

**(April 2026 to March 2027)**  
**KRISHI VIGYAN KENDRA, GANDERBAL, SKUAST-KASHMIR**

**1. GENERAL INFORMATION ABOUT THE KVK**

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

| <i>Address</i>                                             | <i>Telephone</i> |              | <i>E mail</i>                                                      |
|------------------------------------------------------------|------------------|--------------|--------------------------------------------------------------------|
|                                                            | <i>Office</i>    | <i>Fax</i>   |                                                                    |
| Krishi Vigyan Kendra, Ganderbal, Shuhama, Alusteng-190 006 | 0194-2262490     | 0194-2462160 | <a href="mailto:kvkganderbal@gmail.com">kvkganderbal@gmail.com</a> |

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

| <i>Address</i>                                                                                           | <i>Telephone</i> |              | <i>E mail</i>                                                      |
|----------------------------------------------------------------------------------------------------------|------------------|--------------|--------------------------------------------------------------------|
|                                                                                                          | <i>Office</i>    | <i>Fax</i>   |                                                                    |
| Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir, Shalimar, Srinagar-190 025 | 0194-2462758     | 0194-2462160 | <a href="mailto:vc@skuastkashmir.ac.in">vc@skuastkashmir.ac.in</a> |

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

| <i>Name</i>          | <i>Telephone / Contact</i> |               |                        |
|----------------------|----------------------------|---------------|------------------------|
|                      | <i>Residence</i>           | <i>Mobile</i> | <i>Email</i>           |
| Dr. Ajaz Ahmad Malik | Lasjan, Srinagar           | 9622551856    | kvkganderbal@gmail.com |

**1.4. Year of Sanction : 2002**

**1.5. Total land with KVK (in ha)**

| S.No.                       | Item                                                | Area (ha)   |
|-----------------------------|-----------------------------------------------------|-------------|
| 1.                          | Horticulture Nursery                                | 0.4         |
| 2.                          | Apple Orchard                                       | 0.6         |
| 3.                          | HDP Block of apple                                  | 0.15        |
| 4.                          | Ambri Apple Block                                   | 0.1         |
| 5.                          | Mother block of clonal rootstock                    | 0.1         |
| 6.                          | Mother block of Grape, Kiwi, Cherry, Plum & Walnut. | 0.3         |
| <b>Agricultural Crop</b>    |                                                     |             |
| 6.                          | Wheat (Shalimar Wheat-2)                            | 0.4         |
| 7.                          | Oats (SFO-3) / Pulses                               | 5           |
| 8..                         | Maize (SFM-1)                                       | 1.25        |
| 9.                          | Oilseed (SS-3)                                      | 0.4         |
| 10.                         | Vegetables                                          | 0.1         |
| 11.                         | a). Uncultivable area (to be developed)             | 3.3         |
|                             | b). Recently developed area                         | 2.75        |
| 12.                         | Under Division of Vegetable Science, SKUAST-K       | 2.5         |
| 13.                         | Area Under Division of Fruit Science, SKUAST-K      | 2           |
| <b>Area under Buildings</b> |                                                     | <b>0.75</b> |
| <b>Total Land</b>           |                                                     | <b>20.1</b> |

**1.6 Infrastructural Development:**

**A) Buildings**

| S. No. | Name of building             | Source of Funding | Stage           |                              |              |               |                    |                  |
|--------|------------------------------|-------------------|-----------------|------------------------------|--------------|---------------|--------------------|------------------|
|        |                              |                   | Complete        |                              |              | Incomplete    |                    |                  |
|        |                              |                   | Completion Date | Plinth area (Sq.m)           | Exp. (Lakhs) | Starting Date | Plinth area (Sq.m) | Status of const. |
| 1.     | Administrative Building      | ICAR              | 2007            | 250 sq. mts. (Build up area) | 56.80        | -             | -                  | Complete         |
| 2.     | Farmers Hostel               | ICAR              | 2007            | (305 sq. mts)                | 32.71        | -             | -                  | Complete         |
| 3.     | Staff Quarters (4)           | ICAR/ SKUAST      |                 |                              | Incomplete   |               |                    |                  |
| 4.     | Demonstration Units 02       | ICAR              | 2007            | (160 sq. mts)                | 11.40        | -             | -                  | Complete         |
| 5      | Fencing                      | ICAR              | 2007            | 20 ha                        | 28.10        | -             | -                  | Complete         |
| 6      | Rain Water harvesting system | ICAR              | 2007            | -                            | 10.0         | -             | -                  | Complete         |
| 7      | Threshing floor              | ICAR              | Nil             | -                            | -            | -             | -                  | -                |
| 8      | Farm godown                  | ICAR              | Nil             | -                            | -            | -             | -                  | -                |
| 9      | Vemi-composting unit.        | ICAR              | 2017            | 138 sq mtr                   | 4.7          | -             | -                  | Complete         |
| 10     | Polyhouse/ Demo unit         | ICAR              | 2018            |                              | 5.0          |               |                    | Complete         |

**B) Vehicles**

| Type of vehicle             | Year of purchase | Cost (Rs.) | Total kms. Run | Present status |
|-----------------------------|------------------|------------|----------------|----------------|
| Bolero (ZLX) Mahindra       | 2019             | 8,00,000   | 36677.00       | Working        |
| Motorcycle, Hero Passion    | 2011             | 49,250.00  | 35523.00       | Working        |
| Tractor, Mahindra Shaktiman | 2011             | 5,70000.00 | 2861hrs        | Working        |

**C) Equipment's & AV aids**

| Name of the equipment                | Year of purchase | Cost (Rs.)  | Present status     |
|--------------------------------------|------------------|-------------|--------------------|
| LCD Projector                        | 2018             | 59,000.00   | Working            |
| Xerox Machine                        | 2011             | 99996.00    | Working            |
| Plant grinder                        | 2005             | 8857.00     | <b>Not Working</b> |
| Spectrophotometer                    | 2005             | 45900.00    | Working            |
| Fire extinguisher                    | 2005             | 2890.00     | Working            |
| Hot Air Oven                         | 2005             | 22924.00    | Working            |
| Balance single pan                   | 2005             | 9778.00     | <b>Not Working</b> |
| Juicer Mixer                         | 2005             | 2596.00     | <b>Not Working</b> |
| Chemical Balance                     | 2005             | 100880.00   | <b>Not Working</b> |
| Distillation stand                   | 2005             | 9698.93     | <b>Not Working</b> |
| Lab. Conductivity meter              | 2005             | 5960.00     | Working            |
| pH meter                             | 2005             | 11302.00    | Working            |
| Hot plate                            | 2005             | 3480.00     | Working            |
| Water distillation                   | 2005             | 98885.00    | Working            |
| Flame photometer                     | 2005             | 37630.00    | <b>Not Working</b> |
| Shaker                               | 2005             | 27360.00    | Working            |
| De-Ionizer                           | 2005             | 14607.00    | <b>Not Working</b> |
| Kjelplus nitrogen analysis system    | 2005             | 65111.00    | <b>Not Working</b> |
| Brother Printer (MFC-9410CON)        | 2016             | 34,590.00   | Working            |
| Computer HCL (Desktop)               | 2007             | 40352.00    | <b>Not Working</b> |
| Computer All in One (03 No.s)        | 2017             | 1,50,000.00 | Working            |
| Sony Camera (Digital)                | 2017             | 22,990.00   | Working            |
| Photocopier (Konica Minolta)         | 2019             | 100000.00   | Working            |
| Computer HP All in One (02 No.s)     | 2021             | 85400.00    | Working            |
| Computer Lenovo All in One (02 No.s) | 2021             | 114842.00   | Working            |
| Chain Saw                            | 2021             | 23500.00    | Working            |
| Computer HP All in One (02 No.s)     | 2022             | 100000.00   | Working            |
| Laptop i3 Lenovo                     | 2022             | 50000.00    | Working            |
| Brother laser Printer (02 No's)      | 2024             | 25000.00    | Working            |

**Main Agenda points which were raised by the members of SAC for which reply is to be submitted against each item**

**1.7. A). Details of 21<sup>st</sup> SAC meeting conducted in the year (16.07.2025)**

**Hon'ble Vice Chancellor, SKUAST-K, in his valedictory address stressed upon following:**

| <b>S. No.</b> | <b>Issue/Agenda</b>                                                                                                                                                                                                                                                                                                                             | <b>Decision</b>                                                                                                                                                     | <b>Action to be taken by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.            | Hon'ble Vice-Chancellor suggested to evaluate the newly established exotic cherry varieties for evaluation of different growth parameters. He also suggested that PG students should work for collection of data on different parameters and intercropping in high density cherry block may be carried for economic benefits for initial years. | A communication has been made to Professor & Head, Division of Fruit Science, SKUAST-Kashmir, Shalimar for allotment of PG student in favour of concerned scientist | <b>Action Taken</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 2.            | OFT's & demonstrations on various technologies should be laid on farmer's field at various locations in the district.                                                                                                                                                                                                                           | KVK Scientists always lay OFTs on farmers field                                                                                                                     | <ul style="list-style-type: none"> <li>• KVK scientists regularly conduct On-Farm Trials (OFTs) on farmers' fields to assess and demonstrate location-specific technologies under real farming conditions. During the year, two OFTs from each discipline were conducted at three different locations on farmers' fields to facilitate effective transfer, validation, and adoption of suitable technologies based on local needs and conditions.</li> <li>• During the year 2 OFTs were laid from Plant Protection discipline at three different locations each:               <ol style="list-style-type: none"> <li>1.Integrated management on fruit fly in cucumber.</li> <li>2.Management of fruit borer in tomato</li> </ol> </li> </ul> |
| 3.            | For income generation, elite backyard Poultry birds should be popularized in the district                                                                                                                                                                                                                                                       | Elite Keystone birds (Egg type) were popularized and distributed among the farm                                                                                     | <ul style="list-style-type: none"> <li>• In this regard, KVK Ganderbal has demonstrated the</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

|    |                                                                                                                                                                                        |                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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|    | particularly in far-flung villages.                                                                                                                                                    | women of far-flung villages under OFT/ FLD                                                                                                         | <p>economic viability of elite backyard poultry through the Horti-Poultry Integrated Model, wherein Keystone layer birds integrated with apple orchards recorded a BCR ranging from <b>1:2.5 to 1:3.4</b> under farmers' field conditions, replicated at 10 locations.</p> <ul style="list-style-type: none"> <li>• Model also improved orchard productivity through nutrient recycling and reduced feed costs under semi-scavenging management.</li> <li>• Findings of the study have also been published in the <i>International Journal of Agriculture Extension and Social Development</i>.</li> </ul> |
| 4. | Skill oriented training programmes related to beekeeping, dairy farming, sheep farming and vermicomposting should be carried out to involve rural youth for socio-economic upliftment. | It has been decided that most of the training programme shall be Skill based mostly so that more rural youth will be involved for their upliftment | <ul style="list-style-type: none"> <li>• During the year three one day and 7 days skill oriented training programmes were conducted on scientific beekeeping in which more than 100 SHGs/ NRLM and rural youth participated at this Kendra in collaboration with Division of Entomology, SKUAST-K.</li> <li>• Number of skill-oriented training programmes have been conducted on dairy and sheep farming for rural youth with the aim of promoting self-employment, entrepreneurship, and socio-economic upliftment.</li> <li>• Dairy farming: 04 trgs</li> <li>• Sheep farming: 02 trgs</li> </ul>       |

|    |                                                                                                                           |                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5. | Programmes regarding environment and health issues be conducted.                                                          | It has been decided that while providing awareness to the farmers, rural youth thrust may be given on safe environment and health issues due to indiscriminate use of pesticide/ fertilizers. | <ul style="list-style-type: none"> <li>• Number of awareness cum trainings regarding the adverse effects of indiscriminate use of pesticides and fertilizers on human health, soil fertility, biodiversity, and the overall environment were organized by this Kendra. In addition his Kendra has conducted two major programmes on Environment and wasteland management in collaboration with district Administration Ganderbal under JKCIP focusing on environmental safety and sustainable agricultural practices. During the programme major focus was to provide awareness on judicious use of agrochemicals, promotion of eco-friendly farming practices, and protection of environmental and public health.</li> <li>• More than 100 members of SHGs, NRLM groups, and rural youth actively participated in these programmes, aimed at enhancing entrepreneurial skills and promoting scientific apiculture practices.</li> </ul> |
| 6. | Awareness related to fertilizer consumption and use of nano fertilizers should be carried out in the district to farmers. | It has been decided that thrust should be given on new generation fertilizers like nano-urea, nano-DAP etc. for its popularization.                                                           | <ul style="list-style-type: none"> <li>• This Kendra successfully achieved the target of covering more than 250 hectares through demonstrations of nano fertilizers and pesticide application by using drone technology under precision agriculture at various locations across the district.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

|     |                                                                                                                                                                                                               |                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7.  | Increasing the number of farmers for portal services under the KVK umbrella                                                                                                                                   | It has been observed that KVK has registered good number of farmers on portal and more to be added during this year                                                                               | <ul style="list-style-type: none"> <li>• KVK Ganderbal off and on addressing the issues of farmers regarding agriculture, horticulture, animal husbandry, sheep husbandry, fisheries etc. and are on toes for solving the issues of the farmers of the district through technological dissemination and communicates the farmers through various medias like, Kissan Sarathi, Print media Facebook page, X, WhatsApp etc. KVK Ganderbal has covered 28670 on Kisan Sarathi portal till-date.</li> </ul> |
| 8.  | Adoption of IFS model in different locations of the district at least 05 components of the model should be available on each established farm.                                                                | It has been decided that most of the farmers who have been adopted under IFS should posses at least five different components for proper establishment.                                           | A separate enclosed area for rabbits has been constructed within the Horti-Poultry model to enhance the diversity, aesthetic value, and demonstration potential of the unit, while also ensuring better welfare and natural movement for the rabbits.                                                                                                                                                                                                                                                   |
| 9.  | HVC suggested that Horti-Poultry model established at Kendra should also contain separate confined area for rabbits instead of keeping them in cages so that it will add diversity and attraction to the unit | Separate enclosure for rabbits has been allocated in the horti-poultry unit established at KVK campus                                                                                             | A separate enclosed area for rabbits has been constructed within the Horti-Poultry model to enhance the diversity, aesthetic value, and demonstration potential of the unit, while also ensuring better welfare and natural movement for the rabbits.                                                                                                                                                                                                                                                   |
| 10. | Hon'ble Vice-Chancellor emphasized the importance of organic farming for sustainable agriculture in district Ganderbal. He urged to promote vermicompost technologies among the local farmers and to conduct  | Resolved to promote vermicomposting technology among local farmers through training programmes and awareness campaigns. Vermi-bed will be distributed to selected farmers to encourage adoptions. | ❖ KVK Ganderbal has established a functional vermicomposting unit for demonstration and capacity building of farmers. To encourage the adoption of eco-friendly nutrient management practices, vermibeds/worms have been distributed among farmers for on-farm vermicompost production.                                                                                                                                                                                                                 |

|  |                                            |  |                                                                                                                                                                   |
|--|--------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | training programmes to boost its adoption. |  | ❖ The KVK has also been conducting regular awareness programmes, and demonstrations on vermicomposting technology, highlighting its role in improving soil health |
|--|--------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Worthy Director Extension, SKUAST-K, in her valedictory address stressed upon following:**

While praising KVK work, worthy Director Extension said there are more expectations from KVKs. He appreciated the progressive farmers who attended the meeting on occasion of SAC 2025.

| S.No. | Issue/Agenda                                                                                                                                                                                                                                                                                             | Decision                                                                                                                                                       | Action to be taken by                                                                                                                                                                                                                           |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.    | Adoption of far-flung areas for technological backstopping and KVK intervention                                                                                                                                                                                                                          | It has been decided that the farmers belonging to far flung areas should be adopted for technological bac stopping.                                            | This Kendra has adopted 08 new villages from farflung areas of the district viz., Naranag, Kashnambal, Chauntiwaliwar, Anderwan, Gugerpati yarmuqam, Surfraw, Haknar Gund and Guger Basti Preng for technological bac stopping.                 |
| 2.    | Always get feedback from farmers/entrepreneurs while laying out the OFTs/FLDS.                                                                                                                                                                                                                           | Proper feedback from farmers/ entrepreneurs should be taken existing/ completion of OFTs/ FLD's                                                                | The scientists of this Kendra are taking feedback through baseline survey from 15 farmers while existing of an OFT or FLD and on completion taking feedback from the farmers regarding the performance of technology on location specific area. |
| 3.    | FLD's in Oilseed and oats crops should be laid in proper time with adoption of scientific methodology for quality production as per package of practice. More thrust should be given on providing skill-based training programmes for rural youth for income generation and entrepreneurship development | The seeds/ other inputs regarding FLD/ CFLDs oilseed and oats alongwith package of practice be provided in advance for proper adoption and quality production. | Efforts has been made in collaboration with MRCS Kudwani and NSP SKUAST-K to make critical input in advance to farmers while layingout FLD/CFLD so that sowing operation be made in time.                                                       |
| 4.    | Worthy Director stressed upon scientists of KVK to devote more time towards problem solving, testing of technologies, quick                                                                                                                                                                              | Literature related to common problems faced is being published from time to time by the Kendra to aware/ benefit                                               | Literature addressing common problems faced by farmers is regularly published by the Kendra for the awareness and benefit                                                                                                                       |

|    |                                                                                                                                                              |                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | dissemination of information through various Medias for benefit of farming communities.                                                                      | the farming community of the district                                                                                                                                                                                  | of the farming community of the district. During the year, KVK Ganderbal published more than 10 booklets, folders, and research articles covering various aspects of agriculture and allied sectors. In addition, digital and social media platforms such as hashtags, X (formerly Twitter), Facebook, and other online platforms are being effectively utilized for rapid dissemination of technological information, advisories, and farmer-oriented updates. |
| 5. | More awareness cum training programmes on the management of mastitis, repeat breeding and clean milk production should be conducted a for farmers/farm women | No of training is being conducted for the dairy farmers to make them aware about mastitis- its prevention and control, management of repeat breeding and importance of clean milk production to safeguard human health | Several farmer awareness programmes were conducted on the prevention and management of mastitis and repeat breeding in dairy cattle. Farmers were educated about hygienic milking practices, balanced nutrition, proper reproductive management, and timely veterinary care. In addition, awareness was created regarding clean milk production practices to improve milk quality and enhance the shelf life of milk                                            |

## 2. DETAILS OF DISTRICT (2025-26)

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

| S. No | Farming system/enterprise                  |
|-------|--------------------------------------------|
| 1     | Horticulture+Agriculture.                  |
| 2     | Agriculture+ Horticulture+Animal Husbandry |
| 3     | Animal Husbandry + Agriculture.            |

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

| S. No                             | Agro-climatic Zone                                                           | Characteristics                                |
|-----------------------------------|------------------------------------------------------------------------------|------------------------------------------------|
| <b>Western Himalayan region-1</b> |                                                                              |                                                |
| 01.                               | Higher belt – semi arid zone (Sonamarg and Kulan)                            | Rocky soil, above 5200 ft ASL                  |
| 02.                               | Mid belt – Temperate, mostly rain fed (Kangan and foot hills of Ganderbal)   | Clay loam / sandy soil, above 4900-4975 ft ASL |
| 03.                               | Lower belt – Temperate mostly irrigated (Ganderbal and some areas of Kangan) | Silty loam / Clay loam soil, above 4800 ft ASL |

### 2.3 Soil type/s

| S. No | Soil type                         | Characteristics                                                     |
|-------|-----------------------------------|---------------------------------------------------------------------|
| 01.   | Silty clay loam<br>Order: Alfisol | >50% silt<br>Medium to light in color significant clay accumulation |

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

| S. No | Crop          | Area (ha) | Production (MT) | Productivity (MT ha <sup>-1</sup> ) |
|-------|---------------|-----------|-----------------|-------------------------------------|
| 01.   | Fresh fruits  | 9720      | 105686          | 10.8                                |
| 02.   | Dry Fruits    | 5272      | 16156           | 3.06                                |
| 03.   | Rice          | 7746      | 43377           | 5.6                                 |
| 04.   | Maize         | 3357      | 9735            | 2.9                                 |
| 05.   | Wheat         | 23        | 57.5            | 2.5                                 |
| 06.   | Oilseed       | 1745      | 1396            | 0.8                                 |
| 07.   | Vegetable     | 2593      | 27486           | 10.6                                |
| 08.   | Pulses        | 1304      | 2347            | 1.8                                 |
| 09.   | Fodder (Oats) | 3809      | 43042           | 11.3                                |

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

| Category       | Population | Production                         | Productivity                                |
|----------------|------------|------------------------------------|---------------------------------------------|
| <b>Cattle:</b> |            |                                    |                                             |
| Crossbred      | 57411      | Milk = 13.66 thousand tonnes/annum | Milk = 6-7 ltr/day/cow                      |
| Indigenous     | 22524      |                                    |                                             |
| <b>Buffalo</b> | 385        |                                    |                                             |
| <b>Sheep</b>   |            |                                    |                                             |
| Crossbred      | 125000     | Mutton =951000Kg                   | Mutton =9-11Kg/sheep<br>Wool = 2-3 Kg/sheep |
| Indigenous     | 26000      | Wool = 275000 Kg                   |                                             |
| <b>Goats</b>   | 30000      |                                    |                                             |
| <b>Pigs</b>    |            |                                    |                                             |

|                            |        |                      |                           |
|----------------------------|--------|----------------------|---------------------------|
| <i>Crossbred</i>           |        |                      |                           |
| <i>Indigenous</i>          |        |                      |                           |
| <b>Rabbits</b>             | 3000   |                      |                           |
| <b>Poultry</b>             |        |                      |                           |
| Hens                       |        |                      |                           |
| <i>Desi</i>                | 123000 | Egg = 14330000/annum | Egg = 70-80 egg/bird/year |
| <i>Improved</i>            | 413337 |                      |                           |
| Ducks                      | 147497 |                      |                           |
| Turkey and others          | 5832   |                      |                           |
| <b>Horses &amp; Ponies</b> | 3726   |                      |                           |
| <b>Mules</b>               | 29     |                      |                           |

| <b>Category</b> | <b>Area</b> | <b>Production</b> | <b>Productivity</b> |
|-----------------|-------------|-------------------|---------------------|
| Fish            |             | 161103            |                     |

