**Indian Council of Agricultural Research**

**Agricultural Technology Application Research Institute**

**Zone-VII, Umiam, Meghalaya**

**Annual Progress Report**

**2023 (January-December)**

**Name of the KVK: MOKOKCHUNG State: NAGALAND**

**Host Organization: DEPARTMENT OF AGRICULTURE**

**Government of Nagaland**

**ANNUAL REPORT OF KVKS 2023 (January- December)**

1. GENERAL INFORMATION ABOUT THE KVK

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

|  |  |  |  |
| --- | --- | --- | --- |
| Address | Telephone | | E mail |
|  | Office | FAX |  |
| KVK Yisemyong  Post Box No-23  Mokokchung Nagaland-798601 | 0369-2225121 | 0369-2225121 | [kvkmokokchung@gmail.com](mailto:kvkmokokchung@gmail.com) |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Address | Telephone | | E mail |
| Office | FAX |  |
| Directorate of Agriculture  Nagaland Kohima | 0370-2243116 | 0370-2243970 | agrkvk@yahoo.com |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Telephone / Contact | | |
|  | Residence | Mobile | Email |
| Dr. Keviletsu Khate | Yisemyong | 7085879890 | keviletsu@gmail.com |

1.4. Year of sanction: 2002

1.5. Staff Position

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sl.  No. | Sanctioned post | Name of the incumbent | Designation | Discipline | Pay Scale (Rs.) | Date of joining | Category (SC/ST/  OBC/  Others) |
| 1 | Sr. Scientist & Head | Dr. Keviletsu Khate | Sr. Scientist & Head | Animal Genetics & Breeding | 162300 | 16.08.10 | ST |
| 2 | Subject Matter Specialist | Dr. S. Sarendi walling | ACTO | Animal science | 85800 | 19.02.07 | ST |
| 3 | Subject Matter Specialist | Khekali Sema | ACTO | Horticulture | 85800 | 11.07.08 | ST |
| 4 | Subject Matter Specialist | Tokiho Achumi | ACTO | Agronomy | 85800 | 20.02.07 | ST |
| 5 | Subject Matter Specialist | Imtisenla | ACTO | Agronomy | 85800 | 31.05.07 | ST |
| 6 | Subject Matter Specialist | Imtilemla | ACTO | Soil science | 85800 | 11.11.07 | ST |
| 7 | Subject Matter Specialist | Martha Chakruno | ACTO | Entomology | 85800 | 19.02.07 | ST |
| 8 | Programme Assistant | Moainla | Programme Assistant | Horticulture | 60400 | 24.05.06 | ST |
| 9 | Computer Programmer | I.Tangitla | Programme Assistant(Computer) | BLIS | 60400 | 24.05.06 | ST |
| 10 | Farm Manager | Ilika V Achumi | Farm manager | Horticulture | 58600 | 19.02.07 | ST |
| 11 | Superintendent / Accountant | Kiyelu Chophy | Office Supt-cum-Accountant | Account | 56900 | 15.02.07 | ST |
| 12 | Stenographer | Imosangla | Jr. Steno-cum-Computer Operator | PU | 40400 | 01.06.06 | ST |
| 13 | Driver | Supongmeren | Driver | Under matriculate | 32300 | 01.06.06 | ST |
| 14 | Driver | Jongpongyanger | Driver | Under matriculate | 29600 | 01.03.10 | ST |
| 15 | Supporting staff | Imkonglemla | Supporting Staff | Under matriculate | 24900 | 01.06.06 | ST |
| 16 | Supporting staff | Aotoshi | Supporting Staff | Under matriculate | 21500 | 01.03.10 | ST |
|  | Total | 16 |  |  |  |  |  |

Note: No column in the table must be left blank

1.6. a. Total land with KVK (in ha) :23.27

b. Total cultivable land with KVK (in ha): 22

c. Total cultivated land (in ha):7.5

|  |  |  |
| --- | --- | --- |
| S. No. | Item | Area (ha) |
| 1 | Under Buildings | 1.46 |
| 2. | Under Demonstration Units | 1.5 |
| 3. | Under Crops (Cereals, pulses, oilseeds etc.) (Pl. specify separately)   1. Cereal-Millets, Maize (popcorn), Sweet corn 2. Pulses –Soybean | 2 |
| 4. | Under vegetables (Cabbage, Broccoli, Chilli, Brinjal, Tomato, French bean, Colocasia) | 2 |
| 5. | Orchard/Agro-forestry | 1 |
| 6. | Others (specify) Coffee plantation | 1 |

1.7. Infrastructural Development:

A) Buildings

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S.  No. | Name of building | Source of  funding | Stage | | | | | |
| Complete | | | Incomplete | | |
| Completion  Date | Plinth area (Sq.m) | Expenditure (Rs.) | Starting Date | Plinth area  (Sq.m) | Status of construction |
| 1. | Administrative Building | ICAR | 20.06.09 | 400 | 53.5 lakhs | 28.09.07 | 400 | Completed |
| 2. | Farmers Hostel | NA | NA | NA | NA | NA | NA | NA |
| 3. | Staff Quarters (6) | ICAR | NA | 200 |  | 2011 | 100 | Completed |
| 4. | Demonstration Units | ICAR, | 2012 | - | 30.00 lakhs | 2012 | - | Completed |
| 5 | Fencing | ICAR | NA | 7500m | 3.5 lakhs | 2011 | - | Incomplete |

B) Vehicles

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Type of vehicle** | **Regd. No.** | **Year of purchase** | **Cost (Rs.)** | **Total kms. Run** | **Present status** |
| Bolero | NL-10 C0671 | 2016 | 8.0 Lakhs | 123872 | Good |

C) Equipments & AV Aids

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl.no** | **Name of the equipments** | **Year of purchase** | **Cost (Rs.)** | **Present status** |
| 1 | Computer | 2004, 2016 | 70000 | 2004 unserviceable |
| 2 | Sound system | 2005 | 60000 | Good |
| 3 | Digital camera | 2020 | 50000 | Good |
| 4 | OHP | 2004 | 5000 | Good |
| 5 | Laptop Asus | 2022 | 45000 | Good |
| 6 | Handycam | 2008 | 16,000 | Out of order |
| 7 | Photocopier | 2010 | 1,20,000 | Unserviceable |
| 8 | Handycam | 2010 | 18,000 | Good |
| 9 | Computer | 2010 | 45,000 | Good |
| 10 | LCD projector | 2020 | 55,000 | Good |
| 11 | Computer | 2016 | Provided by Host | Good |
| 12 | Computer | 2016 | -do- | Good |
| 13 | Cannon EOS 15000 with Extra Lens | 2020 | 43000 | good |
| 14 | Sony VPL-DX221 LCD Projector HDMI | 2020 | 34500 | Good |
| 15 | Microtek 2300 VA 24 volt | 2021 | 10500 | good |
| 16 | MI Smart TV 4K (65’) | 2022 | 68000 | good |
| 17 | Weighing Balance (50 kg) | 2022 | 9000 | good |
| 18 | Brush cutter 2 stroke | 2022 | 8000 | good |
| 19 | Garmin E-Trex 20X | 2022 | 21500 | good |
| 20 | IK -109 Oven Universal & equipments | 2022 | 44306 | good |
| 21 | Soil moisture indicator | 2022 | 11243 | good |
| 22 | Computer Lenova Idea center 2nos | 2022 | 68000 | good |
| 23 | Printer canon G2010 | 2022 | 12800 | good |
| 24 | TP- Link Router | 2022 | 4950 | Good |
| 25 | Epson ECO Tank Printer | 2023 | 14700 | good |
| 26 | HP Slim SO1 Desktop | 2023 | 51000 | good |
| 27 | Zebronics UPS | 2023 | 2200 | good |
| 28 | Canon G3010 Printers | 2023 | 15700 | good |

1.8. A). Details of SAC meeting\* conducted in 2023

**Scientific Advisory Committee meeting**

Krishi Vigyan Kendra Mokokchung conducted its Scientific Advisory Committee Meeting on 27th January 2023, for approving its action Plan (2023-24) by the committee. The program started with address from Dr. Keviletsu Khate, Senior Scientist & Head. This was followed by presentation on highlights of the activities undertaken during the year 2022-23 based on the recommendations by the SAC in 2022.

With the pronouncement of the meeting from the Chairperson of the program, the Action Plan of the Kendra for the year 2023-24 was presented for deliberation, recommendation and approval by the committee. The recommendations given for Action Plan 2023-24 by the Scientific Advisory Committee members were noted for improving the yearly action plan and to better serve the farming community.

The closing remark and approval of Action Plan 2023-24 for onward submission to ICAR-ATARI, Zone VII was pronounced by the seasonal Chairman, Scientific Advisory Committee cum District Agriculture Officer, Mokokchung. The committee members present during the meeting includes Joint Director, SARS, Divisional Forest Officer, Chief Vety. Officer, District Soil Conservation Officer, Asst. Registrar Co-operative Societies, District Sericulture Officer, Farm Radio Officer (AIR), District Fishery Officer and Sr. Scientist & Head, KVK as member Secretary.

|  |  |  |
| --- | --- | --- |
| **Date of SAC Meeting** | **Salient Recommendations** | **Action taken on recommendation** |
| 27th Jan ‘2023 | * Soil testing of second year Jhum to facilitate winter cropping * Kadaknath chicken to be tested for its health and nutritional aspects and to debunk misconception of its black flesh * Cattle rearing to be encouraged to meet the constraint of purchasing power of synthetic fertilizers and to meet the growing demands of organic manure * Coffee plantation to be popularized along with Black pepper/ betel leaves/ cinnamon as it is the ‘One District One Product’ crop * Millet cultivation to be revived in the district by utilizing third year jhum fields for large scale cultivation incorporating ITKs to control bird menace. * Rejuvenation of orange cultivation to revive the declining orchards in the district * Better collaboration with Allied Departments and church for effective dissemination and strengthening need based solution to farmers * District/block contingency plan to mitigate climate abnormalities and pest menace. | Recommendations on mandated activities has been included in the Action Plan 2024-25 and the same has been submitted to Agricultural Technology Application & Research Institute, Zone-VII |

2. DETAILS OF DISTRICT

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

|  |  |
| --- | --- |
| Sl.no | Farming system/enterprises |
| 1. | Agriculture +Horticulture |
| 2. | Agriculture + Veterinary |
| 3. | Agriculture + Fishery |

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

|  |  |  |
| --- | --- | --- |
| Sl. No | Agro-climatic Zone | Characteristics |
| **1.** | Mid Tropical hill Zone | Hot and humid in the foot hills to moderate in the mid and high with heavy rainfall during summer |
| Moderate to extreme cold and dry in higher altitude during winter |

2.3 Soil types

|  |  |  |  |
| --- | --- | --- | --- |
| Sl. No | Soil type | Characteristics | Area in ha |
| 1. | Sandy clay loam | 20-35% clay  28% silt  45% more sand  pH 4-5 | 1,20,000 |
| 2. | Clay Loam | 27-40% clay  20-45% sand  Medium organic matter  pH 4-5 | 40,000 |
| 3. | Forest Soil | Broad leaves rain forest, evergreen, temperate climate, high organic matter, dark brown soil with pH 4 | 50 |

2.4. Area, Production and Productivity of major crops cultivated in the district

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sl. No | Crop | Area (ha) | Production (ton) | Productivity (Qtl /ha) |
| A |  |  |  |  |
| 1. | Jhum Paddy | 8294 | 18247 | 22 |
| 2. | WTRC Paddy | 2420 | 7744 | 32 |
| 3. | Maize | 575 | 1260 | 22 |
| 4. | Beans | 98 | 132 | 13.5 |
| 5. | Pea | 78 | 125 | 16 |
| 6. | Rapeseed/ Mustard | 103 | 98 | 9 |
| 7. | Potato | 158 | 917 | 65 |
| 8. | Tapioca | 213 | 4579 | 215 |
| 9. | Orange | 1739 | 59126 | 340 |
| 10. | Banana | 1155 | 71610 | 620 |
| 11. | Litchi | 970 | 24250 | 250 |
| 12. | Pineapple | 820 | 13284 | 162 |
| 13. | Tomato | 38 | 9880 | 2600 |
| 14. | Chilli | 76 | 5099.6 | 671 |

