

**ANNUAL REPORT  
(OCTOBER – 2004 TO SEPTEMBER – 05)**

1. Name and address of the : **Krishi Vigyan Kendra,**  
KVK with Pin code

**Regional Agricultural Research Station,**

**PB.No-18, Bijapur-586101**

Telephone with STD code

|                | STD Code                  | Phone No. |
|----------------|---------------------------|-----------|
| Office         | 08352                     | 230758    |
| Residence      | 08352                     | 276518    |
| Email Address: | kvkbijapur@rediffmail.com |           |
| Web site:      | -                         |           |
| FAX Number:    | 08352                     | 267168    |

Name of the Host  
Organisation

**: University of Agricultural Sciences, Dharwad**

Telegraphic Address

**: Nil**

2. Staff Position (as on 31<sup>st</sup> August 2005)

| Sanctioned Post               | Name of Incumbent               | Designation                   | Discipline          | Pay scale     | Basic pay | Date of joining | Permanent (P)/<br>Temporary (T) | Category<br>(SC/ST/OBC/Others) |
|-------------------------------|---------------------------------|-------------------------------|---------------------|---------------|-----------|-----------------|---------------------------------|--------------------------------|
| Training organizer            | Dr. H.B.Patil                   | Training organizer            | Horticulture        | 12,000-18,300 | 14,520/-  | 01-04-04        | P                               | Others                         |
| Training Associate            | Dr. G.Somanagouda               | Training Associate            | Agronomy            | 12,000 + HRA  | -         | 26-03-05        | T                               | Others                         |
| Training Associate            | Dr. Sateesh R.Patil             | Training Associate            | Horticulture        | 12,000 + HRA  | -         | 26-03-05        | T                               | Others                         |
| Training Associate            | Dr. Basavarajappa M.P           | Training Associate            | Pl. Pathology       | 12,000 + HRA  | -         | 08-08-05        | T                               | OBC                            |
| Training Associate            | Sri. Sunilkumar N.M             | Training Associate            | Ag. Entomology      | 11,500 + HRA  | -         | 30-07-05        | T                               | SC                             |
| Training Associate            | Mrs. Roopa U.                   | Training Associate            | Home Science        | 11,500 + HRA  | -         | 16-08-05        | T                               | Others                         |
| Training Associate            | -                               | Training Associate            | Animal Science      | -             | -         | -               | -                               | -                              |
| Training Assistant            | Sri. H.S.Patil                  | Training Assistant            | Soil Science        | 8,750         | -         | 26-05-05        | T                               | Others                         |
| Computer Programmer           | Sri Kirankumar M.<br>Vagadaragi | Computer<br>Programmer        | Computer<br>Science | 8,750         | -         | 04-06-05        | T                               | Others                         |
| Training Assistant            | Ms. Vijaya Hosamani             | Training Assistant            | Ag. Extension       | 8,750         | -         | 28-03-05        | T                               | Others                         |
| Accountant/<br>Superintendent | Ms. Geeta Badiger               | Accountant/<br>Superintendent | -                   | 2,500         | -         | 01-04-05        | T                               | OBC                            |
| Stenographer                  | Mr. S.E.Badiger                 | Typist                        | -                   | 4,150-7,800/- | 4,950     | 01-04-04        | P                               | OBC                            |
| Driver                        | Mr. Yariswamy                   | Driver                        | -                   | 3,850-7,050   | 4,575     | 23-05-05        | P                               | SC                             |
| Driver                        | Ishwar Yakkundi                 | Driver                        | -                   | 2,600         | -         | 01-04-05        | T                               | Others                         |
| Supporting Staff              | Arun Bagali                     | Messenger                     | -                   | 2,200         | -         | 01-04-05        | T                               | Others                         |
| Supporting Staff              | Jagadish Kotnal                 | Messenger                     | -                   | 2,200         | -         | 01-04-05        | T                               | Others                         |

