**Action Plan**

**(April 2018 –March 2019)**



**PRESENTED IN ANNUAL WORKSHOP**

**Of**

**KVKs of Zone II**

HELD AT

**OUAT**

**Bhubaneswar**

**(*26TH- 27TH May 2018)***



**KRISHI VIGYAN KENDRA, SCADA, ARA,**

**SONE COMMAND AREA DEVELOPMENT AGENCY,**

SONE BHAWAN,DAROGA PRASAD RAI PATH,

PATNA – 800001

**BHOJPUR AT A GLANCE**

**1. ESTABLISHMENT: 18.12.1972**

(Partition of old Shahabad District and formation of Bhojpur and Rohtas)

**2.GEOGRAPHICAL LOCATION:**

Latitude: 25015'N to 25046'N

Longitude: 84045'E to 85015'E

Altitude: 195.98 M above MSL

**3.GEOGRAPHICAL BOUNDRY:**

North: River Ganga, Saran &Baliyan district

South: Rohtas and Gaya district

East: River Sone and Patna district

West: District Buxar

**4.GEOGRAPHICAL AREA:**2337.37 (sq km.) or 233729.15 (ha)

**5.Agro-climatic Region &ZONE:** The district comes under South Bihar

Old Alluvial Plains, which has been categorized as Grade III (Sub-humid). The Soil type is heavy to sandy clay.

Rainfall data (m.m.)

Normal : **959.9 mm**

Actual : **817.92 mm**

II. Temperature : Min. 60C; Max.400C

III. Relative Humidity: 35 to 950/0

**6. No. of Blocks/Village**

(a) No. of Blocks : 14

(b) No. of Village Panchayat : 228

(c) No. of Village-Inhibited : 999

(d) No. of Village-Non-Inhibited : 218

(e) No. of Village Electrified : 426

**7.** **(a). Population (As per census):**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl.No.** |  | **Males** | **Female** | **Total** |
| 1. | Urban | 169,535 | 142,879 | 312,414 |
| 2. | Rural | 1,010,076 | 920,654 | 1,930,730 |
|  | Total | 1,179,611 | 1,063,533 | 2,243,144 |

(b) Population density/sq km. : 903

(c) Population below poverty line : 42.50/0

**(d) Percentage of Population w.r.t. various parameters:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl. No.** | **Parameter** | **Total** | **Rural** | **Urban** |
| 1. | Literacy rate: Persons | 58.96 | 56.84 | 71.55 |
|  | Male | 74.29 | 73.43 | 79.55 |
|  | Female | 41.80 | 38.50 | 62.36 |
| 2. | Main workers: Persons | 21.93 | 22.07 | 21.07 |
|  | Male | 36.78 | 36.85 | 36.41 |
|  | Female | 5.45 | 5.85 | 2.87 |
| 3. | Marginal workers: Persons | 7.22 | 7.97 | 2.57 |
|  | Male | 7.31 | 7.96 | 3.43 |
|  | Female | 7.12 | 7.98 | 1.55 |
| 4. | Non- workers: Persons | 70.85 | 69.96 | 76.36 |
|  | Male | 55.91 | 55.19 | 60.16 |
|  | Female | 87.43 | 86.16 | 95.58 |
| 5. | SC Population: Persons | 15.32 | 16.22 | 9.76 |
|  | Male | 15.38 | 16.33 | 9.71 |
|  | Female | 15.25 | 16.10 | 9.81 |
| 6. | ST Population: Persons | 0.37 | 0.37 | 0.39 |
|  | Male | 0.38 | 0.38 | 0.39 |
|  | Female | 0.36 | 0.36 | 0.40 |

**8. Classification of workers:**

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | DETAILS | Number |
|  | Total Cultivators | 227049 |
|  | Small &marginal farmers | 221535 |
|  | Agricultural laborers | 259482 |
|  | Artisans | NA |
|  | Workers in household industries | 24476 |
|  | Allied Agro Activities & Other works | 144028 |
|  | Total working Population | 655935 |
|  | **0/0** of working Population to Total Population | 29.150/0 |

9.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Size of Land holding** | **No. of holding** | **(%)** | **Area (ha)** | **(%)** |
| (a) Less than 1 ha. | 203840 | 78.9 | 67416 | 35.8 |
| (b) Between 1 and 2 ha | 30498 | 11.8 | 38531 | 20.5 |
| (c) Between 2 and 4 ha | 18454 | 7.1 | 49380 | 26.2 |
| (d) Between 4 and 10 ha | 5324 | 2.0 | 31511 | 16.7 |
| (e) More than 10 ha | 88 | 0.2 | 1296 | 00.8 |
| **TOTAL** | **258204** |  | **188134** |  |

**10. Land Utilization Pattern:**

(a) Geographical area : 2, 33,729.15 ha.

(b) Net cultivable area : 1, 88,134.00 ha.

(c) Permanent Fallow land : 418.00 ha.

(d) Cultivable Barren land : 729.00 ha.

(e) Land temporarily used for non-agriculture purpose : 925.00 ha.

(f) Pasture & others : 288.00 ha.

(g) Land not suitable for cultivation : 7221.00 ha.

(h) Aquatic land : 4071.00 ha.

(i) Land used for non-agriculture purpose : 31943.00 ha.

(j) Forest area : Nil

**11. Irrigation Sources:**

Canal: -Sone Canal Circle, Ara.

Sone Canal Division, Bikramganj

State Tube well - 337 (63 functional)

Private Tube well - 18,901

E.R.P. Set - 09

Lift irrigation - 29

Net Irrigate Area.

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No.** | **Source** | **Kharif Area (ha)** | **Rabi Area (ha)** |
| 1. | Canal | 72952 | 29700 |
| 2. | Private Tube well | 24478 | 36717 |
| 3. | Lift Irrigation | 838 | 153 |
| 4. | State Tube well | 454 | 526 |
| 5. | Other Sources | 1685 | 1685 |
|  | **Total** | **1,00,407(ha)** | **68,781 (ha)** |
|  | | | |
| **2.Area Covered Under Different Crops** | | | |
| |  |  |  | | --- | --- | --- | | **Kharif** | **Rabi** | **Summer (ha)** | | Rice- 1,20,500 | Wheat- 1,03,800 | Green Gram- 20 | | Maize- 7,000 | Maize- 2,295 | Maize- 30 | | Pulses- 5,580 | Pulse- 42,600 | Vegetable- 400 | | Red Gram- 3,500 | Gram- 20,500 | Onion- 125 | | Black Gram- 1,000 | Pea- 2,500 |  | | Green Gram- 1,080 | Others- 4,500 |  | | Oil Seed- 525 | Oil seed- 10,140 |  | | Sesame- 215 | Rabi/Mustard- 6,100 |  | | Castor- 285 | Sunflower- 40 |  | | Sunflower- 25 | Vegetable- 2,000 |  | | Vegetable- 750 | Potato- 3,525 |  | | **Total 1,34,355** | **1,64,360** | **575** | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **13.Credit SYSTEM:**   |  |  | | --- | --- | | **Lead Bank** | **Punjab National Bank** | | P.N.B. | 22 | | S.B.I. | 08 | | Allahabad Bank | 01 | | C.B.I | 01 | | Canara Bank | 03 | | Bank of India | 02 | | Union Bank | 03 | | U.C.O. Bank | 02 | | Indian Bank | 02 | | United Bank | 01 | | Bank of Baroda | 02 | | Syndicate Bank | 01 | | Madhya Bihar Gramin Bank | 53 | | Central Co-operative Bank | 15 | | Land Development Bank | 05 | | **Total** | **122** |   **14.Agril. MACHINES:**   |  |  |  | | --- | --- | --- | | Tractor | - | 1623 | | Diesel Pump Set | - | 15057 | | Harvester | - | 05 | | Electric Pump Set | - | 1870 | | Harrows | - | 360 | | Winnower | - | 25 | | Z T Machines |  | 2434 | | Power Tiller |  | 60 | | Sprayer & duster |  | 676 | | Ripper |  | 6 | | Rotavetor |  | 25 | | Thrasher |  | 425 |   **15. Agriculture Support / Facilities**  (a) Seed / Fertilizer / Pesticides depots: 103  (b) Rural Markets / Mandis: 91  (c) Rural God owns: 06  (d) Cold Storage: 3 - capacity - 10000 MT.  **16. Animal Husbandry (As per 2005 census):**   |  |  |  | | --- | --- | --- | | **Dairy Animals** | **Total** | **Milking** | | Cow | 157479 | 4279 | | Buffalo | 206945 | 66068 | | Plough Animals | 87852 | -- | | Sheep + Goat + Pigs | 43698 + 134142 + 17097 | **--** | | Poultry | 215459 | **--** |   :  :  **17. Predominant economic activities of the district**  Agriculture is the predominant economic activity in the district. Other important economic activities are dairy, horticulture, transport, housing, business and other activities in the service sector. The industrial activity in the district is in problem state. Most of the industrial units have become sick and good entrepreneurs and businessmen are shifting to other states.  **18. Major food crops / commercial and plantation / horticulture crops**   1. The major food crops of the district are paddy and wheat. Pulses, oilseeds and maize are   also important crops  2. However, potato, onion and vegetable have emerged as major commercial horticultural  crops .   1. Medicinal and aromatic plants have also started taking roots on a small scale, in the.   district  4. Mushrooms cultivation is in a nascent stage.  19. **Special feature of the DISTRICT:**   * Bhojpur is considered as the rice-bowl in the state and Rice- Mill is a traditional industry * Land is fertile and the farmers are comparatively progressive. * Climate of the district is conducive for a wide ran agricultural / horticultural crops. * Medicinal and aromatic plants are already being cultivated in the district. * There are developed vegetable clusters. * Dairy infrastructure is well developed. * The level of farm mechanization is better than many other districts. * Ara, the headquarter town of the district, is well connected both by rail and road. * It is an adjoining district of the state capital. * All the necessary inputs required for Farm as well as Non-Farm activities are available in the district or those can be easily obtained from the adjoining district at competitive price. * The district is replete with potential for development in Primary, Secondary as well as in Tertiary sectors.   **20. Other factors affecting the district's rural economy:**  **POSITIVE FACTORS**   * District headquarter is well linked with other towns and cities by road and rail. * There is a vast network of canals in the district. * Two major rivers flow through the district providing a good source of river in fishery and an opportunity to do the sand business. * A new power grid was commissioned during the year 2004-05 with which the power position in the district is improving. * The district had been identified under the Rastriya Sam VikasYojana and some of the infrastructural bottlenecks, in terms of rural connectivity, energisationetc, had been bridged.   **NEGATIVES FACTORS**   * Bhojpur is a drought prone district. * The rural connectivity and rural infrastructure is not very strong. * A significant portion of land is rain fed. * The condition of electric supply is not onneed based. |