2.5. Weather data

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Monthly Weather Data\_2023** | | | | | | |
| **Month** | **Total Rainfall (mm)** | **No. of Rainy day (>2.5 mm/day)** | **T.Max (℃)** | **T.Min (℃)** | **RH-I (%)** | **RH-II (%)** |
| January | 1 | 0 | 18.6 | 9.4 | 73.5 | 56.6 |
| February | 18 | 2 | 20.5 | 12.5 | 72.1 | 63.6 |
| March | 52 | 4 | 22.3 | 14.7 | 67.2 | 63.2 |
| April | 82 | 8 | 25.8 | 17.2 | 64.2 | 59.1 |
| May | 100 | 10 | 26.7 | 18.8 | 74.3 | 63.5 |
| June | 448 | 20 | 27.6 | 20.5 | 83.3 | 79.5 |
| July | 344 | 17 | 27.5 | 20.4 | 88.8 | 84.5 |
| August | 477 | 18 | 26.8 | 20.5 | 91.2 | 86.4 |
| September | 205 | 10 | 28.3 | 20.5 | 87.6 | 73.6 |
| October | 132 | 9 | 25.0 | 18.2 | 87.5 | 74.6 |
| November | 12 | 1 | 22.4 | 14.5 | 78.4 | 66.7 |
| December | 60.5 | 7 | 19.2 | 11.6 | 81.5 | 64.3 |
| Data Source: IMD Agro-AWS, KVK,Mokokchung ‘2023 | | | | | | |

* 1. Production and productivity of livestock, Poultry, Fisheries etc. in the district

|  |  |  |  |
| --- | --- | --- | --- |
| Category | Population | Production | Productivity |
| Cattle | | | |
| *Crossbred* | 726 | 520 MT | 3.5 lit/day lactation period of 270 days |
| *Indigenous* | 265 | 1 | 120kg in 12 months |
| *Crossbred* | 23900 | 1787.2 MT | 110 kg in 12 months |
| Goats | 415 | 972 kg | 10-14 kg per year |
| Pigs |  |  |  |
| *Crossbred* | 23900 | 1787.2 MT | 110 kg in 12 months |
| poultry | | | |
| Hens | - | - | - |
| *Desi* | 156750 | 83.8MT | 1 Kg in 6months |
| *Improved* | 18000 | 10MT | 1.5 kg in one month |
| Fish | | | |
| *Marine* |  |  |  |
| *Inland* | 408.50 ha | 1534 MT | 2581.5 kg/ha |

Note: Pl. provide the appropriate Unit against each enterprise

2.7 Details of Operational area / Villages (2023)

| Sl.  No. | Taluk/ Eleka | Name of the block | Name of the village | Major crops & enterprises | Major problem  Identified | Identified thrust area |
| --- | --- | --- | --- | --- | --- | --- |
| 1 |  | Ongpangkong (N) | Longkhum, Longsa, Mokokchung, Ungma, Aosettsu, Chubayimkum, Longmisa, Kubza, chuchuyimpang, Moalenden, Meyilong, Aolijen | Paddy, Maize, Tapioca  Ginger, Passion fruit Tea, Piggery, Poultry, weaving | Low productivity due to non adoption of improved technology, Majority of the farmers involved in cultivation of mix crops, lack of awareness on potentialities of floriculture, lack of irrigation facilities, unavailability of HYV seeds, post harvest management problem, lack of proper infrastructure and marketing network | Create awareness on fallow management and jhum intensification, Cultivation of both kharif and rabi vegetables, production of passion fruit, ginger, tapioca, tea on commercial scale, popularization of floriculture, handloom and handicraft, promotion of infrastructures and marketing network |
| 2 |  | Ongpangkong (s) | Chungtia, Aliba,Khensa, Mekuli, Mangmetong, Kinunger, Longkhum, Yimyu, Sabangya, Sattsu, Satier, Longjongkong | Paddy, Maize, Tapioca  Cucumber, Passion fruit, Ginger, Orange | Low productivity due to non adoption of improved technology, Indiscriminate use of inorganic products in cucumber cultivation, lack of awareness on INM, lack of upgrade dairy breeds, inadequate availability of fodder , insect pest problem, lack of extension activities | Create awareness on fallow management and jhum intensification, Organic Off season cucumber cultivation, development of dairy and fodder crops, production of orange. |
| 3 |  | Kobulong | Mopungchuket, Impur, Yisemyomg, Sungratsu, Chami, Longpha, Longjang, Khanimu, Yimchalu, Alongchem, Impur, Kubulong (C), Yimli(C), Longjang (C). | Paddy, Tapioca, Maize  Passion fruit, ginger, Banana, Piggery, Poultry, Dairy, Sericulture | Low productivity due to non adoption of improved technology, lack of irrigation facilities, unavailability of HYV seeds, post harvest management problem, pest /disease problem in crops and silkworm, lack of processing unit and marketing, lack of spinning & weaving centers , lack of awareness on citronella cultivation, Inbreeding, disease and nutrition in piggery | Create awareness on fallow management and jhum intensification, To increase productivity of passion fruit, ginger and vegetables, promotion on spinning and weaving centre of sericulture, popularization of citronella cultivation, awareness on breeding programme, prevention and control of disease, scientific feeding management |
| 4 |  | Changtongya | Chuchuyimlang,  Unger, Akhoya, Kelingmen, Changtongnya Old, Changtongnya New, Liroyim, Nukshiyim | Paddy, Tapioca, Maize, Coloccasia, banana, Orange, Pineapple Tea, piggery, Poultry, Fishery | Low productivity due to non adoption of improved technology, lack of awareness on value addition products, insect pest and disease problem, poor transportation and marketing facilities, lack of upgraded breeds and health centre | Create awareness on fallow management and jhum intensification, To increase production of banana, tapioca, orange, pineapple, development of tea, arecanut, betel vine, improvement of piggery, fishery and sericulture, |
| 5 |  | Mangkolemba | Longchemdang, Khar, Molungkimong, Yimjenkimomg, Waromung, Alongkima, Bibuia, Mongchen, Chungliyimsen, Japu, Athupumi, Longnak, Merayim, Nokon, Changki, Puniboto | Paddy, Maize, Tapioca, Orange, Pineapple, Arecanut, Tea, betel vine, fishery, cattle, piggery | Unavailability of HYV ( lowland paddy), Lack of knowledge on improved method of cultivation , lack of processing unit, insect pest and disease problem, lack of awareness on INM, poor skill in fishery pond management, financial constraint to take up in commercial scale, inadequate availability of ploughing bullock, swine diseases | Promotion of HYV (paddy), production of oilseed and pulses, production of orange, pineapple, arecanut, tea and fish. Breeding programme for cattle and training of draught animals, prevention & control of swine diseases |
| 6 |  | Longchem | Yajang A, Yajang B, Yajang C, Alongtaki, Changdang, Lakhuni, Longchem, Aonokpu, Nokpu Akumen, Tsurmen, Saring Yim, Lirmen, Lizo Model | Paddy, Tapioca, Maize, colocassia, Agar, Arecanut, betel vine, cattle, piggery | Unavailability of HYV ( lowland paddy), Lack of knowledge and awareness on improved method of cultivation on plantation crops, lack of processing unit, lack of awareness on INM, financial constraint for commercial cultivation, inadequate availability of ploughing bullock, swine diseases | Promotion of HYV (paddy), Commercial cultivation of arecanut, tea, rubber, betel vine, colocassia, orange, production of oilseeds and pulses, Breeding programme for cattle and training of draught animals, prevention & control of swine diseases |
| 7 |  | Tuli | Tuli Town, Merangkong village, Merangkong compound, Asangma, Luyong, Mulongyimsen, Aopenzu, Wameken, Tzudikong, Anaki old, Kangtsung, Kangtsung yimsen, Anaki yimsen, Anaki C | Paddy, Maize, Tapioca, Orange, Pineapple, Arecanut, Tea, betel vine, fishery, cattle, piggery, poultry | Unavailability of HYV ( lowland paddy), Lack of knowledge on improved method of cultivation , lack of processing unit, insect pest and disease problem, lack of awareness on INM, poor skill in fishery pond management, financial constraint to take up in commercial scale, inadequate availability of ploughing bullock, swine diseases, poultry breed | Promotion of HYV (paddy), production of oilseed and pulses, production of orange, pineapple, arecanut, tea and fish. Breeding programme for cattle and training of draught animals, prevention & control of swine diseases, introduction of improved breed of poultry |
| 8 |  | Tsurakong | Satsukba, Shihaphumi, Longtho, Medemyim, Moayimti, Chungtiayimsen, Watiyim, Chungtiayimsen, Aosenden, Aosungkum, Aokum, Vikuto, Tsurangkulem, Merangmen | Paddy, Tapioca, Maize  Passion fruit, ginger, Banana, Piggery, Poultry, Dairy, Sericulture | Low productivity due to non adoption of improved technology, lack of irrigation facilities, unavailability of HYV seeds, post harvest management problem, pest /disease problem in crops and silkworm, lack of processing unit and marketing, lack of spinning & weaving centers , lack of awareness on citronella cultivation, Inbreeding, disease and nutrition in piggery | Create awareness on fallow management and jhum intensification, To increase productivity of passion fruit, ginger and vegetables, promotion on spinning and weaving centre of sericulture, popularization of citronella cultivation, awareness on breeding programme, prevention and control of disease, scientific feeding management |
| 9 |  | Chuchuyimlang | Yaongyimti old, Yaongyimti new, Chuchuyimlang village, Salulamang, Chakpa, Longkong, Mongsenyimti, Chuchuyimlang town, Mongsenyimti C | Paddy, Maize, Tapioca  Ginger, Passion fruit Tea, Piggery, Poultry, weaving | Low productivity due to non adoption of improved technology, Majority of the farmers involved in cultivation of mix crops, lack of awareness on potentialities of floriculture, lack of irrigation facilities, unavailability of HYV seeds, post harvest management problem, lack of proper infrastructure and marketing network | Create awareness on fallow management and jhum intensification, Cultivation of both kharif and rabi vegetables, production of passion fruit, ginger, tapioca, tea on commercial scale, popularization of floriculture, handloom and handicraft, promotion of infrastructures and marketing network |

3. TECHNICAL ACHIEVEMENTS

3. A. Details of target and achievements of mandatory activities by KVK during 2023-24

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Discipline | OFT (Technology Assessment and Refinement) | | | | | | | | | | FLD (Oilseeds, Pulses, Maize, Other Crops/Enterprises) | | | | | | | | | |
| Number of OFTs | | | | | Number of Farmers | | | | | Number of FLDs | | | | | Number of Farmers | | | | |
| Targets | | Achievement | | | Targets | | Achievement | | | Targets | | Achievement | | | Targets | | Achievement | | |
| Agronomy | 3 | | 3 | | | 8 | | 8 | | | 4 | | 4 | | | 40 | | 40 | | |
| Horticulture | 3 | | 3 | | | 12 | | 12 | | | 2 | | 2 | | | 36 | | 36 | | |
| Soil conservation | 3 | | 2 | | | 12 | | 6 | | | 1 | | 1 | | | 20 | | 17 | | |
| Pl. Protection | 2 | | 2 | | | 6 | | 6 | | | 2 | | 2 | | | 8 | | 8 | | |
| Animal Science | 4 | | 4 | | | 21 | | 21 | | | 2 | | 2 | | | 10 | | 11 | | |
| **Total** | **15** | | **14** | | | **59** | | **53** | | | **11** | | **11** | | | **114** | | **112** | | |
| Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit) | | | | | | | | | | | | Extension Activities | | | | | | | |
| Number of Courses | | | | | | | Number of Participants | | | | | Number of activities | | | | | Number of participants | | |
| Clientele | | Targets | | Achievement | | | Targets | | Achievement | | | Targets | | Achievement | | | Targets | | Achievement |
| **Agronomy** | |  | |  | | |  | |  | | | 108 | | 193 | | | 2850 | | 4040 |
| Farmers | | 15 | | 22 | | | 293 | | 666 | | |
| **Horticulture** | |  | |  | | |  | |  | | |
| Farmers | | 9 | | 11 | | | 180 | | 151 | | |
| Rural youth | | 2 | | 3 | | | 50 | | 56 | | |
| **Plant Protection** | |  | |  | | |  | |  | | |
| Farmers | | 6 | | 6 | | | 150 | | 170 | | |
| Rural youth | | 2 | | 4 | | | 40 | | 71 | | |
| Ext. Functionaries | | 1 | | 1 | | | 25 | | 20 | | |
| **Soil conservation** | |  | |  | | |  | |  | | |
| Farmers | | 5 | | 11 | | | 90 | | 226 | | |
| **Animal Science** | |  | |  | | |  | |  | | |
| Farmers | | 5 | | 5 | | | 100 | | 171 | | |
| Rural youth | | 4 | | 5 | | | 75 | | 131 | | |
| Total | | **49** | | **69** | | | **1003** | | **1733** | | | **108** | | **193** | | | **2850** | | **4040** |
| Seed Production (ton.) | | | | | | | | | | Planting material (Nos. in lakh) | | | | | | | | | |
| Target | | | | | Achievement | | | | | Target | | | | | Achievement | | | | |
| 0.5 | | | | | 0.42 (millet & mustard) | | | | |  | | | | |  | | | | |
| **Total** | | | | | **0.42** | | | | |  | | | | |  | | | | |

