# KRISHI VIGYAN KENDRA, DELHI
# ANNUAL REPORT (April, 2018 - March, 2019)

## INDEX

# PROFORMA FOR PREPARATION OF ANNUAL REPORT
## (1st April, 2018 to 31st March, 2019)

## Annual Progress Report Summary

(Note: While preparing summary, please don't add or delete any row or columns)

### 1. Training Programmes

| Clientele | No. of Courses | Male | Female | Total participants |
|---|---|---|---|---|
| Farmers & farm women | 26 | 380 | 151 | 531 |
| Rural youths | - | - | - | - |
| Extension functionaries | 1 | 0 | 25 | 25 |
| Sponsored Training | 4 | 88 | 2 | 90 |
| Vocational Training | 5 | 88 | 18 | 106 |
| **Total** | **36** | **556** | **196** | **752** |

### 2. Frontline demonstrations (including CFLDs on Oilseeds and Pulses under NFSM)

| Enterprise | No. of Farmers | Area (ha) | Units/Animals |
|---|---|---|---|
| Oilseeds | 106 | 42.9 | |
| Pulses | 60 | 23.6 | |
| Cereals | 18 | 7.2 | |
| Vegetables | 17 | 7 | |
| Other crops (Kitchen Garden) | 10 | 0.2 | |
| Hybrid crops | Nil | Nil | |
| **Total** | **211** | **80.9** | |
| Livestock & Fisheries | Nil | Nil | |
| Other enterprises | Nil | Nil | |
| **Total** | Nil | Nil | |
| **Grand Total** | **211** | **80.9** | |

### 3. Technology Assessment

| Category | No. of Technology Assessed | No. of Trials | No. of Farmers |
|---|---|---|---|
| **Technology Assessed** | | | |
| Crops | 5 | 23 | 23 |
| Livestock | - | - | - |
| Various enterprises | 1 | 5 | 10 |
| **Total** | 6 | 28 | 33 |
| **Grand Total** | **6** | **28** | **33** |

### 4. Extension Programmes

| Category | No. of Programmes | Total Participants |
|---|---|---|
| Extension activities | 1084 | 3558 |
| Other extension activities | 47 | - |
| **Total** | **1131** | **3558** |

**5. Mobile Advisory Services**

| Name of KVK | Message Type | Type of Messages | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Crop | Livestock | Weather | Marke-ting | Aware-ness | Other enterprise | Total |
| | Text only | 44 | Nil | 3 | Nil | 5 | 2 | 54 |
| | Voice only | - | - | - | - | - | - | - |
| | Voice & Text both | - | - | - | - | - | - | - |
| | **Total Messages** | 44 | Nil | 3 | Nil | 5 | 2 | 54 |
| | **Total farmers Benefitted** | **9800** | **Nil** | **2253** | **Nil** | **4656** | **170** | **16883** |

**6. Seed & Planting Material Production**

| | Quintal/Number | Value Rs. |
|---|---|---|
| Seed (q) | 154.05 | 119450/- |
| Planting material (No.) | 1200 | 2400 |
| Bio-Products (kg)/Vermi-compost | 10.38 | 8658/- |
| Livestock Production (No.) | Nil | Nil |
| Fishery production (No.) | Nil | Nil |

**7. Soil, water & plant analysis**

| Samples | No. of Beneficiaries | Value Rs. |
|---|---|---|
| Soil | 160 | Free of cost |
| Water | 42 | Free of cost |
| Plant Disease Sample Diagnose | 144 | Free of cost |
| **Total** | **346** | |

**8. HRD and Publications**

| Sr. No. | Category | Number |
|---|---|---|
| 1 | Workshops | 6 |
| 2 | Conferences | 5 |
| 3 | Meetings | 8 |
| 4 | Trainings for KVK officials | 2 |
| 5 | Visits of KVK officials | 5 |
| 6 | Book published | - |
| 7 | Training Manual | 3 |
| 8 | Book chapters | - |
| 9 | Research papers | - |
| 10 | Lead papers | - |
| 11 | Seminar papers | - |
| 12 | Extension folder | 4 |
| 13 | Proceedings | 1 |
| 14 | Award & recognition | 1 |
| 15 | On going research projects | 2 |

# DETAILS OF APR (2018-19)

## 1. GENERAL INFORMATION ABOUT THE KVK

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

| Address | Telephone | | E mail | Website |
|---|---|---|---|---|
| | Office | FAX | | |
| Krishi Vigyan Kendra,<br>Village & Post -Ujwa,<br>Nazafgarh,<br>New Delhi – 110073 | 9667971155 | 011-28525129 | kvkujwa@yahoo.com | www.kvkdelhi.org |

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

| Address | Telephone | | E mail | Website |
|---|---|---|---|---|
| | Office | FAX | | |
| National Horticultural Research & Development Foundation (NHRDF), 47, Pankha Road Institutional Area, Janakpuri, New Delhi, Pin: 110058 | 011-28522211, 28524150 | 011-28525129 | delhi@nhrdf.com | www.nhrdf.com |

1.3. Name of the Programme Coordinator with phone & mobile No

| Name | Telephone / Contact | | |
|---|---|---|---|
| | Office | Mobile | Email |
| Dr P. K. Gupta | 011- 28522211 | 8888867619 | drpkgupta11@gmail.com |

1.4. Year of sanction: 1995

1.5. Staff Position (as on 30th March, 2019)

| Sl. No. | Sanctioned post | Name of the incumbent | Designation | Discipline | Pay Scale (Rs.) | Grade Pay | Present basic (Rs.) | Date of joining | Permanent /Temporary | (SC/ST/OBC/ | Mobile No. | Email id | Please attach recent photograph |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Programme Coordinator | Dr.P.K. Gupta | PC | Horticulture | 37400-67000 | 9000 | 38800 +9000 | 28/2/17 | Temp. | Gen | 8888867619 | kvkujwa@yahoo.com |  |
| 2 | Subject Matter Specialist | Ritu Singh | SMS (H.Sc) | Home Science | 15600-39100 | 5400 | 25480 +5400 | 10.02.05 | -do- | Gen | 9818550652 | -do- |  |
| 3 | Subject Matter Specialist | Rakesh Kumar | SMS (Hort) | Horticulture | 15600-39100 | 5400 | 25480 + 5400 | 22.09.05 | -do- | Gen | 9313047633 | -do- |  |
| 4 | Subject Matter Specialist | Dr. D. K. Rana | SMS (PP) | Plant Pathology | 15600-39100 | 5400 | 21220 +5400 | 5.05.10 | -do- | Gen | 9310904705 | -do- |  |
| 7 | Subject Matter Specialist | Dr Samar Pal Singh | SMS (Agro) | Agronomy | 15600-39100 | 5400 | 15600+ 5400 | 25.05.18 | -do- | Gen | 8650399054 | -do- |  |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | Subject Matter Specialist | Sh Kailash | SMS (AE) | Agriculture Extension | 15600-39100 | 5400 | 15600+5400 | 27.06.18 | -do- | Gen | 9413060922 | -do- |  |
| | Subject Matter Specialist | Dr Arpita Sharma | SMS (Agro met) | Agro-Metrology | 15600-39100 | 5400 | 15600+5400 | 1.03.19 | -do- | Gen | 9070601618 | -do- |  |
| 5 | Subject Matter Specialist | Dr. Raghubir Singh | SMS (AH) | Animal Husbandry | 15600-39100 | 5400 | 15600+5400 | 25.03.19 | -do- | Gen | 9149837754 | -do- |  |
| | Accountant / Superintendent | V. K. Dixit | OSCA | Administration and accounts | 9300-34800 | 4200 | 20160+4200 | 21.10.05 | -do- | Gen | 9911395569 | -do- |  |
| 7 | Computer Programmer | Manju | PA (Comp) | Computer Science | 9300-34800 | 4200 | 13980 +4200 | 2.05.08 | -do- | Gen | 9718666917 | -do- |  |
| 9 | Programme Assistant | Brijesh Yadav | PA (SS) | Soil Science | 9300-34800 | 4200 | 11010 + 4200 | 17.02.14 | -do- | Gen | 7065787046 | -do- |  |
| 11 | Farm Manager | Ram Sagar | Farm Manager | Agriculture | 9300-34800 | 4200 | 9300+4200 | 1.03.2019 | -do- | - | 8953751501 | -do- |  |
| 13 | Agromet Observer | Vishal | Agromet Observer | Agromet Observer | 5200-20200 | 2000 | 5200+2000 | 1.3.2019 | -do- | Gen | 9466803902 | -do- |  |
| 13 | Stenographer | Atma Ram | Store Keeper | Administration | 5200-20200 | 1900 | 9590 +1900 | 10.02.05 | -do- | Gen | 9013553955 | -do- |  |
| 14 | Driver | Rajesh Kumar | Driver | Jeep Driver | 5200-20200 | 1900 | 9580 + 1900 | 02.02.05 | -do- | Gen | 9899426775 | -do- |  |
| 15 | Driver | Krishan | Driver | Tractor Driver | 5200-20200 | 1900 | 8540+1900 | 02.05.08 | -do- | Gen | 8506920345 | -do- |  |
| | Supporting staff | Ramesh Chander | Attendant | Administration | 4440-7440 | 1800 | 7680+1800 | 10.02.05 | -do- | Gen | 9560290407 | -do- |  |
| 16 | Supporting staff | Sachin Kumar | Attendant | Administration | 4440-7440 | 1800 | 5200+1800 | 18.05.18 | -do- | Gen | 9012564616 | -do- |  |

1.6. **Total land with KVK (in ha) : 14.9**

| S. No. | Item | Area (ha) |
|---|---|---|
| 1 | Buildings | 0.7 |
| 2. | Demonstration Units<br>a. Mushroom compost pasteurized<br>b. Mushroom production<br>c. Vermicompost<br>d. Azolla<br>e. Apiculture<br>f. Shade net house<br>g. Insect proof net house | 0.3 |
| 3. | Crops | 10.0 |
| 4. | Horticulture | 0.6 |
| 5. | Rain Water Harvesting Pond | 0.02 |
| 6. | Others if any | |
| | a. Forestry | 1.78 |
| | b. Onion Storage | 1.5 |

**1.7. Infrastructural Development:**

**A) Buildings**

| S. No. | Name of building | Source of funding | Stage | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Complete | | | Incomplete | | |
| | | | Completion Year | Plinth area (Sq.m) | Expenditure (Rs.) | Starting year | Plinth area (Sq.m) | Status of construction |
| 1. | Administrative Building | ICAR | 17.2.2011 | 548.3 | 54,38,664/- | | | |
| 2. | Farmers Hostel | NIL | | | | | | |
| 3. | Staff Quarters | NIL | | | | | | |
| 4. | Demonstration Units : | | | | 967261/- | | | |
| | Mushroom unit | State Govt | 1998 | 250 $m^2$ | - | | | |
| | Vermicompost unit | ICAR | 2016 | 30 $m^2$ | 200000/- | | | |
| | Azolla unit | ICAR | 2018 | 25 $m^2$ | 25000/- | | | |
| | Insect proof net house | NHRDF | 2018 | 50 $m^2$ | 125000/- | | | |
| | Apiculture | NHRDF | 2018 | 10 box | 100000/- | | | |
| | Kinnow orchard | NHRDF | 2018 | 1 acre | 80000/- | | | |
| | Water harvesting | ICAR | 2017 | 200 $m^2$ | 150000/- | | | |
| | Drip irrigation system | NHRDF | 2019 | 2 acre | 287261/- | | | |
| 5 | Fencing | NIL | | | | | | |
| 7 | Threshing floor | ICAR | 17.2.2011 | 222.3 | 1,92,031/- | | | |
| 8 | Farm godown | ICAR | 31.3.2011 | 35.0 | 1,99,869/- | | | |
| | Other | NIL | | | | | | |

B) **Vehicles**

| Type of vehicle | Year of purchase | Cost (Rs.) | Total kms Run | Present status |
|---|---|---|---|---|
| Tractor | 1997 | 231242 | 1047* | Condemnation |
| Scooter | 1995 | 21818 | ----- | Not working |
| Motorcycle | 2000 | 47063 | 51784 | Not working |
| Jeep | 2017 | 800000 | 27568 | New |
| Tractor | 2017 | 700000 | 570.9* | New |

*in hours

**C) Equipments & AV aids**

| Name of the equipment | Number of Equipment | Year of purchase | Cost (Rs.) | Present status |
|---|---|---|---|---|
| Harrow | 1/49 | 1999 | 8600 | Working condition |
| Seed drill machine | 1/153 | 1997 | 6150 | Working condition |
| Computer | 4/215 | 2010 | 25725 | Working condition |
| Computer | 5/215 | 2011 | 24210 | Working condition |
| R.O | 1/12 | 2014 | 15500 | Working condition |
| Finger print attendance machine | 1/29 | 2014 | 11250 | Working condition |
| Heat convector | 2-3/30 | 2014 | 1800 | Working condition |
| Refrigerator | 2/63 | 2011 | 11200 | Working condition |
| Room cooler | 2-4/159 | 2012 | 20402 | Working condition |
| Printer | 4/214 | 2012 | 5350 | Working condition |
| Trolly | 3/53 | 2016 | 158832 | Working condition |
| Plastic palates | 1-8/40 | 2016 | 29560 | Working condition |
| Water cooler with RO | 2/19<br>1/42 | 2016 | 42550 | Working condition |
| Desert cooler | 5-9/119 | 2014 | 25594 | Working condition |
| Cultivator | 1/50 | 1997 | 1672 | Working condition |
| Tractor trolly | 1/53 | 1998 | 11000 | Working condition |
| Scanner | 1/227 | 2010 | 4148 | Working condition |
| Speaker | 1/229 | 2010 | 1733 | Working condition |
| Photocopier machine | 2/241 | 2011 | 35000 | Working condition |
| Laptop | 1/242 | 2011 | 36170 | Working condition |
| Small autoclave | 1/1 | 2012 | 67280 | Working condition |
| Hot air oven | ½ | 2012 | 45016 | Working condition |
| Laminar flow | 1/3 | 2012 | 78874 | Working condition |
| Colony counter | ¼ | 2012 | 6156 | Working condition |
| B.O.D. incubator | 1/5 | 2012 | 107730 | Working condition |
| Microscope | 1/13 | 2012 | 37822 | Working condition |
| Refrigerator | 11/7 | 2012 | 32600 | Working condition |
| Electric balance | 1/14 | 2012 | 42750 | Working condition |
| Water distillation | 1/12 | 2012 | 25650 | Working condition |
| pH meter | 1/15 | 2012 | 19687 | Non working condition |
| EC meter | 1/16 | 2012 | 21038 | Non working condition |
| Spectrophotometer | 1/17 | 2012 | 39150 | Non working condition |
| Flame photometer | 1/18 | 2012 | 60750 | Non working condition |
| Computer | 1/19 | 2012 | 34000 | Working condition |
| Air conditioner | 1/6 | 2012 | 33975 | Working condition |
| Laptop | 1/10 | 2012 | 37000 | Working condition |
| Sprit lamp | 1-2/19 | 2012 | 157 | Working condition |
| Stabilizer | 1/7 | 2012 | 2000 | Working condition |
| Hygrometer | 1/22 | 2012 | 473 | Working condition |
| Planker (wood pata with chain) | 2/57 | 2016 | 8947 | Working condition |
| Mrida parikshak soil testing Mini Lab | 1/50 | 2015 | 75000 | Non working condition |
| Mrida parikshak soil testing Mini Lab | 2/51 | 2017 | 90300 | Working condition |
| Inverter set | 2/43 | 2016 | 24700 | Working condition |
| Harrow | 3/49 | 2017 | 57000 | Working condition |

