------|----------------|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------|-----------|-----------|
| | | Other | | | SC | | | ST | | | M | F | T |
| | | M | F | T | M | F | T | M | F | T | | | |
| Fry and fingerling rearing | | | | | | | | | | | | | |
| Small scale processing | | | | | | | | | | | | | |
| Post-Harvest Technology | | | | | | | | | | | | | |
| Tailoring and Stitching | | | | | | | | | | | | | |
| Rural Crafts | | | | | | | | | | | | | |
| Others, if any | | | | | | | | | | | | | |
| TOTAL | 1 | 05 | 18 | 23 | 02 | 13 | 15 | 00 | 02 | 02 | 07 | 33 | 40 |

F) Extension Personnel Including the sponsored training programmes (Off Campus)

| Thematic Area | No. of Courses | No. of Participants | | | | | | | | | Grand Total | | |
|---|----------------|---------------------|----------|-----------|----------|----------|----------|----------|----------|----------|-------------|----------|-----------|
| | | Other | | | SC | | | ST | | | M | F | T |
| | | M | F | T | M | F | T | M | F | T | | | |
| Productivity enhancement in field crops | | | | | | | | | | | | | |
| Integrated Pest Management | 01 | 13 | 0 | 13 | 1 | 0 | 1 | 0 | 0 | 0 | 14 | 0 | 14 |
| Integrated Nutrient management | | | | | | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | | | | | | |
| Protected cultivation technology | | | | | | | | | | | | | |
| Formation and Management of SHGs | | | | | | | | | | | | | |
| Group Dynamics and farmers organization | | | | | | | | | | | | | |
| Information networking among farmers | | | | | | | | | | | | | |
| Capacity building for ICT application | | | | | | | | | | | | | |
| Care and maintenance of farm machinery and implements | | | | | | | | | | | | | |
| WTO and IPR issues | | | | | | | | | | | | | |
| Management in farm animals | | | | | | | | | | | | | |
| Livestock feed and fodder production | | | | | | | | | | | | | |
| Household food security | | | | | | | | | | | | | |
| Women and Child care | | | | | | | | | | | | | |
| Low cost and nutrient efficient diet designing | | | | | | | | | | | | | |
| Production and use of organic inputs | | | | | | | | | | | | | |
| Gender mainstreaming through SHGs | | | | | | | | | | | | | |
| Crop intensification | | | | | | | | | | | | | |
| TOTAL | 01 | 13 | 0 | 13 | 1 | 0 | 1 | 0 | 0 | 0 | 14 | 0 | 14 |

G) Consolidated table (ON and OFF Campus)

i. Farmers & Farm Women

| Thematic Area | No. of Courses | No. of Participants | | | | | | | | | Grand Total | | |
|---------------------------|----------------|---------------------|---|----|----|---|---|----|---|----|-------------|---|----|
| | | Other | | | SC | | | ST | | | M | F | T |
| | | M | F | T | M | F | T | M | F | T | | | |
| I. Crop Production | | | | | | | | | | | | | |
| Weed Management | 2 | 38 | 0 | 38 | 2 | 0 | 2 | 17 | 0 | 17 | 57 | 0 | 57 |

| | | | | | | | | | | | | | |
|---|----------|-----------|----------|-----------|----------|----------|----------|----------|----------|----------|-----------|----------|-----------|
| Integrated Pest Management | 1 | 12 | 1 | 13 | 1 | 0 | 1 | 0 | 0 | 0 | 13 | 1 | 14 |
| Integrated Nutrient management | | | | | | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | | | | | | |
| Value addition | | | | | | | | | | | | | |
| Protected cultivation technology | | | | | | | | | | | | | |
| Formation and Management of SHGs | | | | | | | | | | | | | |
| Group Dynamics and farmers organization | | | | | | | | | | | | | |
| Information networking among farmers | | | | | | | | | | | | | |
| Capacity building for ICT application | | | | | | | | | | | | | |
| Care and maintenance of farm machinery and implements | | | | | | | | | | | | | |
| WTO and IPR issues | | | | | | | | | | | | | |
| Management in farm animals | | | | | | | | | | | | | |
| Livestock feed and fodder production | | | | | | | | | | | | | |
| Household food security | | | | | | | | | | | | | |
| Women and Child care | | | | | | | | | | | | | |
| Low cost and nutrient efficient diet designing | | | | | | | | | | | | | |
| Production and use of organic inputs | | | | | | | | | | | | | |
| Gender mainstreaming through SHGs | | | | | | | | | | | | | |
| Crop intensification | | | | | | | | | | | | | |
| Others if any | | | | | | | | | | | | | |
| TOTAL | 1 | 12 | 1 | 13 | 1 | 0 | 1 | 0 | 0 | 0 | 13 | 1 | 14 |

Please furnish the details of training programmes as Annexure in the proforma given below

| Discipline | Clientele | Title of the training programme | Duration in days | Venue (Off / On Campus) | Number of participants | | | Number of SC/ST | | |
|------------------|------------------------|--|------------------|-------------------------|------------------------|--------|-------|-----------------|--------|-------|
| | | | | | Male | Female | Total | Male | Female | Total |
| Plant Protection | Farmers and farm women | Disease management in sugarcane | 1 | Off campus | 33 | 00 | 33 | 08 | 00 | 08 |
| Plant Protection | Farmers and farm women | Insect Pest management in sugarcane | 1 | Off campus | 38 | 00 | 38 | 01 | 00 | 01 |
| Plant Protection | Farmers and farm women | Important diseases of mango and their management | 1 | Off campus | 25 | 00 | 25 | 02 | 00 | 02 |

| | | | | | | | | | | |
|------------------|------------------------|---|---|------------|----|----|----|----|----|----|
| Plant Protection | Farmers and farm women | Importance of Trichoderma in sugarcane disease management | 1 | Off campus | 26 | 00 | 26 | 07 | 00 | 07 |
| Plant Protection | Farmers and farm women | Seed treatment in rice for disease and pest management | 1 | Off campus | 19 | 07 | 26 | 01 | 01 | 01 |
| Plant Protection | Farmers and farm women | Diseases of rice and their management | 1 | Off campus | 27 | 04 | 31 | 04 | 01 | 05 |
| Plant Protection | Farmers and farm women | Rice diseases and their management | 1 | Off campus | 25 | 00 | 25 | 25 | 00 | 25 |
| Plant Protection | Farmers and farm women | Identification and management of red rot disease in sugarcane | 1 | Off campus | 25 | 00 | 25 | 01 | 00 | 01 |
| Plant Protection | Farmers and farm women | Management of insect pest and diseases in sugarcane seed production | 1 | Off campus | 39 | 00 | 39 | 04 | 00 | 04 |
| Plant Protection | Farmers and farm women | Wheat diseases and their management | 1 | Off campus | 23 | 02 | 25 | 02 | 00 | 02 |
| Plant Protection | Farmers and farm women | Mushroom production | 1 | Off campus | 07 | 25 | 32 | 02 | 16 | 18 |
| Plant Protection | Farmers and farm women | Insect pest and disease management in onion | 1 | Off campus | 22 | 08 | 30 | 22 | 08 | 30 |
| Plant Protection | Farmers and farm women | Management of diseases in sugarcane | 1 | On Campus | 33 | 00 | 33 | 06 | 00 | 06 |
| Plant Protection | Farmers and farm women | Integrated diseases management in rice crop | 1 | On Campus | 31 | 00 | 31 | 08 | 00 | 08 |
| Plant Protection | Farmers and farm women | Disease management in sugarcane settling transplanting technique | 1 | On Campus | 30 | 00 | 30 | 02 | 07 | 09 |
| Plant Protection | Farmers and farm women | Blast disease management in rice | 1 | On Campus | 12 | 18 | 30 | 02 | 06 | 08 |
| Plant Protection | Farmers and farm women | Integrated insect pest management in sugarcane | 1 | On Campus | 06 | 27 | 33 | 03 | 12 | 15 |

| | | | | | | | | | | |
|------------------------|------------------------|--|---|-----------|----|----|----|----|----|----|
| Plant Protection | Farmers and farm women | Insect pest and diseases management in lentil and chickpea | 1 | On Campus | 30 | 0 | 30 | 15 | 00 | 15 |
| Plant Protection | Farmers and farm women | Insect pest and diseases management in lentil and chickpea | 1 | On Campus | 28 | 00 | 28 | 00 | 00 | 00 |
| Plant Protection | Farmers and farm women | Diseases management in Lentil crop | 1 | On Campus | 24 | 06 | 30 | 01 | 01 | 01 |
| Plant Protection | Farmers and farm women | Diseases and insect pest management in vegetable crops | 1 | On Campus | 04 | 26 | 30 | 04 | 26 | 30 |
| Crop Production | Farmers and farm women | Sugarcane settling transplanting technology | 1 | Off | 25 | 0 | 25 | 9 | 0 | 9 |
| Crop Production | Farmers and farm women | Summer mungbean production technology | 1 | Off | 28 | 2 | 30 | 4 | 0 | 4 |
| Crop Production | Farmers and farm women | Leaser land levelling | 1 | On | 40 | 0 | 40 | 8 | 0 | 8 |
| Crop Production | Farmers and farm women | Scientific rice cultivation technology under drought condition | 1 | Off | 30 | 0 | 30 | 0 | 0 | 0 |
| Crop Production | Farmers and farm women | Package and practices of direct seeded rice cultivation | 1 | On | 25 | 19 | 44 | 8 | 9 | 17 |
| Crop Production | Farmers and farm women | Direct seeded rice cultivation technology | 1 | Off | 27 | 0 | 27 | 12 | 0 | 12 |
| Crop Production | Farmers and farm women | Integrated nutrient management in rice | 1 | On | 32 | 0 | 32 | 6 | 0 | 6 |
| Crop Production | Farmers and farm women | Integrated nutrient management in rice | 1 | Off | 43 | 0 | 43 | 5 | 0 | 5 |
| Crop Production | Farmers and farm women | Direct seeded rice cultivation technology | 1 | Off | 34 | 0 | 34 | 0 | 0 | 0 |
| Crop Production | Farmers and farm women | Integrated weed management under direct seeded rice | 1 | Off | 27 | 0 | 27 | 2 | 0 | 2 |

| | | | | | | | | | | |
|--------------------------|------------------------|---|---|-----|----|---|----|----|---|----|
| Crop Production | Farmers and farm women | Production technique of pigeon pea | 1 | On | 30 | 0 | 30 | 6 | 0 | 6 |
| Crop Production | Farmers and farm women | Scientific production techniques of organic manure | 1 | On | 34 | 0 | 34 | 5 | 0 | 5 |
| Crop Production | Farmers and farm women | Package and practices of mustard production | 1 | On | 22 | 9 | 31 | 2 | 0 | 2 |
| Crop Production | Farmers and farm women | Production technology of sugarcane | 1 | Off | 26 | 0 | 26 | 12 | 0 | 12 |
| Crop Production | Farmers and farm women | Agronomic practices for chickpea production | 1 | On | 30 | 0 | 30 | 5 | 0 | 5 |
| Crop Production | Farmers and farm women | Integrated nutrient management in wheat crops | 1 | Off | 22 | 3 | 25 | 2 | 0 | 2 |
| Crop Production | Farmers and farm women | Production technology of potato | 1 | On | 30 | 0 | 30 | 2 | 0 | 2 |
| Crop Production | Farmers and farm women | Integrated weed management in wheat | 1 | Off | 30 | 0 | 30 | 17 | 0 | 17 |
| Crop Production | Farmers and farm women | Ratoon management in sugarcane | 1 | Off | 25 | 0 | 25 | 0 | 0 | 0 |
| Agricultural Engineering | Farmers and farm women | Solar powered irrigation system (SPIS) introduction, merits/ demerits, installation location and its types. | 1 | On | 28 | 0 | 28 | 10 | 0 | 10 |
| Agricultural Engineering | Farmers and farm women | Technologies for direct sowing of rice, its importance, merits and demerits | 1 | On | 25 | 0 | 25 | 4 | 0 | 4 |
| Agricultural Engineering | Farmers and farm women | Weed management in paddy crop for kharif season | | On | 31 | 0 | 31 | 5 | 0 | 5 |
| Agricultural Engineering | Farmers and farm women | Various weed management methods and it's various available technologies | 1 | Off | 30 | 0 | 30 | 24 | 0 | 24 |
| Agricultural Engineering | Farmers and farm women | Calibration of different agricultural machineries | 1 | Off | 31 | 0 | 31 | 3 | 0 | 3 |
| Agricultural Engineering | Farmers and farm women | Various micro irrigation techniques for water saving | 1 | Off | 30 | 0 | 30 | 5 | 0 | 5 |
| Agricultural Engineering | Farmers and farm women | Care and maintenance of Agricultural Equipment | 1 | Off | 22 | 8 | 30 | 3 | 0 | 3 |