1. B. Abstract of interventions undertaken during 2023

| Sl. No | Thrust area | Crop/  Enterprise | Identified problems | Interventions | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Title of OFT if any | Title of FLD if any | Title of Training if any | Title of training for extension personnel | Extension activities | Supply of seeds, planting materials etc. |
| 1 | Millet production | Foxtail millet | Low cultivation of millet in Area and production |  | Promotion of Millet under Natural Farming practices | Importance of Millet with special reference to Its nutritional and climate resilient aspect | Importance of millet and its role in human health | Training, Method Demonstration, Diagnostic visit, Monitoring | Seeds & Materials for Jeevamprit preparation |
| 2 | Oilseed Production | Mustard | Less utilization of Jhum fallows after Rice |  | Cultivation of Mustard under Rice based cropping system | Crop diversification to increase cropping intensity for better income generation |  | Training, Method Demonstration, Diagnostic visit, Monitoring, field day | Seeds |
| 3 | Soybean | Low seed replacement with improved varieties | Performance evaluation of Soybean Var:MACS-1460 | - | Improved Oilseed production Technology | - | Method Demonstration, Diagnostic visit, Monitoring | Seeds |
| 4 | Soybean | Mono cropping,  poor nutrient management | Varietal evaluation of Soybean Var: VL soya 89 |  | Improved cultivation practises on Soybean |  | Training, Demonstration and Field visit | Seeds |
| 5 | Tillage management | Pea | Intensive tillage leads to high evaporative moisture loss | Utera cropping of pea under rice based cropping system |  | Cultivation practises of Field pea |  | Training, Demonstration and Field visit | Seeds |
| 6 | Cereal production | Sweetcorn | Long duration of existing variety and low yield |  | Popularization of sweet corn (Var VL sweet corn-2). | Improved cultivation practises on sweet corn |  | Training, Field visit, field day | Seeds |
| 7 | Tuber production | Potato | Low production in normal cultivation practices |  | Demonstration on Potato (Var:Garima) | Production technology and INM in Potato |  | Method demonstration, Field visit, field day | Seeds |
| 8 | Soil Nutrient management | Field pea | No nutrient management practices followed for upland pea | Effect of bio-fertilizers on Field Pea under upland condition | - | - | - | Field visits, monitoring, supervision | Biofertilizers & fertilizers |
| 9 | Soil water management | Broccoli/ cabbage | Poor/ No irrigation management practice | Assessment of Soil Moisture Indicator for scheduling of irrigation in winter crops | - | - | - | Field visits, monitoring and supervision | Soil Moisture Indicator |
| 10 | Soil nutrient management | Potato | No nutrient management followed | - | Liming in Potato | Training on nutrient management in potato | - | Field visits, monitoring and supervision | Potato tubers, agri lime, vermicompost fertilizers |
| 11 | Evaluation of breed | poultry | Lack of awareness among the farmers | Introduction of Kadaknath chicken under backyards |  |  |  | Monitoring and supervision | Supply of day old chicks |
| 12 | Small scale income generation | poultry | Low income from local chicken | Vana raja poultry for increasing farmers income |  |  |  | Monitoring and supervision | Supply of day old chicks |
| 13 | Feed management | Fodder maize | Lack of awareness amongst the farmer on quality feed and fodder | Introduction of Maize var.HQPM-1 for livestock and poultry feeding. |  |  |  | Monitoring and supervision | Supply of seeds |
| 14 | Evaluation of breed | poultry | Low production of local chicken | Performance of Rainbow Rooster poultry breed under backyard system. |  |  |  | Monitoring and supervision | Supply of day old chicks |
| 15 | Nutrition management | Poultry | High cost of concentrate feeds |  | Demonstration on Azolla (A. caroliliana) feeding dietary supplementation in backyard poultry feeding. |  |  | Monitoring and supervision | Azolla bed, green nets, fresh azolla |
| 16 | Evaluation of breed | Poultry | Low performance of local chickens |  | Demonstration on performance of Kamrupa chickens in backyards |  |  | Monitoring and supervision | Supply of day old chicks |
| 17 | Integrated pest management | Maize | Heavy infestation of fall armyworm | IPM on Fall armyworm |  |  |  | Monitoring, field inspection, advisory services, collection of datas and supervision | Supply of bioagents *Metarrhizium anisopliae, Beauveria bassiane & Bacillus thuringiensis* |
| 18 | Integrated disease management | Potato | High incidence of late blight leading to poor yield |  | Integrated management of late blight disease of potato |  |  | Monitoring, field inspection, advisory services, collection of datas and supervision | Supply of bioagents *Trichoderma viride & Bacillus subtilis* |
| 19 | Biological control | Paddy | Heavy infestation of stem borers leading to unfilled grains |  | Biological control of rice stem borer in upland paddy |  |  | Monitoring, field inspection, advisory services, collection of datas and supervision | Supply of Tricho cards |
| 20 | Other enterprises | Oyster mushroom | Scientific method of cultivation not followed by the farmers |  | Popularization of Oyster mushroom |  |  | Monitoring, advisory services, field visits and supervision | Oyster mushroom spawns, plastic polybag, ropes etc |
| 21 | Varietal evaluation | French Beans | Poor quality and low yield | Performance assessment of High yielding Bush type French Bean for better quality and yield. |  |  |  | Training, Demonstration & Field visit | Supply of Seeds |
| 22 | Varietal evaluation | Garden Pea | Low yield | Organic production of Garden pea for enhancing the income of farmers |  |  |  | Training, Demonstration & Field visit | Supply of Seeds |
| 23 | Crop production | Ginger | Low yield, Poor nutrient management | Effect of Micro-Nutrient mixture on Ginger for better rhizome development and yield |  |  |  | Training, Demonstration & Field visit | Supply Micro-Nutrient mixture |
| 24 | Crop production | Garden Pea | low yield of existing variety |  | Popularization of Garden Pea Var. Pusa Pragati |  |  | Training, Demonstration & Field visit | Supply of Seeds |
| 25 | Value Addition | Vegetable | Wastage of locally available vegetable during peak season |  | Popularization of locally available vegetables as value added products(Pickles) for more income generation. |  |  | Training and Demonstration | Packaging materials and ingredients |

3.1 Achievements on technologies assessed and refined during 2023

A.1 Abstract of the number of technologies assessed\* in respect of crops/enterprises

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Thematic areas | Cereals | Oilseeds | Pulses | Commercial Crops | Vegetables | Fruits | Flower | Plantation crops | Tuber Crops | TOTAL |
| Varietal Evaluation |  | 2 |  |  | 1 |  |  |  |  | 2 |
| Seed / Plant production |  |  |  |  |  |  |  |  |  |  |
| Weed Management |  |  |  |  |  |  |  |  |  |  |
| Integrated Crop Management |  |  | 1 |  |  |  |  |  |  | 1 |
| Integrated Nutrient Management |  |  | 1 |  | 2 |  |  |  |  | 3 |
| Integrated Farming System |  |  |  |  |  |  |  |  |  |  |
| Mushroom cultivation |  |  |  |  |  |  |  |  |  |  |
| Drudgery reduction |  |  |  |  |  |  |  |  |  |  |
| Farm machineries |  |  |  |  |  |  |  |  |  |  |
| Value addition |  |  |  |  |  |  |  |  |  |  |
| Integrated Pest Management | 1 |  |  |  |  |  |  |  | 1 | 2 |
| Integrated Disease Management |  |  |  |  |  |  |  |  |  |  |
| Resource conservation technology |  |  |  |  | 1 |  |  |  |  | 1 |
| Small Scale income generating enterprises |  |  |  |  |  |  |  |  |  |  |
| **TOTAL** | **1** | **2** | **2** |  | **4** |  |  |  | **1** | **10** |

\* *Any new technology, which may offer solution to a location specific problem but not tested earlier in a given micro farming situation.*

A.2. Abstract of the number of technologies refined\* in respect of crops/enterprises

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Thematic areas | Cereals | Oilseeds | Pulses | Commercial Crops | Vegetables | Fruits | Flower | Plantation crops | Tuber Crops | TOTAL |
| Varietal Evaluation |  |  |  |  |  |  |  |  |  |  |
| Seed / Plant production |  |  |  |  |  |  |  |  |  |  |
| Weed Management |  |  |  |  |  |  |  |  |  |  |
| Integrated Crop Management |  |  |  |  |  |  |  |  |  |  |
| Integrated Nutrient Management |  |  |  |  |  |  |  |  |  |  |
| Integrated Farming System |  |  |  |  |  |  |  |  |  |  |
| Mushroom cultivation |  |  |  |  |  |  |  |  |  |  |
| Drudgery reduction |  |  |  |  |  |  |  |  |  |  |
| Farm machineries |  |  |  |  |  |  |  |  |  |  |
| Post Harvest Technology |  |  |  |  |  |  |  |  |  |  |
| Integrated Pest Management |  |  |  |  |  |  |  |  |  |  |
| Integrated Disease Management |  |  |  |  |  |  |  |  |  |  |
| Resource conservation technology |  |  |  |  |  |  |  |  |  |  |
| Small Scale income generating enterprises |  |  |  |  |  |  |  |  |  |  |
| TOTAL |  |  |  |  |  |  |  |  |  |  |

\* Technology that is refined in collaboration with ICAR/SAU Scientists for improving its effectiveness.

A.3. Abstract of the number of technologies assessed in respect of livestock / enterprises

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Thematic areas | Cattle | Poultry | Sheep | Goat | Piggery | Rabbitery | Fisheries | TOTAL |
| Evaluation of Breeds |  | 2 |  |  |  |  |  |  |
| Nutrition Management |  | 1 |  |  |  |  |  |  |
| Disease of Management |  |  |  |  |  |  |  |  |
| Value Addition |  |  |  |  |  |  |  |  |
| Production and Management |  | 1 |  |  |  |  |  |  |
| TOTAL |  | **4** |  |  |  |  |  |  |

A.4. Abstract on the number of technologies refined in respect of livestock / enterprises

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Thematic areas | Cattle | Poultry | Sheep | Goat | Piggery | Rabbitery | Fisheries | TOTAL |
| Evaluation of Breeds |  |  |  |  |  |  |  |  |
| Nutrition Management |  |  |  |  |  |  |  |  |
| Disease of Management |  |  |  |  |  |  |  |  |
| Production and Management |  |  |  |  |  |  |  |  |
| Feed and Fodder |  |  |  |  |  |  |  |  |
| Small Scale income generating enterprises |  |  |  |  |  |  |  |  |
| TOTAL |  |  |  |  |  |  |  |  |

