Shri Hanumantharaya Educational & Charitable Society

# Krishi Vigyan Kendra
# www.pendekantikvk.org


## ANNUAL PROGRESS REPORT
## 2025

**Dr. G. Dhanalakshmi,**
**Senior Scientist & Head.**

Yagantipalle (v), Banaganapalle (M), Nandyal (dt.),
Andhra Pradesh.

# PROFORMA FOR PREPARATION OF ANNUAL REPORT
**(1st January 2025 to 31st December 2025)**

## 1. GENERAL INFORMATION ABOUT THE KVK

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

**Name of the KVK as per official records (MoU)** : Shri Hanumantharaya Educational & Charitable Society, Krishi Vigyan Kendra, Yagantipalle.
**Address** : Krishi Vigyan Kendra, Yagantipalle (P), Banaganapalle (M), Nandyal (Dt.), A.P.
**Phone** : 9440607424
**Fax** : -
**Email** : pendekantikvk@gmail.com

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

**Name of the Host Organization as per Official Records** : Shri Hanumantharaya Educational & Charitable Society
**Status of the Host Organization (As per the MoU)** : NGO
**Address** : Shri Hanumantharaya Educational & Charitable Society, Krishi Vigyan Kendra, Yagantipalle (P), Banaganapalle (M), Nandyal (Dt.), A.P.
**Phone** : 9440607424
**Fax** : -
**Email** : pendekantikvk@gmail.com
**Name of the Chairperson** : Sri P. Balaji
**Mobile No** : 7702127616
**Email** : Pb1961@rediffmail.com

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

**Name of the Programme Coordinator / SS&H** : Dr. G. Dhanalakshmi
**Residential Address** : Illurukothapeta (V & P), Banaganapalle (M), Nandyal (Dt.), Andhra Pradesh.
**Phone No.** : -
**Mobile No.** : 9440607424
**Email** : dhanaguru12@gmail.com

**1.4. Year of sanction of the KVK (as per Official Order)** : 1989
**1.5. Month and year of establishment** : December, 1989
**1.6. Total land with KVK (in ha) (Consolidated figure)** :

| S. No. | Item | Area (ha) |
|---|---|---|
| 1 | Under Buildings | 2 |
| 2 | Under Demonstration Units | 1 |
| 3 | Under Crops | 10 |
| 4 | Orchard/Agro-forestry | 4 |
| 5 | Others (specify) | 3 |
| | **Total** | **20** |

## 1.6. Infrastructural Development:

### A) Buildings:

| S. No. | Name of building | Source of funding | Stage | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Complete | | | Incomplete | | |
| | | | Completion Date | Plinth area (Sq.m) | Expenditure (Rs.) | Starting Date | Plinth area(Sq.m) | Status of construction Completed/ in progress/ to be initiated) |
| 1 | Administrative Building | ICAR | 1994 | 550 | 7.59 | 1990-91 | | Completed |
| 2 | Farmers Hostel | ICAR | 1994 | 450 | 8.0 | 1990-91 | | Completed |
| 3 | Staff Quarters (No.) | ICAR | 1998 | 650 | 32.27 | 1992-93 | | Completed |
| 4 | Demonstration Units | ICAR | 1992-93 | 300 | 6.5 | 1992-93 | | Completed |
| 5 | Fencing | ICAR | 2005-06 | | 6.5 | 2004-05 | | Completed |
| 6 | Rainwater harvesting system | - | - | - | - | - | | - |
| 7 | Threshing floor | - | - | - | - | - | | - |
| 8 | Farm godown | ICAR | 2005-06 | 112.5 | 5.28 | 2005-06 | | Completed |
| 9 | Shed (Farm equipment) | - | - | - | - | - | | - |
| 10 | Soil Testing Laboratory | ICAR | 2004-05 | 112.5 | 8.59 | 2004-05 | | Completed |
| 11 | Goat Shed | ICAR | 2016-17 | 35.0 | 3.0 | 2016-17 | | Completed |

### B) Vehicles:

| Type of vehicle | Year of purchase | Cost (Rs.) | Total kms covered as on 31.12.2020 | Present status |
|---|---|---|---|---|
| Bolero | 2019 | 6,50,000-00 | 25,024 Km | OK |
| Mahindra & Mahindra Tractor | 2005 | 3,54,522-00 | 30678 (hrs) | OK |
| Motorcycle (Hero Honda) | 2014 | - | 13386 Km | OK |

### C) Equipment & AV aids:

| Name of the equipment | Year of purchase | Cost (Rs.) | Present status |
|---|---|---|---|
| Tape Recorder | 1990 | 2,600-00 | OK |
| Over Head Projector | 1991 | 6,200-00 | OK |
| Slide Projector | 1991 | 7,168-00 | OK |
| Ahuja Micro phone Set | 1994 | 9,500-00 | OK |
| Television | 1994 | 19,999-00 | OK |
| Video Cassette Recorder | 1996 | 19,000-00 | OK |
| Ahuja Portable wireless Amplifier | 2003 | 9,927-00 | OK |
| Cordless micro phone | 2003 | 5,804-00 | OK |
| Collar Mic | 2005 | 5,800-00 | OK |
| Rotavator | 2025 | 3,00,000 | OK |
| 1 No - 9 Tyne Cultivator with Blade | 2025 | 47,000.00 | OK |
| 4 Nos – Manual Seed Dibbler | 2025 | 44,000.00 | OK |
| 1 No- Post Hole Digger with Extra Augar | 2025 | 97,500.00 | OK |
| 1 No - Power Wrench | 2025 | 9,782.00 | OK |
| 1 No- Reversible 3 MB Plough | 2025 | 92,618.00 | OK |
| 1 No- Rohith 4 Row Seed Cum Fertilizer Planter with Riggers | 2025 | 85,000.00 | OK |
| 1 No- Rohith 6 Row Seed Cum Fertilizer Planter with Riggers | 2025 | 89,500.00 | OK |
| 1 Nos - 2 MB Plough | 2025 | 46,100.00 | OK |
| 3 Nos - Proseeder - 2 Row with Attachments | 2025 | 37,500.00 | OK |
| 100 nos Conical Falsk - 1000ml | | 1,03,939.00 | |
| 1no Digital Weighing Balance - Bio Lab | | 7,522.00 | |
| Electrical Oven and Planetary Mixter | | 1,80,540.00 | |
| Wonder chef Oven with Accessories | | 7,999.00 | |
| 1 No - Bund Farmer Cum Dibbler | 2025 | 1,10,000.00 | OK |
| 1 No - Field King Power Harrow | 2025 | 1,93,000.00 | OK |
| 1 No – 26 CC Power Trimmer | 2025 | 10,400.00 | OK |
| 1 No – Power Harrow (Disc Type) | 2025 | 1,35,000.00 | OK |
| 1 No - Power Pruner | 2025 | 27,000.00 | OK |
| Chainsaw Blade | 2025 | 1,100.00 | OK |
| Pruner Attachments | 2025 | 3,800.00 | OK |
| Trimmer Blade Assembly | 2025 | 2,100.00 | OK |
| 1 No - Brush Cutter | 2025 | 17,500.00 | OK |
| 1 No - Bund Farmer Cum Dibbler | 2025 | 1,10,000.00 | OK |
| 1 No – Honda Power Pruner | 2025 | 27,100.00 | OK |

**1.7. A). Details SAC meeting* conducted in the year:**

| S. No. | Date | No of Participants | Salient Recommendations |
|---|---|---|---|
| 1 | 10.03.2025 | 50 | • Double cropping in black soils viz., Korra-Bengalgram, Soybean-Bengalgram to be scaled up in the district.<br>• Record the phyllody incidence in sesame demonstrations of JCS-1020 (Jagithyal till-1) variety.<br>• Cotton shredder and Maize mulcher should be promoted for crop residue incorporation.<br>• Mapping of adopted villages of KVK over the period of time since inception.<br>• Adopted villages should be 12 for three years.<br>• Data to be maintained on RSK wise farming situations.<br>• Large scale demonstrations may be taken up on rabi red gram with POPs for different dates of sowing and spacing.<br>• Soybean area to be increased by identifying suitable mandals with help of DOA and large scale demonstrations may be planned.<br>• Grouping of natural farming Rice farmers for technical support.<br>• OFT on PMDs may be taken up before rice under natural farming.<br>• OFTs on assessment of saline tolerant varieties in Rice convert in to FLD for 2025-26.<br>• Data on seasonality of pests and diseases should be documented.<br>• PB knots for Pink Boll Worm management in Cotton to be tested along with CREMIT paste.<br>• Conclude all OFTs and FLDs that completed three years.<br>• Honey may be added in value added products of millet.<br>• Clear photographs may be taken during diagnostic visits.<br>• Biometric observation should be given as supporting slides for OFTs/FLDs.<br>• More field visits should be taken up by scientists for more interaction with farmers.<br>• Double cropping in single cropping area and triple cropping in double cropped area need to be explored.<br>• In black soils Broad Bed Furrow (BBF) system may be popularized.<br>• Inclusion of green manuring in natural farming and compare with PMDS.<br>• Sheath blight in maize is becoming a menace, need suggestions for better management.<br>• Chilli black thrips is at rise this year need better package for management.<br>• Double cropping failing in drought situations.<br>• Desi seeds should be made available to the farmers and PMDS seed kits may be supplied on subsidy.<br>• Pulses and oil seeds of new varieties may be made available during the season.<br>• More visits of scientists should be there for natural farming.<br>• Positive feedback on performance of Redgram (LRG-52) and Ground |

| | | | |
|---|---|---|---|
| | | | nut (TCGS-1694) varieties in rainfed situation.<br>• PMDS should be popularized.<br>• NPM Shops should be there in each mandal.<br>• Create more awareness on desi varieties of crops.<br>• Small implements for inter cultivation should be made available |

## 2. DETAILS OF DISTRICT (2025)

### 2.0. Operational jurisdiction of KVKs:

| District | New districts governed by the KVK after division of the district, if applicable | Taluks/Tehsils and/or Mandals under the KVKs jurisdiction |
|---|---|---|
| Nandyal | Nandyal | 29 Mandals |

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

| S. No | Farming system/enterprise |
|---|---|
| 1 | Agriculture + Horticulture |
| 2 | Agriculture + Dairy |
| 3 | Agriculture + Horticulture + Dairy |
| 4 | Agriculture + Horticulture + Pastural Culture |

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

| S. No | Agro-climatic Zone | Characteristics |
|---|---|---|
| 1 | Scarce rain fall zone | Low, scanty and erratic rainfall due to which successful crop production with good yield is unrespectable and dry land agriculture is predominant with a variety of rainfed crops in the zone. |

### 2.3. Soil types:

| S. No | Soil type | Characteristics | Area in ha |
|---|---|---|---|
| 1 | Black cotton soils | Heavy and deep to very deep belonging to vertisols. | 3.69 |
| 2 | Red Earths | Clayey sub soil (association of alfisols and inceptisols) | 1.29 |
| 3 | Red earths | Loamy sub soil i.e. chalkas (association of inceptisols and alfisols) | 3.18 |
| 4 | Red sandy loam soils | Dubbas & Chalkas (association of entisols, inceptisols and alfisols)-Light textured soils, poor water holding capacity, poor fertility | 0.54 |
| 5 | Problem soils (Saline/sodic) | High pH more than 9.0 | 1.04 |
| 6 | Rock land and others | Undulated sloppy lands. Very shallow soils. | 0.47 |

## 2.4. Area, Production and Productivity of major crops cultivated in the district (or the jurisdiction as the case may be) for 2025:

### Kharif, 2025:

| S. No. | Name of the Crop | Normal Area (ha) | Actual Area (ha) | % Area Sown |
|---|---|---|---|---|
| 1 | Paddy | 65255 | 95031 | +45.63 |
| 2 | Maize | 50515 | 98171 | +94.34 |
| 3 | Redgram | 36234 | 42922 | +18.45 |
| 4 | Cotton | 18827 | 6536 | -65.28 |
| 5 | Groundnut | 11943 | 3884 | -67.47 |
| 6 | Blackgram | 9451 | 11134 | +17.70 |
| 7 | Castor | 2921 | 1529 | -47.65 |
| 8 | Soybean | 4176 | 7847 | +87.90 |
| 9 | Bajra | 3702 | 4629 | +25.04 |
| 10 | Sateria | 1855 | 598 | -67.76 |
| 11 | Sunflower | 389 | 13 | -96.65 |
| 12 | Jowar | 872 | 87 | -90.02 |
| 13 | Greengram | 279 | 98 | -64.87 |
| **Total** | | **206419** | **272479** | **+32.0** |

### Rabi, 2025-26:

| S. No. | Name of the Crop | Normal Area (ha) | Actual Area (ha) | % Area Sown |
|---|---|---|---|---|
| 1 | Paddy | 75353 | 75334 | 100.0 |
| 2 | Jowar | 40403 | 40393 | 100.0 |
| 3 | Bajra | 2198 | 2198 | 100.0 |
| 4 | Maize | 62804 | 62804 | 100.0 |
| 5 | Redgram | 7145 | 7145 | 100.0 |
| 6 | Greengram | 866 | 866 | 100.0 |
| 7 | Blackgram | 21094 | 21094 | 100.0 |
| 8 | Groundnut | 3741 | 3741 | 100.0 |
| 9 | Rape seed and Mustard | 6468 | 6468 | 100.0 |
| 10 | Sesamum | 1146 | 1127 | 98.3 |
| 11 | Sunflower | 447 | 444 | 99.3 |
| 12 | Bengalgram | 68825 | 68225 | 99.1 |
| 13 | Tobacco | 7059 | 7059 | 100.0 |
| 14 | Safflower | 410 | 392 | 95.6 |
| **Total** | | **177156** | **304385** | **171.8** |

### Horticulture Database of Nandyal district 2025-26:

| Crops | Name | NDL Dist. (Ha) | Crops | Name | NDL Dist. (Ha) |
|---|---|---|---|---|---|
| **Fruits** | Banana | 5421 | **Vegetables** | Onion | 6077 |
| | Mango | 3987 | | Tomato | 2698 |
| | S. Orange | 1126 | | G. Chilli | 852 |
| | Acid Lime | 615 | | Bhendi | 748 |
| | Papaya | 346 | | Drumstick | 210 |
| | Guava | 100 | | Brinjal | 117 |
| | Pomegranate | 85 | | Cucurbits | 50 |
| **Total** | | **12,987 ha** | **Total** | | **12,079 ha** |
| **Spices & Condiments** | Dry Chilli | 5291 | **Flowers** | Chrysanthemum | 653 |
| | Turmeric | 694 | | Jasmine | 194 |
| | Ajwain | 128 | | Marigold | 101 |
| | Curry leaf | 4 | | Tuberose | 12 |

| Total | 7,255 ha | Total | 1,308 ha |
|---|---|---|---|
| Grand total area 33,665 ha | | | |

**Livestock population in Nandyal district:**

| S. No. | Type | Population | | Diff. |
|---|---|---|---|---|
| | | 2020 | 2024 | |
| 1 | Cattle | 184344 | 123550 | -33.0 |
| 2 | Buffalo | 237803 | 296330 | 24.6 |
| 3 | Sheep and Goat | 932947 | 1136414 | 21.8 |
| 4 | Poultry | 867705 | 626947 | -27.7 |

## 2.5. Weather data:

| Month | Normal(mm) | Actual(mm) | Difference (%) |
|---|---|---|---|
| **Summer** | | | |
| March 2025 | 5.6 | 4.4 | -20 |
| April | 18.2 | 43.7 | 140.1 |
| May 2025 | 36.9 | 94.8 | 156.9 |
| **Total** | **60.7** | **142.91** | **135.4** |
| **South- West Monsoon** | | | |
| June2025 | 76.8 | 55.6 | -27.6 |
| July 2025 | 142.0 | 139.9 | -2.1 |
| August | 153.6 | 231.5 | 50.7 |
| September 2025 | 134.7 | 207.9 | 54.3 |
| **Total** | **507.1** | **634.9** | **25.2** |
| **North-East Monsoon** | | | |
| October 2025 | 117.9 | 219.7 | 86.0 |
| November 2025 | 27.2 | 28.8 | 5.9 |
| December 2025 | 7.0 | 2.8 | -60 |
| **Total** | **152.1** | **251.3** | **65.2** |
| **Winter** | | | |
| January 2026 | 2.4 | 1.2 | -50 |
| February 2026 | 2.4 | 1.2 | -50 |
| Total | **4.8** | **1.2** | **-75** |
| **Grand Total** | **724.7** | **1030.3** | **42.2** |

## 2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district (2025):

| Category | Population | Production | Productivity |
|---|---|---|---|
| **Cattle** | | | |
| *Crossbred* | | | |
| *Indigenous* | 123550 | 155673 | 1.26 |
| **Buffalo** | 296330 | 924550 | 3.12 |
| **Sheep** | | | |
| Crossbred | | | |
| *Indigenous* | 824563 | | |
| **Goats** | 311851 | | |
| **Pigs** | | | |
| *Crossbred* | | | |
| *Indigenous* | | | |

| | | | |
|---|---|---|---|
| **Rabbits** | | | |
| **Poultry** | | | |
| Hens | | | |
| *Desi* | | | |
| *Improved* | | | |
| Ducks | | | |
| Turkey and others | | | |

| Category | Area | Production | Productivity |
|---|---|---|---|
| Fish | - | - | - |
| *Marine* | - | - | - |
| *Inland* | - | - | - |
| Prawn | - | - | - |
| Scampi | - | - | - |
| Shrimp | - | - | - |

## 2.7. Details of Adopted Villages (2025):

| S. No. | Taluk/ Mandal | Name of the block | Name of the village | Year of adoption | Major crops & enterprises | Major problem identified | Identified Thrust Areas |
|---|---|---|---|---|---|---|---|
| **KVK adopted villages** | | | | | | | |
| 1 | Dhone | Dhone | Gummakonda | 2024 | Onion, Tomato, Redgram, Groundnut | Local varieties producing lower yields and small to medium sized bulbs<br>Lack of awareness on pin worm management in tomato<br>Low milk yield and poor management on buffalos | INM, IPM and varietal replacement |
| 2 | Dhone | Dhone | Venkatapuram | 2024 | Redgram, Paddy, Groundnut and small ruminants | Local varieties producing lower yields, Lack of quality seed in paddy, and groundnut during season and delay in availability of seed | INM, IPM, Soil health management and awareness on scientific management practices for small ruminants |
| 3 | Dhone | Dhone | Chinnamalkapuram | 2024 | Redgram, setaria, Groundnut, Okra and Poultry | Local varieties producing lower yields and susceptible to YVMV<br>Lack of awareness on backyard | Pest and disease management |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | poultry and management | |
| 4 | Dhone | Dhone | Kothapalli | 2024 | Groud nut, Redgram, Bajra, Onion | Lower yields and non availability of short duration varieties | INM, IPM and varietal replacement |
| 5 | Allagadda | Rudravaram | Narsapuram | 2024 | Maize, Blackgram and tomato | Local varieties producing lower yields and unknown varieties<br>Wilt in maize, | INM, IPM and varietal replacement |
| 6 | Allagadda | Rudravaram | Sreerangapuram | 2024 | Paddy, Maize, Turmeric, Chilli, Banana | Lower yields in all major crops<br>Cigatoka in Banana, thrips in chilli | ICM, Cigatoka management and awareness on recent varieties |
| 7 | Allagadda | Rudravaram | T. Lingamdinne | 2024 | Paddy, Maize, blackgram | Mono cropping in Maize areas, Indiscriminate use of fertilizers in all major crops | Crop diversity, Varietal replacement and awareness on SHC and Soil health management |
| 8 | Atmakur | Velugodu | Muthukuru | 2024 | Paddy, Maize, | Mono cropping, and indiscriminate use of fertilizers and pesticides<br>Lower yields in major crops of the area | Crop diversity, IPM, INM |
| 9 | Atmakur | Velugodu | Ragadiguduru | 2024 | Paddy, Maize, Blackgram, soybean | Mono cropping, and indiscriminate use of fertilizers and pesticides<br>Lower yields in major crops of the area | Crop diversity, IPM, INM |
| 10 | Nandikotkur | Nandikotkur | Bollavaram | 2024 | Redgram, Black gram, bengal gram and Poultry | Wilt and podfly in redgram,<br>Lower yields in major crops<br>Lack of scientific management in poultry | IPM, INM and Poultry |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 11 | Nandikotkur | Nandikotkur | Malyal | 2024 | Bengalgram, Miaze, Redgram, cotton | Indiscriminate use of pesticides and fertilizers<br>Mono cropping and lower yields<br>Lack of short duration or medium duration hybrids in Cotton | IPM, INM, SHM, Awareness on Varietal replacement |
| 12 | Nandikotkur | Nandikotkur | Nagaturu | 2024 | Maize, blackgram | Indiscriminate use of pesticides and fertilizers<br>Mono cropping and lower yields<br>Lack of short duration or medium duration hybrids in Cotton | IPM, INM, SHM, Awareness on Varietal replacement |
| | | | | | | | |
| **DFI villages** | | | | | | | |
| 1 | Banaganapalle | Banaganapalle | Yerragudi | 2018 | Household food security and Kitchen gardening<br><br>Value Addition<br><br>Drudgery reduction technologies | • Lack of awareness on importance of consumption of green leafy and other vegetables in daily menu.<br>• Non-availability of green leafy and other vegetables for daily consumption.<br>• Lack of awareness on PHT of fruits and vegetables.<br>• Lack of awareness on product diversification with local foods with emphasis on | Training programmes & Demonstrations<br><br>Training Programmes Method Demonstrations<br><br>Demonstrations |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | Development of nutrient efficiency diet with local foods<br>Women and child care<br>Stiching and Tailoring<br>Rural crafts | millets.<br>• Drudgery among farm women in farm operations.<br>• Nutritional deficiencies among adolescent girls, pregnant and lactating women& children.<br>• Lack awareness on income generating activities for off season. | Training Programmes<br><br>Training Programmes |
| 2 | | | | | Dairy | • Poor milk production.<br>• Reproductive problems in milch buffaloes.<br>• Mastitis | Demonstrations & Trainings. |
| 3 | | | | | Poultry | • No improved poultry breeds are available.<br>• Poultry diseases | Demonstrations & Trainings. |
| 4 | | | Yerragudi | 2018 | Redgram, Paddy, Setaria, Jowar | • Pod borers and Pod fly in Redgram.<br>• Stemborer in Rice. | IDM, IPM. |
| 5 | Bethamcherla | Bethamcherla | H.kottala | | Groundnut setaria | • Low productivity in oilseeds Due moisture stress | Introduction of Varieties tolerant Moisture stress , Balanced nutrition and weed management<br>Alternate crops |
| 6 | Bethamcherla | Bethamcherla | H.kottala | | Redgram, Bengalgram, Korra | • Indiscriminate use of pesticides, | ICM and IPM |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | poor knowhow on varieties suitable | |
| 7 | Bethamcherla | Bethamcherla | H.kottala | | Dairy | • Fodder shortage.<br>• Poor milk production.<br>• Reproductive problems.<br>• Mastitis | Demonstrations & Trainings. |
| 8 | Bethamcherla | Bethamcherla | H.kottala | | Poultry | • Non availability of improved poultry breeds. | Demonstrations & Trainings. |
| 9 | Bethamcherla | Bethamcherla | H.kottala | | Sheep | • Poor growth in ram lambs, high lamb mortality. | Demonstrations & Trainings. |

### 2.8. Priority/thrust areas:

| Crop/Enterprise | Thrust area |
|---|---|
| Chilli | Wilt, black thrips, mites, viral diseases & high investment |
| Tomato | Wilt, pin worm, low yielding hybrids |
| Vegetables | Less use of drip irrigation system |
| Onion, okra | Low yielding varieties |
| Mango | Flower & fruit drop, black thrips, fruit fly incidence, anthracnose |
| Citrus | Micronutrient deficiency, psyllids, gummosis, wilt |
| Banana | Sigatoka disease |
| Chrysanthemum | Fusarium wilt |

## 3. Salient Achievements

**Achievements of Mandated activities (1st January 2025 to 31st December 2025):**

| S. No | Activity | Target | Achievement |
|---|---|---|---|
| 1 | Technologies Assessed and refined(No.) | 16 | 16 |
| 2 | On-farm trials conducted (No.) | 18 | 18 |
| 3 | Frontline demonstrations conducted (No.) | 29 | 29 |
| 4 | Farmers trained (in Lakh) | 0.02145 | 0.06719 |
| 5 | Extension Personnel trained (No.) | 470 | 1648 |
| 6 | Participants in extension activities (in Lakh) | 0.00706 | 0.32851 |
| 7 | Production and distribution of Seed (in Quintal) | 2500 | 2550.675 |
| 8 | Planting material produced and distributed (in Lakh) | 15.0 | 13.35642 |
| 9 | Live-stock strains and finger lings produced and distributed (in Lakh) | 0.05 | 0.05894 |
| 10 | Soil samples tested by Mini Soil Testing Kit (No) | 0 | 0 |
| 11 | Soil samples tested by Traditional Laboratory (No) | 3000 | 2473 |
| 12 | Water, plant, manure, and other samples tested (No.) | 10 | 49 |
| 13 | Mobile agro-advisory provided to farmers (No.) (M- kisan 213, others 851) | 850 | 1064 |
| 14 | No.of Soil Health Cards issued by Mini Soil Testing Kits (No.) | 0 | 0 |
| 15 | No.of Soil Health Cards issued by Traditional Laboratory (No.) | 4000 | 5054 |

Give Salient Achievements by KVK during the year in bullet points:

### b. Salient Achievements of KVK in bullet Points:

- Successfully organised Vikasith Krishi Sankalp Abhiyan (VKSA) in 138 villages covering 19,463 farmers.
- Established 57 demonstration units out of which 27 units were under vermicompost production.
- As per the mandate 18 OFTs and 29 FLDs were organised.
- Produced 23647 kg of bio inputs and supplied to 1996 farmers.
- Distributed 5054 soil health cards.
- Supplied 5894 Aseel birds to farmers.
- Produced 13,35,642 seedlings and supplied to 206 farmers.
- Produced 255000 kg of seed and supplied to 8602 farmers across the districts.
- Published eight scientific articles with regard to the work done by scientist in different scientific journals.
- Reached 1,15,000 farmers through M- Kisan and delivered 213 messages related to crops and weather ( page no 118).
- Company was registered by women for jute bag making (mentioned in skilling).
- Under Custom hiring services 61 villages were covered and 272 farmers utilized the services of custom hiring centre (page no. 107).

## 4. TECHNICAL ACHIEVEMENTS

**Details of target and achievements of mandatory activities by KVK during 2025:**

**OFT (Technology Assessment):**

| No. of OFTs | | Number of technologies | | Number of locations (Villages) | | Total no. of Trials/ Replications / Beneficiaries | |
|---|---|---|---|---|---|---|---|
| Targets | Achievement | Targets | Achievement | Targets | Achievement | Targets | Achievement |
| 18 | 18 | 36 | 36 | 90 | 90 | 90 | 90 |

**FLD (crop/enterprise/CFLDs):**

| No of Demonstrations | | Area in ha | | Number of Farmers / Beneficiaries / Replications | |
|---|---|---|---|---|---|
| Targets | Achievement | Targets | Achievement | Targets | Achievement |
| 29 | 29 | 70 | 70 | 290 | 320 |

**Training (including sponsored, vocational, and other trainings carried under Rainwater Harvesting Unit):**

| Number of Courses | | | Number of Participants | |
|---|---|---|---|---|
| Clientele | Targets | Achievement | Targets | Achievement |
| Farmers and Farm Women | 72 | 111 | 2098 | 6719 |
| Rural youth | 15 | 19 | 370 | 840 |
| Extn.Functionaries | 18 | 37 | 570 | 1648 |
| | | | | |

**Extension Activities:**

| Number of activities | | Number of participants | |
|---|---|---|---|
| **Targets** | **Achievement** | **Targets** | **Achievement** |
| 37 | 1803 | 856 | 32851 |

**Seed Production (q):**

| Target | Achievement | Distributed to no. of farmers |
|---|---|---|
| 2500 | 2550.675 | 8602 |
| | | |

**Planting material (Nos.):**

| Target | Achievement | Distributed to no. of farmers |
|---|---|---|
| 1500000 | 1335642 | 206 |
| | | |

**Bio inputs:**

| Particulars | Target | Achievement | Distributed to no. of farmers |
|---|---|---|---|
| Vermicompost (Tonnes) | 300 | 223 | 495 |
| Earthworms(Kg.) | 1000 | 4393 | 48 |
| Trichoderma asperellum | 2000 | 2622 | 410 |
| Pseudomonas | 2000 | 2634 | 495 |
| Biofertilizers | 1000 | 1080 | 244 |
| Beauveria | 500 | 547 | 173 |
| Verticillium | 500 | 313 | 131 |

**Soil Analysis:**

| S. No. | Particulars | Nos. |
|---|---|---|
| 1 | Soil Samples | 2473 |
| 2 | Water samples | 49 |

## 5. Technology Assessments (OFTs) in Detail

**OFT: 1**

| S. No. | Item | | Particulars |
|---|---|---|---|
| **1** | **Thematic Area** | **:** | Integrated Nutrient Management |
| **2** | **Title** | **:** | Assessment of organic farming package Rice |
| **3** | **Scientists Involved** | **:** | K.V. Ramanaiah |
| **4** | **Details of Farming Situation** | **:** | Kharif-2025. Irrigated black soils |
| **5** | **Problem definition/description** | **:** | Paddy is a major cereal crop cultivating in of Nandyal district during kharif season. Un availability of sufficient quantities of FYM and other organic inputs. Low organic carbon content in 71 % soils of Nandyal dist. Low fertility and productivity. |
| **6** | **Technology assessed** | **:** | $T_1$: Farmers practice :Chemical farming<br>$T_2$: .Organic farming: Green manuring insitu,FYM-10 T/ha, Neem cake-500 kg, Castor cake-500 Kg.PSB -5 Kg/ha, Azotobacter- 5Kg/ha, Top dressing |

| | | | |
|---|---|---|---|
| | | | Vermicompost -500 Kg for 2 Splits, Pf, neem oil for spaying<br>T3- Natural gfarming-Bheejamrutham, Ghana and Drava Jeevamrutham |
| **7** | **Critical Inputs given** | **:** | Neem cake-500 kg, Castor cake-500 Kg.PSB -5 Kg/ha, Azotobacter-5Kg/ha, Top dressing Vermicompost -500 Kg for 2 Splits, Pf, neem oil for spaying |

**8. Results :**

**Table: Performance of the technology:**

| Technology Option | No. of trials | Yield (q/ha) | Net Returns (Rs. in Rs./ha) | B:C ratio | Data on Other performance indicators* |
|---|---|---|---|---|---|
| Farmers Practice-Chemical farming | 5 | 74.33 | 85202 | 2.20:1 | 1.No.of effective tillers/*1*sqm **408**<br>2.No. of grains /panicle **-279** |
| Technology1 – Organic farming | | **59.47** | **88792** | **2.29:1** | 1.No.of effective tillers/*1*sqm **-296**<br>2.No. of grains /panicle **-158** |
| Technology-2-Natural farming | | 55.03 | 84694 | 2.38:1 | 1.No.of effective tillers/*1*sqm **-237**<br>2.No. of grains /panicle **-141** |

**Description of the results:**

The result indicated that the yield in both $T_{-2}$ (59.47 q/ha) and T3 (55.03 )were lower than farmer's practice -$T_1$ (74.33 q./ha ). Whereas net income is higher in T2 than T1 due to 30% premium for organic rice than market price.