| | | | | |
|---|---|---|---|---|
| Leveler | 2/52 | 2017 | 13000 | Working condition |
| Lecture stand | 2/23 | 2017 | 8000 | Working condition |
| Cultivator | 3/50 | 2017 | 23800 | Working condition |
| Printer | 5/214 | 2017 | 15044 | Working condition |
| Computer | 1-2/215 | 2017 | 80850 | Working condition |
| UPS | 7-8/216 | 2017 | 4106 | Working condition |
| Head phone | 1/245 | 2017 | 400 | Working condition |
| Mulcher single speed | 1-2/61 | 2018 | 336000 | Working condition |
| Shurb master | 1-2/69 | 2018 | 103040 | Working condition |
| Hydrolic reversible 2MB plough | 1/72 | 2018 | 135615 | Working condition |
| Wireless walky phone | 3/86 | 2018 | 1750 | Working condition |
| Happy seeder 10 Row | 1-2/90 | 2018 | 332640 | Working condition |
| Zero till seed cum fertilizer dril | 1-3/92 | 2018 | 183849 | Working condition |
| TATA sky DTH connection | 1/229 | 2018 | 2530 | Working condition |
| Airtel 4G home Wifi router | 1/232 | 2018 | 2500 | Working condition |
| Gramin GPS 72 H | 1/242 | 2017 | 9984 | Working condition |
| Fire extinguisher | 1-3/55 | 2018 | 6372 | Working condition |

1.8. A) Details SAC meeting conducted in the year 2018-19

| Sl.No. | Date | Name and Designation of Participants | Salient Recommendations | Action taken |
|---|---|---|---|---|
| 1. | 28.12.2018 | 1. Dr. R. P. Gupta, Ex-Director, NHRDF<br>2. Dr. H.N. Meena, Sr. Scientist, ICAR-ATARI, Jodhpur<br>3. Dr. Nishi Sharma, Sr. Scientist, CATAT, IARI, New Delhi.<br>4. Sh. R.K.Yadav, Ex Programme Coordinator, KVK, Ujwa<br>5. Sh. Dalbir Singh, Seed Analyst, Office of the Joint Director (Agriculture), Govt. of NCT, Delhi<br>6. Shiv Nanadan Lal, Programme Executive AIR, New Delhi<br>7. Smt. Geeta Devi, Progressive farm woman, Village Ujwa, Delhi<br>8. Sh. Marcal Tirkey, Programme Executive, Doordarshan Kisaan, New Delhi<br>9. Sh. S.C.Sharma HOD (Horticulture), Govt. of NCT Delhi<br>10. Sh. Deepak Jhakar, Manager, NABARD, New Delhi.<br>11. Dr. P.K. Gupta, Programme Coordinator, KVK Ujwa<br>12. Mrs. Ritu Singh, SMS (HS), KVK, Ujwa<br>13. Sh. Rakesh Kumar, SMS (Hort.)<br>14. KVK, Ujwa, Delhi<br>15. Dr. D.K. Rana, SMS(PP), KVK, Ujwa, Delhi<br>16. Dr. Samarpal Singh, SMS (Agro), | ➢ It was advised to test new released varieties of different crops from CCS HAU, Hisar and IARI, New Delhi for seed production under different programmes at KVK farm.<br>➢ KVK was advised to develop organic farming model in the farm with the popularized vegetable crops based crop rotation.<br>➢ Apiculture, mushroom unit, vermicompost and azolla should be commercialized apart from demonstration unit.<br>➢ To establish the collaboration of apiculture unit with the National Bee Board be explored.<br>➢ KVK staff was advised to explore contact with association like kitchen garden, vegetable grower association etc. of Delhi NCR region and introduce the new technologies for adoption among the farmer community.<br>➢ To explore formation of Farmer Produce Organisation (FPO) in different agriculture based enterprise.<br>➢ To introduce the new technologies in floriculture in Delhi NCR region.<br>➢ To prepare the impact study of | ➢ The new varieties from HAU, Hisar, crop moong MH421 variety, mustard crop varieties RH 749 and RH 725 and IARI released variety, PUSA Vijay were introduced and cultivated under CFLD programme and KVK farm.<br>➢ FPO formation has been initiated in collaboration with NABARD at Alipur block.<br>➢ Impact study of CRM project is in progress |

| | | | | |
|---|---|---|---|---|
| | | KVK, Ujwa<br>17. Sh. Kailash Jakhar, SMS (Ext.), KVK, Ujwa, Delhi<br>18. Sh. Ram Kumar, Progressive farmer, village Ghalibpur, New Delhi<br>19. Sh. Brijesh Yadav, PA (SS), KVK, Ujwa | CRM project with soil health parameters.<br>➢ To establish the poultry, goat and fisheries unit at KVK farm and popularizing the same on need base of NCR Delhi region.<br>➢ Success story should be included in SAC presentations.<br>➢ Exposure visits of progressive farmers to be made in financial collaborations with NABARD.<br>➢ Diversified farming with more profitability to be explored in the Delhi NCR region by the only existing KVK in the area.<br>➢ Technologies for water management to be explored by KVK in collaboration with IARI, New Delhi.<br>➢ Information, communication and transmission of agriculture technologies be processed through the AIR and other entertainment media.<br>➢ OFTs on the basis of IPM, IDM the incidence of disease/insect to be highlighted apart from the yield and other parameters.<br>➢ In the food grain storage training the expert from FCI & CWC should be invited.<br>➢ In plant diagnostic laboratory, insect and disease isolated/ identified be documented along with the recommendation.<br>➢ OFTs in different disciplines of agriculture organized by KVK scientists to be based on soil analysis and previous crops.<br>➢ FLDs on different crops by each scientist be conducted as per their specialization.<br>➢ The results of FLDs to be compiled keeping the growth parameters of crops with soil fertility status as per the objectives.<br>➢ SMS (Hort.) should focus on floriculture, vertical garden, terrace gardening, landscape, onion and garlic production because these crop can enhance the income of farmers.<br>➢ In Delhi, the farm houses practices of installing modern technology in the farming of | with compilation and generation of data.<br>➢ The establishment of poultry unit is under process.<br>➢ The collaborations with the print and electronic media is under process. |

| | | | | |
|---|---|---|---|---|
| | | | horticultural crop. SMS (Hort.) to identify the same and make the visits of trainees to enhance their knowledge and skill.<br>➢ KVK focus on collaborating with the electronic and print media like DD Kisan, All India Radio, newspapers etc. for agricultural programmes. | |

** Attach a copy of SAC proceedings along with list of participants*

## 2. DETAILS OF DISTRICT

### 2.1 Major farming systems/enterprises (based on the analysis made by the KVK)

| S. No | Farming system/enterprise |
|---|---|
| 1 | Agri-Dairy System (with rice in *Kharif* and wheat in *rabi* as major crops) |
| 2 | Agri-Pastoral-Oilseed- Dairy system (Mustard as major oilseed crop and Jowar-Bajra as fodder crop) |
| 3 | Agri- Horticulture (Flowers) system |
| 4 | Agri- Vegetables-Dairy system |
| 5 | Agri-Horticulture (Mushroom) system |

### 2.2 Description of agro-climatic zone & major agro ecological situations (based on soil and topography)

**a) Soil type**

| S.No. | Agro-Climatic Zone | Characteristics |
|---|---|---|
| 1 | Trans- Gangatic Plains region (Zone VI) | Semi-Arid, low rainfall, variation in temperature (2 - 48 $^0$C), frost occur once or twice in the year. |

**b) Topography**

| S. No. | Agro ecological situation | Characteristics |
|---|---|---|
| 1 | Climate | The state has three seasons viz., winter (Nov-Mar), summer (Apr-June) & Rainy season (July-Oct). The rainfall occurs during the month of July-Sept with occasional showers during Dec- Jan. The range of rainfall in the region varied between 420-780 mm. The summer season is quite hot and winter is fairly cool. |

### 2.3 Soil Types

| S. No | Soil type | Characteristics | Area (in ha) |
|---|---|---|---|
| 1 | Sandy loam/ Sandy clay loam | Light to medium in texture, low water holding capacity, pH slightly saline with low organic matter content. Wide range of crops can be grown but constraint is saline water for irrigation. | 49702.00 |

### 2.4. Area, Production and Productivity of major crops cultivated in the State (2018-19)

| S. No | Crop | Area (ha) | Production (MT) | Productivity (Q/ha) |
|---|---|---|---|---|
| 1 | Paddy | 5854 | 25258 | 43.14 |
| 2 | Wheat | 19350 | 83419 | 43.11 |
| 3 | Barley | 62 | 181 | 29.19 |
| 4 | Bajra | 1482 | 3258 | 21.97 |
| 5 | Maize | 34 | 174 | 51.18 |
| 6 | Jowar | 3161 | 3035 | 09.60 |
| 7 | Gram | 05 | 10 | 20.00 |
| 8 | Potato | 436 | 9273 | 21.26 |
| 9 | Mustard | 3583 | 4527 | 12.60 |
| 11 | Vegetable | Data not available | | |
| 12 | Flowers | 5995 | Data not available | Data not available |

*Source: State Agriculture Department, Govt. of NCT Delhi*

**2.5. Weather data (2018-19)**

| Month | Rainfall (mm) | Mean Temperature $^0$C | |
|---|---|---|---|
| | | Maximum | Minimum |
| April, 2018 | 12.00 | 37.08 | 21.50 |
| May, 2018 | 3.00 | 39.40 | 24.15 |
| June, 2018 | 134.00 | 39.94 | 29.70 |
| July, 2018 | 400.50 | 35.93 | 27.49 |
| August, 2018 | 155.00 | 34.40 | 27.51 |
| September, 2018 | 138.00 | 32.60 | 25.60 |
| October, 2018 | 0.0 | 33.30 | 19.10 |
| November, 2018 | 0.0 | 28.50 | 13.40 |
| December, 2018 | 7.50 | 22.90 | 06.97 |
| January, 2019 | 16.60 | 21.10 | 06.80 |
| Feburary, 2019 | 30.00 | 22.68 | 10.52 |
| March, 2019 | 0.0 | 28.35 | 13.27 |
| **Total** | **896.6 mm** | **376.18** | **226.01** |
| **Average** | | **31.30** | **18.8** |

**2.6.** Production and productivity of livestock, poultry, fisheries etc. in the district

| Category | Population | Production | Productivity |
|---|---|---|---|
| Cattle | 86433 | | |
| Crossbred | 47935 | 606232 Liter Milk | 12.65 Liter / Animal/ Day |
| Indigenous | 24498 | 97683 Liter Milk | 3.9 Liter / Animal/ Day |
| Buffalo | 162142 | 1286925 Liter Milk | 7.94 Liter / Animal/ Day |
| Sheep | 932 | | |
| Crossbred | 654 | 9425 Kg/ Meat | 14.4 Kg/ Animal |
| Indigenous | 278 | 3529 Kg/ Meat | 12.6 Kg/ Animal |
| Goats | 30470 | 262042 Kg/ Meat | 8.6 Kg/ Animal |
| Pigs | 76346 | Data not Available | Data not Available |
| Crossbred | 8581 | | |
| Indigenous | 67765 | | |
| Rabbits | 6706 | | |
| Poultry | 44000 | 58225 Kg/ Meat | 1.33 Kg/ Bird |
| | | | |
| Hens | 32202 | Data not Available | Data not Available |
| Desi | 20530 | | |
| Improved | 2667 | | |
| Ducks | 2140 | | |
| Turkey and others | 1329 | | |

| Category | Area | Production | Productivity |
|---|---|---|---|
| Fish | | | |
| Marine | | | |
| Inland | 4000 Ha | 70010 ton/year | 0.178 ton/ha/ year |
| Prawn | Data not Available | | |
| Scampi | | | |
| Shrimp | | | |

* Statistical data Govt of NCT, Delhi

2.7 Details of Operational area / Villages (2018-19)

| Taluka | Name of the block | Name of the village | Major crops & enterprises | Major problem identified | Identified Thrust Areas |
|---|---|---|---|---|---|
| Najafgarh<br>Narela<br>Alipur | Najafgarh,<br>Palam<br><br>Narela<br>Alipur | Ghumenhera<br>Shikarpur, Kanganheri<br>Dariyapur kalan,<br>Tigipur | **Crop:**<br>Wheat, Mustard, Paddy, Bajra, Fodder, vegetables,<br>**Enterprise:**<br>Dairy animals & value addition /agril produce | • Imbalanced use of fertilizers<br>• Water scarcity<br>• Diseases & pest infestation in crops.<br>• Low productivity in dairy animals.<br>• Nutritional disorders in vegetable crops<br>• Post harvest losses in cereals, millets, fruits and vegetables crops.<br>• Drudgery and safety concerns in farm work.<br>• Malnutrition among rural youths & rural women.<br>• Faulty nursery raising in open condition | • Soil fertility management.<br>• Performance of salt tolerant varieties<br>• Integrated disease & pest management.<br>• Balanced feeding in dairy animals.<br>• Integrated nutrient management in vegetables.<br>• Value addition to locally grown crops.<br>• Nutritional awareness among masses<br>• Nursery raising in protected condition<br>• Popularization of improved varieties of wheat, mustard & vegetables<br>• Promotion of organic farming. |

2.8 Priority/Thrust areas

| Crop/Enterprise | Thrust area |
|---|---|
| Wheat & Mustard | Popularization of HYV, water salinity management, weed management, grain storage management, soil fertility management |
| Paddy | Weed management, integrated pest management, nutrient management, soil fertility management |
| Vegetables (cucurbits, cauliflower, onion, leafy & tomato) | Soil fertility management, Integrated Pest Management, Biological control of pest & diseases, Post harvest management, weed and Nutrient Management, seed treatment, nursery raising, promotion of organic farming. |
| Animal Husbandry | Nutrient, Disease & Feed Management in milch animals |
| Fruits (Aonla, Karonda, Guava & Papaya) | HYV, IPM, Value Addition |
| Women in agriculture | Women empowerment, preservation of fruits & vegetables, strengthening of SHG's, Health and nutrition awareness and promotion of kitchen garden/terrace garden in rural & urban areas. |
| Agri-based enterprise | Entrepreneurship development in agriculture (value addition, dairy, nursery raising of vegetable crops, mushroom cultivation, vermin -compost & bee keeping) & market linkage |