**3. Total land with KVK (In ha)****- 19.2****4. Infrastructure Development****A. Buildings – Not applicable****B. Vehicles:**

| Type of vehicle | Model     | Actual cost | Total run   | Present status |
|-----------------|-----------|-------------|-------------|----------------|
| Tractor         | MF 245DIJ | 3,24,238=00 | 2285.50 hrs | Good           |
| Qualis          | 2.4D FS   | 4,64,034=28 | 13624 kms   | Good           |

**C. Equipments and Av aids**

| Name of Equipment   | Year of purchase | Cost (Rs) | Present status |
|---|------------------|-----------|----------------|
| Single Furrow reversible plough   | 2001             | 20,250    | Good           |
| Nine fine tiller with seeding attachment  | 2001             | 26,150    | Good           |
| Three in one leveler rangale and cultivator                                     | 2001             | 14,500    | Good           |
| Godrej copier   | 2001             | 80,234    | Good           |
| Stabilizer  | 2001             | 6,000     | Good           |
| Over-head Projector   | 2001             | 23,000    | Good           |
| Kodak DC-3200 (Digital Camera)  | 2002             | 17,000    | Good           |
| Portable Generator 2000   | 2003             | 40,130    | Good           |
| Computer with accessories   | 2003             | 67,680    | Good           |
| 2 KV on line Uninterrupted power supply system for 120 mins battery backup time | 2003             | 52,300    | Good           |
| Mipro-MVA-101 porable public address system                                     | 2003             | 30,240    | Good           |
| Hakims Deflex   | 2003             | 10,115    | Good           |
| Handy image presenter (Flex Vision TFV-300)                                     | 2003             | 53,760    | Good           |
| Tvse, msp 395xl classic 136, col,24 pin 300cp)                                  | 2003             | 12,800    | Good           |
| Hp Desk Jet A3 Size   | 2003             | 15999     | Good           |
| Hp office jet 4110, All in one  | 2003             | 9500      | Good           |
| LG cd writer  | 2003             | 2750      | Good           |

## 5. Description of Agro-climatic zones and farming situations of the district

**Rainfall:** The Bijapur district is characterized by the lowest rainfall in Karnataka state with an average rainfall of 579.0 mm. The district comprises five talukas namely Basavana Bagewadi, Bijapur, Muddebihal, Indi and Sindagi. The five talukas receive rainfall between 546.2 to 630.0 mm. About 60 per cent of the annual rainfall is received in the normal monsoon season (June-September), 14 per cent in the pre monsoon (April-May) and about 23 per cent in the post monsoon months (October-November) Generally the remaining months are dry.

**Temperature:** The mean monthly maximum temperature varies from 29.3 °C (December) to a maximum of 39.0 °C (May). The mean monthly minimum temperatures are lowest (15.5 °C) during January, which increases gradually to maximum of about 23.3 °C (May)

**Relative Humidity:** The moisture content of the air in the district varies from about 35 per cent during February, March and April to a maximum of about 70 per cent in July, August and September.

**Wind velocity:** The district is characterized by high wind velocity especially during monsoon months. The wind speed varies between 3.6 KMPH (December) to 13.2 KMPH (July)

## 6. Thrust areas identified through PRA or any other method

### Training

- a. Recently developed varieties/hybrids and technologies.
- b. Soil and water conservation.
- c. NM and IPM in crop husbandry.
- d. Use of Bio-agents and Botanicals in nutrient management and pest management
- e. Marketing network and facilities
- f. Income generating activities

### Demonstrations

- a. New varieties/hybrids and technologies.
- b. Soil and water conservation.
- c. INM and IPM in crop husbandry
- d. Cropping systems like sequential cropping and intercropping