**Thrust Areas**

Priority Thrust Areas identified through PRA survey & other methods.

|  |  |
| --- | --- |
| **1.** | **Seed Production Programme with special focus on heat & drought tolerant cultivars.** |
| **2.** | **Resource Conservation Technology for better water management under changing climate** |
| **3.** | **Income generation through High tech Horticulture** |
| **4.** | **Adoption of INM and IPM for sustainable agriculture.** |
| **5.** | **Income generation for Farm Women through Apiculture, Poultry, Mushroom & Value addition** |
| **6.** | **Technological awareness for SHG and Kishan Club & Growers Association** |

**Action Plan- 2018-19**

1. Name of the KVK: KVK ,SCADA, Bhojpur, Ara
2. Name of host Organization: Sone Command Area Development Agency, Patna
3. Training Programme to be organized- (April 2018 to March 2019)

**ABSTRACT OF TRAINING PROGRAMMES TO BECONDUCTED**

**(April 2018 – March 2019)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Discipline** | **No. of Courses** | **Duration (Days)** | **Total Trainee Days** | **No. of Participants** | | **Grand Total** |
| **Men** | **Women** |
| A | For Practicing Farmers | 230 | 397 | 12300 | 2880 | 280 | 4600 |
| B | For Rural Youths | 19 | 183 | 6060 | 260 | 60 | 380 |
| C | Extension Functionaries | 24 | 46 | 960 | 460 | - | 480 |
|  | **Grand Total (A+B+C)** | **273** | **626** | **19320** | **3600** | **340** | **5460** |

**SUMMARY OF TRAINING PROGRAMMES TO BE CONDUCTED**

**(April, 2018-March 2019)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sl. No. | Discipline | No. of Courses | Duration  (Days) | Total Trainee  Days | No. of  Participants | | Grand  Total |
|  |  |  |  |  | **Men** | **Women** |  |
| **A.** | **FOR PRACTICING FARMERS** | |  |  |  |  |  |
| **1.** | **Crop Production** |  |  |  |  |  |  |
| a) | Weed Management | 6 | 12 | 240 | 120 | - | 120 |
| b) | Resource Conservation Technologies | 4 | 6 | 160 | 60 | - | 80 |
| c) | Cropping System | 3 | 4 | 120 | 40 | - | 60 |
| d) | Crop diversification | 10 | 26 | 560 | 180 | - | 200 |
| e) | Water management | 11 | 21 | 560 | 180 |  | 220 |
| f) | Seed production | 12 | 38 | 960 | 200 | - | 240 |
| g) | Nursery management | 3 | 4 | 120 | 40 | - | 60 |
| h) | Fodder production | 2 | 4 | 80 | 40 | - | 40 |
| i) | Production of organic inputs | 4 | 9 | 360 | 40 | - | 80 |
|  | **Total** |  |  |  |  |  |  |
| **2.** | **Vegetable Production** |  |  |  |  |  |  |
| a) | Production of low volume and high value Crops | 12 | 24 | 480 | 240 | - | 240 |
| b) | Nursery raising | 6 | 12 | 240 | 120 | - | 120 |
| c) | Seed Production | 2 | 3 | 120 | 20 | - | 40 |
| d) | Weed Control | 4 | 8 | 160 | 80 | - | 80 |
|  | **Total** |  |  |  |  |  |  |
|  | **Fruit Production** |  |  |  |  |  |  |
| a) | Layout and management of Orchards | 4 | 10 | 400 | 40 | - | 80 |
| b) | Cultivation of Fruits | 5 | 10 | 200 | 100 | - | 100 |
| c) | Rejuvenation of old orchards |  |  |  |  |  |  |
|  | **Total** |  |  |  |  |  |  |
|  | Ornamental plants |  |  |  |  |  |  |
|  | Plantation crops |  |  |  |  |  |  |
|  | Tuber crops |  |  |  |  |  |  |
|  | Medicinal & Aromatic Plants |  |  |  |  |  |  |
|  | P.H.T.& Value Addition. |  |  |  |  |  |  |
|  | **Total** |  |  |  |  |  |  |
|  | **Soil Health & Fertility Management** |  |  |  |  |  |  |
|  | Soil Health & Fertility Management | 7 | 14 | 280 | 140 | - | 140 |
| b) | Integrated Nutrient Management | 4 | 8 | 160 | 80 | - | 80 |
| c) | Production and use of Bio- fertilizer | 4 | 4 | 160 | 40 | - | 80 |
| d) | Micro –nutrient Deficiency | 6 | 8 | 240 | 80 | - | 120 |
| e) | Soil & Water Testing | 6 | 2 | 240 | 20 | - | 160 |
| f) | Land Leveling | 2 | 4 | 80 | 40 | - | 40 |
|  | **Total** |  |  |  |  |  |  |
| **3.** | **Agriculture Extension** |  |  |  |  |  |  |
| a) | Formation of Farm Science Club | 24 | 19 | 1140 | 160 | - | 480 |
| **4.** | **Home Science** |  |  |  |  |  |  |
| a) | Household kitchen gardening | 2 | 5 | 200 | - | 20 | 40 |
| b) | Designing and development of low cost diet | 1 | 2 | 40 | - | 20 | 20 |
| c) | Gender mainstreaming through SHGs | 2 | 2 | 80 | - | 20 | 40 |
| d) | Storage loss techniques | 9 | 4 | 360 | - | 40 | 180 |
| e) | Value addition | 3 | 5 | 160 | 20 | 20 | 60 |
| f) | Rural Crafts | 3 | 9 | 320 | - | 40 | 60 |
| g) | Income generation | 3 | 12 | 240 | 20 | 40 | 60 |
| h) | Drudgery Reduction | 4 | 4 | 160 | - | 40 | 80 |
| i) | Women & child care | 5 | 7 | 240 | 20 | 40 | 100 |
|  | **Total** |  |  |  |  |  |  |
| **5.** | **Agriculture Engineering** |  |  |  |  |  |  |
| a) | Use of Z.T. in different situation | 6 | 15 | 600 | 60 | - | 120 |
| **6.** | **Plant Protection** |  |  |  |  |  |  |
| a) | Integrated Pest Management | 13 | 20 | 640 | 180 | - | 280 |
| b) | Integrated Disease Management | 12 | 14 | 480 | 140 | - | 240 |
| c) | Seed Treatment | 4 | 8 | 160 | 80 | - | 80 |
|  | **Total** |  |  |  |  |  |  |
| **7.** | **Animal Husbandry &Veterinary** |  |  |  |  |  |  |
| a) | Dairy Management | 4 | 10 | 800 | 20 | - | 80 |
| b) | Disease Management in Cattle |  |  |  |  |  |  |
| c) | Disease Management in Goat |  |  |  |  |  |  |
| d) | Disease Management in Poultry | 2 | 2 | 80 | 20 | - | 40 |
| e) | Goatery Management |  |  |  |  |  |  |
| f) | Feed Management | 2 | 2 | 80 | 20 | - | 40 |
| g) | Poultry Management | 8 | 12 | 320 | 120 | - | 160 |
|  | **Total** |  |  |  |  |  |  |
|  | **Grand Total – A** | **230** | **397** | **12300** | **2880** | **280** | **4600** |
| **B.** | **FOR RURAL YOUTHS** | |  |  |  |  |  |
| 1 | Seed Production | 4 | 20 | 400 | 80 | - | 80 |
| 2 | Crop Diversification | 2 | 10 | 200 | 40 | - | 40 |
| 3 | Integrated Farming | 1 | 5 | 100 | 20 | - | 20 |
| 4 | Commercial Fruit cultivation | 3 | 17 | 340 | 60 | - | 60 |
| 5 | Nursery management of Hort. Crop |  |  |  |  |  |  |
| 6 | Small Scale processing | 2 | 6 | 120 | - | 40 | 40 |
| 7 | Tailoring & Stitching | 2 | 90 | 3600 | - | 20 | 40 |
| 8 | Rural Crafts |  |  |  |  |  |  |
| 9 | Dairy management | 2 | 15 | 600 | 20 | - | 40 |
| 10 | Poultry management | 2 | 15 | 600 | 20 | - | 40 |
| 11 | Agri. Extension | 1 | 5 | 100 | 20 | - | 40 |
|  | **Grand Total – B** | **19** | **183** | **6060** | **260** | **60** | **380** |
| **C.** | **EXTENSION**  **FUNCTIONARIES** |  |  |  |  |  |  |
| 1 | Productivity Enhancement in field crop under stress condition | 7 | 14 | 280 | 140 | - | 140 |
| 2 | Protected cultivation Technique | 1 | 2 | 40 | 20 | - | 20 |
| 3 | IPM | 4 | 8 | 160 | 80 | - | 80 |
| 4 | Fruit Production | 1 | 2 | 40 | 20 | - | 20 |
| 5 | Aromatic Cultivation | 1 | 2 | 40 | 20 | - | 20 |
| 6 | Information Networking |  |  |  |  |  |  |
| 7 | Use of ZT for Moisture conservation (RCT) | 5 | 10 | 200 | 100 | - | 100 |
| 8 | Formation of SHG | 1 | 2 | 40 | 20 | - | 20 |
| 9 | House hold Kitchen Garden | 1 | 2 | 40 | 20 | - | 20 |
| 10 | Storage loss technique | 1 | 2 | 40 | 20 | - | 20 |
| 11 | Drudgery reduction |  |  |  |  |  |  |
| 12 | Seed Production | 2 | 2 | 80 | 20 | **-** | 40 |
| 13 | Dairy management |  |  |  |  |  |  |
| 14 | Poultry management |  |  |  |  |  |  |
|  | **GRAND Total– C** | **24** | **46** | **960** | **460** | **-** | **480** |
|  | **GRAND TOTAL – (A+ B+ C)** | **273** | **626** | **19320** | **3600** | **340** | **5460** |