## 3. Techanical achievements

### 3.A. Details of targets and achievements of mandatory activities by KVK during 2018-19

| OFT (Technology Assessment) | | | | FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises) | | | |
|---|---|---|---|---|---|---|---|
| 1 | | | | 2 | | | |
| Number of OFTs | | Total no. of Trials | | Area in ha | | Number of Farmers | |
| Targets | Achievement | Targets | Achievement | Targets | Achievement | Targets | Achievement |
| 6 | 6 | 18 | 31 | 43.20 | 88.60 | 117 | 224 |

| Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit) | | | | | Extension Activities | | | |
|---|---|---|---|---|---|---|---|---|
| 3 | | | | | 4 | | | |
| Number of Courses | | | Number of Participants | | Number of activities | | Number of participants | |
| Clientele | Targets | Achievement | Targets | Achievement | Targets | Achievement | Targets | Achievement |
| Farmers | 30 | 26 | 600 | 531 | - | 1131 | - | 3558 |
| Rural youth | 6 | 9 | 120 | 176 | | | | |
| Extn. Functionaries | 5 | 1 | 100 | 25 | | | | |
| Total | **41** | **36** | **820** | **732** | | | | |

| Seed Production (Qtl.) | | | Planting material (Nos.) | | |
|---|---|---|---|---|---|
| 5 | | | 6 | | |
| **Target** | **Achievement** | **Distributed to no. of farmers** | **Target** | **Achievement** | **Distributed to no. of farmers** |
| 172 | 154.05 | 5162 | | 1200 | 735 |

# I. A Technology Assessment

**Summary of technologies assessed under various crops by KVKs**

| Thematic areas | Crop | Name of the technology assessed | No. of trials | No. of farmers |
|---|---|---|---|---|
| Integrated Nutrient Management | Mustard | Foliar application of Boron | 5 | 5 |
| | Onion | Nutrient management in *Rabi* onion | 5 | 5 |
| | Wheat | Integrated Nutrient Management in wheat | 3 | 3 |
| | Cauliflower | Nutrient management in cauliflower. | 5 | 5 |
| Varietal Evaluation | | | | |
| | | | | |
| Integrated Pest Management | Cauliflower | Diamond Back Moth (DBM) Management technique in Cauliflower | 5 | 5 |
| | | | | |
| Integrated Crop Management | | | | |
| | | | | |
| Integrated Disease Management | | | | |
| | | | | |
| Small Scale Income Generation Enterprises | | | | |
| | | | | |
| Weed Management | | | | |
| | | | | |
| Resource Conservation Technology | Mustard | Irrigation scheduling in Mustard crop | 3 | 3 |
| | | | | |
| Farm Machineries | | | | |
| | | | | |
| Integrated Farming System | | | | |
| | | | | |
| Seed / Plant production | | | | |
| | | | | |
| Post Harvest Technology / Value addition | Ber, Aonla & Beet root | Assessment of the acceptability of the ladoo prepared from Beetroot, Ber & Aonla | 5 | 10 |
| | | | | |
| Drudgery Reduction | | | | |
| | | | | |
| Storage Technique | | | | |
| | | | | |
| Others (Pl. specify) | | | | |
| | | | | |
| **Total** | | | **31** | **36** |

**Summary of technologies assessed under livestock by KVKs**

| Thematic areas | Name of the livestock enterprise | Name of the technology assessed | No. of trials | No. of farmers |
|---|---|---|---|---|
| Disease Management | NIL | | | |
| Evaluation of Breeds | | | | |
| Feed and Fodder management | | | | |
| Nutrition Management | | | | |
| Production and Management | | | | |
| Others (Pl. specify) | | | | |
| **Total** | | | | |

**Summary of technologies assessed under various enterprises by KVKs**

| Thematic areas | Enterprise | Name of the technology assessed | No. of trials | No. of farmers |
|---|---|---|---|---|
| Post harvest management | Value addition in fruits | Assessment of the acceptability of the ladoo prepared from the available underutilized fruit and vegetable. | 5 | 10 |

**Note:** Suppose **IPM in paddy** is the technology assessed by 50 KVKs in the Zone with 5 trials by each KVK, then IPM in paddy needs to be considered as a single technology, with 50*5 = 250 trials and No. of KVKs will be 50. In addition, please note that even if IPM in paddy is done with various combinations of Technology Options (treatments), it may be considered as a single technology only.

# I. B. TECHNOLOGY ASSESSMENT IN DETAIL

*(From each state please include the full details of three OFTs on technology assessment under the broad thematic areas such as Integrated Crop Management, weed management, pest and disease management, nutrient management, resource conservation, livestock enterprises, Integrated Nutrient Management)*

### *WATER MANAGEMENT*

**Problem definition:** Farmers are not practicing proper irrigation scheduling at critical stages of mustard crop

**Technology assessed:** Irrigation Scheduling in Mustard Crop

KVK, Delhi conducted the on-farm trial on mustard crop in *rabi* season 2018-19 to assess the effect of irrigation scheduling at vegetative + flowering + pod formation stage on yield and yield attributes of the crop to enhance the productivity. The highest average yield of mustard crop was reported with irrigation at vegetative + flowering + pod formation stage as compared to farmer practice (one irrigation).

| Technology Option | No. of trials | Avg. Yield (qt./ha) | Increase in yield (%) | Net Return (Rs./ha) | B:C Ratio |
|---|---|---|---|---|---|
| T1-Farmers Practice (one irrigation) | 03 | 21.16 | - | 53926 | 2.4 |
| T2-Three irrigations at vegetative + flowering + pod formation stage | | 24.5 | 15.78 | 64450 | 2.7 |

**Growth and yield attributes:**

| Treatments | Average primary branches per plant | Average number of siliquae per plant | Average number of seeds per siliquae | Average plant height (cm) |
|---|---|---|---|---|
| T1-Farmers Practice | 4 | 395 | 12 | 180 |
| T2-Three irrigations at vegetative + flowering + pod formation stage | 6.5 | 443 | 14 | 189 |

### *INTEGRATED PEST MANAGEMENT*

**Problem definition:** Heavy infestation of Diamond Back Moth (DBM) in cauliflower.

**Technology assessed:** Diamond Back Moth (DBM) management technique in cauliflower.

Cauliflower is an important commercial crop of Delhi NCT region. However, there is a high infestation of Diamond Back Moth (DBM) resulting in yield losses. KVK, Delhi conducted an on-farm trial to assess on the control measure. The technology of Spray of Emamectin benzoate (5 SG) @ 0.5 g/L of water and 2 spray of Neemarin @ 5 ml/L of water solution at 15 days interval reduced the percentage of insect infestation from 12 to 4 and yield was increased by 4.28 per cent.

| Technology Option | No. of trials | Infestation of DBM (%) | Yield (kg/ha) | % Increase in yield over farmer's practice | Net return Rs/ha | B:C ratio |
|---|---|---|---|---|---|---|
| $T_1$- Farmers Practice (Dimethoate 30 EC @ 800ml/ha) | 05 | 12 | 27030 | -- | 164800 | 2.56:1 |
| $T_2$-Spray of Emamectin benzoate (5 SG) @ 0.5 g/L of water and 2 spray of Neemarin @ 5 ml/L of water solution at 15 days interval | | 4 | 28240 | 4.28 | 181700 | 2.69:1 |

## *NUTRIENT MANAGEMENT*

**Problem definition:** Mostly the areas are deficient in boron as per soil test basis.

**Technology assessed:** Foliar application of Boron.

KVK, Delhi conducted an on-farm trial on mustard crop in the *rabi* season 2018-19 to assess the effect of foliar application of boron on yield and yield attributes of mustard crop to enhance the productivity of crop. The foliar application of Boron @ 0.25% boric acid was assessed at 40 and 60 days after sowing. The maximum average yield of mustard crop was reported with foliar application of Boron as compared to farmer practices.

| Technology Option | No. of trials | Yield (kg./ha) | Increase in Yield (%) | B:C Ratio |
|---|---|---|---|---|
| T1-Farmers Practice (No use of micronutrient) | 5 | 2250 | -- | 2.64 |
| T2-Foliar application of Boron @ 0.25% boric acid at 40 and 60 Days after sowing . | | 2474 | 10.00 | 2.85 |

**Growth and yield attributes:**

| Treatments | Average primary branches per plant | Average number of siliquae per plant | Average number of seeds per siliquae | Average plant height (cm) |
|---|---|---|---|---|
| T1-Farmers Practice | 4.3 | 410 | 11 | 190 |
| T2-Foliar application of Boron @ 0.25% boric acid at 40 & 60 Days after sowing . | 5.8 | 472 | 13.3 | 193 |

## *NUTRIENT MANAGEMENT*

**Problem definition:** Lower productivity and profitability in *rabi* onion cultivation due to nutrient deficiency.
**Technology assessed:** Nutrient management in *rabi* onion.

KVK, Delhi conducted an on-farm trial to find out appropriate nutrient management practice to enhance the *rabi* onion productivity. The assessed practice of application of elemental sulphur @ 45 Kg/ha (basal dose) was found to be better with 4.82 % increase in yield.

**Table:** Effect of elemental sulphur on increasing yield in *rabi* onion crop.

| Technology Option | No. of trials | Bulb size(cm) | Plant height (cm) | Yield (kg./ha) | Increase in Yield (%) | B:C Ratio |
|---|---|---|---|---|---|---|
| T1- Farmers Practice (No use of elemental sulphur) | 05 | 52 | 41.6 | 19080 | -- | 2.00 |
| T2-Application of elemental sulphur @ 45 Kg/ha (basal dose) | | 62 | 44.8 | 20000 | 04.82 | 2.09 |

## *NUTRIENT MANAGEMENT*

**Problem definition:** Lower productivity and profitability in cauliflower cultivation due to nutritional disorder.

**Technology Assessed:** Nutrient management in cauliflower.

KVK, Delhi conducted an on-farm trial to find out appropriate nutrient management practice to control nutritional disorder & enhance the cauliflower productivity. The assessed foliar application of Borax @ 0.3% + Ammonium molybdate @ 0.05% at 45 DAT was found to be better with 8.00 % increase in yield.

**Table:** Effect of foliar application of Borax @ 0.3% + Ammonium molybdate @ 0.05% at 45 DAT in cauliflower.

| Technology Option | No. of trials | Curd weight(gm) | Plant height (cm) | Yield (kg./ha) | Increase in Yield (%) | B:C Ratio |
|---|---|---|---|---|---|---|
| T1- Farmers Practice (No use of micronutrients) | 5 | 775 | 27.1 | 18240 | -- | 3.50 |
| T2-Foliar spray of of Borax @ 0.3% + Ammonium molybdate @ 0.05% at 45 DAT | | 848 | 30.0 | 19700 | 8.00 | 3.78 |

## *INTEGRATED NUTRIENT MANAGEMENT*

**Problem definition:** Lower yield in wheat crop due to imbalance application of nutrients.

**Technology assessed :** Integrated Nutrient Management in wheat.

KVK, Delhi assessed the technology of Integrated Nutrient Management by the application of effect of fertilizer on the soil test basis with Nitrogen @ 120 kg, Phosphorus @ 60kg, Potassium @ 40kg and Zinc @ 5 kg / ha along with the bio fertilizers over the farmers practice of application of Nitrogen and Phosphorus only.

**Table:** Performance of wheat to integrated nutrient management

| Technology Option | No. of trials | Yield q t./ha | Increase in yield (%) | Net Return (Rs./ha | B:C Ratio |
|---|---|---|---|---|---|
| $T_1$ – Farmer's Practice (N&P application) | 3 | 47.50 | - | 49625 | 2.48 |
| $T_2$ – Application of fertilizer on the soil test basis N, P, K & Zinc + Bio fertilizers | | 50.50 | 6.50 | 54875 | 2.64 |

**Growth, yield attribute and soil fertility status:**

| Treatments | Plant Height (cm) | 1000 grain weight (g) | Fertility status of soil | | | | |
|---|---|---|---|---|---|---|---|
| | | | N (Kg/ha) | P (Kg/ha) | K (Kg/ha) | Zn (ppm) | OC (%) |
| $T_1$ – Farmer's Practice (N&P application) | 91 | 37 | 280 | 12 | 150 | 1.2 | 0.48 |
| $T_2$ – Application of fertilizer on the soil test basis N, P, K & Zinc + Bio fertilizers | 98 | 40 | 310 | 14 | 165 | 1.6 | 0.51 |

## *POST HARVEST TECHNOLOGY/VALUE ADDITION*

**Problem definition:** Non utilization of available Aonla, Ber and Beetroot in processed and preserved form.

**Technology assessed:** Assessment of the acceptability of the ladoo prepared from Beetroot, Ber & Aonla.

KVK, Delhi assessed the technology on value addition in the Beetroot, Ber & Aonla to develop ladoo. The preparation of ladoo from ber (20%), aonla (20%) and beetroot (10%) along with equal amount of sugar (50%) were kept in oven at 60ºC for 2 hours. The material then taken out, cooled and then shaped in to the rounded structure.