| | | | | | | | | | | |
|--------------------------|------------------------|--|---|-----|----|----|----|----|----|----|
| Agricultural Engineering | Farmers and farm women | Solar powered Irrigation system, a way to use green energy for agricultural purpose | 1 | On | 16 | 14 | 30 | 6 | 3 | 9 |
| Agricultural Engineering | Farmers and farm women | Technologies for sugarcane bud and node making to increase farm mechanization | 1 | On | 30 | 0 | 30 | 0 | 9 | 9 |
| Agricultural Engineering | Farmers and farm women | Role and classification of different farm machineries and equipment's for Rabi crop production | 1 | On | 29 | 2 | 31 | 0 | 0 | 0 |
| Agricultural Engineering | Farmers and farm women | Operation and maintenance of Zero Till machine for sowing of wheat | 1 | Off | 30 | 0 | 30 | 24 | 0 | 24 |
| Agricultural Engineering | Farmers and farm women | Implements and Equipment's for Land levelling and shaping for better resource use | 1 | On | 29 | 0 | 29 | 0 | 0 | 0 |
| Agricultural Engineering | Farmers and farm women | Manual Rice-wheat seeder for direct wheat sowing, a low - cost method for wheat sowing | 1 | On | 26 | 5 | 31 | 3 | 4 | 7 |
| Agricultural Engineering | Farmers and farm women | Farm mechanization a sustainable and effective way to double farmers income | 1 | On | 17 | 11 | 28 | 8 | 11 | 19 |
| Animal Science | Farmers and farm women | Dairy animal diseases and their prevention | 1 | Off | 36 | 0 | 36 | 21 | 0 | 21 |
| Animal Science | Farmers and farm women | Management of dairy animals in summer season | 1 | Off | 31 | 0 | 31 | 24 | 0 | 24 |
| Animal Science | Farmers and farm women | Scientific dairy farming | 1 | Off | 28 | 0 | 28 | 4 | 0 | 4 |
| Animal Science | Farmers and farm women | Health management in goat | 1 | Off | 26 | 1 | 27 | 19 | 0 | 19 |
| Animal Science | Farmers and farm women | Feeding management of dairy cattle | 1 | Off | 27 | 0 | 27 | 6 | 0 | 6 |
| Animal Science | Farmers and farm women | Clean milk production | 1 | On | 34 | 1 | 35 | 5 | 0 | 5 |
| Animal Science | Farmers and farm women | Feeding management of dairy cattle | 1 | Off | 23 | 8 | 31 | 21 | 7 | 28 |

| | | | | | | | | | | |
|----------------|------------------------|---|---|-----|----|----|----|----|----|----|
| Animal Science | Farmers and farm women | Scientific dairy farming | 1 | Off | 43 | 0 | 43 | 5 | 0 | 5 |
| Animal Science | Farmers and farm women | Azolla production and use as animal feed | 1 | On | 11 | 22 | 33 | 3 | 22 | 25 |
| Animal Science | Farmers and farm women | Different types of housing systems for goat | 1 | On | 24 | 7 | 31 | 12 | 3 | 15 |
| Animal Science | Farmers and farm women | Production and preservation of green fodder round the year | 1 | Off | 30 | 0 | 30 | 4 | 0 | 4 |
| Animal Science | Farmers and farm women | Important bacterial, viral and parasitic diseases in goat | 1 | Off | 29 | 0 | 29 | 3 | 0 | 3 |
| Animal Science | Farmers and farm women | Important poultry breeds and its scope | 1 | Off | 25 | 1 | 26 | 0 | 0 | 0 |
| Animal Science | Farmers and farm women | Commercial broiler and layer farming | 1 | On | 29 | 0 | 29 | 10 | 0 | 10 |
| Animal Science | Farmers and farm women | Different types of housing system in poultry | 1 | Off | 18 | 12 | 30 | 12 | 6 | 18 |
| Animal Science | Farmers and farm women | PPR disease in goat and it's prevention | 1 | Off | 22 | 8 | 30 | 7 | 2 | 9 |
| Animal Science | Farmers and farm women | Important bacterial, viral and parasitic diseases in poultry | 1 | On | 28 | 0 | 28 | 5 | 0 | 5 |
| Horticulture | Farmers and farm women | Production technology of seedlings in Bottle guard and sponge gaurd | 1 | On | 40 | 0 | 40 | 3 | 0 | 3 |
| Horticulture | Farmers and farm women | Cultural practices in litchi production | 1 | OFF | 27 | 7 | 34 | 27 | 7 | 34 |
| Horticulture | Farmers and farm women | Advance production technology of vegetable crops for kharif season | 1 | OFF | 29 | 1 | 30 | 3 | 0 | 3 |
| Horticulture | Farmers and farm women | Natural farming of | 1 | OFF | 27 | 0 | 27 | 0 | 0 | 0 |

| | | | | | | | | | | |
|--------------|------------------------|--|---|-----|----|----|----|----|----|----|
| | | cucumber in kharif season | | | | | | | | |
| Horticulture | Farmers and farm women | Production technology of Onion in Kharif season | 1 | OFF | 26 | 0 | 26 | 0 | 0 | 0 |
| Horticulture | Farmers and farm women | Cultural practices of okra in Kharif season | 1 | OFF | 17 | 28 | 45 | 5 | 28 | 33 |
| Horticulture | Farmers and farm women | Cultural practices of early cucumber | 1 | OFF | 25 | 0 | 25 | 3 | 0 | 3 |
| Horticulture | Farmers and farm women | Growing of nursery of Vegetable crop | 1 | OFF | 25 | 0 | 25 | 0 | 0 | 0 |
| Horticulture | Farmers and farm women | Nutrient management in Vegetable crop | 1 | OFF | 19 | 7 | 26 | 1 | 0 | 1 |
| Horticulture | Farmers and farm women | Nutrient management in Litchi | 1 | OFF | 25 | 0 | 25 | 0 | 0 | 0 |
| Horticulture | Farmers and farm women | Scope and importance of Nursery raising and its different techniques | 1 | OFF | 23 | 2 | 25 | 2 | 0 | 2 |
| Horticulture | Farmers and farm women | Nutrient management in Mango and Litchi for enhancement of yield and quality of fruits | 1 | OFF | 24 | 1 | 25 | 21 | 1 | 22 |

H) Vocational training programmes for Rural Youth

Details of training programmes for Rural Youth

| Crop / Enterprise | Identified Thrust Area | Training title* | Duration (days) | No. of Participants | | | Self-employed after training | | | Number of persons employed elsewhere |
|---------------------|------------------------|---------------------|-----------------|---------------------|--------|-------|------------------------------|-----------------|----------------------------|--------------------------------------|
| | | | | Male | Female | Total | Type of units | Number of units | Number of persons employed | |
| Mushroom Production | Mushroom Production | Mushroom Production | 4 | 30 | 0 | 30 | | 21 | 21 | 0 |
| Mushroom Production | Mushroom Production | Mushroom Production | 4 | 7 | 33 | 40 | | 36 | 36 | 0 |

| | | | | | | | | | | |
|----------------|-----------------|--|-----------|------------|-----------|------------|-------|------------|------------|----------|
| Crop | Seed production | Certified seed production in sugarcane | 4 | 30 | 0 | 30 | | 23 | 23 | 0 |
| Animal Science | Goat rearing | Commercial goat farming | 5 | 30 | 0 | 30 | Small | 21 | 21 | 0 |
| Animal Science | IFS | Livestock based IFS | 4 | 27 | 0 | 27 | Small | 23 | 23 | 0 |
| Total | | | 21 | 124 | 33 | 157 | | 124 | 124 | 0 |

**training title should specify the major technology /skill transferred*

3.4. A. Extension Activities (including activities of FLD programmes)

| Nature of Extension Activity | No. of activities | Farmers | | | | Extension Officials | | | Total | | |
|--|-------------------|---------|------|-------|------------------------|---------------------|--------|-------|-------|--------|-------|
| | | M | F | T | SC/ ST (% of total) | Male | Female | Total | Male | Female | Total |
| Kisan Mela organized | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kisan Mela participated | 2 | 18000 | 4100 | 22100 | 34.38914 | 0 | 0 | 0 | 18000 | 4100 | 22100 |
| Field Day | 4 | 177 | 14 | 191 | 27.74869 | 0 | 0 | 0 | 177 | 14 | 191 |
| Kisan Ghosthi | 15 | 1457 | 301 | 1758 | 27.70193 | 0 | 0 | 0 | 1457 | 301 | 1758 |
| Exhibition organized | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Participation in exhibition | 7 | 20035 | 4694 | 24729 | 35.03579 | 0 | 0 | 0 | 20035 | 4694 | 24729 |
| Film Show | 1 | 38 | 0 | 38 | 18.42105 | 0 | 0 | 0 | 38 | 0 | 38 |
| Method Demonstrations | 11 | 231 | 3 | 234 | 12.82051 | 0 | 0 | 0 | 231 | 3 | 234 |
| Farmers Seminar | 1 | 61 | 81 | 142 | 65.49296 | 0 | 0 | 0 | 61 | 81 | 142 |
| Workshop | 1 | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 6 | 0 | 6 |
| Group discussion | 1 | 26 | 3 | 29 | 41.37931 | 0 | 0 | 0 | 26 | 3 | 29 |
| Lectures delivered as resource persons | 18 | 1172 | 36 | 1208 | 18 | 0 | 0 | 0 | 1172 | 36 | 1208 |
| Advisory Services | 222 | 8295 | 2817 | 11112 | 41.3067 | 0 | 0 | 0 | 8295 | 2817 | 11112 |
| Scientific visit to farmers field | 151 | 1996 | 356 | 2352 | 32.31293 | 0 | 0 | 0 | 1996 | 356 | 2352 |
| Farmers visit to KVK | 75 | 2151 | 420 | 2571 | 26.52664 | 0 | 0 | 0 | 2151 | 420 | 2571 |
| Diagnostic visits | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Exposure visits | 1 | 37 | 13 | 50 | 4 | 0 | 0 | 0 | 37 | 13 | 50 |
| Ex-trainees Sammelan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Soil health Camp | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Animal Health Camp | 3 | 37 | 67 | 104 | 72.11 | 0 | 0 | 0 | 37 | 67 | 104 |
| Agri mobile clinic | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Soil test campaigns | 4 | 64 | 2 | 66 | 0 | 0 | 0 | 0 | 64 | 2 | 66 |
| Farm Science Club Conveners meet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Self Help Group Conveners meetings | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mahila Mandalas Conveners meetings | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Special day celebration | 13 | 1137 | 387 | 1524 | 23.4252 | 0 | 0 | 0 | 1137 | 387 | 1524 |

| | | | | | | | | | | | |
|-------------------------------|------------|---------------|--------------|---------------|--------------|----------|----------|----------|---------------|--------------|---------------|
| Sankalp Se Siddhi | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Swatchta Hi Sewa | 15 | 749 | 126 | 875 | 29.70 | 0 | 0 | 0 | 749 | 126 | 875 |
| Celebration of important date | 10 | 261 | 58 | 331 | | 0 | 0 | 0 | 273 | 58 | 331 |
| Others Extension Activities | 171 | 48365 | 2668 | 50666 | 33.79387 | 0 | 0 | 0 | 48365 | 2668 | 50666 |
| Total | 726 | 104295 | 16146 | 120086 | 33.69 | 0 | 0 | 0 | 104295 | 16146 | 120086 |

B. Other Extension activities

| Nature of Extension Activity | No. of activities |
|---|-------------------|
| Newspaper coverage | 52 |
| Radio talks | - |
| Books | 2 |
| Research paper | 14 |
| Review papers | 2 |
| News published in Newsletter | 5 |
| Technical report preparation | 4 |
| TV talks | - |
| Popular articles | 9 |
| Extension Literature (Folder) | 4 |
| Pamphlets | 97 |
| Extension bulletin | 01 |
| Electronic media coverage | 4 |
| Animal health camp | 3 |
| Any other (Abstract of research paper published in souvenir) | 24 |
| Total | 221 |