1. **Farmers and Farmwomen**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Thematic Area\*** | **Title** | **Total No**  **Of Course** | **Duration** | **Total Trainee Days** | **No. of participants** | | | **Total** | | | **G.T** |
|  |  |  |  |  | **SC** | **ST** | **Others** | **M** | **F** | **T** |  |
| Weed Management | Weed control in rice nursery | 1 | 2 | 40 | 5 | - | 15 | 20 | - | 20 | 20 |
|  | Weed control in DSR | 1 | 2 | 40 | 5 | - | 15 | 20 | - | 20 | 20 |
|  | Weed control in transplanted rice | 1 | 2 | 40 | 5 | - | 15 | 20 | - | 20 | 20 |
|  | Phalaris minor control in wheat. | 1 | 2 | 40 | 5 | - | 15 | 20 | - | 20 | 20 |
|  | Weed control in Lentil | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Weed control in Gram | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **6** | **12** | **240** | **30** |  | **90** | **120** |  | **120** | **120** |
| Resource CT | Direct seeding of rice with ZT to reduce environmental stress | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Direct seeding of wheat with ZT for minimizing moisture loss. | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | MTUPR technique for overcoming negative impact of changing climatic condition. | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **4** | **6** | **160** | **15** |  | **45** | **60** |  | **60** | **80** |
| Cropping System | Inter cropping in  Sugar cane with Brinjal/Green Gram | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Cultivation of Summer Green gram in Summer Fallow | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | **Total** | **3** | **4** | **120** | **10** |  | **30** | **40** |  | **40** | **60** |
| Crop Diversification | Commercial production of Scented rice. | 1 | 5 | 100 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Scientific cultivation of Green gram | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Scientific cultivation of Hybrid maize. | 1 | 7 | 140 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Scientific cultivation of Broccoli. | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Scientific cultivation of stress tolerant Maize | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Cultivation of Pearl millet in drought pronned area | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Cultivation of short duration Paddy to mitigate climate change | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Resource management with Paddy-Toria-Wheat cropping system | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Cultivation of Rajmah in Wheat fields | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **10** | **26** | **560** | **45** |  | **135** | **180** |  | **180** | **200** |
| Water Management | Water management  in paddy nursery. | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Water management in DSR paddy. | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Use of sprinkler for better water use efficiency | 2 | 5 | 200 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Use of Solar Pump for pollution free irrigation system | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Use of drips in Orchards for better water use efficiency | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Application of Sprinkler irrigation system in vegetable cultivation | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Application of Drip irrigation system in Tomato, Brinjal & Chili cultivation | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Mulching in vegetable cultivation to conserve soil moisture | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Poly mulching in vegetable cultivation to conserve moisture in the field. | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **11** | **21** | **560** | **45** |  | **135** | **180** |  | **180** | **220** |
| Seed Production | Seed production of Medium duration Rice | 1 | 5 | 100 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Seed production of Lentil | 2 | 5 | 200 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Seed production of Gram | 2 | 5 | 200 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Seed production of timely sown Wheat | 1 | 5 | 100 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Seed production of late sown Wheat | 1 | 5 | 100 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Seed production of Mustard | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Technique of certified seed production of Wheat. | 1 | 5 | 100 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Training on Handling of quality seed (Threshing, Packaging & storing). | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Seed Production of Field Pea | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Farmer's rights under seed Bill. | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **12** | **38** | **960** | **50** |  | **150** | **200** |  | **200** | **240** |
| Nursery Management | Preparation of raised bed nursery of Rice. | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Preparation of Rice nursery .for SRI | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | 3 | 4 | **120** | 10 | - | 30 | 40 | - | 40 | 60 |
| Fodder production | Fodder production of  Bar seem | 1 | **2** | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Fodder production of Sudan Grass | **1** | **2** | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **2** | **4** | **80** | **10** | - | **30** | **40** | - | **40** | **40** |
| Production of Organic Input | Brown Manuring in transplanted Rice | 2 | 2 | 80 | 5 | - | 15 | 20 | - | 20 | 40 |
|  | Recycling of Agri. Waste as Vermi compost. | **2** | 7 | 280 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | **Total** | **4** | **9** | **360** | **10** |  | **30** | **40** |  | **40** | **80** |
| Production of low Volume & high value crops | Scientific cultivation of early Kharif Cucurbits | 1 | 2 | 40 | 5 | - | 15 | 20 | - | 20 | 20 |
|  | Scientific package of practices of Hybrid Brinjal | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Scientific cultivation of early Kharif Okra | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Scientific cultivation of Chili | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Scientific cultivation of Cowpea | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Scientific cultivation of early Cauliflower | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Scientific cultivation of early Tomato | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Scientific cultivation of early Potato | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Scientific package and practices of Vegetable Pea | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Scientific cultivation of Cabbage | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Scientific cultivation of early Summer Okra | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Scientific cultivation of early Summer Cucurbits | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **12** | **24** | **480** | **60** |  | **180** | **240** |  | **240** | **240** |
| Nursery Raising | Raising healthy seedling of Kharif Brinjal | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Raising healthy seedling of Chili | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Raising healthy seedling of early Cauliflower | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Scientific nursery management for Onion | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Raising healthy seedling of early Tomato | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Raising healthy seedling of early Cabbage | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | 6 | **12** | **240** | **30** |  | **90** | **120** |  | **120** | 120 |
| Seed Production | Scientific seed production techniques of Potato | 2 | 3 | 120 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | **Total** | **2** | **3** | **120** | **5** | **-** | **15** | **20** |  | **20** | **40** |
| Weed Control | Weed Control by chemicals in Okra | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Control of Parthenium in Vegetable crops | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Chemical Weed Control in Potato | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Chemical Weed Control in Onion | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | 4 | **8** | **160** | **20** |  | **60** | **80** |  | **80** | 80 |
| Layout and management of Orchards | Scientific lay out for developing new Mango orchard | 2 | 5 | 200 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Scientific lay out for developing new Guava orchard | 2 | 5 | 200 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | **Total** | **4** | **10** | **400** | **10** |  | **30** | **40** |  | **40** | **80** |
| Cultivation of Fruits | Band placement of manures & fertilizer in old Mango orchard | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Scientific package & practices for Mango orchard | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Scientific package & practices for Guava Orchard | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Cultivation of Jackfruit in dry land area. | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Cultivation of Awla to mitigate the climate change | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **5** | **10** | **200** | **25** |  | **75** | **100** |  | **100** | **100** |
| Production and Management technology | Scientific cultivation of Marigold | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **1** | **2** | **40** | **5** | **-** | **15** | **20** |  | **20** | **20** |
| Production and Management technology | Scientific Management of Japanese Mint | 1 | 3 | 60 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **1** | **3** | **60** | **5** | **-** | **15** | **20** |  | **20** | **20** |
| Tuber Crops Production and Management technology | Cultivation of early Potato | 1 | 3 | 60 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Use of organic manure in vegetable cultivation to maintain the moisture level in field. | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **2** | **5** | **100** | **10** |  | **30** | **40** |  | **40** | **40** |
| Medicinal & Aromatic Plant Nursery management | Scientific nursery management of Japanese Mint | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **1** | **2** | **40** | 5 | - | 15 | **20** |  | **20** | **20** |
| Post-harvest technology and value addition | Packaging & grading of Tomato | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **1** | **2** | **40** | 5 | - | 15 | **20** |  | **20** | **20** |
| Soil Health &Fertility Management | P-management in Red Gram | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | N-management  in Rice nursery. | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | N- Management in transplanted Paddy | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Foliar application of water soluble fertilizer to reduce plant stress | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Foliar application of Potash to reduce the ET in standing Paddy crop | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Foliar application of NPK in Wheat water soluble fertilizer | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Summer ploughing & Green mannuring to enhance moisture level in field | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total-** | **7** | **14** | **280** | **35** |  | **105** | **140** |  | **140** | **140** |
| Integrated Nutrient Management | Advantages of Vermi- compost in Rabi vegetable. | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Importance of Sulpher& Boron in Onion | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Nutrient management in Okra | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Foliar spray of water soluble fertilizer to reduce plant stress | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **4** | **8** | **160** | **20** | **-** | **60** | **80** | **-** | **80** | **80** |
| Production and use of Organic input | Use of Bio-fertilizer in Paddy | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Use of Bio-fertilizer in Wheat. | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | **Total** | **4** | **4** | **160** | **10** | - | **30** | **40** | - | **40** | **80** |
| Micro nutrient deficiency in Crop | Role of Zn-nutrients in scented Rice | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Zn & Boron application in Paddy | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Role of micro nutrients in Wheat | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Role of S & nutrients in Pulses | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **6** | **8** | **240** | **20** | **-** | **60** | **80** | **-** | **80** | **120** |
| Soil &Water Testing | Techniques of soil sampling | 6 | 2 | 240 | 5 | - | 15 | 20 |  | 20 | 120 |
|  | **Total** | **6** | **2** | **240** | **5** | **-** | **15** | **20** |  | **20** | **120** |
| Land Leveling | Land leveling and its importance in Kharif crops production. | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Land leveling and its role in crop production. | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **2** | **4** | **80** | **10** |  | **30** | **40** |  | **40** | **40** |
| Formation of Farm Science Club | Formation of Farm Science Club to overcome the challenges of changing climate | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Formation of SHGs for Seed Production | 3 | 5 | 300 | 5 | - | 15 | 20 |  | 20 | 60 |
|  | Benefits of RCT through SHGs for stress management | 4 | 2 | 160 | 5 |  | 15 | 20 |  | 20 | 80 |
|  | Importance of Agri -Equipment banks for stress management | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Role of Solar Power in Agriculture | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Awareness of different Govt. Subsidies’ Schemes related to climate change | 3 | 2 | 120 | 5 | - | 15 | 20 |  | 20 | 60 |
|  | Awareness for different kind of soil & seed treatment | 4 | 2 | 160 | 5 | - | 15 | 20 |  | 20 | 80 |
|  | Importance of Soil testing for enhancing Farm Income under climatic change | 4 | 2 | 160 | 5 | - | 15 | 20 |  | 20 | 80 |
|  | **Total** | **24** | **19** | **1140** | **40** |  | **120** | **160** |  | **160** | **480** |
| Household Kitchen Gardening | Development of nutritional garden for semiarid condition. | 2 | 5 | 200 | 5 | - | 15 | - | 20 | 20 | 40 |
|  | **Total** | **2** | **5** | **200** | **5** | **-** | **15** | **-** | **20** | **20** | **40** |
| Designing & Development of low cost diet | Preparation of low cost balanced diet for mother & children | 1 | 2 | 40 | 5 | - | 15 |  | 20 | 20 | 20 |
|  | **Total** | **1** | **2** | **40** | **5** |  | **15** |  | **20** | **20** | **20** |
| Gender mainstreaming through SHGs | For women employment , role of SHG | 2 | 2 | 80 | 5 | - | 15 |  | 20 | 20 | 40 |
|  | **Total** | **2** | **2** | **80** | **5** | **-** | **15** | **-** | **20** | **20** | **40** |
| Storage loss technique | Control of godown insect in cereals storage | 5 | 2 | 200 | 5 | - | 15 |  | 20 | 20 | 100 |
|  | Techniques of insect free pulses storage | 4 | 2 | 160 | 5 | - | 15 |  | 20 | 20 | 80 |
|  | **Total** | **9** | **4** | **360** | **10** |  | **30** |  | **40** | **40** | **180** |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Value addition | Grading parameters for better marketing opportunity in vegetable marketing | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Tomato Preservation | 2 | 3 | 120 | 5 | - | 15 |  | 20 | 20 | 40 |
|  | **Total** | **3** | **5** | **160** | **10** |  | **30** | **20** | **20** | **40** | **60** |
| Rural Craft | Candle making | 1 | 2 | 40 | 5 | - | 15 |  | 20 | 20 | 20 |
|  | Tie & dye Batik Painting | 2 | 7 | 280 | 5 | - | 15 |  | 20 | 20 | 40 |
|  | **Total** | **3** | **9** | **320** | **10** | **-** | **30** | **-** | **40** | **40** | **60** |
| Income Generation | Backyard Poultry farming a good source of income | 1 | 5 | 100 | 5 | - | 15 |  | 20 | 20 | 20 |
|  | Mushroom Cultivation | 1 | 5 | 100 | 5 | - | 15 |  | 20 | 20 | 20 |
|  | Drought tolerant cultivars for vegetable production through SHGs | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **3** | **12** | **240** | **15** |  | **45** | **20** | **40** | **60** | **60** |
| Drudgery reduction | Drudgery reduction through chemical in Paddy | 2 | 2 | 80 | 5 | - | 15 |  | 20 | 20 | 40 |
|  | Drudgery reduction through Weedicide in Vegetable Production | 2 | 2 | 80 | 5 | - | 15 |  | 20 | 20 | 40 |
|  | **Total** | **4** | **4** | **160** | **10** | **-** | **30** |  | **40** | **40** | **80** |
| Women & Child care | Use of pulses & local vegetable in child diet | 2 | 2 | 80 | 5 | - | 15 |  | 20 | 20 | 40 |
|  | Preparation of balanced diet for children & mother | 2 | 3 | 120 | 5 | - | 15 |  | 20 | 20 | 40 |
|  | To minimize body stress in high temperature condition with use of fruit beverage | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **5** | **7** | **240** | **15** |  | **45** | **20** | **40** | **60** | **100** |
| Use of Zero Tillage Technology | Use of ZT for DSR in low land | 2 | 5 | 200 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Use of Zero Tillage seed cum fertilizer drill for Lentil and Gram. | 2 | 7 | 280 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Use of ridge bed seed drill for sowing vegetables. | 2 | 3 | 120 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | **Total** | **6** | **15** | **600** | **15** |  | **45** | **60** |  | **60** | **120** |
| Integrated Pest Management | Grass hopper Control in Sugar Cane during drought | 2 | 3 | 120 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Stem borer control in Scented Rice | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Control of pest in Paddy | 2 | 3 | 120 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | BPH Control in Paddy | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Stem borer control in Maize | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Grasshopper control in Fodder crop during drought condition | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Milibug control in Paddy under drought situation | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Gram pod borer Control | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Aphid management in mustard | 1 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | **Total** | **13** | **20** | **640** | **45** |  | **135** | **180** |  | **180** | **280** |
| Integrated Disease Management | BLB control in Rice in high humidity condition | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Wilt control in Red gram | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | BLB control in Rice | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Wilt Control in Lentil | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Wilt Control in Gram | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Control of early & late blight in Potato | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | YVM disease control in Okra | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **12** | **14** | **480** | **35** |  | **105** | **140** |  | **140** | **240** |
| Seed treatments | Seed treatment in Rice | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Seed treatment in Lentil | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Seed treatment in Potato | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Seed treatment in Wheat | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **4** | **8** | **160** | **20** | **-** | **60** | **80** | **-** | **80** | **80** |
| Dairy Management | Management of Bovines for hygienic & clean Milk Production | 4 | 10 | 800 | 5 | - | 15 | 20 |  | 20 | 80 |
|  | **Total** | **4** | **10** | **800** | **5** | **-** | **15** | **20** |  | **20** | **80** |
| Disease Management in Poultry | Vaccination of Broiler for different infectious diseases | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | **Total** | **2** | **2** | **80** | **5** | **-** | **15** | **20** |  | **20** | **40** |
| Feed Management | Use of Green Fodder for Milk Production In Milch Animals | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | **Total** | **2** | **2** | **80** | **5** | **-** | **15** | **20** |  | **20** | **40** |
| Poultry Management | Improved method of back Yard Poultry Farming | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Scientific Broiler Farming for better Productivity | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | Housing Management in poultry during Winter season | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Pond management for fish culture | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | High density Fish Farming | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Advantage of Rice-Fish culture | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **8** | **12** | **320** | **30** |  | **90** | **120** |  | **120** | **160** |
|  | **Grand Total A.** | **230** | **397** | **12300** | **790** | **-** | **2370** | **2880** | **280** | **3160** | **4600** |