A.5. Results of On Farm Testing (OFT)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl. No | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined (Data on the parameter should be provided) | | Feedback from the farmer | Feedback to the Researcher | B:C Ratio |
| Technology | Farmers practise |  |  |  |
| 1 | Performance evaluation of Soybean Var:MACS-1460 | Low seed replacement with improved varieties | MACS- 1460 | Soyabean | 2 | Av. Pl Height: 59 cm  Days to maturity: 98  No. Of seed per pods: 32  Yield : 14.23qt/ha | Av. Pl Height: 52 cm  Days to maturity: 129  No. Of seed per pods: 23  Yield : 10.78qt/ha | More yield and no hairs on the pods makes it easier to trash | - | 2.6 |
| 2 | Varietal evaluation of Soybean Var.VL soya 89 | Low yield of existing variety, Poor nutrient management | VL soya 89 | Soyabean | 3 | 1.Av. Pl. height-50cm  2.No.of pods/plant-48.5  3.Days to maturity-145 days  4. yield-16.5q/ha  5.N R-34000 | 1.Av. Pl. height-33cm  2. No.of pods/plant-13.4  3.Days to maturity-135 days  4.Yield-11.5qt/ha  5.N R-22000 | Gives higher yield than the existing varieties | Performs better in higher altitude. | 2.13 |
| 3 | Utera cropping of pea under rice based cropping system | Intensive tillage leads to high evaporative moisture loss | Utera cropping | Field Pea | 3 | 1.plant height(cm)-56.4  2.No. of pods/plant-6.4  3. test weight (100 seeds)-14g  2.Yield/ha -13.5qt  3.N R-30500 | 1.Yield-10.5qt/ha  2.N R-25000 | Gives higher yield under the system | - | 2.08 |
| 4 | Effect of bio-fertilizers on Field Pea under upland condition | No nutrient management practices followed for upland pea | T1: Rhizobium @ 200gm/10 kg seed  T2: 100% RDF+ T1  T3: 100% RDF | Field pea var.aman | 3 | **T1: Av. Yield: 15 qt/ha**  **B/harvest**  pH-5.56  Av.N- 430.1  Av.P- 21.45  Av.K- 231.8  **A/harvest**  pH-5.03  Av.N- 486.8  Av.P- 16.98  Av.K- 160.  **T2: Av Yield 13.7qt/ha**  **B/ harvest**  pH-5.83  Av.N- 447.5  Av.P- 37.53  Av.K- 177.7  **A/ harvest**  pH-5.34  Av.N- 491.7  Av.P- 48.26  Av.K- 145.6  **T2: Av. Yield 12.8qt/ha**  **B/harvest**  pH-5.2  Av.N- 480.1  Av.P- 13.40  Av.K- 58.51  **A/harvest**  pH-5.03  Av.N- 430  Av.P- 9.831  Av.K- 23.23 | Av. Yield: 15.2qt/ha  Before sowing  pH-5.48  Av.N- 442.7  Av.P- 54.6  Av.K- 212.3  After harvest  pH- 5.36  av.N- 534.9  Av.P- 61.66  Av.K-125.6 | The technology is acceptable as the crop needs nutrients to thrive better and requested for biofertilizers to be made available to them at reasonable rates |  | 1.4  1.4  1.3  1.24 |
| 5 | Assessment of Soil Moisture Indicator for scheduling of irrigation in winter crops | Poor/ No irrigation management practice | Scheduling irrigation using the Soil Moisture Indicator | Broccoli & cabbage | 3 | Broccoli:  Av. Yield 145 qt/ha  No. of irrigation saved per crop: 12  Cabbage:  Av. Yield : 214qt/ha  No. of irrigation saved per crop: 12 | Broccoli: Av. Yield: 142 qt/ha  No. Irrigation per crop: 42  Cabbage:  Av. Yield : 205qt/ha  No. Of irrigation per crop: 42 | Easy to operate and quite handy. Will be better if the price is little more reasonable. | A very good technology for helping the farmers schedule irrigation | Broccoli  4.8  4.0  Cabbage  4.45  3.6 |
| 6 | IPM on Fall armyworm | Heavy infestation of fall armyworm (upto 50%) | 1 | Maize | 3 | Av. Yield: 20.8 qt/ha  % infestation: 30% | Av. Yield: 12.5 qt/ha  % infestation: 58% | The technology was acceptable to the farmers and the yield was also increased | changing the dates of sowing to evade pest need to be researched | T1- 1.6  T2- 1.1 |
| 7 | Integrated management of late blight disease of potato | High incidence of late blight disease leading to poor yield | 1 | Potato | 3 | Av. Yield: 180.25 qt/ha  Disease incidence: 33% | Av. Yield: 128.75 qt/ha  Disease incidence: 55% | The technology was acceptable to the farmers as it was gave good results and environment friendly | Although the Bio agents are effective it has a short shelf life, difficult to transport | T1-2.17  T2- 1.65 |
| 8 | Introduction of kadaknath chicken under backyard | Lack of awareness amongst the farmers | 1 | poultry | 5 | a. age(days) at first egg lay : 194  b. weight of bird at laying time in grams: 1412gm  c. egg production at 52 weeks: 64  d. Net return in Rs/bird: 292 | a. Average egg produced by local breed at 52 weeks= 30 no’s/ bird/ yr.  b. net return per bird= Rs.66 | The black chicken breed meat has a good taste. Its eggs are similar in size to desi chicken eggs. | More breeds on poultry for high priced verities needs to be researched and developed to be tested at farmers’ field. | 1.54 |
| 9 | Vana raja for income generation | Low production of local chicken | 1 | poultry | 5 | a. age at first egg lay: 177 days  b. average weight of eggs at first lay: 41gm  c. egg production at 52 weeks: 87  d. weight of males at 6 months in grams: 2700  e. weight of females at 6 months in grams: 2355  f. Net return in Rs/bird: 315 | a. Average egg produced by local breed at 52 weeks= 28 to 30 no’s/ bird/ yr.  b. net return per bird=Rs.60 | Vana raja birds are good to rear in backyards. They are better performing than local breed and fetches better returns. | Further assessment required along with cross breeding with local breeds to test the performance of the progeny. | 1.48 |
| 10 | Introduction of maize variety HQPM-1 for livestock and poultry | Lack of awareness amongst the farmers on quality feeds and fodders. | 1 | Feeds and fodder | 3 | a. days to maturity: 106.66  b. cob length in cm: 15.6  c. no. of seeds per cob: 243  e. yield in qt/ha: 28  f. Net income in Rs. per ha: 11550 | Yield =20qt/ha | the maize performance is good and can be sown both at normal sowing time (March\_ Apr.) as well as late sowing (even Sept.). | Different sowing time to be tested to assess best time of sowing. | 2.22 |
| 11 | Performance of Rainbow Rooster bird under backyard system | Low production of local chicken | 1 | poultry | 8 | a. Avg. body weight  i. male: 2779  ii. female: 2457  b. age at first lay: 173  c. egg production at 52 weeks: 81  d. disease incidence: 3.5%  e. Net return/bird in Rs.: 1151 | a. Average egg produced by local breed at 52 weeks= 25 no’s/ bird/ yr.  b. net return per bird= Rs.70  c. B:C ratio =1.38 | Good performance and looks are good due to its multi colour. | Further assessment needed under different rearing system including intensive method of rearing. | 1.55 |
| 12 | Performance assessment of High yielding bush type French Beans for better quality and yield | Poor quality and yield | 1 | French Beans | 3 | 1.Pl. height: 45cm  2.No.of pods/plant: 16.6  3.Yield/Ha: 68qt/ha | 1.Pl. height:33cm  2.No.of pods/plant: 10  3.Yield/Ha: 42qt/ha | Satisfied with the technology but difficult in getting the seeds | Needs further assessment | 2.4 |
| 13 | Organic production of Garden pea for enhancing the income of farmers | Low yield of existing variety | 1 | Garden Pea | 3 | 1.Pl. height: 82cm  2.No.of pod/plant:15.2  3.Seed/pod: 8.2  4.Pod length: 9.1cm  5.Yield/ha: 85qt/ha | 1.Pl. height: 62cm  2.No.of pod/plant:10  3.Seed/pod: 6  4.Pod length: 6.2cm  5.Yield/ha: 48qt/ha | Satisfied with the technology | Needs further assessment | 2.8 |
| 14 | Effect of Micro-Nutrient mixture on Ginger for better rhizome development and yield | Low yield, Poor nutrient management | 1 | Ginger | 6 | 1.No.of tillers/plant(at 4-5 months of the crop): 7  2.Yield/plant: 375.55gm  3.Yield/unit area(at Harvest): 143qt/ha | 1.No.of tillers/plant(at 4-5 months of the crop): 4  2.Yield/plant: 215.45gm  3.Yield/unit area(at Harvest): 110qt/ha | Better rhizome development and more yield | Further assessment needed | 4.5 |

3.2 Achievements of Frontline Demonstrations during 2023

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

List of technologies demonstrated during previous years and popularized during 2022-23 and recommended for large scale adoption in the district

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No** | **Crop and Variety/**  **Enterprise** | **Technology demonstrated** | **Horizontal spread of technology** | | |
| No. of villages | No. of farmers | Area in ha |
| 1 | Poultry | Demonstration on azolla (A. caroliniana) in poultry | 3 | 6 | 50 birds per farmer |
| 2 | Poultry | Demonstration on Kamrupa chicken | 3 | 5 | 50 birds per farmer |
| 3 | Paddy | Introduction of *Trichogramma chilonis* 25 days after transplanting 3 times at fortnightly interval | 1 | 8 | 1 |
| 4 | Oyster mushroom | Soaking of the straw substrate overnight and steam sterilization for half an hour at 85˚C. | 3 | 8 | 20 pkts of spawn per unit (farmer) |

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

b. Details of FLDs conducted during reporting period (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 | Farming situation  (Rainfed/ Irrigated, Soil type, altitude) | Status of soil (Kg/ha) | | |
| N | P | K |
| Proposed | Actual | SC/ST | Others | T |  |  |  |  |  |
| 1 | Millet (foxtail millet) | Nutri-cereals production | Promotion of millet under Natural Farming | Kharif, 2023 | 2 | 2 | 10 | - | 10 | - | Rainfed |  |  |  |
| 2 | Mustard | Oilseed production | Cultivation of Mustard under Rice based cropping system | Rabi, 2023 | 2 | 2 | 10 | - | 10 | - | Rainfed |  |  |  |
| 3 | Sweet corn | Popularization of sweet corn | VL.sweetcorn-1 | Kharif | 1 | 1 | 10 |  | 10 | - | Rainfed |  |  |  |
| 4 | Potato | Tuber production | Kufri Garima | Rabi | 1 | 1 | 10 |  | 10 | - | Rainfed |  |  |  |
| 5 | Potato var. Kufri jyoti | Integrated nutrient management | Application of Lime @ 400 kg/ha in furrows + 50% RDF (120:120:60)+ 1 t/ha vermicompost | Rabi, 2023 | 2 | 2 | 17 | - | 17 | NA | Rainfed | - | - | - |
| 6 | Paddy | Integrated pest management | Introduction of *Trichogramma chilonis* 25 days after transplanting 3 times at fortnightly interval | Kharif 2023 | 1 | 1 | 8 |  |  | - | Rainfed |  |  |  |
| 7 | Ginger | Popularization of Garden Pea Var. Pusa Pragati | Garden Pea | Rabi 2023 | 1 | 1 | 6 |  | 6 | - | Rainfed |  |  |  |
| 8 | Value addition | Popularization of locally available vegetables as value added products(Pickles) for more income generation. | Vegetables(Chilli. Ginger,African egg plant,Brinjal) | Kharif 2023 | 3 | 3 | 30 |  | 30 | - |  |  |  |  |

c. Performance of FLD on Crops during 2023

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl. No. | Crop | Thematic area | Area (ha.) | Avg. yield (Q/ha.) | | % increase in Avg. yield | Additional data on demo. Yield (Q/ha.) | | Data on parameters other than yield, e.g., disease incidence, pest incidence etc. | | Econ. of demo. (Rs./ha.) | | | | Econ. of check (Rs./Ha.) | | | |
| Demo. | Check | H\* | L\* | GC | GR | NR | BCR | GC | GR | NR | BCR |
| Demo | Local |
| 1 | Millet  (Foxtail millet) | Nutri-cereal production | 2 | 16.35 | 14.6 | 12 | 18.4 | 14.3 | - | - | 33500 | 81750 | 48250 | 2.44 | 30300 | 73000 | 42700 | 2.40 |
| 2 | Mustard | Oilseed production | 2 | 11.47 | 8.43 | 36.1 | 13.91 | 9.03 | - | - | 19500 | 34410 | 14910 | 1.76 | 15000 | 25290 | 7290 | 1.4 |
| 3 | Sweet corn | Popularization of sweet corn | 1 | 61.5 | 46 | 33.69 | 85 | 38 |  |  | 47000 | 107500 | 60500 | 2.29 | 45000 | 95000 | 50000 | 2.0 |
| 4 | Potato | Tuber production | 1 | 110.4 | 88.7 | 24.46 | 130 | 90.8 |  |  | 49960 | 84010 | 65050 | 2.30 | 35000 | 71000 | 36000 | 2.02 |
| 5 | Potato var. Kufri jyoti | Integrate nutrient management | 2 | 170.7 | 118.7 | 30.45 | 190 | 150 | - | - | 23000 | 512250 | 277250 | 2.17 | 215000 | 356250 | 141250 | 1.65 |
| 6 | Paddy | Integrated pest management | 1 | 16 | 10.5 | 34.37 | 18.5 | 9.5 | 10% | 55% | 38,000 | 82,000 | 44,800 | 1.4 | 30,300 | 52,300 | 22,000 | 1 |
| 7 | Garden Pea | Popularization of Garden Pea Var. Pusa Pragati | 1 | 50 | 40 | 25% | 55 | 45 |  |  | 30000 | 80500 | 50500 | 2.68 | 25000 | 60000 | 35000 | 2.4 |
| 8 | Value addition | Popularization of locally available vegetables as value added products (Pickles) for more income generation. | 3SHG | - | - | - | - | - | Return of value added vegetables 1kg: Rs 500 | Fresh vegetable 1kg=Rs 50 | 10000 | 25000 | 15000 | 2.5 | - | - | - | - |

\*H-Highest recorded yield, L- Lowest recorded yield\*\* GC- Gross Cost, GR- Gross Return, NR- Net Return, BCR- Benefit-Cost Ratio Produce Sale Price must be as per MSP or Registered Marketing Society Pl. apply the formula: Net Return= Gross Return-Gross Cost, BCR= GR/GC

d. Extension and Training activities under FLD on Crops

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sl.No. | Activity | No. of activities organised | Date | Number of participants | | | Remarks |
| Gen | SC/ST | Total |
| 1 | Field days | 3 | 15/06/23, 7/03/23, 13/02/24 |  | 29 | 29 |  |
| 2 | Farmers Training | 9 | 13/03/23, 16/10/23, 29/3/23,11/10/23,30/10/23, 22/08/23, 24/08/23, 14/09/23 |  | 137 | 137 |  |
| 3 | Media coverage |  |  |  |  |  |  |
| 4 | Training for extension functionaries |  |  |  |  |  |  |
|  | Total | 12 |  |  | 166 | 166 |  |

e. Details of FLD on Enterprises

(i) Farm Implements

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Name of the implement | Crop | No. of farmers | Area (ha) | Performance parameters /  Indicators | \* Data on parameter in relation to technology demonstrated | | % change in the parameter | Remarks |
| Demon. | Local check |
|  |  |  |  |  |  |  |  |  |