## 2.6 Details of Operational area / Villages (2025-26)

| S. No | Taluk     | Name of the Block | Name of the village                                                                              | Major crops and enterprises                                                                                 | Major problems identified                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Identified thrust areas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------|-----------|-------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.    | Ganderbal | Ganderbal         | Gotlibagh/<br>Bela-Wusan/<br>Nuner/<br>Shuhama/<br>Bakura/<br>Khalmulla/<br>Warpoh/<br>Buserbugh | Rice/Maize/ Pulses/<br>apple/walnut/<br>cherry/ Plum/ Pear<br>and Livestock<br>(Sheep, Poultry,<br>Cattle). | <ul style="list-style-type: none"> <li>➤ Low production of fruits, cereals and pulse crops.</li> <li>➤ Low production of meat in sheep and milk in cattle.</li> <li>➤ Unscientific management of field crops and fruit orchards in general and fruit cracking, fruit fly and rodent problem of cherry in particular.</li> <li>➤ Lack of quality seed of cereal crops and planting material of fruit crops.</li> <li>➤ Non-diversification of fruit crops</li> <li>➤ Malnutrition in women and children.</li> <li>➤ Un-employment among rural youth.</li> <li>➤ Poor Socio-economic status of women.</li> <li>➤ Lack of knowledge regarding natural resource management</li> <li>➤ Rodent problems in fruit orchards.</li> </ul> | <ul style="list-style-type: none"> <li>❖ Introduction of high yielding varieties of cereals, pulses and quality planting material of fruit crops.</li> <li>❖ Management of orchards scientifically.</li> <li>❖ Integrated Farming System for doubling farmers income.</li> <li>❖ Improved propagation techniques in cherry crop.</li> <li>❖ Management of dairy animals (health and nutrition).</li> <li>❖ Women empowerment through skill and entrepreneurship development.</li> <li>❖ Demonstration regarding SRI system of rice cultivation and vermicomposting technology for resource management.</li> <li>❖ Demonstration on management of rodents.</li> <li>❖ Demonstration of walnut dehuller and its availability during the season on cooperative basis.</li> <li>❖ Backyard Poultry Rearing among rural women.</li> </ul> |

|    |           |             |                                                                                                 |                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----|-----------|-------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2. | Ganderbal | Sherpathri  | Rabitar/<br>Sendbal/<br>Shalbugh/<br>Sehpora/<br>Patti-<br>shallabugh/<br>Harran                | Rice/Oats/ Oilseed/<br>vegetables/ Agro-<br>forestry/ Willow<br>Wicker and<br>Livestock<br>(Sheep/Poultry/Cattle). | <ul style="list-style-type: none"> <li>➤ Low production of Cereals, Pulses, Oats and Oilseed.</li> <li>➤ Powdery mildew, brown spot, sheath blight, Rice blast and Mustard Aphid.</li> <li>➤ Malnutrition in women and children.</li> <li>➤ Unawareness about soil testing.</li> <li>➤ Soil borne diseases in crops.</li> <li>➤ Low production of meat in sheep and milk in cattle.</li> <li>➤ Non-availability of quality seed of crops.</li> <li>➤ Unemployment among youth.</li> </ul>                                                                                                                                                                     | <ul style="list-style-type: none"> <li>❖ Integrated Diseases Management.</li> <li>❖ Introduction of high yielding varieties of Rice, Pulses, Oats and Oilseed.</li> <li>❖ Women and child care through introduction of low/ minimum and high nutrient diets in children.</li> <li>❖ Soil testing for nutrient recommendation.</li> <li>❖ Awareness of IDM of soil borne diseases.</li> <li>❖ Willow wickering on modern basis.</li> <li>❖ Women empowerment through skill and entrepreneurship development.</li> <li>❖ Management of dairy animals (health and nutrition).</li> <li>❖ Strategies for organic vegetable production.</li> <li>❖ Soil test based nutrient management for better vegetable production</li> <li>❖ Seed production of vegetables.</li> </ul> |
| 3. | Ganderbal | Kangan/Gund | Yarmuqam/<br>Satrina/<br>Haknar/<br>Kachnambal/<br>Anderwan/<br>Wangath/<br>Surfraw/<br>Ganiwan | Apple/Walnut/<br>Cherry/<br>Maize/Pulses/<br>Oilseed/ Livestock<br>(Sheep/Poultry/<br>Cattle).                     | <ul style="list-style-type: none"> <li>➤ Low production in cereals due to inadequate nutrient management.</li> <li>➤ Low production in apple due to faulty training and pruning.</li> <li>➤ Mono-cropping system in crops.</li> <li>➤ Diseases like rice blast and tericum blight in maize.</li> <li>➤ Lack of quality seed of cereal crops and planting material of fruit crops.</li> <li>➤ Shortage of fodder during winter.</li> <li>➤ Malnutrition in women and children.</li> <li>➤ Unemployment among youth.</li> <li>➤ Poor Socio-economic status of women.</li> <li>➤ Improper housing system caused reduce body growth rate and increased</li> </ul> | <ul style="list-style-type: none"> <li>❖ Introduction of high yielding varieties of Cereals particularly Maize.</li> <li>❖ Strategies for enhancement of fruit production with proper package of practices.</li> <li>❖ Introduction of high yielding Pulse varieties and Oilseed.</li> <li>❖ Women empowerment through Backyard Poultry rearing.</li> <li>❖ Management of shot hole disease in cherry.</li> <li>❖ Management of dairy animals (health and nutrition).</li> <li>❖ Introduction of Oats and fodder maize as source of fodder.</li> </ul>                                                                                                                                                                                                                 |

|    |           |                 |                                                                                          |                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----|-----------|-----------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |           |                 |                                                                                          |                                                                         | mortality due to heat (high temp & RH) & cold stress (hailstorm & frost)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ❖ Enhancing the nutritional value of fodder through Urea molasses treatment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 4. | Ganderbal | Wakura/Safapora | Ahan/<br>Wakura/<br>Zazuna/<br>Batwina/<br>Yangoora/<br>Kurhama/<br>Safapora/<br>Goziham | Apple/ Vegetables/<br>Rice/ Pulses/<br>Floriculture/<br>Oilseed/ Sheep  | <ul style="list-style-type: none"> <li>➤ Low production of Cereals, Pulses, Oats and Oilseed due to Non-availability of quality seed.</li> <li>➤ Excessive use of fertilizers.</li> <li>➤ Lack of knowhow about IDM in vegetable crops.</li> <li>➤ Poor orchard management with respect to training and pruning and Nutrient management.</li> <li>➤ Non-diversification of fruit crops.</li> <li>➤ Unawareness about soil testing and nutrient recommendation.</li> <li>➤ Non-availability of quality seed of high yielding improved varieties of vegetable crops and pulses.</li> <li>➤ Non-adoption of package of practice for HYV.</li> <li>➤ Downy mildew, calyx end rot and root rot of cucurbitaceous crops.</li> <li>➤ Many juvenile orchards established with fallow interplant and interrow spaces</li> <li>➤ Lack of awareness regarding intercropping in apple orchards</li> <li>➤ Less availability of vegetable crops</li> <li>➤ No other sources of income till plants bear fruits</li> </ul> | <ul style="list-style-type: none"> <li>❖ Introduction of high yielding varieties of Cereals, Pulses, Oilseed.</li> <li>❖ Pre and Post-harvest Management of orchards.</li> <li>❖ Integrated Farming System for doubling farmers income.</li> <li>❖ Soil testing and sampling for nutrient recommendation.</li> <li>❖ Scientific Training and Pruning of fruit crops particularly apple.</li> <li>❖ Awareness and demonstrations regarding canker, root rot and other diseases in fruit and vegetable crops.</li> <li>❖ Feed and fodder management for sheep and cattle for better remuneration.</li> <li>❖ Management of sheep and dairy animals (health and nutrition).</li> <li>❖ Introduction of Oats and fodder maize as source of fodder.</li> <li>❖ Intercropping of vegetables with vegetables.</li> <li>❖ Introduction of SKUAST-K released vegetable varieties.</li> <li>❖ Awareness regarding SKUAST-K recommended package of practices of vegetable crops.</li> </ul> |
| 5. | Ganderbal | Lar             | Repora/<br>QasbaLar/<br>Waliwar/<br>Larsun/<br>Wandhama/                                 | Grapes/ Apple/<br>Vegetables/ Rice/<br>Maize/ Pulses/<br>Oilseed/ Oats/ | <ul style="list-style-type: none"> <li>➤ Anthracnose and powdery mildew of grapes.</li> <li>➤ Hen and chicken disorder and berry cracking in grapes.</li> <li>➤ Faulty Training and pruning in Grapes &amp; Apple.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>❖ Production and management technology for production high quality grapes.</li> <li>❖ Foliar nutrient application to overcome micronutrient deficiencies.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

|  |  |  |                        |                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--|--|--|------------------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  |  | Manigam/<br>Watalbagh/ | Livestock<br>(Sheep/Poultry/Cattle). | <ul style="list-style-type: none"> <li>➤ Lack of knowledge about protected cultivation of off-season vegetables.</li> <li>➤ Lack of knowledge on kitchen gardening and processing of fruits and vegetables</li> <li>➤ Unawareness of adverse climate adaptive technologies.</li> <li>➤ Non-availability of quality seed of cereals, Pulses and vegetables.</li> <li>➤ Unemployment among rural youth.</li> <li>➤ Foot rot and other problems related to sheep.</li> </ul> | <ul style="list-style-type: none"> <li>❖ Scientific Training and Pruning in Grapes and Apple.</li> <li>❖ Popularization of new SKUAST-K released varieties in Rice, Oilseed, Pulses &amp; vegetables.</li> <li>❖ Introduction of IDM &amp; IPM strategies to manage grape diseases and insect pests.</li> <li>❖ Women empowerment through skill development trainings.</li> <li>❖ Introduction of floriculture and cultivation of medicinal plants as income generation.</li> </ul> |
|--|--|--|------------------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 2.7 Priority/ thrust areas

| Discipline              | Thrust area                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Agronomy</b>         | <ol style="list-style-type: none"> <li>1. Enhancement of seed replacement rate in case of Cereals, Pulses, Oilseeds and Oats with high yielding varieties of SKUAST-K.</li> <li>2. Irrigation management and scheduling in cereal crops with special reference to System of Rice Intensification (SRI).</li> <li>3. Integrated Farming System approach for doubling farmers income.</li> <li>4. Double cropping in maize based cropping system.</li> <li>5. Cultivation of crops as per the recommended package of practices.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Horticulture</b>     | <ol style="list-style-type: none"> <li>1. Orchard management strategies for improvement in growth, yield and productivity of temperate fruits.</li> <li>2. Production of quality planting material of elite regular bearing fruit cultivars</li> <li>3. Fruit diversification.</li> <li>4. Production technology management for quality grape production.</li> <li>5. Shifting to HDP for enhanced productivity in apple.</li> <li>6. Pollination management and pollinizer diversification in apple.</li> <li>7. Walnut propagation technology &amp; production.</li> <li>8. Scientific training and pruning of temperate fruits.</li> <li>9. Production technology of cut flowers and bulbous flowers.</li> <li>10. Post-harvest management &amp; marketing of cut flowers.</li> <li>11. Production technology for temperate vegetable crops</li> <li>12. Seed production of vegetable crops</li> <li>13. Protected cultivation for year round cultivation of vegetable.</li> <li>14. Revival of traditional vegetables</li> <li>15. Exotic/ High value vegetables for nutritional security and income generation</li> <li>16. Thrust on area and altitude specific vegetable cultivation.</li> <li>17. Management of physiological/horticultural problems of fruit crops</li> </ol> |
| <b>Soil Science</b>     | <ol style="list-style-type: none"> <li>1. Soil test based nutrient management.</li> <li>2. Organic farming &amp; vermicomposting.</li> <li>3. Integrated Nutrient Management.</li> <li>4. Use of bio-fertilizers particularly in pulses.</li> <li>5. Micro-nutrient deficiency and disorders.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Plant Protection</b> | <ol style="list-style-type: none"> <li>1. Production technology and management for quality grape production.</li> <li>2. Quality apple fruit production through IDM.</li> <li>3. Integrated approach in plant disease management.</li> <li>4. Popularization of pesticide spray schedule.</li> <li>5. Disease and insect pest management of honey bees.</li> <li>6. Integrated Pest and Disease Management of apple and Rice.</li> <li>7. Integrated disease management of vegetable crops.</li> <li>8. Mushroom cultivation as an enterprise for Self-employment of Rural youth.</li> <li>9. Apiculture technology demonstration and adoption.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Home Science</b>     | <ol style="list-style-type: none"> <li>1. Women development and child care.</li> <li>2. Value addition of fruits and vegetables.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

|                       |                                                                                                                                                                                                                                       |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | 3. Entrepreneurship development as income generating activities.<br>4. Formation and management of Self-Help Groups (SHGs) & FPO's.                                                                                                   |
| <b>Animal Science</b> | 1. Dairying and dairy management.<br>2. Disease and feed management of livestock.<br>3. Production and popularization of backyard poultry as income generating unit.<br>4. Sheep rearing as an enterprise.<br>5. Horti-Poultry model. |

### 3: TECHNICAL ACHIEVEMENTS

#### 3.A. Details of target and achievements of mandatory activities

| OFT            |             |                   |             | FLD            |             |                   |             |
|----------------|-------------|-------------------|-------------|----------------|-------------|-------------------|-------------|
| 1              |             |                   |             | 2              |             |                   |             |
| Number of OFTs |             | Number of farmers |             | Number of FLDs |             | Number of farmers |             |
| Targets        | Achievement | Targets           | Achievement | Targets        | Achievement | Targets           | Achievement |
| 09             | 09          | 39                | 39          | --             | 58.80       | --                | 186         |

#### 3.A.1 FLDs Conducted under CFLDs on Oilseed

| FLD (Oilseeds) |             |                   |             |
|----------------|-------------|-------------------|-------------|
| Number of FLDs |             | Number of Farmers |             |
| Targets        | Achievement | Targets           | Achievement |
| 50.00          | 50.00       | 125               | 125         |

#### 3.A.2 Capacity building programmes conducted

| Training          |             |                        |             | Extension Programmes |             |                        |              |
|-------------------|-------------|------------------------|-------------|----------------------|-------------|------------------------|--------------|
| 3                 |             |                        |             | 4                    |             |                        |              |
| Number of Courses |             | Number of Participants |             | Number of Programmes |             | Number of participants |              |
| Targets           | Achievement | Targets                | Achievement | Targets              | Achievement | Targets                | Achievement  |
| Farmers           | 60          | --                     | 1801        |                      | 1056        |                        | 21240        |
| Rural youth       | 12          | --                     | 371         |                      |             |                        |              |
| Ext. Funct.       | --          | --                     | --          |                      |             |                        |              |
| <b>Total</b>      | <b>72</b>   |                        | <b>2172</b> |                      | <b>1056</b> |                        | <b>21240</b> |

| Sponsored and Skill Development Trainings for Rural Youth |                    |                             |                    |
|-----------------------------------------------------------|--------------------|-----------------------------|--------------------|
| Sponsored Training Programmes including MSME              |                    | Skill Development Trainings |                    |
| No. of Trainings                                          | Total participants | No. of Trainings            | Total Participants |
| 30                                                        | 2295               | 01                          | 29                 |

| Sale of farm produce |              | Sale of Planting materials                                                           |               |
|----------------------|--------------|--------------------------------------------------------------------------------------|---------------|
| 5                    |              | 6                                                                                    |               |
| Name of the crop     | Achievement  | Name of the crop                                                                     | Achievement   |
| Vegetables           | Rs. 89594.00 | Sale of quality planting material (Different fruit crops, rootstock, seedlings etc.) | Rs. 994530.00 |
| Oats                 | Rs. 75000.00 | Rent from Khyber Greens                                                              | Rs. 938309.00 |
| Oilseed              | Rs. 44500.00 |                                                                                      |               |
| Vermicompost         | Rs. 63923.00 |                                                                                      |               |
| Silage               | Rs. 18000.00 |                                                                                      |               |

| Livestock, poultry strains and fingerlings (No.) |               | Bio-products (Kg) |               |
|--------------------------------------------------|---------------|-------------------|---------------|
| 7                                                |               | 8                 |               |
| Target                                           | Achievement   | Target            | Achievement   |
| Cattle and poultry birds                         | Rs. 95350.00  | Milk              | Rs. 318744.00 |
| Sale of Hony                                     | Rs. 535200.00 | Biocontrol        | Rs. 9000.00   |

**Details of each On Farm Trial to be furnished in the following format**

**Trial 1: Integrated Management of fruit fly in cucurbits (cucumber)**

**A. Technology Assessment**

|     |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1)  | <b>Title:</b>                                                 | <b>Integrated Management of fruit fly in cucurbits (cucumber)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 2)  | Problem diagnose/defined :                                    | <b>Fruit fly in cucurbits</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 3)  | Details of technologies selected for assessment/ refinement : | T0: Farmers practice (local)<br>T1= Fruit bait (Methyl Eugenol+crushed fruit)<br>T2: installation of pheromone traps @ 12-15 traps/ha<br>+Insecticide spray (Chlorpyrifos 20 EC @ 100ml/100 litres of water                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 4)  | Source of technology:                                         | SKUAST-K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 5)  | Production system thematic area:                              | Irrigated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 6)  | Thematic area:                                                | IPM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 7)  | Performance of the Technology with performance indicators:    | T3 prove best followed by T2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 8)  | Final recommendation for micro level situation:               | Fruit bait (Methyl Eugenol+crushed fruit) followed by installation of pheromone traps @ 12-15 traps/ha +Insecticide spray (Chlorpyrifos 20 EC @ 100ml/100 litres of water are recommended to manage fruitfly in cucumber                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 9)  | Constraints identified and feedback for research:             | Based on feedback received from farmers, fruit fly infestation has emerged as a major constraint in crop production. Farmers reported that if fruit fly management measures are not initiated at the early stages of the season, as a result, the harvested produce becomes unmarketable, leading to substantial economic losses. Therefore, there is a need for research and extension efforts focusing on the development and dissemination of effective, timely, and sustainable fruit fly management strategies.                                                                                                                               |
| 10) | Process of farmers participation and their reaction:          | Farmers actively participated in the programme through field visits, group discussions, on-farm observations, and interactive feedback sessions. They shared their experiences regarding crop production constraints, pest and disease management, and the effectiveness of existing technologies. Farmers appreciated the opportunity to interact with scientists and extension personnel and emphasized the need for practical, location-specific solutions to address their farming challenges. Overall, their response was positive, and they actively contributed valuable feedback for refining future research and extension interventions. |

## B). Results of On Farm Trials

| <i>Crop/enterprise</i> | <i>Farming situation</i> | <i>Problem Diagnosed</i> | <i>Title of OFT</i>                                               | <i>No. of trials</i> | <i>Technology Assessed</i>                                                                                                                                                                               | <i>Parameters</i>                 | <i>Data on the parameter</i> | <i>Results of refinement</i> | <i>Feedback from the farmer</i>                                                                                                                                                                                                            |
|------------------------|--------------------------|--------------------------|-------------------------------------------------------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                      | 2                        | 3                        | 4                                                                 | 5                    | 6                                                                                                                                                                                                        | 7                                 | 8                            | 9                            | 10                                                                                                                                                                                                                                         |
| Cucumber               | irrigated                | Fruit fly in cucumber    | <b>Integrated Management of fruit fly in cucurbits (cucumber)</b> | 03                   | T0: Farmers practice (local)<br>T1= Fruit bait (Methyl Eugenol+crushed fruit)<br>T2: installation of pheromone traps @ 12-15 traps/ha +Insecticide spray (Chlorpyrifos 20 EC @ 100ml/100 litres of water | 1.Fruit infestation<br>2.Yield/ha | Table-1                      | Table-1                      | They showed keen interest in the technologies demonstrated and appreciated the practical recommendations provided. Their overall response was positive, and they expressed the need for continued technical support and timely advisories. |

**Table-1**

| <b>Technology Assessed</b>                                                                                                     | <b>Production per unit (q/ ha) (Productivity)</b> | <b>Per cent control %</b> | <b>Cost of cultivation</b> | <b>Gross returns (Rs.)</b> | <b>Net Return (Rs.)</b> | <b>B:C Ratio</b> |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|---------------------------|----------------------------|----------------------------|-------------------------|------------------|
| <b>11</b>                                                                                                                      | <b>12</b>                                         | <b>13</b>                 | <b>14</b>                  | <b>15</b>                  | <b>16</b>               | <b>17</b>        |
| <b>T0:</b> Farmers practice (local)                                                                                            | 150                                               | 23                        | 135000                     | 210000                     | 75000                   | 1:1.56           |
| <b>T1:</b> Fruit bait (Methyl Eugenol+crushed fruit)                                                                           | 168                                               | 10                        | 235200                     | 135000                     | 100200                  | 1:1.74           |
| <b>T2:</b> installation of pheromone traps @ 12-15 traps/ha +Insecticide spray (Chlorpyrifos 20 EC @ 100ml/100 litres of water | 185                                               | 100                       | 259000                     | 135000                     | 124000                  | 1.92             |

## **Trial-2: Management of fruit borer in Tomato**

### **A. Technology Assessment**

|     |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1)  | <b>Title:</b>                                                 | <b>Management of fruit borer in Tomato</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2)  | Problem diagnose/defined :                                    | Fruit borer in tomato                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 3)  | Details of technologies selected for assessment/ refinement : | T1: Farmer's Practice (T1): One spray of chlorpyrifos 20EC @ 1.0 ml/liter of water (after outbreak of pest)<br>T2: Pheromone trap @ 10.0/ha (Monitoring) + two sprays of neem oil@3ml/litre of water.<br>T3= Pheromone trap @ 5.0/ha (Monitoring) + Need based two sprays of Imidacloprid 14.5 SC @ 1.0 ml/litre of water                                                                                                                                                                                                                                                                                                                      |
| 4)  | Source of technology:                                         | SKUAST-K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 5)  | Production system thematic area:                              | Irrigated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 6)  | Thematic area:                                                | IPM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 7)  | Performance of the Technology with performance indicators:    | farmers' practice (T1) gave lower returns compared to pheromone trap installation (T2), while combining pheromone traps with imidacloprid spray (T3) provided the highest yield and benefit-cost (B:C) ratio, making it the most economically viable option.                                                                                                                                                                                                                                                                                                                                                                                   |
| 8)  | Final recommendation for micro level situation:               | T3 proved best compared to T2 IN MINIMISING THE BORER INFESTATION IN TOMATO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 9)  | Constraints identified and feedback for research:             | Farmers observed that the use of pheromone traps along with need-based application of safer insecticides provided better pest monitoring and management, reduced unnecessary pesticide sprays, and resulted in higher yield and net returns. Farmers suggested that further research should focus on developing cost-effective, eco-friendly, and location-specific pest management strategies along with timely advisory services for effective pest control.                                                                                                                                                                                 |
| 10) | Process of farmers participation and their reaction:          | Farmers actively participated in the assessment through selection of fields, installation of pheromone traps, observation of pest incidence, and adoption of recommended plant protection measures under the guidance of scientists. Regular interactions, field visits, and discussions were conducted to create awareness regarding integrated pest management practices. Farmers showed keen interest in the demonstrated technology and expressed satisfaction with the reduction in pest incidence, improvement in fruit quality, and higher economic returns obtained from the assessed technology compared to their existing practices. |

## B. Results of On Farm Trials

| <i>Crop/<br/>enterprise</i> | <i>Farmin<br/>g<br/>situatio<br/>n</i> | <i>Problem<br/>Diagnosed</i> | <i>Title of<br/>OFT</i>                                     | <i>No. of<br/>trials</i> | <i>Technology<br/>Assessed</i>                                                                                                                                                                                                                                                                                                                                      | <i>Parameters</i>                 | <i>Data on the<br/>parameter</i> | <i>Results of<br/>refinement</i> | <i>Feedback from the farmer</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------|----------------------------------------|------------------------------|-------------------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|----------------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                           | 2                                      | 3                            | 4                                                           | 5                        | 6                                                                                                                                                                                                                                                                                                                                                                   | 7                                 | 8                                | 9                                | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Tomato                      | Irrigate<br>d                          | Fruit borer                  | <b>Manage<br/>ment of<br/>fruit<br/>borer in<br/>Tomato</b> | 10                       | T1= Farmer's<br>Practice One spray<br>of chlorpyriphos<br>20EC @ 1.0 ml/liter<br>of water (after<br>outbreak of pest)<br>T2= Pheromone trap<br>@ 10.0/ha<br>(Monitoring) + two<br>sprays of neem<br>oil@3ml/litre of<br>water<br>T3= Pheromone trap<br>@ 5.0/ha<br>(Monitoring) + Need<br>based two sprays of<br>Imidacloprid 14.5<br>SC @ 1.0 ml/litre of<br>water | Fruit<br>infestation<br>and yield | Table-1                          | Table-1                          | Farmers expressed<br>satisfaction with the assessed<br>technology as it effectively<br>reduced pest infestation,<br>improved fruit quality, and<br>increased yield and net<br>returns. They appreciated the<br>use of pheromone traps for<br>timely monitoring of pests<br>and observed reduced<br>dependence on chemical<br>pesticides. Farmers<br>suggested wider<br>dissemination of the<br>technology and regular<br>technical guidance for<br>effective adoption at the field<br>level. |

**Table-1**

| <b>Technology Option</b>                                                                                         | <b>Yield (q/ha)</b> | <b>Yield<br/>Increased<br/>(%)</b> | <b>Gross Return<br/>(Rs./ha.)</b> | <b>Cost of<br/>Cultivation<br/>(Rs./ha.)</b> | <b>Net Return<br/>(Rs./ha.)</b> | <b>B:C<br/>Ratio*</b> |
|------------------------------------------------------------------------------------------------------------------|---------------------|------------------------------------|-----------------------------------|----------------------------------------------|---------------------------------|-----------------------|
| Farmer's Practice (T1): One spray of chlorpyriphos 20EC @ 1.0 ml/liter of water (after outbreak of pest)         | 450                 | --                                 | 4,50,000                          | 2,27,000                                     | 2,23,000                        | 1.98                  |
| T2: Pheromone trap @ 10.0/ha (Monitoring) + two sprays of neem oil@3ml/litre of water                            | 510                 | 13.34                              | 5,10,000                          | 2,29,450                                     | 2,80,550                        | 2.22                  |
| T2: Pheromone trap @ 5.0/ha (Monitoring) + Need based two sprays of Imidacloprid 14.5 SC @ 1.0 ml/litre of water | 530                 | 15.21                              | 5,30,000                          | 2,20,250                                     | 3,09,750                        | 2.40                  |

### **Trial 3: Assessment of different Thinning Practices for optimizing crop load management in high density apple orchards**

#### **A. Technology Assessment**

|     |                                                                 |                                                                                                                                                                                                                                                                                                                                         |
|-----|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.  | <b>Title:</b>                                                   | <b>Assessment of different Thinning Practices for optimizing crop load management in high density apple orchards</b>                                                                                                                                                                                                                    |
| 2.  | Problem diagnose/defined<br>:                                   | Poor Quality<br>Biennial<br>Bearing<br>Low returns                                                                                                                                                                                                                                                                                      |
| 3.  | Details of technologies selected for assessment/refinement<br>: | T0: No Thinning - (FP)<br>T1 : $\alpha$ -NAA @ 10-15 ppm applied at 7-35 days from full bloom followed by hand thinning 4-6 Fruits per cm <sup>2</sup> TCSA) – (RP)<br>T2: 6-BA @ 50-150 ppm applied at 5-30 days from full bloom followed by hand thinning 4-6 Fruits per cm <sup>2</sup> TCSA) – (RP)                                 |
| 4.  | Source of technology:                                           | SKUAST-K                                                                                                                                                                                                                                                                                                                                |
| 5.  | Production system                                               | T1 treatment proved to be the best treatment compared to control(T0) for management of Poor Quality Biennial and Bearing-low returns                                                                                                                                                                                                    |
| 6.  | Thematic area:                                                  | Nutritional as well as hormonal deficiency                                                                                                                                                                                                                                                                                              |
| 7.  | Performance of the Technology with performance indicators:      | The assessment was carried out using key performance indicators including flower cluster/tree total no of fruits harvested /tree Quality (% Agrade apples /kanal B:C Ratio and results of one year revealed T0:5-6 flowers /cluster<br>T1: 6-7 F/CT2: 5-7 F/C T0:7 kg/TreeT1: 11 kg kg/treeT2: 10 kg/tree T0:7 54%<br>T1: 82% T2: 79% . |
| 8.  | Final recommendation for micro level situation:                 | Farmers were satisfied with the applications of PGRs for quality improvement and are showing interests in Applying SKUAST-K Recommended PGRs in apple for significant results .                                                                                                                                                         |
| 9.  | Constraints identified and feedback for research:               | Availability of and specific boron trade company and PGRs in local markets is not easily . farmers were satisfied with the technology and wanted inputs every year to be given                                                                                                                                                          |
| 10. | Process of farmers participation and their reaction:            | Farmers actively participated in the implementation, monitoring, and evaluation of the technology. Their overall response was highly positive, with a strong willingness to adopt the foliar applications of boron and pgrs on specific stages .                                                                                        |