C. Celebration of important days in KVKs

| Celebration of Important Days | No. of activities | Farmers | | | | Extension Officials | | | Total | | |
|---|-------------------|------------|-----------|------------|---------------------|---------------------|----------|----------|------------|-----------|------------|
| | | M | F | Total | SC/ ST (% of total) | M | F | Total | M | F | Total |
| Republic day (26 th Jan.) | 01 | 28 | 2 | 30 | 30 | 0 | 0 | 0 | 28 | 2 | 30 |
| International Women's Day (8 th Mar.) | 01 | 12 | 29 | 41 | 51.21 | 0 | 0 | 0 | 12 | 29 | 41 |
| Ambedkar Jayanti (14 th Apr.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| International Yoga Day (21 st Jun.) | 01 | 18 | 0 | 18 | 33.33 | 0 | 0 | 0 | 18 | 0 | 18 |
| Independence Day (15 th Aug.) | 01 | 51 | 5 | 56 | 39.28 | 0 | 0 | 0 | 51 | 5 | 56 |
| Parthenium Awareness Week | 01 | 20 | 0 | 20 | 65.00 | 0 | 0 | 0 | 20 | 0 | 20 |
| Hindi Diwas (14 th Sep.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gandhi Jayanti (2 nd Oct.) | 01 | 17 | 0 | 17 | 35.29 | 0 | 0 | 0 | 17 | 0 | 17 |
| Mahila Kisan Diwas (15 th Oct.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| World Food Day (16 th Oct.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vigilance Awareness Week | 01 | 17 | 0 | 17 | 35.29 | 0 | 0 | 0 | 17 | 0 | 17 |
| National Unity Day (31 st Oct.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| World Science Day (10 th Nov.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| National Education Day (11 th Nov.) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| National Constitution Day (26 th Nov.) | 01 | 39 | 2 | 41 | 14.63 | 0 | 0 | 0 | 39 | 2 | 41 |
| World Soil Day (5 th Dec.) | 01 | 43 | 6 | 49 | 20.40 | 0 | 0 | 0 | 43 | 6 | 49 |
| Kisan Diwas (23 rd Dec.) | 01 | 28 | 14 | 42 | 57.14 | 0 | 0 | 0 | 28 | 14 | 42 |
| Total | 10 | 261 | 58 | 331 | 38.12 | 0 | 0 | 0 | 273 | 58 | 331 |

D. Interaction/Live telecast programme of Hon'ble PM/Hon'ble AM

| Sl. | Date of event | Name of Event/Programme | Interaction of Hon'ble PM/AM | Participants | | | |
|-----|---------------|--|------------------------------|--------------|--------|------------|-------|
| | | | | Farmers | Staffs | VIP/Others | Total |
| 1. | 01.01.2022 | 10 th Instalment of PM-Kisan Samman | Hon'ble PM and AM | 25 | 5 | 0 | 30 |
| 2. | 26.04.2022 | Kisan Bhagidari Prarthmikta Hamari | Hon'ble PM and AM | 325 | 13 | 02 | 340 |
| 3. | 16.07.2022 | 94 th Foundation of ICAR | Hon'ble AM | 191 | 13 | 01 | 205 |
| 4. | 17.09.2022 | Poshan Vatika Abhiyan | Hon'ble AM | 97 | 13 | 01 | 111 |
| 5. | 17.10.2022 | PM-Kisan Samman | Hon'ble PM and AM | 289 | 13 | 03 | 305 |

3.5 a. Production and supply of Technological products

Village seed

| Crop | Variety | Quantity of seed(q) | Value (Rs) | No. of farmers involved in village seed production | Number of farmers to whom seed provided | | | |
|--------------|---------|---------------------|------------|--|---|----|-------|-------|
| | | | | | SC | ST | Other | Total |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Total | | | | | | | | |

KVK farm

| Crop | Variety | Quantity of seed (q) | Value (Rs) | Number of farmers to whom seed provided | | | |
|--------------------|--|----------------------|--------------|---|----|-------|-------------------|
| | | | | SC | ST | Other | Total |
| Paddy | Rajendra Mansuri – 1 | 286.2 | Not received | | | | DSP, RPCA U, Pusa |
| Wheat | DBW – 39 | 95.0 | Not received | | | | DSP, RPCA U, Pusa |
| Mustard | Rajendra Sufhaham – 1 | 15.75 | Not received | | | | DSP, RPCA U, Pusa |
| Pigeon pea | Rajendra Arhar – 1 | 9.18 | Not received | | | | DSP, RPCA U, Pusa |
| Sugarcane | Rajendra Ganna – 1, CoP – 9301 | 97.3 | 43,785.00 | 01 | 00 | 02 | 03 |
| Potato | Kufri Chipsona | 3.3 | | | | | |
| Other vegetables | Cauliflower, onion, chilly, broccoli, pea etc. | 4.88 | | | | | |
| Grand Total | | 511.61 | | | | | |

Production of planting materials by the KVKs

| Crop | Variety | No. of planting materials | Value (Rs) | Number of farmers to whom planting material provided | | | |
|----------------------------|-------------|---------------------------|------------|--|----|-------|-------|
| | | | | SC | ST | Other | Total |
| Vegetable seedlings | | | | | | | |
| Cauliflower | Pusa Sharad | 300 | 300.00 | 0 | 0 | 01 | 01 |
| | Pusa Ketaki | 200 | 200.00 | 0 | 0 | 02 | 02 |
| | HY Safed | 700 | 700.00 | 02 | 0 | 07 | 09 |
| Cabbage | - | - | - | - | - | - | - |
| Tomato | Hybrid | 300 | 300.00 | 0 | 0 | 01 | 01 |
| | F1HY Laxmi | 700 | 700 | 02 | 0 | 07 | 09 |
| Brinjal | - | - | - | - | - | - | - |
| Chilli | K2 | 95 | 95.00 | 0 | 0 | 01 | 01 |
| | S-716 | 970 | 970.00 | 05 | 0 | 10 | 15 |

| | | | | | | | |
|--------------------------|------------------|-------|----------|----|----|-----|-----|
| | BNR-109 | 1030 | 1030 | 02 | 0 | 07 | 09 |
| | VNR-145 | 1000 | 1000.00 | 02 | 0 | 07 | 09 |
| Onion | N-53 | 85165 | 10219.80 | 02 | 0 | 02 | 04 |
| Sponge Gourd | Rajendra | 461 | 2766.00 | 21 | 01 | 32 | 54 |
| | Hybride | 50 | 300.00 | 03 | 0 | 07 | 09 |
| Bottle Gourd | Chamatkar | 323 | 1938 | 13 | 0 | 22 | 35 |
| | Nerendra Shivani | 110 | 660 | 08 | 0 | 14 | 22 |
| | LBH Latto No.1 | 60 | 360 | 04 | 02 | 06 | 12 |
| Bitter Gourd | NBIH-332F1 | 50 | 300 | 02 | 02 | 06 | 10 |
| Brokly | HY | 1105 | 2210.00 | 02 | 0 | 07 | 09 |
| Pointed Guard | N-207, N-360 | 90 | 2700.00 | 06 | 01 | 10 | 17 |
| Flowers | Marigold Narangi | 500 | 300.00 | 01 | 0 | 0 | 01 |
| Vegetable | | | | | | | |
| Onion | | | | | | | |
| Others | | | | | | | |
| Fruits | | | | | | | |
| Mango | | | | | | | |
| Guava | | | | | | | |
| Lime | | | | | | | |
| Papaya | | | | | | | |
| Banana | | | | | | | |
| Others | | | | | | | |
| Ornamental plants | | | | | | | |
| Medicinal and Aromatic | | | | | | | |
| Plantation | | | | | | | |
| Spices | | | | | | | |
| Turmeric | | | | | | | |
| Tuber | | | | | | | |
| Elephant yams | | | | | | | |
| Fodder crop saplings | | | | | | | |
| Forest Species | | | | | | | |
| Others, pl.specify | | | | | | | |
| Total | | 93209 | 27048.8 | 75 | 6 | 149 | 229 |

Production of Bio-Products

| Name of product | Quantity | Value (Rs.) | No. of Farmers benefitted | | | |
|-------------------------|----------|-------------|---------------------------|----|-------|-------|
| | Kg | | SC | ST | Other | Total |
| Bio-fertilizers | | | | | | |
| Bio-pesticide | | | | | | |
| Bio-fungicide | | | | | | |
| Bio-agents | | | | | | |
| Others, please specify. | | | | | | |
| Total | | | | | | |

Production of livestock materials

| Particulars of Live stock | Name of the breed | Number | Value (Rs.) | No. of Farmers benefitted | | | |
|---------------------------|-------------------------------------|----------------|---------------|---------------------------|----|-------|-----------|
| | | | | SC | ST | Other | Total |
| Dairy animals | | | | | | | |
| Cows | | | | | | | |
| Buffaloes | | | | | | | |
| Calves | | | | | | | |
| Others (Pl. specify) | | | | | | | |
| Small ruminants | | | | | | | |
| Sheep | | | | | | | |
| Goat | | | | | | | |
| Other, please specify | | | | | | | |
| Poultry | | | | | | | |
| Broilers | | | | | | | |
| Layers | | | | | | | |
| Duals (broiler and layer) | | | | | | | |
| Japanese Quail | | | | | | | |
| Turkey | | | | | | | |
| Emu | | | | | | | |
| Ducks | | | | | | | |
| Others (Pl. specify) | | | | | | | |
| Piggery | | | | | | | |
| Piglet | | | | | | | |
| Hog | | | | | | | |
| Others (Pl. specify) | | | | | | | |
| Fisheries | | | | | | | |
| Indian carp | Rohu+Katla+Mirgal+Grass carp | 120 kg. | 21,600 | | | | 07 |
| Exotic carp | | | | | | | |
| Mixed carp | | | | | | | |
| Fish fingerlings | | | | | | | |
| Spawn | | | | | | | |
| Others (Pl. specify) | | | | | | | |
| Grand Total | Rohu+Katla+Mirgal+Grass carp | 120 kg. | 21,600 | | | | 07 |

3.5. b. Seed Hub Programme-“Creation of Seed Hubs for Increasing Indigenous Production of Pulses in India”

i) Name of Seed Hub Centre:

| | |
|-------------------------|--|
| Name of Nodal Officer : | |
| Address : | |
| e-mail : | |
| Phone No. : | |
| Mobile : | |

ii) Quality Seed Production of Pulses

| Season | Crop | Variety | Production (q) | | | |
|--------------------|------|---------|----------------|----------------|------------|----------------------------|
| | | | Target | Area sown (ha) | Production | Category of Seed(F/S, C/S) |
| Kharif 2021 | | | | | | |
| Rabi 2021 | | | | | | |
| Summer/Spring 2021 | | | | | | |

iii) Financial Progress

| Fund received (2016-17, 2017-18, 2019, 2020 and 2021) | Expenditure (Rs. in lakhs) | | Unspent balance (Rs. in lakhs) | Remarks |
|--|----------------------------|----------------|-----------------------------------|---------|
| | Infrastructure | Revolving fund | | |
| 2016-17 | | | | |
| 2017-18 | | | | |
| 2018-19 | | | | |
| 2019 | | | | |
| 2020 | | | | |
| 2021 | | | | |
| 2022 | | | | |

iv) Infrastructure Development

| Item | Progress |
|------------------------|----------|
| Seed processing unit | |
| Seed storage structure | |