**Table:** Acceptance of ladoo prepared with Aonla, Beetroot and Ber.

| Technology Option | No. of trials | Organoleptic acceptability in terms of taste (%) | Organoleptic acceptability in terms of colour (%) | Result of assessment | Famers reaction |
|---|---|---|---|---|---|
| $T_1$ – Farmer's Practice (Aonla Ladoo) | 10 | 55 | 40 | | |
| $T_2$ – Ber (20%), Aonla (20%) and Beetroot (10%) with equal amount of sugar (50%) ladoo | | 80 | 90 | Ladoo in combination of ber, aonla beetroot was liked by the majority in terms of taste (80%) | Majority of the population showing keen interest in ladoo and it can become effective tool in improving the nutritional status of the masses. |

# II. FRONTLINE DEMONSTRATION

a. Follow-up for results of FLDs implemented during previous years

List of technologies demonstrated during previous year and popularized during 2018-19 and recommended for large scale adoption in the district

| S. No | Crop/ Enterprise | Thematic Area* | Technology demonstrated | Details of popularization methods suggested to the Extension system | Horizontal spread of technology | | |
|---|---|---|---|---|---|---|---|
| | | | | | No. of villages | No. of farmers | Area in ha |
| 01. | Mustard | • Varietal evaluation<br>• Integrated Crop Management<br>• Integrated Pest & Disease Management | • Improved variety of mustard (RH-749 and Giriraj)<br>• Seed Treatment<br>• Planting Spacing (Line sowing)<br>• Thinning and weed management<br>• Irrigation scheduling | • OFT, FLD & FFS<br>• Trainings & Lectures<br>• Kisan Gosthi<br>• Field Days<br>• Publication & Messages<br>• Technology week<br>• Samples analyzed<br>• Social Media (M-Kisan, Mobile Advisory and Whats App ) | 15 | 106 | 42.60 |
| 02. | Mustard | • Integrated Disease Management | • Bio-fungicide (Tricoderma viride) in Mustard | • Trainings & Lectures<br>• Publication & Messages<br>• Samples anaysed<br>• Social Media (M-Kisan, Mobile Advisory and Whats App ) | 4 | 10 | 4.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 03. | Paddy | • Integrated Pest Management | • Tricograma Japoniccum (Trico-card)<br>• Pseudomonas<br>• Pheromonas Trap | • Trainings & Lectures<br>• Publication & Messages<br>• Samples anaysed<br>• Social Media (M-Kisan, Mobile Advisory and Whats App | 3 | 10 | 4.00 |
| 05. | Wheat | • Varietal evaluation<br>• Integrated Crop Management<br>• Integrated Pest & Disease Management | • HYV of wheat-HD-3086<br>• Planting Method<br>• Direct Wheat Sowing by Happy Seeder and Zero-Seed Drill<br>• Weed Management<br>• Water Management | • Trainings & Lectures<br>• Kisan Gosthi<br>• Field Days<br>• Publication & Messages<br>• Kisan Mela visits<br>• Technology week<br>• Samples anaysed<br>• Social Media (M-Kisan, Mobile Advisory and Whats App ) | 8 | 17 | 7.2 |

**** Thematic areas as given in Table 3.1 (A1 and A2)***

b. Details of FLDs implemented during 2018-19 (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops**.)

| **Sl. No.** | **Crop** | **Thematic area** | **Technology Demonstrated** | **Season and year** | **Area (ha)** | | **No. of farmers/ Demonstration** | | | **Reasons for shortfall in achievement** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Proposed | Actual | SC/ST | Others | Total | |
| 01. | Mustard | Varietal Evaluation | Improved variety of mustard | *Rabi* 2018-19 | 30.00 | 42.6 | - | 106 | 106 | |
| 02. | Mustard | Integrated disease management | IDM in Mustard | *Rabi* 2018-19 | 4.00 | 4.00 | 2 | 8 | 10 | |
| 03. | Paddy | Integrated pest management | IPM in paddy | *Kharif* 2018-19 | 4.00 | 4.00 | 1 | 9 | 10 | |
| 04. | Green Gram | Varietal Evaluation | Improved variety – MH-421 | *Kharif* 2018-19 | 30.00 | 10.00 | - | 25 | 25 | |
| 05. | Wheat | Varietal Evaluation | HYV of wheat-HD-3086 | *Rabi* 2018-19 | 7.20 | 7.20 | - | 17 | 17 | |
| 06. | Gram | Varietal Evaluation | Improved variety – GNG-1958 | *Rabi* 2018-19 | 20.00 | 13.60 | - | 34 | 34 | |
| 07. | *Kharif* Onion | Varietal Evaluation | Improved variety *Kharif* Onion | *Kharif* 2018-19 | - | 2 | - | 5 | 5 | |
| 08. | *Rabi* Onion | Varietal Evaluation | Improved variety *Rabi* variety | *Rabi* 2018-19 | - | 5 | 2 | 10 | 12 | |
| 09. | Kitchen Garden | Nutritional Kitchen Garden | - | *Rabi* 2018-19 | - | 0.2 | - | 10 | 10 | |

Details of farming situation

| Crop | Season | Farming situation (RF/Irrigated) | Soil type | Status of soil | | | Previous crop | Sowing date | Harvest date | Seasonal rainfall (mm) | No. of rainy days |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | P | K | | | | | |
| Mustard | *Rabi* | Irrigated | Sandy loam | M | M | M | Fallow/Rice | 16-22/10/2018 | 5-10/03/2019 | 54.6 mm | 7 Days |
| Mustard | *Rabi* | Irrigated | Sandy loam | M | M | M | Fallow | 9/10/2018 | 22/3/2019 | 54.6 mm | 7 Days |
| Paddy | *Kharif* | Irrigated | Sandy loam | M | M | M | Wheat | 08/07/2018 | 25/10/2018 | 180.25 mm | 25 Days |
| Wheat | *Rabi* | Irrigated | Sandy loam | M | M | M | Fallow/Rice | 7-10/11/2018 | 10-20/04/2019 | 54.6 mm | 7 Days |
| Green Gram | *Kharif* | Irrigated | Sandy loam | M | M | M | Fallow | 12-15/07/2018 | 20-23/09/2018 | 110.0mm | 15 Days |
| Gram | *Rabi* | Irrigated | Sandy loam | M | M | M | Rice | 02-05/10/2018 | 10-15/04/2019 | 54.6 mm | 7 Days |
| Kharif Onion | *Kharif* | Irrigated | Sandy loam | M | M | M | Fallow | 20/7/2018 | 30/12/2018 | 283 mm | 35 Days |
| Rabi Onion | *Rabi* | Irrigated | Sandy loam | M | M | M | Fallow | 25/11/2018 | 12/5/2019 | 54.6 mm | 7 Days |
| Kitchen Garden | *Kharif* | Irrigated | Sandy loam | M | M | M | Fallow | 20/8/2018 | 25/10/218 | 110.0 mm | 12 Days |

Technical Feedback on the demonstrated technologies

| S. No | Feed Back |
|---|---|
| 1 | RH 749 is high yielding variety of mustard crop followed by Giriraj for timely sown condition and better performance in Delhi NCT Region. |
| 2 | MH 421 variety of moong crop is suitable in existing cropping system in Delhi NCT region. |
| 3 | Chick pea variety GNG 1958 found suitable for the region. |
| 4 | The variety of wheat crop HD 3086 performed better on timely sown in Delhi NCT region. |
| | |

Farmers' reactions on specific technologies

| S. No | Feed Back |
|---|---|
| 1 Mustard | Demonstrated plots reported 15.5% more yield than local check plots due to better management practice. |
| 2 Wheat | Cost of cultivation reduces on using happy seeder and zero-seed cum ferti-seed drill. |

Extension and Training activities under FLD

| Sl.No. | Activity | No. of activities organised | Date | Number of participants | Remarks |
|---|---|---|---|---|---|
| 1 | Field days | 5 | 20/09/2018 (Moong), 31/12/2018 (Kharif Onion), 28/02/2018 & 01/03/2019 (Mustard), 29.03.2019 (Gram) | 176 | |
| 2 | Farmers Training | | | | |
| 3 | Media coverage | 2 | 22/9/2018 & 1/1/2019 | - | |
| 4 | Training for extension functionaries | | | | |

## Performance of Frontline demonstrations

### Frontline demonstrations on oilseed crops (including NSFM)

| Crop | Thematic Area | technology demonstrated | Variety | No. of Farmers | Area (ha) | Yield (q/ha) | | | | % Increase in yield | Economics of demonstration (Rs./ha) | | | | Economics of check (Rs./ha) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Demo | | | Check | | Gross Cost | Gross Return | Net Return | BCR (R/C) | Gross Cost | Gross Return | Net Return | BCR (R/C) |
| | | | | | | High | Low | Average | | | | | | | | | | |
| Mustard | Varietal Evaluation | Improved variety of mustard | RH-749 | 66 | 26.4 | 27.00 | 18.00 | 23.8 | 19.00 | 25.26 | 23570 | 83300 | 59730 | 2.53 | 21375 | 66500 | 45125 | 2.11 |
| | | | Giriraj | 40 | 16.00 | 25.00 | 17.00 | 21.8 | 19.00 | 14.70 | 23570 | 76300 | 52730 | 2.23 | 21375 | 66500 | 45125 | 2.11 |
| | Integrated Disease Management | IDM in Mustard | RH 749 | 10 | 4 | 24.7 | 22.2 | 23.60 | 21.10 | 10.59 | 21400 | 103840 | 82440 | 3.85 | 22100 | 92840 | 70740 | 3.20 |

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

**Frontline demonstration on pulse crops** (including NSFM)

| Crop | Thematic Area | technology demonstrated | Variety | No. of Farmers | Area (ha) | Yield (q/ha) | | | | % Increase in yield | Economics of demonstration (Rs./ha) | | | | Economics of check (Rs./ha) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Demo | | | Check | | Gross Cost | Gross Return | Net Return | BCR (R/C) | Gross Cost | Gross Return | Net Return | BCR (R/C) |
| | | | | | | High | Low | Average | | | | | | | | | | |
| Greengram | Varietal Evaluation | Improved variety of mustard | MH-421 | 25 | 10.00 | - | - | 5.80 | - | - | 20560 | 56637 | 36077 | 1.75 | 1660 | 40455 | 23855 | 1.43 |
| Chickpea | Varietal Evaluation | Improved variety of mustard | GNG-1958 | 34 | 13.6 | Result Awaited | | | | | | | | | | | | |

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

## FLD on Other crops

| Category & Crop | Thematic Area | Name of the technology | No. of Farmers | Area (ha) | Yield (q/ha) | | | | % Change in Yield | Other Parameters | | Economics of demonstration (Rs./ha) | | | | Economics of check (Rs./ha) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Demo | | | Check | | Demo | Check | Gross Cost | Gross Return | Net Return | BCR (R/C) | Gross Cost | Gross Return | Net Return | BCR (R/C) |
| | | | | | High | Low | Average | | | | | | | | | | | | |
| **Cereals** | | | | | | | | | | | | | | | | | | | |
| **Paddy** | Integrated pest management | IPM in paddy | 10 | 4 | 45.80 | 43.50 | 44.70 | 41.50 | 7.15 | 49.40 | 47 .10 | 55400 | 160920 | 105520 | 2.90 | 56300 | 149400 | 93100 | 2.65 |
| **Wheat** | Varietal Evaluation | Improved variety of mustard | 17 | 7.2 | Result Awaited | | | | | | | | | | | | | | |
| **Onion** | Varietal Evaluation | Improved variety of Kharif onion | 05 | **2** | **135** | **124** | **129.5** | - | - | - | - | **62500** | **161875** | **99375** | **2.59** | | | | |
| | Varietal Evaluation | Improved variety of Rabi onion | 12 | 5 | Result awaited | | | | | | | | | | | | | | |

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

**FLD on Livestock : NIL**

| Category | Thematic area | Name of the technology demonstrated | No. of Farmer | No.of Units (Animal/ Poultry/ Birds, etc) | Major parameters | | % change in major parameter | Other parameter | | Economics of demonstration (Rs.) | | | | Economics of check (Rs.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Demo | Check | | Demo | Check | Gross Cost | Gross Return | Net Return | BCR (R/C) | Gross Cost | Gross Return | Net Return | BCR (R/C) |
| **Cattle** | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| **Buffalo** | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| **Buffalo Calf** | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| **Dairy** | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| **Poultry** | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| **Sheep & Goat** | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| **Vaccination** | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

**FLD on Fisheries : NIL**

| 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 (R/C) | Gross Cost | Gross Return | Net Return | BCR (R/C) |
| **Common Carps** | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Composite fish culture** | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| **Feed Management** | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

## FLD on Other enterprises : NIL

| 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 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Demo | Check | | Demo | Check | Gross Cost | Gross Return | Net Return | BCR (R/C) | Gross Cost | Gross Return | Net Return | BCR (R/C) |
| **Oyster Mushroom** | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| **Button Mushroom** | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| **Apiculture** | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| **Maize Sheller** | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| **Value Addition** | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| **Vermi Compost** | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

**FLD on Women Empowerment: NIL**

| Category | Name of technology | No. of demonstrations | Name of observations | Demonstration | Check |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |

**FLD on Farm Implements and Machinery: NIL**

| Name of the implement | Crop | Technology demonstrated | No. of Farmer | Area (ha) | Major parameters | Filed observation (output/man hour) | | % change in major parameter | Labor reduction (man days) | | | | Cost reduction (Rs./ha or Rs./Unit etc.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Demo | Check | | Land preparation | Sowing | Weeding | Total | Land preparation | Labour | Irrigation | Total |
| | | | | | | | | | | | | | | | | |

**FLD on Other Enterprise: Kitchen Garden**

| Category and Crop | Thematic area | Name of the technology demonstrated | No. of Farmer | No. of Units | Yield (Kg) | | % change in yield | Other parameters | | Economics of demonstration (Rs./ha) | | | | Economics of check (Rs./ha) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Demonstration | Check | | Demo | Check | Gross Cost | Gross Return | Net Return | BCR (R/C) | Gross Cost | Gross Return | Net Return | BCR (R/C) |
| Kharif season vegetables crops | Household Food security through Kitchen Gardening & Nutritional gardening | Kitchen Gardening & Nutritional gardening | 10 | 10 | 145 | - | - | 145 | - | 1500/unit | 5400/unit | 3900/unit | 3.60:1 | - | - | - | - |
| | | | | | | | | | | | | | | | | | |

**FLD on Demonstration details on crop hybrids** *(Details of Hybrid FLDs implemented during 2018-19):* ***NIL***

| Crop | technology demonstrated | Hybrid Variety | No. of Farmers | Area (ha) | Yield (q/ha) | | | | % Increase in yield | Economics of demonstration (Rs./ha) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Demo | | | Check | | Gross Cost | Gross Return | Net Return | BCR (R/C) |
| | | | | | High | Low | Average | | | | | | |
| Oilseed crop | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Pulse crop | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Cereal crop | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