## 7. Training Achievements

### A. On Campus

| Discipline                                 | No. of Courses  | Number of participants |            |            |                           |           |            | Grand Total |
|--|---|------------------------|------------|------------|---------------------------|-----------|------------|-------------|
|  |   | Others                 |            |            | No. of SC/ST out of Total |           |            |             |
|  |   | Male                   | Female     | Total      | Male                      | Female    | Total      |             |
| <b>Practicing farmers and Rural youths</b> |   |                        |            |            |                           |           |            |             |
| Crop Production                            | 11  | 79                     | -          | 79         | 17                        | -         | 17         | 96          |
| Horticulture                               | 19  | 83                     | 145        | 228        | 25                        | 43        | 68         | 296         |
| Live stock production and management       | 01  | 26                     | 05         | 31         | 01                        | 01        | 02         | 33          |
| Organic farming                            | 02  | 16                     | -          | 16         | -                         | -         | -          | 16          |
| Plant Protection                           | Plant protection aspects were covered in respective training programmes |                        |            |            |                           |           |            |             |
| Vermiculture                               | 09  | 143                    | 75         | 218        | 48                        | 06        | 54         | 272         |
| <b>TOTAL</b>                               | <b>42</b>   | <b>347</b>             | <b>225</b> | <b>572</b> | <b>91</b>                 | <b>50</b> | <b>141</b> | <b>713</b>  |
| <b>Extension functionaries</b>             |   |                        |            |            |                           |           |            |             |
| Crop Production                            | 01  | 21                     | -          | 21         | 03                        | -         | 03         | 24          |
| <b>TOTAL</b>                               | <b>01</b>   | <b>21</b>              | <b>-</b>   | <b>21</b>  | <b>03</b>                 | <b>-</b>  | <b>03</b>  | <b>24</b>   |
| <b>GRAND TOTAL</b>                         | <b>43</b>   | <b>368</b>             | <b>225</b> | <b>593</b> | <b>94</b>                 | <b>50</b> | <b>144</b> | <b>737</b>  |

### B. Off Campus

| Discipline                                 | No. of Courses  | Number of participants |            |             |                           |          |            | Grand Total |
|--|---|------------------------|------------|-------------|---------------------------|----------|------------|-------------|
|  |   | Others                 |            |             | No. of SC/ST out of Total |          |            |             |
|  |   | Male                   | Female     | Total       | Male                      | Female   | Total      |             |
| <b>Practicing farmers and Rural youths</b> |   |                        |            |             |                           |          |            |             |
| Crop Production                            | 15  | 216                    | -          | 216         | 109                       | -        | 109        | 325         |
| Horticulture                               | 04  | 59                     | -          | 59          | 29                        | -        | 29         | 88          |
| Live stock production and management       | 08  | 274                    | 210        | 484         | -                         | -        | -          | 484         |
| Plant Protection                           | Plant protection aspects were covered in respective training programmes |                        |            |             |                           |          |            |             |
| Vermiculture                               | 07  | 311                    | 31         | 342         | -                         | -        | -          | 342         |
| <b>TOTAL</b>                               | <b>34</b>   | <b>860</b>             | <b>241</b> | <b>1101</b> | <b>138</b>                | <b>-</b> | <b>138</b> | <b>1239</b> |
| <b>Extension functionaries</b>             |   |                        |            |             |                           |          |            |             |
| Plant Protection                           | 01  | 21                     | -          | 21          | 4                         | -        | 4          | 25          |
| <b>TOTAL</b>                               | <b>01</b>   | <b>21</b>              | <b>-</b>   | <b>21</b>   | <b>4</b>                  | <b>-</b> | <b>4</b>   | <b>25</b>   |
| <b>GRAND TOTAL</b>                         | <b>35</b>   | <b>881</b>             | <b>241</b> | <b>1122</b> | <b>142</b>                | <b>-</b> | <b>142</b> | <b>1264</b> |