**9. Constraints faced:**

Farmers are reluctant on organic farming and natural farming as yield reduction is more when comparative with farmers practice.

**10. Feed back of the farmers involved:**

Pre seasonal training conducted on soil sampling and testing, nutrient management and mid seasonal field visits finally field days were organized. It is low cost technology when procure locally available organic inputs.

**11. Feed back to the scientist who developed the technology:**

No yield advantage during second year also as it is conversion period for 3 years. However, application of organic inputs is effective for Soil health improvement.

**OFT: 2**

| S. No. | Item | | Particulars |
|---|---|---|---|
| 1 | **Thematic Area** | : | Soil testing |
| 2 | **Title** | : | Assessment of Nutrient management based on STCR equation in Chilli |
| 3 | **Scientists Involved** | : | K.V. Ramanaiah |
| 4 | **Details of Farming Situation** | : | Kharif-2025. Irrigated black soils |
| 5 | **Problem definition/description** | : | Chilli is major spice crop in Nandyal district. It was observed that increased cost of production dueto indiscriminate and excess application of chemical fertilizers without Soil testing.HenceSTCR based nutrient management may reduce cost of production due to judicious usage of chemical fertilisers |
| 6 | **Technology assessed** | : | $T_1$: Farmers practice : Chemical farming- NPK 500-450-75- Kg/ha<br>$T_2$: FN = 10.66T- 0.84SN , F $P_2O_5$ = 3.43T- 1.68 SP, $FK_2O$ = 10.23T-0.60 SK<br>$T_3$- NPK:300-60-120 Kg./ha |
| 7 | **Critical Inputs given** | : | Vermicompost -500 Kg for 2 Splits, and NPK consortia-2.5 lit/ha |

**OFT: 3**

| S. No. | Item | | Particulars |
|---|---|---|---|
| 1 | **Thematic Area** | : | Soil testing |
| 2 | **Title** | : | Assessment of STCR equation based Nutrient management in Maize |
| 3 | **Scientists Involved** | : | K.V. Ramanaiah |
| 4 | **Details of Farming Situation** | : | Kharif-2025. Irrigated black soils |
| 5 | **Problem definition/description** | : | Excess application of chemical fertilizers than recommendation which leads soil health deterioration and low productivity. Hence STCR based nutrient management may reduce cost of production on chemical fertilizers and improve soil health. |
| 6 | **Technology assessed** | : | $T_1$: Farmers practice : NPK:280-180-37.5 Kg./ha<br><br>TO-2 STCR equ.FN = 4.19 T – 0.40 SN,$FP_2O_5$ = 1.50 T – 1.55 SP, $FK_2O$ = 1.49 T – 0.16 SK<br><br>TO-3RDF-250-87,5-87.5 Kg./ha |
| 7 | **Critical Inputs given** | : | Vermicompost -500 Kg for basal, and NPK consortia-2.5 lit/ha |

**OFT: 4**

| S. No. | Item | | Particulars |
|---|---|---|---|
| 1 | **Thematic Area** | : | Cropping systems |
| 2 | **Title** | : | Assessment of Performance of Pigeon pea and small millets Inter cropping Systems under Rainfed situation |
| 3 | **Scientists Involved** | : | M. Sudhakar, SMS (Agronomy) |
| 4 | **Details of Farming Situation** | : | Rainfed, red soils |
| 5 | **Problem** | : | Adverse weather conditions like delay onset of rains and prolonged dry |

| | | | |
|---|---|---|---|
| | **definition/description** | | spells during the crop period is very common in rainfed situation. Such situation results in economic losses to the farmers due to partial or total failure of the sole crops. Millet cultivation is declining due to several reasons of which are processing hardships, low economic gains and lack of awareness about the nutritional significance. |
| **6** | **Technology assessed** | **:** | T1: Pigeonpea + Lilttlemillet(1:5<br>T2: Pigeonpea + Prosomillet(1:5)<br>T3: Pigeonpea + Setaria(1:5) |
| **7** | **Critical Inputs given** | **:** | Seed Rs. 7,500/- |

**8. Results:**

| **Technology Option** | **No. of trials** | **Yield (t/ha)** | **Net Returns (Rs/./ha)** | **Data on Other performance indicators*** | |
|---|---|---|---|---|---|
| | | | | **Redgram Equivalent yield** | **Production use Efficiency (kg /day)** |
| Pigeon pea + Lilttle millet | 6 | 986+1456 | 72047 | 1568 | 10.45 |
| Pigeonpea + Prosomillet(1:5) | | 942+1510 | 90335 | 1797 | 11.98 |
| Pigeonpea + Setaria(1:5) | | 973+1887 | 80081 | 1608 | 10.72 |
| Sole Pigeonpea | | 1070 | 41575 | 1070 | 7.13 |

**Description of the results:**

On farm testing on **Performance of different** intercropping systems i.e. Pigeon pea + Little millet (1:5), Pigeon pea + Proso millet (1:5), Pigeon pea + Setaria (1:5) along with sole crop of Pigeon pea **under Rainfed situation** was conducted during the Kharif season of 2025 at Banaganapalli mandal. The results indicated that Pigeon pea + Proso millet (1:5) was recorded highest redgram equivalent 1797 kg ha-1and net returns of Rs. 90,335/- followed by Pigeon pea + Foxtail millet (1:5), 1608 kg/ha, Rs 80081/ha and Pigeon pea + little millet (1:5) compared to sole crop of Pigeon pea (1070 kg ha, Rs. 41,575/-) were obtained respectively.

**9. Constraints: -**

**10. Feed back of the farmers involved:**

- Redgram + small millets intercropping system found to be remunerative than sole crop of Redgram under rainfed situation.
- While maintaining the Soil fertility, additional yields with Redgram + small millets intercropping system have been realized.
- Since, a food legume is involved in the system, it will not only enhance the income of the farmer, but also provide with the much-needed protein to supplement the predominantly cereal diet of farmers, besides adding fertility to the Soil.

**11. Feed back to the scientist who developed the technology:**

Research on development of short duration redgram varieties has to be strengthened.

**OFT: 5**

| S. No. | Item | | Particulars |
|---|---|---|---|
| 1 | **Thematic Area** | : | Varietal Evaluation |
| 2 | **Title** | : | Assessment of Performance of Fine grain Paddy Varieties |
| 3 | **Scientists Involved** | : | M. Sudhakar, SMS (Agronomy) |
| 4 | **Details of Farming Situation** | : | Irrigated, Low land |
| 5 | **Problem definition/description** | : | The ruling fine grain Paddy variety ie BPT-5204 is susceptible to BPH and Blast with longer duration leads high cost of cultivation with low net returns. Hence it is proposed to assess high yielding fine grain varieties alternative to BPT-5204 with toleranceto afore said pests with medium duration. |
| 6 | **Technology assessed** | : | T1: BPT-2846<br>T2: MTU1271<br>T3: BPT-5204 |
| 7 | **Critical Inputs given** | : | Seed Rs. 7,500/- |

**8. Results:**

| Technology Option | No. of trials | Yield (t/ha) | Net Returns (Rs/./ha) | Data on Other performance indicators* | | |
|---|---|---|---|---|---|---|
| | | | | Panicle length (cm) | Number of grains/panicle | CB ratio |
| T1: BPT-2846 | 6 | 8891 | 128103 | 25.36 | 350 | 2.68 |
| T1: MTU-1271 | | 9455 | 115664 | 26.56 | 436 | 2.55 |
| T3: BPT-5204 | | 7234 | 91683 | 21. 58 | 209 | 2.18 |

**Description of the results:**

On farm testing on **Performance of Paddy varieties ie BPT-2846 and MTU-1271 wi**th ruling variety BPT-5204 was conducted during the Kharif season of 2025 at Banaganapalli and Chabolu mandals. The results indicated that paddy variety MTU-1271 was recorded highest of 9455 kg/ha followed by BPT-2846(8891 kg/ha) but net returns of Rs 128103 was highest with BPT-2846 followed by MTU-1271(Rs 115664/ha) compared with BPT-5204, 7234Kg/ha with net returns of Rs 91683/ha were obtained.

**9. Constraints: -**

**10. Feed back of the farmers involved:**

- The Paddy variety MTU-1271 slightly coarse than BPT-5204 and 2846.
- The both varieties of paddy ie BPT-2846 and MTU-1271 are medium duration with tolerance to BPH and Blast.

**11. Feed back to the scientist who developed the technology:**

The market price also less than BPT-5204 and 2846.

**OFT: 6**

| S. No. | Item | | Particulars |
|---|---|---|---|
| 1 | **Thematic Area** | : | Crop Production and Management |
| 2 | **Title** | : | Assessment of Performance Maize based cropping Sequences |
| 3 | **Scientists Involved** | : | M. Sudhakar, SMS (Agronomy) |
| 4 | **Details of Farming Situation** | : | Irrigated, Red soils |
| 5 | **Problem definition/description** | : | The Productivity of maize- Maize sequence (mono cropping) is very low and effects on soil quality. Therefore sustainable intensification is viable options to improve production and Soil quality and optimize the benefits that can be derived from better use of available natural resources. |
| 6 | **Technology assessed** | : | T1:Maize- Blackgram<br>T2:MaizeBengalgram<br>T3: Maize -Maize |
| 7 | **Critical Inputs given** | : | seed Rs. 6,000/- |

**8. Results:**

**Performance of the technology:**

| Technology Option | No. of trials | Yield (t/ha) | Net Returns (Rs/./ha) | Data on Other performance indicators* | | |
|---|---|---|---|---|---|---|
| | | | | Maize Equivalent Yield Kg/ha | CB ratio | N fixation kg/ha |
| T1:Maize- Blackgram | 6 | 1834 | 88849 | 8088 | 2.29 | 22.10 |
| T2:MaizeBengalgram | | 1942 | 54717 | 5850 | 1.92 | 60.0 0 |
| T3: Maize -Maize | | 4975 | 25075 | 4975 | 1.36 | - |

**Description of the results:**

**Performance Maize based cropping Sequences** Maize- Blackgram, Maize- Bengalgram along with Maize -Maize **under irrigated situation** was conducted during the Kharif & rabi season of 2025 at Nandikotkur mandal. The results indicated that with maximum Maize equivalent yield and net returns were recorded with Maize- Blackgram (8088 kg ha Rs 88849/-) /-) followed by Maize-Bengalgram (5850 kg/ ha Rs 54717/-) and Maize -Maize (4975 kg ha Rs 25075/) were obtained respectively besides maintaining soil fertility.

**9. Constraints: -**

**10. Feed back of the farmers involved:**

- Pulses are very important for their ability to fix nitrogen, diversified crop roration and improved soil health and biological activity.
- Pulses contribute to reducing the need for synthetic fertilizers.
- Growing of legume after maize is superior in terms of improvement in soil fertility and sustainability in Crop yield.

**11. Feed back to the scientist who developed the technology:**

- Research on Cereals- Pulse based cropping sequence has to be strengthened.

**OFT: 7**

| S. No. | Item | | Particulars |
|---|---|---|---|
| 1 | **Thematic Area** | : | Crop Production and Management |
| 2 | **Title** | : | Assessment of Different sowing dates in Bt cotton |
| 3 | **Scientists Involved** | : | M. Sudhakar, SMS (Agronomy) |
| 4 | **Details of Farming Situation** | : | Rainfed, Red soils |
| 5 | **Problem definition/description** | : | Cotton is the most important fiber crop of farming community, due to staggered planting of cotton from April to August has a large effect on growth, development and yield, but it also impacts on insect pest management. Early sowing appears higher yield potential and alternatively, late planting of cotton crop shows more vegetative and difficult to manage resulting in lower yield. |
| 6 | **Technology assessed** | : | T1: 1st fort night of June<br>T2: 2ndt fort night of June<br>T3:1st fort night of July |
| 7 | **Critical Inputs given** | : | seed Rs. 6,000/- |

**8. Results:**

**Performance of the technology:**

| Technology Option | No. of trials | Yield (t/ha) | Net Returns (Rs/./ha) | Data on Other performance indicators* | | |
|---|---|---|---|---|---|---|
| | | | | Bolls/plant | Incidence pink boll worm (%) | CB ratio |
| T1: 1st fort night of June | 6 | 2285 | 103125 | 41.0 | 5.76 | 3.19 |
| T2: 2ndt fort night of June | | 2249 | 100677 | 40.2 | 6.82 | 3.00 |
| T3:1st fort night of July | | 2010 | 82480 | 38.8 | 12.45 | 2.59 |

**Description of the results:**

On farm testing on different sowing dates in Bt cotton under Rainfed situation ie1st fort night of June, 2nd fort night of June and 1st fort night of July was conducted during the Kharif season of 2025 at Nandikotkur mandal. The results indicated that among different dates of sowing 1stnd fort night of June has recorded more number of bolls 41.0 per plant, Yield (2285kg/ha) followed by 2nd fort night of june number of bolls/plant (40.2), 2249 kg/ha as compared to 1st fort night of July (38.8) and (2010 kg/ha) The incidence pink bollworm was increased with delay in sowing time.

**9. Constraints: -**

**10. Feed back of the farmers involved:**

- Optimum Sowing date plays key role in yield potential of cotton and highest cotton yield was obtained when cotton was sown 1st fort night of June.

**11. Feed back to the scientist who developed the technology:**

**OFT: 8**

| S. No. | Item | | Particulars |
|---|---|---|---|
| 1 | **Thematic Area** | : | Crop Production and Management |
| 2 | **Title** | : | Assessment of Performance of real time contingency measures in Rainfed redgram. |
| 3 | **Scientists Involved** | : | M. Sudhakar, SMS (Agronomy) |
| 4 | **Details of Farming Situation** | : | Rainfed, Redsoils |
| 5 | **Problem definition/description** | : | Rainfed/dryland Ecosystem is Characterized by erratic and unpredictable rainfall, frequent drought, run-off, soil loss including shift of sowing and harvesting period of crops thus leading to reduced yield. |
| 6 | **Technology assessed** | : | T1: In-situ moisture conservation measures + foliar spray of 1% of Kno3<br>T2: In-situ moisture conservation measures + foliar spray of 1% of Kno3+ supplemental irrigation<br>T3: No conservation measures(FP) |
| 7 | **Critical Inputs given** | : | seed Rs. 3,000/- |

**8. Results:**

Performance of the technology

| Technology Option | No. of trials | Yield (t/ha) | Net Returns (Rs/./ha) | Data on Other performance indicators* | | |
|---|---|---|---|---|---|---|
| | | | | No of Pods/plant | Available moisture | CB ratio |
| T1: In-situ moisture conservation measures + foliar spray of 1% of Kno3 | 6 | 1222 | 50635 | 157 | Sufficiency | 2.07 |
| T2: In-situ moisture conservation measures + foliar spray of 1% of Kno3+ supplemental irrigation | | 1411 | 60755 | 174 | Sufficiency | 2.16 |
| T3: No conservation measures(FP) | | 1027 | 38215 | 121 | Deficit | 1.86 |

**Description of the results:**

On farm testing on Real time contingency measures in Rainfed redgram i.e. In-situ moisture conservation measures + foliar spray of 1% of Kno3, In-situ moisture conservation measures + foliar spray of 1% of Kno3+ supplemental irrigation and no conservation measures was conducted during the Kharif season of 2025.The results indicated that among conservation measures In-situ moisture conservation measures + foliar spray of 1% of Kno3+ supplemental irrigation has recorded a higher number of pods 174 per plant, Yield (1411kg/ha) followed by In-situ moisture conservation measures + foliar spray of 1% of Kno3 pods 157per plant, Yield (1222 kg/ha) as compared to no conservation measures pods 121 per plant, Yield (1027kg/ha).

**9. Constraints: -**

**10. Feed back of the farmers involved:**

Formation of furrow at 30-35DAS for in-situ moisture conservation, foliar spray of 1% of Kno3 and supplemental irrigation especially in the drought years with uneven rainfall distribution resulted in lower runoff and soil loss with higher yield, monetary returns in Redgram.

**11. Feed back to the scientist who developed the technology:**

**OFT: 9**

| S. No. | Item | | Particulars |
|---|---|---|---|
| 1 | **Thematic Area** | : | Integrated Disease Management |
| 2 | **Title** | : | Assessment of different management options for Blast in Rice (1st yr) |
| 3 | **Scientists Involved** | : | D. Balaraju, SMS – Plant Protection |
| 4 | **Details of Farming Situation** | : | Irrigated Black soils |
| 5 | **Problem definition/description** | : | Rice is the major irrigated Kharif crop in the district, known for production of high-quality staple rice variety BPT 5204 and NDLR 7. In recent years, the diseases especially Rice blast is hampering yields considerably due to its regular incidence for the last few years. Farmers are adopting different management practices with various chemical fungicides and organic means. This study is being taken up to show the relative efficacy of different methods of blast management and the cost effectiveness, with minimization of use of chemicals. |
| 6 | **Technology assessed** | : | TO 1 –Organic Package: Use of blast resistant varities viz. BPT 3291, NDLR 7, clean cultivation, seed or seedling treatment with Pseudomonas, PSB and Azatobacter @ 10 g or ml/lt water for soaking 1 kg of seed or dipping seedlings. Spraing of 10% Cow urine two times at 10 days interval. **(ANGRAU, 2023)**<br>T2 – IDM Package – Use of blast resistant varities viz. BPT 3291, NDLR 7, clean cultivation, seed treatment with Carbendazim @ 1g/lt water for soaking 1 kg of seed. Use of recommended Nitrogen fertilizers in split doses, Need based spray of Tricyclazole 70% @ 0.6 g or Isoprothiolane 40% @ 1.5 ml alternatively. (**ANGRAU, 2023)**<br>T3 – Farmers practice – No seed treatment, use of Peer influencedfungicides viz., tricyclazole, tebuconazole 50% + Trifloxystrobin 25%, Kasugamycin etc. for 2 to 3 rounds. |
| 7 | **Critical Inputs given** | : | Pseudomonas, PSB, Azatobacter - 1000 ml each, Cow urine – 5 lt, Tricyclazole – 120 g |

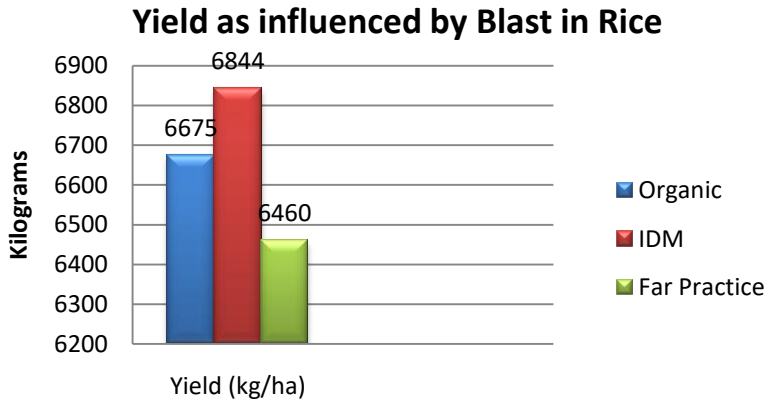
**8. Results:**

**Table: Performance of the technology**

| Technology Option | No. of trials | Yield (qha) | Net Returns (Rs./ ha) | B:C ratio | Data on Other performance indicators* |
|---|---|---|---|---|---|
| TO 1: Organic package | 5 | 66.75 | 48,550-00 | 1.53 | Blast – 4.8 %<br>Cost of PP – Rs. 6,000-00/ha |
| TO 2:IPM Package | | 68.44 | 52,599-00 | 1.58 | Blast – 3.5 %<br>Cost of PP – Rs. 5,500-00/ha |
| Farmers Practice | | 64.60 | 34,535-00 | 1.34 | Blast – 7.5 %<br>Cost of PP – Rs. 8,000-00/ha |

**Description of the results:**

The result indicated that IDM resulted in slightly higheryield than organic package and farmer's practice. The incidence of blast during this season is moderate. In Organic method, the net returns are less than IDM but better than farmers practice.




**9. Constraints faced**:

Knowledge and adoption of bio fungicides is low with the farmers. There usage is slowly picking up.

**10. Feedback of the farmers involved:**

- ✓ The farmers readily accepted some of the components viz., Seed treatment. But they showed reluctance in adoption of seedling dipping with pseudomonas, PSB and Azatobacter as they are new and have less confidence in them about their performance.
- ✓ Farmers were convinced with the control of diseases with chemical application and they readily agreed to spray recommended chemicals.

**11. Feed back to the scientist who developed the technology:**

- Management of Blast and other diseases through organic methods need to be standardized to reduce the rise of toxic chemical usage and also to reduce cost of production.

**OFT: 10**

| S. No. | Item | | Particulars |
|---|---|---|---|
| 1 | **Thematic Area** | : | Integrated Pest Management |
| 2 | **Title** | : | Assessment of different options for management of Black Thrips (Thrips parvispinus) in Chillis |
| 3 | **Scientists Involved** | : | D.Balaraju, SMS – Plant Protection |
| 4 | **Details of Farming Situation** | : | Irrigated Dry - Light Black Soils |
| 5 | **Problem definition/description** | : | Chilli is an important commercial spice crop in the district being cultivated in sizeable area in the district. Apart from regular pests and diseases, it is recently being attacked by an invasive thrips (Thrips parvispinus) with lot of damage to leaves, flowers and thus reducing the yield and quality. Affected about 30-40% of yields and quality last year. As currently there are no standard recommendations, it is proposed to evaluate different |

| | | | |
|---|---|---|---|
| | | | packages given by DrYSRHU for Thrips and Sucking pests for its efficacy. |
| **6** | **Technology assessed** | **:** | **TO 1 – IPM for Thrips**<br>• Seed treatment with imidacloprid 600 FS @ 5 ml per kg of seed; Growing of 4-6 rows of maize/jowar as border crop; Application of Fipronil 0.3% granules 8 kg/ac; Installation of blue sticky traps @ 20 per acre. ; Azadiractin 10000 ppm @ 200ml/ac; Spraying Beauveria/Verticillium @ 1000 ml/ac; Need based application of insecticides for thrips - fipronil 80% @ 40 g/ac or imidacloprid 40%+fipronil 40% @ 40 g/acre or Difenthiuron @ 250 g/ac or cyantraniliprole 240 ml/acre or Spinosad 60 ml/acre; Use of hand sprayer for spraying on crop and on soil around the plants(**DrYSRHU-2021)**<br>**TO 2 – IPMfor Sucking Pests**<br>• Border crop with Jowar/maize, Seed treatment with Imida 600 FS, Application of Fipronil 0.3% G @ 8 kg/ac; Yellow Sticky traps - 20/ac, need based spray of Fipronil @ 2 ml/lt or Acephate @ 1.5 g/lt or Acetamaprid @ 0.2 g/lt or Difenthiuron @ 1.5 g/lt(**DrYSRHU-2020))**<br>**FP - Farmers Practice:**<br>Spraying Insecticides indescriminately on scedule basis, applying 12-18 sprays in a season. |
| **7** | **Critical Inputs given** | **:** | TO 1:Imida 600FS = 50 ml/ac, Blue sticky traps - 20/ac, Azadaractin 10000 ppm - 250 ml/ac, Beauveria & Verticillium - 1 lt each/ac (Rs.1550/- per ac)<br>TO 2:Imida 600FS- 50 ml/ac,yellow sticky traps - 20/ac, Fipronil 5% SC - 500 ml/ac (Rs. 1050/- per ac) |

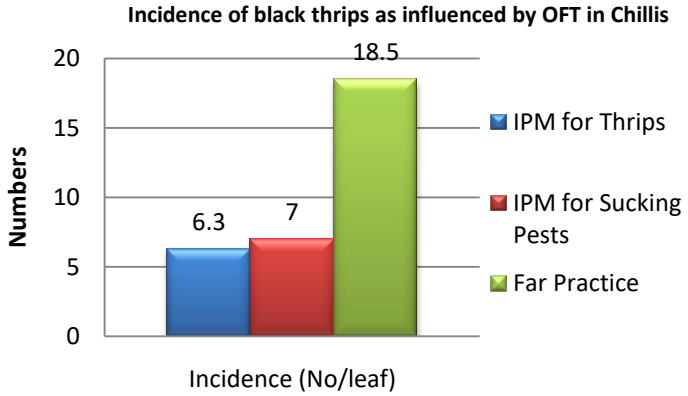
**8. Results:**

**Table: Performance of the technology**

| Technology Option | No.of trials | Yield (qha) | Net Returns (Rs./ ha) | B:C ratio | Data on Other performance indicators* |
|---|---|---|---|---|---|
| TO 1:IPM for Thrips | 5 | 49.75 | 4,69,000 | 1.27 | Black thrips (no./leaf) – 6.3<br>Cost of PP – Rs.1,26,250-00/ha |
| TO 2: IPM for Sucking Pests | | 48.00 | 4,73,375 | 1.22 | Black thrips (no./leaf) –7.0<br>Cost of PP – Rs.1,30,625-00/ha |
| Farmers Practice | | 44.75 | 4,80,250 | 1.12 | Black thrips (no./leaf) –18.5<br>Cost of PP – Rs.1,37,500-00/ha |

**Description of the results:**

The result indicated that IPM package with alternate spraying of Bio-pesticides resulted in better yield than IPM for sucking pests and farmers practice, with better level of control of Black Thrips and resulted in better yield. Hence, more net additional returns in TO 1 Compared to other treatments.




**9. Constraints faced**:

Knowledge and adoption of bio pesticides is low with the farmers. But, with the result witnessed the acceptance slowly increasing year by year.

**10. Feed back of the farmers involved:**

- ✓ The farmers readily accepted some of the components viz., Seed treatment, sticky traps and use of chemical pesticides.
- ✓ Farmers were convinced with the performance of Blues sticky traps against thrips than yellow sticky traps.

**11. Feed back to the scientist who developed the technology:**

- Management of Black thrips is very important in successful chilli production and the recommendations need to be standardised at the earliest to stop the farmers from using heavy doses and mixtures of all available pesticides in the market with the fear and greed.

**OFT: 11**

| S. No. | Item | | Particulars |
|---|---|---|---|
| 1 | **Thematic Area** | : | Integrated Pest Management |
| 2 | **Title** | : | **Assessment of new seed treatment chemicals for soil borne diseases in Groundnut** |
| 3 | **Scientists Involved** | : | D. Balaraju, SMS – Plant Protection |
| 4 | **Details of Farming Situation** | : | Rainfed Red soils |
| 5 | **Problem definition/description** | : | Ground nut is the major Kharif crop grown in red soils as rainfed crop in Nandyal district. Due to regular incidence of collar rot, stem rot and wilt the yields are reduced considerably. Though the seed treatment is recommended by department of agriculture, in practice many farmers are not following for variety of reasons. In cases where seed treatment is followed, the results are not upto the expectations of the farmers. Hence, the present trial on seed treatment with new fungicide is proposed, which is giving promising results and recommended by ANGRAU for Groundnut in AP. |
| 6 | **Technology assessed** | : | **TO 1 –**<br>• Seed treatment with Penflufen 13.28% w/w+ Trifloxystrobin 13.28% w/w FS@ 1 ml+ 6 ml water per kg seed followed by application of |

| | | | |
|---|---|---|---|
| | | | FYM+ Neem cake-based Trichoderma asperellum (2kg mixed in well rotten FYM of 90kg + 10 kg neem cake) to be applied as basal dose, 30 and 50 DAS as top dressing (ANGRAU 2023).<br><br>**TO 2 –**<br>• Seed treatment with mancozeb 50%+ carbendazim 25 WS @ 2 g per kg of seed Soil application of Trichoderma asperellum @4kg enriched in 250kg FYM/ha to be applied 15 days before sowing(ANGRAU 2021).<br><br>**FP - Farmers Practice:**<br>• No seed treatment and no use of Trichoderma soil application. |
| **7** | **Critical Inputs given** | **:** | TO 1:Penflufen 13.28 % w/w+ Trifloxystrobin 13.28% w/w FS,T.asperellum 2 kg<br><br>TO 2:Mancozeb 50%+ Carbendazim 25 WS , T. asperellum 2 kg |

**8. Results:**

**Table: Performance of the technology**

| Technology Option | No. of trials | Yield (qha) | Net Returns (Rs./ ha) | B:C ratio | Data on Other performance indicators* |
|---|---|---|---|---|---|
| TO 1 | 5 | 12.60 | 22,470 | 1.33 | Collar rot (%) –3.8<br>Stem rot (%) – 6.5<br>Cost of PP – Rs.7,500-00/ha |
| TO 2 | | 11.75 | 17,600 | 1.26 | Collar rot (%) – 5.9<br>Stem rot (%) – 8.2<br>Cost of PP – Rs.6,250-00/ha |
| Farmers Practice | | 10.40 | 8,505 | 1.13 | Collar rot (%) – 12.5<br>Stem rot (%) – 11.6<br>Cost of PP – Rs.5,625-00/ha |

**Description of the results:**

The result indicated that seed treatment with Penflufen + Trifloxystrobin @ 1 ml/kg seed resulted in better yield than seed treatment with Mancozeb 50% + Carbendazim 25% @ 2 g/kg seed and farmers practice of no seed treatment, with better level of control of both collar rot and stem rot disease.

**9 Constraints faced:**

Adoption of seed treatment with Penflufen + Trifloxystrobin is low with the farmers because of cost factor.But, with the result witnessed the acceptance may increase due to its superiority over conventional seed treatment.

**10 Feedback of the farmers involved:**

✓ Farmers were convinced with the performance of Penflufen + Trifloxystrobin @ 1 ml/kg seed treatment.

**11 Feed back to the scientist who developed the technology:**

Management of soil borne diseases is very important in successful groundnut production and a cheap and successful fungicide for seed treatment need to be standardised at the earliest.

**OFT: 12**

| S. No. | Item | | Particulars |
|---|---|---|---|
| 1 | **Thematic Area** | : | Varietal evaluation |
| 2 | **Title** | : | Assessing the performance of okra hybrids Arka Nikita & COBh-4 |
| 3 | **Scientists Involved** | : | M. Adinarayana, SMS (Horticulture ) |
| 4 | **Details of Farming Situation** | : | Irrigated red soils |
| 5 | **Problem definition/description** | : | Local varieties producing lower yields and susceptible to YVMV. Farmer using varieties are less branching type and fruits are having with spines and medium length fruits. |
| 6 | **Technology assessed** | : | $T_1$: Arka Nikita<br>$T_2$: COBH-4<br>$T_3$ : NS-7772 |
| 7 | **Critical Inputs given** | : | Arka Nikita and COBH-4 Seeds |

**8. Results:**

**Table: Performance of the technology**

| *Technology Option* | *No. of trials* | *Yield (q/ha)* | *Net Returns (Rs./ha)* | *B:C ratio* | *Data on Other performance indicators** |
|---|---|---|---|---|---|
| *Farmers Practice: NS-7772* | *5* | *14.02* | *1,20,819* | *1.97* | |
| *Technology 1(Arka Nikita)* | | *15.03* | *1,45,747* | *2.24* | |
| *Technology 2(COBh-4)* | | ***16.17*** | *1,69,616* | *2.49* | |

| Parameters | Arka Nikita | COBH-4 | NS-7772 |
|---|---|---|---|
| Plant height | 107.42 cm | 91.34 cm | 102.75cm |
| No of branches | 4.26 | 6.34 | 4.18 |
| Average fruit weight | 25.23g | 22.17g | 17.82g |
| Podlength | 16.32 cm | 13.45 cm | 14.65cm |
| Days to 1st harvest | Early 41d | Early 38d | Late 46d |
| % of YVMV | 11.45 % | 0 % | 17.23% |
| Jassids | Sensitive | Slightly tol. | Sensitive |
| Spines on pod | Spiny | Spineless | Spiny |
| Tenderness | Less tender | More tender | Less |
| Pod color | Light green | Dark green | Dark green |
| Fibrous | Medium | less | Medium |
| Market | Good | Very good | Good |

**9. Constraints:**

Lack of seed source in local markets.