*\* Field efficiency, labour saving etc.*

(ii) Livestock Enterprises

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl | Enterprise/ Category | Thematic area | Name of Technology | No. of farmers | No. of unit | No. of animals, poultry birds etc. | Major Performance parameters / indicators | | % change in the parameter | Econ. of demo. (Rs./Ha.) | | | | Econ. of check (Rs./Ha.) | | | | Remarks |
| GC\*\* | GR\*\* | NR | BCR | GC | GR | NR | BCR |
| Demo | Check |
| 1 | Poultry | nutrition | Demonstration on Azolla (*A. caroliliniana*) feeding as dietary supplementation in backyard poultry | 6 | 6 | 50 birds per farmer | a. demonstration yield in kg/bird= avg.2.7  b. egg production per bird at 40th week= 75 | a. Weight of local check in kg/ bird= avg. 2.5  b. egg production per bird at 40th week= 73 | 14.81 | 428 | 1040 | 616 | 2.45 | 640 | 1020 | 380 | 1.59 | Azolla feeding in poultry chicken reduces cost of production and therefore it is a sustainable option as cost of concentrates are high |
| 2 | Poultry | Evaluation of breed | Demonstration on Kamrupa chicken in backyards | 5 | 5 | 50 birds per farmer | a. demonstration yield in kg/bird= 2.06  b. egg production per bird at 40th week= 42 | a. Weight of local bird in kg/ bird= 1.45  b. annual egg produced per bird = 30 | 32 | 680 | 1080 | 400 | 1.58 | 180 | 250 | 70 | 1.36 | Kamrupa chicken are almost similar in morphological features to local breed but can perform better than local breed under backyards |

(iii) Fisheries

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl. No. | Category, e.g. Common carp, ornamental fish etc. | Thematic area | Name of Technology | No. of farmers | No. of units | No. of fish/ fingerlings | Major Performance parameters / indicators | | % change in the parameter | Other parameters (if any) | | Econ. of demo. (Rs./Ha.) | | | | Econ. of check (Rs./Ha.) | | | | Remarks |
| Demo | Check | GC\*\* | GR\*\* | NR\*\* | BCR\*\* | GC | GR | NR | BCR |
| Demo | Check |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

*\*\* GC- Gross Cost, GR- Gross Return, NR- Net Return, BCR- Benefit-Cost Ratio*

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

(iv)Other enterprises

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl. No. | Category/ Enterprise, e.g., mushroom, vermicompost, apiculture etc. | Thematic area | Name of Technology | No. of farmers | No. of units | Major Performance parameters / indicators | | % change in the parameter | Other parameters (if any) | | Econ. of demo. (Rs./Ha.) | | | | Econ. of check (Rs./Ha.) | | | | Remarks |
| Demo | Check | GC\*\* | GR\*\* | NR\*\* | BCR\*\* | GC | GR | NR | BCR |
| Demo | Check |
| 1 | Mushroom | Other enterprises | Oyster mushroom ( *Pleurotus obstreatus )* | 8 | 3 | i)Avg yield – 1.1 kg/bag  ii)Single wt of the pileus- 52.8gms  iii) time required for harvest- 26 days |  |  |  |  | 5,200 | 11,500 | 6300 | 2.2:1 |  |  |  |  |  |

*\*\* GC- Gross Cost, GR- Gross Return, NR- Net Return, BCR- Benefit-Cost Ratio*

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

(v) Farm Implements and Machinery

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl. No. | Name of implement | Crop | Name of Technology demonstrated | No. of farmers | Area (In ha.) | Field observation (Output/ man-hours) | | % change in the parameter | Labour reduction (Man days) | Cost reduction (Rs. per ha. or Rs. per unit etc.) | Remarks |
| Demo | Check |
|  |  |  |  |  |  |  |  |  |  |  |  |

*f. Performance of FLD on Crop Hybrids*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl. No. | Crop | Name of hybrids | Area (ha.) | No. of farmers | Avg. yield (Q/ha.) | | % increase in Avg. yield | Additional data on demo. yield (Q/ha.) | | Econ. of demo. (Rs./Ha.) | | | | Econ. of check (Rs./Ha.) | | | |
| Demo. | Check | H\* | L\* | GC\*\* | GR\*\* | NR\*\* | BCR\*\* | GC | GR | NR | BCR |
|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

*\*H-Highest recorded yield, L- Lowest recorded yield*

*\*\* GC- Gross Cost, GR- Gross Return, NR- Net Return, BCR- Benefit-Cost Ratio*

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

3.3. Achievements on Training during 2023

\*\*(Attached separate in Excel format)

Annexure 1: Details of Training Programme (On Campus including Sponsored On Campus) for Farmers, Farm Women, Rural Youth and Extension Personnel

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Discipline | Area of training | Title of the training programme | Date | Duration in days | Venue | Please specify Beneficiary group | General participants | | | SC/ST | | | Grand Total | | |
| M | F | T | M | F | T | M | F | T |
| Horticulture | Value addition | Post-harvest management and value addition in horticulture crops | 31.10.2023 | 1 | KVK office | RY |  |  |  | 3 | 19 | 22 | 3 | 19 | 22 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Annexure 2: Details of Training Programme (Off Campus including Sponsored Off Campus) for Farmers, Farm Women, Rural Youth and Extension Personnel

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Discipline | Area of training | Title of the training programme | Date | Duration in days | Venue | Please specify Beneficiary group | General participants | | | SC/ST | | | Grand Total | | |
| M | F | T | M | F | T | M | F | T |
| Agronomy | Crop diversification | Cultivation of millets under Natural farming | 8/04/23 | 1 | Longjang village | Farmer & Farm women |  |  |  | 9 | 6 | 15 | 9 | 6 | 15 |
| Integrated crop management | \*Integrated orchard management | 12/05/23, | 1 | Youngyimti old | Farmer & Farm women |  |  |  | 111 | 10 | 121 | 111 | 10 | 121 |
| \*Management of young orchard cum demonstration on pruning & training | 15/05/23 | 1 | Youngyimti new village, | Farmer & Farm women |
| \*Management of young orchard cum demonstration on pruning & training | 17/11/23 | 1 | Phangsang | Farmer & Farm women |
| Nutrient management | Integrated nutrient management in young orchard cum demonstration on nutrient application | 27/06/23, 28/06/23, | 1 | Chuchuyimlang, | Farmer & Farm women |  |  |  | 108 | 8 | 116 | 108 | 8 | 116 |
| Integrated nutrient management in young orchard cum demonstration on nutrient application | 28/06/23 | 1 | Youngyimti old | Farmer & Farm women |
| Integrated nutrient management in young orchard cum demonstration on nutrient application | 30/06/23 | 1 | Phangsang & Youngyimti New | Farmer & Farm women |
| Integrated farming | \*Role of micro-nutrients in Natural farming | 31/08/23 | 1 | youngyimti new, | Farmer & Farm women |  |  |  | 21 | 14 | 35 | 21 | 14 | 35 |
| Cropping system | \*Intercropping of winter vegetables in fruit orchard | 6/09/23 | 1 | Phangsang | Farmer & Farm women |  |  |  | 108 | 25 | 133 | 108 | 25 | 133 |
| \*Double cropping of oilseed in rice based cropping system | 7/09/23 | 1 | Cchuchuyimlang | Farmer & Farm women |
| \*Double cropping of oilseed in rice based cropping system | 16/10/23 | 1 | Aliba | Farmer & Farm women |
| Cropping system | Improved cultivation practices on sweetcorn and Soybean | 29/3/23 | 1 | Asangma | Farm women |  |  |  | 0 | 20 | 20 | 0 | 20 | 20 |
| Crop diversification | Improved production technologies of Kharif crops | 14/4/23 | 1 | Mokokchung village | Farmer & Farm women |  |  |  | 2 | 15 | 17 | 2 | 15 | 17 |
| Crop diversification | Management of Jhum field crops | 5/5/23 | 1 | Mongsenyimti | Farmer &farm women |  |  |  | 15 | 12 | 27 | 15 | 12 | 27 |
| Cropping system | Improved package of practices on Maize cultivation | 18/5/25 | 1 | Kinunger | Farmer &farm women |  |  |  | 1 | 25 | 26 | 1 | 25 | 26 |
| Crop diversification | Management of Jhum field crops | 31/5/23 | 1 | Chuchuyimlang | Farmer &farm women |  |  |  | 18 | 29 | 47 | 18 | 29 | 47 |
| Cropping system | Training cum demonstration on doubling farmers income | 15/6/23 | 1 | Yimchalu | Farmer and farm women |  |  |  | 2 | 18 | 20 | 2 | 18 | 20 |
| Weed management | Awareness on Parthenium weeds | 17/8/23 | 1 | Kinunger | Farm women |  |  |  | 0 | 15 | 15 | 0 | 15 | 15 |
| Cropping system | Cultivation practises of Pea and Lentil crops | 14/9/23 | 1 | Kinunger | Farm women &rural youth |  |  |  | 2 | 21 | 23 | 2 | 21 | 23 |
| Integrated nutrient management | Production technology and INM in Potato crop | 11/10/23 | 1 | Longjang | Farmer& Farm women |  |  |  | 5 | 5 | 10 | 5 | 5 | 10 |
| Integrated nutrient management | Production technology and INM in Potato crop | 30/10/23 | 1 | Kinunger | Rural youth |  |  |  | 5 | 0 | 5 | 5 | 0 | 5 |
| Horticulture | Crop production | Improved production technology of Kharif crop | 14/04/23 | 1 | Farmers field Mokokchung village | Farmer & Farm women |  |  |  | 2 | 15 | 17 | 2 | 15 | 17 |
| Kitchen gardening | Sustainable farming for self sufficiency for rural area | 18/05/23 | 1 | Kinunger village | Farmer & Farm women |  |  |  | 1 | 25 | 26 | 1 | 25 | 26 |
| Value addition | Doubling farmers income through Horticultural innovation | 9/06 /23 | 1 | Kupza village | Rural youth |  |  |  |  | 15 | 15 |  | 15 | 15 |
| Value addition | Doubling farmers income through Horticultural innovation | 15/06/23 | 1 | Yimchalu village | Farmer & Farm women |  |  |  | 2 | 19 | 21 | 2 | 19 | 21 |
| Value addition | Popularization of locally available vegetable as value added product(Pickle) for more income generation | 22/08/23 | 1 | Longmisa village | Farm women |  |  |  |  | 10 | 10 |  | 10 | 10 |
| Value addition | Popularization of locally available vegetable as value added product(Pickle) for more income generation | 24/08/23 | 1 | Mokokchung | Farm women |  |  |  |  | 23 | 23 |  | 23 | 23 |
| Value addition | Popularization of locally available vegetable as value added product(Pickle) for more income generation | 14/09/23 | 1 | Kinunger village | Farmer and Farm women |  |  |  | 2 | 21 | 23 | 2 | 21 | 23 |
| Crop production | Training & Demonstration of Micro-Nutrient mixture application in ginger | 15/09/23 | 1 | Yisemyong Village | Farmer and Farm women |  |  |  | 2 | 9 | 11 | 2 | 9 | 11 |
| Crop production | Training & Demonstration of Micro-Nutrient mixture application in ginger | 19/09/23 | 1 | Longkhum village | Farmer and Farm women |  |  |  | 22 | 11 | 33 | 22 | 11 | 33 |
| Orchard management | Training and pruning of citrus plant & preparation of Bordeaux mixture & paste | 26/02/24 | 1 | Salulamang Village | Farmer and Farm women |  |  |  | 4 | 1 | 5 | 4 | 1 | 5 |
| Orchard management | Rejuvenation of citrus decline orchard | 27/02/24 | 1 | Yimchalu Village | Farmer and Farm women |  |  |  | 8 | 2 | 10 | 8 | 2 | 10 |
| Orchard management | Farmer and Farm women | 29/02/24 | 1 | Longkhum village | Farmer and Farm women |  |  |  | 8 | 2 | 10 | 8 | 2 | 10 |
| Soil conservation | Soil health & fertility management | Importance of natural farming in present scenario | 25/04/23 | 1 | Mulongkong | Farmer & Farm women |  |  |  | 33 | 6 | 39 | 33 | 6 | 39 |
| Soil health & fertility management | Importance and benefits of brown manuring in upland paddy | 5/05/23 | 1 | Mongsenyimti | Farmer & Farm women |  |  |  | 24 | 14 | 38 | 24 | 14 | 38 |
| Soil health & fertility management | Soil health management through use of organics | 27/05/23 | 1 | Aliba | Farmer & Farm women |  |  |  | 14 | 11 | 25 | 14 | 11 | 25 |
| Soil health & fertility management | Soil health management for sustainable production | 5/12/23 | 1 | Aliba | Farmer & Farm women |  |  |  | 21 | 21 | 42 | 21 | 21 | 42 |
| Production & use of organic inputs | Composting for sanitation (2 nos.) | 17-22/08/23 Aug | 2 | Kinunger & Longjang | Farmer & Farm women |  |  |  | 4 | 20 | 24 | 4 | 20 | 24 |
| Integrated nutrient management | Safe and judicious use of fertilizers | 22/09/23 | 1 | Chuchuyimpang | Farmer & Farm women |  |  |  | - | 20 | 20 | - | 20 | 20 |
| Integrated nutrient management | Safe and judicious use of fertilizers | 11/10/23 | 1 | Longjang | Farmer & Farm women |  |  |  | 5 | 5 | 10 | 5 | 5 | 10 |
| Integrated nutrient management | FLD training on nutrient management in potato | 11/10/23, 30/10/23 | 2 | Longjang & Kinunger | Farmer & Farm women |  |  |  | 9 | 5 | 14 | 9 | 5 | 14 |
| Management of problematic soil | Amelioration of acid soil for improving soil health | 11th Oct | 1 | Longjang | Farmer & Farm women |  |  |  | 5 | 5 | 10 | 5 | 5 | 10 |
| Plant protection | IPM | Integrated pest management on cucurbits | 31/05/23 | 1 | Chuchuyimlang | Farmers & Farm women |  |  |  | 18 | 29 | 47 | 18 | 29 | 47 |
| IPM | Integrated pest management on paddy | 30/06/23 | 1 | Chuchuyimlang | Farmers & Farm women |  |  |  | 19 | 9 | 28 | 19 | 9 | 28 |
| IPM | Integrated pest management on Upland paddy | 31/7/23 | 1 | Chuchuyimlang | Farmers & Farm women |  |  |  | 8 | 8 | 16 | 8 | 8 | 16 |
| Natural farming | Natural farming | 29/9/23 | 1 | Kangtsung | Extension functionaries |  |  |  | 15 | 5 | 20 | 15 | 5 | 20 |
| Mushroom production | Mushroom production for livelihood improvement | 18/10/23 | 1 | Longmisa | Rural youth |  |  |  |  | 16 | 16 |  | 16 | 16 |
| Vocational training | Training for PCOs on,” **S**afe and judicious use of Glyphosate” | 19-21/10/23 | 3 | Chuchuyimpang | Rural youth |  |  |  | 12 | 15 | 27 | 12 | 15 | 27 |
| Vocational Manage & SAMETI | Mushroom production techniques | 10-15/11/23 | 5 | Mokokchung | Rural youth |  |  |  | 3 | 12 | 15 | 3 | 12 | 15 |
| Mushroom production | Oyster mushroom production for livelihood improvement | 22/11/23 | 1 | Mopungchuket | Rural youth |  |  |  | 1 | 12 | 13 | 1 | 12 | 13 |
| IPM | Integrated pest management on cucurbits | 5/12/23 | 1 | Aliba | Farmers and farm women |  |  |  | 20 | 22 | 44 | 20 | 22 | 44 |
| IPM | Integrated pest management on maize | 9/2/24 | 1 | Ungma | Farmers and farm women |  |  |  | 11 | 9 | 20 | 11 | 9 | 20 |
| **IPM** | Integrated pest and disease management on citrus | 9/3/24 | 1 | Dibuia | Farmers and farm women |  |  |  | 17 | - | 17 | 17 | - | 17 |
| Animal Sc. | Piggery | Piggery production and management | 28th Jan. to 03rd Feb. 2023 | 6 | Sungratsu | RY |  |  |  | 13 | 13 | 26 | 13 | 13 | 26 |
| Piggery | Feeding management in piggery | 13.03.23 | 1 | Aolijen | RY |  |  |  | 15 | 21 | 36 | 15 | 21 | 36 |
| Piggery | Internal parasite management in piggery | 10.04.23 | 1 | Khanimu | Farmers & Farm women |  |  |  | 15 | 10 | 25 | 15 | 10 | 25 |
| Piggery | Feeding and disease management in pigs | 25.05.23 | 1 | Salangdem | Farmers & Farm women |  |  |  | 6 | 12 | 18 | 6 | 12 | 18 |
| Poultry | Feeding and disease management in poultry | 07.06.23 | 1 | Longjang | Farmers & Farm women |  |  |  | 4 | 22 | 26 | 4 | 22 | 26 |
| Poultry | Feeding and disease management in poultry | 19.07.23 | 1 | Khanimu | Farmers & Farm women |  |  |  | 9 | 6 | 15 | 9 | 6 | 15 |
| Piggery | Feeding and disease management in pigs | 19.08.23 | 1 | Khanimu | RY |  |  |  | 14 | 0 | 14 | 14 | 0 | 14 |
| Poultry | Poultry management and integrated poultry farming. | 16.09.23 | 1 | Sungratsu | RY |  |  |  | 13 | 16 | 29 | 13 | 16 | 29 |
| Piggery | Health management in pigs | 07.10.23 | 1 | Yimchalu | Farmers & Farm women |  |  |  | 19 | 17 | 36 | 19 | 17 | 36 |
| Piggery | Breeding management in pigs | 18.11.23 | 1 | Alichen | Farmers & Farm women |  |  |  | 24 | 27 | 51 | 24 | 27 | 51 |