# III. Training Programme

**Farmers' Training including sponsored training programmes (on campus)**

| Thematic area | No. of courses | Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Others | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **I Crop Production** | | | | | | | | | | |
| Weed Management | | | | | | | | | | |
| Resource Conservation Technologies | | | | | | | | | | |
| Cropping Systems | | | | | | | | | | |
| Crop Diversification | | | | | | | | | | |
| Integrated Farming | | | | | | | | | | |
| Micro Irrigation/irrigation | | | | | | | | | | |
| Seed production | | | | | | | | | | |
| Nursery management | | | | | | | | | | |
| Integrated Crop Management | | | | | | | | | | |
| Soil & water conservatioin | | | | | | | | | | |
| Integrated nutrient management | | | | | | | | | | |
| Production of organic inputs | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **II Horticulture** | | | | | | | | | | |
| **a) Vegetable Crops** | | | | | | | | | | |
| Production of low value and high valume crops | | | | | | | | | | |
| Off-season vegetables | | | | | | | | | | |
| Nursery raising | | | | | | | | | | |
| Exotic vegetables | | | | | | | | | | |
| Export potential vegetables | | | | | | | | | | |
| Grading and standardization | | | | | | | | | | |
| Protective cultivation | 1 | 15 | 0 | 15 | 2 | 0 | 2 | 17 | 0 | 17 |
| Others (pl specify) | | | | | | | | | | |
| **Total (a)** | **1** | **15** | **0** | **15** | **2** | **0** | **2** | **17** | **0** | **17** |
| **b) Fruits** | | | | | | | | | | |
| Training and Pruning | | | | | | | | | | |
| Layout and Management of Orchards | 1 | 14 | 0 | 14 | 2 | 0 | 2 | 16 | 0 | 16 |
| Cultivation of Fruit | | | | | | | | | | |
| Management of young plants/orchards | | | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | | | |
| Export potential fruits | | | | | | | | | | |
| Micro irrigation systems of orchards | | | | | | | | | | |
| Plant propagation techniques | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (b)** | **1** | **14** | **0** | **14** | **2** | **0** | **2** | **16** | **0** | **16** |
| **c) Ornamental Plants** | | | | | | | | | | |
| Nursery Management | | | | | | | | | | |
| Management of potted plants | | | | | | | | | | |
| Export potential of ornamental plants | | | | | | | | | | |
| Propagation techniques of Ornamental Plants | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total ( c)** | | | | | | | | | | |
| **d) Plantation crops** | | | | | | | | | | |
| Production and Management technology | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (d)** | | | | | | | | | | |
| **e) Tuber crops** | | | | | | | | | | |
| Production and Management technology | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (e)** | | | | | | | | | | |
| **f) Spices** | | | | | | | | | | |
| Production and Management technology | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (f)** | | | | | | | | | | |
| **g) Medicinal and Aromatic Plants** | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nursery management | | | | | | | | | | |
| Production and management technology | | | | | | | | | | |
| Post harvest technology and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (g)** | | | | | | | | | | |
| **GT (a-g)** | **2** | **29** | **0** | **29** | **4** | **0** | **4** | **33** | **0** | **33** |
| **III Soil Health and Fertility Management** | | | | | | | | | | |
| Soil fertility management | 1 | 16 | 0 | 16 | 4 | 0 | 4 | 20 | 0 | 20 |
| Integrated water management | | | | | | | | | | |
| Integrated Nutrient Management | | | | | | | | | | |
| Production and use of organic inputs | | | | | | | | | | |
| Management of Problematic soils | | | | | | | | | | |
| Micro nutrient deficiency in crops | | | | | | | | | | |
| Nutrient Use Efficiency | | | | | | | | | | |
| Balance use of fertilizers | | | | | | | | | | |
| Soil and Water Testing | 1 | 16 | 0 | 16 | 4 | 0 | 4 | 20 | 0 | 20 |
| Others (pl specify) | | | | | | | | | | |
| **Total** | **2** | **32** | **0** | **32** | **8** | **0** | **8** | **40** | **0** | **40** |
| **IV Livestock Production and Management** | | | | | | | | | | |
| Dairy Management | | | | | | | | | | |
| Poultry Management | | | | | | | | | | |
| Piggery Management | | | | | | | | | | |
| Rabbit Management | | | | | | | | | | |
| Animal Nutrition Management | | | | | | | | | | |
| Disease Management | | | | | | | | | | |
| Feed & fodder technology | | | | | | | | | | |
| Production of quality animal products | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **V Home Science/Women empowerment** | | | | | | | | | | |
| Household food security by kitchen gardening and nutrition gardening | 1 | 11 | 7 | 18 | 0 | 0 | 0 | 11 | 7 | 18 |
| Design and development of low/minimum cost diet | | | | | | | | | | |
| Designing and development for high nutrient efficiency diet | | | | | | | | | | |
| Minimization of nutrient loss in processing | | | | | | | | | | |
| Processing and cooking | 1 | 0 | 27 | 27 | 0 | 2 | 2 | 0 | 29 | 29 |
| Gender mainstreaming through SHGs | | | | | | | | | | |
| Storage loss minimization techniques | | | | | | | | | | |
| Value addition | 1 | 0 | 20 | 20 | 0 | 2 | 2 | 0 | 22 | 22 |
| Women empowerment | | | | | | | | | | |
| Location specific drudgery reduction technologies | | | | | | | | | | |
| Rural Crafts | | | | | | | | | | |
| Women and child care | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | **3** | **11** | **54** | **65** | **0** | **4** | **4** | **11** | **58** | **69** |
| **VI Agril. Engineering** | | | | | | | | | | |
| Farm Machinary and its maintenance | | | | | | | | | | |
| Installation and maintenance of micro irrigation systems | | | | | | | | | | |
| Use of Plastics in farming practices | | | | | | | | | | |
| Production of small tools and implements | | | | | | | | | | |
| Repair and maintenance of farm machinery and implements | | | | | | | | | | |
| Small scale processing and value addition | | | | | | | | | | |
| Post Harvest Technology | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **VII Plant Protection** | | | | | | | | | | |
| Integrated Pest Management | 2 | 33 | 0 | 33 | 7 | 0 | 7 | 40 | 0 | 40 |
| Integrated Disease Management | | | | | | | | | | |
| Bio-control of pests and diseases | | | | | | | | | | |
| Production of bio control agents and bio pesticides | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | **2** | **33** | **0** | **33** | **7** | **0** | **7** | **40** | **0** | **40** |
| **VIII Fisheries** | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Integrated fish farming | | | | | | | | | | |
| Carp breeding and hatchery management | | | | | | | | | | |
| Carp fry and fingerling rearing | | | | | | | | | | |
| Composite fish culture | | | | | | | | | | |
| Hatchery management and culture of freshwater prawn | | | | | | | | | | |
| Breeding and culture of ornamental fishes | | | | | | | | | | |
| Portable plastic carp hatchery | | | | | | | | | | |
| Pen culture of fish and prawn | | | | | | | | | | |
| Shrimp farming | | | | | | | | | | |
| Edible oyster farming | | | | | | | | | | |
| Pearl culture | | | | | | | | | | |
| Fish processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **IX Production of Inputs at site** | | | | | | | | | | |
| Seed Production | | | | | | | | | | |
| Planting material production | | | | | | | | | | |
| Bio-agents production | | | | | | | | | | |
| Bio-pesticides production | | | | | | | | | | |
| Bio-fertilizer production | | | | | | | | | | |
| Vermi-compost production | | | | | | | | | | |
| Organic manures production | | | | | | | | | | |
| Production of fry and fingerlings | | | | | | | | | | |
| Production of Bee-colonies and wax sheets | | | | | | | | | | |
| Small tools and implements | | | | | | | | | | |
| Production of livestock feed and fodder | | | | | | | | | | |
| Production of Fish feed | | | | | | | | | | |
| Mushroom Production | | | | | | | | | | |
| Apiculture | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **X Capacity Building and Group Dynamics** | | | | | | | | | | |
| Leadership development | | | | | | | | | | |
| Group dynamics | | | | | | | | | | |
| Formation and Management of SHGs | | | | | | | | | | |
| Mobilization of social capital | | | | | | | | | | |
| Entrepreneurial development of farmers/youths | | | | | | | | | | |
| WTO and IPR issues | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **XI Agro-forestry** | | | | | | | | | | |
| Production technologies | | | | | | | | | | |
| Nursery management | | | | | | | | | | |
| Integrated Farming Systems | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **GRAND TOTAL** | **9** | **105** | **54** | **159** | **19** | **4** | **23** | **124** | **58** | **182** |

**Farmers' Training including sponsored training programmes (off campus)**

| Thematic area | No. of courses | Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Others | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **I Crop Production** | | | | | | | | | | |
| Weed Management | | | | | | | | | | |
| Resource Conservation Technologies | | | | | | | | | | |
| Cropping Systems | | | | | | | | | | |
| Crop Diversification | | | | | | | | | | |
| Integrated Farming | | | | | | | | | | |
| Micro Irrigation/irrigation | | | | | | | | | | |
| Seed production | | | | | | | | | | |
| Nursery management | | | | | | | | | | |
| Integrated Crop Management | 2 | 31 | 0 | 31 | 5 | 0 | 5 | 36 | 0 | 36 |
| Soil & water conservatioin | | | | | | | | | | |
| Integrated nutrient management | 1 | 16 | 0 | 16 | 2 | 0 | 2 | 18 | 0 | 18 |
| Production of organic inputs | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **3** | **47** | **0** | **47** | **7** | **0** | **7** | **54** | **0** | **54** |
| **II Horticulture** | | | | | | | | | | |
| **a) Vegetable Crops** | | | | | | | | | | |
| Production of low value and high value crops | 1 | 14 | 0 | 14 | 3 | 0 | 3 | 17 | 0 | 17 |
| Off-season vegetables | | | | | | | | | | |
| Nursery raising | 1 | 15 | 0 | 15 | 3 | 0 | 3 | 18 | 0 | 18 |
| Exotic vegetables | | | | | | | | | | |
| Export potential vegetables | | | | | | | | | | |
| Grading and standardization | | | | | | | | | | |
| Protective cultivation | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (a)** | **2** | **29** | **0** | **29** | **6** | **0** | **6** | **35** | **0** | **35** |
| **b) Fruits** | | | | | | | | | | |
| Training and Pruning | | | | | | | | | | |
| Layout and Management of Orchards | | | | | | | | | | |
| Cultivation of Fruit | | | | | | | | | | |
| Management of young plants/orchards | | | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | | | |
| Export potential fruits | | | | | | | | | | |
| Micro irrigation systems of orchards | | | | | | | | | | |
| Plant propagation techniques | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (b)** | | | | | | | | | | |
| **c) Ornamental Plants** | | | | | | | | | | |
| Nursery Management | | | | | | | | | | |
| Management of potted plants | | | | | | | | | | |
| Export potential of ornamental plants | | | | | | | | | | |
| Propagation techniques of Ornamental Plants | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total ( c)** | | | | | | | | | | |
| **d) Plantation crops** | | | | | | | | | | |
| Production and Management technology | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (d)** | | | | | | | | | | |
| **e) Tuber crops** | | | | | | | | | | |
| Production and Management technology | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (e)** | | | | | | | | | | |
| **f) Spices** | | | | | | | | | | |
| Production and Management technology | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (f)** | | | | | | | | | | |
| **g) Medicinal and Aromatic Plants** | | | | | | | | | | |
| Nursery management | | | | | | | | | | |
| Production and management technology | | | | | | | | | | |
| Post harvest technology and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (g)** | **2** | **29** | **0** | **29** | **6** | **0** | **6** | **35** | **0** | **35** |
| **GT (a-g)** | **2** | **29** | **0** | **29** | **6** | **0** | **6** | **35** | **0** | **35** |
| **III Soil Health and Fertility Management** | | | | | | | | | | |
| Soil fertility management | 2 | 34 | 0 | 34 | 6 | 0 | 6 | 40 | 0 | 40 |
| Integrated water management | | | | | | | | | | |
| Integrated Nutrient Management | | | | | | | | | | |
| Production and use of organic inputs | 1 | 16 | 0 | 16 | 4 | 0 | 4 | 20 | 0 | 20 |
| Management of Problematic soils | | | | | | | | | | |
| Micro nutrient deficiency in crops | | | | | | | | | | |
| Nutrient Use Efficiency | | | | | | | | | | |
| Balance use of fertilizers | | | | | | | | | | |
| Soil and Water Testing | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | **3** | **50** | **0** | **50** | **10** | **0** | **10** | **60** | **0** | **60** |
| **IV Livestock Production and Management** | | | | | | | | | | |
| Dairy Management | | | | | | | | | | |
| Poultry Management | | | | | | | | | | |
| Piggery Management | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Rabbit Management | | | | | | | | | | |
| Animal Nutrition Management | | | | | | | | | | |
| Disease Management | | | | | | | | | | |
| Feed & fodder technology | | | | | | | | | | |
| Production of quality animal products | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **V Home Science/Women empowerment** | | | | | | | | | | |
| Household food security by kitchen gardening and nutrition gardening | | | | | | | | | | |
| Design and development of low/minimum cost diet | 1 | 0 | 31 | 31 | 0 | 6 | 6 | 0 | 37 | 37 |
| Designing and development for high nutrient efficiency diet | | | | | | | | | | |
| Minimization of nutrient loss in processing | | | | | | | | | | |
| Processing and cooking | | | | | | | | | | |
| Gender mainstreaming through SHGs | 1 | 0 | 26 | 26 | 0 | 5 | 5 | 0 | 31 | 31 |
| Storage loss minimization techniques | | | | | | | | | | |
| Value addition | | | | | | | | | | |
| Women empowerment | 1 | 0 | 25 | 25 | 0 | 0 | 0 | 0 | 25 | 25 |
| Location specific drudgery reduction technologies | | | | | | | | | | |
| Rural Crafts | | | | | | | | | | |
| Women and child care | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | **3** | **0** | **82** | **82** | **0** | **11** | **11** | **0** | **93** | **93** |
| **VI Agril. Engineering** | | | | | | | | | | |
| Farm Machinary and its maintenance | | | | | | | | | | |
| Installation and maintenance of micro irrigation systems | | | | | | | | | | |
| Use of Plastics in farming practices | | | | | | | | | | |
| Production of small tools and implements | | | | | | | | | | |
| Repair and maintenance of farm machinery and implements | | | | | | | | | | |
| Small scale processing and value addition | | | | | | | | | | |
| Post Harvest Technology | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **VII Plant Protection** | | | | | | | | | | |
| Integrated Pest Management | 5 | 77 | 0 | 77 | 11 | 0 | 11 | 88 | 0 | 88 |
| Integrated Disease Management | | | | | | | | | | |
| Bio-control of pests and diseases | | | | | | | | | | |
| Production of bio control agents and bio pesticides | | | | | | | | | | |
| Others (Oyster Mushroom) | 1 | 16 | 0 | 16 | 3 | 0 | 3 | 19 | 0 | 19 |
| **Total** | **6** | **93** | **0** | **93** | **14** | **0** | **14** | **107** | **0** | **107** |
| **VIII Fisheries** | | | | | | | | | | |
| Integrated fish farming | | | | | | | | | | |
| Carp breeding and hatchery management | | | | | | | | | | |
| Carp fry and fingerling rearing | | | | | | | | | | |
| Composite fish culture | | | | | | | | | | |
| Hatchery management and culture of freshwater prawn | | | | | | | | | | |
| Breeding and culture of ornamental fishes | | | | | | | | | | |
| Portable plastic carp hatchery | | | | | | | | | | |
| Pen culture of fish and prawn | | | | | | | | | | |
| Shrimp farming | | | | | | | | | | |
| Edible oyster farming | | | | | | | | | | |
| Pearl culture | | | | | | | | | | |
| Fish processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **IX Production of Inputs at site** | | | | | | | | | | |
| Seed Production | | | | | | | | | | |
| Planting material production | | | | | | | | | | |
| Bio-agents production | | | | | | | | | | |
| Bio-pesticides production | | | | | | | | | | |
| Bio-fertilizer production | | | | | | | | | | |
| Vermi-compost production | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Organic manures production | | | | | | | | | | |
| Production of fry and fingerlings | | | | | | | | | | |
| Production of Bee-colonies and wax sheets | | | | | | | | | | |
| Small tools and implements | | | | | | | | | | |
| Production of livestock feed and fodder | | | | | | | | | | |
| Production of Fish feed | | | | | | | | | | |
| Mushroom Production | | | | | | | | | | |
| Apiculture | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **X Capacity Building and Group Dynamics** | | | | | | | | | | |
| Leadership development | | | | | | | | | | |
| Group dynamics | | | | | | | | | | |
| Formation and Management of SHGs | | | | | | | | | | |
| Mobilization of social capital | | | | | | | | | | |
| Entrepreneurial development of farmers/youths | | | | | | | | | | |
| WTO and IPR issues | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **XI Agro-forestry** | | | | | | | | | | |
| Production technologies | | | | | | | | | | |
| Nursery management | | | | | | | | | | |
| Integrated Farming Systems | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **GRAND TOTAL** | **17** | **219** | **82** | **301** | **37** | **11** | **48** | **256** | **93** | **349** |