**B. Rural Youths**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Thematic Area\*** | **Title** | **Total No**  **Of Course** | **Duration** | **Total Trainee Days** | **No. of participants** | | | **Total** | | | **G.T** |
| **SC** | **ST** | **Others** | **M** | **F** | **T** |
| Seed Production | Seed Production of rice | 1 | 5 | 100 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Seed Production of Gram | 1 | 5 | 100 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Seed Production of Lentil | 1 | 5 | 100 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Seed production of Wheat | 1 | 5 | 200 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | **Total** | **4** | **20** | **400** | **20** |  | **60** | **80** |  | **80** | **80** |
| Crop diversification | Hybrid Tomato Cultivation | 1 | 5 | 100 | 5 | - | 15 | 20 | - | 20 | 20 |
|  | Cultivation of Vegetable Pea | 1 | 5 | 100 | 5 | - | 15 | 20 | - | 20 | 20 |
|  | **Total** | **2** | **10** | **200** | **10** |  | **30** | **40** |  | **40** | **40** |
| Integrated Farming | Scientific Cultivation techniques of Marigold | 1 | 5 | 100 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **1** | **5** | **100** | **5** |  | **15** | **20** |  | **20** | **20** |
| Commercial Fruit Cultivation | Scientific cultivation practices of Mango | 1 | 5 | 100 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | High density technology in Mango orchard | 1 | 7 | 140 | 5 | - | 15 | 20 | - | 20 | 20 |
|  | High density technology in Guava orchard | 1 | 5 | 100 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **3** | **17** | **340** | **15** |  | **45** | **60** |  | **60** | **60** |
| Small Scale Processing | Mango & Watermelon squace | 1 | 3 | 60 | 5 | - | 15 |  | 20 | 20 | 20 |
|  | Guava Jelly making | 1 | 3 | 60 | 5 | - | 15 |  | 20 | 20 | 20 |
|  | **Total** | **2** | **6** | **120** | **10** |  | **30** |  | **40** | **40** | **40** |
| Tailoring & Stitching | Tailoring | 2 | 90 | 3600 | 5 | - | 15 |  | 20 | 20 | 40 |
|  | **Total** | **1** | **90** | **3600** | **5** | **-** | **15** |  | **20** | **20** | 40 |
| Dairy Management | Scientific management of Dairy Cattle for Entrepreneurship development | 2 | 15 | 600 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | **Total** | **2** | **15** | **600** | **5** | **-** | **15** | **20** |  | **20** | **40** |
| Poultry management | Improved method of Broiler Production for Entrepreneurship development in Rural Youth | 2 | 15 | 600 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | **Total** | **2** | **15** | **600** | **5** | **-** | **15** | **20** |  | **20** | **40** |
| Ag. Ext. | Formation of SHGs for Seed Production | 1 | 5 | 100 | 5 | - | 15 | 20 | - | 20 | 20 |
|  | **Total** | **1** | **5** | **100** | **5** | **-** | **15** | **20** | **-** | **20** | **20** |
|  | **Grand Total B.** | **19** | **183** | **6060** | **80** | **-** | **240** | **260** | **60** | **320** | **380** |