### B). Results of On Farm Trials

| Crop  | Problem diagnosed                             | Technology assessed                                                                                           | Parameters                                                                                                              | Data on parameters (mean )                                                                                                                                                                                    | Results of Assessment                                          | Feedback                                                                                                                                                                      |
|-------|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Apple | Poor fruit set and fruit quality, low returns | <p>T0: No thinning</p> <p>T1: NAA @10ppm from full bloom</p> <p>T2: 6-BA@50 ppm followed by hand thinning</p> | <p>Flower cluster/ tree</p> <p>Total no of fruits harvested /tree</p> <p>Quality (% A grade apples /kanal B:C Ratio</p> | <p>T0:5-6 Flowers/ cluster<br/>T1: 6-7 F/C<br/>T2: 5-7 F/C</p> <p>T0: 8 kg/Tree<br/>T1: 11 kg kg/tree<br/>T2: 10 kg/tree</p> <p>T0:54%<br/>T1: 82%<br/>T2: 79%<br/>T0:1.88:1<br/>T2:3.20:1<br/>T3: 2.80:1</p> | T1: Treatment significantly showed good results followed by T2 | Farmers were satisfied with the applications of PGRs for quality improvement and are showing interests in Applying SKUAST-K Recommended PGRs in apple for significant results |

## Trial-4: Assessment of Physiological disorder hen and chicken in grapes

### A. Technology Assessment

|     |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1)  | Title:                                                        | Assessment of Physiological disorder hen and chicken in grapes                                                                                                                                                                                                                                                                                                                                                  |
| 2)  | Problem diagnose/defined :                                    | Hen and Chicken, is a grapevine disorder where clusters develop unevenly, with some berries normal-sized (“hens”) and others small and underdeveloped (“chickens”), primarily caused by poor fertilization                                                                                                                                                                                                      |
| 3)  | Details of technologies selected for assessment/ refinement : | <b>T1: Farmers practice</b><br>T2: Three sprays of Boric acid @ 1.5 g/litre of water at bud swell stage, after petal fall and 21 days after second spray.<br>T3: Three sprays of GA3 @ 40ppm at Pre bloom , after petal fall and third spray 21 days after second spray                                                                                                                                         |
| 4)  | Source of technology:                                         | SKUAST-K                                                                                                                                                                                                                                                                                                                                                                                                        |
| 5)  | Production system                                             | T2 treatment proved to be the best treatment compared to control(T1) for management of grape disorder and production was significantly increased in Treated vine yards and with the visible results achieved through recommended technology of SKUAST-K .                                                                                                                                                       |
| 6)  | Thematic area:                                                | Nutritional deficiency                                                                                                                                                                                                                                                                                                                                                                                          |
| 7)  | Performance of the Technology with performance indicators:    | The assessment was carried out using key performance indicators including Flowering and berry yield per panicle and yield /ha market value of boxes was taken from the farmer to observe the difference in quality yield harvested from the treated plots and non treated plots (T <sub>2</sub> ) exhibited improved yield and price percentage followed by T3 Compared the farmers' practice (T <sub>0</sub> ) |
| 8)  | Final recommendation for micro level situation:               | Farmers reported increase in net returns and application of boron 1.5 gm/litre of water at flowering at is recommended stages of flowering gives better results                                                                                                                                                                                                                                                 |
| 9)  | Constraints identified and feedback for research:             | Availability of and specific boron trade company and PGRs in local markets is not easily . farmers were were satisfied with the technology and wanted inputs every year to be given                                                                                                                                                                                                                             |
| 10) | Process of farmers participation and their reaction:          | Farmers actively participated in the implementation, monitoring, and evaluation of the technology. Their overall response was highly positive, with a strong willingness to adopt the foliar applications of boron and pgrs on specific stages.                                                                                                                                                                 |

### B). Results of On Farm Trials

| Details                                                                                                                    | No. of trials | Production Q/HA | Gross Return (Rs./ Ha) | BC Ratio |
|----------------------------------------------------------------------------------------------------------------------------|---------------|-----------------|------------------------|----------|
| T0: Farmers practice                                                                                                       | 03            | 41.56           | 6,15,000.00            | 1.54     |
| T1: Three sprays of Boric acid @ 1.5 g/litre of water at bud swell stage, after petal fall and 21 days after second spray. |               | 77.50           | 15,50,000.00           | 3.37     |
| T2: Three sprays of GA3 @ 40 ppm at Pre bloom , after petal fall and third spray 21 days after second spray                |               | 73.00           | 14,60,000.00           | 2.99     |

**Farmers Feedback:** T1 treatment significantly increased yield followed by T2 when compared to compared control(T1) for management of grape disorder (hen and chicken) and production was significantly increased in Treated vine yards with the visible results achieved through recommended technology of SKUAST-K .

## Trial-5: Processing Technology for the development of Quality apple chips by Osmo-air dehydration

### A. Technology Assessment

|    |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Title:                                                      | <b>Processing Technology for the development of Quality apple chips by Osmo-air dehydration.</b>                                                                                                                                                                                                                                                                                                                                                                                                        |
| 2  | Problem diagnose/ defined                                   | Enzymatic Browning, Shrinkage during dehydration, Loss of Quality                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 3  | Details of technologies selected for assessment/ refinement | T1: Farmer Practice (Open sun drying)<br>T2: Steeping with 0.75% Ascorbic acid + 0.8% EDTA + 1.75 Citric acid followed by Osmo air dehydration (40% sucrose dip for 3 hours + drying at 65 °C)<br>T3: Steeping with 0.75% Ascorbic acid + 0.8% EDTA + 1.75 Citric acid followed by Osmo air dehydration (30% sucrose + 15% honey dip for 3 hours + drying at 65 °C)                                                                                                                                     |
| 4  | Source of technology                                        | Division of FST, SKUAST-Kashmir                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 5  | Production system thematic area                             | Post-harvest management and value addition of fruits                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 6  | Thematic area:                                              | Processing technology for the development of quality Apple chips by osmo- air dehydration and enhancing its storage stability using different packaging materials shelf life                                                                                                                                                                                                                                                                                                                            |
| 7  | Performance of the Technology with performance indicators   | Technology was assessed using performance indicators viz., moisture content, water activity, L* value % shrinkage and overall acceptability                                                                                                                                                                                                                                                                                                                                                             |
| 8  | Final recommendation for micro level situation:             | Chemical steeping of apple slices in 0.75% Ascorbic Acid + 0.8% EDTA + 1.75% Citric Acid followed by osmo-air dehydration using 30% sucrose and 15% honey dip for 3 hours and drying at 65°C is recommended for the preparation of quality apple chips. The technology effectively controls enzymatic browning, minimizes shrinkage, improves colour retention, enhances sensory quality and extends shelf stability.                                                                                   |
| 9  | Constraints identified and feedback for research            | 1. Limited availability of controlled dehydration facilities at farmer level.<br>2. Additional cost involved in chemical pretreatment and osmotic agents.<br>3. Need for technical training regarding standard processing procedures.<br><b>Feedback:</b> <ul style="list-style-type: none"><li>• Development of low-cost dehydration units for rural areas.</li><li>• Standardization of natural anti-browning agents.</li><li>• Economic feasibility studies for commercial-scale adoption.</li></ul> |
| 10 | Process of farmers participation and their reaction         | 1. Farmers were actively involved in preparation of apple slices, pretreatment, dehydration and evaluation.<br>1. 2.Comparative demonstrations between traditional sun drying and improved technology were conducted.<br>2. 3.Farmers observed substantial improvement in colour, texture, appearance and overall quality.<br>3. 4.High acceptance was recorded due to superior marketability and consumer appeal of osmo-air dehydrated apple chips.                                                   |

### B). Results of On Farm Trials

| <i>Crop/<br/>enterprise</i> | <i>Farming<br/>situation</i>   | <i>Problem<br/>Diagnosed</i>                                   | <i>Title of OFT</i>                                                                  | <i>No. of<br/>trials</i> | <i>Technology<br/>Assessed</i> | <i>Parameters</i>                                                         | <i>Data on the<br/>parameter</i> | <i>Results of<br/>refinement</i>            | <i>Feedback<br/>from the<br/>farmer</i>                    |
|-----------------------------|--------------------------------|----------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------|--------------------------------|---------------------------------------------------------------------------|----------------------------------|---------------------------------------------|------------------------------------------------------------|
| 1                           | 2                              | 3                                                              | 4                                                                                    | 5                        | 6                              | 7                                                                         | 8                                | 9                                           | 10                                                         |
| Apple Processing            | Value addition of apple fruits | Enzymatic browning, shrinkage during dehydration, quality loss | Processing Technology for Development of Quality Apple Chips by Osmo-Air Dehydration | 10                       | T1, T2, T3                     | Moisture Content, Water Activity, Colour (L*), Shrinkage, Sensory Quality | Table below                      | T3 found superior in all quality attributes | Highly satisfied with product quality and market potential |

| <b>Treatment</b>                                                                                                                                                               | <b>Moisture Content (%)</b> | <b>Water Activity</b> | <b>L* Value (Colour)</b> | <b>Shrinkage (%)</b> | <b>Overall Acceptability</b> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------|--------------------------|----------------------|------------------------------|
| <b>11</b>                                                                                                                                                                      | <b>12</b>                   | <b>13</b>             | <b>14</b>                | <b>15</b>            | <b>16</b>                    |
| T1: Farmers practice (Open sun drying)                                                                                                                                         | 16.95                       | 0.54                  | 39.00                    | 32.89                | 2.66                         |
| T <sub>2</sub> : Steeping with 0.75% Ascorbic acid + 0.8% EDTA + 1.75 Citric acid followed by Osmo air dehydration (40% sucrose dip for 3 hours + drying at 65 °C)             | 3.69                        | 0.29                  | 63.80                    | 15.91                | 7.33                         |
| T <sub>3</sub> : Steeping with 0.75% Ascorbic acid + 0.8% EDTA + 1.75 Citric acid followed by Osmo air dehydration (30% sucrose + 15% honey dip for 3 hours + drying at 65 °C) | 2.96                        | 0.21                  | 71.04                    | 6.20                 | 8.16                         |

## Trial-6: Effect of Edible Coating (Chitosan) on Post-Harvest Quality and Shelf Life Extension of Capsicum under Ambient Storage Conditions

### A. Technology assessment

|    |                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | <b>Title:</b>                                                     | Effect of Edible Coating (Chitosan) on Post-Harvest Quality and Shelf Life Extension of Capsicum under Ambient Storage Conditions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 2  | Problem diagnose/defined :                                        | Shrivelling, higher physiological weight loss and decay during ambient storage of Capsicum resulting in reduced shelf life and marketability.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 3  | Details of technologies selected for assessment/refinement :<br>: | <b>T1:</b> Farmers Practice (No treatment)<br><b>T2:</b> Capsicum fruits dipped in 0.5% Chitosan solution and stored under ambient conditions<br><b>T3:</b> Capsicum fruits dipped in 1.0% Chitosan solution and stored under ambient conditions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 4  | Source of technology:                                             | Division of Food Science and Technology, SKUAST-Kashmir                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 5  | Production system thematic area:                                  | Post-Harvest Management and Value Addition of Vegetables                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 6  | Thematic area:                                                    | Assessment of edible coating technology for reducing post-harvest losses and enhancing storage life of Capsicum under ambient conditions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 7) | Performance of the Technology with performance indicators:        | <ul style="list-style-type: none"> <li>The trial was conducted to evaluate the effectiveness of Chitosan edible coatings in minimizing post-harvest losses in Capsicum. Physiological weight loss, shrivelling and decay incidence were recorded during 15 days of ambient storage.</li> <li>Results revealed that physiological weight loss increased with storage period in all treatments. The highest physiological weight loss (65.01%) was recorded in Farmers Practice (T1), followed by 0.5% Chitosan treatment (54.27%). The lowest physiological weight loss (45.01%) was observed in fruits treated with 1% Chitosan (T3).</li> <li>Shrivelling increased with increase in storage duration. Maximum shrivel rating (5) was observed in Farmers Practice, whereas minimum shrivel rating was recorded in fruits treated with 1% Chitosan.</li> <li>Similarly, decay incidence increased with storage period. The highest decay incidence rating (5) was observed in Farmers Practice, followed by 0.5% Chitosan treatment (3), while the lowest decay incidence rating (2) was recorded in 1% Chitosan treated fruits.</li> </ul> |
| 8) | Final recommendation for micro level situation:                   | Dipping Capsicum fruits in 1% Chitosan solution before storage is recommended for farmers as an effective and eco-friendly post-harvest treatment to reduce physiological weight loss, shrivelling and decay, thereby extending shelf life and improving marketability under ambient storage conditions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 9) | Constraints identified and feedback for research:                 | 1.Limited awareness among farmers regarding edible coating technologies.<br>2.Availability of food-grade Chitosan at village level.<br>3.Need for standardization of coating protocols for different vegetable crops.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

|     |                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |                                                      | 4. Further studies on economic feasibility and large-scale adoption are required.                                                                                                                                                                                                                                                                                                                                          |
| 10) | Process of farmers participation and their reaction: | Farmers actively participated in harvesting, treatment preparation, coating application and storage observations. They regularly monitored quality changes during storage. Farmers expressed positive feedback regarding the effectiveness of 1% Chitosan treatment in maintaining freshness, reducing spoilage and increasing shelf life of Capsicum. They showed willingness to adopt the technology for commercial use. |

### B). Results of On Farm Trials

| <i>Crop/<br/>enterprise</i> | <i>Farming<br/>situation</i>                  | <i>Problem Diagnosed</i>                         | <i>Title of OFT</i>                                                                        | <i>No. of<br/>trials</i> | <i>Technology Assessed</i>                                            | <i>Parameters</i>                                                         | <i>Data on the<br/>parameter</i> | <i>Results of<br/>refinement</i>                                                                                             | <i>Feedback<br/>from the<br/>farmer</i>                                                                   |
|-----------------------------|-----------------------------------------------|--------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| 1                           | 2                                             | 3                                                | 4                                                                                          | 5                        | 6                                                                     | 7                                                                         | 8                                | 9                                                                                                                            | 10                                                                                                        |
| Capsicum                    | Ambient storage of freshly harvested Capsicum | Shrivelling, physiological weight loss and decay | Effect of edible coating (Chitosan) on post-harvest quality of Capsicum at ambient storage | 10                       | T1: Farmers Practice (No treatment) T2: 0.5% Chitosan T3: 1% Chitosan | Physiological weight loss (%), Shrivelling rating, Decay incidence rating | Table-1                          | 1% Chitosan significantly reduced physiological weight loss, shrivelling and decay, thereby extending shelf life of Capsicum | Farmers observed better freshness, reduced spoilage and improved marketability with 1% Chitosan treatment |

**Table-1**

| <b>Technology Assessed</b> | <b>Physiological Weight Loss (%)</b> | <b>Shrivelling Rating</b> | <b>Decay Incidence Rating</b> |
|----------------------------|--------------------------------------|---------------------------|-------------------------------|
| <b>11</b>                  | <b>12</b>                            | <b>13</b>                 | <b>14</b>                     |
| T1: Farmers Practice       | 65.01                                | --                        | 5                             |
| T2: 0.5% Chitosan          | 54.27                                | 4                         | 3                             |
| T3: 1.0% Chitosan          | 45.01                                | 3                         | 2                             |

## Trial-7: Evaluation of mineral mixture supplementation on production performance of sheep

### A. Technology Assessment

|    |                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Title:                                                        | <b>Evaluation of mineral mixture supplementation on production performance of sheep</b>                                                                                                                                                                                                                                                                                                                                                                                                         |
| 2  | Problem diagnose/defined :                                    | Lack of sheep specific mineral mixture supplementation, resulting in suboptimal growth, health, and reproductive performance in sheep.                                                                                                                                                                                                                                                                                                                                                          |
| 3  | Details of technologies selected for assessment/ refinement : | To: Farmers' practice (basal feeding without mineral supplementation)<br>T <sub>1</sub> : Basal feeding + supplementation with 25 g/day of conventional mineral mixture<br>T <sub>2</sub> : Basal feeding + supplementation with 25 g/day of sheep-specific mineral mixture                                                                                                                                                                                                                     |
| 4  | Source of technology:                                         | SKUAST-K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 5  | Production system                                             | Small ruminant production system focusing on growth, health, and reproductive performance.                                                                                                                                                                                                                                                                                                                                                                                                      |
| 6  | Thematic area:                                                | Nutritional Management                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 7  | Performance of the Technology with performance indicators:    | The assessment was carried out using key performance indicators including Body Condition Score (BCS), disease incidence, lamb birth weight, and lambing percentage. Sheep receiving the sheep-specific mineral mixture (T <sub>2</sub> ) exhibited improved body condition, reduced disease occurrence, higher lamb birth weights, and enhanced lambing percentage compared to both the farmers' practice (T <sub>0</sub> ) and conventional mineral mixture supplementation (T <sub>1</sub> ). |
| 8  | Final recommendation for micro level situation:               | Farmers reported increase in birth weight, improvement of health status (BCS) and lambing percentage. instead of supplementing general mineral mixture, sheep specific mineral mixture is recommended which gives better results                                                                                                                                                                                                                                                                |
| 9  | Constraints identified and feedback for research:             | Cost of sheep specific mineral mixture. However, farmers expressed satisfaction with the observed improvements in animal performance and reproductive outcomes, indicating a favorable cost-benefit perception.                                                                                                                                                                                                                                                                                 |
| 10 | Process of farmers participation and their reaction:          | Farmers actively participated in the implementation, monitoring, and evaluation of the technology. Their overall response was highly positive, with a strong willingness to adopt the sheep-specific mineral mixture owing to the visible improvements in flock productivity and health.                                                                                                                                                                                                        |

## B. Results of On Farm Trials

| <i>Crop/enterprise</i> | <i>Farming situation</i>     | <i>Problem Diagnosed</i>                                                                                                                    | <i>Title of OFT</i>                                                                                              | <i>No. of trials</i> | <i>Technology Assessed</i>                                                                                                                                                                                                                                                               | <i>Parameters</i>                                                                                                       | <i>Data on the Parameter</i> | <i>Results of assessment</i>                                                                                                                                                                                                                                                                                                                       | <i>Feedback from the farmer</i>                                                                                                                                                                                                                            |
|------------------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                      | 2                            | 3                                                                                                                                           | 4                                                                                                                | 5                    | 6                                                                                                                                                                                                                                                                                        | 7                                                                                                                       | 8                            | 9                                                                                                                                                                                                                                                                                                                                                  | 10                                                                                                                                                                                                                                                         |
| Sheep                  | Semi-intensive sheep rearing | Lack of sheep-specific mineral supplementation leading to poor body condition, lower reproductive performance, and higher disease incidence | Evaluation of Sheep-Specific Mineral Mixture Supplementation on Production and Reproductive Performance of Sheep | 03<br>(09 locations) | T <sub>0</sub> : Farmers' practice (basal feeding without mineral supplementation)<br>T <sub>1</sub> : Basal feeding + supplementation with 25 g/day of conventional mineral mixture<br>T <sub>2</sub> : Basal feeding + supplementation with 25 g/day of sheep-specific mineral mixture | 1. BCS (1-5 scale)<br><br>2. Lamb Birth Wt (LBW)(kg)<br><br>3. Disease Incidence (DI)<br><br>4. Lambing percentage (LP) | Table-1 below                | -Improved body condition and overall health status compared to T <sub>0</sub> and T <sub>1</sub> .<br>-Approximately 20–25% increase in lamb birth weight over farmers' practice<br>-Reduced disease incidence compared to non-supplemented and conventionally supplemented animals.<br>-Improved reproductive performance and lambing percentage. | -Farmers observed healthier and more active animals with improved body condition, stronger and healthier lambs at birth with better survival, fewer disease cases and reduced veterinary interventions, increased lamb crop and better flock productivity. |

\*On the standard 1–5 sheep Body Condition Score scale:

- BCS < 2.0 = thin/poor condition
- BCS 2.5–3.0 = moderate/acceptable condition
- BCS 3.0–3.5 = good condition for breeding and reproduction
- BCS > 4.0 = over-conditioned/fat

**Table-1**

| <b>Technology Assessed</b>                                                                 | <b>BCS<br/>(1-5 scale)</b> | <b>LBW<br/>(kg)</b> | <b>DI<br/>(%)</b> | <b>LP<br/>(%)</b> |
|--------------------------------------------------------------------------------------------|----------------------------|---------------------|-------------------|-------------------|
| <b>11</b>                                                                                  | <b>12</b>                  | <b>13</b>           | <b>14</b>         | <b>15</b>         |
| <b>T0:</b> Farmers' practice (basal feeding without mineral supplementation)               | 2.5                        | 2.8                 | 20                | 78                |
| <b>T1:</b> Basal feeding + supplementation with 25 g/day of conventional mineral mixture   | 2.8                        | 3.1                 | 15                | 84                |
| <b>T2:</b> Basal feeding + supplementation with 25 g/day of sheep-specific mineral mixture | 3.1                        | 3.4                 | 10                | 90                |

## **Trial-8: Effect of extended photoperiod on growth and egg production in backyard poultry during winter**

### **A. Technology Assessment**

|    |                                                               |                                                                                                                                                                                                                                                                                     |
|----|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | <b>Title:</b>                                                 | <b>Effect of extended photoperiod on growth and egg production in backyard poultry during winter</b>                                                                                                                                                                                |
| 2  | Problem diagnose/defined :                                    | Decrease in egg production during winter due to short day length and low ambient temperature                                                                                                                                                                                        |
| 3  | Details of technologies selected for assessment/ refinement : | T <sub>0</sub> : Farmer's practice (natural daylight)<br>T <sub>1</sub> : Extended photoperiod (16 h light)<br>T <sub>2</sub> : Extended photoperiod (16 h light) + improved winter housing management to avoid cold stress                                                         |
| 4  | Source of technology:                                         | SKUAST-K                                                                                                                                                                                                                                                                            |
| 5  | Production system                                             | Backyard poultry production system                                                                                                                                                                                                                                                  |
| 6  | Thematic area:                                                | Poultry Production Management / Environmental Management for Enhanced Egg Production                                                                                                                                                                                                |
| 7  | Performance of the Technology with performance indicators:    | Satisfactory                                                                                                                                                                                                                                                                        |
| 8  | Final recommendation for micro level situation:               | Provision of a total of 16 hours of light per day (natural + artificial) during winter, along with improved housing management to minimize cold stress, is recommended for enhancing egg production in backyard poultry.                                                            |
| 9  | Constraints identified and feedback for research:             | Power fluctuations and frequent electricity shutdowns during winter affect the continuity of supplementary lighting.                                                                                                                                                                |
| 10 | Process of farmers participation and their reaction:          | Participating farmers were involved in implementation and monitoring of supplementary lighting schedules. Farmers observed improved bird activity, feed intake, and egg production during winter and expressed satisfaction with the technology due to its simplicity and low cost. |

## B. Results of On Farm Trials

| <i>Crop/enterprise</i> | <i>Farming situation</i>                         | <i>Problem Diagnosed</i>                                                       | <i>Title of OFT</i>                                                                           | <i>No. of trials</i> | <i>Technology Assessed</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <i>Parameters</i>                                                                      | <i>Data on the parameter</i> | <i>Results of refinement</i>                                                                                                                                                                                               | <i>Feedback from the farmer</i>                                                                                                                                                      |
|------------------------|--------------------------------------------------|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                      | 2                                                | 3                                                                              | 4                                                                                             | 5                    | 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 7                                                                                      | 8                            | 9                                                                                                                                                                                                                          | 10                                                                                                                                                                                   |
| Poultry                | Backyard poultry production system during winter | Decrease in egg production due to short day length and low ambient temperature | Effect of extended photoperiod on growth and egg production in backyard poultry during winter | 03 (10 locations )   | <b>T<sub>0</sub>:</b> Backyard poultry rearing under natural daylight conditions without supplementary lighting.<br><b>T<sub>1</sub>:</b> Supplementary artificial lighting during morning/evening hours to maintain a total photoperiod of 16 hours during winter.<br><b>T<sub>2</sub>:</b> Supplementary artificial lighting during morning/evening hours to maintain a total photoperiod of 16 hours during winter coupled with improved winter housing management to reduce cold stress. | Avg. Egg production,<br><br>Avg. Egg weight,<br><br>Hen-Housed Egg Production (HHEP %) | Table-1 below                | Supplementary lighting significantly improved egg production and laying percentage during winter. The combination of extended photoperiod and improved housing management (T <sub>2</sub> ) recorded the best performance. | Farmers observed increased egg production, improved bird activity and better winter performance . They expressed satisfaction due to ease of adoption and visible economic benefits. |

**Table-1**

| <b>Technology Assessed</b>                                                              | <b>Hens in lay (%)<br/>(Avg. egg production)</b> | <b>Avg. egg weight (g)</b> | <b>HHEP (%)</b> |
|-----------------------------------------------------------------------------------------|--------------------------------------------------|----------------------------|-----------------|
| <b>11</b>                                                                               | <b>12</b>                                        | <b>13</b>                  | <b>14</b>       |
| T <sub>0</sub> : Farmer's practice (natural daylight)                                   | 45                                               | 51.2                       | 35.5            |
| T <sub>1</sub> : Extended photoperiod (16 h light)                                      | 75                                               | 53.2                       | 58.5            |
| T <sub>2</sub> : Extended photoperiod (16 h light) + improved winter housing management | 84                                               | 54.6                       | 66.8            |