3.6. (A) Literature Developed/Published (with full title, author & reference)

| Author's name | Year | Title | ISBN No./ISSN Copy | Circulation |
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| Yadav, B., Malav, L. C., Jiménez-Ballesta, R., Kumawat, C., Patra, A. , Patel, A., Jangir, A., Nogiya, M., Meena, R. L., Moharana, P. C., Kumar, N., Sharma, R. P., Yadav, L. R., Reddy, G. P. O., and Mina, B. L. | 2022 | Modeling and assessment of land degradation vulnerability in aridecosystem of Rajasthan using analytical hierarchy process and geospatial techniques | <i>Land</i> , 12: 106. doi: 10.3390/land12010106 | NAAS Rating – 9.40/ Impact Factor 3.905 |
| Goswami, S., Singh, S. K., Patra, A. , Dutta, A., and Mohapatra, K. K. | 2022 | Residual effects of nickel and its interaction with applied zinc and NPK improve the growth, yield, and nutritional quality of cowpea and urease activity of soil grown in Vertisols | <i>Journal of Soil Science and Plant Nutrition</i> , 1-11. doi: 10.1007/s42729-022-01024-2 | NAAS Rating – 9.87/ Impact Factor 3.610 |
| Anil, A. S., Sharma, V. K., Jiménez-Ballesta, R., Parihar, C. M., Datta, S. P., Barman, M., Chobhe, K. A., Kumawat, C., Patra, A. , and Jatav, S. S. | 2022 | Impact of long-term conservation agriculture practices on phosphorus dynamics under maize-based cropping systems in a sub-tropical soil | <i>Land</i> , 11 (9): 1488. doi: 10.3390/land11091488 | NAAS Rating – 9.40/ Impact Factor 3.905 |
| Didawat, R. K., Sharma, V. K., Nath, D. J., Patra, A. , Kumar, S., Biswas, D. R., Chobhe, K. A., Bandyopadhyay, K. K., Trivedi, A., Chopra, I., Dutta, A., Mohapatra K. K., and Anil, A. S. | 2022 | Soil biochemical properties and nutritional quality of rice cultivated in acidic inceptisols using long-term organic farming practices | <i>Archives of Agronomy and Soil Science</i> , 1-16. doi: 10.1080/03650340.2022.2084084 | NAAS Rating – 9.09/ Impact Factor 2.242 |

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| Shashank Singh, Biswarup Mehera, Subhangi Singh, RP Singh and Abhik Patra | 2022 | Effect of phosphorus and sulphur application on yield attributes and yield of linseed (<i>Linum usitatissimum</i> L.) grown in middle gangetic plain | <i>The Pharma Innovation Journal</i> , 11(10): 214-216 | NAAS Rating – 5.23 |
| Shashank Singh, Biswarup Mehra, Subhangi Singh, SK Singh, RP Singh and Abhik Patra | 2022 | Effect of phosphorus and sulphur application on growth attributes and growth rate of linseed (<i>Linum usitatissimum</i> L.) grown under sandy loam soil | <i>The Pharma Innovation Journal</i> , 11(11): 422-425 | NAAS Rating – 5.23 |
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| Extension Pamphlets/ Folder/Literature | | | | |
| Pamphlets Published | | | | |
| डा आर. पी. सिंह | 2022 | <ul style="list-style-type: none"> ➤ खरीफ फसलों में बीजोपचार ➤ गन्ने का लाल धारी रोग प्रबंधन ➤ गन्ने की फसल में पेड़ी कुंठन रोग प्रबंधन ➤ गन्ने के उकठा रोग का प्रबंधन ➤ गन्ने के कंडुआ रोग का प्रबंधन ➤ गन्ने के मित्र कीटों को बचाएं ➤ गन्ने के लाल सडन रोग का प्रबंधन ➤ गन्ने में अंकुर बेधक कीट की पहचान एवं प्रबंधन ➤ गन्ने में ऊनी माहूँ कीट का प्रबंधन ➤ गन्ने में काला चिकटा कीट की पहचान एवं प्रबंधन ➤ गन्ने में गुरुदासपुर कीट की पहचान एवं प्रबंधन ➤ गन्ने में घासी प्ररोह रोग का प्रबंधन ➤ गन्ने में चोटी बेधक कीट की पहचान एवं प्रबंधन ➤ गन्ने में जड़ बेधक कीट की पहचान एवं प्रबंधन ➤ गन्ने में टिड्डी कीट की पहचान एवं प्रबंधन ➤ गन्ने में तना बेधक कीट की पहचान एवं प्रबंधन ➤ गन्ने में थ्रिप्स कीट की पहचान एवं प्रबंधन ➤ गन्ने में दीमक कीट की पहचान एवं प्रबंधन | कृषि विज्ञान केंद्र, नरकटियागंज | |

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| | | <ul style="list-style-type: none"> ➤ गन्ने में पायरिला कीट की पहचान एवं प्रबंधन ➤ गन्ने में पोक्कहा बोईंग रोग की रोकथाम ➤ गन्ने में पोरी बेधक कीट की पहचान एवं प्रबंधन ➤ गन्ने में प्लासी बोरर कीट की पहचान एवं प्रबंधन ➤ गन्ने में माईट की पहचान एवं प्रबंधन ➤ गन्ने में शल्क कीट की पहचान एवं प्रबंधन ➤ गन्ने में सफेद गिडार कीट की पहचान एवं प्रबंधन ➤ गन्ने में सफेद मक्खी कीट की पहचान एवं प्रबंधन ➤ गेहूँ की फसल में अनावृत कंडुआ एवं करनाल बंट रोग की पहचान एवं प्रबंधन ➤ गेहूँ की फसल में गेरुई रोग की पहचान एवं प्रबंधन ➤ गेहूँ की फसल में झुलसा रोग की पहचान एवं प्रबंधन ➤ चने में फली भेदक कीट का नियंत्रण ➤ टमाटर की फसल में जीवाणु झुलसा रोग की पहचान एवं समेकित प्रबंधन ➤ टमाटर की फसल में पछेती झुलसा रोग की पहचान एवं समेकित प्रबंधन ➤ टमाटर की फसल में फल विगलन रोग की पहचान एवं समेकित प्रबंधन ➤ टमाटर के फल भेदक कीट का समेकित प्रबंधन ➤ टमाटर के सफेद मक्खी व गुर्च रोग का प्रबन्धन ➤ दलहनी फसलों में फली बेधक कीट का समेकित प्रबंधन | | |
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| | | <ul style="list-style-type: none"> ➤ धान का झोंका रोग प्रबंधन ➤ धान की फसल को गंधी बग कीट से बचाएं ➤ धान की फसल में गंधी बग, बाली काटने वाले व टिट्टी कीट का खतरा बढ़ा ➤ धान की बाली काटने वाले कीट का प्रबन्धन ➤ धान के आभासी कंड रोग का प्रबंधन ➤ धान के कांटेदार गुबरैला (हिस्पा) कीट की पहचान एवं प्रबंधन ➤ धान के जीवाणु झुलसा रोग का नियंत्रण ➤ धान के जीवाणु झुलसा रोग के लक्षण एवं प्रबंधन ➤ धान के जीवाणु पर्ण धारी रोग का नियंत्रण ➤ धान के झुलसा रोग नियंत्रण ➤ धान के भूरा धब्बा रोग नियंत्रण ➤ धान के शीथ झुलसा रोग का नियंत्रण ➤ धान के शीथ सडन रोग नियंत्रण ➤ पर्यावरण पर विशेष ➤ बैगन के जीवाणु उकठा रोग का प्रबंधन ➤ बैगन के प्ररोह एवं फल बेधक कीट का प्रबंधन ➤ बैगन फसल में झुलसा व फल सडन रोग प्रबंधन ➤ बैगन फसल में सूत्रकृमि का प्रबंधन ➤ बैगन में आर्द्र गलन रोग प्रबंधन ➤ बैगन में छोटी पत्ती रोग का समेकित प्रबंधन | | |
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| | <ul style="list-style-type: none"> ➤ माईकोराईजा कल्चर के प्रयोग से कृषि में लाभ ➤ मिर्च के रोग एवं कीट तथा प्रबंधन ➤ मृदा सौरीकरण से लाभ ➤ रबी फसलों को पीला से बचाएं ➤ रबी फसलों में बीज एवं भूमि शोधन अवश्य करें ➤ वर्मी वाश के प्रयोग की बिधियाँ ➤ वसंत ऋतु पर विशेष ➤ सब्जियों के आर्द्र गलन रोग एवं समेकित प्रबंधन ➤ केचुआ खाद के प्रयोग की मात्रा ➤ केले की फसल को बंची टॉप रोग से बचाएं ➤ केले के प्रकंद भेदक कीट का प्रबन्धन ➤ केले के फल एवं पत्ती धब्बा लगाने वाला भृंग कीट का प्रबंधन करें ➤ केले में उकठा रोग प्रबन्धन नवीन तकनीक द्वारा करें ➤ केले में जीवाणु उकठा रोग का प्रबंधन ➤ केले में तना भेदक कीट का समेकित प्रबंधन ➤ केले में पर्ण चित्ती रोग का प्रबन्धन ➤ आलू की फसल में पछेती झुलसा रोग की पहचान एवं समेकित प्रबंधन ➤ अवशेषों को खेतों में कदापि न जलाएं ➤ अगस्त माह में गन्ने फसल में कृषि कार्य ➤ गन्ने की फसल में अक्टूबर माह में किये जाने वाले कृषि कार्य | | |
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| | | <ul style="list-style-type: none"> ➤ गन्ने की फसल में जुलाई माह में किये जाने वाले कृषि कार्य ➤ गन्ने की फसल में जून माह में किये जाने वाले कृषि कार्य ➤ गन्ने की फसल में फ़रवरी-मार्च माह में किये जाने वाले कार्य ➤ गन्ने की फसल में मई माह में किये जाने वाले कृषि कार्य ➤ गन्ने की फसल में सितम्बर माह में किये जाने वाले कृषि कार्य ➤ गन्ने की फसल में नवम्बर माह में किये जाने वाले कृषि कार्य ➤ गन्ने की फसल में दिसम्बर माह में किये जाने वाले कृषि कार्य ➤ गन्ने फसल में अप्रैल माह में किये जाने वाले कृषि कार्य | | |
| | | ➤ Fodder production in <i>Rabi</i> season | | |
| | | ➤ Fodder production in <i>Kharif</i> season | | |
| | | ➤ FMD disease in livestock | | |
| | | ➤ <i>Azolla</i> – feed supplement | | |
| | | ➤ PPR disease in goats | | |
| | | ➤ Vaccination schedule for castles | | |
| | | ➤ Goat farming | | |
| | | ➤ Advisory for the month of Oct. to the livestock farmers | | |
| | | ➤ Advisory for the month of Sept. to the livestock farmers | | |
| | | ➤ Barseem farming | | |
| | | ➤ Deworming in livestock | | |
| | | ➤ Vermicompostin g | | |

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| | | ➤ Advisory for the month of Aug. to the livestock farmers | | |
| Published Folder | | | | |
| डॉ .आर .पी. सिंह, डॉ ए.के. सिंह ,डॉ. एस.के. गंगवार, डॉ अभय कुमार सिंह | 2022 | समेकित कृषि प्रणाली जीवन का मूल आधार | प्रकाशक- कृषक चेतना जबलपुर Reg. no.: RNI/MPHIN/2010/37315 | - |
| डॉ .आर .पी. सिंह, डॉ ए.के. सिंह ,डॉ. एस.के. गंगवार, डॉ अभय कुमार सिंह | 2022 | कोदो, कुटकी की उन्नत तकनीक एवं उपयोगिता | प्रकाशक- कृषक चेतना जबलपुर Reg. no.: RNI/MPHIN/2010/37315 | - |
| डॉ .आर .पी. सिंह, डॉ ए.के. सिंह ,डॉ. एस.के. गंगवार, डॉ अभय कुमार सिंह | 2022 | प्राकृतिक खेती अपनाएं – कम लागत में अधिक लाभ कमायें | प्रकाशक- कृषक चेतना जबलपुर Reg. no.: RNI/MPHIN/2010/37315 | - |
| डॉ .आर .पी. सिंह, डॉ ए.के. सिंह ,डॉ. एस.के. गंगवार, डॉ अभय कुमार सिंह | 2022 | प्राकृतिक खेती में फसल प्रबंधन के उपाय | प्रकाशक- कृषक चेतना जबलपुर Reg. no.: RNI/MPHIN/2010/37315 | - |
| Technical reports | 2022 | 1. Annual Progress Report of KVK, Narkatiaganj for the year 2021 2. 6 th EEC report 3. Action Plan of KVK, Narkatiaganj for the year 2022 – 2023 4. SAC meeting report of 2022 | | |
| Electronic Publication (CD/DVD etc) | | | | |
| Total | 162 | | | |

N.B.: Please enclose a copy of each. In case of literature prepared in local language please indicate the title in English