(D) Vocational training programmes for Rural Youth

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Crop / Enterprise | Date | Duration | Area of training | Training title\* | No. of Participants | | | | | | | | | Impact of training in terms of Self employment after training | | | | Whether Sponsored by external funding agencies |
| General | | | SC/ST | | | Total | | |
| M | F | T | M | F | T | M | F | T | Type of enterprise ventured | No. of units | No. of persons employed | Avg. Annual income generated through enterprise |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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

Annexure 3: Only Sponsored Training Programmes (On, Off and Vocational)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| On/ Off/ Vocational | Beneficiary group (F/ FW/ RY/ EP) | Date (From- To) | Duration (days) | Discipline | Area of training | Title | **No. of Participants** | | | | | | | | | **Sponsoring Agency** | **Amount of fund received** |
| **General** | | | **SC/ST** | | | **Total** | | |
| M | F | T | M | F | T | M | F | T |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Off | RY | 28th Jan to 03rd Feb 2023 | 6 | Animal Science | piggery | Piggery production and management |  |  |  | 13 | 13 | 26 | 13 | 13 | 26 | MANAGE (Hyderabad) & SAMETI (Nagaland) | 42,000 |
| Off | RY | 11- 15/11/23 | 5 | Plant protection | Mushroom production | Mushroom production techniques |  |  |  | 3 | 12 | 15 | 3 | 12 | 15 | MANAGE (Hyderabad) & SAMET I(Nagaland) | 42,000/- |
| Off | Farmers & farm women | 5th Dec | 1 day | Soil conservation | Soil fertility management | Soil health management for sustainable production |  |  |  | 21 | 21 | 42 | 21 | 21 | 42 | Cucumber festival committee & State department of agriculture | All expenses borne by the sponsoring agency |

3.4.Extension Activities (including activities of FLD programmes) (Please mention specific Extension Activity conducted by the KVK such as Field Day, Kisan Mela, Exhibition, Diagnostic Visit, etc) during 2021

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl | Extension Activity | Topic | Date and duration | No. of activities | Participants | | | | | | | | | | | |
| General | | | SC/ST | | | Extension Officials | | | Grand Total | | |
| M | F | T | M | F | T | M | F | T | M | F | T |
| 1 | Diagnostic visits | \*Yellowing of leaves in potato  \*analytical assessment of yellow leaves in orange, assessment on Pest and diseases of cucurbits, tomato, potato  Cultivation of Cucumber Tomato, Citrus | 4/02/23, 29/08/23, 16/04/23, 6/09/23, 14/09/23, 15/09/23, 17/10/23, 25/10/23  13/05/23,18/07/23, 12/09/23 | 18 |  |  |  | 55 | 46 | 101 |  |  |  | 55 | 46 | 101 |
| 2 | Scientists visit to farmers field | \*Growth assessment of Rapeseed & mustard  \*Irrigation scheduling in potato  \*growth performance of sweet orange  \*growth performance of young sweet orange  \*monitoring of sweet orange, Monitoring and supervision on trials, growth assessment & pest and disease monitoring in paddy, tomato,potato & mushroom | 24/01/23, 25/01/23  3/07/23, 3/07/23  3/07/23, 14/10/23,  Jan-Dec’23 | 81 |  |  |  | 191 | 167 | 358 |  |  |  | 191 | 167 | 358 |
| 3 | Kisan Gosthi | \*outscaling Natural farming, Under Mission life | 10/02/23, 27/05/23 | 3 |  |  |  | 27 | 32 | 59 |  |  |  | 27 | 32 | 59 |
| 4 | Method Demonstrations | \*A-frame techniques and its uses  \*application of organic inputs & proper planting method  \* utera cropping of mustard in TRC, Soil sampling, fertilizer application methods, vermicomposting, using soil moisture indicator  \*Value addition of vegetables, \*Preparation of Ginger candy & pickles, \*Training and pruning of Citrus & \*Preparation of Bordeaux mixture & paste | 13/05/23, 27-30/06/23, 7/09/23, 14/10/23, 5/05/23, 27/05/23,17/08/23, 22/08/23, 29/08/23 29/09/23,11/10/23, 12/10/23,30/10/23, 13/11/23, 9/06/23, 15/06/23,22/08/23, 24/08/23, 14/09/23, 31/10/23 | 23 |  |  |  | 255 | 207 | 462 |  |  |  | 255 | 207 | 462 |
| 5 | Group meetings/ Discussion | Millet recipe contest mobilization, discussion on cultivation of rabi crops and mobilization of farmers, Livestock and poultry rearing situation assessments, IPM on maize, Cultivation of Tomato & Rabi crops, Home base production & marketing, Beautification for Republic day celebration | 5th, 9th and 31st July, 17th & 22nd Aug, 22nd Sept, 19/07/23, 18/05/23  19/09/23, 13/12/23 | 13 |  |  |  | 63 | 96 | 159 |  |  |  | 63 | 96 | 159 |
| 6 | Field Day | Seed potato production under Natural Farming, | 8/03/23 | 2 |  |  |  | 25 | 12 | 37 |  |  |  | 25 | 12 | 37 |
| 7 | Lecture delivered as resource person |  | 18/4/23,15/9/23,  21/10/23 | 3 |  |  |  | 48 | 83 | 131 |  |  |  | 48 | 83 | 131 |
| 8 | Newspaper publication | Awareness on rain water harvesting and other press releases | 28/05/23, 30/05/23, 23/08/23, 5/12/23, 6/12/23 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Radio talk | Awareness on rain water harvesting, world soil day | 31/05/23, 5/12/23 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Advisory services (mobile talk/ text messages) | Pest management in vegetables, Planning and management of citrus orchard and agar plantation and soil management practices, site selection and construction of jalkhund under NARI for kitchen garden, Livestock and poultry, pests and disease of cucurbits, Planting technique for mango & Litchi Orchard management | 24/01/23, 3/11/23, 7/12/23, 15/03/23, 3/05/23, 21/06/23, 10/08/23, 14/10/23, 28/04/23, 13/05/23  26/06/23, 29/07/23, 25/08/23 | 13 |  |  |  | 16 | 9 | 25 |  |  |  | 16 | 9 | 25 |
| 11 | Animal Health Camp | Awareness program on deworming, vitamin supplementation, minerals supplementation, disinfection, antibiotics uses, external parasites | 10th Apr, 25th May, 7th Oct., 18th Nov./ 1 day each | 04 |  |  |  | 64 | 66 | 130 |  |  |  | 64 | 66 | 130 |
| 12 | Publication of extension materials | Natural farming practices | 3rd Dec 23 | 1 |  |  |  | 200 | 100 | 300 |  |  |  | 200 | 100 | 300 |
| 13 | Film show | Soil and water: a source of life | 5th Dec | 1 |  |  |  | 21 | 21 | 42 |  |  |  | 21 | 21 | 42 |
| 14 | Farmers Scientist Interaction | Safe and judicious use of fertilizers | 5th Dec | 1 |  |  |  | 21 | 21 | 42 |  |  |  | 21 | 21 | 42 |
| 15 | Awareness campaign | \*Natural Farming –way forward  \*Natural farming & soil health  \*Mission LIFE  \*18th Parthenium awareness week, \*Swachhta special campaign, VBSY | 16/11/23, 4-7/12/23, 22-5/06/23, 16-22/08/23, 2-31/10/23, 12-14/12/23, | 11 |  |  |  | 721 | 247 | 968 |  |  |  | 721 | 247 | 968 |
| 16 | Farmers visit/ students visit to KVK | \*To study Natural farming practices,  \* Visit to all the demonstration unit of the KVK and interaction | 23/06/23, 18/09/23 | 2 |  |  |  | 65 | 37 | 102 |  |  |  | 65 | 37 | 102 |
| 17 | Celebration of important days | World environment day, world soil day | 5th June and 5th Dec | 2 |  |  |  | 45 | 67 | 112 |  |  |  | 45 | 67 | 112 |
| 18 | Kisan mela |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 | Swachhta Action Plan | Setting up low cost Vermicomposting units and visit for review under SAP | 8th, 12th & 18th Sept, 18th & 20th Dec | 2 |  |  |  | 4 | 6 | 10 |  |  |  | 4 | 6 | 10 |
| 20 | Newspaper coverage | 1. Debeaking in chicken 2.why we should rear dual purpose chicken 3. Designers egg | 23rd March, 13th June, 8thSept. | 03 |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | Soil health camp | 5th Dec | 1 |  |  |  |  | 21 | 21 | 42 |  |  |  | 21 | 21 | 42 |
| 22 | Leaflet/folder | Soil health card scheme | For VBSY | 1 |  |  |  | 400 | 400 | 800 |  |  |  | 400 | 400 | 800 |
| **Total** | | | | **193** |  |  |  | **2286** | **1754** |  |  |  |  | **2286** | **1754** | **4040** |