## Trial-9: Assessment of Zn solubilizing bacteria as inoculants for Zn nutrition in Rice production

### A. Technology Assessment

|   |                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Title:                                                       | Assessment of Zn solubilizing bacteria as inoculants for Zn nutrition in Rice production                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 2 | Prioritized problem :                                        | Soil Health                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 3 | Details of technologies selected for assessment/refinement : | T1: Farmer's Practice<br>T2: Recommended fertilizer (RDF) for the crop<br>T3: Use of Zn solubilising bacteria as seedling treatment + RDF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 4 | Source of technology:                                        | SKUAST-K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 5 | Performance of the Technology:                               | Farmers' practice (T1) gave lower returns compared to the treatment where recommended fertilizer dose was applied (T2), while combining recommended fertilizer dose with zinc solubilising bacteria (T3) provided the highest yield.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 6 | Final recommendation for micro level situation:              | T3 proved best treatment but still needs some more trials to recommend this technology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 7 | Constraints identified and feedback for research:            | Farmers observed that the use of zinc solubilizing bacteria along with balanced dose of fertilizer resulted in higher yield. Farmers suggested that further research should focus on developing cost-effective, eco-friendly, management strategies along with timely advisory.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 8 | Process of farmers participation and their reaction:         | Farmers actively participated in the programme and showed keen interest in understanding the role of ZSB in improving zinc availability to crops and enhancing nutrient-use efficiency. During the interaction, the importance of balanced fertilizer application based on crop requirements and soil health was explained. Farmers were informed about the adverse effects of indiscriminate fertilizer use and the benefits of integrating biofertilizers such as ZSB with recommended fertilizer doses.<br><br>The interactive discussions helped clarify farmers' queries regarding application methods, dosage, storage, and expected benefits. Overall, the programme witnessed enthusiastic participation, and the farmers acknowledged the importance of combining biofertilizers with balanced fertilizer use for improving soil health, crop productivity, and long-term sustainability of agricultural production systems. |

### B. Results of On Farm Trials

| Technology Assessed                                             | Grain yield (kg/ ha) | Per cent increase |
|-----------------------------------------------------------------|----------------------|-------------------|
| T1- Farmers Practice                                            | 6668.00              | --                |
| T2-Recommended fertilizer (RDF) for the crop                    | 7410.00              | 11                |
| T3- Use of Zn solubilising bacteria as seedling treatment + RDF | 7665.00              | 15                |

Feedback from the farmers:

- The farmers expressed keen interest in adopting the technologies demonstrated i.e., (Zinc Solubilizing Bacteria (ZSB) as a seedling root-dip treatment in rice after learning about its role in improving zinc availability and enhancing crop growth and use of balanced fertilization).
- Farmers appreciated the recommendations provided

## PART 4 - FRONTLINE DEMONSTRATIONS

### 4.A. Summary of FLDs implemented during 2025-26

| S. No. | Category     | Farming Situation | Season and Year | Crop         | Variety/breed           | Hybrid  | Thematic area                        | Technology Demonstrated    | Area (ha) |        | No. of farmers/ demonstration |        |       | Reasons for shortfall in achievement |
|--------|--------------|-------------------|-----------------|--------------|-------------------------|---------|--------------------------------------|----------------------------|-----------|--------|-------------------------------|--------|-------|--------------------------------------|
|        |              |                   |                 |              |                         |         |                                      |                            | Proposed  | Actual | SC/ST                         | Others | Total |                                      |
| 1      | Oilseeds     | Irrigated         | Rabi-2025-26    | Brown Sarson | SS-2                    | Variety | Integrated Crop production (CM)      | Integrated crop management | 10.00     | 10.00  | -                             | 26     | 26    | -                                    |
|        | CFLD         | Irrigated         | Rabi-2025-26    | Brown Sarson | SS-2                    | Variety | Integrated Crop production (CM)      | Integrated crop management | 50.00     | 50.00  | -                             | 125    | 125   |                                      |
| 2.     | Cereals      |                   |                 |              |                         |         |                                      |                            |           |        |                               |        |       |                                      |
|        | Paddy        | Irrigated         | Kharif 2025     | Rice         | SR-4                    | Variety | Crop production (CM)                 | Integrated crop management | 16.80     | 16.80  | -                             | 60     | 60    | -                                    |
|        | Maize        | Irrigated         | Kharif 2025     | Maize        | Hybrid                  | Hybrid  | Crop production (CM)                 | Integrated crop management | 10.00     | 10.00  | --                            | 25     | 25    | -                                    |
|        | Fodder Maize | Irrigated         | Kharif, 2025    | Fodder       | KDFM-1                  | Variety | Crop production (ICM)                | Integrated crop management | 17.0      | 17.0   | --                            | 50     | 50    |                                      |
| 3.     | Oats         | Irrigated         | Rabi-2025-26    | Oats         | SFO-3                   | Variety | Crop production (ICM)                | Integrated crop management | 5.00      | 5.00   | --                            | 25     | 25    | -                                    |
|        |              |                   |                 |              |                         |         |                                      |                            |           |        |                               |        |       |                                      |
| 4.     | Dairy        |                   | 2025            |              |                         |         | Productive performance of dairy cows | Milk production            | --        |        | -                             | 10     | 10    | -                                    |
| 5      | Poultry      | -                 | 2025            | Poultry      | Key stone, KCL, Kroiler | Layer   | Poultry management                   | Backyard poultry           | -         | 150    |                               | 15     | 15    | -                                    |

#### 4.A. 1. Soil fertility status of FLDs plots during 2025-26

| Sl. No. | Category            | Farming Situation | Season and Year | Crop                    | Variety/ breed    | Thematic area      | Technology Demonstrated             | Status of soil (Kg/Acre) |    |     | Previous crop grown |
|---------|---------------------|-------------------|-----------------|-------------------------|-------------------|--------------------|-------------------------------------|--------------------------|----|-----|---------------------|
|         |                     |                   |                 |                         |                   |                    |                                     | N                        | P  | K   |                     |
| 1.      | <b>Oilseeds</b>     | Irrigated         | 2025-26         | Oilseed                 | Shalimar Sarson-2 | Production (ICM)   | Seeds variety, Package of practices | 295                      | 26 | 275 | Rice                |
| 2.      | <b>Cereals</b>      | Irrigated         | 2025            | Rice                    | Shalimar Rice-2   | Production (ICM)   | Integrated Crop Management          | 290                      | 22 | 270 | Oilseed             |
| 3.      |                     | Irrigated         | 2025            | Maize                   | Hybrid            | Production (ICM)   | Integrated crop management          | 150                      | 75 | 40  | Oilseed             |
|         | <b>Fodder maize</b> | Irrigated         | 2025            | Maize                   | KDFM-1            | Crop production    | Irrigated crop management           | 120                      | 60 | 30  |                     |
| 3.      | <b>Fruit</b>        |                   |                 |                         |                   |                    |                                     |                          |    |     | --                  |
|         |                     |                   |                 |                         |                   |                    |                                     |                          |    |     | --                  |
| 4.      | <b>Fodder</b>       | Irrigated         | 2025            | Oats                    | SFO-3             | Crop Production    | Integrated Crop Management          | 275                      | 22 | 220 | Maize/ Rice         |
|         |                     |                   |                 |                         |                   |                    |                                     |                          |    |     |                     |
| 5.      | <b>Dairy</b>        | --                | ---             | ---                     |                   |                    |                                     |                          |    |     |                     |
|         |                     |                   |                 |                         |                   |                    |                                     |                          |    |     |                     |
| 6.      | <b>Poultry</b>      | --                | 2025            | Key stone, KCL, Kroiler | Layer             | Poultry management | Backyard poultry                    | --                       | -- | --  | --                  |

## B. Results of Frontline Demonstrations

| Crop     | Name of the technology demonstrated     | Variety       | Hybrid  | Farming situation | No. of Demo. | Area (ha) | Yield (q/ha) |       |        |       | % Increase | Economics of demonstration (Rs./ha) |              |            |      | Economics of check (Rs./ha) |              |            |      |
|----------|-----------------------------------------|---------------|---------|-------------------|--------------|-----------|--------------|-------|--------|-------|------------|-------------------------------------|--------------|------------|------|-----------------------------|--------------|------------|------|
|          |                                         |               |         |                   |              |           | Demo         |       |        | Check |            | Gross Cost                          | Gross Return | Net Return | BC R | Gross Cost                  | Gross Return | Net Return | BC R |
|          |                                         |               |         |                   |              |           | H            | L     | A      |       |            |                                     |              |            |      |                             |              |            |      |
| Oilseeds | Shalimar Sarson-2                       | SS-2          | Variety | Irrigated         | 25           | 10.00     | 13.50        | 12.00 | 12.75  | 10.20 | 32.00      | 38960                               | 106000       | 67040      | 1.72 | 35630                       | 70650        | 35020      | 0.98 |
| Cereals  |                                         |               |         |                   |              |           |              |       |        |       |            |                                     |              |            |      |                             |              |            |      |
| Rice     | Shalimar Rice-4                         | SR-4          | Variety | Irrigated         | 84           | 16.80     | 82.00        | 79.00 | 80.50  | 70.00 | 17.00      | 88000                               | 226000       | 138000     | 1.57 | 88000                       | 188000       | 100000     | 1.14 |
| Maize    | Integrated Crop Management              | Maize         | Kanchan | Irrigated         | 25           | 10        | 58.0         | 49.8  | 53.9   | 28.26 | 52.75      | 53200                               | 162600       | 89400      | 2.05 | 45600                       | 103300       | 57700      | 1.26 |
| Maize    | KDFM-1                                  | KDFM-1        | Variety | Irrigated         | 43           | 17.00     | 37.50        |       |        | 31.00 | 21.00      | 58000                               | 128000       | 70000      | 1.21 | 58000                       | 88500        | 30500      | 0.53 |
| Fodder   | Shalimar Fodder Oats-3                  | SFO-3         | Variety | Irrigated         | 10           | 02.00     | 295          | 275   | 285.00 | 215   | 37.00      | 45600                               | 130000       | 84400      | 1.85 | 45600                       | 99600        | 54000      | 1.18 |
| Apple    | Management of Canker in apple           | Red delicious | Variety | Irrigated         | 5            | 0.15      | 15           | 14    | 13.5   | 9.5   | 37.5       | 76000                               | 172500       | 96500      | 2.27 | 60200                       | 95000        | 34800      | 1.51 |
| Apple    | Management of root rot disease in apple | Red delicious | Variety | Irrigated         | 03           | 0.15      | 16.2         | 13    | 14.6   | 9.0   | 62.2       | 76000                               | 186000       | 110000     | 1.44 | 60000                       | 90400        | 30400      | 0.50 |

### Data on additional parameters other than yield (viz., reduction of percentage in weed/pest/ diseases etc.)

| Data on other parameters in relation to technology demonstrated |                               |                 |                     |      |       |
|-----------------------------------------------------------------|-------------------------------|-----------------|---------------------|------|-------|
| Crop                                                            | Technology to be demonstrated | Variety/ Hybrid | Parameter with unit | Demo | Check |
| -                                                               | -                             | -               | -                   | -    | -     |

### FLD-1: (Animal Science): Popularization of winter chocolates for enhancing productive performance of dairy cows

| Type of livestock | Name of the technology demonstrated                                                    | Breed             | No. of Demo | No. of Units | Yield       |             |               |                                                  | % Increase | Economics of demonstration (Rs./unit/ 2 M) |              |            |        | Economics of check (Rs./unit/2M) |              |            |        |
|-------------------|----------------------------------------------------------------------------------------|-------------------|-------------|--------------|-------------|-------------|---------------|--------------------------------------------------|------------|--------------------------------------------|--------------|------------|--------|----------------------------------|--------------|------------|--------|
|                   |                                                                                        |                   |             |              |             |             |               | Check if any                                     |            | Gross Cost                                 | Gross Return | Net Return | ** BCR | Gross Cost                       | Gross Return | Net Return | ** BCR |
|                   |                                                                                        |                   |             |              | Demo        |             |               |                                                  |            |                                            |              |            |        |                                  |              |            |        |
|                   |                                                                                        |                   |             |              | H           | L           | A             |                                                  |            |                                            |              |            |        |                                  |              |            |        |
| Cattle            | Popularization of winter chocolates for enhancing productive performance of dairy cows | Cross bred Jersey | 06          | 12           | 9.0 Lit/day | 7.5 Lit/day | 8.25 Lit /day | C/B Jersey cows without feeding winter chocolate | 26.92 %    | 2100 (WC) Feed + dry fodder=10,000 =12100/ | 24750        | 12650      | 2.04   | 10,000                           | 19500        | 9500       | 1.95   |

#### Parameters to be evaluated

#### Effect of feeding winter chocolates (WC):

- Avg. Milk yield (L/day) = 8.25
- Body Condition Score (1–5 scale) = 3.25
- Incidence of metabolic diseases (%) = 8.33
- Net return Rs 12,650/cow/2 months

#### Without winter chocolates:

- Avg. Milk yield (L/day) = 6.50
- Body Condition Score (1–5 scale) = 2.75
- Incidence of metabolic diseases (%) = 25
- Net return Rs 19,500/cow/2 months

### FLD-2: (Animal Science) Popularization of keystone golden as backyard poultry birds

| Type of livestock | Name of the technology demonstrated                         | Breed          | No. of Demo | No. of Units | Yield    |          |          |              | % Increase | Economics of demonstration (Rs./unit) |              |            |                       | Economics of check (Rs./unit) |              |            |                       |
|-------------------|-------------------------------------------------------------|----------------|-------------|--------------|----------|----------|----------|--------------|------------|---------------------------------------|--------------|------------|-----------------------|-------------------------------|--------------|------------|-----------------------|
|                   |                                                             |                |             |              | Demo     |          |          | Check if any |            | Gross Cost                            | Gross Return | Net Return | ** BCR                | Gross Cost                    | Gross Return | Net Return | ** BCR                |
|                   |                                                             |                |             |              | H        | L        | A        |              |            |                                       |              |            |                       |                               |              |            |                       |
| Poultry           | Popularization of keystone golden as backyard poultry birds | Keystone birds | 20          | 200          | 135 eggs | 115 eggs | 125 eggs | Local birds  | 150        | 8500                                  | 25000        | 16500      | 25,000 / 8,500 = 2.94 | 4500                          | 10,000       | 5500       | 10,000 / 4,500 = 2.22 |

#### Parameters to be evaluated

#### Keystone Birds

- Average body weight at 8 weeks (kg) = 0.72
- Average body weight at 20<sup>th</sup> weeks (kg) = 1.62
- Average body weight at 40<sup>th</sup> weeks (kg) = 2.05
- Body weight at first egg laying (kg) = 1.52
- Age at first egg laying (days) = 155
- Total eggs produced up to 40 weeks (No.) = 125

#### Local Birds

- Average body weight at 8 weeks (kg) = 0.45
- Average body weight at 20<sup>th</sup> weeks (kg) = 1.10
- Average body weight at 40<sup>th</sup> weeks (kg) = 1.55
- Body weight at first egg laying (kg) = 1.18
- Age at first egg laying (days) = 185
- Total eggs produced up to 40 weeks (No.) = 50

**4.B.3. Extension and Training activities under FLD**

| <b><i>Sl.No.</i></b> | <b><i>Activity</i></b>               | <b><i>No. of activities organized</i></b> | <b><i>Number of participants</i></b> | <b><i>Remarks</i></b>                                                                                       |
|----------------------|--------------------------------------|-------------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------------------------------|
| 1                    | Field days                           | 5                                         | 42                                   | Farmers expressed keen interest in adopting the technologies demonstrated by the subject matter specialists |
| 2                    | Farmers Training                     | 7                                         | 161                                  | -                                                                                                           |
| 3                    | Media coverage                       | 4                                         | --                                   | -                                                                                                           |
| 4                    | Training for extension functionaries | 0                                         | 0                                    | -                                                                                                           |
| 5                    | Others (FLD Monitoring)              | 12                                        | 78                                   | -                                                                                                           |

## 5. Achievements on Training (Including the sponsored, vocational, FLD and trainings under Rainwater Harvesting Unit)

### A) ON Campus

| a) Farmers' Training including sponsored training programmes (ON Campus) |                |                     |           |           |           |          |           |             |           |           |
|--------------------------------------------------------------------------|----------------|---------------------|-----------|-----------|-----------|----------|-----------|-------------|-----------|-----------|
| Area of training                                                         | No. of courses | No. of Participants |           |           |           |          |           |             |           |           |
|                                                                          |                | General             |           |           | SC/ST     |          |           | Grand Total |           |           |
|                                                                          |                | Male                | Female    | Total     | Male      | Female   | Total     | Male        | Female    | Total     |
| <b>Crop Production</b>                                                   |                |                     |           |           |           |          |           |             |           |           |
| Weed Management                                                          |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Resource Conservation Technologies                                       | 1              | 0                   | 0         | 0         | 13        | 1        | 14        | 13          | 1         | 14        |
| Cropping Systems                                                         |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Crop Diversification                                                     |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Integrated Farming                                                       |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Micro irrigation/irrigation                                              |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Seed production                                                          |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Nursery management                                                       |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Integrated Crop Management                                               | 1              | 0                   | 0         | 0         | 28        | 1        | 29        | 28          | 1         | 29        |
| Soil & water conservation                                                |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Integrated nutrient Management                                           |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Production of organic inputs                                             |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Others                                                                   | 1              | 27                  | 0         | 27        | 0         | 0        | 0         | 27          | 0         | 27        |
| <b>Total</b>                                                             | <b>3</b>       | <b>27</b>           | <b>0</b>  | <b>27</b> | <b>41</b> | <b>2</b> | <b>43</b> | <b>68</b>   | <b>2</b>  | <b>70</b> |
| <b>Horticulture</b>                                                      |                |                     |           |           |           |          |           |             |           |           |
| <b>a) Vegetable Crops</b>                                                |                |                     |           |           |           |          |           |             |           |           |
| Production of low volume and high value crops                            | 1              | 15                  | 10        | 25        | 0         | 0        | 0         | 15          | 10        | 25        |
| Off0season vegetables                                                    |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Nursery raising                                                          |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Exotic vegetables                                                        | 1              | 35                  | 0         | 35        | 0         | 0        | 0         | 35          | 0         | 35        |
| Export potential vegetables                                              |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Grading and standardization                                              |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Protective cultivation                                                   |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Others                                                                   | 1              | 35                  | 0         | 35        | 0         | 0        | 0         | 35          | 0         | 35        |
| <b>Total (a)</b>                                                         | <b>3</b>       | <b>85</b>           | <b>10</b> | <b>95</b> |           |          | <b>0</b>  | <b>85</b>   | <b>10</b> | <b>95</b> |
| <b>b) Fruits</b>                                                         |                |                     |           |           |           |          |           |             |           |           |
| Training and Pruning                                                     |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Layout and Management of Orchards                                        |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Cultivation of Fruit                                                     |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Management of young plants/orchards                                      |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Rejuvenation of old orchards                                             |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Export potential fruits                                                  |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Micro irrigation systems of orchards                                     |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Plant propagation techniques                                             |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| Others                                                                   |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |
| <b>Total (b)</b>                                                         | <b>0</b>       | <b>0</b>            | <b>0</b>  | <b>0</b>  | <b>0</b>  | <b>0</b> | <b>0</b>  | <b>0</b>    | <b>0</b>  | <b>0</b>  |
| <b>c) Ornamental Plants</b>                                              |                |                     |           |           |           |          |           |             |           |           |
| Nursery Management                                                       |                |                     |           | 0         |           |          | 0         | 0           | 0         | 0         |

|                                             |          |           |           |           |          |          |          |           |           |           |
|---------------------------------------------|----------|-----------|-----------|-----------|----------|----------|----------|-----------|-----------|-----------|
| Management of potted plants                 |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Export potential of ornamental plants       |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Propagation techniques of Ornamental Plants |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Others                                      |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Total (c)                                   | 0        | 0         | 0         | 0         | 0        | 0        | 0        | 0         | 0         | 0         |
| <b>d) Plantation crops</b>                  |          |           |           |           |          |          |          |           |           |           |
| Production and Management technology        |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Processing and value addition               |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Others                                      |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Total (d)                                   | 0        | 0         | 0         | 0         | 0        | 0        | 0        | 0         | 0         | 0         |
| <b>e) Tuber crops</b>                       |          |           |           |           |          |          |          |           |           |           |
| Production and Management technology        |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Processing and value addition               |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Others                                      |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Total (e)                                   | 0        | 0         | 0         | 0         | 0        | 0        | 0        | 0         | 0         | 0         |
| <b>f) Spices</b>                            |          |           |           |           |          |          |          |           |           |           |
| Production and Management technology        |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Processing and value addition               |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Others                                      |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Total (f)                                   | 0        | 0         | 0         | 0         | 0        | 0        | 0        | 0         | 0         | 0         |
| <b>g) Medicinal and Aromatic Plants</b>     |          |           |           |           |          |          |          |           |           |           |
| Nursery management                          |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Production and management technology        |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Post harvest technology and value addition  |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Others                                      |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Total (g)                                   | 0        | 0         | 0         | 0         | 0        | 0        | 0        | 0         | 0         | 0         |
| <b>Total(a0g)</b>                           | <b>3</b> | <b>85</b> | <b>10</b> | <b>95</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>85</b> | <b>10</b> | <b>95</b> |
| <b>Soil Health and Fertility Management</b> |          |           |           |           |          |          |          |           |           |           |
| Soil fertility management                   |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Integrated water management                 |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Integrated Nutrient Management              |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Production and use of organic inputs        |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Management of Problematic soils             |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Micro nutrient deficiency in crops          |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Nutrient Use Efficiency                     |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Balance Use of fertilizer                   |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Soil & water testing                        |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| others                                      | 1        | 5         | 22        | 27        | 0        | 0        | 0        | 5         | 22        | 27        |
| <b>Total</b>                                | <b>1</b> | <b>5</b>  | <b>22</b> | <b>27</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>5</b>  | <b>22</b> | <b>27</b> |
| <b>Livestock Production and Management</b>  |          |           |           |           |          |          |          |           |           |           |
| Dairy Management                            | 1        | 0         | 0         | 0         | 40       | 14       | 54       | 40        | 14        | 54        |
| Poultry Management                          |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Piggery Management                          |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Rabbit Management                           |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |

|                                                                      |          |           |           |           |           |           |           |            |           |            |
|----------------------------------------------------------------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|------------|
| Animal Nutrition Management                                          | 1        | 0         | 0         | 0         | 28        | 1         | 29        | 28         | 1         | 29         |
| Disease Management                                                   |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Feed & fodder technologies                                           |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Production of quality animal products                                |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Others                                                               | 1        | 35        | 0         | 35        | 0         | 0         | 0         | 35         | 0         | 35         |
| <b>Total</b>                                                         | <b>3</b> | <b>35</b> | <b>0</b>  | <b>35</b> | <b>68</b> | <b>15</b> | <b>83</b> | <b>103</b> | <b>15</b> | <b>118</b> |
| <b>Home Science/Women empowerment</b>                                |          |           |           |           |           |           |           |            |           |            |
| Household food security by kitchen gardening and nutrition gardening |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Design and development of low/minimum cost diet                      |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Designing and development for high nutrient efficiency diet          |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Minimization of nutrient loss in processing                          |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Processing & cooking                                                 | 1        | 4         | 11        | 15        | 0         | 0         | 0         | 4          | 11        | 15         |
| Gender mainstreaming through SHGs                                    |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Storage loss minimization techniques                                 |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Value addition                                                       | 1        | 17        | 2         | 19        | 0         | 0         | 0         | 17         | 2         | 19         |
| Women empowerment                                                    |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Location specific drudgery reduction technologies                    |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Rural Crafts                                                         |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Women and child care                                                 |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Others                                                               |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| <b>Total</b>                                                         | <b>2</b> | <b>21</b> | <b>13</b> | <b>34</b> | <b>0</b>  | <b>0</b>  | <b>0</b>  | <b>21</b>  | <b>13</b> | <b>34</b>  |
| <b>Agril. Engineering</b>                                            |          |           |           |           |           |           |           |            |           |            |
| Farm machinery & its maintenance                                     |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Installation and maintenance of micro irrigation systems             |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Use of Plastics in farming practices                                 |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Production of small tools and implements                             |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Repair and maintenance of farm machinery and implements              |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Small scale processing and value addition                            |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Post Harvest Technology                                              |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Others                                                               |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| <b>Total</b>                                                         | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>0</b>  | <b>0</b>  | <b>0</b>  | <b>0</b>  | <b>0</b>   | <b>0</b>  | <b>0</b>   |
| <b>Plant Protection</b>                                              |          |           |           |           |           |           |           |            |           |            |
| Integrated Pest Management                                           | 1        | 0         | 0         | 0         | 40        | 14        | 54        | 40         | 14        | 54         |
| Integrated Disease Management                                        | 1        | 8         | 12        | 17        | 0         | 0         | 0         | 8          | 12        | 20         |
| Bio-control of pests and diseases                                    |          |           |           | 37        |           |           | 0         | 0          | 0         | 0          |
| Production of bio control agents and bio pesticides                  |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Others                                                               | 1        | 17        | 0         | 17        |           |           | 0         | 17         | 0         | 17         |
| <b>Total</b>                                                         | <b>3</b> | <b>25</b> | <b>12</b> | <b>71</b> | <b>40</b> | <b>14</b> | <b>54</b> | <b>65</b>  | <b>26</b> | <b>91</b>  |
| <b>Fisheries</b>                                                     |          |           |           |           |           |           |           |            |           |            |
| Integrated fish farming                                              |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |
| Carp breeding and hatchery management                                |          |           |           | 0         |           |           | 0         | 0          | 0         | 0          |