(B) Details of HRD programmes undergone by KVK personnel:

| Sl. No. | Name of programme | Name of course | Name of KVK personnel and designation | Date and Duration | Organized by |
|---------|---------------------------|--|--|--|--|
| 1. | Winter school | Climate smart agriculture for sustainable production | Mr. Abhik Patra, SMS – Crop Production | 28 th March to 17 th April, 2022, 21 days | Dr. Rajendra Prasad Central Agricultural University, Pusa, Samastipur, Bihar |
| 2. | Capacity Building Program | Solar powered Irrigation System | Mr. Pankaj Malkani SMS-Agricultural Engineering | 25 th -27 th May, 2022 3 days | BISA Jabalpur |
| 3. | Online workshop | All India fodder production officers: Kharif | Mr. Abhik Patra, SMS – Crop Production | 28-30 th June, 2022, 3 days | ICAR- Indian Grassland and Fodder Research |

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| | | | | | Institute, Jhansi |
| 4. | Online training | Extension strategies for promotion of climate resilient agriculture | Mr. Abhik Patra, SMS – Crop Production | 22-26 th August, 2022, 5 days | Bihar Agricultural University, Sabour, Bhagalpur |
| 5. | Management development program | Developing Winning research proposals | Mr. Abhik Patra, SMS – Crop Production | 12-17 th September, 2022, 6 days | ICAR-National Academy of Agricultural Research Management Rajendranagar, Hyderabad |
| 6. | 21 days training | Advance course on climate resilient agriculture (CRA) | Mr. Abhik Patra, SMS – Crop Production | 29 th November – 19 th December, 2022, 21 days | BISA- Ludhiana and Jabalpur |
| 7. | Online training | All India fodder production officers: Kharif | Dr. Bhushan Kumar Singh SMS – Animal Science | 28-30 th June, 2022, 3 days | ICAR- Indian Grassland and Fodder Research Institute, Jhansi |
| 8. | Online training | Extension Approaches for sustainable buffalo production | Dr. Bhushan Kumar Singh SMS – Animal Science | 23-25 November 2022, 3 days | MANAGE and KVAFSU |

3.7. Success stories/Case studies, if any (two- or three-pages write-up on 1-2 best case(s) with suitable action photographs)

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| Name of farmer | Mr. Anand Kumar Singh |
| Address | Village: Samhauta of Narkatiaganj block, West Champaran district in Bihar |
| Contact details (Phone, mobile, email Id) | 8340491683 |
| Landholding (in ha.) | 27 |
| Name and description of the farm/ enterprise | Integrated Farming System (Crop + Fisheries based) |
| Economic impact | Mr. Anand Kumar Singh was born in farming family hails from the village Samhauta of Narkatiaganj block, West Champaran district in Bihar. He completed his graduation and chosen agriculture as a profession and started devoting his time focusing on a better farming. He is having 27 acre of land. Initially, he used to grow only rice, wheat, sugarcane and fisheries by adopting traditional methods. He was not getting the expected income. He felt that doing agriculture through conventional method minimized the yield and income. It is also associated with low productivity, increased cost on agriculture inputs and poor or no utilization of existing farm resources available in the farm. He came in contact of KVK scientists and other agencies like agriculture, horticulture, animal husbandry, he incorporated the major components of Integrated Farming Systems for diversified agriculture (Rice, Wheat, Sugarcane, Mustard, Mango, Makhana cultivation, Dairy, Fisheries/ Prawn farming) for enhancing his farm income. Now, he is a role |

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| | <p>model for other agri-entrepreneur in the district for adopting Integrated Farming System.</p> <p>After establishing the integrated farming system, his net income increased to Rs. 2685600 lakh/-annually from 27 acre land. The overall average production growth and net income was 48.31 and 114.40 per cent more over previous baseline period. Mr. Singh has become a role model for fellow farmers in the district Wst Champaran of Bihar. His socio-economic status is recognized as a Progressive Farmers. His plan for the future is to expand IFS model and inculcating the value of agriculture among youth who are quitting agriculture. His future plan is also to increase his area under orchards. According to Mr. Singh, “a diversified farming system is like flower plants of different colours in a beautiful garden”.</p> |
| Social impact/Recognition | <p>The partner farmers and neighboring farmers were fully convinced about different components of integrated farming system i.e. different species of fishes, sugarcane settling transplanting technique (STT) with intercropping of short duration and short statured crop like potato, field pea, lentil and wheat, makhana cultivation, fruits plants (mango, litchi). Farmers becoming aware that saving of water and cost of fertilizers through use of drip and fertigation system in sugarcane crop, saving of power consumption and irrigation labour costs, wider row spacing and intercropping is one of the most important cultural practices for decreases insect-pests and diseases as well as increases doubling farmers income, nutritional and livelihood security. Intercropping in sugarcane crop has indicated more benefits in terms of net profits mainly resulting reduces cost of cultivation, reduction of incidence of insect pests and diseases and greater resource utilization and fulfils the diversified needs of the farmers. Farmer’s confidence improved with KVK scientist and sugar mill officials to have face to face discussion and facilitated sharing of knowledge with experiences. Intercropping with sugarcane STT encouraged the partner and neighboring farmers to act their farm work in a more systemic and specific manner and also reducing plant protection input/other input costs and providing various environmental benefits. Crop based IFS model has indicated more benefit in terms of net profits mainly resulting reduces cost of cultivation, reduction of incidence of insect pests and diseases and greater resource utilization and fulfils the diversified needs of the farmers. The technology is capable for increasing the productivity, profitability and nutritional security of sugarcane growers as well as socio economic status of farmers. He has recognized by different institutions i.e.</p> <ul style="list-style-type: none"> ➤ Abhinav Kisan Puraskar-2020 by Dr Rajendra Prasad Central Agricultural University, Pusa, Samastipur, Bihar ➤ Best IFS model and getting higher monetary by district magistrate West Champaran Bihar. ➤ Plaque of Appreciation awarded for his significant contribution to |

STRASA and particularly his substantial role involvement in creating generating awareness and promoting stress tolerant rice in Bihar by IRRI, Philippines, Manila.

- Recognition certificate for Fingerlings production-2021 by district Fisheries department, West Champaran, Bihar.
- Kisan Shri Award by ATMA, West Champaran, Bihar.

Environmental impact
 They are reducing the contamination of environment by adoption of different components of IFS in their cropping system. The number of friendly insects in the surrounding environment increases by growing intercrop in sugarcane crop, due to which the use of chemical pesticides is reduced and hygienic products are obtained.

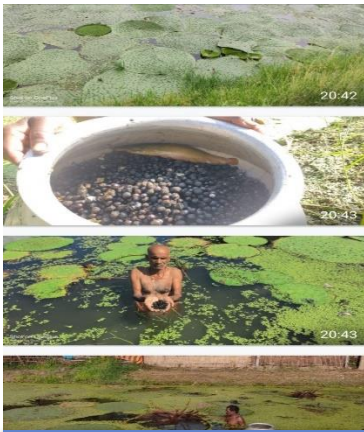
Horizontal/ Vertical spread
 The rapid horizontal/vertical expansion of crop based IFS model and STT technique in sugarcane crop with intercropping are ensured to increasing the productivity, profitability and nutritional security of sugarcane growers as well as socio economic status of farmers. The outcome of these new technology for higher sugarcane production and fisheries inspired the farming communities to replace their conventional method of transplanting/sowing technique with resistance high yielding varieties which are being cultivated. More than 10 crop based IFS model and >1000 acre area are being cultivated by this technologies.



Crop Production and Mango cultivation by Mr Anand Singh




Fisheries Production by Mr Anand Singh



Makhana Cultivation



A view of recognition received by Mr Anand Singh

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| <p>Name of farmer</p> | <p>Mr. Sachin Kumar Singh</p> |  |
| <p>Address</p> | <p>Village: Kathsikari, Block: Ramnagar, W. Champaran</p> | |
| <p>Contact details (Phone, mobile, email Id)</p> | <p>8969084117</p> | |
| <p>Landholding (in ha.)</p> | <p>08</p> | |
| <p>Name and description of the farm/ enterprise</p> | <p>Sugarcane cultivation through SST technology with drip irrigation system and intercropping of potato, wheat, lentil, field pea + Dairy</p> | |

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|--|--|
| <p>Methodology adopted by the farmers</p> | <p>Major steps involved in raising single bud or bud-chip settlings and intercropping are given below.</p> <ol style="list-style-type: none"> 1. Preparation of single-bud setts or bud-chips for one acre, 6–8-month-old plant crop (6-7 qt. seed cane), protray (50 cavity-200 no.), cocopeat (25 kg), vermicompost/FYM (7 qt.), jaivik shakti compost manure (1 qt.), sand (25 kg), fungicide (100 g), insecticide (500 ml), NPK powder 100g, humic acid 30 ml, use single bud sett cutter or bud chip machines available locally are required. Mr. Singh collected the all materials for settling production as per norms. 2. Single bud setts cut by single bud cutter machine and treated with nutrients and pesticides (0.1% each of Urea, FeSO₄ and ZnSO₄; and 0.04% Propiconazole fungicide) manually. Planted single budded setts vertically/bud-chips with buds facing upwards in protrays/ cavity trays using above mentioned ratio potting mixture of sand: soil: decomposed FYM/cocopeat/vermicompost etc. 3. Stacked the sett filled protray vertically one over others and cover the trays with polythene sheet and leave it for 5-6 days. 4. After 5 days unpacked the trays, spread it horizontally. Watering followed in the settlings regularly. The settlings will be ready for transplanting by 30-35 days. 5. He transplanted 30-35 days old settlings in the main field using the sugarcane settling transplanting technique manually with normal planting spacing of 5 x 2 feet (row x plant) distance in a paired row and zig-zag (5000 settling/acre) and also at 4 x 1.5 feet (row x plant) distance in a single line (8000 settling/acre). He irrigates the field immediately after transplanting and also used settlings as in gap filling in their field for maintaining the plant populations. He used drip irrigation and fertigation system in their sugarcane plots for proper delivery of water and fertilizers at active root zone resulting in higher water and fertilizer use efficiency. 6. In wider row spacing, planted sugarcane + potato, sugarcane + field pea, sugarcane + lentil and sugarcane + wheat in their farm field. |
| <p>Economic impact</p> | <p>Mr. Sachin Kumar Singh had heard about the importance of sugarcane settling transplanting technique through Harinagar Sugar Mill (HSM) officials, Scientists of RPCAU, Pusa and newspaper etc. He also exposed his keen interest to HSM officials and KVK scientists for adoption of settling transplanting technique for sugarcane production in their farm. He started their work on said technology with intercropping of potato, field pea, lentil and wheat since 2017-18. He also adopted drip irrigation system for irrigation in STT methodology. By taking the technical knowledge from KVK scientists and HSM officials. Now, he is doing sugarcane production technology through settling transplanting technique with intercropping in an area of 15 acre with other recommended package of practices. All the necessary arrangement made by Harinagar Sugar Mill officials and KVK, technocrats regarding scientific cultivation of sugarcane settling transplanting technique with intercropping during 2020-21. Mr. Sachin Singh adopted sugarcane settling transplanting technique with intercropping of sugarcane + potato, sugarcane + field pea, sugarcane + lentil and sugarcane + wheat for higher production, income and their livelihood security. He also adopted other package and practices with proper insect-pest and disease management as per suggestion of KVK scientists. He harvested 5250 qt production of sugarcane including intercropped yield from 15-acre lands during 2020-21. He also harvested 79 qt. produce (paddy and wheat) during 2020-21. He got net returns of Rs. 978750/- and Rs. 80700/- from sugarcane STT with intercropping and paddy and wheat, respectively during 2020-21. It was 312.11 and 54.60 per cent more over previous baseline period. He received total net income of Rs. 1135450/- during 2020-21, which was 240.77 per cent more over previous baseline period (Rs. 333200/-during</p> |