**C. Consolidated on campus + Off campus**

| Discipline                                 | No. of Courses  | Number of participants |            |             |                           |           |            | Grand Total |
|--|---|------------------------|------------|-------------|---------------------------|-----------|------------|-------------|
|  |   | Others                 |            |             | No. of SC/ST out of Total |           |            |             |
|  |   | Male                   | Female     | Total       | Male                      | Female    | Total      |             |
| <b>Practicing farmers and Rural youths</b> |   |                        |            |             |                           |           |            |             |
| Crop Production                            | 26  | 295                    | -          | 295         | 126                       | -         | 126        | 421         |
| Horticulture                               | 23  | 142                    | 145        | 287         | 54                        | 43        | 97         | 384         |
| Live stock production and management       | 09  | 300                    | 215        | 515         | 1                         | 1         | 2          | 517         |
| Plant Protection                           | Plant protection aspects were covered in respective training programmes |                        |            |             |                           |           |            |             |
| Vermiculture                               | 16  | 454                    | 106        | 560         | 48                        | 06        | 54         | 614         |
| Organic farming                            | 02  | 16                     | -          | 16          | -                         | -         | -          | 16          |
| <b>TOTAL</b>                               | <b>76</b>   | <b>1207</b>            | <b>466</b> | <b>1673</b> | <b>229</b>                | <b>50</b> | <b>279</b> | <b>1952</b> |
| <b>Extension functionaries</b>             |   |                        |            |             |                           |           |            |             |
| Crop Production                            | 01  | 21                     | -          | 21          | 3                         | -         | 3          | 24          |
| Plant Protection                           | 01  | 21                     | -          | 21          | 4                         | -         | 4          | 25          |
| <b>TOTAL</b>                               | <b>02</b>   | <b>42</b>              | <b>-</b>   | <b>42</b>   | <b>7</b>                  | <b>-</b>  | <b>7</b>   | <b>49</b>   |
| <b>GRAND TOTAL</b>                         | <b>78</b>   | <b>1249</b>            | <b>466</b> | <b>1715</b> | <b>236</b>                | <b>50</b> | <b>286</b> | <b>2001</b> |

**D. Vocational training programme for rural youths and farm women**

| Crop/<br>Enterprise                 | Identified thrust area                              | Training title                        | Duration (days) | No. of participants |        |       | No. of participants<br>employed |
|-------------------------------------|---|---------------------------------------|-----------------|---------------------|--------|-------|---------------------------------|
|                                     |   |                                       |                 | Male                | Female | Total |                                 |
| Horticulture                        | Income generation                                   | Mushroom production technology        | 02              | 23                  | -      | 23    | 03                              |
| Horticulture                        | Non availability of genuine planting material       | Propagation of horticulture crops     | 05              | -                   | 25     | 25    | 12                              |
| Horticulture                        | “   | “                                     | 03              | -                   | 30     | 30    | 02                              |
| Post harvest technology             | Income generation                                   | Preservation of fruits and vegetables | 02              | -                   | 30     | 30    | -                               |
| *Vermiculture                       | Maintenance of soil fertility and income generation | Vermicompost production technology    | 01              | 314                 | 18     | 332   | 199                             |
| Livestock production and management | Livestock production and management                 | Goat and sheep rearing                | 03              | 27                  | 06     | 33    | 20                              |
| <b>TOTAL</b>                        |   |                                       |                 | 364                 | 111    | 473   | -                               |