|                                                     |           |            |           |            |            |           |            |            |            |            |
|-----------------------------------------------------|-----------|------------|-----------|------------|------------|-----------|------------|------------|------------|------------|
| Carp fry and fingerling rearing                     |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Composite fish culture                              |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Hatchery management and culture of freshwater prawn |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Breeding and culture of ornamental fishes           |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Portable plastic carp hatchery                      |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Pen culture of fish and prawn                       |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Shrimp farming                                      |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Edible oyster farming                               |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Pearl culture                                       |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Fish processing and value addition                  |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Others                                              | 1         | 15         | 0         | 15         | 0          | 0         | 0          | 15         | 0          | 15         |
| <b>Total</b>                                        | <b>1</b>  | <b>15</b>  | <b>0</b>  | <b>15</b>  | <b>0</b>   | <b>0</b>  | <b>0</b>   | <b>15</b>  | <b>0</b>   | <b>15</b>  |
| <b>Production of Input at site</b>                  |           |            |           |            |            |           |            |            |            |            |
| Seed Production                                     |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Planting material production                        |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Bio0agents production                               |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Bio0pesticides production                           |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Bio0fertilizer production                           |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Vermi0compost production                            | 1         | 51         | 0         | 51         | 0          | 0         | 0          | 51         | 0          | 51         |
| Organic manures production                          |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Production of fry and fingerlings                   | 1         | 0          | 0         | 0          | 40         | 14        | 54         | 40         | 14         | 54         |
| Production of Bee0colonies and wax sheets           |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Small tools and implements                          |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Production of livestock feed and fodder             |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Production of Fish feed                             |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Mushroom production                                 | 1         | 8          | 12        | 20         | 0          | 0         | 0          | 8          | 12         | 20         |
| Apiculture                                          | 1         | 18         | 12        | 30         | 0          | 0         | 0          | 18         | 12         | 30         |
| Others                                              |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| <b>Total</b>                                        | <b>4</b>  | <b>77</b>  | <b>24</b> | <b>101</b> | <b>40</b>  | <b>14</b> | <b>54</b>  | <b>117</b> | <b>38</b>  | <b>155</b> |
| <b>Capacity Building and Group Dynamics</b>         |           |            |           |            |            |           |            |            |            |            |
| Leadership development                              | 1         | 20         | 0         | 20         | 0          | 0         | 0          | 20         | 0          | 20         |
| Group dynamics                                      | 2         | 49         | 2         | 51         | 0          | 0         | 0          | 49         | 2          | 51         |
| Formation and Management of SHGs                    |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Mobilization of social capital                      |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Entrepreneurial development of farmers/youths       | 1         | 20         | 0         | 20         | 0          | 0         | 0          | 20         | 0          | 20         |
| WTO and IPR issues                                  |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Others                                              | 1         | 22         | 4         | 26         |            |           | 0          | 22         | 4          | 26         |
| <b>Total</b>                                        | <b>5</b>  | <b>111</b> | <b>6</b>  | <b>117</b> | <b>0</b>   | <b>0</b>  | <b>0</b>   | <b>111</b> | <b>6</b>   | <b>117</b> |
| <b>Agro forestry</b>                                |           |            |           |            |            |           |            |            |            |            |
| Production technologies                             |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Nursery management                                  |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Integrated Farming Systems                          |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| Others                                              |           |            |           | 0          |            |           | 0          | 0          | 0          | 0          |
| <b>Total</b>                                        | <b>0</b>  | <b>0</b>   | <b>0</b>  | <b>0</b>   | <b>0</b>   | <b>0</b>  | <b>0</b>   | <b>0</b>   | <b>0</b>   | <b>0</b>   |
| <b>Grand Total</b>                                  | <b>25</b> | <b>401</b> | <b>87</b> | <b>522</b> | <b>189</b> | <b>45</b> | <b>234</b> | <b>590</b> | <b>132</b> | <b>722</b> |
|                                                     |           |            |           |            |            |           |            |            |            |            |

| b) Training for Rural Youths including sponsored training programmes (ON Campus)                   |                |                     |            |            |          |           |           |             |            |            |
|----------------------------------------------------------------------------------------------------|----------------|---------------------|------------|------------|----------|-----------|-----------|-------------|------------|------------|
| Area of training                                                                                   | No. of Courses | No. of Participants |            |            |          |           |           |             |            |            |
|                                                                                                    |                | General             |            |            | SC/ST    |           |           | Grand Total |            |            |
|                                                                                                    |                | Male                | Female     | Total      | Male     | Female    | Total     | Male        | Female     | Total      |
| Nursery Management of Horticulture crops                                                           |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Training and pruning of orchards                                                                   |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Protected cultivation of vegetable crops                                                           |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Commercial fruit production                                                                        |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Integrated farming                                                                                 | 3              | 36                  | 73         | 109        | 0        | 0         | 0         | 36          | 73         | 109        |
| Seed production                                                                                    |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Production of organic inputs                                                                       |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Planting material production                                                                       |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Vermiculture                                                                                       |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Mushroom Production                                                                                |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Beekeeping                                                                                         |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Sericulture                                                                                        |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Repair and maintenance of farm machinery and implements                                            |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Value addition                                                                                     |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Small scale processing                                                                             |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Post Harvest Technology                                                                            |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Tailoring and Stitching                                                                            |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Rural Crafts                                                                                       |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Production of quality animal products                                                              |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Dairying                                                                                           |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Sheep and goat rearing                                                                             |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Quail farming                                                                                      |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Piggery                                                                                            |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Rabbit farming                                                                                     |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Poultry production                                                                                 |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Ornamental fisheries                                                                               |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Composite fish culture                                                                             |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Freshwater prawn culture                                                                           |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Shrimp farming                                                                                     |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Pearl culture                                                                                      |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Cold water fisheries                                                                               |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Fish harvest and processing technology                                                             |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| Fry and fingerling rearing                                                                         |                |                     |            | 0          |          |           | 0         | 0           | 0          | 0          |
| other                                                                                              | 3              | 40                  | 38         | 78         | 0        | 12        | 12        | 40          | 50         | 90         |
| <b>Total</b>                                                                                       | <b>6</b>       | <b>76</b>           | <b>111</b> | <b>187</b> | <b>0</b> | <b>12</b> | <b>12</b> | <b>76</b>   | <b>123</b> | <b>199</b> |
|                                                                                                    |                |                     |            |            |          |           |           |             |            |            |
| c) Training programmes for Extension Personnel including sponsored training programmes (ON Campus) |                |                     |            |            |          |           |           |             |            |            |
| Area of training                                                                                   | No. of Courses | No. of Participants |            |            |          |           |           |             |            |            |
|                                                                                                    |                | General             |            |            | SC/ST    |           |           | Grand Total |            |            |
|                                                                                                    |                | Male                | Female     | Total      | Male     | Female    | Total     | Male        | Female     | Total      |
|                                                                                                    |                |                     |            |            |          |           |           |             |            |            |

|                                                       |          |          |          |          |          |          |          |          |          |          |
|-------------------------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Productivity enhancement in field crops               |          |          |          | 0        |          |          | 0        | 0        | 0        | 0        |
| Integrated Pest Management                            |          |          |          | 0        |          |          | 0        | 0        | 0        | 0        |
| Integrated Nutrient management                        |          |          |          | 0        |          |          | 0        | 0        | 0        | 0        |
| Rejuvenation of old orchards                          |          |          |          | 0        |          |          | 0        | 0        | 0        | 0        |
| Protected cultivation technology                      |          |          |          | 0        |          |          | 0        | 0        | 0        | 0        |
| Production and use of organic inputs                  |          |          |          | 0        |          |          | 0        | 0        | 0        | 0        |
| Care and maintenance of farm machinery and implements |          |          |          | 0        |          |          | 0        | 0        | 0        | 0        |
| Gender mainstreaming through SHGs                     |          |          |          | 0        |          |          | 0        | 0        | 0        | 0        |
| Formation and Management of SHGs                      |          |          |          | 0        |          |          | 0        | 0        | 0        | 0        |
| Women and Child care                                  |          |          |          | 0        |          |          | 0        | 0        | 0        | 0        |
| Low cost and nutrient efficient diet designing        |          |          |          | 0        |          |          | 0        | 0        | 0        | 0        |
| Group Dynamics and farmers organization               |          |          |          | 0        |          |          | 0        | 0        | 0        | 0        |
| Information networking among farmers                  |          |          |          | 0        |          |          | 0        | 0        | 0        | 0        |
| Capacity building for ICT application                 |          |          |          | 0        |          |          | 0        | 0        | 0        | 0        |
| Management in farm animals                            |          |          |          | 0        |          |          | 0        | 0        | 0        | 0        |
| Livestock feed and fodder production                  |          |          |          | 0        |          |          | 0        | 0        | 0        | 0        |
| Household food security                               |          |          |          | 0        |          |          | 0        | 0        | 0        | 0        |
| Other                                                 |          |          |          | 0        |          |          | 0        | 0        | 0        | 0        |
| <b>Total</b>                                          | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> |
|                                                       |          |          |          |          |          |          |          |          |          |          |

#### d) Sponsored training programmes

| Area of training                                  | No. of Courses | No. of Participants |           |           |           |           |           |             |           |            |
|---------------------------------------------------|----------------|---------------------|-----------|-----------|-----------|-----------|-----------|-------------|-----------|------------|
|                                                   |                | General             |           |           | SC/ST     |           |           | Grand Total |           |            |
|                                                   |                | Male                | Female    | Total     | Male      | Female    | Total     | Male        | Female    | Total      |
| <b>Crop production and management</b>             |                |                     |           |           |           |           |           |             |           |            |
| Increasing production and productivity of crops   |                |                     |           | 0         |           |           | 0         | 0           | 0         | 0          |
| Commercial production of vegetables               | 2              | 31                  | 19        | 50        | 40        | 10        | 50        | 71          | 29        | 100        |
| Production and value addition                     |                |                     |           |           |           |           |           |             |           |            |
| Fruit Plants                                      |                |                     |           | 0         |           |           | 0         | 0           | 0         | 0          |
| Ornamental plants                                 |                |                     |           | 0         |           |           | 0         | 0           | 0         | 0          |
| Spices crops                                      |                |                     |           | 0         |           |           | 0         | 0           | 0         | 0          |
| Soil health and fertility management              |                |                     |           | 0         |           |           | 0         | 0           | 0         | 0          |
| Production of Inputs at site                      |                |                     |           | 0         |           |           | 0         | 0           | 0         | 0          |
| Methods of protective cultivation                 |                |                     |           | 0         |           |           | 0         | 0           | 0         | 0          |
| Other                                             |                |                     |           | 0         |           |           | 0         | 0           | 0         | 0          |
| <b>Total</b>                                      | <b>2</b>       | <b>31</b>           | <b>19</b> | <b>50</b> | <b>40</b> | <b>10</b> | <b>50</b> | <b>71</b>   | <b>29</b> | <b>100</b> |
| <b>Post harvest technology and value addition</b> |                |                     |           |           |           |           |           |             |           |            |
| Processing and value addition                     |                |                     |           | 0         |           |           | 0         | 0           | 0         | 0          |
| Other                                             |                |                     |           | 0         |           |           | 0         | 0           | 0         | 0          |
| <b>Total</b>                                      | <b>0</b>       | <b>0</b>            | <b>0</b>  | <b>0</b>  | <b>0</b>  | <b>0</b>  | <b>0</b>  | <b>0</b>    | <b>0</b>  | <b>0</b>   |
| <b>Farm machinery</b>                             |                |                     |           |           |           |           |           |             |           |            |
| Farm machinery, tools and implements              |                |                     |           | 0         |           |           | 0         | 0           | 0         | 0          |
| Other                                             |                |                     |           | 0         |           |           | 0         | 0           | 0         | 0          |

|                                      |          |           |           |            |           |           |            |            |           |            |
|--------------------------------------|----------|-----------|-----------|------------|-----------|-----------|------------|------------|-----------|------------|
| Total                                | 0        | 0         | 0         | 0          | 0         | 0         | 0          | 0          | 0         | 0          |
| <b>Livestock and fisheries</b>       |          |           |           |            |           |           |            |            |           |            |
| Livestock production and management  |          |           |           | 0          |           |           | 0          | 0          | 0         | 0          |
| Animal Nutrition Management          |          |           |           | 0          |           |           | 0          | 0          | 0         | 0          |
| Animal Disease Management            |          |           |           | 0          |           |           | 0          | 0          | 0         | 0          |
| Fisheries Nutrition                  |          |           |           | 0          |           |           | 0          | 0          | 0         | 0          |
| Fisheries Management                 |          |           |           | 0          |           |           | 0          | 0          | 0         | 0          |
| Other                                | 2        | 37        | 13        | 50         | 19        | 31        | 50         | 56         | 44        | 100        |
| <b>Total</b>                         | <b>2</b> | <b>37</b> | <b>13</b> | <b>50</b>  | <b>19</b> | <b>31</b> | <b>50</b>  | <b>56</b>  | <b>44</b> | <b>100</b> |
| <b>Home Science</b>                  |          |           |           |            |           |           |            |            |           |            |
| Household nutritional security       |          |           |           | 0          |           |           | 0          | 0          | 0         | 0          |
| Economic empowerment of women        |          |           |           | 0          |           |           | 0          | 0          | 0         | 0          |
| Drudgery reduction of women          |          |           |           | 0          |           |           | 0          | 0          | 0         | 0          |
| Other                                |          |           |           | 0          |           |           | 0          | 0          | 0         | 0          |
| <b>Total</b>                         | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>0</b>   | <b>0</b>  | <b>0</b>  | <b>0</b>   | <b>0</b>   | <b>0</b>  | <b>0</b>   |
| <b>Agricultural Extension</b>        |          |           |           |            |           |           |            |            |           |            |
| Capacity Building and Group Dynamics |          |           |           | 0          |           |           | 0          | 0          | 0         | 0          |
| Other                                |          |           |           | 0          |           |           | 0          | 0          | 0         | 0          |
| <b>Total</b>                         | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>0</b>   | <b>0</b>  | <b>0</b>  | <b>0</b>   | <b>0</b>   | <b>0</b>  | <b>0</b>   |
| <b>Grant Total</b>                   | <b>4</b> | <b>68</b> | <b>32</b> | <b>100</b> | <b>59</b> | <b>41</b> | <b>100</b> | <b>127</b> | <b>73</b> | <b>200</b> |

**e) Details of vocational training programmes carried out by KVKs for rural youth (On Campus)**

| Area of training                                  | No. of Courses | No. of Participants |          |          |          |          |          |             |          |          |
|---------------------------------------------------|----------------|---------------------|----------|----------|----------|----------|----------|-------------|----------|----------|
|                                                   |                | General             |          |          | SC/ST    |          |          | Grand Total |          |          |
|                                                   |                | Male                | Female   | Total    | Male     | Female   | Total    | Male        | Female   | Total    |
| <b>Crop production and management</b>             |                |                     |          |          |          |          |          |             |          |          |
| Commercial floriculture                           |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Commercial fruit production                       |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Commercial vegetable production                   |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Integrated crop management                        |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Organic farming                                   |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Other                                             |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| <b>Total</b>                                      | <b>0</b>       | <b>0</b>            | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b>    | <b>0</b> | <b>0</b> |
| <b>Post harvest technology and value addition</b> |                |                     |          |          |          |          |          |             |          |          |
| Value addition                                    |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Other                                             |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| <b>Total</b>                                      | <b>0</b>       | <b>0</b>            | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b>    | <b>0</b> | <b>0</b> |
| <b>Livestock and fisheries</b>                    |                |                     |          |          |          |          |          |             |          |          |
| Dairy farming                                     |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Composite fish culture                            |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Sheep and goat rearing                            |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Piggery                                           |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Poultry farming                                   |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Other                                             |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| <b>Total</b>                                      | <b>0</b>       | <b>0</b>            | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b>    | <b>0</b> | <b>0</b> |
| <b>Income generation activities</b>               |                |                     |          |          |          |          |          |             |          |          |

|                                                       |          |           |           |           |          |          |          |           |           |           |
|-------------------------------------------------------|----------|-----------|-----------|-----------|----------|----------|----------|-----------|-----------|-----------|
| Vermicomposting                                       |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Production of bioagents, pesticides, fertilizers etc. |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Repair and maintenance of farm machinery & implements |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Rural Crafts                                          |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Seed production                                       |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Sericulture                                           |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Mushroom cultivation                                  | 1        | 17        | 12        | 29        |          |          | 0        | 17        | 12        | 29        |
| Nursery, grafting etc.                                |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Tailoring, stitching, embroidery, dying etc.          |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Agri. para workers, para vet training                 |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Other                                                 |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| <b>Total</b>                                          | <b>1</b> | <b>17</b> | <b>12</b> | <b>29</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>17</b> | <b>12</b> | <b>29</b> |
| <b>Agricultural Extension</b>                         |          |           |           |           |          |          |          |           |           |           |
| Capacity building and group dynamics                  |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| Other                                                 |          |           |           | 0         |          |          | 0        | 0         | 0         | 0         |
| <b>Total</b>                                          | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>0</b>  | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b>  | <b>0</b>  | <b>0</b>  |
| <b>Grand Total</b>                                    | <b>1</b> | <b>17</b> | <b>12</b> | <b>29</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>17</b> | <b>12</b> | <b>29</b> |

## OFF Campus

### a) Farmers' Training including sponsored training programmes (OFF Campus)

| Area of training                              | No. of Courses | No. of Participants |          |          |          |          |          |             |          |          |
|-----------------------------------------------|----------------|---------------------|----------|----------|----------|----------|----------|-------------|----------|----------|
|                                               |                | General             |          |          | SC/ST    |          |          | Grand Total |          |          |
|                                               |                | Male                | Female   | Total    | Male     | Female   | Total    | Male        | Female   | Total    |
| <b>Crop Production</b>                        |                |                     |          |          |          |          |          |             |          |          |
| Weed Management                               |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Resource Conservation Technologies            |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Cropping Systems                              |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Crop Diversification                          |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Integrated Farming                            |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Micro irrigation/irrigation                   |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Seed production                               |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Nursery management                            |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Integrated Crop Management                    |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Soil & water conservation                     |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Integrated nutrient Management                |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Production of organic inputs                  |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| Others                                        |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |
| <b>Total</b>                                  | <b>0</b>       | <b>0</b>            | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b>    | <b>0</b> | <b>0</b> |
| <b>Horticulture</b>                           |                |                     |          |          |          |          |          |             |          |          |
| <b>a) Vegetable Crops</b>                     |                |                     |          |          |          |          |          |             |          |          |
| Production of low volume and high value crops |                |                     |          | 0        |          |          | 0        | 0           | 0        | 0        |

|                                             |   |     |    |     |    |   |    |     |    |     |
|---------------------------------------------|---|-----|----|-----|----|---|----|-----|----|-----|
| Off-season vegetables                       |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Nursery raising                             |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Exotic vegetables                           |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Export potential vegetables                 |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Grading and standardization                 |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Protective cultivation                      |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Others                                      |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Total (a)                                   | 0 | 0   | 0  | 0   | 0  | 0 | 0  | 0   | 0  | 0   |
| <b>b) Fruits</b>                            |   |     |    |     |    |   |    |     |    |     |
| Training and Pruning                        | 3 | 204 | 0  | 204 | 0  | 0 | 0  | 204 | 0  | 204 |
| Layout and Management of Orchards           | 1 | 30  | 0  | 30  | 0  | 0 | 0  | 30  | 0  | 30  |
| Cultivation of Fruit                        | 2 | 0   | 0  | 0   | 92 | 2 | 94 | 92  | 2  | 94  |
| Management of young plants/orchards         |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Rejuvenation of old orchards                |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Export potential fruits                     | 1 | 28  | 1  | 29  | 0  | 0 | 0  | 28  | 1  | 29  |
| Micro irrigation systems of orchards        |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Plant propagation techniques                |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Others                                      | 1 | 17  | 22 | 39  | 0  | 0 | 0  | 17  | 22 | 39  |
| Total (b)                                   | 8 | 279 | 23 | 302 | 92 | 2 | 94 | 371 | 25 | 396 |
| <b>c) Ornamental Plants</b>                 |   |     |    |     |    |   |    |     |    |     |
| Nursery Management                          |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Management of potted plants                 |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Export potential of ornamental plants       |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Propagation techniques of Ornamental Plants |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Others                                      |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Total (c)                                   | 0 | 0   | 0  | 0   | 0  | 0 | 0  | 0   | 0  | 0   |
| <b>d) Plantation crops</b>                  |   |     |    |     |    |   |    |     |    |     |
| Production and Management technology        |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Processing and value addition               |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Others                                      |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Total (d)                                   | 0 | 0   | 0  | 0   | 0  | 0 | 0  | 0   | 0  | 0   |
| <b>e) Tuber crops</b>                       |   |     |    |     |    |   |    |     |    |     |
| Production and Management technology        |   |     | 0  | 0   |    |   | 0  | 0   | 0  | 0   |
| Processing and value addition               |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Others                                      |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Total (e)                                   | 0 | 0   | 0  | 0   | 0  | 0 | 0  | 0   | 0  | 0   |
| <b>f) Spices</b>                            |   |     |    |     |    |   |    |     |    |     |
| Production and Management technology        |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Processing and value addition               |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Others                                      |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Total (f)                                   | 0 | 0   | 0  | 0   | 0  | 0 | 0  | 0   | 0  | 0   |
| <b>g) Medicinal and Aromatic Plants</b>     |   |     |    |     |    |   |    |     |    |     |
| Nursery management                          |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Production and management technology        |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |
| Post harvest technology and value addition  |   |     |    | 0   |    |   | 0  | 0   | 0  | 0   |

|                                                                      |          |            |           |            |           |           |           |            |           |            |
|----------------------------------------------------------------------|----------|------------|-----------|------------|-----------|-----------|-----------|------------|-----------|------------|
| Others                                                               |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Total (g)                                                            | 0        | 0          | 0         | 0          | 0         | 0         | 0         | 0          | 0         | 0          |
| <b>Total(a0g)</b>                                                    | <b>8</b> | <b>279</b> | <b>23</b> | <b>302</b> | <b>92</b> | <b>2</b>  | <b>94</b> | <b>371</b> | <b>25</b> | <b>396</b> |
| <b>Soil Health and Fertility Management</b>                          |          |            |           |            |           |           |           |            |           |            |
| Soil fertility management                                            |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Integrated water management                                          |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Integrated Nutrient Management                                       |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Production and use of organic inputs                                 |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Management of Problematic soils                                      |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Micro nutrient deficiency in crops                                   |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Nutrient Use Efficiency                                              |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Balance Use of fertilizer                                            |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Soil & water testing                                                 |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| others                                                               |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| <b>Total</b>                                                         | <b>0</b> | <b>0</b>   | <b>0</b>  | <b>0</b>   | <b>0</b>  | <b>0</b>  | <b>0</b>  | <b>0</b>   | <b>0</b>  | <b>0</b>   |
| <b>Livestock Production and Management</b>                           |          |            |           |            |           |           |           |            |           |            |
| Dairy Management                                                     |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Poultry Management                                                   | 1        | 20         | 0         | 20         | 0         | 0         | 0         | 20         | 0         | 20         |
| Piggery Management                                                   |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Rabbit Management                                                    |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Animal Nutrition Management                                          |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Disease Management                                                   | 4        | 44         | 25        | 69         | 10        | 0         | 10        | 54         | 25        | 79         |
| Feed & fodder technologies                                           |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Production of quality animal products                                | 1        | 0          | 0         | 0          | 21        | 3         | 24        | 21         | 3         | 24         |
| Others                                                               | 2        | 30         | 0         | 30         | 8         | 16        | 24        | 38         | 16        | 54         |
| <b>Total</b>                                                         | <b>8</b> | <b>94</b>  | <b>25</b> | <b>119</b> | <b>39</b> | <b>19</b> | <b>58</b> | <b>133</b> | <b>44</b> | <b>177</b> |
| <b>Home Science/Women empowerment</b>                                |          |            |           |            |           |           |           |            |           |            |
| Household food security by kitchen gardening and nutrition gardening |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Design and development of low/minimum cost diet                      |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Designing and development for high nutrient efficiency diet          |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Minimization of nutrient loss in processing                          |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Processing & cooking                                                 |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Gender mainstreaming through SHGs                                    |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Storage loss minimization techniques                                 |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Value addition                                                       | 1        | 17         | 22        | 39         |           |           | 0         | 17         | 22        | 39         |
| Women empowerment                                                    |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Location specific drudgery reduction technologies                    |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Rural Crafts                                                         |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Women and child care                                                 |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| Others                                                               |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |
| <b>Total</b>                                                         | <b>1</b> | <b>17</b>  | <b>22</b> | <b>39</b>  | <b>0</b>  | <b>0</b>  | <b>0</b>  | <b>17</b>  | <b>22</b> | <b>39</b>  |
| <b>Agri. Engineering</b>                                             |          |            |           |            |           |           |           |            |           |            |
| Farm machinery & its maintenance                                     |          |            |           | 0          |           |           | 0         | 0          | 0         | 0          |