| | |
|---|---|
| | <p>2016-17). He is also producing about 3600 litre milks from their 4 cows and receiving net income about Rs. 76000/- annually from their livestock's, which is 74.71 per cent more over previous baseline period.</p> |
| <p>Social impact</p> | <p>The partner farmers and neighboring farmers were fully convinced about sugarcane settling transplanting technique (STT) with intercropping of short duration and short statured crop like potato, field pea, lentil and wheat. Farmers becoming aware that saving of water and cost of fertilizers through use of drip and fertigation system in sugarcane crop, saving of power consumption and irrigation labour costs, wider row spacing and intercropping is one of the most important cultural practices for decreases insect-pests and diseases as well as increases doubling farmers income, nutritional and livelihood security. Intercropping in sugarcane crop has indicated more benefits in terms of net profits mainly resulting reduces cost of cultivation, reduction of incidence of insect pests and diseases and greater resource utilization and fulfils the diversified needs of the farmers. Farmer's confidence improved with KVK scientist and sugar mill officials to have face to face discussion and facilitated sharing of knowledge with experiences. Intercropping with sugarcane STT encouraged the partner and neighboring farmers to act their farm work in a more systemic and specific manner and also reducing plant protection input/other input costs and providing various environmental benefits. The technology is capable for increasing the productivity, profitability and nutritional security of sugarcane growers as well as socio economic status of farmers.</p> |
| <p>Environmental impact</p> | <p>They are reducing the contamination of environment by the use of pesticides in their crops through drip system. The number of friendly insects in the surrounding environment increases by growing intercrop in sugarcane crop, due to which the use of chemical pesticides is reduced and hygienic products are obtained.</p> |
| <p>Horizontal/ Vertical spread</p> | <p>Sugarcane settling transplanting technique (STT) with intercropping are adopted by them and enhanced the yield of Sugarcane + Potato/Field pea/Lentil/Wheat about 250% more over conventional method followed by Paddy-Wheat (23.44%) and by dairy animal (20%). The overall production increased by 253.06 per cent and income jumped about 240.77 per cent. The rapid horizontal/vertical expansion of STT technologies of the sugarcane crop with intercropping are ensured to increasing the productivity, profitability and nutritional security of sugarcane growers as well as socio economic status of farmers. The outcome of these new technology for higher sugarcane production inspired the farming communities to replace their conventional method of transplanting/sowing technique with resistance high yielding varieties which are being cultivated. More than 1000 acre area are being cultivated by this technologies.</p> |



Bud cutting by farmer through single bud cutter machine, sett treatment, prepared compost and placement of single bud in protrays



Settling germination started



Grown up settlings in protrays



Settlings transplanting



Fertigation



Sugarcane + Potato



Sugarcane + Field pea



Sugarcane + Wheat



Sugarcane + Lentil



KVK technocrats and HSM officials with farmer's

3.8. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year

| Sl. No. | Name/ Title of the technology | Name/ Details of the Innovator(s) | Brief details of the Innovative Technology |
|---------|---|--|---|
| 1 | Fish pond based integrated farming system Mango orchard Solar powered based Irrigation system Makhana Cultivation Custom hiring Center STT based Sugarcane cultivation | Mr. Anand Kumar Singh Village: Samhauta, Block: Narkatiyaganj, Distt.: W. Champaran | Establishment of the integrated farming system, the net income increased to Rs. 2685600 lakh/-annually from 27 acre land. The overall average production growth and net income was 48.31 and 114.40 per cent more over previous baseline period. Mr. Singh has become a role model for fellow farmers in the district West Champaran of Bihar. His socio-economic status is recognized as a Progressive Farmers. His plan for the future is to expand IFS model and inculcating the value of agriculture among youth who are quitting agriculture. His future plan is also to increase his area under orchards. According to Mr. Singh, “a diversified farming system is like |

| | | | |
|----|--|--|--|
| | | | flower plants of different colours in a beautiful garden”. |
| 2. | STT based sugarcane cultivation Drip Irrigation system for the irrigation of Sugarcane Developed methodologies for portray mix preparation for STT | Mr. Sachin Singh Village: Katsikri, Block: Ramnagar, Distt.:W. Champanan | Preparation of single-bud setts or bud-chips for one acre, 6–8-month-old plant crop (6-7 qt. seed cane), protray (50 cavity-200 no.), cocopeat (25 kg), vermicompost/FYM (7 qt.), jaivik shakti compost manure (1 qt.), sand (25 kg), fungicide (100 g), insecticide (500 ml), NPK powder 100g, humic acid 30 ml, use single bud sett cutter or bud chip machines available locally are required. Mr. Singh collected the all materials for settling production as per norms. Single bud setts cut by single bud cutter machine and treated with nutrients and pesticides (0.1% each of Urea, FeSO ₄ and ZnSO ₄ ; and 0.04% Propiconazole fungicide) manually. Planted single budded setts vertically/bud-chips with buds facing upwards in protrays/ cavity trays using above mentioned ratio potting mixture of sand: soil: decomposed FYM/cocopeat/vermicompost etc. Stacked the sett filled protray vertically one over others and cover the trays with polythene sheet and leave it for 5-6 days. After 5 days unpacked the trays, spread it horizontally. Watering followed in the settlings regularly. The settlings will be ready for transplanting by 30-35 days. |

- 3.9. a. Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

| Sl. No. | Crop / Enterprise | ITK Practiced | Purpose of ITK |
|---------|-------------------|-----------------------------|--|
| 1. | Wheat and Mustard | Seed treated with BEEJAMRIT | For healthy plant growth and higher yield with less nutrient requirement |
| 2. | Mustard | Application of Varmiwash | For insect pest management |

- b. Give details of organic farming practiced by the farmer

| Sl. No. | Crop / Enterprise | Area (ha)/ No. covered | Production | No. of farmers involved | Market available (Y/N) |
|---------|-------------------|------------------------|---------------------------|-------------------------|------------------------|
| 1. | Wheat and Mustard | 12 ha & 5 ha | Crop is in Standing phase | 10 | Yes |
| 2. | Mustard | 3 ha | Crop is in Standing phase | 6 | Yes |

3.10. Indicate the specific training need analysis tools/methodology followed by KVKs

| Sl. No. | Brief details of the tool/ methodology followed | Purpose for which the tool was followed |
|---------|---|--|
| 1. | Village level survey by developed data collection tools (interview schedules, questioner, etc.) | To access the need based training |
| 2. | PRA and RRA activity | To access the need based training and to know the socio-economic status of the farmers, natural resources availability, etc. |

3.11. a. Details of equipment available in Soil and Water Testing Laboratory

| Sl. No | Name of the Equipment | Qty. |
|--------|-----------------------|------|
| | | |
| | | |
| | | |
| | | |

3.11.b. Details of samples analyzed so far:

| Number of soil samples analyzed | | |
|------------------------------------|---------------------------------|-------|
| Through mini soil testing kit/labs | Through soil testing laboratory | Total |
| | | |

3.11.c Detail of Soil, Water and Plant analysis at KVK

| Sl. | Analysis | No. of Samples analyzed | No. of Villages | No. of Farmers | Amount realized (Rs.) |
|-----|-----------------|-------------------------|-----------------|----------------|-------------------------------------|
| 1. | Soil | 1800 | 46 | 1800 | Soil sample tested by HSM, Ramnagar |
| 2. | Water | | | | |
| 3. | Plant | 238 | 14 | 238 | |
| 4. | Fertilizers | | | | |
| 5. | Manures | | | | |
| 6. | Food | | | | |
| 7. | Others (if any) | | | | |

3.11.d. Details on World Soil Day

| Sl. No. | Activity | No. of Participants | No. of VIPs | Name (s) of VIP(s) | Number of Soil Health Cards distributed | No. of farmers benefitted |
|---------|--|---------------------|-------------|--------------------|---|---------------------------|
| 1. | Kisan gosthi | 49 | 0 | 0 | Nil | 49 |
| 2. | Method demonstration for soil sampling | 49 | 0 | 0 | Nil | 49 |

3.12. Activities of Rain Water Harvesting structure and micro irrigation system

| No of training programme | No. of demonstrations | No. of plant material produced | Visit by the farmers (No.) | Visit by the officials (No.) |
|--------------------------|-----------------------|--------------------------------|----------------------------|------------------------------|
| | | | | |

3.13. Technology week celebration

| Type of activities | No. of activities | Number of participants | Related crop/livestock technology |
|--------------------|-------------------|------------------------|-----------------------------------|
| | | | |

3.14. RAWE/ FET programme - is KVK involved? (Y/N)- NO

| No of student trained | No of days stayed |
|-----------------------|-------------------|
| | |

| ARS trainees trained | No of days stayed |
|----------------------|-------------------|
| | |

3.15. List of VIP visitors (Minister/ MP/MLA/DM/VC/ZilaParishad/Other Head of Organization/Foreigners)

| Date | Name of the person | Purpose of visit |
|---|-----------------------------------|--|
| MP (Rajy Sabha | Hon'ble Shri Satish Chandra Dubey | Inauguration of Kisan Bhagidari-Prathmikata Hamari Program-2022 |
| Dean, College of Fisheries, RPCAU, Pusa | Dr P P Srivastava | SAC meeting |
| DEE, RPCAU, Pusa | Dr M S Kundu | SAC Meeting |
| | | |
| | | |
| | | |

4. IMPACT

4.1. Impact of KVK activities (Not to be restricted for reporting period).

| Name of specific technology/skill transferred | No. of participants | % of adoption | Change in income (Rs.) | |
|---|---------------------|---------------|------------------------|------------------|
| | | | Before (Rs./Unit) | After (Rs./Unit) |
| STT and IFS, Natural farming | | | | |
| | | | | |

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants

4.2. Cases of large scale adoption

(Please furnish detailed information for each case)

| Horizontal spread of technologies | |
|-----------------------------------|-------------------|
| Technology | Horizontal spread |
| STT | 1200 ha |
| Rajender ganna-1 | 450 ha |
| Rajender suflam-1 | 600 ha |

Give information in the same format as in case studies

4.3. Details of impact analysis of KVK activities carried out during the reporting period

| Sl. No. | Brief details of technology | Impact of the technology in subjective terms | Impact of the technology in objective terms |
|---------|-----------------------------|--|---|
| | | | |

4.4. Details of innovations recorded by the KVK

| | |
|---------------------------------|--|
| Thematic area | |
| Name of the Innovation | |
| Details of Innovator | |
| Back ground of innovation | |
| Technology details | |
| Practical utility of innovation | |

4.5. Details of entrepreneurship development

| | |
|--|--|
| Entrepreneurship development | |
| Name of the enterprise | |
| Name & complete address of the entrepreneur | |
| Role of KVK with quantitative data support: | |
| Timeline of the entrepreneurship development | |
| Technical Components of the Enterprise | |
| Status of entrepreneur before and after the enterprise | |
| Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise): | |
| Horizontal spread of enterprise | |

4.6. Any other initiative taken by the KVK

5. LINKAGES

5.1. Functional linkage with different organizations

| Name of organization | Nature of linkage |
|--|---|
| National Horticulture Mission | To establish model nursery, vegetable seed production, training of farmers, supply of planting materials |
| ATMA, West Champaran | Training of farmers, Infrastructure development, Assessment, refinement, validation and adaptation of trial |
| Directorate of Sugarcane, Bihar Govt. | Development of seed production programme of Sugarcane |
| DHO, W. Champaran | Training of farmers, Kisan goshthi |
| DAO, W. Champaran | Training of farmers, Kisan goshthi and Kisan Mela |
| DFO, W. Champaran | Training of farmers, Kisan goshthi |
| DAHO, W. Champaran | Training of farmers, Kisan goshthi |
| NGO Super Kisan Clubs, Fakirana Sister Society KisanJagaranSamittee, Bagaha | Training of farmers, Kisan goshthi |
| NABARD | Formation of Kisan club, Training of Farmers, Krishan goshthi. |
| CISA | Training of farmers, goshthi, field visit |
| Jeevika | Training of farmers |

5.2. List of special programme undertaken during 2022 by the KVK, which have been financed by ATMA/ Central Govt/ State Govt./NABARD/NHM/NFDB/Other Agencies (**information of previous years should not be provided**)

a) Programmes for infrastructure development

| Name of the programme/scheme | Purpose of programme | Date/ Month of initiation | Funding agency | Amount (Rs.) |
|------------------------------|----------------------|---------------------------|----------------|--------------|
| | | | | |

(b) Programme for other activities (training, FLD, OFT, Mela, Exhibition etc.)

| Name of the programme/scheme | Purpose of programme | Date/ Month of initiation | Funding agency | Amount (Rs.) |
|------------------------------|----------------------|---------------------------|----------------|--------------|
| | | | | |