**C. Extension Functionaries**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Thematic Area\*** | **Title** | **Total No**  **Of Course** | **Duration** | **Total Trainee Days** | **No. of participants** | | | **Total** | | | **G.T.** |
| **SC** | **ST** | **Others** | **M** | **F** | **T** |  |
| Productivity Enhancement in Field Crop | New vistas in summer Pulses | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Advances in medicinal crop production | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Constraints of Rice seeds production | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Constraints of Pulses production | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Techniques for higher Oilseed production for better stress manage | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Constraints of Rabi pulses under changing climate condition | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Modern concept of organic farming | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **7** | **14** | **280** | **35** |  | **105** | **140** |  | **140** | **140** |
| Protected Cultivation Technique | Advantage & technique of drip irrigation system in Horticultural crop | 1 | 2 | 40 | 5 |  | 15 | 20 |  | 20 | 20 |
|  | **Total** | **1** | **2** | **40** | **5** |  | **15** | **20** |  | **20** | **20** |
| IPM | IPM in Paddy | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | IPM in Cucurbits | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | IPM in Potato | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | IPM in Pulses | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **4** | **8** | **160** | **20** |  | **60** | **80** |  | **80** | **80** |
| Fruit Production | High density Plantation of Mango | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **1** | **2** | **40** | **5** |  | **15** | **20** |  | **20** | **20** |
| Aromatic Cultivation | Cultivation of Japanese Mint & its distillation techniques | 1 | 2 | 40 | 5 | - | 15 | 20 | - | 20 | 20 |
|  | **Total** | **1** | **2** | **40** | **5** |  | **15** | **20** |  | **20** | **20** |
| RCT | Use of ZT in different crops as a tool for Resource Conservation | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Sprinkler irrigation system in Okra & Cowpea to save Irrigation water | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Drip irrigation system to save irrigation water in Mango orchard | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Drip irrigation system to save irrigation water in Guava orchard | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Ring basin method of irrigation in summer cucurbits to save Irrigation water | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | **Total** | **5** | **10** | **200** | **25** | **-** | **75** | **100** |  | **100** | **100** |
| SHG | Formation of SHG | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
| House hold Kitchen Gardening | House hold food security | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
| Storage loss technique | Control of godown pest | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
| Drudgery reduction |  |  |  |  |  |  |  |  |  |  |  |
| Seed Production | Seed Production of Cereal & Pulses | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
| Dairy management |  |  |  |  |  |  |  |  |  |  |  |
| Poultry management |  |  |  |  |  |  |  |  |  |  |  |
|  | **Total** | **5** | **8** | **200** | **20** | **-** | **60** | **80** | **-** | **80** | **100** |
|  | **Total C** | **24** | **46** | **960** | **115** | **-** | **345** | **460** | **-** | **460** | **480** |

1. **Sponsored**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Thematic Area\*** | **Title** | **Total No**  **Of Course** | **Duration** | **Total Trainee Days** | **No. of participants** | | | **Total** | | | **G.T.** |
| **SC** | **ST** | **Others** | **M** | **F** | **T** |
| Seed Production | Seed Production of  rice | 1 | 5 | 100 | 5 | - | 15 | 20 |  | 20 | 20 |
|  | Quality seed production  of sugarcane. | 1 | 7 | 140 | 5 | - | 15 | 20 |  | 20 | 20 |
| Commercial Fruit Cultivation | Lay-out of mother orchards for Mango & Guava | 1 | 5 | 100 | 5 | - | 15 | 20 |  | 20 | 20 |
| Value addition | Cereal Seed Processing & Packaging | 1 | 2 | 40 | 5 | - | 15 |  | 20 | 20 | 20 |
| IPM | BPH Control in Paddy | 2 | 5 | 200 | 5 | - | 15 | 20 |  | 20 | 40 |
| IDM | Wilt Control in Lentil | 2 | 2 | 80 | 5 | - | 15 | 20 |  | 20 | 40 |
|  | **Total** | **8** | **26** | **660** | **30** | **-** | **90** | **100** | **20** | **120** | **160** |

1. **Vocational**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Thematic Area\*** | **Title** | **Total No**  **Of Course** | **Duration** | **Total Trainee Days** | **No. of participants** | | | **Total** | | | **GT** |
| **SC** | **ST** | **Others** | **M** | **F** | **T** |
| Seed Production | Seed Production of Wheat | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
| Commercial Fruit Cultivation | Scientific layout for developing new Guava orchard | 1 | 2 | 40 | 5 | - | 15 | 20 |  | 20 | 20 |
| Garden Management | Mali Training | 1 | 180 | 4500 | 5 | - | 15 | 20 |  | 20 | 20 |
| Rural Craft | Beautician & Parlor | 1 | 180 | 3600 | 5 | - | 15 |  | 20 | 20 | 20 |
|  | **Total** | **4** | **364** | **8180** | **20** | **-** | **60** | **60** | **20** | **80** | **80** |

**1 A.-Frontline Demonstration**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl.**  **No** | **Season** | **Crop** | **Variety/Component** | **No. of demonstration** | **Area (ha)** |
| 1 | Kharif | Paddy | R Sweta | 25 | 10.0 |
| 2 |  | Paddy | DSR with ZT Drill | 25 | 10.0 |
| 3 |  | Paddy | Weed Control in DSR | 25 | 10.0 |
| 4 |  | Paddy | Zinc as Foliar | 25 | 10.0 |
| 5 | Rabi | Wheat | HD-2967 | 25 | 10.0 |
| 6 |  | Wheat | Weed control | 20 | 8.0 |
| 7 |  | Lentil | Boron as Foliar | 20 | 8.0 |
| 8 |  | Gram | Weed control | 20 | 8.0 |
| 9 |  | Mustard | Aphid control | 15 | 5.0 |
| 10 |  | Okra | Weed Control | 15 | 5.0 |
| 11 |  | Onion | Weed Control | 15 | 5.0 |
|  |  |  | **Grand Total** | **205** | **89.0** |