|                                                          |          |            |           |            |           |          |           |            |           |            |
|----------------------------------------------------------|----------|------------|-----------|------------|-----------|----------|-----------|------------|-----------|------------|
| Installation and maintenance of micro irrigation systems |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Use of Plastics in farming practices                     |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Production of small tools and implements                 |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Repair and maintenance of farm machinery and implements  |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Small scale processing and value addition                |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Post Harvest Technology                                  |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Others                                                   |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| <b>Total</b>                                             | <b>0</b> | <b>0</b>   | <b>0</b>  | <b>0</b>   | <b>0</b>  | <b>0</b> | <b>0</b>  | <b>0</b>   | <b>0</b>  | <b>0</b>   |
| <b>Plant Protection</b>                                  |          |            |           |            |           |          |           |            |           |            |
| Integrated Pest Management                               | 2        | 55         | 0         | 55         | 0         | 0        | 0         | 55         | 0         | 55         |
| Integrated Disease Management                            | 4        | 57         | 14        | 71         | 33        | 3        | 36        | 90         | 17        | 107        |
| Bio0control of pests and diseases                        |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Production of bio control agents and bio pesticides      |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Others                                                   | 2        | 32         | 38        | 70         | 0         | 0        | 0         | 32         | 38        | 70         |
| <b>Total</b>                                             | <b>8</b> | <b>144</b> | <b>52</b> | <b>196</b> | <b>33</b> | <b>3</b> | <b>36</b> | <b>177</b> | <b>55</b> | <b>232</b> |
| <b>Fisheries</b>                                         |          |            |           |            |           |          |           |            |           |            |
| Integrated fish farming                                  | 1        | 11         | 1         | 12         | 0         | 0        | 0         | 11         | 1         | 12         |
| Carp breeding and hatchery management                    |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Carp fry and fingerling rearing                          |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Composite fish culture                                   |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Hatchery management and culture of freshwater prawn      |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Breeding and culture of ornamental fishes                |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Portable plastic carp hatchery                           |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Pen culture of fish and prawn                            |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Shrimp farming                                           |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Edible oyster farming                                    |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Pearl culture                                            |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Fish processing and value addition                       | 1        | 34         | 0         | 34         | 0         | 0        | 0         | 34         | 0         | 34         |
| Others                                                   | 2        | 28         | 23        | 51         |           |          | 0         | 28         | 23        | 51         |
| <b>Total</b>                                             | <b>4</b> | <b>73</b>  | <b>24</b> | <b>97</b>  | <b>0</b>  | <b>0</b> | <b>0</b>  | <b>73</b>  | <b>24</b> | <b>97</b>  |
| <b>Production of Input at site</b>                       |          |            |           |            |           |          |           |            |           |            |
| Seed Production                                          |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Planting material production                             |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Bio0agents production                                    |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Bio0pesticides production                                |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Bio0fertilizer production                                |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Vermi0compost production                                 |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Organic manures production                               |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Production of fry and fingerlings                        |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Production of Bee0colonies and wax sheets                |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Small tools and implements                               |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Production of livestock feed and fodder                  |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |
| Production of Fish feed                                  |          |            |           | 0          |           |          | 0         | 0          | 0         | 0          |

|                                               |           |            |            |            |            |           |            |            |            |             |
|-----------------------------------------------|-----------|------------|------------|------------|------------|-----------|------------|------------|------------|-------------|
| Mushroom production                           | 1         | 0          | 25         | 25         | 0          | 0         | 0          | 0          | 25         | 25          |
| Apiculture                                    |           |            |            | 0          |            |           | 0          | 0          | 0          | 0           |
| Others                                        |           |            |            | 0          |            |           | 0          | 0          | 0          | 0           |
| <b>Total</b>                                  | <b>1</b>  | <b>0</b>   | <b>25</b>  | <b>25</b>  | <b>0</b>   | <b>0</b>  | <b>0</b>   | <b>0</b>   | <b>25</b>  | <b>25</b>   |
| <b>Capacity Building and Group Dynamics</b>   |           |            |            |            |            |           |            |            |            |             |
| Leadership development                        | 3         | 43         | 27         | 70         | 0          | 0         | 0          | 43         | 27         | 70          |
| Group dynamics                                |           |            |            | 0          |            |           | 0          | 0          | 0          | 0           |
| Formation and Management of SHGs              |           |            |            | 0          |            |           | 0          | 0          | 0          | 0           |
| Mobilization of social capital                |           |            |            | 0          |            |           | 0          | 0          | 0          | 0           |
| Entrepreneurial development of farmers/youths |           |            |            | 0          |            |           | 0          | 0          | 0          | 0           |
| WTO and IPR issues                            |           |            |            | 0          |            |           | 0          | 0          | 0          | 0           |
| Others                                        | 2         | 42         | 1          | 43         | 0          | 0         | 0          | 42         | 1          | 43          |
| <b>Total</b>                                  | <b>5</b>  | <b>85</b>  | <b>28</b>  | <b>113</b> | <b>0</b>   | <b>0</b>  | <b>0</b>   | <b>85</b>  | <b>28</b>  | <b>113</b>  |
| <b>Agro forestry</b>                          |           |            |            |            |            |           |            |            |            |             |
| Production technologies                       |           |            |            | 0          |            |           | 0          | 0          | 0          | 0           |
| Nursery management                            |           |            |            | 0          |            |           | 0          | 0          | 0          | 0           |
| Integrated Farming Systems                    |           |            |            | 0          |            |           | 0          | 0          | 0          | 0           |
| Others                                        |           |            |            | 0          |            |           | 0          | 0          | 0          | 0           |
| <b>Total</b>                                  | <b>0</b>  | <b>0</b>   | <b>0</b>   | <b>0</b>   | <b>0</b>   | <b>0</b>  | <b>0</b>   | <b>0</b>   | <b>0</b>   | <b>0</b>    |
| <b>Grand Total</b>                            | <b>35</b> | <b>692</b> | <b>199</b> | <b>891</b> | <b>164</b> | <b>24</b> | <b>188</b> | <b>856</b> | <b>223</b> | <b>1079</b> |

#### b) Training for Rural Youths including sponsored training programmes (OFF Campus)

| Area of training                                        | No. of Courses | No. of Participants |        |       |       |        |       |             |        |       |
|---------------------------------------------------------|----------------|---------------------|--------|-------|-------|--------|-------|-------------|--------|-------|
|                                                         |                | General             |        |       | SC/ST |        |       | Grand Total |        |       |
|                                                         |                | Male                | Female | Total | Male  | Female | Total | Male        | Female | Total |
| Nursery Management of Horticulture crops                | 2              | 0                   | 0      | 0     | 137   | 26     | 163   | 137         | 26     | 163   |
| Training and pruning of orchards                        |                |                     |        | 0     |       |        | 0     | 0           | 0      | 0     |
| Protected cultivation of vegetable crops                | 1              | 7                   | 43     | 50    |       |        | 0     | 7           | 43     | 50    |
| Commercial fruit production                             |                |                     |        | 0     |       |        | 0     | 0           | 0      | 0     |
| Integrated farming                                      | 1              | 0                   | 0      | 0     | 75    | 10     | 85    | 75          | 10     | 85    |
| Seed production                                         |                |                     |        | 0     |       |        | 0     | 0           | 0      | 0     |
| Production of organic inputs                            |                |                     |        | 0     |       |        | 0     | 0           | 0      | 0     |
| Planting material production                            | 4              | 87                  | 153    | 240   |       |        | 0     | 87          | 153    | 240   |
| Vermiculture                                            |                |                     |        | 0     |       |        | 0     | 0           | 0      | 0     |
| Mushroom Production                                     | 5              | 60                  | 240    | 300   | 0     | 0      | 0     | 60          | 240    | 300   |
| Beekeeping                                              |                |                     |        | 0     |       |        | 0     | 0           | 0      | 0     |
| Sericulture                                             |                |                     |        | 0     |       |        | 0     | 0           | 0      | 0     |
| Repair and maintenance of farm machinery and implements |                |                     |        | 0     |       |        | 0     | 0           | 0      | 0     |
| Value addition                                          |                |                     |        | 0     |       |        | 0     | 0           | 0      | 0     |
| Small scale processing                                  |                |                     |        | 0     |       |        | 0     | 0           | 0      | 0     |
| Post Harvest Technology                                 |                |                     |        | 0     |       |        | 0     | 0           | 0      | 0     |
| Tailoring and Stitching                                 |                |                     |        | 0     |       |        | 0     | 0           | 0      | 0     |
| Rural Crafts                                            |                |                     |        | 0     |       |        | 0     | 0           | 0      | 0     |

|                                        |           |            |             |             |            |           |            |             |             |             |
|----------------------------------------|-----------|------------|-------------|-------------|------------|-----------|------------|-------------|-------------|-------------|
| Production of quality animal products  |           |            |             | 0           |            |           | 0          | 0           | 0           | 0           |
| Dairying                               |           |            |             | 0           |            |           | 0          | 0           | 0           | 0           |
| Sheep and goat rearing                 |           |            |             | 0           |            |           | 0          | 0           | 0           | 0           |
| Quail farming                          |           |            |             | 0           |            |           | 0          | 0           | 0           | 0           |
| Piggery                                |           |            |             | 0           |            |           | 0          | 0           | 0           | 0           |
| Rabbit farming                         |           |            |             | 0           |            |           | 0          | 0           | 0           | 0           |
| Poultry production                     | 4         | 47         | 193         | 240         | 0          | 0         | 0          | 47          | 193         | 240         |
| Ornamental fisheries                   | 1         | 0          | 0           | 0           | 40         | 10        | 50         | 40          | 10          | 50          |
| Composite fish culture                 |           |            |             | 0           |            |           | 0          | 0           | 0           | 0           |
| Freshwater prawn culture               |           |            |             | 0           |            |           | 0          | 0           | 0           | 0           |
| Shrimp farming                         |           |            |             | 0           |            |           | 0          | 0           | 0           | 0           |
| Pearl culture                          |           |            |             | 0           |            |           | 0          | 0           | 0           | 0           |
| Cold water fisheries                   |           |            |             | 0           |            |           | 0          | 0           | 0           | 0           |
| Fish harvest and processing technology |           |            |             | 0           |            |           | 0          | 0           | 0           | 0           |
| Fry and fingerling rearing             |           |            |             | 0           |            |           | 0          | 0           | 0           | 0           |
| Other                                  | 14        | 717        | 412         | 1129        | 143        | 44        | 187        | 860         | 456         | 1316        |
| <b>Total</b>                           | <b>32</b> | <b>918</b> | <b>1041</b> | <b>1959</b> | <b>395</b> | <b>90</b> | <b>485</b> | <b>1313</b> | <b>1131</b> | <b>2444</b> |

**5.A Details of above training programmes as in the proforma given below (2025-26)**

| Date       | Clientele         | Title of the training programme                                                               | Venue (Off / On Campus) | Number of SC/ST/OBC |        |       | Number of Others |        |       | Total number of participants |        |       |
|------------|-------------------|-----------------------------------------------------------------------------------------------|-------------------------|---------------------|--------|-------|------------------|--------|-------|------------------------------|--------|-------|
|            |                   |                                                                                               |                         | Male                | Female | Total | Male             | Female | Total | Male                         | Female | Total |
| 22-04-025  | Farmer/ farmwomen | Importance of vaccination and deworming in cattle and sheep                                   | (Off-campus)            | 31                  | 0      | -     | -                | -      | -     | 31                           | -      | 31    |
| 05-05-2025 | Farmer/ farmwomen | Equine diseases and their management                                                          | (Off-campus)            | 69                  | 0      | 0     | 0                | 0      | 0     | 69                           | 0      | 69    |
| 05-05-2025 | Farmer/ farmwomen | Foliar application of boron for fruit development in apple                                    | (Off-campus)            | 69                  | 0      | 0     | 0                | 0      | 0     | 69                           | 0      | 69    |
| 29-05-2025 | Farmer/ farmwomen | Awareness cum training programme on SKUAST-K recommended spray schedule for apple             | (Off-campus)            | 0                   | 0      | 0     | 0                | 19     | 6     | 19                           | 06     | 25    |
| 29-05-2025 | Farmer/ farmwomen | Awareness and training programme on quality planting material and disease management in apple | (Off-campus)            | 0                   | 0      | 0     | 0                | 28     | 01    | 28                           | 01     | 29    |
| 29-05-25   | Farmer/ farmwomen | Metabolic diseases of ruminants-their prevention and control                                  | (Off-campus)            | 0                   | 0      | 0     | 0                | 23     | 02    | 23                           | 02     | 25    |
| 30-05-2025 | Farmer/ farmwomen | Integrated disease management of vegetable crops                                              | (Off-campus)            | 0                   | 0      | 0     | 0                | 22     | 04    | 22                           | 04     | 26    |
| 30-05-2025 | Farmer/ farmwomen | Use of clonal rootstock of different fruit crops for high density planting                    | (Off-campus)            | 0                   | 0      | 0     | 0                | 30     | 0     | 30                           | 0      | 30    |
| 30-05-2025 | Farmer/ farmwomen | Management of repeat breeding/ infertility in high yielding cows                              | (Off-campus)            | 0                   | 0      | 0     | 0                | 20     | 0     | 20                           | 0      | 20    |
| 31-05-2025 | Farmer/ farmwomen | Clean & Hygienic milk production                                                              | (Off-campus)            | 0                   | 0      | 0     | 0                | 21     | 0     | 21                           | 0      | 21    |
| 31-05-2025 | Farmer/ farmwomen | Integrated disease management in maize crop in high altitude areas                            | Off campus              | 21                  | 03     | 0     | 0                | 0      | 0     | 21                           | 03     | 24    |
| 07-05-2025 | Rural youth       | Adopting IFS models for maximizing returns with special reference to HPM                      | On-campus               | 0                   | 0      | 0     | 0                | 10     | 15    | 10                           | 15     | 25    |
| 02-07-2025 | Farmer/ farmwomen | Importance of vaccination and deworming in cattle and sheep                                   | Off Campus              | -                   | -      | -     | -                | 6      | 0     | 6                            | 0      | 6     |

|                  |                      |                                                                                                        |                    |    |    |    |    |    |    |           |           |           |
|------------------|----------------------|--------------------------------------------------------------------------------------------------------|--------------------|----|----|----|----|----|----|-----------|-----------|-----------|
| 09-07-2025       | Farmer/<br>farmwomen | Training programme on Zoonotically important diseases viz-a-viz celebration of World Zoonoses Day-2025 | (Off-campus)       | -  | -  | -  | -  | 15 | 23 | <b>15</b> | <b>23</b> | <b>38</b> |
| 14-07-2025       | Farmer/<br>farmwomen | Training Programme on Integrated Disease Management on Chilli Wilt                                     | On campus          | -  | -  | -  | -  | 17 | 5  | <b>17</b> | <b>5</b>  | <b>22</b> |
| 18-07-2025       | Farmer/<br>farmwomen | Scientific techniques for harvesting, grading in cherry                                                | (Off campus)       | 23 | 2  | -  | -  | -  | -  | <b>23</b> | <b>2</b>  | <b>25</b> |
| 19-07-2025       | Farmer/<br>farmwomen | Training Programme on Integrated Disease Management in Maize                                           | (Off campus)       | 12 | -  | -  | -  | 16 | 4  | <b>28</b> | <b>4</b>  | <b>32</b> |
| 22-23 July, 2025 | Rural Youth          | Two days Boot-camp/ Ideation Start-up: Fueling young minds for tomorrow                                | (On Campus)        | -  | -  | -  | -  | 18 | 31 | <b>18</b> | <b>31</b> | <b>49</b> |
| 29-07-2025       | Farmer/<br>farmwomen | Awareness-cum-Training programme on Common Infectious diseases of Animals                              | (Off campus)       | -- | -- | -- | -- | 30 | -- | <b>30</b> | --        | <b>30</b> |
| 29-07-2025       | Farmer/<br>farmwomen | Management of stored grain pests and rodents                                                           | (Off campus)       | -- | -- | -- | -- | 30 | -- | <b>30</b> | --        | <b>30</b> |
| 11-08-2025       | Farmer/<br>farmwomen | Pollination management and role of honey bees for fruit production                                     | On Campus          | -- | -- | -- | -- | 02 | 23 | <b>02</b> | <b>23</b> | <b>25</b> |
| 21-08-2025       | Farmer/<br>farmwomen | Integrated disease management of solanaceous vegetable crops                                           | On Campus          | -- | -- | -- | -- | 08 | 12 | <b>08</b> | <b>12</b> | <b>20</b> |
| 21-08-2025       | Farmer/<br>farmwomen | Production technology of Dhingri Mushroom cultivation                                                  | On Campus          | -- | -- | -- | -- | 08 | 12 | <b>08</b> | <b>12</b> | <b>20</b> |
| 21-08-2025       | Farmer/<br>farmwomen | Rearing of honeybees for honey production and pollination                                              | On Campus          | -- | -- | -- | -- | 18 | 12 | <b>18</b> | <b>12</b> | <b>30</b> |
| 02-08-2025       | Rural Youth          | Adapting integrated farming system models for maximizing returns                                       | On Campus          | -- | -- | -- | -- | 16 | 17 | <b>16</b> | <b>17</b> | <b>33</b> |
| 20-08-2025       | Rural Youth          | Production technology of Dhingri and button mushroom cultivation                                       | (7 Days) On Campus | -- | -- | -- | -- | 17 | 12 | <b>17</b> | <b>12</b> | <b>29</b> |
| 16-09-2025       | Farmer/<br>farmwomen | IDM & IPM of insect pest and disease of floriculture crops                                             | Off Campus         | -- | -- | -- | -- | 25 | 0  | <b>25</b> | <b>0</b>  | <b>25</b> |
| 17-09-2025       | Farmer/<br>farmwomen | Control and prevention of infectious disease in animals                                                | Off Campus         | 08 | 16 | -- | -- | -- | -- | <b>08</b> | <b>16</b> | <b>24</b> |

|            |                      |                                                                                                                                                                                             |              |    |    |    |    |    |    |           |           |           |
|------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----|----|----|----|----|----|-----------|-----------|-----------|
| 19-09-2025 | Farmer/<br>farmwomen | Interactive workshop on cleanliness waste management and environmental sustainability                                                                                                       | Off Campus   | -- | -- | -- | -- | -- | 24 | <b>0</b>  | <b>24</b> | <b>24</b> |
| 11-09-2025 | Farmer/<br>farmwomen | Training programme on Vermicomposting Technology for sustainable agriculture and scientific vegetable cultivation for improving yield, quality and income of the small and marginal farmers |              | -- | -- | -- | -- | -- | 51 | --        | <b>51</b> | <b>51</b> |
| 11-09-2025 | Rural Youth          | Sustainability through integrated farming systems                                                                                                                                           | (On Campus)  | -- | -- | -- | -- | 10 | 05 | <b>10</b> | <b>05</b> | <b>15</b> |
| 11-10-2025 | Farmer/<br>farmwomen | Use of clonal rootstock of different fruits for higher domestic plants                                                                                                                      | (On Campus)  | 40 | 14 | 0  | 0  | 6  | 0  | <b>46</b> | <b>14</b> | <b>60</b> |
| 11-10-2025 | Farmer/<br>farmwomen | Pesticide spray schedule of SKUAST-K for insect pest disease management                                                                                                                     | (On Campus)  | 40 | 14 | 0  | 0  | 6  | 0  | <b>46</b> | <b>14</b> | <b>60</b> |
| 11-10-2025 | Farmer/<br>farmwomen | Control & management of mastitis in dairy cows                                                                                                                                              | (On Campus)  | 40 | 14 | 0  | 0  | 6  | 0  | <b>46</b> | <b>14</b> | <b>60</b> |
| 11-10-2025 | Farmer/<br>farmwomen | Promotion & popularization of backyard RAS units                                                                                                                                            | (On Campus)  | 40 | 14 | 0  | 0  | 6  | 0  | <b>46</b> | <b>14</b> | <b>60</b> |
| 30-10-2025 | Farmer/<br>farmwomen | Sustainable farming practices for maximizing income                                                                                                                                         | (On Campus)  | 0  | 0  | 0  | 0  | 13 | 01 | <b>13</b> | <b>01</b> | <b>14</b> |
| 22-10-2025 | Rural Youth          | Management of grape physiological disorder                                                                                                                                                  | (Off Campus) | 0  | 0  | 0  | 0  | 31 | 0  | <b>31</b> | <b>0</b>  | <b>31</b> |
| 22-10-2025 | Rural Youth          | Smarter waste management for sustainability in farms                                                                                                                                        | (Off Campus) | 0  | 0  | 0  | 0  | 31 | 0  | <b>31</b> | <b>0</b>  | <b>31</b> |
| 08-11-2025 | Farmer/<br>farmwomen | Training programme on Natural farming                                                                                                                                                       | (On Campus)  | -- | -- | -- | -- | 22 | 4  | <b>22</b> | <b>4</b>  | <b>26</b> |
| 19-11-2025 | Farmer/<br>farmwomen | Silage and hay making for winter feeding of livestock                                                                                                                                       | (On Campus)  | 28 | 01 | -- | -- | -- | -- | <b>28</b> | <b>01</b> | <b>29</b> |
| 19-11-2025 | Farmer/<br>farmwomen | Training programme on management strategies of oilseed under CFLD Oilseed                                                                                                                   | (On Campus)  | 28 | 01 | -- | -- | -- | -- | <b>28</b> | <b>01</b> | <b>29</b> |
| 24-11-2024 | Farmer/<br>farmwomen | Application of Agri-drone in agriculture                                                                                                                                                    | (Off Campus) | -- | -- | -- | -- | 28 | 16 | <b>28</b> | <b>16</b> | <b>44</b> |
| 25-11-2025 | Farmer/<br>farmwomen | Training and pruning in fruit crops                                                                                                                                                         | (Off Campus) | -- | -- | -- | -- | 89 | -- | <b>89</b> | <b>0</b>  | <b>89</b> |

|                      |                      |                                                                                                             |              |    |    |    |    |    |    |    |    |    |
|----------------------|----------------------|-------------------------------------------------------------------------------------------------------------|--------------|----|----|----|----|----|----|----|----|----|
| 27-11-2025           | Farmer/<br>farmwomen | Training and pruning in high density apple orchards                                                         | (Off Campus) | -- | -- | -- | -- | 25 | -- | 25 | -- | 25 |
| 29-11-2025           | Farmer/<br>farmwomen | Canopy management in apple and other fruit crops                                                            | (Off Campus) | -- | -- | -- | -- | 90 | -- | 90 | -- | 90 |
| 05-12-2025           | Farmer/<br>farmwomen | Healthy soils for healthy cities (World Soil Day 2025)                                                      | (On Campus)  | -- | -- | -- | -- | 20 | -- | 20 | -- | 20 |
| 17 & 18 -<br>12-2025 | Farmer/<br>farmwomen | Technology intervention for sustainable farming and soil health management                                  | (On Campus)  | -- | -- | -- | -- | 34 | 0  | 34 | 0  | 34 |
| 29-12-2025           | Farmer/<br>farmwomen | Scientific production technology for high value exotic vegetables                                           | (On Campus)  |    |    |    |    | 35 | 0  | 35 | 0  | 35 |
| 29-11-2025           | Farmer/<br>farmwomen | Impact of climate change on agricultural and horticultural crops                                            | (On Campus)  |    |    |    |    | 35 | -- | 35 | 0  | 35 |
| 29-11-2025           | Farmer/<br>farmwomen | Integrated farming System (IFS) for sustainable livelihoods with special reference to Horti-Poultry model   | (On Campus)  |    |    |    |    | 35 | -  | 35 | 0  | 35 |
| 01-01-2026           | Farmer/<br>farmwomen | Production technology of Dhingri and button mushroom cultivation                                            | (Off Campus) | -  | -  | -  | -  | 0  | 25 | 0  | 25 | 25 |
| 03-01-2026           | Farmer/<br>farmwomen | Natural farming and its impact on sustainability, profitability and food security                           | (On Campus)  | -- | -- | -- | -- | 05 | 22 | 05 | 22 | 27 |
| 07-01-2026           | Farmer/<br>farmwomen | Management of untimely snow/hailstorm affected crops                                                        | (Off Campus) | -- | -- | -- | -- | 04 | 22 | 04 | 22 | 26 |
| 07-01-2026           | Farmer/<br>farmwomen | Training programme on production technology on Oyester mushroom cultivation                                 | (Off Campus) | -- | -- | -- | -- | -- | 25 | -- | 25 | 25 |
| 08-01-2026           | Farmer/<br>farmwomen | Introduction and awareness on low cost mushroom cultivation                                                 | (Off Campus) | -- | -- | -- | -- | 18 | 03 | 18 | 03 | 21 |
| 13-01-2026           | Farmer/<br>farmwomen | Integrated Livelihood Models for Sustainability in agriculture                                              | (On Campus)  | -- | -- | -- | -- | 27 | -- | 27 | -- | 27 |
| 04-02-2026           | Farmer/<br>farmwomen | Integrated farming systems for improving livelihood and socio-economic status of small and marginal farmers | (Off Campus) | -- | -- | -- | -- | 11 | 1  | 11 | 1  | 12 |
| 04-02-2026           | Farmer/<br>farmwomen | IFS with fisheries as core component                                                                        | (Off Campus) | -- | -- | -- | -- | 11 | 01 | 11 | 01 | 12 |
| 04-02-2026           | Farmer/<br>farmwomen | Adoption of backyard RAS systems                                                                            | (Off Campus) | -- | -- | -- | -- | 11 | 01 | 11 | 01 | 12 |

|            |                      |                                                                                                  |              |    |    |    |    |    |    |           |           |           |
|------------|----------------------|--------------------------------------------------------------------------------------------------|--------------|----|----|----|----|----|----|-----------|-----------|-----------|
| 05-02-2026 | Farmer/<br>farmwomen | Business orientation of Krishi Udyamis                                                           | (On Campus)  | -- | -- | -- | -- | 15 | 02 | <b>15</b> | <b>02</b> | <b>17</b> |
| 19-02-2026 | Farmer/<br>farmwomen | Processing and value addition of vegetables                                                      | (On Campus)  | -- | -- | -- | -- | 17 | 02 | <b>17</b> | <b>02</b> | <b>19</b> |
| 05-02-2026 | Rural Youth          | Training programme on SKUAST-K recommended spray schedule                                        | (On Campus)  | -- | -- | 12 | -  | 10 | 03 | <b>22</b> | <b>03</b> | <b>25</b> |
| 05-02-2026 | Rural Youth          | Training programme on SKUAST-K recommended spray schedule                                        | (On Campus)  | -- | -- | -- | -  | 12 | 04 | <b>12</b> | <b>04</b> | <b>16</b> |
| 05-03-2026 | Farmer/<br>farmwomen | Resilient & Climate Smart Olericulture                                                           | (On Campus)  |    |    |    |    | 15 | 10 | <b>15</b> | <b>10</b> | <b>25</b> |
| 05-03-2026 | Farmer/<br>farmwomen | Entrepreneurship opportunities in fisheries sector with special emphasis on ornamental fisheries | (On Campus)  |    |    |    |    | 15 | 10 | <b>15</b> | <b>10</b> | <b>25</b> |
| 05-03-2026 | Farmer/<br>farmwomen | Drying and dehydration of fruits and vegetables                                                  | (On Campus)  |    |    |    |    | 04 | 11 | <b>04</b> | <b>11</b> | <b>15</b> |
| 06-03-2026 | Farmer/<br>farmwomen | Employment generation beyond traditional practices                                               | (On Campus)  |    |    |    |    | 20 | 0  | <b>20</b> | <b>0</b>  | <b>20</b> |
| 09-03-2026 | Farmer/<br>farmwomen | Methods of fertilizer application in apple orchards                                              | (On Campus)  |    |    |    |    | 17 | 0  | <b>17</b> | <b>0</b>  | <b>17</b> |
| 27-03-2026 | Farmer/<br>farmwomen | Major policies and schemes for fish farmers under PMMSY and PMMKSY                               | (On Campus)  |    |    |    |    | 34 | 0  | <b>34</b> | <b>0</b>  | <b>34</b> |
| 31-03-2026 | Rural Youth          | High Density Apple cultivation-Skills and potential                                              | (Off Campus) |    |    |    |    | 17 | 22 | <b>17</b> | <b>22</b> | <b>39</b> |
| 31-03-2026 | Rural Youth          | Processing and value addition of fruits and vegetables                                           | (Off Campus) |    |    |    |    | 17 | 22 | <b>17</b> | <b>22</b> | <b>39</b> |
| 31-03-2026 | Rural Youth          | Ornamental fish keeping as an enterprise                                                         | (On Campus)  |    |    |    |    | 17 | 22 | <b>17</b> | <b>22</b> | <b>39</b> |