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

6.1. Performance of demonstration units (other than instructional farm)

| Sl. No. | Name of demo Unit | Year of estt. | Area (Sq. mt) | Details of production | | | Amount (Rs.) | | Remarks |
|---------|-------------------|---------------|---------------|-----------------------|---------|------|----------------|--------------|---------|
| | | | | Variety/breed | Produce | Qty. | Cost of inputs | Gross income | |
| 1. | | | | | | | | | |
| 2. | | | | | | | | | |
| 3. | | | | | | | | | |
| 4. | | | | | | | | | |
| 5. | | | | | | | | | |
| 6. | | | | | | | | | |
| 7. | | | | | | | | | |
| | Total | | | | | | | | |

6.2. Performance of Instructional Farm (Crops)

| Name Of the crop | Date of sowing | Date of harvest | Area (ha) | Details of production | | | Amount (Rs.) | | Remarks |
|------------------|---------------------|----------------------|-----------|-----------------------|-----------------|----------|----------------|--------------|--------------------|
| | | | | Variety | Type of Produce | Qty. (q) | Cost of inputs | Gross income | |
| Paddy | 4-6 July, 2022 | 26-29 November, 2022 | 6 ha | R. mahsuri | F/S | 286.2 | - | - | Kharif -2022 |
| Wheat | 8-16 December, 2021 | 26-29 April, 2022 | 6 ha | DBW 39 | F/S | 95 | - | - | Rabi, 2021-2022 |
| Wheat | 8-16 December, 2022 | Standing position | 6 ha | DBW 39 | B/S and F/S | - | - | - | Rabi, 2022-2023 |
| Pigeon pea | 25 July, 2021 | 12-14 May, 2022 | 1 ha | R. arhar-1 | F/S | 9.18 | - | - | Kharif , 2021-2022 |
| Pigeon pea | 20-23 July, 2022 | Standing position | 1 ha | R. arhar-1 | F/S | - | - | - | Kharif , 2022-2023 |

| | | | | | | | | | |
|--------------|------------------------------|-----------------------------|---------|--|-----|---------------|---|---|------------------------|
| Mustard | 5-6 Novem ber, 2021 | 20-24 April, 2022 | 2 ha | R. Suflam | T/L | 19.75 | - | - | Rabi, 2021- 22 |
| Mustard | 2-4 Novem ber, 2022 | Standin g position | 1 ha | R. Suflam | T/L | - | - | - | Rabi, 2022- 2023 |
| Sugarcane | 10 Novem ber, 2021 | 12-18 Decemb er, 2022 | 1.75 ha | Rajendra ganna-1 and CoP 9301 | B/S | 97.3 | - | - | Autu mn, 2022 |
| Sugarcane | 09 March, 2022 | Standin g position | 0.5 ha | Rajendra ganna-1 | B/S | - | - | - | Spring , 2022 |
| Total | | | | | | 503.43 | | | |

6.3. Performance of Production Units (bio-agents / bio pesticides/ bio fertilizers etc.,)

| Sl. No. | Name of the Product | Qty. (Kg) | Amount (Rs.) | | Remarks |
|---------|---------------------|-----------|----------------|--------------|---------|
| | | | Cost of inputs | Gross income | |
| 1. | | | | | |
| | | | | | |

6.4. Performance of instructional farm (livestock and fisheries production)

| Sl. No | Name of the animal / bird / aquatics | Details of production | | | Amount (Rs.) | | Remarks |
|--------|--------------------------------------|------------------------------|-----------------|--------|----------------|--------------|--|
| | | Breed | Type of Produce | Qty. | Cost of inputs | Gross income | |
| 1. | Aquatics | Rohu+Katla+Mirgal+Grass carp | Fish | 120 kg | - | 21000 | Remaining harvesting will be done in next season |
| 2. | | | | | | | |
| 3. | | | | | | | |

6.5. Utilization of hostel facilities

Accommodation available (No. of beds)

| Months | No. of trainees stayed | Trainee days (days stayed) | Reason for short fall (if any) |
|----------------|------------------------|----------------------------|--------------------------------|
| | | | |
| | | | |
| | | | |
| Total : | | | |

(For whole of the year)

6.6. Utilization of staff quarters

Whether staff quarters has been completed:

No. of staffquarters:

Date of completion:

Occupancy details:

| Months | Q I | QII | Q III | QIV | Q V | QVI |
|--------|-----|-----|-------|-----|-----|-----|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

7. FINANCIAL PERFORMANCE

7.1. Details of KVK Bank accounts

| Bank account | Name of the bank | Location | Account Number |
|---------------|----------------------|-------------------------|------------------|
| Main A/c | Punjab National Bank | Sugauli, East Champaran | 0859002100006775 |
| Revolving A/c | Punjab National Bank | Sugauli, East Champaran | 0859000100346611 |

7.2. Utilization of funds under CFLD on Oilseed (*Rs. In Lakhs*)

| Item | Released by ICAR | | Expenditure | | Unspent balance as on 1 st April, 2023 |
|---------|------------------|------|-------------|------|---|
| | Kharif | Rabi | Kharif | Rabi | |
| Mustard | | 0.00 | | 0.00 | 0.00 |
| | | | | | |
| | | | | | |

7.3. Utilization of funds under CFLD on Pulses (*Rs. In Lakhs*)

| Item | Released by ICAR | | Expenditure | | Unspent balance as on 1 st April 2023 |
|------------|------------------|------|-------------|------|--|
| | Kharif | Rabi | Kharif | Rabi | |
| Pigeon pie | 0.00 | | 0.11 | | (-)0.11 |
| | | | | | |

7.4. Utilization of KVK funds during the year 2022 (Not audited)

| Sl. No. | Particulars | Sanctioned | Released | Expenditure |
|-----------------------------------|--|---------------|--------------|--------------|
| A. Recurring Contingencies | | | | |
| 1 | Pay & Allowances | 92.16 | 80.75 | 11.41 |
| 2 | Traveling allowances | 1.75 | 0.85 | |
| 3 | Contingencies | | | |
| A | Stationary, Telephone, Postage, Electric bill and others.. | 3.40 | 3.20 | 0.20 |
| B | Training of Farmers | | | |
| C | Training materials (posters, charts, demonstration...etc) | | | |
| D | Training of extension functionaries | | | |
| E | Training of Rural Youth | | | |
| F | FLD other than Oilseeds & Pulses | 4.50 | 4.15 | 0.35 |
| G | OFT | | | |
| H | Soil & Water Testing Lab | | | |
| I | Maintenance of building | | | |
| J | Estension activities, KisanMelaetc | | | |
| TOTAL (A) | | 101.81 | 88.95 | 11.96 |

| B. Non-Recurring Contingencies | | | | |
|--------------------------------|---------------------|---------------|--------------|--------------|
| 1 | Works | - | - | - |
| 2 | Vehicle | - | - | - |
| 3 | Furniture & Fixture | - | - | - |
| 4 | Equipments | - | - | - |
| TOTAL (B) | | - | - | - |
| C. REVOLVING FUND | | | | |
| GRAND TOTAL (A+B+C) | | 101.81 | 88.95 | 11.96 |

7.5. Status of **Revolving fund** (Rs. in lakh) for last three years

| Year | Opening balance as on 1 st April | Income during the year | Expenditure during the year | Net balance in hand as on 1 st April of each year (Kind + cash) |
|------|---|------------------------|-----------------------------|--|
| 2019 | - | - | - | |
| 2020 | - | - | - | |
| 2021 | - | 209235.00 | 120983.00 | 88,252.00 |
| 2022 | 274805.90 | 1013560.00 | 1288365.90 | 6,10,558.90+6,00,000.00 =12,10,558.90 |

8. Other information

8.1. Prevalent diseases in Crops

| Name of the disease | Crop | Date of outbreak | Area affected (in ha) | % Commodity loss | Preventive measures taken for area (in ha) |
|---------------------|-----------|-----------------------------------|-----------------------|---|--|
| Alternaria blight | Mustard | 1 st week of December | 50 | 8-10% | Same as in affected area by spraying of Azoxystrobin 23% SC @ 1 ml/Liter of water |
| Blast | Paddy | 2 nd week of September | 100 | 10-12% | Same as in affected area by spraying of Hexaconazole 5% EC @ 1 ml/Liter of water |
| Brown spot | Paddy | 2 nd week of September | 100 | 12-15% | Same as in affected area by spraying of Propiconazole 25% EC @ 1 ml/Liter of water |
| False smut | Paddy | 3 rd week of September | 125 | 10-15% | Same as in affected area by spraying of Propiconazole 25% EC @ 1 ml/Liter of water |
| Blight | Wheat | 2 nd week of December | 75 | 8-10% | Same as in affected area by spraying of Propiconazole 25% EC @ 1 ml/Liter of water |
| Pokkah boeing | Sugarcane | 1 st week of July | 250 | 15-18% | Same as in affected area by spraying of Copper Oxychloride 50% WP @ 2-2.5gram/liter of water |
| Red rot | Sugarcane | 1 st week of July | >250 | 25-30% | Same as in affected area by spraying of Thiophanate Methyl 70%WP @ 1 gram/liter of water |
| Wilt | Sugarcane | Last week of September | >250 | 30-40%; in some plots 100% loss (about 50 ha) | There is no preventive measure adopted by farmers |

8.2. Prevalent diseases in Livestock/Fishery

| Name of the disease | Species affected | Date of outbreak | Number of death/ Morbidity rate (%) | Number of animals vaccinated | Preventive measures taken in pond (in ha) |
|---------------------|------------------|------------------|-------------------------------------|------------------------------|---|
| | | | | | |
| | | | | | |

9.1. Nehru Yuva Kendra(NYK) Training

| Title of the training programme | Period | | No. of the participant | | Amount of Fund Received (Rs) |
|---------------------------------|--------|----|------------------------|--------|------------------------------|
| | From | To | Male | Female | |
| | | | | | |
| | | | | | |

9.2. PPV & FR Sensitization training Programme

| Date of vaccination programme | Resource Person | No. of participants | Registration (crop wise) | |
|-------------------------------|-----------------|---------------------|--------------------------|---------------------|
| | | | Name of crop | No. of registration |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

9.3. *mKisan* Portal (National Farmers' Portal/ SMS Portal)

| Type of message | No. of messages | No. of farmers covered |
|----------------------|-----------------|------------------------|
| Crop | | |
| Livestock | | |
| Fishery | | |
| Weather | | |
| Marketing | | |
| Awareness | | |
| Training information | | |
| Other | | |
| Total | | |

9.4. KVK Portal and Mobile App

| Sl. No. | Particulars | Description |
|---------|--|-------------|
| 1. | No. of visitors visited the portal | |
| 2. | No. of farmers registered in the portal | |
| 3. | Mobile Apps developed by KVK | |
| 4. | Name of the App | |
| 5. | Language of the App | |
| 6. | Meant for crop/ livestock/ fishery/ others | |
| 7. | No. of times downloaded | |

9.5 Kisan Mobile Advisory Services (KMAS)

| Sl. No. | Discipline | No. of Advisories | No. of Messages (text+ videos) | Total messages | No. of Farmers |
|---------|-------------|-------------------|--------------------------------|----------------|----------------|
| 1. | Crop | | | | |
| 2. | Livestock | | | | |
| 3. | Weather | | | | |
| 4. | Marketing | | | | |
| 5. | Awareness | | | | |
| 6. | Enterprises | | | | |
| 7. | Others | | | | |
| 8. | Total | | | | |

9.6. a. Observation of Swachha Bharat Programme/Pakhwara

| Date/ Duration of Observation | Activities undertaken | No. of Participants | | | |
|-------------------------------------|---|---------------------|---------|--------|-------|
| | | Staffs | Farmers | Others | Total |
| 16- 31.12.2022 | Taking swachhta pledge and cleanliness, campus cleanliness, waste management at farmers field, cleanliness at outside campus, safe disposal of waste material, cleaning of office record and hand sanitization. | 16 | 104 | 0 | 120 |
| | | | | | |

b. Details of Swachhta activities with expenditure

| Activities | Number | Expenditure (in Rs.) |
|--|--------|----------------------|
| 1. Digitization of office records/ e-office | | |
| 2. Basic maintenance | | |
| 3. Sanitation and SBM | | |
| 4. Cleaning and beautification of surrounding areas | | |
| 5. Vermicomposting/ Composting of biodegradable waste management & other activities on generate of wealth for waste | | |
| 6. Used water for agriculture/ horticulture application | | |
| 7. Swachhta Awareness at local level | | |
| 8. Swachhta Workshops | | |
| 9. Swachhta Pledge | | |
| 10. Display and Banner | | |
| 11. Foster healthy competition | | |
| 12. Involvement of print and electronic media | | |