**10. Feedback of the farmers involved:**

Arka Nikita and COBH-4 varieties are early, good branching type and fruits are spineless as it is easy to harvest and more tender.

**11. Feed back to the scientist who developed the technology:**

COBh-4 variety is resistant to bhendi Yellow Mosaic Virus disease, slightly tolerance to jassids and thick green pods with more tender and good market acceptability.


**Field Photos of okra**

**OFT: 13**

| S. No. | Item | | Particulars |
|---|---|---|---|
| 1 | **Thematic Area** | : | Varietal evaluation |
| 2 | **Title** | : | Assessing the performance of marigold hybrids Arka Abhi & Arka Bhanu |
| 3 | **Scientists Involved** | : | M. Adinarayana SMS Horticulture |
| 4 | **Details of Farming Situation** | : | Irrigated red soils |
| 5 | **Problem definition/description** | : | Local varieties producing lower yields and seed cost is more. |
| 6 | **Technology assessed** | : | $T_1$: Arka Abhi<br>$T_2$: Arka Bhanu<br>$T_3$ :Lirril Yellow |
| 7 | **Critical Inputs given** | : | Arka Abhi and Arka Bhanu seedlings |

**8. Results:**

**Table: Performance of the technology**

| Technology Option | No. of trials | Yield (q/ha) | Net Returns (Rs./ha) | B:C ratio | Data on Other performance indicators* |
|---|---|---|---|---|---|
| Farmers Practice: Lirril Yellow | 5 | 15.05 | 2,96,640 | 2.90 | |
| Technology 1(Arka Abhi) | | 16.70 | 3,48,699 | 3.29 | |
| Technology 2(Arka Bhanu) | | **17.57** | 3,74,572 | 3.45 | |

| Parameters | Arka Abhi | Arka Bhanu | Liril Yellow |
|---|---|---|---|
| Plant height | 75cm | 88cm | 70cm |
| No of Branches | 8-10 | 12-14 | 8-10 |
| Flower Color | Lemon yellow | Golden yellow | lemon yellow |
| Flower size | Large size | Large | large |
| Flower diameter | 7.45cm | 8.34cm | 7.13cm |
| Compactness | Compact flowers | less compact | Compact |
| Self life | 6-8 days | 5-6 days | 6-7 days |
| 10 flowers weight | 105g | 122g | 101g |
| Days to harvest | 47-49 days | 44-47 | 45-48 days |

**9. Constraints:**

Lack of availability of seed from other source.

**10. Feedback of the farmers involved:**

The farmers are readily accepted and convinced with the good performance of Arka Abhi and Arka Bhanu hybrids as they are large size flowers, more number of branches with high yielding hybrids.

**11. Feed back to the scientist who developed the technology:**

Research on management of bud rot, thrips need to be standardized with new molecules.



**Field photos of Marigold**

**OFT: 14**

| S. No | Item | | Particulars |
|---|---|---|---|
| 1 | **Thematic Area** | : | Varietal evaluation |
| 2 | **Title** | : | Assessing the performance of onion varieties Red-4 &Fursungi |
| 3 | **Scientists Involved** | : | M. Adinarayana SMS Horticulture |
| 4 | **Details of Farming Situation** | : | Irrigated red soils |
| 5 | **Problem definition/description** | : | Local varieties producing lower yields and seed cost is more. |
| 6 | **Technology assessed** | : | $T_1$: Red-4<br>$T_2$: Fursungi<br>$T_3$: Ew-401 |
| 7 | **Critical Inputs given** | : | Seeds of Red-4 and Fursungi |

**8. Results:**

**Table: Performance of the technology**

| Technology Option | No. of trials | Yield (q/ha) | Net Returns (Rs./ha) | B:C ratio | Data on Other performance indicators* |
|---|---|---|---|---|---|
| Farmers Practice: Panchaganga | 5 | **The results are under progress** | | | |
| Technology 1(Red-4) | | | | | |
| Technology 2(Fursungi) | | | | | |

***Data on Other performance indicators****

| Parameters | Demo | FP |
|---|---|---|
| Plant height cm | 56.67 | 55.53 |
| No of leaves | 6.34 | 6.12 |

**9. Constraints:**

Fursungi variety having long duration

**10. Feedback of the farmers involved:**

**11. Feed back to the scientist who developed the technology:**

**Field photos of onion**

**OFT: 15**

| S. No. | Item | | Particulars |
|---|---|---|---|
| 1 | **Thematic area** | : | Nutrition management |
| 2 | **Title** | : | Assessing the effect of distillery stillage supplementation on growth performance in post weaned ram lambs |
| 3 | **Scientists involved** | : | Dr. A. Krishna Murthy, SMS (AH) |
| 4 | **Details of farming situation** | : | Rainfed |
| 5 | **Problem definition / description: (one paragraph)** | : | Poor growth rate in lambs due to protein deficiency and high cost of concentrate feed. |
| 6 | **Technology Assessed** | : | TO1:Grazing / Roughages + Recommended feed (18%CP) 200g/day+ Distillery stillage (20% replacement of feed on DM basis)<br>TO2: Grazing / Roughages + Recommended feed (18%CP) 200g/day<br>FP: Grazing / Roughages + Grain feeding (200g/day) |
| 7 | **Critical inputs given** | : | Feed and Distillery stillage |

**8. Results**

**Table: Performance of the technology**

| Technology Option | No. of trials | Body weight gain (kg in 90 days) | Net Returns/animal (Rs.) | B:C ratio | Data on Other performance indicators* |
|---|---|---|---|---|---|
| Grazing / Roughages + Recommended feed (18%CP) 200g/day+ Distillery stillage (20% replacement of feed on DM basis) | 5 | 14.22 | 4342.00 | 4.23 | - |
| Grazing / Roughages + Recommended feed (18%CP) 200g/day | | 13.2 | 3960.00 | 4.01 | - |
| Grazing / Roughages + Grain feeding (200g/day) | | 9.72 | 2664.00 | 3.18 | - |

**Description of the results:**

On supplementation of concentrate feed (18% CP) resulted in 35.8% increase in body weight gain and supplementation of distillery stillage resulted in 46.3% increase in body weight gain over farmers practice of grain feeding.

**9. Constraints if any:**

Availability of distillery stillage.

**10. Feed back of the farmers involved:** Increase in appetite of the animals was observed

**11. Feed back to the scientist who developed the technology:** Nil

**OFT: 16**

| S. No. | Item | | Particulars |
|---|---|---|---|
| 1 | **Thematic area** | : | Nutrition management |
| 2 | **Title** | : | Assessing the performance of different mineral mixtures on production and reproduction efficiency in buffaloes |
| 3 | **Scientists involved** | : | Dr.A.Krishna Murthy, SMS (AH) |
| 4 | **Details of farming situation** | : | Rainfed |
| 5 | **Problem definition / description: (one paragraph)** | : | Poor production and reproduction efficiency in milch animals due to mineral deficiencies |
| 6 | **Technology Assessed** | : | TO-1: Roughages + Concentrates + Fertimin plus 50g/day<br>TO-2: Roughages + Concentrates + Area Specific mineral mixture 50g/day<br>FP: Roughages + Concentrate feed |
| 7 | **Critical inputs given** | : | Fertimin plus and area specific mineral mixture |

**8. Results**

**Table: Performance of the technology**

| Technology Option | No. of trials | 6%FCM yield (Kg/day) | Net Returns/animal (Rs.) | B:C ratio | No of animals conceived |
|---|---|---|---|---|---|
| TO-1: Roughages + Concentrates + Fertimin plus 50g/day | 5 | 8.19 | 13726.00 | 3.77 | 1 (20%) |
| TO-2: Roughages + Concentrates + Area Specific mineral mixture 50g/day | | 7.96 | 13386.00 | 3.81 | 2 (40%) |
| FP: Roughages + Concentrate feed | | 8.19 | 12483.00 | 3.8 | - |

**Description of the results:**

On supplementation of Fertimin plus resulted in 7.1% increase in 6%FCM yield per day and 2 animals exhibited heat and on supplementation of Area Specific Mineral Mixture resulted in 4.1% increase in 6%FCM yield and 3 animals exhibited heat over farmer's practice.

**9. Constraints if any:**

Cost of fertimin plus is high compared to area specific mineral mixture.

**10. Feedback of the farmers involved:**

Area specific mineral mixture is good for improving reproductive health where as fertimin plus improved fat content in milk.

**11. Feed back to the scientist who developed the technology:**

Palatability of fertimin plus is low.

**OFT: 17**

| S. No. | Item | | Particulars |
|---|---|---|---|
| 1 | **Thematic area** | : | Breed Evaluation |
| 2 | **Title** | : | **Assessing the performance of different poultry under** |
| 3 | **Scientists involved** | : | Dr.A.Krishna Murthy, SMS (AH) |
| 4 | **Details of farming situation:** | : | Rainfed |
| 5 | **Problem definition / description: (one paragraph)** | : | Low productivity of ND poultry birds and improved poultry breeds are not available |
| 6 | **Technology Assessed** | : | TO-1: TANUVAS Aseel<br>TO-2: Rajasri<br>FP: ND |
| 7 | **Critical inputs given** | : | Five weeks age poultry birds |

**8. Results**

**Table: Performance of the technology**

| Technology Option | No. of trials | Body wt gain in 150 days (grams) | Net Returns/bird (Rs.) | B:C ratio | Mortality |
|---|---|---|---|---|---|
| TO-1: TANUVAS Aseel | 5 | 1225.6 | 321.00 | 2.07 | 28% |
| TO-2: Rajasri | | 1067.2 | 154.00 | 1.62 | 36% |
| FP: Non-Descriptive | | 661.0 | 54.00 | 1.18 | 22% |

**Description of the results:**

Five weeks age birds have supplied to farmers with the body weight of 216.7 and 194.6grams in Aseel and Rajasri respectively. The body weight at 150 days age were 1442.3, 1261.8 and 823.4grams in Aseel, Rajasri and ND birds respectively

**9. Constraints if any:**

Cannibalism is high in improved poultry breeds

**10. Feedback of the farmers involved:**

Growth rate and market demand is high for Aseel birds

**11. Feed back to the scientist who developed the technology: -**

**OFT: 18**

| S. No. | Item | | Particulars |
|---|---|---|---|
| 1 | **Thematic area** | : | Value Addition |
| 2 | **Title** | : | Assessment of Bio-Fortified varieties for Nutritional Security |
| 3 | **Scientists involved** | : | K. LakshmiPriya, PA (H. Sc), M.Sudhakar, SMS (Agro) |
| 4 | **Details of farming situation:** | : | |
| 5 | **Problem definition / description: (one paragraph)** | : | Malnutrition led to poor health and increased susceptibility to various diseases. Malnutrition emerged as a Major health challenge in 21st century and is aptly addressed through Sustainable development goals.(SDGs) chartered by United Nations. In India, 58.4% of the children (6-59 months), 53% of the adult women and 22.7% of adult men are affected due to anaemia.70% of children (<5 years) are estimated to be iron deficient. Various strategies viz., Food Fortification, medical Supplementation and dietary diversity are used to alleviate malnutrition. Introduction of Biofortification of Millet crop is cost effective, Sustainable, Nutrients reach the people in natural form and alleviate malnutrition as the Millets are highly nutritious being rich sources of Fibre, proteins, vitamins and minerals. |
| 6 | **Technology Assessed** | : | T1: Finger Millet: VR CFMV1 (Indravathi)-ARS, ANGRAU, VIZAYANAGARAM (AICRP on SmallMillets), 2020 (The proposed Finger Millet is Rich in calcium (428 mg/100g), iron (58.0 ppm) and zinc(44.0 ppm) in comparison to 200 mg/100g calcium, 25ppm iron and 16 ppm zinc in popular varieties).<br><br>T2: Finger Millet: Var: 929 (Vegavathi )(AICRP on SmallMillets)The Proposed Fortified Finger Millet is Rich in iron (131.8 ppm) in comparison to 25.0 ppm inpopular varieties.<br><br>FP: Non descriptive |
| 7 | **Critical inputs given** | : | Finger Millets Indravati and Vegavathi Flours & Suji (along with quantity as well as value) |

**8. Results:**

Indravathi and Vegavathi fortified Finger Millet varieties were assessed for value addition by using Hedonic Scale .Overall Acceptability9.25% Expressed Indrāvati like Very Much with (8 Points) than Vegavathi.

**Table: Performance of the technology**

| Technology Option | No. of trials | Yield (q/ha) | Net Returns (Rs./ha) | B:C ratio | Data on Other performance indicators* |
|---|---|---|---|---|---|
| Farmers Practice | | | | | |
| Technology 1(Mention details) | | | | | |
| Technology 2(Mention details) | | | | | |

| Observations | TO: IIndravathi | TO:II: Vegavathi |
|---|---|---|
| By Using Hedonic Scale i.e, Colour, Taste, Smell, Texture, Appearance,Overall Acceptability | Lunch, Sweet and Snack Items | Lunch, Sweet and Snack Items |
| Result(10 sample) | Overall Acceptability : Scale Points: 8.0 (Like Verymuch) Indrāvati than Vegavathi | |

**9. Constraints:** No

**10. Feedback of the farmers involved:**

**11. Feed back to the scientist who developed the technology:**

## 6. Frontline Demonstrations in Detail:

| S. No. | Crop/Enterprise | Thematic area | Technology Demonstrated as a follow-up from OFT | Feedback sent to the Research System | Details on the performance of the technology sent to the Extension Department | Horizontal spread of the technology | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | No. of Villages | Farmers | Area (ha) |
| 1 | Bt. Cotton | Soil testing | Soil test based nutrient management and foliar nutrition | Yes | 15 -20% yield increased and cost reduction on chemical fertilizers Rs. 4,500/ha. | 10 | 556 | 7890 |
| 2 | Bengal gram | INM | Sulpher and Zinc management and Bio fertilizers application | Yes | 10% yield increased over control. | 26 | 1285 | 6790 |
| 3 | Bengal gram | Varietal Evaluation | Demonstration Bengalgram with NBeg-452 and NBeG-857 | Yes | Performing well in Rainfed situation.<br>Tolerant to drought.<br>Tolerant to wilt. | 36 | 15000 | 18000 |
| 4 | Paddy | Resource conservation | Direct Seeding | Yes | Water saving and Cost reduction technology | 25 | 15000 | 20250 |
| 5 | Maize | Resource conservation | Zero tillage | Yes | Water saving , time saving and Cost reduction technology | 12 | 500 | 850 |
| 6 | Redgram Seteria | Cropping system | Redgram+ seteria Inter cropping System | Yes | Remunerative cropping system under rainfed situation | 25 | 18000 | 25000 |
| 7 | Redgram | Varietal Evaluation | Varietal Demonstration in Redgram-PRG-176& LRG-52 | Yes | Performing well in Rainfed situation.<br>Suitable for light to medium black soils.<br>Tolerant to wilt | 75 | 25000 | 20000 |
| 8 | Setaria | Varietal Evaluation | Varietal Demonstration in Setaria varieties Renadu and suryanandi | Yes | Performing well in Rainfed situation and as sole crops and inter crops. | 36 | 980 | 7900 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 9 | Redgram/ Bengal gram | Conservartion Agriculture | Raised bed planter | Yes | In-situ moistureconsevation | 12 | 200 | 500 |
| 10 | Jowar | Varietal Evaluation | Varietal Demonstration in Jowar varieties NTJ-5, C-43and N-15 | Yes | Performing well in Rainfed situation in black soils. | 15 | 300 | 2200 |
| 11 | Chrysanthemum | ICM | Spraying of growth regulator GA3 | Yes | Spraying of GA3 100ppm at 30,45, 60 DAT for early high yields | 4 | 168 | 267 |
| 12 | Ridge gourd | Varietal evaluation | Arka Prasan | Yes | Performing well and it is on par with hybrids | 12 | 214 | 354 |
| 13 | Dolichos bean | Cropping system & Varietal evaluation | Arka Amogh | Yes | Performing well & remunerative cropping system during rabi | 15 | 142 | 121 |
| 14 | Banana | IDM | Management of Sigatoka disease | Yes | Pre-monsoon spraying with Chlorothalonil @2g/lit and two to three post monsoon sprayings at 25 days interval with Propiconozole 1ml/lit or Tebuconazole + Trifloxistrobin @1.4ml/lit. | 17 | 184 | 367 |
| 15 | Mango | ICM | ICM practices | Yes | June-July: pruning & application of 2/3rd dose of RDF &<br>Sep-Oct: Foliar spray Arka Mango Special @ 5g/lit<br>Feb-March: Application of remaining 1/3rd dose of RDF & foliar spray NAA 50ppm at marble size fruits Arka Fruit fly traps @8 no's per acre | 8 | 187 | 358 |

**FLD: 01. Soil test based Nutrient management in Bt. Cotton**

| Sl. No. | Item | | Details |
|---|---|---|---|
| 1 | **Crop** | : | Cotton |
| 2 | **Thematic area** | : | INM |
| 3 | **Technology demonstrated** | : | STBR-Nutrient dosage (NPK Kg./ha)-160-44-40 and foliar application of KNO3 (2%), MgSO4-(1%), ZnSO4(0.2%), Borax (0.15%) |
| 4 | **Season and year** | : | Kharif-2025 |
| 5 | **Farming situation** | : | Irrigated black- Sandy clay loam soil |
| 6 | **Source of fund** | : | KVK |
| 7 | **No of locations (Villages)** | : | 1 |
| 8 | **No. of demonstrations (replications/farmers/beneficiaries)** | : | 10 |
| 9 | **No of SC/ST Farmers and women farmers** | : | 5 |
| 10 | **Area proposed (ha)** | : | 4 |
| 11 | **Actual area (ha)** | : | 4 |
| 12 | **Justification for shortfall if any** | : | |
| 13 | **Feedback from farmers** | : | Farmers were satisfied with crop performances and expressed that Soil test based nutrient management is a viable technology in Bt. Cotton, because of less cost on chemical fertilizers and without reduction in yield compared to their own practice. They realized that they are resorting to higher expenditure on fertilizers in absence of soil testing of their fields |
| 14 | **Feedback of the Scientist** | : | Soil test based nutrient management and foliar application of K,Mg,Zn and B improved the productivity of Bt. Cotton where zinc and Boron are deficient in soils |
| 15 | **Extension activities on the FLD (Field days, Farmers training, media coverage, training to Extension Functionaries)** | : | Field days-1<br>Training-1 |

**FLD: 02. Integrated nutrient management in Groundnut**

| Sl. No. | Item | | Details |
|---|---|---|---|
| 1 | **Crop** | : | Groundnut |
| 2 | **Thematic area** | : | INM |
| 3 | **Technology demonstrated** | : | NPK-20-40-50Kg /ha<br>PSB-2.5lt/ ha, Gypsum– 500Kg /ha, FYM-5 tonnes/ha |
| 4 | **Season and year** | : | Kharif-2025 |
| 5 | **Farming situation** | : | Rainfed - Red soil |
| 6 | **Source of fund** | : | KVK |
| 7 | **No of locations (Villages)** | : | 1 |
| 8 | **No. of demonstrations (replications/farmers/beneficiaries)** | : | 10 |
| 9 | **No of SC/ST Farmers and women farmers** | : | 4 |
| 10 | **Area proposed (ha)** | : | 4 |
| 11 | **Actual area (ha)** | : | 4 |

| | | | |
|---|---|---|---|
| **12** | **Justification for shortfall if any** | **:** | |
| **13** | **Feedback from farmers** | **:** | Farmers were satisfied with crop performances and expressed that Integrated nutrient management is a viable technology in groundnut, because of less cost on chemical fertilizers and without reduction in yield compared to their own practice. They realized that they are resorting to higher expenditure on fertilizers in absence of soil testing of their fields. |
| **14** | **Feedback of the Scientist** | **:** | Integrated nutrient management and application of gypsum would improve the productivity of groundnut. |
| **15** | **Extension activities on the FLD (Field days, Farmers training, media coverage, training to Extension Functionaries)** | **:** | Field days-1<br>Training-1 |

**FLD: 03. Soil test based nutrient management in Chickpea**

| Sl. No. | Item | | Details |
|---|---|---|---|
| **1** | **Crop** | **:** | Chickpea |
| **2** | **Thematic area** | **:** | INM |
| **3** | **Technology demonstrated** | **:** | STBR-NPK 28-32-0 Kg/ha, PSB-2.5 lit, Gypsum-250 kg and Zinc sulphate-25 Kg/ha |
| **4** | **Season and year** | **:** | Rabi-2025 |
| **5** | **Farming situation** | **:** | Rainfed - Black soil |
| **6** | **Source of fund** | **:** | KVK |
| **7** | **No of locations (Villages)** | **:** | 1 |
| **8** | **No. of demonstrations (replications/farmers/beneficiaries)** | **:** | 10 |
| **9** | **No of SC/ST Farmers and women farmers** | **:** | 4 |
| **10** | **Area proposed (ha)** | **:** | 4 |
| **11** | **Actual area (ha)** | **:** | 4 |
| **12** | **Justification for shortfall if any** | **:** | |
| **13** | **Feedback from farmers** | **:** | Farmers were satisfied with crop performances and expressed that Soil test based nutrient management is a viable technology in chickpea because of without reduction in yield compared to their own practice. |
| **14** | **Feedback of the Scientist** | **:** | Soil test based nutrient management and basal application of zinc sulphate and gypsum for sulphur improved the productivity of Chickpea |
| **15** | **Extension activities on the FLD (Field days, Farmers training, media coverage, training to Extension Functionaries)** | **:** | Field days-1<br>Training-1 |

**FLD: 04. Demo on Saline tolerant Rice variety MCM- 103**

| Sl. No. | Item | | Details |
|---|---|---|---|
| **1** | **Crop** | **:** | Rice |
| **2** | **Thematic area** | **:** | Varietal |
| **3** | **Technology demonstrated** | **:** | MCM-103 |

| | | | |
|---|---|---|---|
| **4** | **Season and year** | **:** | Rabi-2025 |
| **5** | **Farming situation** | **:** | ID - Black soil |
| **6** | **Source of fund** | **:** | KVK |
| **7** | **No of locations (Villages)** | **:** | 1 |
| **8** | **No. of demonstrations (replications/farmers/beneficiaries)** | **:** | 10 |
| **9** | **No of SC/ST Farmers and women farmers** | **:** | 4 |
| **10** | **Area proposed (ha)** | **:** | 4 |
| **11** | **Actual area (ha)** | **:** | 4 |
| **12** | **Justification for shortfall if any** | **:** | |
| **13** | **Feedback from farmers** | **:** | Farmers were satisfied with crop performance and expressed that MCM-103 is saline tolerant and crop yield attributes are better than BPT-5204 |
| **14** | **Feedback of the Scientist** | **:** | MCM-103 is suitable for saline soils where EC >4dSm$^{-1}$ |
| **15** | **Extension activities on the FLD (Field days, Farmers training, media coverage, training to Extension Functionaries)** | **:** | Training-1 |

**FLD: 05. Zero tillage in Maize**

| Sl. No. | Item | | Details |
|---|---|---|---|
| **1** | **Crop** | **:** | Maize |
| **2** | **Thematic area** | **:** | Resource conservation |
| **3** | **Technology demonstrated** | **:** | **Zero tillage Maize** |
| **4** | **Season and year** | **:** | Kharif-2022 |
| **5** | **Farming situation** | **:** | Irrigated black- Sandy clay loam soil |
| **6** | **Source of fund** | **:** | KVK |
| **7** | **No of locations (Villages)** | **:** | 2 |
| **8** | **No. of demonstrations (replications/farmers/beneficiaries)** | **:** | 10 |
| **9** | **No of SC/ST Farmers and women farmers** | **:** | 3 |
| **10** | **Area proposed (ha)** | **:** | 4 |
| **11** | **Actual area (ha)** | **:** | 4 |
| **12** | **Justification for shortfall if any** | **:** | - |
| **13** | **Feedback from farmers** | **:** | Maize can be successfully grown without any primary tillage under no-till situation with less cost of cultivation, higher farm profitability and better resource use efficiency**.** |
| **14** | **Feedback of the Scientist** | **:** | Results are awaited |
| **15** | **Extension activities on the FLD: (Field days, Farmers training, media coverage, training to Extension Functionaries)** | **:** | Field days-1<br>Training-1 |

**FLD: 06. Demonstration on Redgram + Pearlmillet**

| Sl. No. | Item | | Details |
|---|---|---|---|
| 1 | **Crop** | : | Pearlmillet +Redgram |
| 2 | **Thematic area** | : | Cropping system |
| 3 | **Technology demonstrated** | : | **Demonstration on Redgram+ Pearlmillet** |
| 4 | **Season and year** | : | Kharif-2023 |
| 5 | **Farming situation** | : | Rainfed Red |
| 6 | **Source of fund** | : | KVK |
| 7 | **No of locations (Villages)** | : | 1 |
| 8 | **No. of demonstrations (replications/farmers/beneficiaries)** | : | 10 |
| 9 | **No of SC/ST Farmers and women farmers** | : | 5 |
| 10 | **Area proposed (ha)** | : | 4 |
| 11 | **Actual area (ha)** | : | 4 |
| 12 | **Justification for shortfall if any:** | : | - |
| 13 | **Feedback from farmers** | : | Intercropping of**Redgram+ Pearlmillet**is to stabilize the productivity and enhance the returns in terms of increased net returns And also the intercropping act as a insurance against total crop failures. |
| 14 | **Feedback of the Scientist** | : | The results indicated that highest Redgram equivalent yield (1339 kg/ha) and net returns was obtained with minimum pearlmillet+ Redgram intercropping (Rs 61110/ha) than sole crop of Redgram (1041kg/ha) (Rs 43441ha). The additional net income of the farmers was also increased in pearl millet + Redgram intercropping which is calculated as Rs. Rs 17669/- more than the sole crop of Redgram. |
| 15 | **Extension activities on the FLD** | : | Field days-1, Training-1 |

**FLD: 07. Demonstration on minimum tillage Bengalgram in Setaria+ Redgram Intercropping**

| Sl. No. | Item | | Details |
|---|---|---|---|
| 1 | **Crop** | : | Setaria + Redgram- bengalgram |
| 2 | **Thematic area** | : | Cropping system |
| 3 | **Technology demonstrated** | : | Demonstration on minimum tillage Bengalgram in Setaria+ Redgram Intercropping. |
| 4 | **Season and year** | : | Kharif-2022 and Rabi |
| 5 | **Farming situation** | : | Rainfed black |
| 6 | **Source of fund** | : | CRIDA |
| 7 | **No of locations (Villages)** | : | 1 |
| 8 | **No. of demonstrations (replications/farmers/beneficiaries)** | : | 10 |
| 9 | **No of SC/ST Farmers and women farmers** | : | 5 |
| 10 | **Area proposed (ha)** | : | 4 |
| 11 | **Actual area (ha)** | : | 4 |
| 12 | **Justification for shortfall if any** | : | - |

| | | | |
|---|---|---|---|
| **13** | **Feedback from farmers** | **:** | Farmers were impressed with Introduction Bengalgram with minimum**tillage in Setaria+ Redgram intercropping system after harvest of Setaria.**The additional net income of the farmers was also increased in Rs. Rs 21358 more than the in Setaria+ Redgram Intercropping. |
| **14** | **Feedback of the Scientist** | **:** | The results indicated that highest Redgram equivalent yield (2133 kg/ha) and net returns was obtained with minimum tillage Bengalgram in Korra+ Redgram intercropping (Rs 114687/ha) than Korra+ Redgram intercropping (1733 kg/ha ) (Rs 93329 ha). The additional net income of the farmers was also increased in minimum tillage Bengalgram in Korra+ Redgram intercropping which is calculated as Rs. Rs 21358/- more than the in Setaria+ Redgram Intercropping. |
| **15** | **Extension activities on the FLD (Field days, Farmers training, media coverage, training to Extension Functionaries)** | **:** | Field days-1<br>Training-1 |

**FLD: 08. Setaria- Bengalgram cropping sequence with minimum Tillage**

| Sl. No. | Item | | Details |
|---|---|---|---|
| **1** | **Crop** | **:** | Setaria -Bengalgram |
| **2** | **Thematic area** | **:** | Cropping system |
| **3** | **Technology demonstrated** | **:** | Setaria- Bengalgram cropping sequence with minimum Tillage. |
| **4** | **Season and year** | **:** | Kharif-2022 and Rabi |
| **5** | **Farming situation** | **:** | Rainfed black |
| **6** | **Source of fund** | **:** | CRIDA |
| **7** | **No of locations (Villages)** | **:** | 1 |
| **8** | **No. of demonstrations (replications/farmers/beneficiaries)** | **:** | 10 |
| **9** | **No of SC/ST Farmers and women farmers** | **:** | 5 |
| **10** | **Area proposed (ha)** | **:** | 4 |
| **11** | **Actual area (ha)** | **:** | 4 |
| **12** | **Justification for shortfall if any** | **:** | - |
| **13** | **Feedback from farmers** | **:** | Farmers were impressed with minimum **tillage in Setaria followed Bengalgram sequence.** |
| **14** | **Feedback of the Scientist** | **:** | The results indicated that highest net returns was obtained with Korra-bengalgram sequence (Rs. **85552**/ha) than fallow – Bengalgram (Rs. **64811** /ha). The additional net income of the farmers was also increased in Korra- Bengalgram sequence which is calculated as Rs. 20741/ha- more than the Fallow- bengalgram. This shows the increased profitability through Setaria-Bengalgram sequence with minimum tillage. Foxtail millet (korra), crop being its short duration may fit well in double cropping sequence under rainfed situation in black soils. Inorder to increase net returns Rs/ha and cropping intensity. |
| **15** | **Extension activities on the FLD (Field days, Farmers training, media coverage, training to Extension Functionaries)** | **:** | Field days-1<br>Training-1 |