**2 B. Seed and planting material production**

|  |  |  |  |
| --- | --- | --- | --- |
| **Seed** | | **Planting material** | |
| **Crop** | **Area (ha)** | **Crop** | **Area/No** |
| Paddy | 50 | Vegetable Seedlings | 95000 |
| Wheat | 50 | Agro-Forestry Plants | 2000 |
| Lentil | 50 | Papaya Seedling | 1000 |
| Gram | 40 | Mango Plants | 1000 |
| Total | 190 |  | 99000 |

3 C. Extension Activities

|  |  |  |
| --- | --- | --- |
| **Activities** | **No.** | **Participation** |
| FIELD DAYS | 10 | 300 |
| KISHAN MELA | 3 | 1500 |
| DIAGNOSTIC SERVICES | 10 | 600 |
| FARMERS VISIT TO KVK |  | 1200 |
| PUBLICATION & DISTRIBUTION | 10 | 2000 |
| KISHAN GOSTHI | 8 | 500 |
| DD / RADIO TALK | 5 |  |
| FILM SHOW | 50 |  |

3D.Expected fund utilization-NA

|  |  |  |
| --- | --- | --- |
| Project | Source | Amount to be received (Rs. In Lakh) |
|  |  |  |

**4 D. On-farm trials to be conducted**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sl. No | Thematic Area | Title | Treatments | No. of Farmer |
| 1 | Soil Fertility Management | Impact of K Fertigation on quality of processed Rice | T. O 1–Farmers practice (Injudicious use of K - Fertilizer )  T. O 2– 40 Kg. K /ha.  T. O 3–Use of K as per STBR | 16 |
| 2 | INM | Evaluation of Sulfur source for Chick Pea | T. O 1–Farmers practice (Injudicious use of S - Fertilizer)  T. O 2–Basal application of Bentonite @ 20Kg./ha.  T. O 3–Basal application of Phospho Gypsum @ 125 Kg. /ha. | 16 |
| 3 | INM | Evaluation of additional an application on Lentil | T.O. 1 -Farmers Practice application of DAP@125 kg./ha.  T.O. 2- DAP @125Kg/ha + 30 Kg Urea/ha as basal  T.O. 3 -DAP @125Kg/ha + 10 gram Urea/liter as foliar 30-35 days after DAS |  |
| 4 | Vegetable crop yield increment | Evaluation of early Cauliflower Variety | T. O. 1– Farmers Practice (cultivation of Early Kuwari)  T. O. 2– Sowing of Kashi Kuwari  T. O. 3– Sowing of Sabour Agrim | 16 |
| 5 | Vegetable crop yield increment | Evaluation of Dark Red Onion cultivar | T. O. 1– Farmers practice (Cultivation Agri found light Red)  T. O. 2– Cultivation of Agri found dark Red  T. O. 3– Cultivation of N-53 | 16 |
| 6 | Cropping System | Evaluation of Maize-Potato inter cropping | T. O. 1– Farmers Practice ( sole crop Maize)  T. O. 2 – Farmers practices (Sole crop Potato)  T. O. 3–Maize + Potato | 16 |
| 7 | IPM | Assessment of Chemical & Biological control of BPH in Paddy | T. O. 1– Farmers practice (Application of Chlorpyriphos 20 E.C. @ 1.25 lit/ha.  T. O. 2– Fipronil 0.5 % SC @ 1.0 Lit. /ha.  T.O. 3 – Azadirachatine 0.03% @ 1 lit./ha. | 16 |
| 8 | IDM | Evaluation of Chemical control of Cercospora Leaf spot in Okra | T. O. 1– Spray of Mancozeb 75 WP@2 Kg. /ha.  T. O. 2 - Spray of Carbandazim 50 WP@1 Kg. /ha.  T.O. 3 – Spray of COC 50WP @ 3 Kg. /ha. | 16 |
| 9 | IDM | Evaluation of Chemical control of late blight in Tomato | T. O. 1–.Farmers practices (Spray of Mancozeb 75 WP@2 Kg. /ha.)  T. O. 2– Spray of Carbandazim 50 WP@1 Kg. /ha.  T. O. 3– Spray of Mancozeb 63% + Carbandazim 12%@1 Kg. /ha. | 16 |
| 10 | Store Grain Pest | Evaluation of different technique for Wheat Weevils control | T. O. 1–. Farmers practices (Drying & storage in Jut Bags).  T. O. 2– TO-1 + Celphos Diskette  T.O. 3- Drying & storage in Air tight Bag with Celphos Diskette | 16 |
| 11 | Apiculture | Control of Wax moth in Apiculture during rainy season | T. O 1–Farmers practices (Injudicious use of chemicals)  T. O 2–Use of Naphthalene ball in Bee boxes  T. O 3–Use of Ethylene Di bromide @ 10 ml. as Fumigation fort nightly.  T.O. 4- Use of Bacillus thrungensis in Wax moth | 16 |
| 12 | Water Management | Evaluation of Pre Sowing Irrigation on germination and yield Lentil. | T. O. 1– Farmers Practice i.e. no Pre Sowing Irrigation  T. O. 2–Pre Sowing Irrigation. | 16 |
| 13 | RCT | Evaluation of Conservation Tillage Practices in cultivation of Lentil | T. O. 1– Farmers Practice i.e. Broadcasting of seed  T. O. 2–Line sowing with Seed Drill  T. O. 3–Line sowing with ZT Drill | 16 |
|  | **TOTAL** |  |  | **208** |

1. List of projects to be implemented -NA

|  |  |
| --- | --- |
| Name of the project | Fund expected (Rs.) |
|  |  |

1. Number of success stories to be developed

a) Paddy Seed Production

b) Pulses Seed Production

c) Wheat Seed Production

1. Scientific Advisory Committee

|  |  |
| --- | --- |
| Date of SAC meeting held during 2014-15 | Proposed date |
|  | Jnue,2018 &Feb, 2019 |

1. Soil and water testing

|  |  |
| --- | --- |
|  | No. of sample to be analyzed |
| Soil | 1000 |
| Plant | - |
| Manure | - |

1. Staff position (As on 1-04-2017)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sl.No | Sanctioned | In position | Name | If vacant, since when |
| 1 | Senior Scientist & Head | 02.06.2001 | Dr. Pravin Kumar Dwivedi |  |
| 2 | SMS (Hort.) | 09.10.1996 | Sri Nilesh Kumar |  |
| 3 | SMS (H. Sc.) | 11.08.2001 | Smt. SupriyaVerma |  |
| 4 | SMS (PP) | 14.01.2013 | Sri ShashiBhushan KumarShashi |  |
| 5 | SMS (Ag. Extn.) | 14.01.2013 | Dr. Sachidanand Singh |  |
| 6 | SMS (PBG) | 16.01.2013 | Dr. Anil Kumar Yadav |  |
| 7 | SMS (Vet. A.H.) |  | Vacant | 01.01.2015 |
| 8 | Programme Assistant |  | Vacant | 14.01.2013 |
| 9 | Prog. Asstt. (Computer) | 01.01.2001 | Sri Pankaj Kumar |  |
| 10 | Farm Manager | 06.02.2001 | Sri Sunil Kumar |  |
| 11 | Assistant | 16.01.2013 | Sri SanjeevRaghuvanshi |  |
| 12 | Jr. Stenographer | 18.12.2000 | Sri RadhaKrishan Nair |  |
| 13 | Driver | 02.12.2000 | Sri Mahabir Ram |  |
| 14 | Driver |  | Vacant | 27.11.2017 |
| 15 | Supporting Staff G-I | 07.06.2001 | Smt. Baby Kumari |  |
| 16 | Supporting Staff G-I |  | Vacant | 07.09.2008 |

1. Status of infrastructure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Infrastructure | Complete | Under Construction | Not started | Reasons, if not started |
| Administrative Building | Complete |  |  |  |
| Trainees hostel | Complete |  |  |  |
| Staff Quarter | Complete |  |  |  |
| Demonstration Unit  Poultry Unit | Complete |  |  |  |
| Distillation Unit for Medicinal & Aromatic plant | Complete |  |  |  |
| Vermi Compost Unit | Complete |  |  |  |

1. **Fund requirement and expenditure (Rs.)**

|  |  |  |
| --- | --- | --- |
|  | Expenditure (last year) | Expected requirement (Rs.in Lakh) |
| **Recurring**  Pay & allowance  Contingency  TA  HRD | 10487774.00  1375808.00  178822.00  82500.00 | 11335000.00  1600000.00  1800000.00  75000.00 |
| **Non-recurring (specify)**  Library  Works  Equipment | 0.00  0.00  200000.00 | 0.00  0.00  0.00 |
| **Total** | **12324904.00** | **14810000.00** |