\* Nine programmes were conducted

### E. Sponsored training programmes

| Title   | Discipline                      | Month | Duration (days) | No. of courses | No. of participants |        |       |        |       |        |       | Sponsoring agency |
|---|---------------------------------|-------|-----------------|----------------|---------------------|--------|-------|--------|-------|--------|-------|-------------------|
|   |                                 |       |                 |                | Others              |        | SC/ST |        | Total |        |       |                   |
|   |                                 |       |                 |                | Male                | Female | Male  | Female | Male  | Female | Total |                   |
| <b>A. Practicing farmers/farmwomen and Rural youths</b> |                                 |       |                 |                |                     |        |       |        |       |        |       |                   |
| Livestock production and management                     | Veterinary and animal husbandry | Oct   | 01              | 01             | -                   | -      | -     | -      | 30    | -      | 30    | RUDSET            |
| Livestock production and management                     | Veterinary and animal husbandry | Dec   | 02              | 01             | -                   | -      | -     | -      | 36    | 24     | 60    | RUDSET            |
| Livestock production and management                     | Veterinary and animal husbandry | Jan   | 01              | 01             | -                   | -      | -     | -      | 19    | 11     | 30    | KSDA              |
| Livestock production and management                     | Veterinary and animal husbandry | Jan   | 02              | 01             | -                   | -      | -     | -      | 51    | 14     | 65    | RUDSET            |
| Vermiculture  | Vermiculture                    | Feb   | 01              | 01             | -                   | -      | -     | -      | -     | 30     | 30    | RUDSET            |
| Vermiculture  | Vermiculture                    | Mar   | 01              | 01             | -                   | -      | -     | -      | -     | 87     | 87    | RUDSET            |
| Vermiculture  | Vermiculture                    | May   | 01              | 01             | -                   | -      | -     | -      | -     | 60     | 60    | RUDSET            |
| Vermiculture  | Vermiculture                    | June  | 01              | 01             | -                   | -      | -     | -      | -     | 60     | 60    | RUDSET            |
| Vermiculture  | Vermiculture                    | June  | 01              | 01             | -                   | -      | -     | -      | -     | 42     | 42    | RUDSET            |
| Vermiculture  | Vermiculture                    | June  | 01              | 01             | -                   | -      | -     | -      | -     | 52     | 52    | RUDSET            |
| Vermiculture  | Vermiculture                    | July  | 01              | 01             | -                   | -      | -     | -      | -     | 75     | 75    | RUDSET            |
| Vermiculture  | Vermiculture                    | July  | 01              | 01             | -                   | -      | -     | -      | -     | 34     | 34    | RUDSET            |
| Vermiculture  | Vermiculture                    | Sept  | 01              | 01             | -                   | -      | -     | -      | -     | 37     | 37    | RUDSET            |
| <b>TOTAL</b>  |                                 |       |                 |                | -                   | -      | -     | -      | 136   | 526    | 662   |                   |
| <b>B. Extension functionaries</b>                       |                                 |       |                 |                |                     |        |       |        |       |        |       |                   |
| Livestock production and management                     | Veterinary                      | Dec   | 01              | 01             | -                   | -      | -     | -      | 50    | -      | 50    | RUDSET            |
| Livestock production and management                     | Veterinary                      | Dec   | 01              | 01             | -                   | -      | -     | -      | 43    | -      | 43    | RUDSET            |
| <b>TOTAL</b>  |                                 |       |                 |                | -                   | -      | -     | -      | 93    | -      | 93    |                   |
| <b>GRAND TOTAL</b>                                      |                                 |       |                 |                | -                   | -      | -     | -      | 229   | 526    | 755   |                   |



## 8. Results of Front Line Demonstration

### (A) Oilseeds:

#### a. Details of implementation

| Sl. No                      | Crop                      | Year    | Season | Area (ha) |        | No. of farmers/ Demo |        |       | Remarks |
|-----------------------------|---------------------------|---------|--------|-----------|--------|----------------------|--------|-------|---------|
|                             |                           |         |        | Proposed  | Actual | SC/ST                | Others | Total |         |
| <b>For the year 2004-05</b> |                           |         |        |           |        |                      |        |       |         |
| 1.                          | Sunflower (KBSH-1)        | 2004-05 | Kharif | 5.0       | 5.0    | -                    | 08     | 08    | -       |
| 2.                          | Summer groundnut (GPBD-4) | 2004-05 | Summer | 5.0       | 5.0    | 02                   | 06     | 08    | -       |
| <b>For the year 2005-06</b> |                           |         |        |           |        |                      |        |       |         |
| 1.                          | Groundnut                 | 2005-06 | Kharif | 5.0       | 5.0    | 4                    | 8      | 12    | -       |
| 2.                          | Sunflower                 | 2005-06 | Kharif | 5.0       | 5.0    | -                    | 12     | 12    | -       |