**FLD: 09. Soybean- Bengalgram sequence with minimum tillage in rainfed black soils**

| Sl. No. | Item | | Details |
|---|---|---|---|
| 1 | **Crop** | : | Soybean- Bengalgram |
| 2 | **Thematic area** | : | Cropping system |
| 3 | **Technology demonstrated** | : | Soybean- Bengalgram sequence with minimum tillage in rainfed black soils. |
| 4 | **Season and year** | : | Kharif-2022 and Rabi |
| 5 | **Farming situation** | : | Rainfed black |
| 6 | **Source of fund** | : | CRIDA |
| 7 | **No of locations (Villages)** | : | 1 |
| 8 | **No. of demonstrations (replications/farmers/beneficiaries)** | : | 10 |
| 9 | **No of SC/ST Farmers and women farmers** | : | 5 |
| 10 | **Area proposed (ha)** | : | 4 |
| 11 | **Actual area (ha)** | : | 4 |
| 12 | **Justification for shortfall if any** | : | - |
| 13 | **Feedback from farmers** | : | Farmers were impressed with minimum **tillage in Soybean followed Bengalgram sequence**. |
| 14 | **Feedback of the Scientist** | : | The results indicated that highest net returns was obtained with Soyabean- Bengalgram sequence (Rs. 103883 /ha) than fallow –Bengalgram (Rs. 61851 /ha). The additional net income of the farmers was also increased in Soyabean-Bengalgram sequence which is calculated as Rs. 42032 more than the Fallow- Bengalgram. |
| 15 | **Extension activities on the FLD (Field days, Farmers training, media coverage, training to Extension Functionaries)** | : | Field days-1<br>Training-1 |

**FLD: 10. Demonstrating CREMIT for PBW management in Cotton**

| S. No. | Item | | Details |
|---|---|---|---|
| 1 | **Crop** | : | Bt Cotton |
| 2 | **Thematic area** | : | IPM |
| 3 | **Technology demonstrated** | : | CREMIT (Controlled Release Enhanced Mating Disruption Technology) application @ 30, 60 & 90 DAS + Ph traps @ 4/ac, Need based PP chemical spray. |
| 4 | **Season and year** | : | Kharif-2024 |
| 5 | **Farming situation** | : | Rainfed Light Black Soil |
| 6 | **Source of fund** | : | KVK |
| 7 | **No of locations (Villages)** | : | 1 |
| 8 | **No. of demonstrations (replications/farmers/beneficiaries)** | : | 10 |
| 9 | **No of SC/ST Farmers and women farmers** | : | 4 |
| 10 | **Area proposed (ha)** | : | 4 |
| 11 | **Actual area (ha)** | : | 4 |
| 12 | **Justification for shortfall if any** | : | |
| 13 | **Feedback from farmers** | : | CREMIT Paste application at 30, 60 and 90 DAS ensured good confusion of male adults of PBW and thus reduced incidence is seen. |
| 14 | **Feedback of the Scientist** | : | The incidence of PBW in the field applied with CREMIT |

| | | | |
|---|---|---|---|
| | | | paste is far below than the check. Just about 2% incidence is noticed in the FLD against 6.5 % incidence in check. |
| **15** | **Extension activities on the FLD (Field days, Farmers training, media coverage, training to Extension Functionaries)** | **:** | Training-1<br>Field Visits – 3 |

| Component | FLD | Farmer Practice | Remarks |
|---|---|---|---|
| Yield (q/ha) | 30.50 | 26.25 | 16.2% higher yield |
| Cost of Cultivation (Rs/ha) | 97,750 | 94,000 | |
| Cost of Plant Protection (Rs/ha) | 15,500 | 11,750 | Rs. 3,750 additional cost |
| Gross income (Rs./ha) | 2,50,100 | 2,15,250 | |
| Net Income (Rs./ha) | 1,52,350 | 1,21,250 | Rs. 31,100/- addl net income |
| Cost Benefit ration | 2.56 | 2.29 | |
| PBW Damage% | 2.0 | 6.5 | 69.23 % reduction |

**FLD: 11. Integrated Disease Management in Bengalgram**

| S. No. | Item | | Details |
|---|---|---|---|
| **1** | **Crop** | **:** | Bengalgram |
| **2** | **Thematic area** | **:** | IDM |
| **3** | **Technology demonstrated** | **:** | • Seed treatment with Tebuconazole @1.5 g/Kg followed by T.viride @ 10 g/kg of seed<br>• Soil application of T.viride @ 2 kg/ac with 90 kg FYM and 10 kg Neem cake<br>• Spraying Hexaconazole @ 2 ml/lt or Propiconazole @ 1 ml/lt alternately at 7 days interval. |
| **4** | **Season and year** | **:** | Rabi-2025 |
| **5** | **Farming situation** | **:** | Rainfed Black Cotton Soil |
| **6** | **Source of fund** | **:** | KVK |
| **7** | **No of locations (Villages)** | **:** | 1 |
| **8** | **No. of demonstrations (replications/farmers/beneficiaries)** | **:** | 10 |
| **9** | **No of SC/ST Farmers and women farmers** | **:** | 2 |
| **10** | **Area proposed (ha)** | **:** | 4 |
| **11** | **Actual area (ha)** | **:** | 4 |
| **12** | **Justification for shortfall if any** | **:** | |
| **13** | **Feedback from farmers** | **:** | Seed treatment with Tebuconazole @ 1.5 g/kg followed by Seed treatment with T.viride @ 10 g/kg gave good control of Wilt and Dry root rot. And this year incidence of blight and rust were not noticed. |

| Component | FLD | Farmer Practice | Remarks |
|---|---|---|---|
| Yield (q/ha) | 21.25 | 19.50 | 8.97 % higher yield |
| Cost of Cultivation (Rs/ha) | 43,250 | 45,000 | |

| | | | |
|---|---|---|---|
| Cost of Plant Protection (Rs/ha) | 5,500 | 7,250 | Rs. 1,750 saving |
| Gross income (Rs./ha) | 1,10,500 | 1,01,400 | |
| Net Income (Rs./ha) | 67,250 | 56,400 | Rs. 10,850/- addl. Net returns |
| Cost Benefit ratio | 2.55 | 2.25 | |
| Rust incidence% | 4.0 | 8.5 | 52.9% reduction |
| Dry root rot incidence % | 5.2 | 10.8 | 51.9 % reduction |

**FLD: 12. Management of Pin worm (*Tuta absoluta*) in Tomato**

| S. No. | Item | | Details |
|---|---|---|---|
| 1 | **Crop** | : | Tomato |
| 2 | **Thematic area** | : | IPM |
| 3 | **Technology demonstrated** | : | 1. Installation of light traps right from transplanting.<br>2. Erection of Ph traps @ 35 per ha.<br>3. Need based spray of Spinosad/Flubendiamide in rotation at 3 weeks interval<br>4. Spray Decamethrin 2.5% EC for killing Adult moths. |
| 4 | **Season and year** | : | Rabi-2024 |
| 5 | **Farming situation** | : | Irrigated Red Soil |
| 6 | **Source of fund** | : | KVK |
| 7 | **No of locations (Villages)** | : | 1 |
| 8 | **No. of demonstrations (replications/farmers/beneficiaries)** | : | 10 |
| 9 | **No of SC/ST Farmers and women farmers** | : | 4 |
| 10 | **Area proposed (ha)** | : | 4 |
| 11 | **Actual area (ha)** | : | 4 |
| 12 | **Justification for shortfall if any** | : | |
| 13 | **Feedback from farmers** | : | Installation of Pheromone traps and spraying of Decamethrin reduced the incidence of Pin Worn significantly. |
| 14 | **Feedback of the Scientist** | : | Installation of Ph traps for pin worm ahead of incidence reduced the incidence significantly and the damage is also limited. |
| 15 | **Extension activities on the FLD (Field days, Farmers training, media coverage, training to Extension Functionaries)** | : | Training-1<br>Field Visits – 2 |

| Component | FLD | Farmer Practice | Remarks |
|---|---|---|---|
| Yield (q/ha) | 301.63 | 261.75 | 15.23% higher yield |
| Cost of Cultivation (Rs/ha) | 1,46,500 | 1,54,750 | |
| Cost of Plant Protection (Rs/ha) | 34,000 | 42,250 | Rs. 8,250 saving |
| Gross income (Rs./ha) | 3,61,950 | 3,14,100 | |
| Net Income (Rs./ha) | 2,15,450 | 1,59,350 | Rs. 56,100/- addl net income |
| Cost Benefit ration | 2.47 | 2.03 | |

| | | | |
|---|---|---|---|
| Pinworm Damage% | 9.8 | 20.5 | 52.08% reduction |

**FLD: 13. Integrated Disease Management in Acid Lime**

| S. No. | Item | | Details |
|---|---|---|---|
| 1 | **Crop** | : | Acid lime |
| 2 | **Thematic area** | : | IDM |
| 3 | **Technology demonstrated** | : | Pruning of gummosis affected and dead branches, scraping of gum, painting stems with COC paste, Soil drenching with Mancozeb and spraying Carbendazim 0.1% for Gummosis and spraying of Streptocycline @ 0.1g/lt and COC @ 3g/lt for Citrus Canker. |
| 4 | **Season and year** | : | K-2024 |
| 5 | **Farming situation** | : | Irrigated Red Soil |
| 6 | **Source of fund** | : | KVK |
| 7 | **No of locations (Villages)** | : | 1 |
| 8 | **No. of demonstrations (replications/farmers/beneficiaries)** | : | 10 |
| 9 | **No of SC/ST Farmers and women farmers** | : | 4 |
| 10 | **Area proposed (ha)** | : | 4 |
| 11 | **Actual area (ha)** | : | 4 |
| 12 | **Justification for shortfall if any** | : | |
| 13 | **Feedback from farmers** | : | Pruning of affected parts followed by spray of Carbendazim 0.1% gave good control of gummosis. |
| 14 | **Feedback of the Scientist** | : | Prophylactic spray of COC and Streptocyclline will give better management of Citrus Canker. |
| 15 | **Extension activities on the FLD: (Field days, Farmers training, media coverage, training to Extension Functionaries)** | : | Training-1<br>Field Visits – 2 |

| Component | FLD | Farmer Practice | Remarks |
|---|---|---|---|
| Yield (q/ha) | 106.25 | 93.00 | 14.25% higher yield |
| Cost of Cultivation (Rs/ha) | 1,26,875 | 1,31,600 | |
| Cost of Plant Protection (Rs/ha) | 33,375 | 38,100 | Rs. 4,725 saving |
| Gross income (Rs./ha) | 3,18,750 | 2,79,000 | |
| Net Income (Rs./ha) | 1,91,875 | 1,47,400 | Rs. 44,475/- addl net income |
| Cost Benefit ration | 2.51 | 2.12 | |
| Canker % | 9.1 | 16.3 | 44.5% reduction |
| Gummosis % | 12.8 | 21.8 | 41.3% reduction |

**FLD: 14. Integrated Disease Management for Sheath Blight in Maize**

| S. No. | Item | | Details |
|---|---|---|---|
| 1 | **Crop** | : | Maize |
| 2 | **Thematic area** | : | IDM |
| 3 | **Technology demonstrated** | : | Removal of Kharif crop residues, spraying of Carbendazim @ 1g/lt or Propiconazole @ 1 ml/lt as prophylactic measure for management of sheath blight. |
| 4 | **Season and year** | : | K-2025 |
| 5 | **Farming situation** | : | Irrigated Black Soil |
| 6 | **Source of fund** | : | KVK |
| 7 | **No of locations (Villages)** | : | 1 |
| 8 | **No. of demonstrations (replications/farmers/beneficiaries)** | : | 10 |
| 9 | **No of SC/ST Farmers and women farmers** | : | 4 |
| 10 | **Area proposed (ha)** | : | 4 |
| 11 | **Actual area (ha)** | : | 4 |
| 12 | **Justification for shortfall if any** | : | |
| 13 | **Feedback from farmers** | : | Removal of last season debris, followed by spray of Propiconazole 0.1% at 40 DAS gave good control of sheath blight. |
| 14 | **Feedback of the Scientist** | : | Soil application of Trichoderma with FYM followed by Prophylactic spray of Propiconazole will give better management of sheath blight. |
| 15 | **Extension activities on the FLD: (Field days, Farmers training, media coverage, training to Extension Functionaries)** | : | Training-1<br>Field Visits – 2 |

| Component | FLD | Farmer Practice | Remarks |
|---|---|---|---|
| Yield (q/ha) | 73.75 | 60.75 | 21.4% higher yield |
| Cost of Cultivation (Rs/ha) | 69,000 | 71,000 | |
| Cost of Plant Protection (Rs/ha) | 6,750 | 8,750 | Rs. 2,000 saving |
| Gross income (Rs./ha) | 1,40,125 | 1,15,425 | |
| Net Income (Rs./ha) | 71,125 | 44,425 | Rs. 26,700- addl net income |
| Cost Benefit ration | 2.03 | 1.63 | |
| Sheath blight % | 7.5 | 18.8 | 60.1 % reduction |

**FLD: 15. Demonstration of management of fusarium wilts in chrysanthemum**

| S. No. | Particulars | | Details |
|---|---|---|---|
| 1 | **Crop** | : | Chrysanthemum |
| 2 | **Thematic area** | : | IDM |
| 3 | **Technology demonstrated** | : | Ensure good drainage, apply 100kg FYM enriched with 2kg of *Trichodermeasperillum*and soil drenching with COC @ 3g/lit or Captan @3g/lit |
| 4 | **Season and year** | : | Kharif- 2025 |
| 5 | **Farming situation** | : | Irrigated Red soil |
| 6 | **Source of fund** | : | KVK |
| 7 | **No of locations (Villages)** | : | 2 |
| 8 | **No. of demonstrations (replications/farmers/beneficiaries):** | : | 10 |
| 9 | **No of SC/ST Farmers and women farmers** | : | 10 |
| 10 | **Area proposed (ha)** | : | 4 |
| 11 | **Actual area (ha)** | : | 4 |
| 12 | **Justification for shortfall if any** | : | - |
| 13 | **Feedback from farmers** | : | Farmers are happy with the demonstration of trichoderma culture application before transplanting, seedling drenching and drenching with Carbendazim 1g/lit during wilt incidence in chrysanthemum |
| 14 | **Feedback of the Scientist** | : | It was found that less disease incidence of fusarium wilt recorded in demo (11.23%) when compared to farmer practice (24.54%) and recorded 13.30% yield increases in demo. |
| 15 | **Extension activities on the FLD: (Field days, Farmers training, media coverage, training to Extension Functionaries)** | : | Training-2<br>Field demonstrations -2<br>Field visits -6<br>Field Visits to EF-2 |

**FLD: 16. Demonstration of integrated crop management in mango**

| S. No. | Particulars | | Details |
|---|---|---|---|
| 1 | **Crop** | : | Mango |
| 2 | **Thematic area** | : | ICM |
| 3 | **Technology demonstrated** | : | June-July: pruning of criss cross and dried branches along with left over fruit stalks & spraying of 1% Bordeaux mixture followed by application of 2/3rd dose of RDF (60-70 kg FYM, 750g Urea, 4.2 Kg SSP and 1.2 kg MOP per tree above 10 years |

| | | | |
|---|---|---|---|
| | | | age) & foliar spray Arka Mango Special @ 5g/lit of water.<br>Sep-Oct: Foliar spray Arka Mango Special @ 5g/lit of water.<br>Feb-March: Application of remaining 1/3rd dose of RDF 750g Urea, 2kg SSP & 500g MOP & foliar spray 2,4-D/NAA 10ppm at marble size fruits for control of fruit drop and installation of Arka Fruit fly traps @8 no's per acre |
| **4** | **Season and year** | **:** | Kharif/Rabi- 2025 |
| **5** | **Farming situation** | **:** | Irrigated Red/mixed soil |
| **6** | **Source of fund** | **:** | KVK |
| **7** | **No of locations (Villages)** | **:** | 2 |
| **8** | **No. of demonstrations (replications/farmers/beneficiaries):** | **:** | 10 |
| **9** | **No of SC/ST Farmers and women farmers** | **:** | 10 |
| **10** | **Area proposed (ha)** | **:** | 4 |
| **11** | **Actual area (ha)** | **:** | 4 |
| **12** | **Justification for shortfall if any** | **:** | - |
| **13** | **Feedback from farmers** | **:** | Farmers are happy with the demonstration of ICM practices like timely pruning, fertilizer application and proper spraying schedule in mango. |
| **14** | **Feedback of the Scientist** | **:** | It was found that 12.18% yield increase, less incidence of hoppers 6.12% and sooty mould 5.43% and noticed very less incidence of fruit fly 4.25% due to bagging of fruit covers and market price also high when compared to farmers practice |
| **15** | **Extension activities on the FLD: (Field days, Farmers training, media coverage, training to Extension Functionaries)** | **:** | Training-4<br>Field demonstrations -7<br>Field visits -24 |


**Photos of mango orchard**

**FLD: 17. Demonstration of flower regulation in acid lime**

| S. No. | Particulars | | Details |
|---|---|---|---|
| **1** | **Crop** | **:** | Acid lime |
| **2** | **Thematic area** | **:** | ICM |
| **3** | **Technology demonstrated** | **:** | GA3 @50ppm in June + Cycocel @1000ppm in September + Potassium nitrate @ 10g per lit during October followed by micro nutrient mixture spray at new flush emergence stage, Peanut stage and marble stage. |
| **4** | **Season and year** | **:** | Kharif/Rabi- 2025 |
| **5** | **Farming situation** | **:** | Irrigated Red/mixed soil |

| | | | |
|---|---|---|---|
| **6** | **Source of fund** | **:** | KVK |
| **7** | **No of locations (Villages)** | **:** | 2 |
| **8** | **No. of demonstrations (replications/farmers/beneficiaries)** | **:** | 10 |
| **9** | **No of SC/ST Farmers and women farmers** | **:** | 10 |
| **10** | **Area proposed (ha)** | **:** | 4 |
| **11** | **Actual area (ha)** | **:** | 4 |
| **12** | **Justification for shortfall if any** | **:** | - |
| **13** | **Feedback from farmers** | **:** | Farmers are happy with the demonstration of flower regulation in acid lime with hormones i.e. GA3 and Cycocel and Potasium nitrate. Recorded more yield during summer 8.96% |
| **14** | **Feedback of the Scientist** | **:** | It was found that more number of flowers per shoot 9.76, fruit set % 53.27 and fruit retention % 65.32. recorded more market price during summer |
| **15** | **Extension activities on the FLD: (Field days, Farmers training, media coverage, training to Extension Functionaries)** | **:** | Training-3<br>Field demonstrations -5<br>Field visits -5 |


**Photos of acid lime orchard**

**FLD: 18. Demonstration of soil application of Sulphur in Onion**

| S. No. | Particulars | | Details |
|---|---|---|---|
| **1** | **Crop** | **:** | Onion |
| **2** | **Thematic area** | **:** | INM |
| **3** | **Technology demonstrated** | **:** | Soil application of Sulphur 25kg/ha before transplanting for higher yields and high pungency of bulbs. |
| **4** | **Season and year** | **:** | Rabi- 2025 |
| **5** | **Farming situation** | **:** | Irrigated Red/mixed soil |
| **6** | **Source of fund** | **:** | KVK |
| **7** | **No of locations (Villages)** | **:** | 1 |
| **8** | **No. of demonstrations (replications/farmers/beneficiaries)** | **:** | 10 |
| **9** | **No of SC/ST Farmers and women farmers** | **:** | 4 |
| **10** | **Area proposed (ha)** | **:** | 4 |
| **11** | **Actual area (ha)** | **:** | 4 |
| **12** | **Justification for shortfall if any** | **:** | - |
| **13** | **Feedback from farmers** | **:** | Farmers are happy with the demonstration of sulphur as soil application before transplanting of onion |

| | | | |
|---|---|---|---|
| **14** | **Feedback of the Scientist** | **:** | The results are under progress. Recorded plant height 56.67cm & 55.53 and number of leaves 6.34 & 6.12 in demo and farmers practice |
| **15** | **Extension activities on the FLD: (Field days, Farmers training, media coverage, training to Extension Functionaries)** | **:** | Training-1<br>Field demonstrations -3<br>Field visits -5 |


**Field photos of onion**

**FLD: 19. Ovisynch protocol in buffalo heifers**

| Sl. No | Technology | | Ovisynch protocol in buffalo heifers |
|---|---|---|---|
| **1** | **Crop** | **:** | Buffaloes |
| **2** | **Thematic area** | **:** | Dairy Management |
| **3** | **Technology demonstrated** | **:** | 0day – GhRH, &7$^{th}$ day – PgF2alpha, 9$^{th}$ day – GnRH and TAI after 72 hours |
| **4** | **Season and Year** | **:** | 2025 |
| **5** | **Farming situation** | **:** | Rainfed |
| **6** | **Source of Fund** | **:** | KVK |
| **7** | **No. of locations (villages)** | **:** | 2 |
| **8** | **No. of demonstrations** | **:** | 20 |
| **9** | **No. of SC/ST farmers and women farmers** | **:** | 8 |
| **10** | **Area proposed** | **:** | 20 animals` |
| **11** | **Actual area** | **:** | 20 animals |
| **12** | **Justification for short rainfall if any** | **:** | |
| **13** | **Feedback from farmers** | **:** | Conception can be improved through hormone therapy |
| **14** | **Feedback of the scientist** | **:** | - |
| **15** | **Extension activities on the FLD** | **:** | Training programme, Field visit, Method demonstration |

**FLD: 20. Reduction of neonatal mortality in lambs**

| Sl. No | Technology | | Reduction of neonatal mortality in lambs |
|---|---|---|---|
| 1 | Crop | **:** | Sheep |
| 2 | Thematic area | **:** | Livestock management |
| 3 | Technology demonstrated | **:** | 1$^{st}$ Day – TT inj., 2-4days – Antibiotic feeding, 5-7days – Liver tonic and 15$^{th}$ day – De-worming |
| 4 | Season and Year | **:** | 2025 |
| 5 | Farming situation | **:** | Rainfed |
| 6 | Source of Fund | **:** | KVK |

| | | | |
|---|---|---|---|
| 7 | No. of locations (villages) | : | 2 |
| 8 | No. of demonstrations | : | 10 |
| 9 | No. of SC/ST farmers and women farmers | : | 4 |
| 10 | Area proposed | : | 100 animals` |
| 11 | Actual area | : | 100 animals |
| 12 | Justification for short rainfall if any | : | |
| 13 | Feedback from farmers | : | Mortality was reduced to 4% from30% through this package. |
| 14 | Feedback of the scientist | : | - |
| 15 | Extension activities on the FLD | : | Training programme, Field visit, Method demonstration |

**FLD: 21. Supplementation of milk replacer to pre weaned kids**

| Sl. No. | Technology | | Supplementation of milk replacer to pre weaned kids |
|---|---|---|---|
| 1 | Crop | : | Sheep |
| 2 | Thematic area | : | Animal Nutrition management |
| 3 | Technology demonstrated | : | Supplementation of milk replacer developed by NIANP @ 50g/day |
| 4 | Season and Year | : | 2025 |
| 5 | Farming situation | : | Rainfed |
| 6 | Source of Fund | : | KVK |
| 7 | No. of locations (villages) | : | 2 |
| 8 | No. of demonstrations | : | 10 |
| 9 | No. of SC/ST farmers and women farmers | : | 4 |
| 10 | Area proposed | : | 50 animals |
| 11 | Actual area | : | 50 animals |
| 12 | Justification for short rainfall if any | : | |
| 13 | Feedback from farmers | : | Milk replacer can reduce the mortality and also cost on milk |
| 14 | Feedback of the scientist | : | Cost of milk replacer is high |
| 15 | Extension activities on the FLD | : | Training programme, Field visit, Method demonstration |

**FLD: 22. Demonstration of scientific managemental strategies in prepubertal heifers to curtail delayed sexual maturity**

| Sl. No. | Technology | | Demonstration of scientific managemental strategies in prepubertal heifers to curtail delayed sexual maturity |
|---|---|---|---|
| **1** | **Crop** | : | Dairy animals |
| **2** | **Thematic area** | : | Animal Nutrition management |
| **3** | **Technology demonstrated** | : | 1.Deworming at the time of enrolment followed by once every 3 months<br>2. Concentrate (Type 1 with 14-15% CP) feeding @1-1.5 kg/animal/day+ Adlibitum green fodder + locally available crop residues.<br>3.Supplementation of mineral mixture @50 gm/day/animal |
| **4** | **Season and Year** | : | 2025 |
| **5** | **Farming situation** | : | Rainfed |
| **6** | **Source of Fund** | : | KVK |
| **7** | **No. of locations (villages)** | : | 2 (Rudravaram and Meerapuram) |
| **8** | **No. of demonstrations** | : | 10 |
| **9** | **No. of SC/ST farmers and women farmers** | : | 4 |
| **10** | **Area proposed** | : | 10 animals |

| | | | |
|---|---|---|---|
| **11** | **Actual area** | **:** | 10 animals |
| **12** | **Justification for short rainfall if any** | **:** | |
| **13** | **Feedback from farmers** | **:** | Feed and mineral mixture supplementation improved the growth rate and came to heat at early stage. |
| **14** | **Feedback of the scientist** | **:** | |
| **15** | **Extension activities on the FLD** | **:** | Training programme, Field visit, Method demonstration |

**FLD: 23. Demonstration on insemination of Sex Sorted Semen in buffaloes**

| **Sl. No** | **Technology** | | **Insemination of dairy animals with Sex Sorted Semen** |
|---|---|---|---|
| **1** | **Crop** | **:** | Dairy animals |
| **2** | **Thematic area** | **:** | Dairy management |
| **3** | **Technology demonstrated** | **:** | Inseminated the milch buffaloes with sex sorted semen replacing the normal semen |
| **4** | **Season and Year** | **:** | 2025 |
| **5** | **Farming situation** | **:** | Rainfed |
| **6** | **Source of Fund** | **:** | KVK |
| **7** | **No. of locations (villages)** | **:** | 4 (Rudravaram, Charlakothuru, Yagantipalle and Meerapuram) |
| **8** | **No. of demonstrations** | **:** | 45 |
| **9** | **No. of SC/ST farmers and women farmers** | **:** | 20 |
| **10** | **Area proposed** | **:** | 45 animals |
| **11** | **Actual area** | **:** | 45 animals |
| **12** | **Justification for short rainfall if any** | **:** | |
| **13** | **Feedback from farmers** | **:** | |
| **14** | **Feedback of the scientist** | **:** | |
| **15** | **Extension activities on the FLD** | **:** | Training programme, Field visit, Method demonstration |

**FLD: 24.**

| **S. No.** | **Particulars** | | **Details** |
|---|---|---|---|
| **1** | **Crop** | **:** | Millets |
| **2** | **Thematic area** | **:** | Value Addition |
| **3** | **Technology demonstrated** | **:** | Banana Based Millet Nutri Mix |
| **4** | **Season and year** | **:** | 2025 |
| **5** | **Farming situation** | **:** | NA |
| **6** | **Source of fund** | **:** | KVK |
| **7** | **No of locations (Villages)** | **:** | 2 |
| **8** | **No. of demonstrations (replications/farmers/beneficiaries):** | **:** | 40 |
| **9** | **No of SC/ST Farmers and women farmers** | **:** | 17 |
| **10** | **Area proposed (ha)** | **:** | NA |
| **11** | **Actual area (ha)** | **:** | NA |
| **12** | **Justification for shortfall if any** | **:** | NA |
| **13** | **Feedback from farmers** | **:** | With the demonstration of Banana based Millet Nutri Mix (prepared with Finger Millet-75gms+Bajra flour-100gms+Roasted Bengalgram flour-100gms+Banana Flour- |

| | | | |
|---|---|---|---|
| | | | 25gms). Sensory Evaluation was taken up with hedonic Scale 8.45% (expressed colour, Taste, smell, Texture, appearance, Overall Acceptability 8 Points (Like Very much). |
| **14** | **Feedback of the Scientist** | **:** | - |
| **15** | **Extension activities on the FLD: (Field days, Farmers training, media coverage, training to Extension Functionaries)** | **:** | Training Programmes and Method Demonstrations were carried out. |

**FLD: 25.**

| S. No. | Particulars | | Details |
|---|---|---|---|
| **1** | **Crop** | **:** | Vegetables |
| **2** | **Thematic area** | **:** | Value Addition |
| **3** | **Technology demonstrated** | **:** | Demonstration of processing techniques for making green chilli powder |
| **4** | **Season and year** | **:** | 2025 |
| **5** | **Farming situation** | **:** | - |
| **6** | **Source of fund** | **:** | KVK |
| **7** | **No of locations (Villages)** | **:** | 5 |
| **8** | **No. of demonstrations (replications/farmers/beneficiaries):** | **:** | 20 |
| **9** | **No of SC/ST Farmers and women farmers** | **:** | 9 |
| **10** | **Area proposed (ha)** | **:** | - |
| **11** | **Actual area (ha)** | **:** | - |
| **12** | **Justification for shortfall if any** | **:** | - |
| **13** | **Feedback from farmers** | **:** | With the Demonstration of Green Chillie Powder, green chillies are washed, blanched, Sundried with 0% moisture and Powdered. Shelf life enhancement by 16 months and Recipes prepared with green chillie powder evaluated with Hedonic scale 9.65% expressed 8 points (Like Very Much) |
| **14** | **Feedback of the Scientist** | **:** | - |
| **15** | **Extension activities on the FLD: (Field days, Farmers training, media coverage, training to Extension Functionaries)** | **:** | Training Programmes and Method Demonstrations were carried out. |

**FLD: 26.**

| S. No. | Particulars | | Details |
|---|---|---|---|
| 1 | **Crop** | : | Fruits |
| 2 | **Thematic area** | : | Shelf life Enhancement |
| 3 | **Technology demonstrated** | : | Demonstration of Nano stickers forenhancingshelflife of fruits |
| 4 | **Season and year** | : | 2024 |
| 5 | **Farming situation** | : | NA |
| 6 | **Source of fund** | : | KVK |
| 7 | **No of locations (Villages)** | : | 2 |
| 8 | **No. of demonstrations (replications/farmers/beneficiaries):** | : | 10 |
| 9 | **No of SC/ST Farmers and women farmers** | : | 3 |
| 10 | **Area proposed (ha)** | : | - |
| 11 | **Actual area (ha)** | : | - |
| 12 | **Justification for shortfall if any** | : | - |
| 13 | **Feedback from farmers** | : | With introduction of Nano Stickers for enhancing Shelf life of Mangoes was observed in fully riped Mangoes (one nano Sticker for 2to 21/2 kgs of fruits), shelf life was extended from 9 to 11 days with 11.1% of fruit damage, in control mangoes damaged with 44.4% in 5 to 6 days. 88.23% expressed Colour, Taste, Smell, Texture, Appearance, and Overall Acceptability: Scale Points: 8 (Like Verymuch). |
| 14 | **Feedback of the Scientist** | : | - |
| 15 | **Extension activities on the FLD: (Field days, Farmers training, media coverage, training to Extension Functionaries)** | : | Training Programmes and Method Demonstrations were carried out. |

**FLD: 27.**

| S. No. | Particulars | | Details |
|---|---|---|---|
| 1 | **Crop** | : | Green leafy and Vegetables |
| 2 | **Thematic area** | : | Nutrigardens |
| 3 | **Technology demonstrated** | : | Household food security by kitchen gardening and nutrition gardening |
| 4 | **Season and year** | : | Kharif & Rabi 2025 |
| 5 | **Farming situation** | : | Irrigated Medium Black soils |
| 6 | **Source of fund** | : | KVK |
| 7 | **No of locations (Villages)** | : | 5 |
| 8 | **No. of demonstrations (replications/farmers/beneficiaries):** | : | 10 |
| 9 | **No of SC/ST Farmers and women farmers** | : | 03 |
| 10 | **Area proposed (ha)** | : | 1.5 ha |
| 11 | **Actual area (ha)** | : | 1.5 ha |
| 12 | **Justification for shortfall if any** | : | - |
| 13 | **Feedback from farmers** | : | With the Introduction of Nutrigardens Increased consumption of greens and other vegetables in daily menu was recorded 10.5 kgs/week than their regular usage i.e., 3-4 kgs/week which helps in dietary diversity and income generated Rs. 3,480/-/season. |

| | | | |
|---|---|---|---|
| **14** | **Feedback of the Scientist** | **:** | - |
| **15** | **Extension activities on the FLD: (Field days, Farmers training, media coverage, training to Extension Functionaries)** | **:** | Training Programmes and Demonstrations were carried out. |

**FLD: 28.**

| S. No. | Particulars | | Details |
|---|---|---|---|
| **1** | **Crop** | **:** | Maize |
| **2** | **Thematic area** | **:** | Drudgery Reduction |
| **3** | **Technology demonstrated** | **:** | Demonstration On Manual Seed Push Planter |
| **4** | **Season and year** | **:** | Kharif & Rabi 2025 |
| **5** | **Farming situation** | **:** | Irrigated Medium Black soils |
| **6** | **Source of fund** | **:** | KVK |
| **7** | **No of locations (Villages)** | **:** | 03 |
| **8** | **No. of demonstrations (replications/farmers/beneficiaries):** | **:** | 10 |
| **9** | **No of SC/ST Farmers and women farmers** | **:** | 03 |
| **10** | **Area proposed (ha)** | **:** | 0.4 ha |
| **11** | **Actual area (ha)** | **:** | 1.2 ha |
| **12** | **Justification for shortfall if any** | **:** | - |
| **13** | **Feedback from farmers** | **:** | For Sowing Maize crop introduced Manual Seed Push Planter labour Saved and cost on Sowing reduced by Rs.600/ac and drudgery recorded moderate than manual sowing which recorded from moderate to max. |
| **14** | **Feedback of the Scientist** | **:** | - |
| **15** | **Extension activities on the FLD: (Field days, Farmers training, media coverage, training to Extension Functionaries)** | **:** | Training Programmes and Demonstrations were carried out. |

**FLD: 29.**

| S. No. | Particulars | | Details |
|---|---|---|---|
| **1** | **Crop** | **:** | Groudnut |
| **2** | **Thematic area** | **:** | Drudgery Reduction |
| **3** | **Technology demonstrated** | **:** | Demonstration of Three Pronged Wheel hoes |
| **4** | **Season and year** | **:** | Kharif & Rabi 2025 |
| **5** | **Farming situation** | **:** | Irrigated Medium Black soils |
| **6** | **Source of fund** | **:** | KVK |
| **7** | **No of locations (Villages)** | **:** | 03 |
| **8** | **No. of demonstrations (replications/farmers/beneficiaries):** | **:** | 10 |
| **9** | **No of SC/ST Farmers and women farmers** | **:** | 03 |
| **10** | **Area proposed (ha)** | **:** | 0.4 ha |
| **11** | **Actual area (ha)** | **:** | 1.2 ha |
| **12** | **Justification for shortfall if any** | **:** | - |

| | | | |
|---|---|---|---|
| **13** | **Feedback from farmers** | **:** | For Sowing Maize crop introduced Manual Seed Push Planter labour Saved and cost on Sowing reduced by Rs.600/ac and drudgery recorded moderate than manual sowing which recorded from moderate to max. |
| **14** | **Feedback of the Scientist** | **:** | - |
| **15** | **Extension activities on the FLD: (Field days, Farmers training, media coverage, training to Extension Functionaries)** | **:** | Training Programmes and Demonstrations were carried out. |

# 7. Extension Studies

## Extension Study: 01

### Impact of Custom Hiring Center promoted by KVK, Yagantipalle

**Objectives:**

1. To study the perception and adoption of about KVK CHC.
2. To assessing the performance of CHC.
3. To study the constraints and elicit suggestions.