**(P. K. Dwivedi)**

Senior Scientist & Head

KVK,SCADA, Bhojpur, Ara

**OFT-1.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 01. | Title of On-Farm Trail |  | : | Evaluation of Chemical Control of *Cyperus rotundas.* |
| 02. | Micro-irrigation system |  | : | Rainfed |
| 03. | Problem identified |  | : | Cyperus weed is fastly infesting large area under upland conditions especially in Vegetables, Maize and Sugarcane including Paddy. |
| 04. | Hypothesis |  | : | As post-emergence weedicide Glyphosate is controlling the weed but now the efficiency has drastic reduction. Thus there is need of Post emergence weedicide for the control of such Weeds  A new broad spectrum Post emergence weedicide Halosulfuron methyl 75%WG will control effectively the Cyperus weed and may solve the problem. |
| 05. | Source of technology |  | : | HAU, Haryana |
| 06. | Technical intervention |  | : | Weedicides |
| 07. | Treatment details | Tech. option -1  Tech. option -2  Tech. option -3 | :  :  : | Farmers practice (Hand weeding)  Glyphosate@3.0 Lt/ ha as postemergence  Halosulfuron methyl 75%WG @90 gram a.i./ ha as post emergence |
| 08. | Replication |  | : | 20(Area 0.2 ha./treatments) |
| 09. | Performance indicators | Technical observation | : | Weed Count / m2, dry wt.,  Yield attributes, yield |
| Economic indicators | : | Net return B. C. Ratio |
| Farmers feedback | : | Quality & Effectiveness of the chemical return |

**OFT -2**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 01. | Title of On-Farm Trail |  | : | Chemical control of parasitic weeds of lentil |
| 02. | Micro-irrigation system |  | : | Rainfed |
| 03. | Problem identified |  | : | Cuscuta as parasite weed is fastly infesting large area under pulses specially lentil. This weed is also hazardous for animal and other associated crops. |
| 04. | Hypothesis |  | : | As pre-emergence weedicide Pendimethalin is controlling the weed emergence in early stage but again it is appearing. Thus there is need of Post emergence weedicide for the control of such parasites  A new broad spectrum Post emergence weedicide Quizalfop ethyl is identified for effective control of Cuscuta and may solve the problem. |
| 05. | Source of technology |  | : | DrRPCAU, Pusa |
| 06. | Technical intervention |  | : | Weedicides |
| 07. | Treatment details | Tech. option -1  Tech. option -2  Tech. option -3 | :  :  : | Farmers practice (Hand removal)  Pendimethalin - @1.0 kg a.i. / ha as pre-emergence  Quizalfop Ethyl 5EC @40 g a.i./ ha as post- emergence |
| 08. | Replication |  | : | 20(Area 0.2 ha./treatments) |
| 09. | Performance indicators | Technical observation | : | Weed Count / m2, dry wt.,  Yield attributes, Yield |
| Economic indicators | : | Net return B. C. Ratio |
| Farmers feedback | : | Quality & Effectiveness of the chemical return |

**OFT-3.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 01. | Title of On-Farm Trail |  | : | Evaluation of suitable date of Wheat sowing in Rice-Wheat cropping system |
| 02. | Micro-irrigation system |  | : | Irrigated |
| 03. | Problem identified |  | : | Traditionally long duration Paddy is grown in major parts of canal irrigated situation. This results in delay up to 40 days in Wheat sowing. This leads to drastic reduction in Wheat productivity with all based management practices. |
| 04. | Hypothesis |  | : | Timely sowing that is in 1stweak of Nov. Provides more cold days for better vegetative growth of Wheat which may result in better productivity |
| 05. | Source of technology |  | : | CSISA |
| 06. | Technical intervention |  | : | Date of sowing & Seed |
| 07. | Treatment details | Tech. Option -1  Tech. Option -2  Tech. Option-3 Tech. Option -4 | : | Farmers Practice i.e. delayed cultivation (20-30 November)  Sowing of Wheat on 1st Nov.  Sowing of Wheat on 7th Nov.  Sowing of Wheat on 15th Nov. |
| 08. | Replication |  | : | 30 (0.2ha/treatment) |
| 09. | Performance indicators | Technical observation | : | Tillering increase/decrease. Yield & Test weight |
| Economic indicators | : | Net return BC ratio |
| Farmers feedback | : | Over all crop Growth & Grain Quality |

**OFT-4**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 01. | Title of On-Farm Trail |  | : | Assessment of high yielding variety of Maize |
| 02. | Micro-irrigation system |  | : | Irrigated Upland |
| 03. | Problem identified |  | : | Poor yield of Maize due to selection of local variety |
| 04. | Hypothesis |  | : | Farmers are growing local variety of maize which gives poor yield in district Bhojpur having Avg. yield 24 Qt. /ha. Improved variety like NK-6240 and BKC-7074 are high yielding variety may be suitable to this area. Therefore to evaluate the comparative performance present OFT is proposed. |
| 05. | Source of technology |  | : | DMR,Begusaray |
| 06. | Technical intervention |  | : | High yielding Hybrid Maize seed |
| 07. | Treatment details | Tech. Option -1  Tech. Option -2  Tech. Option - 3 | :  :  : | Farmers practice local cultivars cultivation  Cultivation of DHM-117  Cultivation of HM-12 |
| 08. | Replication |  | : | 10 ( 0.20 ha/treatment ) |
| 09. | Performance indicators | Technical observation | : | Plant Height, Days to Mature, Avg. No. of Cobs/Plant, No. of Grain/Cob Increase/decrease in yield, test weight |
| Economic indicators | : | Net return BC ratio |
| Farmers feedback | : | Crop growth & yield. |

**OFT-5**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 01. | Title of On-Farm Trail |  | : | Evaluation of Maize-Potato inter cropping |
| 02. | Micro-irrigation system |  | : | Irrigated Upland |
| 03. | Problem identified |  | : | At times the Potato crop is facing severe disease and natural challenges resulting in very poor economic returns. Under such changing situation Maize is the future crop which can change the economics |
| 04. | Hypothesis |  | : | Newly developed Hybrid verity DKC-9081 may be a good choice for intercropping with Potato and it may be replace the traditional cultivation of sole potato crop. |
| 05. | Source of technology |  | : | RAU, PUSA |
| 06. | Technical intervention |  | : | High yielding Hybrid Maize seed |
| 07. | Treatment details | Tech. Option -1  Tech .Option -2 | :  : | Farmers practice(i.e.cultivation of Potato)  Cultivation of Potato + Maize |
| 08. | Replication |  | : | 10 (0.20 ha. / farmers) |
| 09. | Performance indicators | Technical observation | : | Plant Height, Days to Mature, Avg. No. of Cobs/Plant, Increase/decrease in yield, No. of Grain/Cob, Test weight. Yield Equivalence |
| Economic indicators | : | Net return BC ratio |
| Farmers feedback | : | Crop growth & yield. |

**OFT-6**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 01. | Title of On-Farm Trail |  | : | Evaluation of HYV of round Brinjal Variety NON-0137 to replace the local cultivars |
| 02. | Micro-irrigation system |  | : | Irrigated |
| 03. | Problem identified |  | : | Brinjal is the second most important vegetable of Bhojpur district in term of area. Through the farmer are cultivating Round Brinjal’s local cultivarssince long. The Germplasmhaddeteriorated and number of pest and disease are attacking the cultivars resulting in poor yield i.e. below 120 qt/ha and very poor economical return. |
| 04. | Hypothesis |  | : | As per the felt need of the farmers the traditional varieties need to replace with High yielding as well as YMV resistant varieties considering the importance of this crop the present OFT with variety Non – 0137(Round Brinjal) is prospered to assess its potentiality against the specific problem of poor yield |
| 05. | Source of technology |  | : | IIVR, Varanasi |
| 06. | Technical intervention |  | : | Improved Seed |
| 07. | Treatment details | Tech. option -1  Tech.option-2 | : | Farmers Practice  Cultivation of Non – 0137 |
| 08. | Replication |  | : | 10 Farmers (0.2 ha./ treatment) 2 ha. |
| 09. | Performance indicators | Technical observation | : | Vigor &Color.  Etiology  Yield |
| Economic indicators | : | Net result & BC ratio |
| Farmers feedback | : | Overall crop growth & gain quality |

**OFT-7.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 01. | Title of On-Farm Trail |  | : | Evaluation of Chemical Wilt control in Bottle Gourd |
| 02. | Micro-irrigation system |  | : | Irrigated Upland |
| 03. | Problem identified |  | : | Bottle gourd is one of the leading crop and is grown in an area of 1200 ha. Having the Average productivity of 300 Qt/ha. (net return Rs. 1.4 Lakh/ha.) but since last 3-4 years there is drastic reduction in yield up to 40% was observed due to wilt infestation This has severelyaffected the economic return of this highly value crop |
| 04. | Hypothesis |  | : | The traditional molecule foliar application is partially controlling the disease. A new broad spectrum fungicide having the combination of Pyrochlostrabin 5%+Metiram 55% as good curative for this disease. This molecule was evaluated in KVK & was found significantly good for the control of Wilt. |
| 05. | Source of technology |  | : | K.V.K., Bhojpur |
| 06. | Technical intervention |  | : | Fungicide |
| 07. | Treatment details | Tech. Option -1  Tech. Option -2 | : | Farmers practice two spray of Mancozeb+Carbendazim @2 Kg./ha.  Two spray Pyrochlostrabin 5%+Metiram 55%@ 1 Kg./ha. |
| 08. | Replication |  | : | 10 (0.20 ha. Per farmers) |
| 09. | Performance indicators | Technical observation | : | No. Of infected plant per100mt |
| Economic indicators | : | Net return B. C. Ration |
| Farmers feedback | : | Disease infestation fruit quality economical return |