#### b. Details of farming situation

| Crop                         | Season | Farming situation (RF/Irrigated) | Soil type            | Status of soil                    |   |   | Previous crop                          | Sowing date             | Harvest date           | Seasonal rainfall (mm) | No. of rainy days |
|------------------------------|--------|----------------------------------|----------------------|-----------------------------------|---|---|--|-------------------------|------------------------|------------------------|-------------------|
|                              |        |                                  |                      | Low (L)<br>Medium (M)<br>High (H) |   |   |  |                         |                        |                        |                   |
|                              |        |                                  |                      | N                                 | P | K |  |                         |                        |                        |                   |
| <b>For the year 2004-05.</b> |        |                                  |                      |                                   |   |   |  |                         |                        |                        |                   |
| Sunflower                    | Kharif | RF                               | Medium black         | L                                 | M | H | Rabi sorghum, sunflower and Bengalgram | IInd week of Sept, 2004 | IInd week of Jan, 2005 | 222.2                  | 18                |
| Groundnut                    | Summer | Irrigated                        | Red and medium black | L                                 | L | M | Bengalgram and groundnut               | Ist week of Jan, 2005   | IInd week of May, 2005 | -                      | -                 |
| <b>For the year 2005-06</b>  |        |                                  |                      |                                   |   |   |  |                         |                        |                        |                   |
| Groundnut                    | Kharif | RF                               | Red                  | L                                 | M | M | Sunflower/ Groundnut                   | IInd week of July-05    | -                      | 174.0                  | -                 |
| Sunflower                    | Kharif | RF                               | Black                | L                                 | M | H | Sunflower/ Sorghum                     | IInd week of Sept-05    | -                      | -                      | -                 |

**c. Crop performance**

| Crop                 | Variety/<br>Technology                     | No. of farmers | Area (ha) | Demonstration yield (q/ha) |        |       |       | Increase in yield (%) | Cost of additional cash inputs (Rs/ha) |       |
|----------------------|--|----------------|-----------|----------------------------|--------|-------|-------|-----------------------|--|-------|
|                      |  |                |           | Highest                    | Lowest | Avg   | Local |                       | Demo                                   | Local |
| For the year 2004-05 |  |                |           |                            |        |       |       |                       |  |       |
| Sunflower            | KBSH-1, imidacloprid and wider row spacing | 08             | 5.0       | 10.50                      | 5.25   | 7.11  | 4.81  | 49.00                 | 460                                    | -     |
| Groundnut            | GPBD-4 and biofertilizers                  | 08             | 5.0       | 31.00                      | 18.00  | 24.12 | 20.38 | 18.40                 | 1310                                   | -     |

**(B) Pulses:**

**a. Details of implementation**

| Sl. No               | Crop            | Year    | Season | Area (ha) |        | No. of farmers/<br>Demo |        |       | Remarks |
|----------------------|-----------------|---------|--------|-----------|--------|-------------------------|--------|-------|---------|
|                      |                 |         |        | Proposed  | Actual | SC/ST                   | Others | Total |         |
| For the year 2004-05 |                 |         |        |           |        |                         |        |       |         |
| 1.                   | Redgram         | 2004-05 | Kharif | 5.0       | 5.0    | 3                       | 9      | 12    | -       |
| 2.                   | Bengalgram      | 2004-05 | Rabi   | 5.0       | 5.0    | -                       | 10     | 10    | -       |
|                      |                 |         |        |           |        |                         |        |       | -       |
| For the year 2005-06 |                 |         |        |           |        |                         |        |       |         |
| 1.                   | Greengram       | 2005-06 | Kharif | 5.0       | 5.0    | 4                       | 8      | 12    | -       |
| 2.                   | Redgram (WRP-1) | 2005-06 | Kharif | 5.0       | 5.0    | -                       | 12     | 12    | -       |
| 3.                   | Redgram (ASHA)  | 2005-06 | Kharif | 5.0       | 5.0    | -                       | 12     | 12    | -       |
|                      |                 |         |        |           |        |                         |        |       |         |