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

| Thematic area | No. of courses | Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Others | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **I Crop Production** | | | | | | | | | | |
| Weed Management | | | | | | | | | | |
| Resource Conservation Technologies | | | | | | | | | | |
| Cropping Systems | | | | | | | | | | |
| Crop Diversification | | | | | | | | | | |
| Integrated Farming | | | | | | | | | | |
| Micro Irrigation/irrigation | | | | | | | | | | |
| Seed production | | | | | | | | | | |
| Nursery management | | | | | | | | | | |
| Integrated Crop Management | 2 | 31 | 0 | 31 | 5 | 0 | 5 | 36 | 0 | 36 |
| Soil & water conservatioin | | | | | | | | | | |
| Integrated nutrient management | 1 | 16 | 0 | 16 | 2 | 0 | 2 | 18 | 0 | 18 |
| Production of organic inputs | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | **3** | **47** | **0** | **47** | **7** | **0** | **7** | **54** | **0** | **54** |
| **II Horticulture** | | | | | | | | | | |
| **a) Vegetable Crops** | | | | | | | | | | |
| Production of low value and high value crops | 1 | 14 | 0 | 14 | 3 | 0 | 3 | 17 | 0 | 17 |
| Off-season vegetables | | | | | | | | | | |
| Nursery raising | 1 | 15 | 0 | 15 | 3 | 0 | 3 | 18 | 0 | 18 |
| Exotic vegetables | | | | | | | | | | |
| Export potential vegetables | | | | | | | | | | |
| Grading and standardization | | | | | | | | | | |
| Protective cultivation | 1 | 15 | 0 | 15 | 2 | 0 | 2 | 17 | 0 | 17 |
| Others (pl specify) | | | | | | | | | | |
| **Total (a)** | **3** | **44** | **0** | **44** | **8** | **0** | **8** | **52** | **0** | **52** |
| **b) Fruits** | | | | | | | | | | |
| Training and Pruning | | | | | | | | | | |
| Layout and Management of Orchards | 1 | 14 | 0 | 14 | 2 | 0 | 2 | 16 | 0 | 16 |
| Cultivation of Fruit | | | | | | | | | | |
| Management of young plants/orchards | | | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | | | |
| Export potential fruits | | | | | | | | | | |
| Micro irrigation systems of orchards | | | | | | | | | | |
| Plant propagation techniques | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (b)** | **1** | **14** | **0** | **14** | **2** | **0** | **2** | **16** | **0** | **16** |
| **c) Ornamental Plants** | | | | | | | | | | |
| Nursery Management | | | | | | | | | | |
| Management of potted plants | | | | | | | | | | |
| Export potential of ornamental plants | | | | | | | | | | |
| Propagation techniques of Ornamental Plants | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total ( c)** | | | | | | | | | | |
| **d) Plantation crops** | | | | | | | | | | |
| Production and Management technology | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (d)** | | | | | | | | | | |
| **e) Tuber crops** | | | | | | | | | | |
| Production and Management technology | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (e)** | | | | | | | | | | |
| **f) Spices** | | | | | | | | | | |
| Production and Management technology | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (f)** | | | | | | | | | | |
| **g) Medicinal and Aromatic Plants** | | | | | | | | | | |
| Nursery management | | | | | | | | | | |
| Production and management technology | | | | | | | | | | |
| Post harvest technology and value addition | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Others (pl specify) | | | | | | | | | | |
| **Total (g)** | | | | | | | | | | |
| **GT (a-g)** | **4** | **58** | **0** | **58** | **10** | **0** | **10** | **68** | **0** | **68** |
| **III Soil Health and Fertility Management** | | | | | | | | | | |
| Soil fertility management | 3 | 50 | 0 | 50 | 10 | 0 | 10 | 60 | 0 | 60 |
| Integrated water management | | | | | | | | | | |
| Integrated Nutrient Management | | | | | | | | | | |
| Production and use of organic inputs | 1 | 16 | 0 | 16 | 4 | 0 | 4 | 20 | 0 | 20 |
| Management of Problematic soils | | | | | | | | | | |
| Micro nutrient deficiency in crops | | | | | | | | | | |
| Nutrient Use Efficiency | | | | | | | | | | |
| Balance use of fertilizers | | | | | | | | | | |
| Soil and Water Testing | 1 | 16 | 0 | 16 | 4 | 0 | 4 | 20 | 0 | 20 |
| Others (pl specify) | | | | | | | | | | |
| **Total** | 5 | 82 | 0 | 82 | 18 | 0 | 18 | 80 | 0 | 100 |
| **IV Livestock Production and Management** | | | | | | | | | | |
| Dairy Management | | | | | | | | | | |
| Poultry Management | | | | | | | | | | |
| Piggery Management | | | | | | | | | | |
| Rabbit Management | | | | | | | | | | |
| Animal Nutrition Management | | | | | | | | | | |
| Disease Management | | | | | | | | | | |
| Feed & fodder technology | | | | | | | | | | |
| Production of quality animal products | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **V Home Science/Women empowerment** | | | | | | | | | | |
| Household food security by kitchen gardening and nutrition gardening | 1 | 11 | 7 | 18 | 0 | 0 | 0 | 11 | 7 | 18 |
| Design and development of low/minimum cost diet | 1 | 0 | 31 | 31 | 0 | 6 | 6 | 0 | 37 | 37 |
| Designing and development for high nutrient efficiency diet | | | | | | | | | | |
| Minimization of nutrient loss in processing | | | | | | | | | | |
| Processing and cooking | 1 | 0 | 27 | 27 | 0 | 2 | 2 | 0 | 29 | 29 |
| Gender mainstreaming through SHGs | 1 | 0 | 26 | 26 | 0 | 5 | 5 | 0 | 31 | 31 |
| Storage loss minimization techniques | | | | | | | | | | |
| Value addition | 1 | 0 | 20 | 20 | 0 | 2 | 2 | 0 | 22 | 22 |
| Women empowerment | 1 | 0 | 25 | 25 | 0 | 0 | 0 | 0 | 25 | 25 |
| Location specific drudgery reduction technologies | | | | | | | | | | |
| Rural Crafts | | | | | | | | | | |
| Women and child care | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | 6 | 11 | 136 | 147 | 0 | 15 | 15 | 11 | 151 | 162 |
| **VI Agril. Engineering** | | | | | | | | | | |
| Farm Machinary and its maintenance | | | | | | | | | | |
| Installation and maintenance of micro irrigation systems | | | | | | | | | | |
| Use of Plastics in farming practices | | | | | | | | | | |
| Production of small tools and implements | | | | | | | | | | |
| Repair and maintenance of farm machinery and implements | | | | | | | | | | |
| Small scale processing and value addition | | | | | | | | | | |
| Post Harvest Technology | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **VII Plant Protection** | | | | | | | | | | |
| Integrated Pest Management | 7 | 110 | 0 | 110 | 18 | 0 | 18 | 128 | 0 | 128 |
| Integrated Disease Management | | | | | | | | | | |
| Bio-control of pests and diseases | | | | | | | | | | |
| Production of bio control agents and bio pesticides | | | | | | | | | | |
| Others (Oyster mushroom) | 1 | 16 | 0 | 16 | 3 | 0 | 3 | 19 | 0 | 19 |
| **Total** | **8** | **126** | **0** | **126** | **21** | **0** | **21** | **147** | **0** | **147** |
| **VIII Fisheries** | | | | | | | | | | |
| Integrated fish farming | | | | | | | | | | |
| Carp breeding and hatchery management | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Carp fry and fingerling rearing | | | | | | | | | | |
| Composite fish culture | | | | | | | | | | |
| Hatchery management and culture of freshwater prawn | | | | | | | | | | |
| Breeding and culture of ornamental fishes | | | | | | | | | | |
| Portable plastic carp hatchery | | | | | | | | | | |
| Pen culture of fish and prawn | | | | | | | | | | |
| Shrimp farming | | | | | | | | | | |
| Edible oyster farming | | | | | | | | | | |
| Pearl culture | | | | | | | | | | |
| Fish processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **IX Production of Inputs at site** | | | | | | | | | | |
| Seed Production | | | | | | | | | | |
| Planting material production | | | | | | | | | | |
| Bio-agents production | | | | | | | | | | |
| Bio-pesticides production | | | | | | | | | | |
| Bio-fertilizer production | | | | | | | | | | |
| Vermi-compost production | | | | | | | | | | |
| Organic manures production | | | | | | | | | | |
| Production of fry and fingerlings | | | | | | | | | | |
| Production of Bee-colonies and wax sheets | | | | | | | | | | |
| Small tools and implements | | | | | | | | | | |
| Production of livestock feed and fodder | | | | | | | | | | |
| Production of Fish feed | | | | | | | | | | |
| Mushroom Production | | | | | | | | | | |
| Apiculture | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **X Capacity Building and Group Dynamics** | | | | | | | | | | |
| Leadership development | | | | | | | | | | |
| Group dynamics | | | | | | | | | | |
| Formation and Management of SHGs | | | | | | | | | | |
| Mobilization of social capital | | | | | | | | | | |
| Entrepreneurial development of farmers/youths | | | | | | | | | | |
| WTO and IPR issues | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **XI Agro-forestry** | | | | | | | | | | |
| Production technologies | | | | | | | | | | |
| Nursery management | | | | | | | | | | |
| Integrated Farming Systems | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **GRAND TOTAL** | **26** | **324** | **136** | **460** | **56** | **15** | **71** | **380** | **151** | **531** |

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

| Area of training | No. of Courses | No. of Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | General | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Nursery Management of Horticulture crops | | | | | | | | | | |
| Training and pruning of orchards | | | | | | | | | | |
| Protected cultivation of vegetable crops | | | | | | | | | | |
| Commercial fruit production | | | | | | | | | | |
| Integrated farming | | | | | | | | | | |
| Seed production | | | | | | | | | | |
| Production of organic inputs | | | | | | | | | | |
| Planting material production | | | | | | | | | | |
| Vermi-culture | | | | | | | | | | |
| Mushroom Production | | | | | | | | | | |
| Bee-keeping | | | | | | | | | | |
| Sericulture | | | | | | | | | | |
| Repair and maintenance of | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| farm machinery and implements | | | | | | | | | | |
| Value addition | | | | | | | | | | |
| Small scale processing | | | | | | | | | | |
| Post Harvest Technology | | | | | | | | | | |
| Tailoring and Stitching | | | | | | | | | | |
| Rural Crafts | | | | | | | | | | |
| Production of quality animal products | | | | | | | | | | |
| Dairying | | | | | | | | | | |
| Sheep and goat rearing | | | | | | | | | | |
| Quail farming | | | | | | | | | | |
| Piggery | | | | | | | | | | |
| Rabbit farming | | | | | | | | | | |
| Poultry production | | | | | | | | | | |
| Ornamental fisheries | | | | | | | | | | |
| Composite fish culture | | | | | | | | | | |
| Freshwater prawn culture | | | | | | | | | | |
| Shrimp farming | | | | | | | | | | |
| Pearl culture | | | | | | | | | | |
| Cold water fisheries | | | | | | | | | | |
| Fish harvest and processing technology | | | | | | | | | | |
| Fry and fingerling rearing | | | | | | | | | | |
| 5-Days Training under In-Situ Crop Residue management | 1 | 25 | 0 | 25 | 5 | 0 | 5 | 25 | 5 | 30 |
| **TOTAL** | 1 | 25 | 0 | 25 | 5 | 0 | 5 | 25 | 5 | 30 |

**Training for Rural Youths including sponsored training programmes (Off campus)**

| Area of training | No. of Courses | No. of Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | General | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Nursery Management of Horticulture crops | | | | | | | | | | |
| Training and pruning of orchards | | | | | | | | | | |
| Protected cultivation of vegetable crops | | | | | | | | | | |
| Commercial fruit production | | | | | | | | | | |
| Integrated farming | | | | | | | | | | |
| Seed production | | | | | | | | | | |
| Production of organic inputs | | | | | | | | | | |
| Planting material production | | | | | | | | | | |
| Vermi-culture | | | | | | | | | | |
| Mushroom Production | | | | | | | | | | |
| Bee-keeping | | | | | | | | | | |
| Sericulture | | | | | | | | | | |
| Repair and maintenance of farm machinery and implements | | | | | | | | | | |
| Value addition | | | | | | | | | | |
| Small scale processing | | | | | | | | | | |
| Post Harvest Technology | | | | | | | | | | |
| Tailoring and Stitching | | | | | | | | | | |
| Rural Crafts | | | | | | | | | | |
| Production of quality animal products | | | | | | | | | | |
| Dairying | | | | | | | | | | |
| Sheep and goat rearing | | | | | | | | | | |
| Quail farming | | | | | | | | | | |
| Piggery | | | | | | | | | | |
| Rabbit farming | | | | | | | | | | |
| Poultry production | | | | | | | | | | |
| Ornamental fisheries | | | | | | | | | | |
| Composite fish culture | | | | | | | | | | |
| Freshwater prawn culture | | | | | | | | | | |
| Shrimp farming | | | | | | | | | | |
| Pearl culture | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Cold water fisheries | | | | | | | | | | |
| Fish harvest and processing technology | | | | | | | | | | |
| Fry and fingerling rearing | | | | | | | | | | |
| **5-Days Training under In-Situ Crop Residue management** | 1 | 25 | 0 | 25 | 5 | 0 | 5 | 25 | 5 | 30 |
| **TOTAL** | 1 | 25 | 0 | 25 | 5 | 0 | 5 | 25 | 5 | 30 |