3.5 Production and supply of Technological products during 2023

A. SEED MATERIALS

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Major group/class | Crop wise | Variety | Quantity (qt) | Value (Rs.) | Number of recipient/ beneficiaries | | | | |
| General | | SC/ST | | Grand Total |
| M | F | M | F |  |
| Nutri-cereals | Foxtail millet | Local | 3.2 | 16000 |  |  | 5 | 10 | 15 |
| **Total** | | | 3.2 | 16000 |  |  | 5 | 10 | 15 |

A1. SUMMARY of Production and supply of Seed Materials during 2023

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl. No. | Major group/class | Quantity (q) produced | Quantity (q) supplied | Value (Rs.) of quantity produced | Number of recipient/ beneficiaries | | | | |
| General | | SC/ST | | Grand Total |
| M | F | M | F |  |
| 1 | Nutri-cereals | 3.2 | 2 | 16000 |  |  | 5 | 10 | 15 |
| 2 | Mustard | 1.0 | 1.0 | 25000 |  |  | 10 | 10 | 20 |
| TOTAL | | 4.2 | 3.0 | 41000 |  |  | 15 | 20 | 35 |

B. Production and supply of Planting Materials (Nos. in No.) during 2023

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Major group/class | Crop | Variety | Quantity (In No.) produced | Quantity (In No.) supplied | Value (Rs.) of quantity produced | Number of recipient/ beneficiaries | | | | |
| General | | SC/ST | | Grand Total |
| M | F | M | F |  |
| **VEGETABLES** | Chilli | 1. Khyati | 8000 | 5000 | 3000 |  |  | 5 | 10 | 15 |
| Broccoli | Green Magic | 5000 | 3000 | 2000 |  |  |  | 5 | 5 |
| Brinjal | Profit Raj | 2000 | 1500 | 1000 |  |  |  | 5 | 5 |
| Cauliflower | Madhuri | 5000 | 3000 | 2000 |  |  |  | 6 | 6 |
| **PLANTATION CROP** |  |  |  |  |  |  |  |  |  |  |

C. Production of Bio-Products during 2023

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Major group/class | Product Name | Species | Produced Quantity | | Value (Rs.) | Number of Recipient /beneficiaries | | | | |
| No | (Kg) |
| General | | SC/ST | | Grand Total |
| M | F | M | F |  |
| BIOAGENTS | Vermicompost | *Eisenia fetida* | 5000 | 1400 | 61000 |  |  | 4 | 1 | 5 |

D. Production of livestock during 2023

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl. No. | Type/ category of livestock | Breed | Quantity | | Value (Rs.) | Number of Recipient beneficiaries | | | | |
| (Nos) | Kgs |
| General | | SC/ST | | Total |
| M | F | M | F |  |
| 1. | Poultry | Rainbow Rooster | 1o00 |  |  |  |  | 15 | 25 | 40 |

3.6. Literature Developed/Published (with full title, author & reference) during 2023

(A) KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.):

(B) Articles/ Literature developed/published

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item** | **Title /and Name of Journal** | **Authors name** | **Number of copies** | |
| **Produced/ published** | **Supplied/ distributed** |
| Booklet | Millet Recipe Book | Tokiho Achumi, Martha Chakruno,  Dr. Keviletsu Khate | 100 | 98 |
| Newspaper articles | 1. De-beaking in chicken  2. Why we should rear dual purpose chicken  3. Designers egg | Dr. S. Sarendi Walling | - | - |
|  | Awareness on rain water harvesting (the same was broadcasted by AIR- Mokokchung on 31st May 2023) | Imtilemla | Mokokchung Times (30th May 2023) |  |
|  | Importance of celebration of world soil day (the same was broadcasted by AIR\_ Mokokchung on the 5th Dec 2023) | Imtilemla | Mokokchung Times (5th Dec 2023) |  |
| Leaflet | Soil Health Card Scheme | Imtilemla |  | 500 copies during Vikshit Bharat Sankalp Yatra |

(C) Details of Electronic Media Produced

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. | Type of media (CD / VCD / DVD / Audio-Cassette) | Title of the programme | Number produced |
| 1. |  |  |  |

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

1. **Title of the success story -** Oyster Mushroom cultivation enhances farm income in Mokokchung, Nagaland

**Background**

Mushroom cultivation in the homestead has been practiced by the farmers of Mokokchung district for quite some time. There is a huge demand for mushroom in the market and favourable climatic conditions for its production. However, the farmers are unable to produce year round due to lack of scientific production techniques and non availability of spawn in the district. In this context, training on scientific methods of mushroom cultivation techniques was necessary to educate the farmers to make it sustainable and profitable enterprise.

**KVK intervention**

Keeping the potential of mushroom production in view, KVK Mokokchung conducted training on scientific methods of mushroom production at Longmisa Village where 16 farm women attended the programme. Techniques on mushroom cultivation were demonstrated and the farmers practically learned spawn run and preparation of polybags. Among the trainees, Mrs. Chayusenla was very enthusiastic and was interested in cultivation of mushroom on a commercial scale. She was provided with 50 packets spawns, 2kg of polybag, 2 sprayers and financial assistance for construction of mushroom production unit. Suitable technical guidance was given to her from the initial stage of straw substrate preparation till harvesting of the crop.

**Output and outcome**

At the onset of technology adoption, Mrs. Chayusenla started with 100 mushroom beds. The cropping period was approximately 45 days where 190kg of fresh mushrooms were harvested and sold @ Rs.250.00 per kg resulting in a return of Rs. 47500.00. The benefit cost ratio was observed to be 2.04. She expanded her production area in the second year by establishing low cost production unit to accommodate 200-300 mushroom bags and become a role model for other farmers. The technology has spread to other women folks of her village as well as nearby localities covering one women SHG and 7 individual farmers.

**Impact of the intervention**

The training imparted, advisory services and regular monitoring of the farmers’ production unit has resulted in substantial increase of income. Mushroom production technology has also made farm women realize productive utilization of their leisure time in preparation of straw substrate in the evening which otherwise were spend by talking with other folks. Additionally, the paddy straws which are generally spread and burnt in the field are preserved and help farmers generate additional income. Further, year round production of mushroom has enabled district horticulture department to regularly produce spawn which otherwise produced only on receipt of requisition in advance.

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Training and demonstration

Demonstration unit

1. Economic empowerment of women through pig and poultry farming in Mokokchung

**Details of Farmer**:

Farmers Name : Mrs. Mathala

Address : Khanimu village

Contact No.: 8730014849

**Background:** Mrs. Mathala has been practicing mixed farming for almost two decades with tapioca and Colocasia been the main crops and these serve as feed for pigs. She was breeding the pigs once to twice in a year with an average litter size of 8 piglets. In poultry she faced problem of selecting suitable breed and low-cost feed supplement to sustain the enterprise.

**KVK intervention**

During 2022-2023, she came to learn about scientific feeding and breeding techniques during a program conducted by the kendra. Vanaraja chicks, Azolla beds, shed net, vitamin and mineral supplements were provided to the farmer. Sanitation and healthcare measures were also imparted to exploit the optimum genetic potential of the animals.

**Output and outcome**

With better feeding the reproductive performance of the sows improved and she started getting three litters in a year with an average litter size of 9 piglets per farrowing and these were sold at the rate of Rs. 3500/-per piglets. It was observed that feeding Azolla at the rate of 50-70g per bird along with concentrate followed by free ranging reduced cost of rearing and give better return. The extra litter and additional number of piglets per litter in a year produce much needed additional income to the farmer and her family.

**Change in income and economics with cost benefit ratio**

|  |  |
| --- | --- |
| **Income from piggery before intervention** | **Income from piggery after intervention** |
| Cost of production per sow= Rs.21500 | Cost of production per sow = Rs.24500 |
| Gross income per sow = Rs.59500 | Gross income per sow = Rs.115500 |
| Net income per sow = Rs.38000 | Net income per sow= Rs.91000 |
| B:C ratio = 2.7 | B:C =4.7 |

|  |  |
| --- | --- |
| **Poultry fed with azolla + concentrates @ 50 g per bird + Scavenging** | **Poultry fed with concentrates @ 70 g per bird + Scavenging** |
| Cost of production per bird = Rs.654 | Cost of production per bird = Rs. 975 |
| Gross income per bird = Rs.960 | Gross income per bird = Rs.840 |
| Net income per bird = Rs.306 | Net income per bird = Rs.85 |
| B:C ratio =1.46:1 | B:C = 1.16:1 |

****

Azolla fed to chickens

Piggery component

Azolla cultivation

1. Kadaknath chicken as an alternative option to produce quality meat and eggs

**Introduction**

Local chicken is the choicest meat amongst the local population. However, performance of local chicken in the district is decreasing over the years due to inbreeding depression creating a huge gap between demand and availability. In order to minimize this gap, there is a necessity to introduce a suitable breed with better performance like growth and egg production as well as ability to withstand the changing climatic conditions.

**KVK Intervention**

Krishi Vigyan Kendra, Mokokchung introduced Kadaknath, a dual-purpose breed, with the hope of solving the problems with indigenous chickens. Training on package of practices recommendation was given at Khanimu village and attended by 21 farmers. Four passionate farmers were provided with 50 each of day old chicks and these were reared under enclosure for a month by feeding starter feed. The sheds were constructed using locally available low cost materials. The chickens were let free after one month and allowed to forage in the open backyards.

**Output and outcome**

Mr. Meyatoshi Longkumer of Khanimu village after getting suitable training started his poultry unit with 50 Kadaknath birds. He reared the birds with proper care and the birds started laying eggs at 7 months of age with a body weight of 1.3 kg as compared to 1.2 kg at 12 months for local chickens. The number of eggs produced by Kadaknath at 40 weeks was found to be 52 while the local birds produced 30 eggs annually.

The farmer generated an income of Rs. 22300.00 by disposing the surplus male birds after retaining two male birds for breeding. He also sold 950 eggs and generated Rs.9500.00. Now he has about 30 chicks of different age groups hatched by his local chickens as Kadaknath hens are poor setters and do not brood their own eggs.

**Impact**

The dual purpose Kadaknath birds in backyard has instilled a sense of eagerness amongst the farmers in the village and neighboring villages of the district due to easy accessibility of eggs and poultry meat at doorsteps resulting in providing additional income to the farmers. The higher protein and lower cholesterol in Kadaknath meat also opens alternative meat option to the increasing health conscious citizens of the district.