**1. Perception about the CHCs:**

| S. No. | Statements | M | Index | Rank |
|---|---|---|---|---|
| 1 | CHC services are affordable and economically beneficial to farmers | 4.35 | 87.00 | 2 |
| 2 | CHC has a good range of farm machinery suitable for my cropping needs. | 3.45 | 69.00 | 11 |
| 3 | Machinery is well maintained and good working condition. | 4.13 | 82.67 | 5 |
| 4 | CHC machinery helps in timely completion of major farm operations. | 3.47 | 69.33 | 10 |
| 5 | Use of CHC services reduces labour dependency on my farm. | 3.39 | 67.83 | 12 |
| 6 | Staff at the CHC are cooperative and provide necessary technical guidance. | 3.83 | 76.50 | 9 |
| 7 | CHC procedures for booking and hiring machinery are simple and farmer-friendly. | 3.93 | 78.67 | 7 |
| 8 | Staff provide proper guidance on safe and efficient use of machinery | 4.25 | 85.00 | 3 |
| 9 | CHC functioning well and services are good | 4.48 | 89.50 | 1 |
| 10 | Knew about advanced farm machinery from CHC | 4.29 | 85.83 | 4 |
| 11 | CHC helps small and marginal farmers avoid heavy investment in machinery | 4.09 | 81.83 | 6 |
| 12 | In CHC machinery is often unavailable when required | 3.90 | 78.00 | 8 |

**1. Perception about the CHCs:**

The perception analysis of farmers towards Custom Hiring Centers (CHCs) revealed an overall favorable attitude, with most statements recording high perception index values above 75 per cent. The **highest ranked**

**statement** was "CHC functioning well and services are good" (Index = 89.50), indicating strong overall satisfaction with CHC performance. Similarly, farmers perceived CHC services as affordable and economically beneficial (Index = 87.00) *and acknowledged that CHCs provide* proper guidance on safe and efficient use of machinery (Index = 85.00), reflecting the economic and technical benefits of the centers.

Farmers also reported gaining awareness about advanced farm machinery (Index = 85.83) and observed that machinery is well maintained (Index = 82.67), suggesting effective management and maintenance practices. The statement *CHC* helps small and marginal farmers avoid heavy investment in machinery (Index = 81.83) further highlights the inclusiveness and cost-saving potential of CHCs.

However, **relatively lower perception scores** were recorded for aspects such as reducing labour dependency (Index = 67.83), range of machinery availability (Index = 69.00), and timely completion of operations (Index = 69.33). These findings indicate operational gaps related to machinery adequacy and availability during peak periods. The issue of machinery unavailability when required (Index = 78.00) also suggests the need for better scheduling and inventory management.

**2. Adoption of the services from CHC:**

| Sl. No. | Implement | Frequently | | Occasionally | | Never | |
|---|---|---|---|---|---|---|---|
| | **Primary tillage** | **F** | **%** | **F** | **%** | **F** | **%** |
| | Cultivator | | | | | | |
| 1 | 9 tyne cultivator | 44 | 36.67 | 28 | 23.33 | 48 | 40.00 |
| 2 | 7 tyne cultivator | 40 | 33.33 | 17 | 14.17 | 63 | 52.50 |
| 3 | Boot type cultivator | 14 | 11.67 | 21 | 17.50 | 85 | 70.83 |
| | MB plough | 4 | 3.33 | 36 | 30.00 | 83 | 69.17 |
| 4 | 2 bottom mould board plough | 3 | 2.50 | 28 | 23.33 | 89 | 74.17 |
| 5 | 3 bottom mould board plough | 2 | 1.67 | 37 | 30.83 | 81 | 67.50 |
| 6 | 2 Reversible MB plough | 61 | 50.83 | 48 | 40.00 | 11 | 9.17 |
| 7 | Disc plough (Hydraulic) | 0 | 0.00 | 12 | 10.00 | 108 | 90.00 |
| | Secondary tillage | | | | | | |
| 8 | Rotavator | 96 | 80.00 | 21 | 17.50 | 3 | 2.50 |
| 9 | land leveler | 18 | 15.00 | 46 | 38.33 | 56 | 46.67 |
| 10 | Blade Harrow | 83 | 69.17 | 34 | 28.33 | 3 | 2.50 |
| | Sowing equipment | | | | | | |
| 11 | Zero till drill | 12 | 10.00 | 14 | 11.67 | 94 | 78.33 |
| | Seed drill | | | | | | |
| 12 | Vertical seed drill | 92 | 76.67 | 16 | 13.33 | 12 | 10.00 |
| 13 | Inclined seed metering plate | 7 | 5.83 | 46 | 38.33 | 67 | 55.83 |
| 14 | Footed roller mechanism | 6 | 5.00 | 18 | 15.00 | 96 | 80.00 |
| 15 | Manual push planter | 68 | 56.67 | 34 | 28.33 | 18 | 15.00 |
| 16 | Seed planter | 87 | 72.50 | 29 | 24.17 | 4 | 3.33 |
| | **Sprayers** | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17 | Portable Sprayer | 11 | 9.17 | 48 | 40.00 | 61 | 50.83 |
| 18 | Drone sprayer | 46 | 38.33 | 45 | 37.50 | 29 | 24.17 |
| | Inter cultivation | | | | | | |
| 19 | Power weeder | 98 | 81.67 | 18 | 15.00 | 4 | 3.33 |
| 20 | Tractor operated sprayer | 8 | 6.67 | 47 | 39.17 | 65 | 54.17 |
| 21 | Brush cutter | 39 | 32.50 | 45 | 37.50 | 36 | 30.00 |
| | Residue management | | | | | | |
| 22 | Chaff cutter | 2 | 1.67 | 49 | 40.83 | 69 | 57.50 |
| 23 | Rotary slasher | 0 | 0.00 | 27 | 22.50 | 93 | 77.50 |
| 24 | Rotary shredder | 0 | 0.00 | 19 | 15.83 | 101 | 84.17 |
| | Conservation agriculture equipment | | | | | | |
| 25 | Sub soiler | 0 | 0.00 | 12 | 10.00 | 108 | 90.00 |
| 26 | BBF Planter | 0 | 0.00 | 18 | 15.00 | 102 | 85.00 |

2. The adoption pattern of CHC services showed considerable variation across implements**. High frequent adoption** was observed (Fig.1&2) for power weeder (81.67%)**,** rotavator (80.00%)**,** vertical seed drill (76.67%)**,** seed planter (72.50%)**,** blade harrow (69.17%), and manual push planter (56.67%)**,** indicating strong demand for machinery related to secondary tillage, sowing, and inter cultivation**.** The2 reversible MB plough (50.83%) and drone sprayer (38.33%) also recorded moderate usage, reflecting growing mechanization and technology acceptance.

Conversely, **low adoption** was reported for boot type cultivator, MB ploughs, disc plough, zero till drill, residue management tools (rotary slasher, shredder), sub soiler, and BBFplanter**,** where more than 70–90 per cent of farmers never used these implements. This suggests limited awareness, high operational complexity, or lower suitability to existing cropping systems.

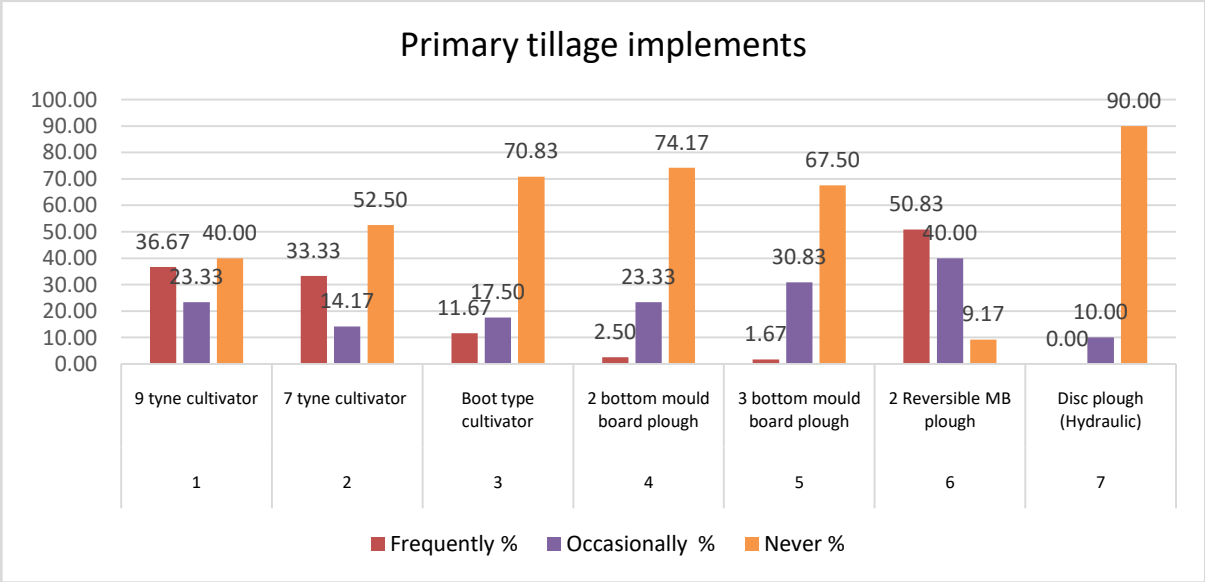
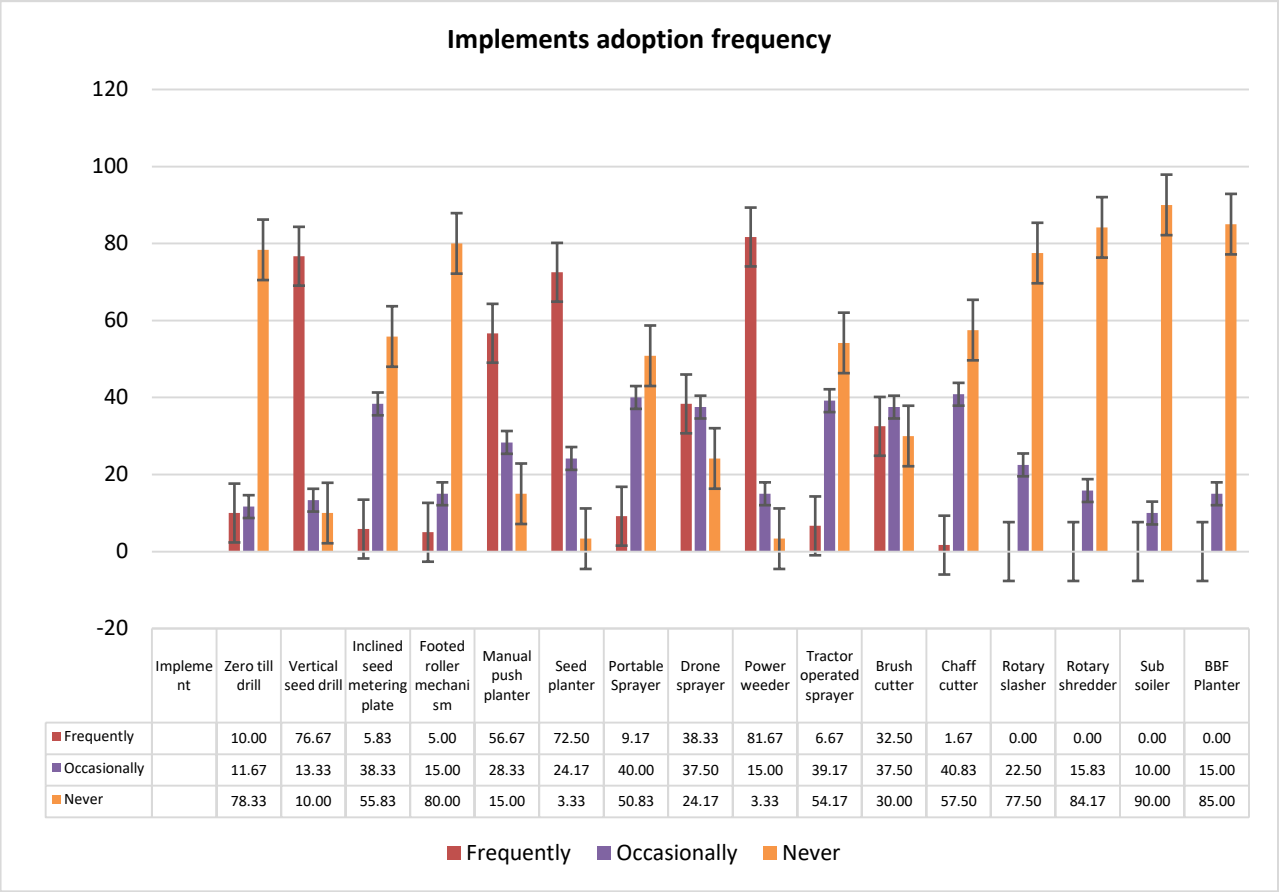



**Fig. 1 Primary tillage implements adoption frequency**




| Implement | Zero till drill | Vertical seed drill | Inclined seed metering plate | Footed roller mechanism | Manual push planter | Seed planter | Portable Sprayer | Drone sprayer | Power weeder | Tractor operated sprayer | Brush cutter | Chaff cutter | Rotary slasher | Rotary shredder | Sub soiler | BBF Planter |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Frequently | 10.00 | 76.67 | 5.83 | 5.00 | 56.67 | 72.50 | 9.17 | 38.33 | 81.67 | 6.67 | 32.50 | 1.67 | 0.00 | 0.00 | 0.00 | 0.00 |
| Occasionally | 11.67 | 13.33 | 38.33 | 15.00 | 28.33 | 24.17 | 40.00 | 37.50 | 15.00 | 39.17 | 37.50 | 40.83 | 22.50 | 15.83 | 10.00 | 15.00 |
| Never | 78.33 | 10.00 | 55.83 | 80.00 | 15.00 | 3.33 | 50.83 | 24.17 | 3.33 | 54.17 | 30.00 | 57.50 | 77.50 | 84.17 | 90.00 | 85.00 |

**Fig. 2 Implements adoption frequency for other than primary implements**

## 3. Performance of CHC:

| Sl. No. | Performance Indicators | M | I | Rank |
|---|---|---|---|---|
| 1 | CHC provides farm machinery at the required time | 3.41 | 68.17 | 7 |
| 2 | CHC supports small and marginal farmers effectively | 3.63 | 72.50 | 6 |
| 3 | CHC services contribute to increased cropping intensity | 2.78 | 55.50 | 11 |
| 4 | Availability of machinery is adequate during peak season | 2.93 | 58.50 | 10 |
| 5 | Machines supplied by CHC are in good working condition | 3.95 | 79.00 | 5 |
| 6 | CHC services reduce cost of cultivation | 4.42 | 88.33 | 2 |
| 7 | Rental charges of CHC are affordable | 4.40 | 88.00 | 3 |
| 8 | CHC helps in timely completion of farm operations | 3.28 | 65.67 | |
| 9 | CHC reduces dependence on private machinery owners | 4.52 | 90.33 | 1 |
| 10 | Booking procedure of CHC is simple and transparent | 3.30 | 66.00 | 9 |
| 11 | Behaviour and cooperation of CHC staff is satisfactory | 3.30 | 66.00 | 9 |
| 12 | CHC promotes adoption of improved farm mechanization | 3.38 | 67.67 | 8 |
| 13 | Overall performance of CHC is satisfactory | 4.20 | 84.00 | 4 |

5 = Very Satisfied | 4 = Satisfied | 3 = Neutral | 2 = Dissatisfied | 1 = Very Dissatisfied

3. The performance assessment of CHC indicated an overall satisfactory to high level of farmer satisfaction, with most indicators recording perception indices above 65 per cent. The highest ranked benefit was reduction in dependence on private machinery owners (Index = 90.33), followed by reduced cost of cultivation (88.33) and affordable rental charges (88.00), highlighting the strong economic advantages of CHC services. Farmers also

rated overall performance satisfactory (84.00) and reported that machines were in good working condition (79.00), reflecting efficient maintenance and management.

### 4. Cost comparison between private and KVK CHC:

| Sl. No | Technology adoption by individual farmer | Private (per ac) | CHC (per ac) | % deference |
|---|---|---|---|---|
| 1 | 7 tyne cultivator | 350 | 63 | 82.0 |
| 2 | 5 tyne cultivator | 350 | 63 | 82.0 |
| 3 | 9 tyne cultivator | 250 | 63 | 74.8 |
| 4 | 2 MB Plough | 300 | 63 | 79.0 |
| 5 | 3 MB Plough | 300 | 63 | 79.0 |
| 6 | Reversible 2 MB Plough | 300 | 112 | 62.7 |
| 7 | Rotavator | 600 | 125 | 79.2 |
| 8 | Tractor operated Sprayer | 300 | 162 | 46.0 |
| 9 | Brush cutter | 150 | 87 | 42.0 |

**Source: Data collected during study**

The cost comparison between KVK Custom Hiring Centre (CHC) and private hiring services clearly shows that CHC services are much more economical for farmers across all farm implements. The per-acre charges of CHC are substantially lower than private providers, resulting in cost savings ranging from 42% to 82%. Maximum savings (82%) are observed for 7 tyne and 5 tyne cultivators, followed by rotavator (79.2%) and MB ploughs (79%), indicating major reduction in land preparation costs. Moderate savings are seen for the reversible MB plough (62.7%), while comparatively lower savings are noticed for tractor sprayer (46%) and brush cutter (42%).

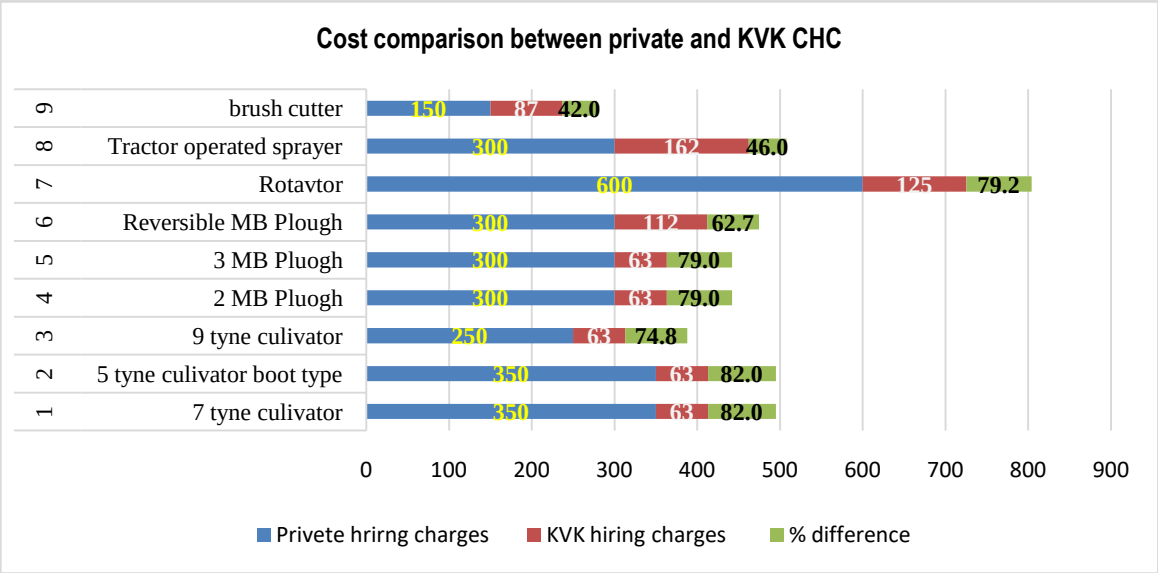



**Figure 3. Cost comparison between private and KVK CHCs**

### 5. CONSTRAINTS AND PROBLEMS IN AVAILING CHC FACILITY:

| S. No. | Constraint/Problem | F | % |
|---|---|---|---|
| 1 | Non-availability of machinery during peak agricultural season | 82 | 68.33 |
| 2 | High rental charges compared to private machinery providers | 16 | 13.33 |

| | | | |
|---|---|---|---|
| 3 | Difficulty in transporting machinery from CHC due to unavailability of tractor facility | 61 | 50.83 |
| 4 | Poor condition or frequent breakdowns of hired machinery | 48 | 40.00 |
| 5 | Delay in providing machinery due to high demand | 82 | 68.33 |
| 6 | Complex booking procedures or lack of transparency | 43 | 35.83 |
| 7 | No. of each variety of machinery Inadequate | 89 | 74.17 |
| 8 | Limited working hours of CHC causing inconvenience | 73 | 60.83 |
| 9 | Lack of timely maintenance and servicing of machinery | 43 | 35.83 |
| 10 | Long distance of CHC from the village | 62 | 51.67 |
| 11 | Lack of awareness about machinery availability or booking process | 43 | 35.83 |

### 4. SUGGESTIONS TO IMPROVE THE ADOPTION OF CHC FACILITY:

1. Per acre/hour basis with tractor, driver and implement may help to small and marginal farmers.
2. Increase the no. of implements to avoid peak season shortage.
3. Provide Drone spraying facility.
4. Conducting of demonstrations for advanced equipment's in larger area may help to accept easily.
5. Providing of low cost harvesters may help more to the farming community.
6. Making digital application for knowing status of availability and plan accordingly.

## Extension Study: 2

## Impact Assessment of Conservation Agriculture practices

### Objectives:

1. To study the perception and adoption of CA Practices.
2. To evaluate the economic benefit of the practices in major crops.
3. Elicit the constraints and provide suitable suggestions.

### 1. Personal profile of the adopters: (n = 80)

| Sl. No. | Variable | Category | F | % |
|---|---|---|---|---|
| 1 | Age | ≤35 yrs | 22 | 27.5 |
| | | 36–50 yrs | 38 | 47.5 |
| | | >50 yrs | 20 | 25.0 |
| 2 | Education | Illiterate | 21 | 26.25 |
| | | Primary | 28 | 35.00 |
| | | Secondary | 24 | 30.0 |
| | | Intermediate & above | 7 | 8.75 |
| 3 | Farmer Category | Marginal | 26 | 32.5 |
| | | Small | 31 | 38.8 |
| | | Semi-medium | 15 | 18.7 |
| | | Medium & Large | 8 | 10.0 |

The study was conducted among 80 farmers practicing Conservation Agriculture. Nearly half of the respondents (47.5%) belonged to the middle age group (36–50 years), followed by young farmers (27.5%) and older farmers (25.0%), indicating that CA is predominantly adopted by economically active and progressive

farmers. Regarding education, majorities were literate, with 30.0% having secondary education and 26.2% graduates and above, which may facilitate better understanding and adoption of improved practices. In terms of farm size, small (38.8%) and marginal farmers (32.5%) constituted the major share (71.3%), showing that CA practices are particularly relevant and accessible to resource-poor farmers.

## 2. Perception on Conservation Agriculture:

| Sl. No. | Statements | M | I | Rank |
|---|---|---|---|---|
| 1 | CA improves soil fertility and organic matter content | 4.25 | 85.0 | 1 |
| 2 | Crop residue retention reduces the need of fertilizers and inputs | 4.15 | 83.0 | 2 |
| 3 | Soil moisture is better conserved under CA practices. | 4.1 | 82.0 | 3 |
| 4 | Managing crop residues is difficult under CA | 3.2 | 64.0 | 8 |
| 5 | Weed problems increase under CA practices | 3.35 | 67.0 | 7 |
| 6 | It helps to mitigate crop during drought conditions | 4 | 80.0 | 5 |
| 7 | CA improves soil structure and reduces erosion | 3.2 | 64.0 | 8 |
| 8 | Soil moisture is better conserved under CA. | 4.08 | 81.6 | 4 |
| 9 | Conservation Agriculture reduces the cost of cultivation. | 3.95 | 79.0 | 6 |

Farmers expressed a favorable perception of CA benefits. High perception indices were recorded for soil fertility improvement (85%), reduction in fertilizer requirement (83%), soil moisture conservation (82%), and drought mitigation (80%). These results indicate strong awareness of the ecological and economic advantages of CA.

However, moderate perception scores were observed for residue management difficulty (64%) and weed problems (67%), highlighting operational challenges that may hinder wider adoption. Despite these constraints, farmers generally acknowledged that CA reduces the cost of cultivation (79%), supporting its economic viability.

## 3. Adoption of Conservation Agriculture Components (n=80)

| Sl. No. | CA Practice | Full adoption | | Partial adoption | | Not adopted | |
|---|---|---|---|---|---|---|---|
| | | F | % | F | % | F | % |
| 1 | Minimum tillage | 16 | 20 | 19 | 23.75 | 45 | 56.25 |
| 2 | Crop rotation | 54 | 67.5 | 14 | 17.5 | 12 | 15 |
| 3 | Residue retention | 15 | 18.75 | 34 | 42.5 | 31 | 38.75 |
| 4 | Cover crops | 13 | 16.25 | 16 | 20 | 51 | 63.75 |
| 5 | Direct seeding | 11 | 13.75 | 12 | 15 | 57 | 71.25 |
| 6 | Zero tillage | 6 | 7.5 | 16 | 20 | 58 | 72.5 |
| 7 | In site moisture conservation | 26 | 32.5 | 21 | 26.25 | 33 | 41.25 |

Adoption of CA practices varied across components. Crop rotation recorded the highest full adoption (67.5%), reflecting farmers' familiarity and perceived benefits in maintaining soil fertility and breaking pest

cycles. In-situ moisture conservation also showed moderate adoption (32.5% full and 26.25% partial), indicating awareness about moisture management under rainfed conditions.

However, practices requiring specialized equipment or technical skills showed low adoption. Zero tillage (72.5% not adopted), direct seeding (71.25%), and cover crops (63.75%) had poor uptake, likely due to limited availability of machinery, lack of awareness, or higher management complexity. Residue retention was mostly partially adopted (42.5%), suggesting gradual acceptance but practical difficulties in handling residues.