**(B) Vocational training programmes for Rural Youth**

| Crop / Enterprise   | Date                     | Training title*                                                  | Identified Thrust Area | Duration (days) | No. of Participants |        |       | Self-employed after training |                 |                            | Number of persons employed elsewhere |
|---------------------|--------------------------|------------------------------------------------------------------|------------------------|-----------------|---------------------|--------|-------|------------------------------|-----------------|----------------------------|--------------------------------------|
|                     |                          |                                                                  |                        |                 | Male                | Female | Total | Type of units                | Number of units | Number of persons employed |                                      |
| Mushroom production | 20-08-2025 to 26-08-2026 | Production technology of Dhingri and Button Mushroom cultivation | -                      | -               | 17                  | 12     | 29    | -                            | -               | -                          | -                                    |

**(C) Sponsored training programmes under JKCIP during the year 2025-26**

| S. No | Date       | Title                                                    | Discipline       | Duration (days) | Client (PF/RV/EF) | No. of courses | No. of Participants |        |       |       |        |       |       |        |       |
|-------|------------|----------------------------------------------------------|------------------|-----------------|-------------------|----------------|---------------------|--------|-------|-------|--------|-------|-------|--------|-------|
|       |            |                                                          |                  |                 |                   |                | Others              |        |       | SC/ST |        |       | Total |        |       |
|       |            |                                                          |                  |                 |                   |                | Male                | Female | Total | Male  | Female | Total | Male  | Female | Total |
| 1     | 12-08-2028 | Awareness about various schemes sponsored by JKCIP       | Horticulture     | 01 days         | Rural Youth       | 01             | 0                   | 0      | 0     | 83    | 29     | 112   | 83    | 29     | 112   |
| 2     | 12-08-2025 | Awareness about various schemes sponsored by JKCIP       | Horticulture     | 01 days         | Rural Youth       | 01             | 54                  | 49     | 103   | 0     | 0      | 0     | 54    | 49     | 103   |
| 3     | 19-08-2025 | Awareness about various schemes sponsored by JKCIP       | Horticulture     | 01 days         | Rural Youth       | 01             | 75                  | 30     | 105   | 0     | 0      | 0     | 75    | 30     | 105   |
| 4     | 19-08-2025 | Awareness about various schemes sponsored by JKCIP       | Horticulture     | 01 days         | Rural Youth       | 01             | 81                  | 44     | 125   | 0     | 0      | 0     | 81    | 44     | 125   |
| 5     | 10-09-2025 | Awareness programme on SKUAST recommended spray schedule | Plant Protection | 01 days         | Rural Youth       | 01             | 50                  | 45     | 95    | 0     | 0      | 0     | 50    | 45     | 95    |

|    |            |                                                                                                       |                  |         |             |           |    |    |     |    |    |    |           |           |            |
|----|------------|-------------------------------------------------------------------------------------------------------|------------------|---------|-------------|-----------|----|----|-----|----|----|----|-----------|-----------|------------|
| 6  | 10-09-2025 | Awareness programme on use of organic inputs for management of insect pest and disease in field crops | Plant protection | 01 days | Rural Youth | <b>01</b> | 58 | 46 | 104 | 0  | 0  | 0  | <b>58</b> | <b>46</b> | <b>104</b> |
| 7  | 11-09-2025 | Awareness programme on Importance of vaccination and deworming in cattle and sheep                    | Animal Science   | 01 days | Rural Youth | <b>01</b> | 57 | 30 | 87  | 0  | 0  | 0  | <b>57</b> | <b>30</b> | <b>87</b>  |
| 8  | 11-09-2025 | Awareness programme on Zoonotically important diseases                                                | Animal Science   | 01 days | Rural Youth | <b>01</b> | 55 | 40 | 95  | 0  | 0  | 0  | <b>55</b> | <b>40</b> | <b>95</b>  |
| 9  | 18-09-2025 | Awareness programme on maturity indices of walnut and its cleaning                                    | Horticulture     | 01 days | Rural Youth | <b>01</b> | 0  | 0  | 0   | 70 | 10 | 80 | <b>70</b> | <b>10</b> | <b>80</b>  |
| 10 | 18-09-2025 | Awareness programme on nursery development and multiplication of rootstocks                           | Horticulture     | 01 days | Rural Youth | <b>01</b> | 0  | 0  | 0   | 67 | 16 | 83 | <b>67</b> | <b>16</b> | <b>83</b>  |
| 11 | 24-09-2025 | Awareness programme on IFS: as a potential income generation model to boost farmers economy           | IFS              | 01 days | Rural Youth | <b>01</b> | 0  | 0  | 0   | 75 | 10 | 85 | <b>75</b> | <b>10</b> | <b>85</b>  |

|     |            |                                                                         |                 |         |             |    |    |    |    |    |    |    |    |    |    |
|-----|------------|-------------------------------------------------------------------------|-----------------|---------|-------------|----|----|----|----|----|----|----|----|----|----|
| 12  | 24-09-2025 | Awareness programme on Small ruminant vaccination                       | Animal Science  | 01 days | Rural Youth | 01 | 0  | 0  | 0  | 60 | 15 | 75 | 60 | 15 | 75 |
| 13  | 16-10-2025 | Important diseases of apple and their management                        | Crop management | 01 days | Rural Youth | 01 | -- | -- | -- | 62 | 31 | 93 | 62 | 31 | 93 |
| 14. | 16-10-2025 | Management of untimely snow/hail storms affected crops                  | Crop management | 01 days | Rural Youth | 01 | -- | -- | -- | 64 | 28 | 92 | 64 | 28 | 92 |
| 15. | 23-10-2025 | Significance of newly released varieties in stone fruits                | Horticulture    | 01 days | Rural Youth | 01 | -- | -- | -- | 62 | 25 | 87 | 62 | 25 | 87 |
| 16. | 23-10-2025 | Nutritional value and diet security for good health through fruit crops | Home Science    | 01 days | Rural Youth | 01 | -- | -- | -- | 63 | 31 | 94 | 63 | 31 | 94 |

**(E) Training programmes under MSME Conducted by KVK Ganderbal during the year 2025-2026**

| S.No | Date       | Title                                                                   | Discipline       | Duration (days) | Client (PF/RV/EF) | No. of courses | No. of Participants |        |       |       |        |       |       |        |       |
|------|------------|-------------------------------------------------------------------------|------------------|-----------------|-------------------|----------------|---------------------|--------|-------|-------|--------|-------|-------|--------|-------|
|      |            |                                                                         |                  |                 |                   |                | Others              |        |       | SC/ST |        |       | Total |        |       |
|      |            |                                                                         |                  |                 |                   |                | Male                | Female | Total | Male  | Female | Total | Male  | Female | Total |
| 1    | 31-12-2025 | Awareness on Horti-Poultry Model: As a potential income generation unit | Animal Science   | 01 days         | Rural Youth       | 01             | 07                  | 53     | 60    | 0     | 0      | 0     | 07    | 53     | 60    |
| 2.   | 31-12-2025 | Awareness on Introduction to low cost mushroom cultivation              | Plant Protection | 01 days         | Rural Youth       | 01             | 0                   | 60     | 60    | 0     | 0      | 0     | 0     | 60     | 60    |

|    |           |                                                                    |                   |         |             |    |    |    |    |   |   |   |    |    |    |
|----|-----------|--------------------------------------------------------------------|-------------------|---------|-------------|----|----|----|----|---|---|---|----|----|----|
| 3. | 3/2/2026  | Multiplication of Gisela-5 rootstock through different techniques  | Horticulture      | 01 days | Rural Youth | 01 | 20 | 40 | 60 | 0 | 0 | 0 | 20 | 40 | 60 |
| 4. | 4/2/2026  | Training on protected cultivation of vegetable crops               | Vegetable Science | 01 days | Rural Youth | 01 | 31 | 19 | 50 | 0 | 0 | 0 | 31 | 19 | 50 |
| 5. | 4/2/2026  | Introduction and awareness on low cost mushroom cultivation        | Plant Protection  | 01 days | Rural Youth | 01 | 0  | 60 | 60 | 0 | 0 | 0 | 0  | 60 | 60 |
| 6. | 4/2/2026  | Ornamental fish keeping as a profitable enterprise for rural youth | Fisheries         | 01 days | Rural Youth | 01 | 37 | 13 | 50 | 0 | 0 | 0 | 37 | 13 | 50 |
| 7. | 5/2/2026  | Horti-poultry model: A potential income generation unit            | Animal Science    | 01 days | Rural Youth | 01 | 08 | 52 | 60 | 0 | 0 | 0 | 08 | 52 | 60 |
| 8. | 6/2/2026  | Training on protected cultivation of vegetable crops               | Vegetable Science | 01 days | Rural Youth | 01 | 07 | 43 | 50 | 0 | 0 | 0 | 07 | 43 | 50 |
| 9. | 9/2/2026  | Multiplication of Gisela-5 rootstock through different techniques  | Horticulture      | 01 days | Rural Youth | 01 | 39 | 21 | 60 | 0 | 0 | 0 | 39 | 21 | 60 |
| 10 | 10/2/2026 | Multiplication of Gisela-5 rootstock through different techniques  | Horticulture      | 01 days | Rural Youth | 01 | 05 | 55 | 60 | 0 | 0 | 0 | 05 | 55 | 60 |

|     |            |                                                                    |                   |         |             |    |    |    |    |    |    |    |    |    |    |
|-----|------------|--------------------------------------------------------------------|-------------------|---------|-------------|----|----|----|----|----|----|----|----|----|----|
| 11. | 23-02-2026 | Multiplication of Gisela-5 rootstock through different techniques  | Horticulture      | 01 days | Rural Youth | 01 | 23 | 37 | 60 | 0  | 0  | 0  | 23 | 37 | 60 |
| 12  | 5/3/2026   | Training on protected cultivation of vegetable crops               | Vegetable Science | 01 days | Rural Youth | 01 | 0  | 0  | 0  | 40 | 10 | 50 | 40 | 10 | 50 |
| 13. | 6/3/2026   | Ornamental fish keeping as a profitable enterprise for rural youth | Fisheries         | 01 days | Rural Youth | 01 | 0  | 0  | 0  | 19 | 31 | 50 | 19 | 31 | 50 |
| 14. | 12/3/2026  | Ornamental fish keeping as a profitable enterprise for rural youth | Fisheries         | 01 days | Rural Youth | 01 | 40 | 10 | 50 | 0  | 0  | 0  | 40 | 10 | 50 |

## 6. Extension Activities (including activities of FLD programmes)

| Nature of Activity                          | No. of Activities | SC/ST (Farmers) |            |             | OBC/Other (Farmers) |             |             | Extension Officials |          |           | Grand Total  |             |              |
|---------------------------------------------|-------------------|-----------------|------------|-------------|---------------------|-------------|-------------|---------------------|----------|-----------|--------------|-------------|--------------|
|                                             |                   | (I)             |            |             | (II)                |             |             | (III)               |          |           | (I+II+III)   |             |              |
|                                             |                   | Male            | Female     | Total       | Male                | Fem<br>ale  | Total       | Male                | Female   | Total     | Male         | Female      | Total        |
| Diagnostic Visits                           | 81                | 62              | 10         | 72          | 345                 | 72          | 417         | 0                   | 0        | 0         | 824          | 82          | 906          |
| Field Day                                   | 12                | 0               | 0          | 0           | 83                  | 18          | 101         | 0                   | 0        | 0         | 184          | 18          | 202          |
| Group discussions                           | 76                | 314             | 52         | 366         | 918                 | 285         | 1203        | 0                   | 0        | 0         | 2435         | 337         | 2772         |
| Kisan Gosthi                                | 16                | 84              | 16         | 100         | 351                 | 153         | 504         | 0                   | 0        | 0         | 939          | 169         | 1108         |
| Film Show                                   | 7                 | 195             | 56         | 251         | 791                 | 370         | 1161        | 0                   | 0        | 0         | 2147         | 426         | 2573         |
| Kisan Mela                                  | 2                 | 156             | 64         | 220         | 1192                | 384         | 1576        | 0                   | 0        | 0         | 2924         | 448         | 3372         |
| Exhibition                                  | 3                 | 78              | 32         | 110         | 596                 | 192         | 788         | 0                   | 0        | 0         | 1462         | 224         | 1686         |
| Scientist visit to farmers field            | 81                | 62              | 10         | 72          | 345                 | 72          | 417         | 0                   | 0        | 0         | 824          | 82          | 906          |
| Plant/animal health camps                   | 1                 | 69              | 0          | 69          | 0                   | 0           | 0           | 0                   | 0        | 0         | 69           | 0           | 69           |
| Method Demonstrations                       | 66                | 230             | 79         | 309         | 427                 | 95          | 522         | 0                   | 0        | 0         | 1179         | 174         | 1353         |
| Celebration of important days               | 7                 | 77              | 46         | 123         | 431                 | 208         | 639         | 0                   | 0        | 0         | 1147         | 254         | 1401         |
| Special day celebration                     | 2                 | 1               | 0          | 1           | 17                  | 5           | 22          | 0                   | 0        | 0         | 40           | 5           | 45           |
| Exposure visits                             | 30                | 195             | 56         | 251         | 791                 | 370         | 1161        | 12                  | 3        | 15        | 2147         | 429         | 2576         |
| Others (Farmers visit to KVK)               | 672               | 197             | 104        | 301         | 700                 | 285         | 985         | 0                   | 0        | 0         | 1882         | 389         | 2271         |
| <b>TOTAL</b>                                | <b>1056</b>       | <b>1720</b>     | <b>525</b> | <b>2245</b> | <b>6987</b>         | <b>2509</b> | <b>9496</b> | <b>12</b>           | <b>3</b> | <b>15</b> | <b>18203</b> | <b>3037</b> | <b>21240</b> |
| Extension Literature                        | 44                |                 |            |             |                     |             |             |                     |          |           |              |             |              |
| News paper coverage                         | 29                |                 |            |             |                     |             |             |                     |          |           |              |             |              |
| Popular articles                            | 4                 |                 |            |             |                     |             |             |                     |          |           |              |             |              |
| Radio Talks                                 | 0                 |                 |            |             |                     |             |             |                     |          |           |              |             |              |
| TV Talks                                    | 8                 |                 |            |             |                     |             |             |                     |          |           |              |             |              |
| Animal health camps (no. of animal treated) | 1/ 75             |                 |            |             |                     |             |             |                     |          |           |              |             |              |
| Others                                      | 8                 |                 |            |             |                     |             |             |                     |          |           |              |             |              |

### 6. B. Kisan Mobile Advisory Services

| Name of the KVK | No. of farmers Covered | No. of Advisories Sent | Kisan Mobile Advisory |           |         |           |           |                  |           |
|-----------------|------------------------|------------------------|-----------------------|-----------|---------|-----------|-----------|------------------|-----------|
|                 |                        |                        | Type of messages      |           |         |           |           |                  |           |
|                 |                        |                        | Crop                  | Livestock | Weather | Marketing | Awareness | Other enterprise | Any other |
| Ganderbal       | 28670                  | 237                    | 132                   | 58        | 17      | 0         | 21        | 9                | --        |

## PART 7 – PUBLICATION, SUCCESS STORY, SWTL, TECHNOLOGY WEEK AND DROUGHT MITIGATION

### Literature Developed/Published (with full title, author & reference)

#### (A) Literature developed/published

| <i>Item</i>            | <i>Title</i>                                                                                                                                                                                                                                                                           | <i>Authors name</i>                                                                                                                                            |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Research papers</b> | Serological detection and molecular typing of Mycobacterium avium subspecies paratuberculosis in sheep and goats co-infected with gastrointestinal parasites from the northern Himalayan territories of India<br><i>(Journal of Applied Microbiology, 2025, 136(7), 1xaf180.)</i>      | Misbah Altaf , Shaheen Farooq , Mohd Altaf Bhat , Zahid Amin Kashoo , Padma Yangzom , Uznain Tramboo , Sabia Qureshi , Isfaq ul-Hussain , Idrees Mehraj Allaie |
|                        | Prevalence, molecular detection, and histopathological analysis of necrotic enteritis in chickens<br><i>Open Veterinary Journal, (2025), Vol. 15(9): 4248-4254</i>                                                                                                                     | Amir Bashir Kouchey, Showkat Ahmad Shah, Majid Shaf1, Shaheen Farooq, Shabu Showkat, Akeel Bashir, Shayaib Ahmad Kamil, Masood Saleem Mir,                     |
|                        | Horti-poultry integration as a sustainable integrated farming model for enhancing farmer income and organic apple production<br><i>International Journal of Agriculture Extension and Social Development</i>                                                                           | S Farooq, Ajaz A Malik, Suja N Qureshi, Farooq A Ahangar and Amir Bashir Wani                                                                                  |
|                        | Assessment and performance of FLD through improved techniques of grafting in walnut ( <i>Juglans regia</i> L.) at district Ganderbal Jammu and Kashmir. <i>International Journal of Advanced Biochemistry Research</i>                                                                 | F. A. Ahanger, Shaheen Farooq, Rafiya Munshi, Faiqa Syed and Amir Bashir                                                                                       |
|                        | Quality assessment of fresh and processed farm grown stone fruits: Physico-chemical and sensory aspects<br><i>SKUAST Journal of Research</i>                                                                                                                                           | F. A. Ahanger, Shaheen Farooq, S. N. Qureshi Faiqa Syed and Amir Bashir                                                                                        |
|                        | Identification of SNPs and genomic regions linked to BCMV resistance and common bean using genome wide association analysis. <i>Plant Molecular Biology Reporter</i>                                                                                                                   | F. A. Ahanger                                                                                                                                                  |
|                        | Assessment and Performance of Front line Demonstrations through Improved Techniques of Grafting in Walnut ( <i>Juglans regia</i> ) at District Ganderbal. . <i>IJABR 2025;-9(2):648-651 Issue 2, part1(2025)</i><br><a href="http://www.biochemjournal.com">www.biochemjournal.com</a> | Suja Nabi Qureshi et al                                                                                                                                        |

| <b>Item</b> | <b>Title</b>                                                                                                                                                                                                                                 | <b>Authors name</b>                        |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
|             | Influence of organic manures and IBA on survival percentage of roots through mound layering in apple root stocks<br>IJABR 2025;SP-9(2):513518<br><a href="http://www.biochemjournal.com">www.biochemjournal.com</a>                          | Suja Nabi Qureshi (2 <sup>nd</sup> Author) |
|             | Comparative study of pruning methods on growth yield and quality in Nectarine Plant Archives vol.25, supplement 1,2025 pp-2960-2972                                                                                                          | Suja Nabi Qureshi                          |
|             | Quality assessment of fresh and processed farm-grown stone fruits:Physiochemical and sensory aspects.<br><i>SKUAST Journal of Research</i> 27(2): 229-237; (2025) (DOI No. 10.5958/2349-297X.2025.00032.9)                                   | Suja Nabi Qureshi                          |
|             | A study on media preferences of tribal farmers in the hilly district of Reasi Jammu and Kashmir<br>AATCC Review Journal (2025) 297-299volume 13,Issue 04,2025<br><a href="http://aatcc.peerjournals.net/">http://aatcc.peerjournals.net/</a> | Suja Nabi Qureshi                          |
|             | A study on media preference s on natural farming in Reasi dist of Jammu and Kashmir. India<br><i>AMA-Agricultural mechanization in Asia africa and latin America</i> 20256.40ISSN:00845841Volume 56,Issue 08,August 2025.                    | Suja Nabi Qureshi                          |
|             | Exploring salinity tolerance in wild grape rootstocks through comprehensive germplasm screening<br><i>Agriculture ,Ecosystem and Environment</i> (AGEE46306).O7 Aug.202512.00 NAAS Impact 6.00                                               | Suja Nabi Qureshi co-author                |
|             | High Density apple Plantation a Modern approach to orchard Management<br>PUB. NO:AU/DE/405-BL/05/2025Suja Nabi Qureshi (editor)                                                                                                              | Suja Nabi Qureshi                          |

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

**Success Story-1: Animal Science, KVK-Ganderbal**

**Title: "Boosting Milk Yield in Winters: The Power of Winter Chocolates"**

Shaheen Farooq, Ajaz Malik, Shuja N. Qureshi, Farooq A. Ahangar, Faiqa Syed and Amir Bashir Wani

**Name of farmer: Mr. Rayees Ahmad Bhat**

**Address: Watlar, Ganderbal**

**Mobile Number: 6005900491**

**Age: 27**

**Education: 10<sup>th</sup>**

**Size of land holding (in acre): 02**



**1. Background / Situation**

Mr. Rayees Ahmad Bhat is a young and enterprising dairy farmer from village Watlar, Block Lar, District Ganderbal, UT of Jammu & Kashmir. A progressive dairy entrepreneur, he manages a well-maintained farm comprising 06 crossbred Jersey dairy cows. Under normal climatic conditions, his dairy unit produces an average of 85–90 litres of milk per day, generating a gross daily income of approximately Rs. 4,000–4,500.

However, during the harsh winter months, milk production consistently declined to 55–60 litres per day, despite maintaining the same feeding regime, inputs, and management practices. This seasonal drop resulted in a daily shortfall of nearly 30 litres of milk, leading to an estimated financial loss of about Rs. 40,000 per month, thereby adversely affecting the overall profitability and sustainability of the dairy enterprise.

**2. KVK intervention**

To mitigate the problem of winter-induced decline in milk production, Krishi Vigyan Kendra (KVK), Ganderbal implemented a targeted intervention by organizing training-cum-awareness programmes on scientific dairy farming practices for dairy farmers of the district. These programmes emphasized the importance of balanced ration formulation, winter stress alleviation, scientific feeding strategies, animal health and hygiene, and efficient dairy herd management under cold climatic conditions.

Mr. Rayees Ahmad Bhat actively participated in these capacity-building programmes and adopted the recommended practices at his dairy farm.

As a crucial component of the intervention, KVK Ganderbal supplied winter chocolates as a supplementary nutritional input to the participating farmers for a duration of four months (November to February), coinciding with the most critical winter stress period. These supplements were aimed at meeting the increased energy and nutrient requirements of dairy cows during cold stress, thereby supporting improved milk production and overall animal well-being.





**Distribution cum awareness programmes on the Importance of Feeding Winter Chocolates to Dairy Animals**

### **3. Innovation / Initiative**

The winter chocolates supplied by KVK are a specially formulated energy-rich feed supplement, fortified with essential vitamins and minerals to meet the increased metabolic demands of dairy cows during cold stress. This innovative nutritional intervention aimed to compensate for the energy deficit caused by low temperatures, improve feed utilization, and support sustained milk production when conventional feeding alone proves inadequate.

The initiative provided farmers with a practical, location-specific, and cost-effective solution to mitigate winter stress and associated productivity losses.

### **4. Socio-Economic Impact**

Following the adoption of scientific dairy management practices and supplementation with winter chocolates, a significant improvement in milk production was observed during the winter months. The average daily milk yield increased from 55–60 litres to about 70–75 litres, reflecting an increment of nearly 15 litres per day.

Consequently, the winter production gap was reduced from 30 litres/day to approximately 15 litres/day, leading to a marked improvement in farm income. The additional milk production resulted in an estimated increase of around Rs. 23,000 per month (at a conservative milk price of Rs. 50 per litre).

Beyond monetary gains, the intervention also led to:

- Improved body condition and overall health of dairy cows
- Reduced winter stress-related productivity losses
- Enhanced awareness and adoption of scientific feeding practices
- Improved financial resilience and sustainability of the dairy enterprise



**Dairy unit of progressive farmer Mr. Rayees Ahmad Bhat at village Watlar, District Ganderbal (J&K).**

### **5. Awards and Recognitions**

The successful implementation of KVK-recommended interventions and the positive outcomes achieved by Mr. Rayees Ahmad Bhat have established him as a progressive and innovative dairy farmer in the district. His dairy unit now serves as a demonstration model for other farmers in the region, highlighting the effectiveness of scientific feeding strategies and seasonal nutritional management under Kashmir's challenging winter conditions.