Kadaknath chicken foraging in backyards

Nest for egg laying

3.8 Give details of innovative methodology/technology developed and used for Transfer of Technology during the year

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

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. | Crop / Enterprise | ITK Practiced | Purpose of ITK |
|  |  |  |  |

3.10 Indicate the specific training need analysis tools/methodology followed for

- Identification of courses for farmers/farm women : PRA, Training Need Analysis, Group discussion, Interaction

- Rural Youth : PRA, Training Need Analysis, Group discussion, Interaction

- Extension personnel : Needed Technologies based on their role as extension functionaries

3.11 Field activities

i. Number of villages adopted : 14

ii. No. of farm families selected : 4700

iii. No. of survey/PRA conducted : 4

3.12. Activities of Soil and Water Testing

Status of establishment of Soil Lab : Completed

1. Year of establishment : 2011

2. List of equipments purchased with amount :

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl. No | Name of the Equipment | | | Qty. | Cost |
| S&WT lab | Mini lab/ Mridaparikshak | Manufacturer |
| 1 |  | Mridaparikshak | Nagarjuna | 2 | 1,44,000/- |
| Total | |  |  | 2 | 1,44,000/- |

3. Details of samples analyzed (2023) :

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Details | No. of Samples analysed | No. of Farmers | No. of Villages | Amount( In Rupees) realized |
| Soil Samples | 68 | 68 | 3 | Nil |
| Water Samples |  |  |  |  |
| Plant Samples |  |  |  |  |
| Petiole Samples |  |  |  |  |
| Total | 68 | 68 | 3 | Nil |

1. Details of Soil Health Cards (SHCs) 2023
2. No. of SHCs prepared : 68
3. No. of farmers to whom SHCs were distributed : 68
4. Name of the Major and Minor nutrients analysed : pH, OC, Avl N, Avl P, Avk.K, Zn, S, Fe, B
5. No. of villages covered : 3

3.13. Details of SMS/ Voice Calls sent on various priority areas

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Message type** | **Crop** | | **Livestock** | | **Weather** | | **Marketing** | | **Awareness** | | **Other Ent.** | | **Total** | |
| **M** | **B** | **M** | **B** | **M** | **B** | **M** | **B** | **M** | **B** | **M** | **B** | **M** | **B** |
| Text only | 12 |  | 3 |  | 17 |  |  |  |  |  | 6 |  | 38 | 2280 |
| Voice only |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Voice and Text both |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 12 |  | 3 |  | 17 |  |  |  |  |  | 6 |  | 38 | 2280 |

**\*M : No. of messages**

**\*\*B : No. Of beneficiaries**

3.14 Contingency planning for 2023

a. Crop based Contingency planning

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Contingency (Drought/ Flood/ Cyclone/ Any other please specify) | Proposed Measure | Proposed Area (In ha.) to be covered | Number of beneficiaries proposed to be covered | | |
| General | SC/ST | Total |
|  | Introduction of new variety or crop | 5 |  | 10 | 10 |
|  | Introduction of Resource Conservation Technologies | 5 |  | 20 | 20 |
|  | Distribution of seeds and planting materials | 10 |  | 40 | 40 |
|  | Any other (Please specify) |  |  |  |  |
| Long dry spell | Already sown crops  i. In-situ moisture conservation to safeguard the standing crop from moisture stress.  ii. Mulching with crop residue or thin plastic sheets if the water stress continues.  iii. Raising nursery of crops in which transplanting is easily possible for filling the gaps | 5 |  | 20 | 20 |

a. Livestock based Contingency planning

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Contingency (Drought/ Flood/ Cyclone/ Any other please specify) | Number of birds/ animals to be distributed | No. of programmes to be undertaken | No. of camps to be organized | Proposed number of animals/ birds to be covered through camps | Number of beneficiaries proposed to be covered | | |
| General | SC/ST | Total |
|  |  |  |
| Subsidiary income generation in case of crop failures | 1000 birds | 5 | 2 | 1000 birds |  | 100 | 100 |

* 1. IMPACT
  2. Impact of KVK activities (Not to be restricted for reporting period only)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name of specific technology/skill transferred | No. of participants | % of adoption | Change in income (Rs.) | |
| Before (Rs./Unit) | After (Rs./Unit) |
|  |  |  |  |  |

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

4.2. Cases of large scale adoption

(Please furnish detailed information for each case)

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

5.0. LINKAGES ESTABLISHED

5.1 Functional linkage with different organizations established during 2023

|  |  |
| --- | --- |
| Name of organization | Nature of linkage |
| State Agricultural Research Station (SARS) Yisemyong | Joint implementation in conducting training, demonstration, meeting, trials etc. |
| DAO, DHO, DVO, DSCO, DFO, LRD in the district, ATMA Mokokchung | Conducting training, demonstration programmes |
| ICAR,Jharnapani, Nagaland University | Consultation, meeting and exchange of technologies |
| NABARD, RO Dimapur Nagaland | Implementation of Rural livelihood programs |

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

* 1. List special programmes undertaken by the KVK, which have been financed by State Govt./Other Agencies during 2023

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name of the scheme/ special programme | Activity | Date/ Month of initiation | Funding agency | Amount (Rs.) |
| Out scaling of Natural farming | Awareness, Training program, Frontline demonstration, Method demonstration, campaign posters and leaflets |  | Ministry of Agriculture & Farmers’ welfare, Govt. Of India | 502222 |
| Campaign on Nutri-Garden and tree plantation. | Seeds distribution, Training, Interaction |  | ATARI |  |
| Swachhta Action Plan | Cleanliness drive, training, awareness |  | ATARI | 48810 |
| World Soil Health Day | Training, Soil card distribution | 5th December 2023 | Directorate of Agriculture, Nagaland | The entire expenditure was borne by the sponsoring agency |
| KSHAMTA | Training, establishment of mushroom and apiary unit | March ‘24 | ATARI | 82000 |

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district : Yes

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No.** | **Programme** | **Nature of linkage** | **Remarks** |
| 1. | Training programme for farmers | Resource persons | Lecture delivered as resource persons in various programmes organised by ATMA, Mokokchung |

5.4 Give details of programmes implemented under National Horticultural Mission

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. | Programme | Nature of linkage | Constraints if any |
|  |  |  |  |

5.5 Nature of linkage with National Fisheries Development Board

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. | Programme | Nature of linkage | Remarks |
| 1 |  |  |  |

6. Status of NARI during 2023

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name of Nutri- SMART Village** | **T1** | **T2** | **Area (ha)** | **No of Beneficiaries** | **Name of crop** | **T1** | | | **T2** | | |
| **Name of variety** | **Yield (q/ha)** | **Consumption (kg)** | **Name of variety** | **Yield (q/ha)** | **Consumption (kg)** |
| Kupza | Improved varieties , recommended agronomic practises | Farmers’ practise – use of local cultivars , random sowing and planting , no proper layout of garden , poor maintenance | 0.0224 | 83 | i) Broccoli | Green magic | 50 | 15 | Local | 12 | 8 |
| ii) Beetroot | Detriot Dark Red | 6 | 6 |  | 2 | 2 |
| iii)Cabbage | Rareball | 10 | 10 |  | 7 | 7 |
| Iv) Cauliflower | Candid Charm | 6 | 6 |  | 6 | 4 |
| v) Tomato | Rocky | 27 | 11 |  | 18 | 11 |
| vi) Carrot | Kuroda | 2.5 | 2,5 |  | 1.5 | 1.5 |
| vii) Yard long bean | NS- 620 | 4 | 4 |  | 3 | 3 |
| viii) Bittergourd | Palee | 36 | 6 |  | 20 | 6 |
| ix) Ladies finger | Arka Anamika | 6.5 | 4.5 |  | 2.5 | 2.5 |
|

.

7. PERFORMANCE OF INFRASTRUCTURE IN KVK DURING 2023

7.1 Performance of demonstration units (other than instructional farm)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sl. No. | Demo Unit  (Name and No.) | Year of estd. | Area | Details of production | | | Amount (Rs.) | | Remarks |
| Variety/ species/ breed | Type of Produce | Qty. | Cost of inputs | Gross income |
| 1 |  |  |  |  |  |  |  |  |  |

7.2 Performance of instructional farm (Crops) including seed production during 2023

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Name  of the crop | Date of sowing | Date of harvest | Area (ha) | Details of production | | | Amount (Rs.) | | Remarks |
| Variety | Type of Produce | Qty. | Cost of inputs | Gross income |
| Tomato | 1st Sept | 6th Dec | 0.005 | Aditya | Vegetables | 26kgs | 450/- | 1300/- |  |
| Brinjal | 24th April | 17th July | 0.008 | Profit Raj | Vegetables | 86kgs | 105/- | 2580/- |  |
| Colocasia | 30th March | 12th Dec | 0.0032 | Local | Tubers | 93 kgs |  | 1000/- |  |
| Chilli | 25th April | 20th July | 0.008 | Tejaswani | Vegetable | 17 kgs | 216 | 1190/- |  |
| Sweet Corn | 30th Mar’23 | Jul-1st week of Aug’23 | 0.5 | NSCH-130 | Green cob | 5051 kg | 18000 | 32000 |  |

7.3 Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.) during 2023

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl.  No. | Name of the Product | Qty | Amount (Rs.) | | Remarks |
| Cost of inputs | Gross income |
| 1 | Vermicompost | 1400 kg | - | - | Used in KVK farm |

7.4 Performance of instructional farm (livestock and fisheries production) during 2023

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sl.  No | Name  of the animal / bird / aquatics | Details of production | | | Amount (Rs.) | | Remarks |
| Breed/ species | Type of Produce | Qty. | Cost of inputs | Gross income |
| 1 | Broiler chicken | Coob | meat | 463 kg | 66000 | 83395 |  |

7.5 Rainwater Harvesting

Training programmes conducted by using Rainwater Harvesting Unit/ structure during 2023

| Date | Title of the training course | Client (PF/RY/EF) | No. of Courses | No. of Participants including SC/ST | | |
| --- | --- | --- | --- | --- | --- | --- |
| Male | Female | Total |
| 18th April ’23 | Construction of Jalkhund for life saving irrigation | PF | 1 | 4 | - | 4 |

7.6. Utilization of hostel facilities (Month-Wise) during 2023

Accommodation available (No. of beds):

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Months | Title of the training course/Purpose of stay | Duration of Training | No. of trainees stayed | Trainee days (days stayed) | Reason for short fall (if any) |
|  |  |  |  |  |  |
| Total |  |  |  |  |  |

8. FINANCIAL PERFORMANCE

8.1 Details of KVK Bank accounts

|  |  |  |  |
| --- | --- | --- | --- |
| **Bank account** | **Name of the bank** | **Location/ Branch** | **Account Number** |
| With Host Institute | State Bank of India | Lerie, Kohima | 01000050059 |
| With KVK | State Bank of India | Mokokchung, Main Branch | 11361013166 |
| Revolving Fund | Nagaland State Cooperative Bank | Mokokchung | 20003392 |

8.2 Utilization of funds under CFLD on Oilseeds and Pulses (Rs. In Lakhs) if applicable during 2023

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Item | Released by ICAR/ATARI (in lakh) | | Expenditure (in lakh) | | Unspent balance as on 31st March, 2021 |
| Amount | Amount | Amount | Amount |
|  |  |  |  |  |  |
| TOTAL |  |  |  |  |  |

8.3 Utilization of KVK funds during the year 2023

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.**  **No.** | **Particulars** | **Sanctioned (in Lakh)** | **Released**  **(in Lakh)** | **Expenditure**  **(in Lakh)** |
| **A. Recurring Contingencies** | | | | |
| 1 | Pay & Allowances | 2,4009483 | 2,4009483 | 2,4009483 |
| 2 | Traveling allowances | 300000 | 300000 | 300000 |
| 3 | Contingencies | 3290000 | 3290000 | 3290000 |
| *A* | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines) | 1151500 | 1151500 | 1151500 |
| *B* | POL, repair of vehicles, tractor and equipments |
|  | Working Capital |  |  |  |
| *C* | Meals/refreshment for trainees | 2138500 | 2138500 | 2138500 |
| *D* | Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training) |
| *E* | Frontline demonstration except oilseeds and pulses |
| *F* | On farm testing (on need based, location specific and newly generated information in the major production systems of the area) |
| *G* | Training of extension functionaries |
| *H* | Maintenance of buildings |
| *I* | Establishment of Soil, Plant & Water Testing Laboratory |
| *J* | Library |  |  |  |
| *K* | KSHAMTA | 80000 | 80000 | 80000 |
| *L* | NARI | 80000 | 80000 | 80000 |
| *M* | HRD | 50000 | 50000 | 50000 |
| TOTAL (A) | | 27809483 | 27809483 | 27809483 | 272.29456 |
| **B. Non-Recurring Contingencies** | | | | |
| 1 | Works | 300000 | 300000 | 300000 |
| 2 | Equipments including SWTL & Furniture | 530000 | 530000 | 530000 |
| 3 | Farm Equipment |  |  |  |
| 4 | Furniture |  |  |  |
| 5 | Library (Purchase of assets like books & journals) |  |  |  |
| TOTAL (B) | | 830000 | 830000 | 830000 | 280.79456 | |
| C. REVOLVING FUND | | 157305 | 157305 | 157305 |
| **GRAND TOTAL (A+B+C)** | | **28786788** | **28786788** | **28786788** |

8.4 Status of Revolving Fund (Rs. in lakhs) for last three years

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Opening balance as on 1st April** | **Income during the year** | **Expenditure during the year** | **Net balance with KVK (in lakh)**  **As on 31st Dec 2023** |
| **2023** | **1.01840** | **0.55465** | **0.00** | **1.57305** |

Note: No KVK must leave this table blank

8.5 Please include information which has not been reflected above.

1. Establishment of Pig Breeding unit at KVK farm from TDF of NABARD
2. Establishment of Vermi compost unit with financial assistance from District Soil Conservation Office, Mokokchung
3. Establishment of demonstration unit on “One District, One Crop” coffee under collaborative mode with Land Resources Department, Mokokchung.

8.6 Constraints and Suggestion (Provide point-wise if any, for recommendation)

(a) Administrative

1. Leakage of office roof and staff quarters
2. Requirement of farmers’ hostel at KVK campus
3. Need of new office pool vehicle
4. Incomplete security fencing

(b) Financial

1. Increase in the amount for HRD program
2. Increase in the contingency fund

(c) Technical

1. Unavailability of critical inputs in the district (seeds, livestock strains, bio agents).

Sr. Scientist cum Head