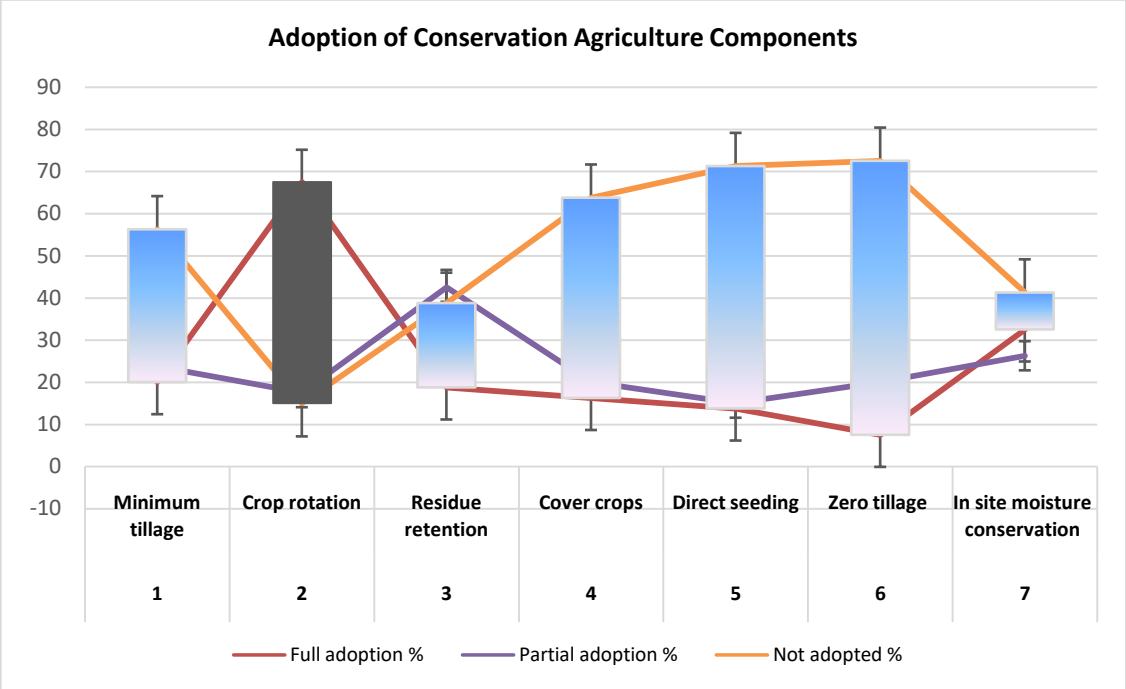



**Fig. 1 Adoption frequencies for adoption of CA Practices**

## 4. Impact of Conservation Agriculture on Crop Yields:

| Sl. No. | Crop | Yield | | | Cost of cultivation | | | Net income | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | before (q/ac) | After (q/ac) | % Change | Before (Rs/ac) | After (Rs/ac) | % Change | Before (Rs/ac) | After (Rs/ac) | % Change |
| 1 | Redgram | 3.9 | 5.2 | **33.30** | 12800 | 12100 | **5.46** | 20350 | 32360 | 59.01 |
| 2 | Chickpea | 5 | 6.5 | **30.00** | 20200 | 19500 | **3.46** | 29250 | 38025 | 30 |
| 3 | Setariea | 4.2 | 5.6 | **33.33** | 11240 | 11600 | **3.2** | 11970 | 15960 | 36.42 |
| 4 | Maize | 28.98 | 29.8 | **2.82** | 24400 | 22350 | **8.4** | 26315 | 29800 | 13.24 |
| 5 | Paddy | 26 | 26.2 | **0.76** | 31600 | 27100 | **14.2** | 59800 | 60260 | 0.76 |

Redgram-8550, chickepa-5850, Setaria-2850, maize-1750, Paddy- 2300.

Conservation Agriculture practices resulted in notable improvements in productivity and profitability across major crops. Redgram recorded the highest yield increase (33.30%) along with a reduction in cost of cultivation (5.46%), leading to a substantial increase in net income (59.01%).

Similarly, Setaria showed a 33.33% yield gain and 36.42% higher net returns, while chickpea registered a 30% yield improvement with a 30% rise in income. Maize demonstrated moderate improvement in yield (2.82%) and reduced costs (8.4%), resulting in a 13.24% increase in net income. In contrast, paddy showed marginal yield improvement (0.76%) but a significant reduction in cultivation cost (14.2%), indicating that CA benefits in paddy

are more cost-oriented than yield-oriented. These findings confirm that CA practices enhance farm profitability through both increased productivity and cost savings.

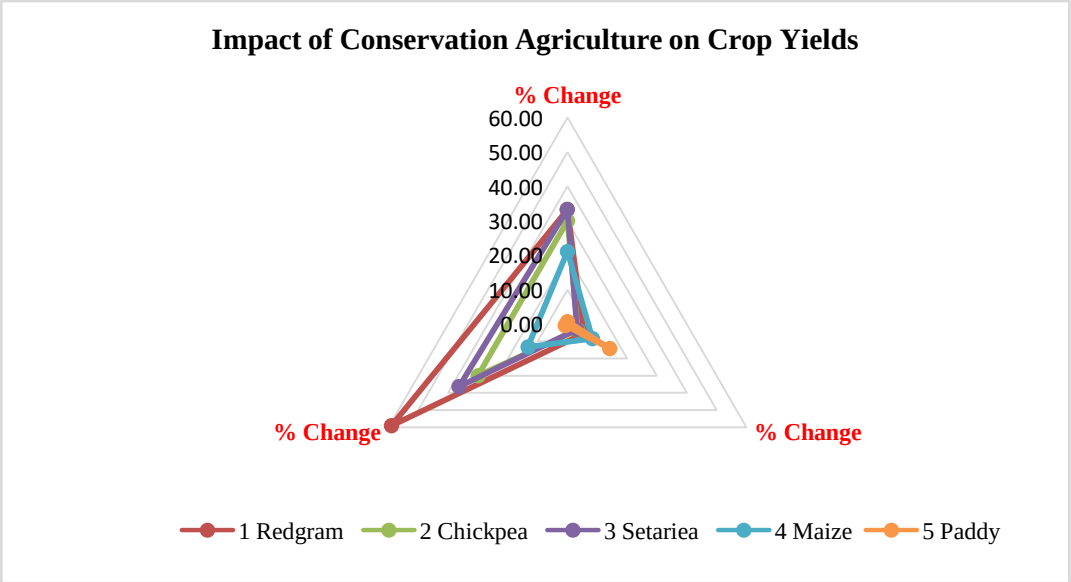



**Fig. 2. Impact of CA Practices in major crops**

## 5. Impact on cropping intensity (n=80):

| Sl. No. | Particulars | F | % |
|---|---|---|---|
| 1 | Increased | 31 | 38.75 |
| 2 | No change | 49 | 61.25 |

The adoption of CA slightly improved cropping intensity. About 38.75% of farmers reported increased cropping intensity, while 61.25% observed no change. The calculated cropping intensity increased from 100% to 110.43%, indicating better utilization of land resources due to timely operations, moisture conservation, and reduced turnaround time between crops.

## 6. Cropping Intensity of Farmers Before and After Conservation Agriculture (n = 80):

| Sl. No. | Particulars | Before | After |
|---|---|---|---|
| 1 | Mean net sown area | 2.30 -5.0 | 2.30 - 5.0 |
| 2 | Mean Gross cropped area | 2.3 -2.5 | 2.54–2.80 |
| 3 | Cropping intensity | 100 | 110.43 |

*Cropping Intensity (%)=Gross Cropped Area (GCA)/Net Sown Area (NSA)×100

## 7. Suggestion for overcoming the problems:

- Conduct village-level large scale demonstrations.
- Conduct more awareness programmes on CA practices.
- Train farmers on integrated weed management.
- Use progressive farmers as CA ambassadors.
- Regular contacts with farmers by collect feedback and refine recommendations.
- Develop extension literature and success stories.
- Provide subsidies for zero-till seed drills and residue management equipment.
- Community based residual management practices with help of CHCs.

## Extension Study: 3

### Assessing the Economic Impact of Farmer Producer Organizations (FPOs) in Nandyal Dit., Andhra Pradesh

### Change in income levels of the farmer member of FPO:

### Quantitative:

The study assessing the economic impact of Farmer Producer Organizations (FPOs) in Nandyal (dt.) of Andhra Pradesh (n = 120) indicates a moderate yet positive improvement in the economic status of member farmers after joining FPOs. The proportion of farmers earning below Rs. 50,000 declined from 20.00% to 14.16%, while those in the Rs. 1,00,000-2,00,000 category increased from 20.83% to 23.33%, and the overall average annual income rose from Rs. 88,500 to Rs. 90,300, registering a 2.03% increase. Crop-wise net returns per acre showed substantial gains in soybean (Rs. 18,460 to Rs. 23,280; 26.11%) and millets (Rs. 19,250 to Rs. 21,150; 9.87%), moderate increases in Redgram (Rs. 33,500 to Rs. 36,500; 8.95%) and chilli (Rs. 78,900 to Rs. 81,250; 2.97%), while cotton remained unchanged (Rs. 35,000). About 50.83% of members procured fertilizers, 40.00% pesticides, and 17.50% seeds through FPOs, with 46.66% reporting improvement in input quality and 30.00% indicating reduction in input cost. In marketing, 43.33% adopted collective marketing, 35.83% experienced better price realization, and 34.16% reported increased sale prices, whereas 30.00% received subsidies/support and 15.00% accessed institutional credit through FPOs. Despite these benefits, major constraints such as limited access to larger markets (mean score 4.02; Rank I), difficulty in accessing institutional finance (3.91; Rank II), and inadequate storage and processing facilities (3.78; Rank III) continue to limit performance. Overall, the findings suggest that FPOs have positively influenced income and market access, though strengthening financial support, infrastructure, and governance is essential to enhance their long-term impact.

1. **Is there any change in household agricultural income since joining the FPO?**

| Income Category | Before Joining | After joining |
|---|---|---|
| **<50,000** | 20.00 | 14.16 |
| **50–1,00,000/** | 51.66 | 55.00 |
| **1,00,000–2,00,000** | 20.83 | 23.33 |
| **>2,00,000** | 7.5 | 7.5 |

2. **Crop-wise Net Returns (Rs./acre):**

| Crop | Before FPO | After FPO | % of Increase |
|---|---|---|---|
| Redgram | 33,500 | 36,500 | 8.95 |
| Soybean | 18,460 | 23,280 | 26.11 |
| Millets | 19,250 | 21,150 | 9.87 |
| Cotton | 35,000 | 35,400 | 1.14 |
| Chilli | 78,900 | 81,250 | 2.97 |

3. **Change in Income Levels of Farmers Before and After Joining the FPO (n = 120):**

| Item | Before joining FPO | After joining FPO | % Change |
|---|---|---|---|
| Annual income (Rs.) | 88,500 | 90,300 | **+2.03 %** |

### 4. Input usage from FPOs:

| Inputs | F | % |
|---|---|---|
| **Seed** | 21 | 17.50 |
| **Fertilizers** | 61 | 50.83 |
| **Pesticides** | 48 | 40.00 |
| **Agri. Machinery** | 12 | 10.00 |
| **Bio-inputs/other micro nutrients** | 19 | 15.83 |

### 5. Economic Benefits accrued due to FPO Membership: 120 sample size:

| Sl. No. | Indicator | Frequency (No.) | Percentage (%) | Rank |
|---|---|---|---|---|
| **1. Input-Related Benefits** | | | | |
| 1.1 | Purchase of inputs through FPO | 36 | 30 | 2 |
| 1.2 | Average reduction in input cost | 32 | 26.66 | 3 |
| 1.3 | Improvement in quality of inputs | 56 | 46.66 | 1 |
| **2. Production-Related Benefits** | | | | |
| 2.1 | Increase in crop yield after joining FPO | 36 | 30 | 1 |
| 2.2 | Average yield increase | 31 | 25.83 | 2 |
| **3. Marketing Benefits** | | | | |
| 3.1 | Adoption of collective marketing through FPO | 52 | 43.33 | 1 |
| 3.2 | Improvement in price realization | 43 | 35.83 | 2 |
| 3.3 | Average increase in sale price | 41 | 34.16 | 3 |
| 3.4 | Reduction in post-harvest losses | 13 | 10.83 | 4 |
| **4. Value Addition & Processing** | | | | |
| 4.1 | Access to cleaning/grading/sorting/packaging | 12 | 10 | 1 |
| 4.2 | Economic gain due to value addition (Rs./q) | 8 | 6.66 | 2 |
| **5. Financial Benefits** | | | | |
| 5.1 | Access to institutional credit through FPO | 18 | 15 | 2 |
| 5.2 | Reduction in interest rate on credit | 12 | 10 | 3 |
| 5.3 | Receipt of subsidy/support through FPO | 36 | 30 | 1 |
| **6. Farm Machinery & Services** | | | | |
| 6.1 | Access to farm machinery through FPO (CHC/FMB) | 0 | 0 | 0 |
| 6.2 | Reduction in machinery operation cost | 0 | 0 | 0 |
| **7. Income Change After Joining FPO** | | | | |
| 7.1 | Increase in overall annual farm income | 12 | 10 | 2 |
| 7.2 | Average increase in annual farm income | 16 | 13.33 | 1 |
| **8. Satisfaction Level** | | | | |
| **8.1** | **Overall satisfaction with FPO services** | **18** | **15** | **-** |

***Satisfaction scale: Highly satisfied = 4, Satisfied = 3, Neutral = 2, Dissatisfied = 1**

### 6. Constraints & suggestions to enhance effectiveness:

| Constraint | Mean | Category rank | Overall rank |
|---|---|---|---|
| **Institutional** | | | |
| Lack of awareness about FPO functions | 3.84 | I | XIV |
| Weak governance and leadership | 3.62 | II | VIII |
| Low participation in decision-making | 3.48 | III | XII |
| Limited trust among members | 3.05 | V | XVI |
| Poor professional management | 3.31 | IV | XV |
| **Financial** | | | |
| Difficulty in accessing institutional finance | 3.91 | I | II |

| | | | |
|---|---|---|---|
| Inadequate working capital of FPO | 3.74 | II | V |
| High cost of credit | 3.53 | III | XI |
| Irregular dividend or profit distribution | 3.28 | IV | XVII |
| **Capacity development** | | | |
| Lack of technical training | 3.48 | IV | XIII |
| Poor awareness of government schemes | 3.69 | III | XVIII |
| Limited adoption of modern technologies | 3.76 | I | IV |
| Lack of skilled manpower in FPO | 3.41 | II | VII |
| **Marketing** | | | |
| Limited access to larger markets | 4.02 | I | I |
| Poor price realization | 3.86 | III | X |
| Inadequate storage and processing facilities | 3.78 | II | III |
| Lack of transport and logistics support | 3.55 | IV | IX |
| Dependence on local traders | 3.42 | V | VI |

## 8. Technology Week Celebrations:

| Types of Activities | No. of Activities | Number of Participants | Related crop/livestock technology |
|---|---|---|---|
| Gosthies | 0 | 0 | |
| Lectures organized | 4 | 190 | on HDPS technology and climate resilient technologies |
| Exhibition | 4 | 387 | Seed and planting materials, bio inoculants displayed at exhibition |
| Film show | 5 | 190 | create awareness on natural farming advantages and climate resilient technologies in dry land farming |
| Fair | 0 | 0 | |
| Farm Visit | 10 | 251 | Demo units of KVK |
| Diagnostic Practical | 4 | 84 | on Natural farming practices |
| Distribution of Literature (No.) | 410 | 410 | on HDPS Cotton, Calendar operations of Mango, Natural farming practices and Millet cultivation |
| Distribution of Seed (q) | 0 | 0 | |
| Distribution of Planting materials (No.) | 90 | 90 | Distributed drumstick, dragon fruit and acidlime seedlings to the farmers |
| Bio Product distribution (Kg) | 0 | 0 | |
| Bio Fertilizers (q) | 0 | 0 | |
| Distribution of fingerlings | 0 | 0 | |
| Distribution of Livestock specimen (No.) | 0 | 0 | |
| Total number of farmers visited the technology week | 418 | 418 | Actively involved in the sessions by interacting on related topics |
| Others | 0 | 0 | |

## 9. Training/workshops/seminars etc. attended by KVK staff:

Trainings attended in the relevant field of specialization (Mention Title, duration, Institution, location etc.)

| Name of the staff | Title | Dates | Duration | Organized by |
|---|---|---|---|---|
| D. Balaraju<br>SMS (Plant Protection) | Refresher Training on Latest Technologies | 17-18, July 2025 | 2 days | ANGRAU, KVK, Reddipalli, Anantapur. |
| Dr. A. KrishnaMurthy, SMS (Animal Husbandry) | Workshop on Inclusive strategies for rural development through agriculture and allied sectors | 23.01.2025 | 1 day | Center for the study of social inclusion, Sri Krishnadevaraya University, Anantapuram. |
| Dr. A. KrishnaMurthy, SMS (Animal Husbandry) | International conference of ISDA | 29.01.2025 to 31.01.2025 | 3 Days | CRIDA, Hyderabad. |
| Dr. A. KrishnaMurthy, SMS (Animal Husbandry) | Dissemination of Novel technologies for improved livestock and poultry production for doubling farmers income | 11.09.2025 to 12.09.2025 | 2 days | CCVEC, Sri Venkateswara Veterinary University. |
| E. Ravi Goud, SMS (Extension) | National conference on Application of AI services through extension services for sustainable development in Agri and allied sectors | 09.01.2025 to 10.01.2025 | 2 days | UAS Raichur, Karnataka. |
| E. Ravi Goud, SMS (Extension) | International Conference on Rainfed Agriculture: Building Pathways for Resilience & Sustainable Livelihoods | 29.01.2025 to 31.01.2025 | 3 days | ICAR-CRIDA, Hyderabad. |
| E. Ravi Goud, SMS (Extension) | Training Programme on Impact Assessment of Agricultural Technologies | 04.08.2025 to 08.08.2025 | 5 days | ICAR-NAARM, Hyderabad. |
| E. Ravi Goud, SMS (Extension) | Training Programme on Psychometry and Scaling methods | 15.12.2025 to 19.12.2025 | 5 days | ICAR-NAARM, Hyderabad. |
| K. Lakshmi Priya<br>PA (Home Science) | Food Safety Standards For Products In Agriculture and Allied Sector” | 7/11/2025 | 1 Day | PJTSAU, R’Nagar, Hyderabad. |

## 10. Details of collaborative / externally funded / sponsored projects/programmes implemented by KVK. (2025)

| S. No. | Title of the programme / project | Sponsoring / collaborating agency | Objectives | Duration | Amount (Rs) |
|---|---|---|---|---|---|
| 1 | SPECIAL PROJECT ON COTTON | ICAR-CICR, Nagpur | Targeting Technology to Agro-Ecological Zones.<br>Large Scale Demonstrations of Best Practices to Enhance Cotton Productivity.<br>Through HDPS Cotton technology | 1 year | 15,25,000.00 |
| 2 | Training ProgrammeOn Food processing &Value addition | ATMA | To bring awareness among women about Food Processing & Value addition and Establishment of different Processing units for livelihoods security. | 1 day | 12,000.00 |
| 3 | Training Program On Importance OfNutricereals | ATMA | To bring awareness among farm women on importance of nutricereals for nutritional security. | 1 day | 12,000.00 |

**Detailed report of each project/programme separately with objectives, nature of collaboration / programme, outcome of the collaboration etc.**

**Cotton Project:**

- **Name of Technology:** High Density Planting System in Cotton.
- **Under the Guidance of:** ICAR-CICR, Nagpur.
- **Objectives:**
  I. To enhance cotton Productivity in rainfed situations.
  II. To make cotton cultivation suitable for Red and Light soils under rain fed conditions.
  III. To produce export quality kapaas.
- **Demonstrations conducted at:** Nandikotkur, Devanur, Pudicherla and Jalakanur villages.
- **Area of Demonstration:** 75 Ha. (187 Acres).
- **No. of Farmers involved:** 68
- **Targeted farmers group:** Small and marginal farmers.

| S. No. | Activity | No. of Activities | No. of Participants |
|---|---|---|---|
| 1 | Farmer trainings | 5 | 289 |
| 2 | Field day | 3 | 260 |
| 3 | Work shop | 1 | 85 |
| 4 | Kisan mela | 0 | 0 |
| 5 | Online Review meetings by CICR members | 4 | Nodal officers, YPs. |
| 6 | Diagnostic Filed visits | 117 | 220 |

**Comparative economics of cotton cultivation between HDPS/CS and conventional planting in Nandyal district of Andhra Pradesh state under rainfed conditions**

**Sample size: 68 farmers** **(in Rs./acre)**

| S. No. | Package of practice | HDPS 90×15cm | Conventional planting In Cotton |
|---|---|---|---|
| 1 | Land preparation | 3,800 | 3,800 |
| 2 | Seed and Sowing | 6750 | 4200 |
| 3 | Gap filling | - | - |
| 4 | Total weeding | 3400 | 2800 |
| 5 | Inter cultivation | 1800 | 1800 |
| 6 | Fertilizer | 3950 | 3020 |
| 7 | Pesticide | 4250 | 3750 |
| 8 | Chemical canopy management | 1500 | - |
| 9 | Harvesting labour | 10800 | 9,000 |
| | **Total cost of cultivation** | 36, 250 | 28,370 |
| 10 | Yield (kg) | 904 | 669 |
| 11 | MSP 2025-26 per kg | 77 | 77 |
| | **Gross income** | 69,608 | 51,513 |
| 12 | Net income | 33,358 | 23,143 |
| | **B:C** | **1.92** | **1.81** |

# 11. Success Stories

## Success Story 1:

### Success story of Sri. B. Siva Shankar Reddy in managing sheath blight in Maize

**Introduction /Situation Analysis:**

Sri B. Siva Shankar Reddy, a progressive farmer from Yagantipalle village having a land of 13 ac is regularly taking up Rice, Maize and Redgram crops. He is cultivating Redgram with millets (Setaria) as intercrop in 9 acres during Kharif as rainfed crop. In about 4 ac of land which is under irrigatioin, he used to take up Rice crop, but in recent years he is taking up Maize crop regularly season after season without any crop rotation. Due to monocropping of Maize, which is very prevalent in this village, the yields of Maize were drastically reduced from 32 q/ac to 18q/ac over this period, which was mainly attributed to regular incidence of sheath blight disease, that is causing poor grain setting and reduction in the weight of the cobs. As the farmers were taking up fungicidal sprays after noticing the damage, they could not manage the disease. This has become the major production constraint in maize growing areas of this region. And Shankar Reddy is no exception and was getting 20-30% lower yields compared to previous seasons.

**Support &Implementation:**

During 2022, he attended KVK trainings on Integrated Pest and Disease management in Maize where management options for Fall Army Worm and Sheath Blight disease were dealt in detail. He took up field demonstrations organized by KVK on these aspectsand got good improvement in yield, curtailing the sheath blight disease to maximum extent. The strategy given for better crop management were:

- Growing of Navadhanya /Multiple crops, before the Kharif season in Summer to save the loss of soil organic carbon due to severe heat during summer season and to add good amount of organic manure to the soil, that enhances microbial activity, that checks the soil borne disease problems.
- Application of Trichoderma enriched FYM to the soil before Kharif sowing of Maize followed by prophylactic spray of Propiconazole @ 1 ml/lt water at 40-45 DAS against sheath blight disease.
- Practicing crop rotation with pulses every alternate season.

With the suggestions and guidance of KVK, he took up Navdhanya in his 4 ac land in summer followed by soil application of Trichoderma with FYM before Kharif season. On following the package, in the first season itself he saw the improvement in disease suppression and yield. After following this practice for the last 4 seasons continuously, now he got 32q of maize grain/ac as against 24 q/ac of grain yield by fellow farmers, who did not follow Navdhanaya and Prophylactic spray of fungicide. Now, the sheath blight incidence in this farmers field was observed at 3-5% as against 18-22% in fellow farmers fields.

**Output:**

Due to implementation of Integrated Disease Management package, the disease incidence was controlled by 58% resulting in 19.8% additional yield compared to farmers practice of spraying fungicides on noticing incidence of the disease. The farmer has got an additional return of Rs. 8,917 per acre by IDM in Maize.

Yield details of Maize for the last 3 seasons in this farmers field.

| Season | Yield (Kg/ac) | | Sheath Blight % | | Addl. Net income (Rs/ac) | % improvement in Yield | % Reduction in Sheath Blight |
|---|---|---|---|---|---|---|---|
| | With Package | Farmers Practice | With Package | Farmers Practice | | | |
| Kharif, 2023 | 2860 | 2550 | 9.5 | 18.4 | 5,890-00 | 12.16 | 48.37 |
| Kharif, 2024 | 3100 | 2680 | 7.5 | 17.7 | 7,770-00 | 15.67 | 57.62 |
| Kharif, 2025 | 3120 | 2350 | 5.3 | 17.5 | 13,090-00 | 32.76 | 69.71 |
| **Average** | **3,027** | **2,527** | **7.43** | **17.86** | **8,917-00** | **19.78** | **58.39** |

**Outcome:**

By seeing the success of this farmer, other farmers of the village and nearby villages viz. Meerapuram, Pathapadu and Sadukottam, the farmers are adopting Prophylactic spraying of Propiconazole for sheath blight management and some farmers are practicing crop rotation in Rabi mainly with Blackgram for improving their soil health and to achieve better Maize yields in the ensuing season.


**Impact:**

Sri B. Siva Shankar Reddy's adoption of Integrated Disease Management practices in maize brought a clear impact. By introducing Navadhanya cropping, applying Trichoderma-enriched FYM, and using prophylactic fungicide sprays, he reduced sheath blight incidence from 18–22% to just 3–5%. This improvement led to nearly 20% higher yields, with his fields producing 32 q/ac compared to 24 q/ac in fellow farmers' fields. His net income increased by ₹8,917 per acre, proving the profitability of IDM. Motivated by his success, farmers in nearby villages have started adopting similar practices, ensuring healthier soils and better maize productivity.

## Success Story 2:

### Enterpreneuring through Bio Resource Centre – A Success story of K. Maheswara Reddy, progressive farmer cum Agri Input Dealer

**Introduction and situation Analysis:**

Due to indiscriminate application of chemical fertilizers for the past few decades, almost completely avoiding organic manures and composts has lead to a very severe loss in soil productivity and soil health. This lead to decreased fertilizer use efficiency, increasing costs on fertilizer application apart from crop becoming susceptible to various pests and diseases abiotic stresses all of which have resulted in dropping productivity across all the crops. Soil Organic Carbon is depleting year by year and cost of cultivation increasing regularly affecting the profitability in crop production to a larger extent. Sri. K. Maheswara Reddy of Gundupapala village of Gospadu mandal is one such affected farmer who was in distress due to increasing costs of production especially in crops like Blackgram and Chillis and rarely getting net income in chillis for the past few years.

Though awareness created on importance of maintaining good amounts of Soil Organic Carbon for successful production, farmers adoption is negligible mainly due to non-availability of Organic Manures and its cost of application. Maheswarar eddy was no exception. But, he is determined to change his fate in farming.

**Plan, Implement and Support:**

Krishi Vigyan Kendra, Yagantipalle is aware of the soil situation in the district and for the past few years KVK is implementing different programmes to sensitize, bring awareness on improving soil fertility and soil health. In this regard KVK is continuously organizing training programmes and demonstrations on various aspects like STCR, Organic/Natural farming, PMDS application etc. KVK is not leaving a single opportunity to sensitize and promote the use of Organic Manures, Green manuring, Crop Residue incorporation, Navadhanya/cover crops etc. and making use of all its programmes for the purpose.

Sri K. Maheswara Reddy, who is also a pesticide dealer has attended 52 week DAESI training programme conducted by KVK during 2022-23. He was very much impressed by the idea of growing Navdhanya/PMDS crops preceeding to Kharif crop season for improving soil fertility and Soil Organic Carbon. In Kharif, 2023 he has grown PMDS in 2 ac of land where after incorporation of it, he took up Chillis crop and got 2680 kg/ac as against non PMDS plot where he got 2340 kg/ac with same management. In last two years, KVK has facilitated supply of 600 kits of PMDS seeds for interested farmers to take up. The results were very encouraging in Maize, Rice and Chillis.

Mr. Maheswara Reddy was very much impressed by the results and has convinced many of his pesticide customers to try this PMDS before their main crop and about 250 acres of land under his business jurisdiction was covered with PMDS crop in 2024 and PMDS kits were prepared and supplied by Maheswar Reddy. Seeing the response many farmers are coming forward to grow PMDS before main season in crops like Maize, Rice, Chillis

and Vegetables. Maheswarareddy wanted to seize this opportunity to make a business out of it and approached KVK for suggestion and guidance.

KVK has suggested and guided Sri Maheswara Reddy to establish a Bio-input Resource Centre as an Enterpreneural activity and to make regular business out of it. Through the BRC, he could take up procurement and supply of PMDS seed kits along with supply of some Organic inputs like Ghana Jeevamrith, Panchagavya, Neem Powder, Botanical extracts, Pheromone traps etc to needy farmers who are interested to improve their lands and also interested to transform some of their lands to Natural /Organic farming, to produce the needed food grains and vegetables for their own consumption and Rice and Pesticide free chillis for consumers.

Making use of KVKs knowledge and vast experience in establishing and running Bio-input Resource Centres, Maheswara Reddy has started a BRC named **Sri Shanmukha BRC Centre** at Gundupapala village to supply PMDS kits and other organic inputs for Natural farming / Organic Farming from January, 2025. During 2025, he prepared and supplied 600 PMDS kits to various farmers of the district.

Now, he has planned to supply 10000 PMDS kits during this year. KVK has given the crop wise seed weight formula for making PMDS kits with 31 types of crop seeds, totaling to 15 kg in each kit, which is sufficient for one acre.

**Output:**

The farmers who adopted growing of PMDS crop before Kharif and incorporated the biomass at 40-45 DAS and took up main crop during Kharif have got very good results in terms of Yield as well as reduced incidence of pests and diseases.

**The results in different crops are summarized as under:**

| Crop | Area (ac) | Yield (Kg/ac) | | No. of sprays for Plant Protection | | Addl. Net income (Rs/ac) | % improvement in Yield |
|---|---|---|---|---|---|---|---|
| | | With PMDS | Without PMDS | With PMDS | Without PMDS | | |
| Maize | 38 | 3245 | 2860 | 3 | 4 | 6,930-00 | 13.46 |
| Rice | 75 | 2,700 | 2,249 | 4 | 6 | 9,780-00 | 20.05 |
| Chillis | 27 | 2,435 | 2,190 | 19 | 23 | 47,325-00 | 11.18 |

The yield advantage of 11% in chillis has resulted in additional net returns of Rs, 47,325 which is convincingly very high and attracting many farmers to adopt PMDS in chillis.

**Performance of BRC during first year of its establishment (2025-26)**

| Product | Quantity (No.) | Cost Economics (Rs/kit) | | Total (Rs) | | Net income (Rs) | B C Ratio |
|---|---|---|---|---|---|---|---|
| | | Cost of Production | Marketing price | Total Cost (Rs) | Total Revenue (Rs) | | |
| PMDS kits | 628 | 1318 | 1600 | 8,27,704-00 | 10,04,800-00 | 1,77,096-00 | 1.21 |
| Cow based concoctions (lt) | 960 | 32.50 | 60.00 | 31,200-00 | 57,600-00 | 26,400-00 | 1.85 |
| **TOTAL** | | | | **8,58,904-00** | **10,62,400-00** | **47,325-00** | **1.24** |

With in two months of PMDS activity during April and May,2025 the farmer could able to earn a net income of Rs. 1,77,096-00 with a B C ratio of 1.21. With the success achieved and anticipated higher demand for PMDS kits for 2026 he is planning to produce and supply 10000 kits targeting a net income of **Rs.17,50,000/-** with an average margin of Rs. 175/- per PMDS kit. The projection is made considering the interest on capital that is needed for this activity.

**Outcome:**

Many farmers of chillis and paddy are coming forward to practice PMDS before main season, as they witnessed the superiority of this practice in bringing about considerable yield advantage at very little or no extra cost. The farmers of nearby villages have already placed the order for PMDS kits with Mr. Maheswara Reddy for this year.

**Impact:**

The department of Agriculture and RySS who are promoting the concept of Natural farming and Organic Farming have approached Mr Reddy for supply of PMDS kits for their cadre and farmers, where PMDS is a very important component in their crop production strategy. They have ordered for supply of 1500 kits during this 2026. Apart from this, the peers of farmer customers of Maheswara Reddy are also interested to purchase PMDS kits from him for this season. KVK is also in a big way promoting PMDS and facilitating its supply through this KVK nurtured BRC and projected demand for 2000 PMDS kits this year through KVK.