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

| Area of training | No. of Courses | No. of Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | General | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Nursery Management of Horticulture crops | | | | | | | | | | |
| Training and pruning of orchards | | | | | | | | | | |
| Protected cultivation of vegetable crops | | | | | | | | | | |
| Commercial fruit production | | | | | | | | | | |
| Integrated farming | | | | | | | | | | |
| Seed production | | | | | | | | | | |
| Production of organic inputs | | | | | | | | | | |
| Planting material production | | | | | | | | | | |
| Vermi-culture | | | | | | | | | | |
| Mushroom Production | | | | | | | | | | |
| Bee-keeping | | | | | | | | | | |
| Sericulture | | | | | | | | | | |
| Repair and maintenance of farm machinery and implements | | | | | | | | | | |
| Value addition | | | | | | | | | | |
| Small scale processing | | | | | | | | | | |
| Post Harvest Technology | | | | | | | | | | |
| Tailoring and Stitching | | | | | | | | | | |
| Rural Crafts | | | | | | | | | | |
| Production of quality animal products | | | | | | | | | | |
| Dairying | | | | | | | | | | |
| Sheep and goat rearing | | | | | | | | | | |
| Quail farming | | | | | | | | | | |
| Piggery | | | | | | | | | | |
| Rabbit farming | | | | | | | | | | |
| Poultry production | | | | | | | | | | |
| Ornamental fisheries | | | | | | | | | | |
| Composite fish culture | | | | | | | | | | |
| Freshwater prawn culture | | | | | | | | | | |
| Shrimp farming | | | | | | | | | | |
| Pearl culture | | | | | | | | | | |
| Cold water fisheries | | | | | | | | | | |
| Fish harvest and processing technology | | | | | | | | | | |
| Fry and fingerling rearing | | | | | | | | | | |
| **5-Days Training under In-Situ Crop Residue management** | 2 | 50 | 0 | 50 | 10 | 0 | 10 | 50 | 10 | 60 |
| **TOTAL** | 2 | 50 | 0 | 50 | 10 | 0 | 10 | 50 | 10 | 60 |

## Details of trainings organized under ASCI

| Area of training | No. of Courses | No. of Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | General | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Assistant Gardener | 1 | 18 | 0 | 18 | 2 | 0 | 2 | 20 | 0 | 20 |
| Nursery Worker | 1 | 16 | 2 | 18 | 2 | 0 | 2 | 18 | 2 | 20 |
| | | | | | | | | | | |
| **TOTAL** | 2 | 34 | 2 | 36 | 4 | 0 | 4 | 38 | 2 | 40 |

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

| Area of training | No. of Courses | No. of Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | General | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Productivity enhancement in field crops | | | | | | | | | | |
| Integrated Pest Management | | | | | | | | | | |
| Integrated Nutrient management | | | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | | | |
| Protected cultivation technology | | | | | | | | | | |
| Production and use of organic inputs | | | | | | | | | | |
| Care and maintenance of farm machinery and implements | | | | | | | | | | |
| Gender mainstreaming through SHGs | | | | | | | | | | |
| Formation and Management of SHGs | | | | | | | | | | |
| Women and Child care | | | | | | | | | | |
| Low cost and nutrient efficient diet designing | | | | | | | | | | |
| Group Dynamics and farmers organization | | | | | | | | | | |
| Information networking among farmers | | | | | | | | | | |
| Capacity building for ICT application | | | | | | | | | | |
| Management in farm animals | | | | | | | | | | |
| Livestock feed and fodder production | | | | | | | | | | |
| Household food security | **1** | **0** | **25** | **25** | **0** | **0** | **0** | **0** | **25** | **25** |
| Any other (pl.specify) | | | | | | | | | | |
| **TOTAL** | | | | | | | | | | |

**Training programmes for Extension Personnel including sponsored training programmes (off campus)**

| Area of training | No. of Courses | No. of Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | General | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Productivity enhancement in field crops | | | | | | | | | | |
| Integrated Pest Management | | | | | | | | | | |
| Integrated Nutrient management | | | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | | | |
| Protected cultivation technology | | | | | | | | | | |
| Production and use of organic inputs | | | | | | | | | | |
| Care and maintenance of farm machinery and implements | | | | | | | | | | |
| Gender mainstreaming through SHGs | | | | | | | | | | |
| Formation and Management of SHGs | | | | | | | | | | |
| Women and Child care | | | | | | | | | | |
| Low cost and nutrient efficient diet designing | | | | | | | | | | |
| Group Dynamics and farmers organization | | | | | | | | | | |
| Information networking among farmers | | | | | | | | | | |
| Capacity building for ICT application | | | | | | | | | | |
| Management in farm animals | | | | | | | | | | |
| Livestock feed and fodder production | | | | | | | | | | |
| Household food security | | | | | | | | | | |
| Any other (pl.specify) | | | | | | | | | | |
| **TOTAL** | | | | | | | | | | |

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

| Area of training | No. of Courses | No. of Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | General | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Productivity enhancement in field crops | | | | | | | | | | |
| Integrated Pest Management | | | | | | | | | | |
| Integrated Nutrient management | | | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | | | |
| Protected cultivation technology | | | | | | | | | | |
| Production and use of organic inputs | | | | | | | | | | |
| Care and maintenance of farm machinery and implements | | | | | | | | | | |
| Gender mainstreaming through SHGs | | | | | | | | | | |
| Formation and Management of SHGs | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Women and Child care | | | | | | | | | | |
| Low cost and nutrient efficient diet designing | | | | | | | | | | |
| Group Dynamics and farmers organization | | | | | | | | | | |
| Information networking among farmers | | | | | | | | | | |
| Capacity building for ICT application | | | | | | | | | | |
| Management in farm animals | | | | | | | | | | |
| Livestock feed and fodder production | | | | | | | | | | |
| Household food security | **1** | **0** | **25** | **25** | **0** | **0** | **0** | **0** | **25** | **25** |
| Any other (pl.specify) | | | | | | | | | | |
| **TOTAL** | | | | | | | | | | |

## Table. Sponsored training programmes

| Area of training | No. of Courses | No. of Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | General | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| | | | | | | | | | | |
| **Crop production and management** | | | | | | | | | | |
| Increasing production and productivity of crops | | | | | | | | | | |
| Commercial production of vegetables | | | | | | | | | | |
| **Production and value addition** | | | | | | | | | | |
| Fruit Plants | | | | | | | | | | |
| Ornamental plants | | | | | | | | | | |
| Spices crops | | | | | | | | | | |
| Soil health and fertility management | | | | | | | | | | |
| Production of Inputs at site | | | | | | | | | | |
| Methods of protective cultivation | | | | | | | | | | |
| Others (pl. specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **Post harvest technology and value addition** | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | |
| Others (pl. specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **Farm machinery** | | | | | | | | | | |
| Farm machinery, tools and implements | | | | | | | | | | |
| Others (pl. specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **Livestock and fisheries** | | | | | | | | | | |
| Livestock production and management | | | | | | | | | | |
| Animal Nutrition Management | | | | | | | | | | |
| Animal Disease Management | | | | | | | | | | |
| Fisheries Nutrition | | | | | | | | | | |
| Fisheries Management | | | | | | | | | | |
| Others (pl. specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **Home Science** | | | | | | | | | | |
| Household nutritional security | | | | | | | | | | |
| Economic empowerment of women | | | | | | | | | | |
| Drudgery reduction of women | | | | | | | | | | |
| Others (pl. specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **Agricultural Extension** | | | | | | | | | | |
| Capacity Building and Group Dynamics | | | | | | | | | | |
| Others (pl. specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **GRAND TOTAL** | | | | | | | | | | |

## Name of sponsoring agencies involved

## Details of vocational training programmes carried out by KVKs for rural youth

| Area of training | No. of Courses | No. of Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | General | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **Crop production and management** | | | | | | | | | | |
| Commercial floriculture | | | | | | | | | | |
| Commercial fruit production | | | | | | | | | | |
| Commercial vegetable production | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Integrated crop management | | | | | | | | | | |
| Organic farming | | | | | | | | | | |
| Others (Nursery Raising) | **1** | **20** | **0** | **20** | **5** | **0** | **5** | **25** | **0** | **25** |
| **Total** | **1** | **20** | **0** | **20** | **5** | **0** | **5** | **25** | **0** | **25** |
| **Post harvest technology and value addition** | | | | | | | | | | |
| Value addition | **1** | **7** | **15** | **22** | **0** | **0** | **0** | **7** | **15** | **22** |
| Others (pl. specify) | | | | | | | | | | |
| **Total** | **1** | **7** | **15** | **22** | **0** | **0** | **0** | **7** | **15** | **22** |
| **Livestock and fisheries** | | | | | | | | | | |
| Dairy farming | | | | | | | | | | |
| Composite fish culture | | | | | | | | | | |
| Sheep and goat rearing | | | | | | | | | | |
| Piggery | | | | | | | | | | |
| Poultry farming | | | | | | | | | | |
| Others (pl. specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **Income generation activities** | | | | | | | | | | |
| Vermicomposting | **1** | **19** | **1** | **20** | **-** | **-** | **-** | **19** | **1** | **20** |
| Production of bio-agents, bio-pesticides, | | | | | | | | | | |
| bio-fertilizers etc. | | | | | | | | | | |
| Repair and maintenance of farm machinery | | | | | | | | | | |
| and implements | | | | | | | | | | |
| Rural Crafts | | | | | | | | | | |
| Seed production | | | | | | | | | | |
| Sericulture | | | | | | | | | | |
| Mushroom cultivation | **1** | **16** | **1** | **17** | **2** | **0** | **2** | **18** | **1** | **19** |
| Nursery, grafting etc. | | | | | | | | | | |
| Tailoring, stitching, embroidery, dying etc. | | | | | | | | | | |
| Agril. para-workers, para-vet training | | | | | | | | | | |
| Others (Bee Keeping) | **1** | **17** | **1** | **18** | **2** | **0** | **2** | **19** | **1** | **20** |
| **Total** | **2** | **33** | **2** | **35** | **4** | **0** | **4** | **37** | **2** | **39** |
| **Agricultural Extension** | | | | | | | | | | |
| Capacity building and group dynamics | | | | | | | | | | |
| Others (pl. specify) | | | | | | | | | | |
| **Total** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |
| **Grand Total** | **5** | **79** | **18** | **97** | **9** | **0** | **9** | **88** | **18** | **106** |

# IV. Extension Programmes

| Activities | No. of Programmes | No. of farmers | No. of Extension Personnel | TOTAL |
|---|---|---|---|---|
| Advisory Services | 530 | 1030 | 10 | 1040 |
| Diagnostic visits | 170 | 180 | 5 | 185 |
| Field Day | 5 | 176 | 15 | 191 |
| Group discussions | 10 | 120 | 5 | 125 |
| Kisan Ghosthi | 4 | 170 | 5 | 175 |
| Film Show | 12 | 125 | 4 | 129 |
| Self -help groups | 1 | 15 | - | 15 |
| Kisan Mela | - | - | - | - |
| Exhibition | 4 | 1600 | 15 | 1615 |
| Scientists' visit to farmers field | 250 | 250 | 15 | 265 |
| Plant/animal health camps | - | - | - | - |
| Farm Science Club | - | - | - | - |
| Ex-trainees Sammelan | - | - | - | - |
| Farmers' seminar/workshop | 1 | 760 | 10 | 770 |
| Method Demonstrations | 20 | 150 | 10 | 160 |
| Important Week/Days celebrated | | | | |
| I. International Yoga Day (21st June 2018) | 1 | 41 | 4 | 45 |
| II. Parthenium Week (15-22 Aug., 2018) | 5 | 80 | 5 | 85 |
| III. World Soil Day (5 Dec., 2018) | 1 | 60 | 5 | 65 |
| IV. World Honey Bee Day (19 Aug., 2018) | 1 | 44 | 3 | 47 |
| V. International Yoga Day (21 June, 2018) | 1 | 35 | - | 35 |

| | | | | |
|---|---|---|---|---|
| VI. Mahila Kisan Diwas (15 Oct., 2018) | 1 | 48 | 5 | 53 |
| | | | | |
| Exposure visits | 5 | 95 | - | 95 |
| Soil testing campaign | 5 | 95 | 3 | 98 |
| Self help Group meetings | 36 | 450 | - | 450 |
| Farmers visit to KVK | 1000 | 1356 | 6 | 1362 |
| Lecture delivered | 2 | 142 | 8 | 150 |
| Seed treatment campaign | 5 | 140 | 3 | 143 |
| **Total** | 1084 | 3496 | 62 | 3558 |

**Details of other extension programmes**

| Particulars | Number |
|---|---|
| Electronic Media (CD./DVD) | 2 |
| Extension Literature | 4 |
| News paper coverage | 24 |
| Popular articles | - |
| Radio Talks | 3 |
| TV Talks | 14 |
| Animal health amps (Number of animals treated) | - |
| Others (pl. specify) | - |
| **Total** | **47** |

| Name of KVK | Message Type | Type of Messages | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Crop | Livestock | Weather | Marke-ting | Aware-ness | Other enterprise | Total |
| | Text only | 44 | Nil | 3 | Nil | 5 | 2 | 54 |
| | Voice only | - | - | - | - | - | - | - |
| | Voice & Text both | - | - | - | - | - | - | - |
| | **Total Messages** | 44 | Nil | 3 | Nil | 5 | 2 | 54 |
| | **Total farmers Benefitted** | **9800** | **Nil** | **2253** | **Nil** | **4656** | **170** | **16883** |

# V. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS

| Number of KVKs organised Technology Week | Types of Activities | No. of Activities | Number of Participants | Related crop/livestock technology |
|---|---|---|---|---|
| | Gosthies | | | |
| | Lectures organised | | | |
| | Exhibition | | | |
| | Film show | | | |
| | Fair | | | |
| | Farm Visit | | | |
| | Diagnostic Practicals | | | |
| | Distribution of Literature (No.) | | | |
| | Distribution of Seed (q) | | | |
| | Distribution of Planting materials (No.) | | | |
| | Bio Product distribution (Kg) | | | |
| | Bio Fertilizers (q) | | | |
| | Distribution of fingerlings | | | |
| | Distribution of Livestock specimen (No.) | | | |
| | Total number of farmers visited the technology week | | | |

# VI. PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS

**Production of seeds by the KVKs**

| Crop | Name of the crop | Name of the variety | Name of the hybrid | Quantity of seed (q) | Value (Rs) | Number of farmers |
|---|---|---|---|---|---|---|
| Cereals | Wheat | HD-2967 | | 34.20 | 85500/- | 85 |
| | | | | | | |
| | | | | | | |
| Oilseeds | Mustard | Pusa Vijay | | 87.94 | 703520/- | 4397 |
| | | | | | | |
| Commercial crops | | | | | | |
| | | | | | | |
| | | | | | | |
| Vegetables | Spinach | Pusa all green | | 27.96 | 223680/- | 350 |
| | | Pusa Saag | | 3.95 | 177750/- | 330 |
| | | | | | | |
| **Total** | | | | **154.05** | **1,190,450/-** | **5,162** |