## Success Story-2

### A Practical Example of Successful Intercropping Farming: The Inspiring Journey of Mr. Ishfaq Ahmad Mir

#### KVK–Ganderbal:

Ajaz A. Malik, Farooq A. Ahanger, Shuja N. Qureshi, Shaheen Farooq, Faiqa Syeed

#### Details of the Entrepreneur

| Particulars   | Details                                                                                                        |
|---------------|----------------------------------------------------------------------------------------------------------------|
| Name          | Mr. Ishfaq Ahmad Mir                                                                                           |
| Father's Name | Bashir Ahmad Mir                                                                                               |
| Age           | 31 years                                                                                                       |
| Address       | Ahan, Wakura, District Ganderbal (J&K)                                                                         |
| Qualification | Postgraduate in Tourism                                                                                        |
| Land Holding  | 10 Kanals                                                                                                      |
| Enterprise    | Watermelon intercropping in High Density Apple Orchard with integrated vegetable cultivation and sheep rearing |
| KVK           | Krishi Vigyan Kendra, Ganderbal                                                                                |



#### Background / Situation

Mr. Ishfaq Ahmad Mir, a progressive and well-educated youth from Ahan village of Wakura block in District Ganderbal, holds a postgraduate degree in Tourism. Despite his educational qualifications, Ishfaq chose agriculture as a livelihood option with the objective of improving his family income and making productive use of his available land resources. He owns a total landholding of 10 kanals, out of which horticulture forms the major component.

Prior to the adoption of KVK interventions like crop geometry, package of practices and intercropping practices, Ishfaq followed conventional horticultural practices. His net returns were limited to around Rs. 60,000 per hectare, which proved economically unviable and discouraging. Dependence on a single crop and lack of diversification restricted income generation and failed to fully utilize land and other farm resources.

#### Challenges Faced

At the initial stage, the following constraints hindered higher income realization from the farm: - Lack of awareness and technical knowledge regarding scientific intercropping systems.

- Traditional orchard management practices resulting in low productivity and returns.
- Absence of guidance on crop diversification and efficient resource utilization.
- Seasonal dependence on single cropping, leading to idle land and income gaps.

## KVK Intervention

Recognizing the potential of the farmer, Krishi Vigyan Kendra, Ganderbal intervened with need-based technical guidance and capacity building. Ishfaq was trained and motivated to adopt scientific intercropping of watermelon in High Density Apple Orchards. The interventions included:

- Training on scientific intercropping techniques for watermelon cultivation in orchards.
- Advisory support on improved package of practices for vegetable cultivation after watermelon harvest (from mid-August onwards).
- Technical guidance on integrated farming systems, particularly sheep rearing with emphasis on rearing male sheep for sale during Muslim religious occasions.
- The KVK intervention aimed at diversification of enterprises, efficient land use, and enhancement of farm income from the same landholding.

## Innovation / Initiative

With continuous technical backstopping from KVK Ganderbal, Ishfaq adopted watermelon intercropping in 0.4 ha of his orchard area. After harvesting watermelon, he introduced seasonal vegetables from mid-August, ensuring extended utilization of land and continuous income flow. In addition, he integrated sheep rearing as a complementary enterprise, focusing on male sheep breeds to tap the festive market demand.

This integrated approach of horticulture, vegetable cultivation, and livestock rearing significantly improved resource use efficiency and farm profitability.

## Socio-Economic Impact

The impact of scientific intercropping and integrated farming was substantial:

- Net returns increased from Rs. 60,000/ ha to Rs. 17,00,000/ ha through watermelon intercropping.
- Vegetable cultivation after watermelon harvest generated an additional income of Rs. 12,000–16,000 / ha.
- Sheep rearing provided an additional annual income of Rs. 1.0–1.5 lakh.

Overall, Ishfaq achieved considerable socio-economic stability, improved his household income, and reduced financial vulnerability. His success story has motivated many fellow farmers in the region to adopt intercropping and integrated farming systems for income enhancement.

**Table: Income Before and After KVK Intervention**

| Particulars                                    | Before Intervention<br>(Conventional Practices) | After KVK Intervention (Scientific<br>Intercropping & Integrated Farming) |
|------------------------------------------------|-------------------------------------------------|---------------------------------------------------------------------------|
| Main Enterprise                                | Apple orchard<br>(monocropping)                 | Watermelon intercropping in HD Apple<br>orchard (8 kanals)                |
| Net Return (₹/ha)                              | 60000                                           | 17 lakhs                                                                  |
| Additional Income<br>from Vegetables<br>(₹/ha) | Nil                                             | 1.2–1.6 lakh                                                              |

| Particulars                | Before Intervention<br>(Conventional Practices) | After KVK Intervention (Scientific<br>Intercropping & Integrated Farming) |
|----------------------------|-------------------------------------------------|---------------------------------------------------------------------------|
| Income from Livestock      | Nil                                             | ₹1.0–1.5 lakh/year (sheep rearing)                                        |
| Cropping Intensity         | Single crop                                     | Multiple crops (intercropping + vegetables)                               |
| Overall Annual Farm Income | Low and unstable                                | High, diversified, and stable                                             |

## Conclusion

The success story of Mr. Ishfaq Ahmad Mir is a representative example of how scientific intercropping and integrated farming systems can significantly enhance farm income and livelihood security in temperate regions like Kashmir Valley. The systematic technical intervention, capacity building, and continuous advisory support provided by Krishi Vigyan Kendra, Ganderbal enabled effective utilization of land, diversification of enterprises, and maximization of returns from limited resources.

The remarkable increase in income before and after intervention clearly highlights the impact of KVK-led extension activities. The model demonstrated by Mr. Ishfaq Ahmad Mir is scalable, replicable, and suitable for dissemination at regional and national levels. This case holds strong relevance for inclusion in ICAR/ATARI national success story compilations and can serve as a guiding example for farmers and rural youth aiming to adopt sustainable and remunerative farming systems.

### Glimpses of farming activities:



## Success Story-3: Horticulture, KVK-Ganderbal

### Success Story of Progressive Orchardist (High Density Apple)

Suja N. Qureshi ,Ajaz A. Malik, Farooq A. Ahanger, Shaheen Farooq, Faiqa Syeed

#### Details of the entrepreneur

|               |                                |
|---------------|--------------------------------|
| Name          | Mr. Mohammad Ilyas Malik       |
| Age           | 42 years old                   |
| Address       | Vill. Dab, Wakura Ganderbal JK |
| Qualification | 9 <sup>TH</sup> pass           |
| Mobile        | 7006487704                     |
| KVK           | Ganderbal (JK)                 |



#### Background / Situation

Mr. Mohammad Ilyas Malik is, a 42-year-old resident of Village Dab, Wakura Ganderbal JK represents a remarkable example of rural determination and resilience. Belonging to a small farming family with an of land Size of land holding (in acre): 0.5 ha he faced constant financial pressure while supporting a household joint family. of 8 member's I could not continued his education due to financial shortcomings and had a traditional apple orchard var. Red delicious as a alternative to earn livelihood for supporting a joint family but the main challenge in this orchard was very less production and minimum percentage of A grade apple which was hurdle in fetching a good market price of his production to improver pollination as the var red delicious is gametophytic self incompatible needs pollenizers and the farmers was facing various problems in improving quality production of AA grades which turned him to new advancing horticulture technologies high density plantation on clonal rootstocks of apple for AA grade apple production and yield per capita unit.

A turning point came in his life whn he attended a farmers trainings progromme on production technology of horticulture crops conducted by concerned horticulture Scientist where he learned about use of clonal apple rootstocks which accommodates maximum number of plants per ha with 10 times higher yield and 90 percent a grade fruits and early precocity of trees. The initiative, implemented through KVK Ganderbal replacing initially aimed to equip rural youth with technical skills to take up profitable agricultural enterprises. Encouraged by the p 3500 sq metr (0.35 ha) area of his existing traditional low yielded orchardf starting a business with low initial investment and guided technical support, Aparpal approached KVK Bathinda for training and entrepreneurship development.

#### KVK Intervention

KVK Ganderbal SKUAST-K assessed will power, interests, aptitude, and potential before recommending installation of high Density orchard with elite high yielding apple self fruitful varieties on M9 a dwarf clonal apple rootstock . Mohammad Ilyas Malik resident of Dab block Wakura District was inspired and motivated for adapting new models of apple high density orchards of elite varieties on clonal rootstock of apple M9 post trainings. He approached KVK for layout design and demanded varieties of high-density Apple orchard and in the year 2022 (March). He managed the recommended quality planting material and established a high-density apple orchard on an area of 7 Kanals land with apple varieties Schinco Gala, Red Gala, king rot and T-rex gal on Dwarf clonal rootstock (M9).

## KVK intervention

Mohammad Ilyas Malik, resident of Dab (block Wakura) had been in touch with the KVK Ganderbal SKUAST to get scientific advice related to High density apple orchards and multiple enterprises (backyard poultry etc.) of his interest. Recently, he has introduced y. He is continuously a part of many training programmes conducted by KVK Ganderbal and has motivated other neighbors in his area to take trainings from subject experts of KVK Ganderbal and use their land for creation of sustainable income for livelihood. His hard work and dedication made him role model and a successful progressive orchardist and first farmer in his area to adopt integrated farming system.

## Innovation / Initiative

With scientific knowledge and confidence gained from KVK trainings, Aparpal introduced several innovations that strengthened his enterprise like backyard poultry farming along with High density apple orchard in order to harvest the economic benefits of Horti- poultry model. The enterprise will fetch him more income and will also provide him food security. An important innovation was the efficient use of poultry manure. Instead of disposing of it as waste, he applied it to his fields, improving soil fertility and reducing dependence on chemical fertilizers. Surplus manure was sold to other farmer in form of vermicompost. Trained by KVK in Layout of Orchard and selection of varieties for HD Apple and tall spindles training system for red gala on M9. Continuous monitoring of Orchard for Integrated nutrient management and spray schedules Establishment of High-Density apple orchard Hort-poultry Unit through KVK Ganderbal interventions.

## Socio-Economic Impact

As a result of the intervention by KVK Ganderbal, particularly timely trainings & technical guidance, farm income improved significantly. Prior to the intervention, the farmer was able to make (Table -1) from traditional orchard and after transformation of plantation by implementing the High-Density plantation. By improving farmer income & increasing sustainability, this production system enhanced the farm's overall economics.

**Table:1 - Comparison of quality production and income from traditional and High density orchard after shifting to new system of plantation .**

| Year                          | Gross Income (₹) | Expenditure (₹) | Net Income (₹) | Comments                                                        |
|-------------------------------|------------------|-----------------|----------------|-----------------------------------------------------------------|
| 20                            | 70000            | 12000           | 58000          | Traditional Seedling originated trees                           |
| 2016                          | 74000            | 14000           | 60000          | Traditional Seedling originated trees                           |
| 2017                          | 65000            | 12000           | 53000          | Traditional Seedling originated trees                           |
| 2018                          | 70000            | 12000           | 58000          | Traditional Seedling originated trees                           |
| 2019                          | 74000            | 14000           | 60000          | Traditional Seedling originated trees                           |
| 2020                          | 65000            | 12000           | 53000          | Traditional Seedling originated trees                           |
| 2021                          | 59000            | 10000           | 49000          | Traditional Seedling originated trees                           |
| 2022 **<br>(Shifting to 9HDP) | 30000            | 7000            | 23000          | From unchanged trees on 03 land of existing traditional orchard |
| 2023                          | 383000           | 165000          | 218000         | High Density Orchard elite varieties on M9 rootstock            |
| 2024                          | 672000           | 55000           | 666500         | With the age potential yield of tress increased                 |
| 2025                          | 813000           | 50000           | 763000         | With the age potential yield of tress increase                  |

## Awards and Recognitions

Mohammad Ilyas MaliKS achievements have been widely recognized and appreciated and he has been nominated for ten thousand rupees cash award for his dedicated hard work and follow up of scientific advises regarding selection of varieties implementation of training pruning and other cultural operations for achieving a remarkable production and incomes



## 9. IMPACT

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

| S.No. | Name of specific technology/skill transferred | No. of participants | Number of adopters | Change in income (Rs.) |                  |
|-------|-----------------------------------------------|---------------------|--------------------|------------------------|------------------|
|       |                                               |                     |                    | Before (Rs./unit)      | After (Rs./unit) |
| 1.    | Paddy (Jehlum)                                | 41                  | 36                 | 3100                   | 4800             |
| 2.    | Maize (C15)                                   | 82                  | 56                 | 2000                   | 3300             |
| 3.    | Brown Sarson (KS-101(Gulchin))                | 105                 | 65                 | 3400                   | 4400             |
| 4.    | Field pea (Rachna)                            | 90                  | 29                 | 3400                   | 5800             |
| 5.    | Paddy (Shalimar Rice-1)                       | 76                  | 08                 | 3100                   | 4690             |
| 6.    | Maize (C15)                                   | 55                  | 26                 | 2160                   | 3450             |
| 7.    | Brown Sarson (KS-101 (Gulchin))               | 53                  | 48                 | 3750                   | 4850             |
| 8.    | Field pea P8                                  | 25                  | 15                 | 3450                   | 5880             |
| 9.    | Brown Sarson (KS-101 (Gulchin))               | 41                  | 38                 | 3600                   | 4800             |
| 10.   | Maize (C-15)                                  | 41                  | 34                 | 2160                   | 3450             |
| 11.   | Paddy (Jehlum)                                | 81                  | 78                 | 3160                   | 4400             |
| 12.   | Brown Sarson (KS-101 (Gulchin))               | 41                  | 34                 | 3600                   | 4800             |
| 13.   | Maize (C15)                                   | 41                  | 29                 | 2160                   | 3450             |
| 14.   | Paddy (SR-1, SR-2)                            | 29                  | 16                 | 3200                   | 4400             |
| 15.   | Paddy (Pusa Sugandh)                          | 01                  | 01                 | 3000                   | 4000             |
| 16.   | Brown Sarson (KS-101 (Gulchin))               | 34                  | 26                 | 3600                   | 4800             |
| 17.   | Paddy (Jehlum)                                | 22                  | 18                 | 3750                   | 5200             |
| 18.   | Paddy (SR-1)                                  | 03                  | 00                 | 3750                   | 5000             |
| 19.   | Paddy (SR-2)                                  | 03                  | 01                 | 3750                   | 5200             |
| 20.   | Maize (C-15)                                  | 16                  | 11                 | 2200                   | 3500             |
| 21.   | Maize (C-8)                                   | 02                  | 01                 | 2200                   | 3180             |
| 22.   | Maize (C-6)                                   | 02                  | 01                 | 2200                   | 3180             |
| 23.   | Wheat (Shalimar Wheat-1)                      | 01                  | 01                 | 2800                   | 3550             |
| 24.   | Wheat (Shalimar Wheat-2)                      | 12                  | 08                 | 2800                   | 3550             |
| 25.   | Oats (Sabzaar)                                | 28                  | 21                 | 2500                   | 3200             |
| 26.   | Oats (SKO-90)                                 | 05                  | 03                 | 2500                   | 3000             |
| 27.   | Brown Sarson (KS-101 (Gulchin))               | 34                  | 30                 | 4275                   | 5000             |
| 28.   | Paddy (Jehlum)                                | 14                  | 14                 | 3750                   | 5200             |
| 29.   | Paddy (Jehlum (SRI))                          | 02                  | 01                 | 3750                   | 5000             |
| 30.   | Maize (C-8)                                   | 08                  | 03                 | 2200                   | 3000             |
| 31.   | Maize (C-15)                                  | 29                  | 16                 | 2200                   | 3500             |

|     |                                 |     |     |              |              |
|-----|---------------------------------|-----|-----|--------------|--------------|
| 32. | Wheat (Shalimar Wheat-2)        | 12  | 08  | 2800         | 3550         |
| 33. | Poultry (Kruoiler)              | 15  | 08  | 220 /bird    | 422 /bird    |
| 34. | Poultry (Vanraja)               | 15  | 10  | 220 /bird    | 389 /bird    |
| 35. | Dairy cattle (Dairy cattle)     | 10  | 05  | 1500 /cattle | 1980 /cattle |
| 36. | Brown Sarson (KS-101 (Gulchin)) | 12  | 08  | 3600         | 5500         |
| 37. | Paddy (Jehlum)                  | 22  | 20  | 3750         | 5200         |
| 38. | Paddy (SR-1)                    | 08  | -   | 3750         | 5000         |
| 39. | Paddy (SR-2)                    | 02  | 02  | 3750         | 5200         |
| 40. | Paddy (SR-3)                    | 02  | 02  | 3750         | 5200         |
| 41. | Paddy (SR-3 (SRI))              | 01  | 01  | 3750         | 5200         |
| 42. | Wheat (Shalimar Wheat-1)        | 01  | 01  | 2800         | 3550         |
| 43. | Maize (SMC-4)                   | 10  | 06  | 2200         | 3500         |
| 44. | Maize (Hybrid maize-1)          | 01  | 01  | 2200         | 3800         |
| 45. | Oats (Sabzaar)                  | 25  | 23  | 2500         | 3300         |
| 46. | Dairy                           | 10  | 06  | 1500         | 1980         |
| 47. | Poultry (Kuroiler)              | 15  | 10  | 220 /bird    | 422 /bird    |
| 48. | Poultry (Vanraja)               | 15  | 10  | 220 /bird    | 389 /bird    |
| 49. | Brown Sarson (KS-101 (Gulchin)) | 45  |     | 4300         | 5500         |
| 50. | Pea (Arkel)                     | 37  | 19  | 3450         | 5860         |
| 51. | Paddy (Jehlum)                  | 16  | 14  | 3750         | 5200         |
| 52. | Paddy (SR-2)                    | 20  | 10  | 3750         | 5200         |
| 53. | Paddy (SR-3)                    | 04  | 04  | 3750         | 5200         |
| 54. | Paddy (SR-4)                    | 06  | 06  | 3750         | 5200         |
| 55. | Paddy (SR-5)                    | 03  | 03  | 3500         | 4800         |
| 56. | Paddy (Mushkbudji)              | 16  | 07  | 3750         | 6000         |
| 57. | Paddy (Kamad)                   | 04  | 02  | 3750         | 5600         |
| 58. | Paddy (SR-4 (SRI))              | 03  | 03  | 3750         | 5200         |
| 59. | Wheat (Shalimar Wheat-1)        | 28  | 18  | 2800         | 3550         |
| 60. | Maize (SMC-7)                   | 30  | 23  | 2200         | 3500         |
| 61. | Oats (Sabzaar, SFO-2, SFO-3)    | 50  | 50  | 2500         | 3500         |
| 62. | Dairy                           | 27  | 20  | 127 /day/cow | 135 /day/cow |
| 63. | Poultry (Kuroiler)              | 150 | 124 | 220 /bird    | 422 /bird    |
| 64. | Poultry (Vanraja)               | 200 | 170 | 220 /bird    | 389 /bird    |
| 65. | Poultry (Keystone golden)       | 25  | 20  | 220 /bird    | 380 /bird    |
| 66. | Poultry (American white pekin)  | 20  | 16  | 220 /bird    | 235 /bird    |

|     |                                                  |    |    |     |         |
|-----|--------------------------------------------------|----|----|-----|---------|
| 67. | Cutting & Tailoring at Gutlibagh                 | 15 | 80 | Nil | 15000/- |
| 68. | Sozni work at Dub, Ganderbal                     | 20 | 65 | Nil | 9500/-  |
| 69. | Sozni work at Dach Mohalla, Gujarpati, Yarmuqam. | 15 | 60 | Nil | 9000/-  |
| 70. | Crochette work at Gutlibagh.                     | 19 | 63 | Nil | 3000/-  |

## 9.2. Cases of large scale adoption:

### (Please furnish detailed information for each case)

1. Adoption of SR-4 variety of rice: The horizontal expansion of improved rice variety- SR-4 has led to increase in production and productivity of rice. In spite of decrease in rice area by 18%, from 2011-12 to 2019-20, the production has increased by 15% and productivity by 40%. This was possible with the adoption of SR-4 variety by farmers of Ganderbal, having a yield potential of 9 t/ha.
2. For crops like maize, apple, walnut, grapes and cherry, the area has increased by 29, 38, 20, 50 and 55 percent, respectively, during the last 10 years. The production during the period has increased by 185, 87, 30, 148 and 122 percent, respectively with a subsequent increase in productivity of these crops by 120, 36, 8, 66 and 43 percent, respectively.
3. Adoption of SKUAST-K spray schedule: Prevalence of diseases and insect pests cause havoc to the fruit industry of Kashmir. The pests are causing an annual loss of hundreds of crores. Adoption of SKUAST-K spray schedule by farmers demonstrated by KVK Ganderbal has proved fruitful in control of diseases. As of now, the SKUAST-K recommended spray schedule is adopted by majority of fruit growers (>80%) of the district.
4. Management of chilli wilt disease: Chillo wilt is one of the most serious diseases of chilli in district Ganderbal. Management of chilli wilt through any of the practices (a) Seed treatment with carbendazim 50 WP+ Mancozeb (75 WP) 2 g/ kg of seed (b) Seedling dip in Carbendazim 50 WP+ Mancozeb (75 WP) @ 0.2% (c) Drenching root zone of plants with carbendazim 50 WP and Mancozeb 75 @ 0.3%, demonstrated by KVK Ganderbal had led to its widescale adoption. As of now, almost all the chilli growers are adopting this practice to manage the chilli wilt.

### 9.3 Details of impact analysis of KVK activities carried out during the reporting period:

| Name of specific technology/skill transferred | No. of participants | Number of adopters | Adoption rate (%) | Change in income (Rs.) |                  | Increase in income (%) |
|-----------------------------------------------|---------------------|--------------------|-------------------|------------------------|------------------|------------------------|
|                                               |                     |                    |                   | Before (Rs./unit)      | After (Rs./unit) |                        |
| Rice (SR-2,SR-3, SR-4, SR-5)                  | 373                 | 242                | 64                | 3578                   | 5035             | 40                     |
| Maize (C-15, C-7, C-4)                        | 82                  | 56                 | 68                | 2174                   | 3400             | 56                     |
| Oilseed (SS-2)                                | 365                 | 249                | 68                | 6694                   | 8811             | 31                     |
| Peas (Rachna, Arkel)                          | 152                 | 63                 | 41                | 3433                   | 5846             | 70                     |
| Wheat (SW-1, SW-2)                            | 54                  | 36                 | 66                | 2800                   | 3550             | 26                     |
| Fodder Oats (Sabzaar, SFO-2, SFO-3)           | 108                 | 97                 | 90                | 2500                   | 3250             | 30                     |
| Poultry (Vanraja, Kuroiler)                   | 425                 | 350                | 82                | 220/bird               | 270/bird         | 22                     |
| Dairy (ASMM, UMMB)                            | 37                  | 26                 | 70                | 127 /day/cow           | 135 /day/cow     | 6                      |

## 10.0 LINKAGES

### 10.1 Functional linkage with different organizations

| Name of organization             | Nature of linkage                                                                                                                     |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. NABARD                        | Exposure visits & Trainings.                                                                                                          |
| 2. Deptt. of Agriculture         | Diagnostic visits, Plant clinic camps, Kissangoshties, Field days, FLD's, Exhibitions, Farmers fair, Kissan mela, Training programmes |
| 3. Deptt. of Horticulture        | Diagnostic visits, Plant clinic camps, Kissangoshties, Field days, FLD's, Exhibitions, Farmers fair, Kissan mela, Training programmes |
| 4. Deptt. of Animal Husbandry    | Animal clinic camps, Farmers training, Diagnostic visits                                                                              |
| 5. Department of Sheep Husbandry | Animal clinic camps, Farmers training, Diagnostic visits                                                                              |

## 11. FINANCIAL PERFORMANCE

### 11.1 Details of KVK Bank accounts

| Bank account        | Name of the bank          | Location           | Account Number       |
|---------------------|---------------------------|--------------------|----------------------|
| With Host Institute | JK Bank , SKUAST-K Branch | Shalimar, Srinagar | --                   |
| With KVK            | JK Bank Shuhama, Alusteng | Shuhama            | CDG-0854010200000027 |
|                     | -do-                      | Shuhama            | SBG-0854040500000016 |

### 11.2 Utilization of KVK funds during the year (April 2025 to March, 2026) :(in lakhs)

| S. No. | Particulars                                                                                                                                                               | Sanctioned    | Released      | Expenditure   |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|---------------|
| 1.     | <b>Recurring Contingencies</b>                                                                                                                                            |               |               |               |
| 1.1    | Pay & Allowances                                                                                                                                                          | 198.00        | 199.00        | 198.00        |
| 1.2    | Traveling allowances                                                                                                                                                      | 1.00          |               | 1.00          |
| 1.3    | Contingencies                                                                                                                                                             |               |               |               |
|        | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance POL, repair of vehicles, tractor and equipments |               |               |               |
|        | Meals/refreshment for trainees                                                                                                                                            |               |               |               |
|        | Training material                                                                                                                                                         |               |               |               |
|        | Frontline demonstration except oilseeds and pulses                                                                                                                        | 15.50         | 15.50         | 15.50         |
|        | On farm testing                                                                                                                                                           |               |               |               |
|        | Training of extension functionaries                                                                                                                                       |               |               |               |
|        | Maintenance of buildings                                                                                                                                                  |               |               |               |
|        | Establishment of Soil, Plant & Water Testing Laboratory                                                                                                                   |               |               |               |
|        | Library                                                                                                                                                                   |               |               |               |
|        | <b>Total Recurring</b>                                                                                                                                                    | <b>214.50</b> | <b>214.50</b> | <b>214.50</b> |
| 2.1    | <b>Non-Recurring Contingencies</b>                                                                                                                                        |               |               |               |
|        | Works                                                                                                                                                                     |               |               |               |
|        | Equipments including SWTL & Furniture (Photocopier)                                                                                                                       |               |               |               |
|        | Vehicle (Four wheeler/Two wheeler, please specify)                                                                                                                        | 5.70          | 5.70          | 5.70          |
|        | Library                                                                                                                                                                   |               |               |               |
|        | <b>Total Non-Recurring</b>                                                                                                                                                |               |               |               |
|        | <b>REVOLVING FUND</b>                                                                                                                                                     |               |               |               |
|        | <b>GRAND TOTAL (A+B+C)</b>                                                                                                                                                | <b>220.20</b> | <b>220.20</b> | <b>220.20</b> |