As it is a no or low cost, easily adoptable soil fertility improving technology, it could catch up further in coming days and the supply from one BRC is not sufficient to meet the growing future demand and this type of BRCs need to come up in all major panchayats to facilitate safeguarding of Soils by one and all farmers.

## Success Story 3:

### Boosting Chrysanthemum Yields through Shade Net Seedling Technology: -A Case Study of a Young Farmer"

**Situation analysis/Problem statement:**

Mr. Yugendhar Reddy, a 33-year-old young farmer educated up to 9$^{th}$ class from Seetharamapuram village of Bethamcherla mandal, Nandyal district, Andhra Pradesh, was previously procuring chrysanthemum (Sent Yellow variety) seedlings from various nursery sources such as Krishnagiri (Tamil Nadu), Kolar (Karnataka), Madanapalli and Rajahmundry (Andhra Pradesh). However, he consistently faced severe incidence of Fusarium wilt disease in his fields, which was also prevalent among farmers in nearby villages including Shankalapuram, Muddaram, Bainapalle, and Rudravaram. The disease led to reduced plant population, poor crop growth, and significant yield losses, often resulting in negative returns. The problem was aggravated due to the use of infected seedlings, improper crop management practices, and lack of crop rotation. Upon adopting the use of healthy, disease-free nursery seedlings raised from selected mother plants along with integrated disease management practices, the incidence of Fusarium wilt was significantly reduced. This intervention resulted in

improved plant health, higher yields, and enhanced productivity, demonstrating that scientific nursery management can ensure better returns even under small landholding conditions.

**Plan, Implementation and Support:**

Seetharamapuram village was adopted by the KVK- Yagantipalle, and Mr. Yugendhar Reddy was selected as a beneficiary under horticulture interventions. With technical guidance from KVK, he was encouraged to establish a shade net nursery for raising and supplying quality, disease-free chrysanthemum seedlings to the farming community. With financial support from the Department of Horticulture under a 50% subsidy scheme, he received ₹11 lakh out of the total investment of ₹30 lakh and established a shade net over 1 acre during May 2025. Under continuous KVK support, he successfully produced healthy, disease-free seedlings and supplied them to local farmers. He also adopted and promoted integrated disease management practices, including ensuring proper drainage, use of disease-free planting material, application of 100 kg FYM enriched with 1 litre*Trichoderma asperellum* and 10 kg neem cake at transplanting, followed by periodic application of *Trichoderma* through drip and soil drenching at 15–20 day intervals. In case of disease incidence, need-based application of Copper Oxychloride (3 g/litre) or Carbendazim (1 g/litre) was practiced. Additionally, he adopted integrated crop management practices by incorporating organic inputs such as pre-monsoon dry sowing (PMDS), application of 8–10 tonnes/acre of FYM, vermicompost, and neem cake to improve soil health and nutrient management, thereby enhancing crop productivity.

**Output and Outcome:**

After adopting shade net-based nursery production of quality planting material along with integrated disease management and improved technical practices, Mr. Yugendhar Reddy significantly enhanced his income and observed a marked reduction in Fusarium wilt incidence in his field as well as in farmers' fields using his seedlings. He produced about **14.62 lakh seedlings per batch (30–40 days)** and successfully raised **three batches during Kharif and Rabi seasons,** covering nearly **220 acres**. The total production reached **43.86 lakh seedlings**, with a selling price ranging from **₹0.50 to ₹2.00 per seedling** depending on demand, and an average price of **₹0.65 per seedling.** During 2025, he could produce only three batches due to initial constraints such as establishment of the mother block, limited skilled labour, and time required for shade net installation. However, from the next year onwards, he plans to produce **4–5 batches annually** to further enhance his income. During the lean (off-season) period, he efficiently utilized the nursery by raising seedlings of marigold, tomato, and banana on a pre-booking basis, ensuring continuous income generation.

**Nursery production:**

The cost economics of chrysanthemum nursery seedling production under shade net conditions revealed it to be a profitable enterprise. The farmer produced **43,86,848 seedlings annually,** indicating efficient nursery management and high productivity. The **total investment cost was ₹15,06,054,** which included depreciation of the shade net structure over 8 years. The enterprise generated a **gross income of ₹28,51,451,** resulting in a **net income of ₹13,45,397.** The **B:C ratio of 1.89** indicates strong economic viability, even after accounting for fixed

costs. This model proves that protected nursery cultivation is a sustainable and income-generating venture for farmers.

**Table-1: Cost economics of production of chrysanthemum nursery seedlings under shade net**

| S. No. | Production of seedlings / year | Cost of investment (Rs.) | Gross income (Rs.) | Net income (Rs.) | B:C ratio |
|---|---|---|---|---|---|
| 1 | 43,86,848 | 15,06,054 | 28,51,451 | 13,45,397 | 1.89 |

## Chrysanthemum cultivation:

The cost economics of chrysanthemum cultivation in 5 acres demonstrated high profitability and efficient resource utilization. The farmer achieved a total yield of **32.15 tonnes,** reflecting adoption of improved cultivation practices. The **cost of cultivation was ₹7,52,452**, while the enterprise generated a **gross income of ₹19,29,000**. This resulted in a substantial **net income of ₹11,76,548,** ensuring strong financial returns. The **B:C ratio of 2.56** indicates that the crop is highly remunerative. This success highlights chrysanthemum cultivation as a profitable option for enhancing farmers' income and livelihood security.

**Table-2: Cost economics of cultivation of chrysanthemum crop in 5 acre land**

| S. No. | Yield (t) | Cost of cultivation (Rs.) | Gross income (Rs.) | Net income (Rs.) | B:C ratio |
|---|---|---|---|---|---|
| 1 | 32.15 | 7,52,452 | 19,29,000 | 11,76,548 | 2.56 |

**Fig-1: Photos of chrysanthemum nursery under shade net**


**Fig-2: Photos of demonstration of fusarium wilt management in chrysanthemum**

## Impact:

Mr. Yugendhar Reddy's initiative in establishing a shade net nursery and adopting integrated disease management practices created a strong impact. Fusarium wilt incidence was drastically reduced, ensuring healthy

chrysanthemum crops and reliable seedling supply. His enterprise produced nearly 44 lakh seedlings annually, covering 220 acres, and generated a net income of ₹13.45 lakh, while cultivation on 5 acres added ₹11.76 lakh. Neighboring farmers benefited from disease-free seedlings, leading to improved yields and reduced losses. With B:C ratios of 1.89 for nursery and 2.56 for cultivation, his model proved both profitable and sustainable, offering livelihood security and replicable success for farmers in Nandyal district.

## Success Story 4:

### From Grain to Flower: A Young Farmer's Success in Floriculture Farming

**Situation analysis/Problem statement:**

At SHE&CS–KVK, Yagantipalle, it was observed that many farmers were cultivating maize continuously as a monocrop throughout the year. Initially, farmers expected higher production, but over time, the soil became hard, compact, and poor in organic carbon, leading to declining yields. Continuous maize cultivation also increased the incidence of pests and diseases, resulting in higher input costs and frequent crop losses. At the same time, expansion of maize area created market glut during harvest, causing unstable and low prices, making the crop less profitable. Farmers struggled to meet their family expenses due to irregular and reduced income from maize. In contrast, floriculture crops like Tuberose, Marigold Chrysanthemum and Crossandra offered an alternative with regular income through continuous harvesting. By adopting staggered sowing, farmers could ensure steady market supply and better prices. This situation highlighted the urgent need to shift from maize monocropping to diversified cropping systems for improving soil health, reducing risks, and ensuring sustainable income for farming families.

**Plan, Implement and Support:**

Mr. Mallikarjuna Reddy, a 30-year-old farmer from Yagantipalle village of Banaganapalle mandal, Nandyal district, educated up to 10th class, was selected as a beneficiary under horticulture interventions during 2025–26. Under the technical guidance of KVK, Yagantipalle, he shifted from continuous maize cultivation to floriculture in an area of 4.0 acres, allocating 3.5 acres to Tuberose and 0.5 acre to Marigold. KVK facilitated the supply of high yielding marigold hybrid seedlings such as Arka Abhi and Arka Bhanu developed by ICAR-IIHR. Regular field visits were conducted once in 10–15 days to provide need-based advisories on crop management. He adopted recommended Integrated Nutrient Management (INM) and Integrated Pest and Disease Management (IPM) practices for both crops, ensuring better crop health and productivity. With continuous technical support, he improved soil health through balanced nutrient application and reduced chemical usage by incorporating bio-inputs and eco-friendly pest management practices. To ensure stable income, a market linkage was established with a local merchant from Banaganapalle on a monthly payment basis, reducing market risk and price fluctuations. This planned intervention, timely implementation, and continuous support from KVK helped the farmer successfully transition from unprofitable maize cultivation to remunerative floriculture, ensuring regular and reliable income.

**Output and Outcome:**

After shifting from mono-cropping of maize to diversified floriculture cultivation and adopting high-yielding varieties along with improved technologies and technical interventions, the farmer successfully doubled his income. Earlier, maize cultivation resulted in relatively low yields and poor net returns. However, with the guidance and technical support from KVK Yagantipalle, he achieved higher productivity, better net returns, and an improved B:C ratio through floriculture crops. Encouraged by the profitable outcomes, he is now planning to further expand his floriculture area by cultivating an additional 4 acres of tuberose, 1 acre of chrysanthemum, 0.5 acre of crossandra, and 1 acre of marigold using drip irrigation and mulching technologies under continued technical support from KVK Yagantipalle. He established a strong market linkage with a local merchant, ensuring a stable and assured monthly income. He consistently receives remunerative prices of ₹52/kg for tuberose and ₹30/kg for marigold in every harvest throughout the cropping period, which significantly enhances his income stability and reduces market uncertainty. The economic performance of floriculture crops cultivated by the farmer clearly demonstrates the profitability of this enterprise. In marigold (varieties Arka Abhi and Arka Bhanu) grown in 0.5 acre, a yield of 2.75 tonnes was realized with a cost of cultivation of ₹15,326, generating gross returns of ₹82,500 and a net return of ₹67,174, resulting in a high B:C ratio of 5.38. Similarly, tuberose (variety Sugandham) cultivated over 3.5 acres produced an impressive yield of 81.77 tonnes. With a total cultivation cost of ₹12,33,500, the farmer achieved gross returns of ₹35,76,040 and a substantial net return of ₹23,42,540, with a B:C ratio of 2.89. These results highlight that floriculture crops, particularly marigold and tuberose, offer significantly higher returns compared to traditional cropping systems. The adoption of improved varieties and scientific cultivation practices not only enhanced productivity but also ensured better economic viability, making floriculture a sustainable and profitable alternative for the farmer.

**Table 1: Cost economics marigold and tuberose crops**

| Sl. No. | Crop | Variety | Area | Yield realized (t) | Cost of cultivation (Rs.) | Gross returns (Rs.) | Net returns (Rs.) | B:C ratio |
|---|---|---|---|---|---|---|---|---|
| 1 | Marigold | Arka Abhi Arka Bhanu | 0.5 acre | 2.75 | 15,326 | 82,500 | 67,174 | 5.38 |
| 2 | Tuberose | Sugandham | 3.5 acre | 81.77 | 1233500 | 3576040 | 2342540 | 2.89 |



**Fig-1: Photos of visits and interventions in marigold & tuberose**

**Impact:**

Mr. Mallikarjuna Reddy's transition from maize monocropping to floriculture created a strong impact on income and sustainability. By cultivating tuberose and marigold with improved varieties and scientific practices, he doubled his earnings and secured assured monthly returns. His tuberose crop yielded 81.77 tonnes with net returns of ₹23.42 lakh, while marigold added ₹67,174 with a high B:C ratio of 5.38. The intervention improved soil health, reduced pest incidence, and lowered chemical dependency through integrated management. With stable market linkages and remunerative prices, floriculture proved a profitable and replicable model for farmers in Nandyal district.

**Success Story 5:**

**Success Story on Castor hybrid ICH-5 in Nandyal district**

**Introduction:**

Castor is an important oilseed crop of A.P and is grown under semi arid and tropical areas. The yields are generally low due to scanty and ill distributed rain fall during the monsoon period. *This is mainly due to the following reasons.*

- ***The soils of castor growing areas in Kurnool district fall under Alfisols which are characterized by poor texture, shallow depth, less water holding capacity and low fertility.***
- **Non-availability of quality seed, meager water resources, poor adoption of agronomic and plant protection measures .**
- ***The cyclonic rains coupled with high relative humidity (>90%) during spike formation/development stage results in severe***

***incidence of Botrytis, which adversely affects the capsule formation& development.*** To overcome above constraints several on farm demonstrations were organized with castor hybrid ICH-5 developed at IIOR .

As it is predominantly grown in marginalized soils with little or no inputs further due to recurrent droughts and uncertain monsoon castor farmers are generally reluctant to invest in high production technology. In recent times, though good market prices have encouraged quite a good number of farmers to pursue castor cultivation with better investment and care. One of the important inputs of improved castor production technology is better seed and its timely availability which determines the output.

In Castor hybrid **ICH-5** with Improved production technologies (Improved variety, seed treatment, Soil test based fertilizer application, and IPM measures against botrytis) gave higher grain yield (1196Kg/ha), which was 23.04 per cent than that of obtained with farmers practice yields of 972Kg/ha in red soils under rainfed situation. The Economic Viability of improved technology over farmers practice was calculated depending on prevailing prices of input and output costs. The improved technologies resulted increased income with cost benefit ratio of 1:2.42/1.94.

The additional net income of the farmers was highest **ICH-5** with integrated crop management practices as Rs 10,892/- more than the ruling Private castor hybrids under rainfed situation.

**Output and Outcome:** This hybrid has spread very quickly in the district and also other castor growing districts of A.P including non-traditional areas because of its special features like high yielding, comes up well even when drought situations prevail during crop growth period, wilt resistant, bold seed type etc


To cater to the needs of the farmers seed production of ICH-5 was taken up in Farmers fields and KVK is met the seed demand by 3.9 percent of district requirement of castor seed. For three years the seed produced at adopted villages of KVK, .in collaboration with IIOR, Hyderabad.

**Impact:** This hybrid has spread very quickly not only to the interior pockets of the district but also to other castor growing districts and non-traditional areas because of its unique features like high yielding variety, comes up well even when drought situations prevail during crop growth period, wilt resistant, bold seed type etc. Farmers are reaping good returns due to the hybrid and area under Rabi castor is also increasing in the district.

## Success Story 6:

### Double Layer Farming System – Empowering Rural Youth with Sustainable Livelihoods

### Situation analysis/Problem statement

Livestock plays an important role as source of sustainable income under changing climatic scenario espcially rainfed farming syatem. Among the livestock fattening of ram lambs and backyard poultry are the promising sectors which are having good market demand and local needs. To make these two components in a single house, a two layer livestock housing system demonstration unit has been established at SHE&CS Krishi Vigyan Kendra, Yagantipalle, Nandyal distict during 2017 with the funds provided by ATARI (Zone-X).

The system has attracted many unemployed youth and farm women of across Nandyal and Kurnool districts and established such units. KVK provided technical support in establishing units and continuous guidance for their success.

Smt. Pushpa of Balapanur village, Panyam mandal is one amongest them who become farm women to successful entrepreneur. Being an educated farm women involved in various agricultural activites in their 7 acres of land, she also involved in community resource person of Natural Farming. She inspired with the advantages of the two layer system during her visit to KVK during 2023. The thoughts of her wife have accepeted by her husband Mr.Anil Kumar and supported in establishing the unit.

### Plan, Implement and Support:

A double layer livestock unit has been established with the technical support of KVK during June 2023 in an area of 216 sqft (18feetX12feet) to accommodate 20 ram lambs on elevated wooden fllor and 100 poultry on the lower side with capital investment of 1.4lakh. The crop residue i.e. blackgram haulms from their own farm is being fed to ram lambs along with daily supplementation of concentrate feed. The ram lambs and poultry are allowed to move freely in the paddock provided. She use to spent 90minutes daily for cleaning and feeding of the animals and poultry apart from her routein activities as house keeper. Soon she has established market within village and also received orders from colleges.

### Output:

A total of 60 ram lambs and 130 poultry were sold in a year from which a total of Rs.4.95 was realized as net income. With small capital and limited labour she got monthly net income of Rs.40.0 thousand which is twice

to their farm income. She proudly said "the income from rearing ram lambs and poultry helped to make their dreams true".

**Outcome:**

The success of Smt. Pushpa have inspired other farm women to establish four such units in surrounding villages viz. Kondajuturu and Koratamaddi villages of Panyam mandal.

**Impact:**

The success of the double layer livestock farming system model has inspired many rural youth in the district and the foot prints have increased to visit the demonstration unit at KVK. A total of 29 such units have been established in Nandyal district with the technical support of KVK within a span of two years.

| S. No | Mandal | With support of NLM | Self-finance |
|---|---|---|---|
| 1 | Kolimigundla | 1 | 1 |
| 2 | Owk | 1 | - |
| 3 | Banaganapalle | 2 | 11 |
| 4 | Dhone | | 2 |
| 5 | Panyam | | 3 |
| 6 | Gadivemula | - | 1 |
| 7 | Nandyal | 1 | 2 |
| 8 | Miduturu | 1 | - |
| 9 | Allagadda | 1 | 1 |
| 10 | Nandikotkuru | | 1 |
| | **Total** | **7** | **22** |

**Success Story 7:**

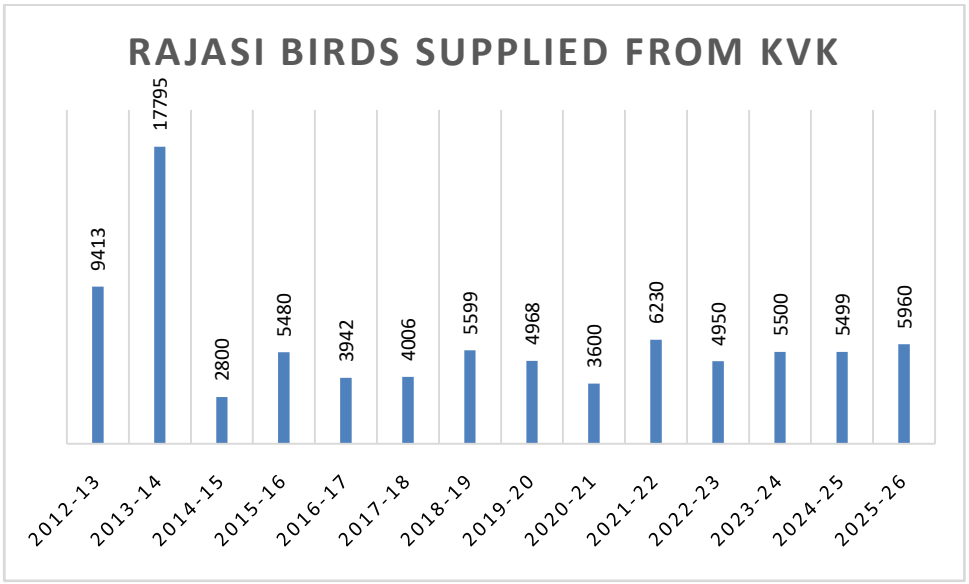
**Sustainable livelihood and nutritional security for rural families through backyard poultry**

Backyard poultry plays a crucial role to achieve nutritional security in rural areas. With an objective to create sustainable livelihood and to improve the egg and meat consumption in tribal and rural families, KVK, Yagantipalle initiated the activity during 2012-13 to promote backyard poultry by facilitating improved poultry breeds suitable to local climatic conditions. Different poultry breeds developed for backyard poultry were brought from different institutions and assessed its performance at KVK. Based on the results, Rajasri poultry breed was selected for promotion as it performed well in the backyards with regard to survivability and body weight gain.

**Methodology:**

Day old Rajasri chicks were brought from Poultry Research Station (formally AICRP on poultry), Rajendra Nagar, Hyderabad and reared for five weeks at Poultry nursery unit of KVK and supplied to the farmers with complete vaccinations. The farm women were trained at KVK on different aspects viz. feeding management, disease control and marketing.

A total of 80,882 Rajasri chicks of five weeks age were supplied from 2012 to 2025-26. These birds were supplied to farmers, other KVKs of Andhra Pradesh, NGOs and other line departments like DRDA and ATMA. Diagnostic visits were made along with the department of AH personnel and farmers were given advises with regard to feeding and medication.




**Performance of Rajasri birds:**

The genetic potential of Rajasri birds for its higher body weight gain and high egg laying capacity under field condition proved and cocks attain 1896grams and hens attain 1371grams at six months of age. The annual egg production was 165 with egg weight of 49grams. Average mortality at field condition was 7.6% (Krishna Murthy *et al* 2013).

A study conducted on economic impact of Rajasri birds indicated that net returns per bird was 221.02 and 207.67 and the weekly egg production was resulted as 3.61 and 3.52, sale price of eggs was Rs. 5.86 and Rs. 5.64for the birds supplied during 2017 and 2018 respectively (Nagarjuna Reddy *et al* 2020).

Another study conducted on performance of Rajasri birds indicated that of 30 chicks purchased, mortality stood at 16.66%, 36.66% were sold, 16.66% consumed, and 30% retained. Egg production generated both income (77.97% of 168 eggs sold monthly) and home nutrition (15.47% consumed). Significant improvements were observed post adoption: meat consumption frequency (d=2.38), egg consumption frequency (d=3.94), and annual egg intake nearly doubled (d=12.33); annual income rose by ` 16,634 (d=0.70). Employment generated 36.54 man-days annually, and was largely contributed by women and children. (Ravi Goud *et al* 2026).

**Impact:**

Rajasri birds at backyards improved weekly egg consumption to three to four times in a week from once in a week which assured nutritional security to rural families. Apart from this, rural farm women have realized monthly income of Rs.1800–2400 on sale of extra eggs and adult birds on rearing a unit of twenty Rajasri birds. Rearing of Rajasri birds have also generated entrepreneurship to 126 farmers of Nandyal district over a period of 12 years.

**Constraints:**

As the Rajasri breed is an improved poultry breed developed with multiple breeds having fast growth and more egg laying capacity. This breed donsn’t has brooding habit and hence not farmers are unable to multiply through natural brooding. This is gap is fulfilling by KVK through supply of chicks as per farmers need.

**Way forward:**

Farmers are being educated towards scientific rearing of backyard poultry and to overcome the above constraints through diagnostic visits, training programmes, and demonstrations. In addition to Rajasri, keeping the farmers demand in view, TANUVAS Aseel breed has been introduced during 2025-26. Adoptability and survivability is good and have good market demand and value.

## Success Story 8:

### Enhancing Cotton Productivity through HDPS Technology -Case of Shaik Khadar Bhasha

**1. Situation Analysis / Problem Statement:**

Cotton cultivation in the rainfed shallow red soils of Jalakanur village, Midthur cluster of Nandyal district, is highly vulnerable to climatic variability, particularly erratic rainfall and prolonged dry spells. Farmers traditionally adopt wider spacing of 120 × 40 cm with a low plant population of about 8,300 plants per acre, leading to sub-optimal utilization of land resources. This practice results in lower productivity (3.5-6.0 q/acre), increased susceptibility to drought and pink bollworm infestation, and prolonged crop duration requiring multiple pickings, thereby increasing labour costs. During the cropping season of 2023-24, the region experienced a 33% deficit in rainfall, which further aggravated yield losses and highlighted the urgent need for a climate-resilient, high-density planting system to improve productivity and resource-use efficiency.

**2. Plan, Implement and Support:**

To address these challenges, Krishi Vigyan Kendra (KVK), Yagantipalle introduced the High Density Planting System (HDPS) through Front Line Demonstrations (FLDs) on the farmer's field. Under this intervention, HDPS was implemented with a spacing of 90 × 15 cm, increasing the seed rate to 6 packets per acre compared to 2.5 packets under conventional practice. This resulted in a substantial increase in plant population to approximately 29,690 plants per acre. The hybrid RCH 971 BG II was used in both systems. Canopy management was carried out using Mepiquat Chloride (Chamatkar), applied at 50 DAS (1 ml/lit.) and 80 DAS (1.2 ml/lit.) to regulate vegetative growth and improve boll retention. Continuous technical guidance and field-level support were provided by KVK scientists throughout the cropping period.

**3. Output:**

The adoption of HDPS technology resulted in a significant improvement in crop performance. Increased plant population contributed to better canopy architecture, while the application of growth regulators reduced boll dropping and ensured uniform crop maturity and synchronized boll bursting. The number of picking rounds was reduced to two in HDPS compared to three to four in conventional practice, thereby lowering labour requirements. Over a three-year period, HDPS consistently outperformed the conventional method. The mean yield under HDPS was 7.47 q/acre compared to 6.02 q/acre under farmer practice, representing a 24% increase. The average net income increased from Rs. 21,342 to Rs. 31,007 per acre, and the benefit-cost ratio improved from 2.09 to 2.62. Notably, even under adverse conditions in 2023-24 with 33% deficit rainfall, HDPS recorded 27% higher yield than conventional practice.

**Table 1. Yield impact of the technology over three years:**

| Year | Yield (qtl/acre) | | Gross cost (Rs.) | | Gross income (Rs.) | | Net income (Rs.) | | B:C ratio | | Rain fall deviation in cropping period* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | HDPS | Farmer practice | HDPS | Farmer practice | HDPS | Farmer practice | HDPS | Farmer practice | HDPS | Farmer practice | |
| **2023-24** | 4.95 | 3.90 | 12680 | 12430 | 33660 | 26520 | 20980 | 14090 | 2.65 | 2.13 | - 33 % |
| **2024-25** | 8.02 | 6.20 | 18560 | 19860 | 54,536 | 42,160 | 35,976 | 22,300 | 2.94 | 2.12 | + 17 % |
| **2025-26** | 9.45 | 7.97 | 28,195 | 26,560 | 64,260 | 54,196 | 36,065 | 27,636 | 2.277 | 2.040 | +33 % |
| **Mean** | **7.47** | **6.02** | **19811** | **19616** | **50818** | **40958** | **31007** | **21342** | **2.62** | **2.09** | - |

## 4. Outcome:

The successful demonstration of HDPS led to increased confidence among farmers in adopting this improved technology. The practice began spreading horizontally to neighboring farmers and villages, indicating its acceptability and scalability. The technology contributed to reduced labour requirements due to fewer picking rounds and shortened crop duration, helping the crop escape terminal drought conditions. Additionally, improved input-use efficiency enhanced overall profitability, making HDPS a viable option for rainfed cotton cultivation.

## 5. Impact:

At the broader level, HDPS technology has contributed to a shift from conventional spacing to high-density planting in rainfed cotton systems, resulting in improved productivity and resilience under variable climatic conditions. Economically, it has enhanced farm income and strengthened the local agricultural economy. Environmentally, HDPS enabled better utilization of available soil moisture and reduced the impact of terminal drought and pest incidence, particularly pink bollworm. Institutionally, the initiative strengthened the linkage between farmers and KVK while promoting the effectiveness of FLD-based technology dissemination models. The experience of Shaik Khadar Bhasha clearly demonstrates that HDPS in cotton is a climate-resilient and economically viable technology for rainfed conditions. With appropriate canopy management and continuous scientific support, HDPS has proven effective in enhancing productivity, reducing climatic risks, and improving farmers' income in shallow red soil regions.

**YP-I field visit to farmer fields**

**Cotton harvesting at HDPS demonstration field**

## Success Story 9:

### Establishment of Millet Food Court for Nutritional Security and Economic Sustainability

**Situation Analysis:**

Millets are important traditional Crops in Andhra Pradesh growing in sizeable area. Particularly in Nandyal district Jowar is grown in an area of 43884 ha, Foxtail 1885 ha, Bajra 4543 ha. Millets are high energy, nutritious foods with good amount of dietary fiber and essential minerals compared to other cereals. The added advantage of Millets is the slow digestibility and it is good diet for people with lifestyle disorders. The awareness on use of millet products is increasing among consumers.

**Approaches, Interventions and outcomes:**

**Plan, Implement and Support:**

Two SHG WomenSmtS.Lakshmidevi w/o Samba Siva Reddy, SmtB.Rajeswari, w/o Rammohan Reddy from Yagantipallevillageinterested in establishing Millet Food Court to make millet products available at the door steps of the public with ensured quality. They approached KVK and underwent training in preparation of breakfast, lunch, dinner, sweets and savories with Millets for 3 days in 2024.

**Output:**

The Two SHG Women established Millet Food Court in 2025 Under the Name “Sri Sai millet Foods” at Banagnanapalle after attending training and started preparation of breakfast, lunch, dinner, sweets and savories with Millets and selling to the public.

**Outcome:**

They are Selling Jowar roti, Ragi Roti, Jowar, Ragi, Bajra Idlis, Ragidosa, Jowar Pongali, Korra Bisbellie Bath, Proso Curd rice, Korra Payasam etc… They created employment for 3 fellow SHG women by paying Rs.300/-/day / each for 25 days in a month. She is getting an net income of Rs. 21,250/month.

**Impact of Intervention:**

Millet Food Court established by SHG Women is an inspiration to many enthusiastic entrepreneurs throughout the district. They became well known in the district for millet food recipes. Students from Agri clinics and Agri business Colleges, SHG women members, Visiting and interacting.

**Inauguration of Millet Food Court**

**Staff Of Women Development &Child welfare Visit to Food Court**


**Millet Meal serving to customers**

## Success Story 10:

### Establishment of Dhal Processing Units for Economic Sustainability

**Situation analysis/Problem statement:**

Pulses are important traditional Crops in Nandyal District, In Kharif Redgram is grown in an area of 68,660 hac and Bengalgram is grown in 1,61,142 hac in Rabi. The food habits of people of this region are mainly depending on Redgram and Bengal gram based recepies in daily menu. Average consumption of Redgram is 25-30kgs/annum/household and Bengal gram 25kgs/annum/household. Though there is a lot of demand for dhal for house hold consumption due to lack of proper processing facilities at door steps of farm families they depend on machineries with low output (55 to 58kgs/qtl).

The decentralized, small scale food processing is advantageous for Economic Sustainability for women. Keeping this in view, KVK focused on establishment of small scale food processing units at farmgate.

**Plan, Implement and Support:**

Rural Youth Entrepreneur Sri Muneswar Reddy S/o Lakshmi Reddy, Govindapalle Village OfSirivella Mandal Visited KVK to establish Mini Dhal Processing Unit. He Established Grader cum Sorter, Mini dhal mill, Boiler and Dryer by investing 6.0lakh and Shed Cost, Electricity supply Rs. 20.0 lakh. by taking loan under PMFME.

KVK extended technical guidance right from the purchase of machineries till the processing of dhal. The entrepreneurs purchased dhal processing Unit for Rs. 6,40,000/- from Jalaram Engineering works, Akola, Maharashtra (A Franchiser of dhal processing machinery developed by Dr PDKV, Akola) and are doing processing activity i.e., dehuking and processing of Redgram, Bengalgram, greengram and Black gram.

**Output:**

He got expertise in running dhal processing units and started dehusking of Redgram, Bengalgram, Greengram and Blackgram.