**Production of planting materials by the KVKs**

| Crop | Name of the crop | Name of the variety | Name of the hybrid | Number | Value (Rs.) | Number of farmers |
|---|---|---|---|---|---|---|
| Commercial | | | | | | |
| | | | | | | |
| | | | | | | |
| Vegetable seedlings | Tomato | Arkarakshak | | 700 | 1400 | 500 |
| | Brinjal | Pusa Uttam | | 300 | 600 | 150 |
| | Chili | Pusa sadbhar | | 200 | 400 | 85 |
| | | | | | | |
| **Total** | | | | **1200** | **2400** | **735** |

**Production of Bio-Products**

| Bio Products | Name of the bio-product | Quantity Kg | Value (Rs.) | No of Farmers |
|---|---|---|---|---|
| Bio Fertilizers | Vermicompost | 1038 | 8658 | 1000 |
| **Total** | | 1038 | 8658 | 1000 |

**Table: Production of livestock materials : NIL**

| Particulars of Live stock | Name of the breed | Number | Value (Rs.) | No. of Farmers |
|---|---|---|---|---|
| **Dairy animals** | | | | |
| Cows | | | | |
| Buffaloes | | | | |
| Calves | | | | |
| Others (Pl. specify) | | | | |
| | | | | |
| **Poultry** | | | | |
| Broilers | | | | |
| Layers | | | | |
| Duals (broiler and layer) | | | | |
| Japanese Quail | | | | |
| Turkey | | | | |
| Emu | | | | |
| Ducks | | | | |
| Others (Pl. specify) | | | | |
| | | | | |
| **Piggery** | | | | |
| Piglet | | | | |
| Others (Pl.specify) | | | | |
| **Fisheries** | | | | |
| Indian carp | | | | |
| Exotic carp | | | | |
| Others (Pl. specify) | | | | |
| | | | | |
| **Total** | | | | |

# VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS

| Samples | No. of Samples | No. of Farmers | No. of Villages | Amount realized (Rs.) | No. of soil health cards distributed |
|---|---|---|---|---|---|
| Soil | 160 | 160 | 35 | - | 160 |
| Water | 75 | 75 | 25 | - | - |
| Plant | 144 | 144 | 16 | - | - |
| **Total** | **379** | **379** | **76** | | |

# VIII. SCIENTIFIC ADVISORY COMMITTEE

| Name of KVK | Date of SAC Meeting | Participants |
|---|---|---|
| KVK, Ujwa, Delhi | 28/12/2018 | 19 |

# IX. NEWSLETTER/MAGAZINE

| Name of News letter/Magazine | No. of Copies printed for distribution |
|---|---|
| Krishi Vahini (Jan-June 2018) | 500 |
| Krishi Vahini (July- December, 2018) | 520 |

# X. PUBLICATIONS

| Category | Number |
|---|---|
| Research Paper | - |
| Technical bulletins | - |
| Technical reports | 3 |
| Others (pl. specify) | - |
| | |
| | |
| | |

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

| Activities conducted | | | | |
|---|---|---|---|---|
| **No. of Training programmes** | **No. of Demonstration s** | **No. of plant materials produced** | **Visit by farmers (No.)** | **Visit by officials (No.)** |
| | | | | |
| | | | | |
| | | | | |

# XII. INTERVENTIONS ON DISASTER MANAGEMENT/UNSEASONAL RAINFALL/HAILSTORM/COLD WAVES ETC

Introduction of alternate crops/varieties

| Crops/cultivars | Area (ha) | Extent of damage | Recovery of damage through KVK initiatives if any |
|---|---|---|---|
| | | | |
| | | | |
| Total | | | |

Major area coverage under alternate crops/varieties

| Crops | Area (ha) | Number of beneficiaries |
|---|---|---|
| Oilseeds | | |
| Pulses | | |
| Cereals | | |
| Vegetable crops | | |
| Tuber crops | | |
| | | |
| | | |
| | | |
| **Total** | | |

Farmers-scientists interaction on livestock management

| Livestock components | Number of interactions | No.of participants |
|---|---|---|
| | | |
| | | |
| **Total** | | |

Animal health camps organised

| Number of camps | No.of animals | No.of farmers |
|---|---|---|
| | | |
| | | |
| **Total** | | |

Seed distribution in drought hit states

| Crops | Quantity (qtl) | Coverage of area (ha) | Number of farmers |
|---|---|---|---|
| | | | |
| | | | |
| **Total** | | | |

Large scale adoption of resource conservation technologies

| Crops/cultivars and gist of resource conservation technologies introduced | Area (ha) | Number of farmers |
|---|---|---|
| | | |
| | | |
| **Total** | | |

Awareness campaign

| | Meetings | | Gosthies | | Field days | | Farmers fair | | Exhibition | | Film show | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | No.of farmers | No. | No.of farmers | No. | No.of farmers | No. | No.of farmers | No. | No.of farmers | No. | No.of farmers |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| **Total** | | | | | | | | | | | | |

# XIII. DETAILS ON HRD ACTIVITIES

**A. HRD activities organized in identified areas for KVK staff by the Directorate of Extension**

| Name of the SAU | Title of the training programmes | No of programmes | No. of Participants | No. of KVKs involved |
|---|---|---|---|---|
| **Punjab Agriculture University, Ludhiana, Punjab** | **"Operational Guidelines of Farm Machineries" under in-Situ Crop Residue Management.** | **1** | **30** | **15 (14 Haryana and New Delhi)** |
| Total | - | 1 | 30 | 15 |

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

| Title of the training programmes | No of programmes | No. of Participants | No. of KVKs involved |
|---|---|---|---|
| Annual Review Workshop of Krishi Vigyan Kendra Rajasthan, Haryana and Delhi | 1 | 2 | 63 |
| Annual Action Plan of ***in-Situ*** Crop Residue Management | 1 | 4 | 60 |
| Sensitization Workshop on "Promotion of Agricultural Mechanization for In-Situ Management of Crop Residue" | 1 | 3 | 15 |
| Regional Conference on Motivating and Attracting Youth in Agriculture (MAYA) | 1 | 3 | - |
| Training-cum-Workshop for Gardener and Assistant Gardener under Agricultural Skill Council of India (ASCI) | 1 | 1 | 80 |
| Two day Training on "Capacity building on agromet advisory preparation" | 1 | 2 | 16 |
| Zonal Workshop-cum-Training Programme on Pulses Production Technology | 1 | 1 | 61 |
| Annual Action Plan-2019-20 and State Level Workplan (2019-20) workshop for KVK of Haryana and Delhi | 1 | 3 | 19 |
| Two-Day Training Programme on performance of technological packages used during Kharif Oilseeds 2018 and status of Rabi-2018-19 of CFLDs on Oilseeds under NFSM | 1 | 1 | - |
| One-Day "Stakeholder Meet" under Crop Residue Management Project | 1 | 1 | 15 |
| Total | 10 | 21 | 329 |

# XIV: STATUS REVOLVING FUNDs

**(Rs in Lakh)**

| Year | Opening balance as on 1st April | Income during the year | Expenditure during the year | Net balance in hand as on 1st April of each year |
|---|---|---|---|---|
| April 2016 to March 2017 | 68.63 | 6.94 | 1.37 | 74.20 |
| April 2017 to March 2018 | 74.20 | 11.84 | 3.99 | 82.05 |
| April 2018 to March 2019 | 82.05 | 9.33 | 4.45 | 86.93 |

# XV: CASE STUDIES

**The KVKs implementing VATICA, NARI & Doubling Farmers income schemes should submit one page report with salient achievements along with photographs pertaining to year 2018-19.**

## Initiative under NARI scheme during the year 2018-19

The level of nutrition in NCT Delhi is disturbing inspite of production of crops and vegetables. According to NFHS 4 (2015-16) survey, about 35% of all adults have BMI<18.5 in Delhi, more than 25% of women have a BMI below 18.5 in the age groups of 15-49 years, about 22 per cent of women suffer from chronic energy deficiencies, 78% of women (rural) in the age group of 15-49 years are anemic and 63% children in the age group of 6 months to 5 years are anemic.

It shows that food security does not directly translate into nutritional security. There is a disconnect between agriculture and nutrition which needs to be bridged. To address these issues, a scheme on Nutri Sensitive Agricultural Research and Innovation (NARI) was initiated by KVK, Ujwa, Delhi, during the year 2018-19. Under the scheme one village: Mitraon in Nazafgrh block, New Delhi had been selected. The following initiatives were undertaken during the year 2018-19:

- By conducting the primary survey, the knowledge on nutrition, food consumption pattern were assessed in all the respondents of the village. The results revealed the existence of undernourishment among females as compare to males. Women and children were more vulnerable.
- Nutrition status of men, women and children were calculated using Body Mass Index (BMI). The result showed that altogether 15 percent men, 34 percent women, 56 percent girls and 44 percent boys were falling under underweight category. In general the survey registered a slight mark of overweight and obesity in the respondent groups.
- The most consumed food groups were cereals, vegetables, milk and milk products and in the majority missing food groups were pulses, millets and fruits. It was also revealed in this study that majority; the respondent groups had low level of knowledge about nutrition.
- .Under NARI programme, which is being started in the village Mitraon, Nazafgarh, New Delhi, during the year 2018-19 different agriculture interventions like field demonstrations on nutri- rich varieties, capacity building programmes, minimal processing techniques of pearl millet. The details of activities conducted during the year 2018-19 is given below:

**Field Demonstrations on Nutri-crops**

| S.No. | Name of crop | No. of demonstrations |
|---|---|---|
| | Mustard | 10 |
| | Nutritional Kitchen garden (*rabi*) | 10 |

## 1. Mustard:

Mustard oil is the commonest cooking oil in north India. Mustard oil is healthy and retains its characteristic pungency makes it the ideal cooking oil and due to which many consumers especially in northern India want it as cooking oil. However, it is equally undeniable that mustard oil contains more than 40 per cent erucic acid.

The health risks associated with erucic acid in mustard oil are: accumulation of triglycerides in the heart; development of fibriotic lesions of the heart; increase in risk of lung cancer etc. The high erucic acid levels in Indian mustard have led to a growing market for imported rapeseed or canola oil, which in 2014-15 (November-October), was amounted to over 14.4 mt valued at $10.5 billion. Indian Council of Agricultural Research (ICAR) has given due emphasis to improve the nutritional quality traits of various crops including mustard. ICAR - Indian Agricultural Research Institute (ICAR-IARI), New Delhi has developed a low erucic acid Indian mustard variety namely Pusa Mustard-30 (PM 30) using conventional breeding method.

Apart from good production potential, it is beneficial for health as it has low erucic acid and has the best combination of other desirable fatty acids. Besides, the two other two essential fatty acids viz., linoleic and linolenic acids, which are not synthesized by human body are supplemented by diet only, are also present in very balanced proportion. The quantity of such important essential fatty acids has also improved in this oil (Oleic acid 45%, linoleic acid 29%, lenolenic acid 14% and ecosenoic acid, 3%) to make it healthier with enhanced shelf life. The new variety possesses oil content of 38% oil and composition of fatty acids is erucic acid less than 2%.

Under this programme, a demonstration on Pusa 30 Mustard is being conducted and for ensuring healthy consumption of mustard oil.


FLD on Mustard var. P-30

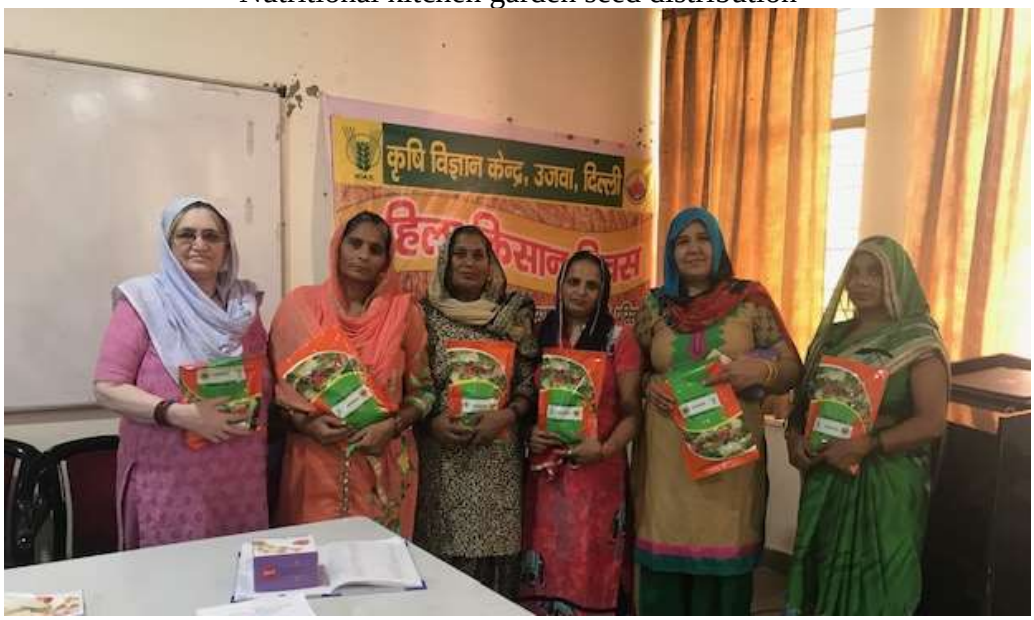
Mustard in farmer's field


Mustard in farmer's field

2. **Nutritional kitchen garden** –

To ensure the regular supply and consumption of seasonal nutritious vegetables (winter vegetables), farm trainings on nutri-kitchen garden are given to farmers from project village. The vegetables included Spinach, Amaranthus, Brinjal, Sem, Tomato, Carrot, Raddish, Cauliflower, Vegetable Mustard, Pea, Bean, drumstick etc. Under this programme 10 demonstrations were conducted.


Nutritional kitchen garden seed distribution




Kitchen garden at farmer's field

**3. Capacity building interventions:**

Pearl millet is an important coarse grain cereal cultivated in states like Rajasthan, Uttar Pradesh and Haryana. It has rich composition of proteins and minerals and has several health benefits. It has the highest protein content for any grain. It contains several essential minerals like phosphorus, zinc, magnesium, essential vitamins and amino acids etc. Even though, it was part of the traditional diet pattern, but, now a days, due to changing cropping pattern and consumption pattern, such crops are disappearing from the field and diet as well (even though, pearl millets are being cultivated by the farmers but it was only for the fodder purpose). An awareness programme regarding shelf life enhancement of pearl millet was conducted at the village. Farm women were trained to prepare the value added products from pearl millet and oats and explained about their importance and nutritive value.

| S.No. | Title of training | No. of participants |
|---|---|---|
| 1 | Importance of nutritional kitchen garden | 18 |
| 2 | Value addition of nutricereals | 20 |

Demonstration on improving the shelf life of pearl millet flour


Training programme on value addition of nutria cereals


Demonstration on preparation of oats cookies