9.11. Details of Swachhta Hi Sewa programme organized

| Sl. No. | Activity | No. of villages Involved | No. of Participants | No. of VIPs | Name (s) of VIP(s) |
|---------|---|--------------------------|---------------------|-------------|--------------------|
| 1. | Taking swachhta pledge and cleanliness, campus cleanliness, waste management at farmers field, cleanliness at outside campus, safe disposal of waste material, and hand sanitization. Total 15 activities was done. | 4 | 875 | 0 | Nil |

9.12. Details of Mahila Kisan Divas programme organized

| Sl. No. | Activity | No. of villages Involved | No. of Participants | No. of VIPs | Name (s) of VIP(s) |
|---------|----------|--------------------------|---------------------|-------------|--------------------|
| | | | | | |

9.13. No. of Progressive/Innovative/Lead farmer identified (category wise)

| Sl. No. | Name of Farmer | Address of the farmer with contact no. | Innovation/ Leading in enterprise |
|---------|----------------|--|-----------------------------------|
| | | | |

9.14. Revenue generation

| Sl.No. | Name of Head | Income(Rs.) | Sponsoring agency |
|--------|--------------|-------------|--------------------|
| 1. | MNREGA | 10 Lakhs | Gram Panchayat NKE |
| 2. | | | |
| 3. | | | |

9.15. Resource Generation:

| Sl.No. | Name of the programme | Purpose of the programme | Sources of fund | Amount (Rs. lakhs) | Infrastructure created |
|--------|-----------------------|--------------------------|-----------------|--------------------|------------------------|
| | | | | | |

9.16. Performance of Automatic Weather Station in KVK

| Date of establishment | Source of funding i.e. IMD/ICAR/Others (pl. specify) | Present status of functioning |
|-----------------------|--|-------------------------------|
| 02/09/2022 | CRA pogramme | Functioning |
| | | |

9.17. Contingent crop planning

| Name of the state | Name of district/KVK | Thematic area | Number of programmes organized | Number of Farmers contacted | A brief about contingent plan executed by the KVK |
|-------------------|----------------------|---------------|--------------------------------|-----------------------------|---|
| | | | | | |

10. Report on Cereal Systems Initiative for South Asia (CSISA)

- a) Year:
b) Introduction / General Information:

| Experiment | Title | Objective | Treatment details | Date of sowing | Replication | Result with photographs |
|-----------------|-------|-----------|-------------------|----------------|-------------|-------------------------|
| Experiment 1 | | | | | | |
| Experiment 2 | | | | | | |
| Experiment 3 | | | | | | |
| ... | | | | | | |
| .. | | | | | | |
| Others (If any) | | | | | | |

11. Details of TSP

a. Achievements of physical output under TSP during 2021

| Sl. | Activities | Physical Achievement | |
|-----|---|------------------------|----------------------|
| | | No. of Trainings/Demos | No. of beneficiaries |
| 1) | Trainings | | |
| a. | Farmer | | |
| b. | Women | | |
| c. | Rural Youths | | |
| d. | Extension Personnel | | |
| 2) | OFT | No. of OFTs | No. of beneficiaries |
| | | | |
| 3) | FLD | No. of FLDs | No. of beneficiaries |
| | | | |
| 4) | Mobile agro- advisory to farmers | No. of advisory | No. of beneficiaries |
| | | | |
| 5) | Other activities | | |
| a. | Participants in extension activities (No.) | | |
| b. | Production of seed (q) | | |
| c. | Production of Planting material (No. in lakh) | | |
| d. | Production of Livestock strains (No. in lakh) | | |
| e. | Production of fingerlings (No. in lakh) | | |
| f. | Testing of Soil, water, plant, manures samples (Nos.) | | |
| g. | Asset creation (Number; Sprayer, ridge maker, pump set, weeder etc.) | | |
| h. | No. of other programmes (Swachha Bharat Abhiyaan, Agriculture knowledge in rural school, Planting material distribution, Vaccination camp etc.) | | |

b. Fund received under TSP in 2022-23 (Rs. In lakh):

c. Achievements of physical outcome under TSP during 2022

| Sl. No. | Description | Unit | Achievements |
|---------|---|-------------------|--------------|
| 1 | Change in family income | % | |
| 2 | Change in family consumption level | % | |
| 3 | Change in availability of agricultural implements/ tools etc. | No. per household | |

d. Location and Beneficiary Details during 2022

| District | Sub-district | No. of Village covered | Name of village(s) covered | ST population benefitted (No.) | | |
|----------|--------------|------------------------|----------------------------|--------------------------------|---|---|
| | | | | M | F | T |
| | | | | | | |

12.Details of SCSP

| Sl. | Activities | Physical Achievement | |
|-----|---|------------------------|----------------------|
| | | No. of Trainings/Demos | No. of beneficiaries |
| 1) | Trainings | | |
| a. | Farmer | | |
| b. | Women | | |
| c. | Rural Youths | | |
| d. | Extension Personnel | | |
| 2) | OFT | No. of OFTs | No. of beneficiaries |
| | | | |
| 3) | FLD | No. of FLDs | No. of beneficiaries |
| | | | |
| 4) | Mobile agro- advisory to farmers | No. of advisory | No. of beneficiaries |
| | | | |
| 5) | Other activities | | |
| a. | Participants in extension activities (No.) | | |
| b. | Production of seed (q) | | |
| c. | Production of Planting material (No. in lakh) | | |
| d. | Production of Livestock strains (No. in lakh) | | |
| e. | Production of fingerlings (No. in lakh) | | |
| f. | Testing of Soil, water, plant, manures samples (Nos.) | | |

| | | | | | | | | |
|----|--|--|--|--|--|--|--|--|
| 3. | | | | | | | | |
|----|--|--|--|--|--|--|--|--|

18. Technologies for Doubling Farmers' Income

| Sl. No. | Name of the Technology | Brief Details of Technology (3- 5 bullet points) | Net Return to the farmer (Rs.) per ha per year due to adoption of the technology | No. of farmers adopted the technology in the district | One high resolution 'Photo' in 'jpg' format for each technology |
|---------|------------------------|--|--|---|---|
| 1 | | | | | |
| 2 | | | | | |

19. Report on Digital Farming Initiatives in Agriculture/ Digital Ag. Extension Service

| Phase | Database prepared/ covered for | | KVK level Committee | | Various activity conducted for farmers |
|-------|--------------------------------|----------------------|---------------------|-----------------|--|
| | Total no. of villages | Total no. of farmers | Date of formation | Name of members | |
| I | | | | | |
| II | | | | | |
| Total | | | | | |

20. Information on Visit of Ministers to KVKs, if any

| Date of Visit | Name of Hon'ble Minister | Name of Ministry | Salient points in his/ her observation (2-3 bulleted points) |
|---------------|--------------------------|------------------|--|
| | | | |

21. a) Information on ASCI Skill Development Training Programme, undertaken during 2022

| Year | Name of the Job role | Name of the certified Trainer of KVK for the Job role | Date of start of training | Date of completion of training | No. of participants | Whether uploaded to SDMS Portal (Y/N) | Fund utilized for the training (Rs.) |
|------|----------------------|---|---------------------------|--------------------------------|---------------------|---------------------------------------|--------------------------------------|
| 2022 | | | | | | | |
| | | | | | | | |

b) Information on Skill Development Training Programme (**Other than ASCI or less than 200 hrs.**, if any) if undertaken during 2022

| Thematic area of training | Title of the training | Duration (in hrs.) | No. of participants | | | | | | | | | | Fund utilized for the training (Rs.) | |
|---------------------------|-----------------------|--------------------|---------------------|---|----|---|-------|---|-------|---|---|--|--------------------------------------|--|
| | | | SC | | ST | | Other | | Total | | | | | |
| | | | M | F | M | F | M | F | M | F | T | | | |
| | | | | | | | | | | | | | | |

22. Information of NARI Project(if applicable)

| Name of Nodal Officer | No. of OFT on specified aspects | Title(s) of OFT | No. of FLD on specified aspects | No. of capacity development programme on specified aspects | Total no. of farm women/ girls involved in the project | Details of Issues related to gender mainstreaming addressed through the project |
|-----------------------|---------------------------------|-----------------|---------------------------------|--|--|---|
| | | | | | | |

Progress Information of NARI Project

B. Distribution of seed/ planting materials/ input/ others

| Name of programme | No. of Programme | Total quantity distributed | | | | No. of farmers benefited | | | | | | | | | No. of other officials (except KVK) attended the programme | |
|-------------------|------------------|----------------------------|--------------------------|------------|-----------------|--------------------------|---|----|---|--------|---|-------|---|---|--|--|
| | | Seed (q) | Planting material (lakh) | Input (kg) | Other (kg/ No.) | SC | | ST | | Others | | Total | | | | |
| | | | | | | M | F | M | F | M | F | M | F | T | | |
| KKA-I | | | | | | | | | | | | | | | | |
| KKA-II | | | | | | | | | | | | | | | | |

C. Livestock and Fishery related activities

| Name of programme | No. of Programme | Activities performed | | | | No. of farmers benefited | | | | | | | | | No. of other officials (except KVK) attended the programme | |
|-------------------|------------------|---------------------------|-------------------------|--|---|--------------------------|---|----|---|--------|---|-------|---|---|--|--|
| | | No. of animals vaccinated | No. of animals dewormed | Feed/ nutrient supplements provided (kg) | Any other (Distribution of animals/ birds/ fingerlings) [No.] | SC | | ST | | Others | | Total | | | | |
| | | | | | | M | F | M | F | M | F | M | F | T | | |
| KKA-I | | | | | | | | | | | | | | | | |
| KKA-II | | | | | | | | | | | | | | | | |

D. Other activities

| Name of programme | Activities | No. of farmers benefited | | | | | | | | | No. of other officials (except KVK) attended the programme | |
|-------------------|------------------------------|--------------------------|---|----|---|--------|---|-------|---|---|--|--|
| | | SC | | ST | | Others | | Total | | | | |
| | | M | F | M | F | M | F | M | F | T | | |
| KKA-I | Soil Health Card Distributed | | | | | | | | | | | |
| | NADEP Pit established | | | | | | | | | | | |
| | Farm implements distributed | | | | | | | | | | | |
| | Others, if any | | | | | | | | | | | |
| KKA-II | Soil Health Card Distributed | | | | | | | | | | | |
| | NADEP Pit established | | | | | | | | | | | |
| | Farm implements distributed | | | | | | | | | | | |
| | Others, if any | | | | | | | | | | | |

Krishi Kalyan Abhiyan- III

| No. of villages covered | No. of animal inseminated | No. of farmers benefited | | | | | | | | | Any other, if any (pl. specify) | |
|-------------------------|---------------------------|--------------------------|---|----|---|--------|---|-------|---|---|---------------------------------|--|
| | | SC | | ST | | Others | | Total | | | | |
| | | M | F | M | F | M | F | M | F | T | | |
| | | | | | | | | | | | | |

25. ARYA

| KVK | No. of entrepreneurial units established | No. of Training programs organized | No. of rural youth trained | | No. of youth established units | |
|-----|--|------------------------------------|----------------------------|--------|--------------------------------|--------|
| | | | Male | Female | Male | Female |
| | | | | | | |
| | | | | | | |

26. Any other programme organized by KVK, not covered above

| Sl. No. | Name of the programme | Date of the programme | Venue | Purpose | No. of participants |
|---------|-----------------------|-----------------------|-------|---------|---------------------|
| | | | | | |

27. Good quality action photographs of overall achievements of KVK during the year (best 10)



Krishi Vigyan Kendra, Narkatiaganj celebrated World Pulse Day-2022



Educational-cum-exposure visit-Agricultural Technology Exhibition





Field day in Mustard field under CFLD



Field day in Mustard field under CFLD



Kisan Bhagidari-Prathmikata Hamari Program-2022- Chaired by Hon'ble Rajya Sabha MP Shri Satish Chara Dubey Ji