**Outcome:**

His turn over is 200qtls–Redgram @ Rs.500/-/Qtl,100qtls-Blackgram @ Rs.500/Qtl (with an output of 78 to 80 kgs/qtl) for a period of 4 to 5 months during the year and earning an annual net income of Rs.1,50,000/-.

**Impact of Intervention:**

The income generating activity helped him as alternate income source. He is known in the sirivellamandal for dhal processing activity and meeting Processing demands of 18 villages.

**Success Story 11:**

## Establishment of Wooden Pressed Oil Unit for Economic Sustainability

**Situation analysis/Problem statement:**

Wood-pressed oil (also known as wood cold-pressed oil) is highly beneficial for health compared to refined oils. It is extracted at low temperatures without chemicals, allowing the oil to retain natural nutrients, antioxidants (like Vitamin E), and anti-inflammatory properties that improve heart health, boost immunity, and aid digestion.

The decentralized, small scale food processing is advantageous for Economic Sustainability for women and rural youth. Keeping this in view, KVK focused on establishment of small scale food processing units at farm gate.

**Plan, Implement and Support:**

KVK Motivated rural youth in establishing food processing units for income generation, Dr. Manohar, M.Tech, IIT-Chennai approached KVK for establishment of wooden pressed oil unit,. With technical Support from KVK he purchased two Wooden Pressed Oils Units, by investing 10.0 lakh (Machioneries-6.0 lakh, Shed-2.0lakhs, Branding, Labelling & packing- 2.0lakh).

KVK extended technical guidance right from the purchase of machineries till the processing of Oils, Packing, Branding, labeling and FSSAI Registration etc. He established Wooden Pressed Oils Units at Ayyaluri Metta, Nandyal and started Preparation of Different Oils.

**Output:**

He got expertise in running Wooden Pressed Oils unit and started production of Groundnut, Sesame, Sunflower & Coconut oils under the brand name “Sri Lakshmi’s Wooden Pressed Oils” (SLFP).

**Outcome:**

All the Oils are Truthfully Labelled, Lab tested, Marketing through Local Super Markets, Selling Outside the District, Annual Production: 5000 lts @ Rs.350/-lt, Gross Income: Rs. 17,50,000.00,Net Income: Rs, 5,25,000.00.

**Impact of Intervention:**

The income generating activity helped him as alternate income source. He is known in two to three mandals for Wooden pressed oils. The business has reached across the district with nearly 890 consumer base. Young and enthusiastic Students, SHG women are visiting and interacting to take up as enterprising activity at their respective places.


**Success Story 12:**

## Organic Path to Prosperity – The Story of K. Bala Maddilety

For years, farmers in Andhra Pradesh relied on High-Yielding Varieties (HYVs) of rice such as BPT-5204 and NDLR-7. While these varieties initially promised higher yields, they gradually led to soil degradation, pest outbreaks, rising input costs, and health concerns. Against this backdrop, Mr. K. Bala Maddilety, a farmer from Jillella village in Nandyal district, chose a different path—embracing organic rice farming with indigenous varieties.

### Farmer Profile

**Name** : Mr. K. Bala Maddilety
**Age** : 47 years
**Village** : Jillella, Gospadu Mandal, Nandyal District, Andhra Pradesh
**Farm Size** : 6 acres
**Education** : Intermediate
**Experience** : 17 years (5 years in organic rice farming)

### The Turning Point:

Until 2020, Mr. Maddilety cultivated HYVs using chemical fertilizers and pesticides. Though yields were high, the hidden costs were severe and he was not happy with the conventional farming. His turning point came after attending a training program and exposure visit organized by Krishi Vigyan Kendra, where he witnessed the benefits of organic farming. Inspired by success stories of fellow farmers, he decided to transition to organic cultivation.

### Organic Practices Adopted:

Followed Green manuring with sun hemp, application of farmyard manure, vermicompost, Jeevamrutham, and Panchagavya. Pest & Disease Management with Neem oil sprays, Tricho cards for stem borer, and Pseudomonas for disease control.Indigenous rice varieties such as Kalabhat, Chittimuthyalu, Mapillai Samba, Shivani Samba, Kalajira, and Navara. He saved his own seeds each season, reducing market dependency.

### Economic & Environmental Impact:

Despite a slight reduction in yield, the premium price of organic rice and reduced input costs significantly boosted his profitability. Soil organic carbon also improved, reflecting healthier soils.

### Marketing & Recognition:

Mr. Maddilety sells his rice under branded packaging through: Local organic stores and fairs, Farmer's markets in Nandyal and Kurnool Kamadhenu Siri Santha (monthly fair at Market Yard, Nandyal). His efforts earned him the "Best Organic Farmer" award from ANGRAU and farmer federations.

**Social Impact:**

- Inspired 60+ farmers in his village and nearby areas to adopt organic paddy cultivation.
- Conducts field demonstrations for agriculture students.
- Collaborates with agricultural universities and APCNF for native variety trials.

**Future Vision:**

- Establish a small organic rice processing and packaging unit.
- Launch an agritourism center to showcase traditional rice farming practices.

**Conclusion:**

Mr. K. Bala Maddilety's journey from chemical-based farming to organic rice cultivation demonstrates that sustainability and profitability can go hand in hand. By reviving indigenous rice varieties and adopting eco-friendly practices, he not only improved his own livelihood but also inspired an entire community. His story is a beacon of hope for farmers seeking resilience, better income, and healthier soils.

## Success Story 13:

### From Engineer to Agripreneur: A Model of Sustainable and Profitable Farming

K. Harshavardhan Reddy of Gulladurthy village, Koilkuntla mandal, is a remarkable example of how scientific knowledge, innovation, and social responsibility can transform agriculture into a sustainable and profitable enterprise. With a strong academic background and a clear vision to contribute to society, he chose agriculture not merely as a livelihood, but as a mission to improve farming systems and farmers' livelihoods.

Applying his engineering and management skills, he practices **large-scale, professionally managed farming,** operating nearly**200 acres across multiple locations** in rayalasema region with hired staff and systematic supervision. He has successfully integrated **crop production with livestock,** using **farmyard manure from cattle** to improve soil fertility and reduce dependence on chemical fertilizers. His farming philosophy strongly emphasizes **Good Agricultural Practices (GAPs)** such as **Integrated Nutrient Management (INM), Integrated Pest Management (IPM), PMDS,** and regular application of **organic manures.**

**About the Farmer:**

- **Name** : K. Harshavardhan Reddy
- **Village** : Gulladurthy
- **Mandal** : Koilkuntla
- **Total Farm Area** : 200 acres (10 acres owned, remaining contract farming)
- **Farming Experience** : Since 2014
- **Educational Qualification** : M. Tech in Power Systems from Jawaharlal Nehru Technological University (JNTU), Anantapur

### Reasons for Joining Farming:

**Despite having a stable professional career, voluntarily entered agriculture due to:**

- A strong social commitment toward farmers and rural development.
- Desire to apply scientific and technical knowledge for improving farm productivity.
- Interest in promoting cost-effective and sustainable farming practices.

### Early Agricultural Experience: Poultry and Field Crops:

- Engaged in poultry farming during 2011–2014, gaining practical experience in agribusiness management.
- Cultivated crops on 10 acres leased from Bensisan village during the initial phase.
- Expanded farm acreage significantly after 2017, focusing on diversified agriculture.

### Innovative Crop Management Practices:

Mr. Harshvardhan Reddy strongly believes that reduction in cost of cultivation, rather than only yield enhancement, is the key to higher farm profitability. He adopted Integrated Nutrient Management (INM) and Integrated Pest Management (IPM) practices across crops, which resulted in lower input costs, improved soil health, and higher net returns.

### Key Innovations: INM and IPM:

- Judicious use of chemical fertilizers combined with organic manures, bio-fertilizers, and crop residues.
- Adoption of need-based nutrient application based on crop growth stages.
- Reduction in pesticide usage through:
    - Regular crop monitoring.
    - Use of bio-pesticides, pheromone traps, and neem-based formulations.
- Encouragement of natural enemies, thereby reducing pest resurgence.
- Improved soil fertility and moisture retention, leading to stable yields.

### Crop-wise Performance:

| Sl. No. | Crop | Variety | Cost of cultivation (Rs.) | Yield (Qtl) | Gross income (Rs.) | Net income (Rs.) | B : C Ratio | Area (ac) |
|---|---|---|---|---|---|---|---|---|
| 1 | Paddy | NDLR, BPT | 28400 | 36 | 64800 | 36400 | 2.28:1 | 20 |
| 2 | Maize | Private | 24560 | 34 | 64600 | 40040 | 2.63:1 | 20 |
| 3 | Ground nut | Visita | 41250 | 16 | 120000 | 78750 | 2.91:1 | 10 |
| 4 | Chick pea | NBeG-452 | 19590 | 10 | 16500 | 52000 | 0.84:1 | 90 |
| 5 | Black gram | VBN, TBG-104 | 36620 | 8 | 64000 | 27380 | 1.75:1 | 20 |
| 6 | Redgram | Colombo | 15340 | 7 | 57050 | 41710 | 3.72:1 | 10 |

Through scientific input management, he achieved competitive yields with comparatively lower production costs, significantly improving net income per acre.

**Diversification into Horticulture:**

Recognizing the importance of diversification for income stability, Mr. Harshvardhan Reddy expanded into **horticultural crops**, which now form a major component of his farming system.

**Details of cost economics of horticulture crop:**

| Sl. No. | Crop | Cost of cultivation (Rs./acre) | Yield (qtl/acre) | Gross income (Rs./acre) | Net income (Rs./acre) | B : C Ratio |
|---|---|---|---|---|---|---|
| 1 | Mango | 35,000 | 40 | 1,20,000 | 85,000 | 3.4 : 1 |
| 2 | Sweet orange | 45,000 | 100 | 2,00,000 | 1,55,000 | 4.4 : 1 |
| 3 | Guava | 30,000 | 80 | 1,20,000 | 90,000 | 4.0 : 1 |
| 4 | Custard apple | 20,000 | 30 | 75,000 | 55,000 | 3.7 : 1 |
| 5 | Jamun | 25,000 | 25 | 75,000 | 50,000 | 3.0 : 1 |
| 6 | Drumstick | 40,000 | 120 | 1,80,000 | 1,40,000 | 4.5 : 1 |

**Major Gains and Impact:**

- Reduced cost of cultivation through INM and IPM.
- Higher net income without excessive dependency on chemicals.
- Improved soil health and sustainability.
- Better resilience to pest outbreaks and climatic variability.
- Employment generation for local rural youth.
- Acts as a role model and knowledge source for neighboring farmers.

**Conclusion:**

The success story of K. Harshvardhan Reddy clearly demonstrates that scientific farming, when combined with education and innovation, can make agriculture both profitable and sustainable. His emphasis on cost reduction rather than yield maximization alone has helped him achieve better net returns and long-term farm sustainability. Today, he stands as an inspiration for educated youth to consider agriculture as a viable, respectable, and impactful profession.

**Impact of KVK activities (Not to be restricted for reporting period):**

| Name of specific technology/skill transferred | No. of participants | % of adoption | Change in income (Rs.) | |
|---|---|---|---|---|
| | | | Before (Rs./Unit) | After (Rs./Unit) |
| Seed production | 542 | 34 | 48,000 | 56,000 |
| Bioinputs production | 348 | 12 | 14,000 | 23,000 |
| Vermicompost production | 346 | 7 | 4,0 lakh/annm | 5.5lakh/anum |
| Basic & Advanced Tailoring | 138 | 84.7 | - | 6500.00 |
| Blouse Designing | 58 | 89.6 | 4500.00 | 7500.00 |
| Jute Bag Making | 76 | 55.2 | 3500.00 | 5500.00 |
| Millet Value Added Products | 15 | 73.3 | | 6500.00 |

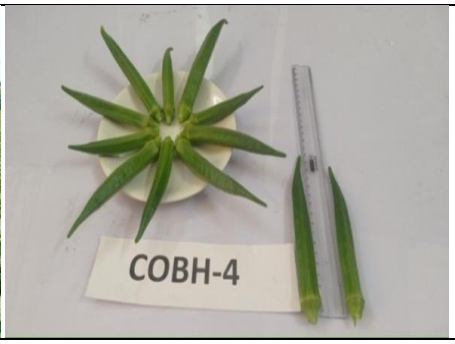
NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants.

**Impact of five select technologies assessed/demonstrated/popularized by the KVK in the district (in QRT format)**

# Box item for APR 2025
**(Similar to APR 2024)**

Name and contact details of farmer, few lines of farmers statement / achievement, good quality photo.

| From Vision to Prosperity through fattening of ram lambs | |
|---|---|
| **Name** | Sri Srinivasa Rao<br>Shantinagar Village<br>Sirivel Mandal, NandyalDist |
| **Contact details** | Shantinagar Village<br>Sirivel Mandal, NandyalDist<br>Phone no.9490656954 |
| **Farmer statement / Achievements** | • He took a bold step toward transforming his livelihood. With a clear vision of building a sustainable and profitable livestock enterprise, he invested ₹21.60 lakh to construct a 3,600 sq.ft double layer livestock unit with technical support of KVK.<br>• He adopted scientific feeding and management in rearing of rams<br>• The stock of 400 ram lambs and 500 poultry are being maintained throughout the year<br>• He is earning a net income of Rs.3.18 lakh per month apart from agriculture. |
| **Photo** |   |

| | | |
|---|---|---|
| **Name** | **:** | Mr. Y. Chandra Sekhar Reddy |
| **Contact Details** | **:** | Yagantipalli (Vi), Banaganapalle (Ma),<br>Nandyal district, Andhra Pradesh-518 124 |
| **Farmers Statement/Achievements** | **:** | • The farmers are readily accepted and convinced with the performance of Okra hybrids Arka Nikita and COBH-4 as they are tenderer, dark green pods and having good market preference.<br>• Noticed the resistant to YVMV disease in COBH-4 hybrid and tolerance in Arka Nikita hybrid.<br>• He got good yield of 16.17 t/ha in okra hybrid COBH-4, with net income (Rs.1,69,616) and CB ratio (2.49) in 1 ha of land through KVK OFTs. |
| **Photo** | **:** |     |

| | | |
|---|---|---|
| **Name** | **:** | M. Manasa W/o Haranath |
| **Contact Details** | **:** | Nandyal,<br>Nandyal district, Andhra Pradesh-518 124 Mobile No: 9618974717 |
| **Farmers Statement/Achievements** | **:** | In 2024, Mrs Manasa received training on millet value addition, learning to prepare millet-based breakfast, lunch, dinner items, sweets, and savories.<br><br>• Following the training, she established *Prakruthi Millet Food Court* in Nandyal, offering a wide range of dishes such as jowar roti, ragi roti, bajra idlis, ragidosa, pongali, korra bisibelle bath, proso curd rice, and korra payasam.<br>• The enterprise generated employment for 3–8 individuals, each earning ₹400 per day for 25 working days in a month, thereby supporting rural livelihoods.<br>• Home delivery services were launched in partnership with Zomato, expanding consumer access and convenience.<br>• Millet snacks are regularly supplied to the district administration's *Spandana* programme and to the Agricultural College, Mahanandi, worth ₹1.5 lakh.<br>• The College of Agriculture, ANGRAU, attached 12 internship students to gain hands-on experience in millet value addition.<br>• The unit consistently earns a net income of ₹3,000 per day (for 25 days a month), demonstrating both economic sustainability and the nutritional importance of millet foods. |
| **Photo** | **:** |  |

**One page report on skilling - outcome of skilling - entrepreneurship development programmes conducted, enterprises established, handholding by KVK - outcome in terms of income, employment generated etc.**

## 1. Promotion of Eco-Friendly Jute Bag a Success of SHG Women

**Name** : Smt V. Sulochana w/o V. Sudhakar

**Address** : H. No: 2-91, Rangarajupeta, Koilakuntla (P&M), Nandyal (dt.), Andhra Pradesh-518124.

**Mobile No.** : 6305262940

### Situation analysis/Problem statement:

Women in rural areas are actively seeking employment opportunities that can provide sustainable income and meet market demand. With increasing awareness about eco-friendly alternatives, there is a growing demand for reusable and biodegradable products.

Despite this demand, rural women often lack access to organized, market-linked enterprises. Plastic carry bags continue to dominate, limiting opportunities for eco-friendly alternatives. Without proper training, support, and infrastructure, women are unable to tap into profitable ventures like jute bag making, which could simultaneously generate income and reduce environmental pollution.

### Plan, Implement and Support:

To promote eco-friendly jute bags, KVK organized one-month training in 2025 for two SHG women groups (25 members) in collaboration with Indira Kranthi Patham, DRDA, Koilakuntla. Inspired by the training, six SHG women led by Smt. V. Sulochana (W/o Sudhakar) came forward to establish a Jute Bag Making Unit. KVK supported the group by facilitating the purchase of stitching machines and raw jute materials from the National Jute Board, Hyderabad. The women invested ₹6,00,000 initially, mobilizing loans from Mandal Mahila Samakhya and local banks, thereby laying the foundation for a sustainable, market-oriented enterprise.

### Output:

The SHG women began producing jute bags of various sizes, adding creative value with laces, patchwork, and ethnic cotton materials. Alongside technical skills, the women learned essential business practices such as cost calculation, pricing strategies, and profit margin analysis. They understood how to manage investments, calculate returns per bag, and identify market demand. Training also strengthened their skills in record-keeping, group coordination, and customer engagement, enabling them to run the unit as a sustainable enterprise.

### Outcome:

The trained SHG women launched their products under the brand name *SKV Eco-Friendly Jute & Cloth Bags*. They are now stitching 1,800–2,300 bags per month, creatively designed with varied colour combinations and value additions. The bags are marketed through retail shops, local markets, weekly shandys, and Rural Retail

Stores opened by DRDA across five mandals, as well as through Online Digital Commerce (ONDC). With effective

**Impact of Intervention:**

In 2025, the district's first Jute Bag Making Unit was established by an SHG women's group, and it has been running successfully since. The eco-friendly bags stitched by the unit gained strong demand, with line departments placing orders for cloth bags for seed packing, as well as jute bags, files, and pouches for meetings. To meet this rising demand, two additional stitching machines were purchased, expanding production capacity. Beyond economic gains, the initiative significantly boosted the self-confidence of rural women, enabling them to see themselves as entrepreneurs. Their active participation and success enhanced their social status within the community, positioning them as role models for other women to take up market-linked enterprises.

**Supporting Quotes & Images:**

**Training SHG Women on Jute Bag Making At Mandal Mahila Samakhya, Koilakuntla**


**Inauguration of Jute Bag Making Unit**

**Online Orders Packing**


**Online bags**

**One case of successful technology application and dissemination: a technology which has passed through OFT, FLD, Trainings, Mainstream Extension (State Department of Agriculture), large scale adoption by farmers (in terms of area, additional income, input savings, saving of natural resources *etc*.)**

## Inter Cropping systems for drought mitigation

## Details of the technology:

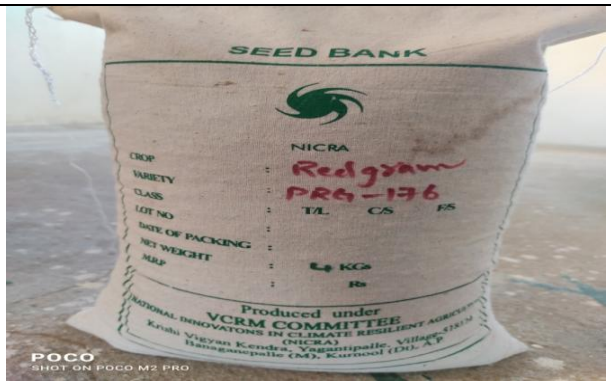
Adverse weather conditions such as delayed onset of rains and prolonged dry spells are a recurring challenge in rainfed agriculture, often resulting in heavy economic losses to farmers due to partial or complete failure of sole crops. In Nandyal district, pigeon pea is cultivated on nearly **45,000 hectares**, but its productivity is highly constrained by the amount and distribution of rainfall during the monsoon. Being a late-maturing, tall, wide-spaced crop with a deep root system, pigeon pea can effectively accommodate short-duration, fast-growing, and short-statured companion crops like millets and pulses, making intercropping a viable and climate-resilient alternative. To safeguard farmers against drought-induced crop failure, more than **1,250 demonstrations** have been organized over the past decade on the **Redgram + Setaria (1:5) intercropping system**, using different varieties under rainfed conditions. Among these, the combination of **Red gram Ujwala (PRG176)** and **Setaria SIA3088** consistently proved superior in both On-Farm Trials and demonstrations. Seed availability was ensured through NICRA seed hubs and local seed entrepreneurs, enabling widespread adoption across the district and neighboring regions. This system not only stabilizes yields and diversifies farmer income but also strengthens seed supply chains, enhances resilience, and builds farmer confidence in adopting improved practices, thereby transforming risk-prone rainfed fields into sustainable, income-generating enterprises.

## Performance and Impact of Technology:

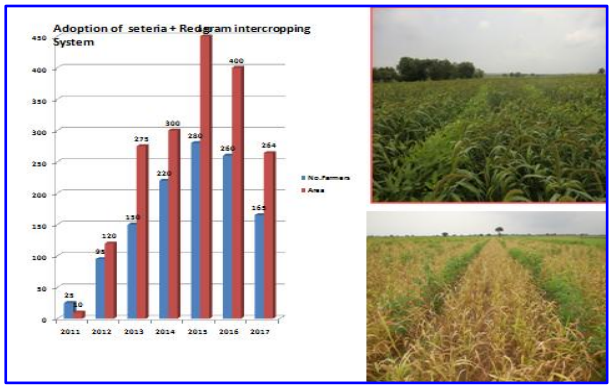
In order to utilize the bi-model distribution of rainfall and also to insure against crop failure due to drought during crop growth period, millet based inter cropping systems were demonstrated. Redgram + Setaria (1:5) inter cropping systems in the village, along with sole crop of Redgram/Setaria in order to increase cropping intensity and net returns of the farmers. The results indicated that, among intercropping of pigeonpea+ setaria resulted in maximum LER pigeon pea equivalent yield and (1466 kg /ha) than sole pigeon pea. Ahmad and Prasad (1996) also reported higher LER with little millet + Pigeon pea intercropping system. The results of the demonstrations revealed that Net returns with Pigeon pea+ Setaria was Rs 60595/ha.

**Results of Redgram +Setaria inter cropping systems on yields and income**

| Crop/Cropping System | Seed yield (kg/ha) | Fodder (kg/ha) | Cost of cultivation (Rs/ha) | Gross income (Rs/ha) | Net Income (Rs/ha) | B:C ratio |
|---|---|---|---|---|---|---|
| Sole Crop (Setaria) | 1745 | 2617 | 31300 | 55840 | 24540 | 1:1.78 |
| Redgram+Setaria 1:5 | 1690+745 | 2197 | 49360 | 109955 | 60595 | 1:2.22 |








**Up-scaling:**

The technology is well suited in the zone as bimodal distribution of rainfall is a common phenomenon. As the system is like crop insurance it can be promoted across the rainfed areas and the technology is spread in rainfed mandals of Nandyal district.

## Linkages

**Functional linkage with different organizations**

| | |
|---|---|
| NICAR-CICR, Nagpur | Implementing special project on cotton at KVK jurisdiction |
| NAARM, Hyderabad | SCSP |
| CRIDA | SCSP, CRP-CA |
| ATMA | Trainings |
| State Dept. of Agriculture | Diagnostic field visits and trainings |
| MANAGE | DAESI |
| CRIDA | Implementing Climate resilient technologies |
| ANGRAU | Technical support |

# Status Report of CHC

| No of villages covered with CHC | Name of Mandals | No of farmers |
|---|---|---|
| 61 | Banaganapalli, panyam Owk, Koilakuntla and Bethamcherla(5) | 272 |






## AWARDS and RECOGNITIONS

**Best Extension worker Eruvaka Foundation award**


**M. Adinarayana, SMS (Hort.), Received Best Poster Presentation Award during "International Conference on Rainfed Agriculture: Building Pathways for Resilience & Sustainable Livelihoods" conducted by Indian Society of Dryland Agriculture.**

**Received Eruvaka Foundation Award For Best Extension Professional - Homesciene during Kisan Mahostav Celebrations Organized by Eruvaka Foundation on 26/9/25 At KL University, Guntur**

**Received JaiKisan Foundation Award For Best Extension Professional - Homesciene during National Farmers's Day Celebrations Organized by Jaikisan Foundation on 23/12/25 At ZP Office, Ananthpur**

# PHOTOS

## OFTs


**STCR equation based Nutrient management in Chilli**


**Organic farming in Rice**

**Assessment of Performance of Maize based cropping sequences**


**Assessment of Performance of Real time contingency measures in Rainfed Redgram**


**Assessment of different management options for Blast management in Rice**

**Visit to OFT in Groundnut at Kothakota**

**Assessing the performance of marigold hybrids Arka Abhi & Arka Bhanu**

**Assessing the performance of onion vareities Red-4 &Fursungi**


**Assessing the effect of distillery stillage supplementation on growth performance in post weaned lambs**

**Assessing the effect of distillery stillage supplementation on growth performance in post weaned lambs**

**Assessing the production and reproduction performance of buffaloes on supplementation with different mineral mixtures**

**Assessing the production and reproduction performance of buffaloes on supplementation with different mineral mixtures**

**Assessment Of Fortified Finger Millet Varieties for Value Addition**


**Assessment Of Fortified Finger Millet Varieties for Value Addition**

# FLDs

**Soil test based nutrient management in Bengalgram**

**Demonstration onSaline tolerant variety in Rice**

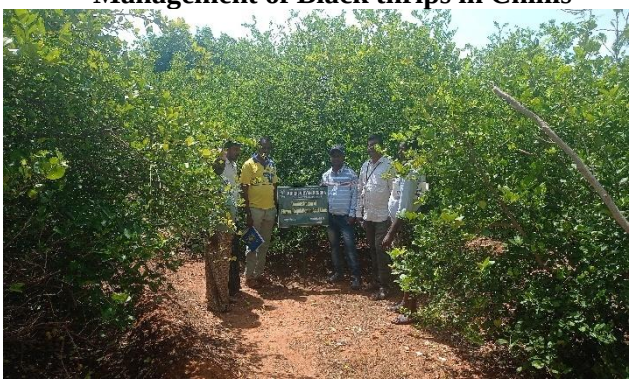
**Intercropping system with Setaria**

**Zero tillage Maize cultivation**

**Management of Sheath Blight in Maize**

**Management of Black thrips in Chillis**

**Demonstration on management of fusarium wilt in Chrysanthemum**



**Demonstration on flower regulation in Acid lime**

**Demonstration of Ovisynch protocol in Buffalo heifers**

**Demonstration of Scientific management of Lambs to reduce neonatal mortality**

**FLD On Green Chillie Powder**

**FLD On NutriGardens**

## Trainings (Farmers & Farm Women)

**Training on Soil testing**

**Training on Soil Health Management**

**Training programme on ICM in Mango**

**Training programme on ICM in Chilli**

**Training programme on Marketing Strategies for Strengthening FPO's**

**Farmers Training on Govt. Schemes**


**Training ProgrammeOn Food Processing & Value Addition-ATMA**

**Training Programmeon Importance of Nutri Cereals-ATMA**

## Trainings (Rural Youth)

**Training on Vermicomposting technology**

**Internshipprogramme on propagation methods in horticulture crops**

**Training programmeon Nursery Management**


**Training Programmeto Women And adolescents On Blouse designing**


**Skill Training Program On Jute Bag making**

## Trainings (Extension Functionaries)


**Training on Soil Sample collection**

**Training on double layer farming**

**Training on Biofertilizers and Biopesticides**

**Pesticide Residue Management to input dealers under DAESI**

**Trainingprogramme to DAESI Dealers**


**Exposure visit to KVK**


**Awareness on G-RAM-G Bill to DAESI Dealers**

**Training Programme to Anganwadi Teachers and Supervisors on Nutrigardens&NutriThali**

## Method Demonstrations

**Method demonstration on appication of CREMIT in Cotton for PBW management**

**Method demonstration on preparation of Jeevamrutham**

**Method demonstration on soil application of Trichoderma culture in Chrysanthemum**

**Method Demonstration on Value Addition to Local Foods**

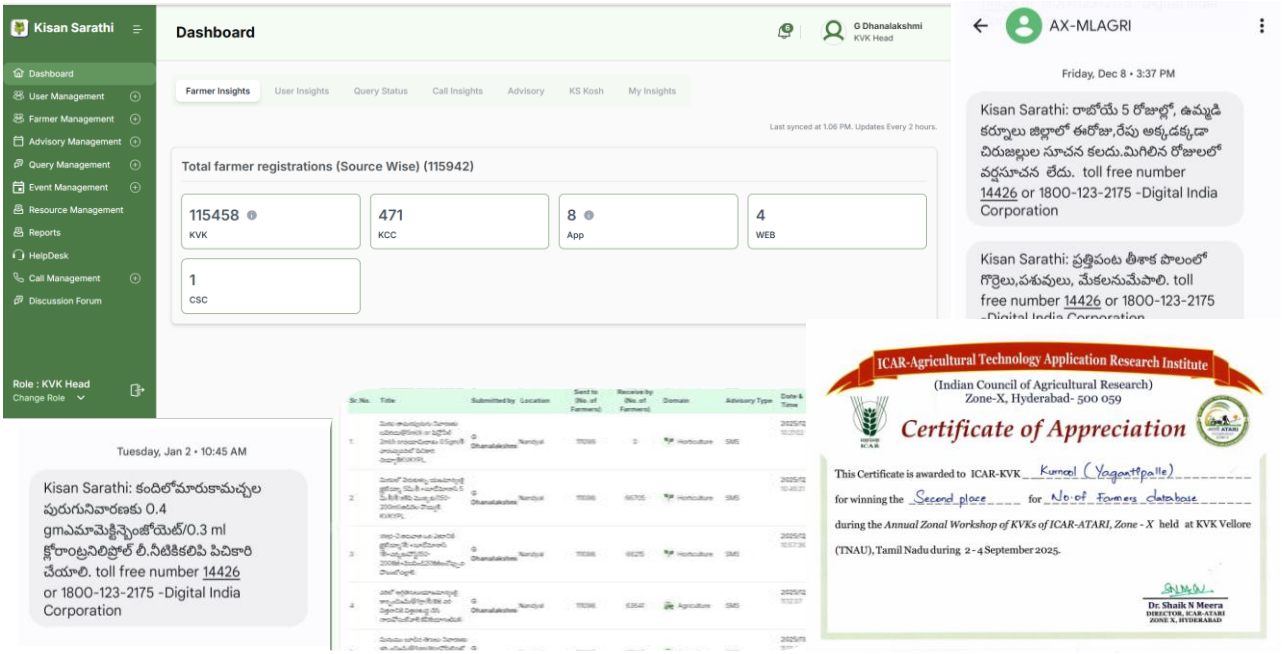
## Viksit Krishi Sankalp Abhiyan

No. of Villages covered: 138
No. of Farmers covered: 19463

## One photo for Annual Zonal Award

**Red gram + Setaria intercropping as climate Resilient technology**

# Kisan Sarathi




**Registered 1,15,458 farmers under Kisan Sarathi**

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