**OFT-8.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 01. | Title of On-Farm Trail |  | : | Evaluation of Molecules for effective Sheath Rot Control in Maize |
| 02. | Micro-irrigation system |  | : | Irrigated Upland |
| 03. | Problem identified |  | : | Maize crop in general is suffering a lot due to Sheath Rot infection now a day. This disease is appearing in epidemic from in the initial stage of flowering & thus result in heavy lass in Maize production |
| 04. | Hypothesis |  | : | Since the disease is composite in nature, application of Anti biotic may me curative. To assess the effectiveness the present OFT is being proposed. |
| 05. | Source of technology |  | : | KVK, Bhojpur |
| 06. | Technical intervention |  | : | Anti biotic with Fungicide and other chemicals |
| 07. | Treatment details | Tech. option -1  Tech. option -2  Tech. option -3 | :  :  : | Farmers practice spraying of Hexaconazole 5 EC @ 1.25 lit / ha.  Soil treatment with Bleaching Powder (3Kg /ha)  Two spray of Streptocyclin + Copper OxiChloride(25gm+750 gm /ha) after 30 DAS and 60 DAS |
| 08. | Replication |  | : | 20 (0.20 ha/treatment.) |
| 09. | Performance indicators | Technical observation | : | Occurrence of Sheath Blight  Increase in yield Paddy yield |
| Economic indicators | : | Net return BC ratio |
| Farmers feedback | : | Plant health & efficiency of medicine |

**OFT-9.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 01. | Title of On-Farm Trail |  | : | Management of Rust disease in Lentil |
| 02. | Micro-irrigation system |  | : | Rain fed Medium land |
| 03. | Problem identified |  | : | Lentil crop in general is suffering a lot due to Sheath Rot infection now a day. This disease is appearing in epidemic from in the later stage of flowering & thus result in heavy loss in Lentil production |
| 04. | Hypothesis |  | : | The incidence of Rust disease in Lentil at flowering results in heavy loss in yield resulting in poor seed setting. The spread of disease is very fast through smutted spores. The application of fungicides at different stages may control the incidence of disease and combat further spread. . |
| 05. | Source of technology |  | : | RAU, Pusa |
| 06. | Technical intervention |  | : | Fungicide |
| 07. | Treatment details | Tech. option -1  Tech. option -2 | :  :  : | Farmers practices Seed treatment with Carbendazim (2g /kg seed)  Seed treatment with Carbendazim (2g /kg seed)+Two spray of Carbendazim+ Mancozeb (2.0 kg a.i. /ha) after 30 DAS and 60 DAS |
| 08. | Replication |  | : | 20 (0.20 ha/treatment.) |
| 09. | Performance indicators | Technical observation | : | Occurrence of Rust disease  Increase in yield Lentilyield |
| Economic indicators | : | Net return BC ratio |
| Farmers feedback | : | Plant health & efficiency of medicine |

**OFT-10**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 01. | Title of On-Farm Trail |  | : | Evaluation of N application in Lentil |
| 02. | Micro-irrigation system |  | : | Irrigated |
| 03. | Problem identified |  | : | Farmers are not using the Rhizobium Culture and the FYM due to in proper supply. This result in poor Nitrogen availability in the Rhizosphere of Lentil leading to poor vegetative growth and branching and as a result low yield of Lentil |
| 04. | Hypothesis |  | : | Application of Nitrogen in addition to the normal recommendation of DAP which is supplementing partial Nitrogen will cover up the demand of Lentil crop for proper vegetative growth, which is now going to be a bigger problem in Lentil growing area. The proper branching & vegetative growth will result in increased no. of flower per plant leading to more grain setting and ultimately better yield |
| 05. | Source of technology |  | : | ICAR, IIPR, Kanpur |
| 06. | Technical intervention |  | : | Application of N Fertilizer |
| 07. | Treatment details | Tech. option -1  Tech.option-2  Tech.option-3 | : | Farmers Practice application of DAP@125 kg./ha.  DAP @125Kg/ha + 30 Kg Urea/ha as basal  DAP @125Kg/ha + 10 gram Urea/liter as foliar 30-35 days after DAS |
| 08. | Replication |  | : | 20 Farmers (0.2 ha./ treatment) 8 ha. |
| 09. | Performance indicators | Technical observation | : | No. of plant / sq. meter plant height  No. of grain per pot yield  Test weight |
| Economic indicators | : | Net result & BC ratio |
| Farmers feedback | : | Overall crop growth & gain quality |

**OFT-11.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 01. | Title of On-Farm Trail |  | : | Evaluation of Pre-sowing irrigation on Germination and Yield of Lentil |
| 02. | Micro-irrigation system |  | : | Irrigated |
| 03. | Problem identified |  | : | The frequent tillage operations over long periods have detrimental effect on surface of soil. It pulverizes the soil into dust and breaks down soil aggregates. Tillage hastens the oxidation of organic matter from the soil, reduces infiltration and induces runoff and soil erosion. |
| 04. | Hypothesis |  | : | The area under Lentil is around 20000 ha. with average yield of around 8 quintal / ha. it since to be very low as compare to the potential yield of the existing cultivars which is more than 10 Q. / ha.. The pre sowing irrigation may result is better crop stand with good vegetative smooth and high nutrient use efficiency leading to improvement in yield. |
| 05. | Source of technology |  | : | B.A.U., Sabour |
| 06. | Technical intervention |  | : | Irrigation |
| 07. | Treatment details | Tech. option -1  Tech.option-2 | : | Farmers Practice is no Pre sowing irrigation  Pre sowing irrigation |
| 08. | Replication |  | : | 20 Farmers (0.2 ha./ treatment) 4 ha. |
| 09. | Performance indicators | Technical observation | : | No. of plant / sq. meter plant height  No. of sowing per pot yield  Test weight (1000 grin weight) |
| Economic indicators | : | Net result BC ratio |
| Farmers feedback | : | Overall crop growth & gain quality |

**OFT-12**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 01. | Title of On-Farm Trail |  | : | Evaluation of Conservation Tillage Practices in cultivation of Lentil |
| 02. | Micro-irrigation system |  | : | Rain fed |
| 03. | Problem identified |  | : | Traditionally Lentil is shown in major part after harvesting of Paddy on residue moisture. This result in poor germination and crop stand leading to poor yield of Lentil with all Agronomical practices. |
| 04. | Hypothesis |  | : | The area under Lentil is around 20000 ha. With average yield of around 8 quintal /ha, very low as compare to the potential yield of the existingcultivars (16 Q. / ha). This is mainly due to poor moisture leading to under supply of nutrients. To control above disadvantages of repeated tillage operations in cultivation of lentil, Sowing of seeds by drilling might be better optionsfor resource conservation.. |
| 05. | Source of technology |  | : | CSISA, Bihar &UP Hub |
| 06. | Technical intervention |  | : | Irrigation |
| 07. | Treatment details | Tech.option-1  Tech.option-2 | : | Farmers Practice conventional of Sowing  Sowing of Lentilwith ZT drilling |
| 08. | Replication |  | : | 20 Farmers (0.2 ha./ treatment) 4 ha. |
| 09. | Performance indicators | Technical observation | : | No. of plant / sq. meter plant height  Test weight (1000 gram weight),Yield |
| Economic indicators | : | Net result BC ratio |
| Farmers feedback | : | Overall crop growth & gain quality |

**OFT-13**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 01. | Title of On-Farm Trail |  | : | Evaluation of Conservation Tillage Practices in cultivation of Gram |
| 02. | Micro-irrigation system |  | : | Rain fed |
| 03. | Problem identified |  | : | Traditionally Gram is shown in major part after harvesting of Paddy on residue moisture. This result in poor germination and crop stand leading to poor yield of Gram input of all agronomical practices. |
| 04. | Hypothesis |  | : | The area under Gram is around 18000 ha. with average yield of around 8-9 quintal/ ha,very low as compare to the potential yield of the existing cultivars (16-18Q./ ha). This is mainly due to poor moisture leading to under supply of nutrients. To control above disadvantages of repeated tillage operations in cultivation of lentil, Sowing of seeds by drilling might be better options for resource conservation |
| 05. | Source of technology |  | : | CSISA, Bihar &UP Hub |
| 06. | Technical intervention |  | : | Irrigation |
| 07. | Treatment details | Tech. option -1  Tech.option-2 | : | Farmers Practice conventional of Sowing  Sowing of Gram with ZT drilling |
| 08. | Replication |  | : | 20 Farmers (0.2 ha/ treatment) 4 ha. |
| 09. | Performance indicators | Technical observation | : | No. of plant / sq. meter plant height  Test weight (1000 gram weight),Yield |
| Economic indicators | : | Net result BC ratio |
| Farmers feedback | : | Overall crop growth & Grain quality |

**(P. K. Dwivedi)**

Senior Scientist & Head

KVK, SCADA, Bhojpur, Ara