| <b>b. Details of farming situation</b> |        |                                  |                      |                |            |          |                        |                                 |                                |                        |                   |
|--|--------|----------------------------------|----------------------|----------------|------------|----------|------------------------|---------------------------------|--------------------------------|------------------------|-------------------|
| Crop                                   | Season | Farming situation (RF/Irrigated) | Soil type            | Status of soil |            |          | Previous crop          | Sowing date                     | Harvest date                   | Seasonal rainfall (mm) | No. of rainy days |
|  |        |                                  |                      | Low(L)         | Medium (M) | High (H) |                        |                                 |                                |                        |                   |
|  |        |                                  |                      | N              | P          | K        |                        |                                 |                                |                        |                   |
| For the year 2004-05                   |        |                                  |                      |                |            |          |                        |                                 |                                |                        |                   |
| Redgram                                | Kharif | Irrigated                        | Medium to deep black | L              | M          | H        | Sunflower/Maize        | IIInd and IIIrd week of July 04 | IIInd and IIIrd week of Feb 05 | -                      | -                 |
| Bengalgram                             | Rabi   | RF                               | Medium to deep black | L              | M          | H        | Sunflower/Rabi sorghum | Ist and IIInd week of October04 | Ist and IIInd week of Jan 05   | 222.2                  | 18.0              |
| For the year 2005-06                   |        |                                  |                      |                |            |          |                        |                                 |                                |                        |                   |
| Redgram (WRP-1)                        | Kharif | RF                               | Light soil           | L              | M          | M        | Redgram                | July IIInd week 2005            | -                              | 124.5                  | -                 |
| Redgram (ASHA)                         | Kharif | Irrigated                        | Deep black soil      | L              | M          | H        | Redgram and groundnut  | July IIInd week 2005            | -                              | -                      | -                 |
| Greengram                              | Kharif | RF                               | Medium               | L              | M          | H        | Groundnut              | -                               | Vitiated                       | 174.8                  | -                 |

| <b>c. Crop performance</b> |                           |                |           |                            |        |       |       |                       |  |       |
|----------------------------|---------------------------|----------------|-----------|----------------------------|--------|-------|-------|-----------------------|--|-------|
| Crop                       | Variety/Technology        | No. of farmers | Area (ha) | Demonstration yield (q/ha) |        |       |       | Increase in yield (%) | Cost of additional cash inputs (Rs/ha) |       |
|                            |                           |                |           | Highest                    | Lowest | Avg   | Local |                       | Demo                                   | Local |
| Redgram                    | Asha (ICPL-87119) and IPM | 12             | 5.0       | 24.35                      | 13.05  | 19.78 | 15.90 | 24.33                 | -                                      | 1375  |
| Bengalgram                 | IPM                       | 10             | 5.0       | 11.50                      | 06.00  | 08.62 | 06.74 | 27.88                 | 850                                    | -     |

### C) Performance of FLD in the district

#### i. Oilseeds

|                                 |                                  |                       |  |
|---------------------------------|----------------------------------|-----------------------|--|
| Crop                            | : Sunflower                      | Season                | : Kharif                                 |
| Sowing date                     | : IInd week of Sept-2004         | Harvesting date       | : IInd week of Jan-2005                  |
| Situation                       | : Rainfed                        | District              | : Bijapur                                |
| Agro-climatic zone              | : Northern dry zone of Karnataka | Previous crop pattern | : Rabi sorghum, Sunflower and Bengalgram |
| Status of national productivity | : 539 kg/ha                      | Rainfall distribution | : 222.20 mm                              |

| Variety/Technology                                       | No. of farmers | Area (ha) | Yield (q/ha)  |        |      |             | Local check | Increase in yield (%) | Cost of additional cash Rs/ha |             |
|--|----------------|-----------|---------------|--------|------|-------------|-------------|-----------------------|-------------------------------|-------------|
|  |                |           | Demonstration |        |      | Local check |             |                       | Demo                          | Local check |
|  |                |           | Highest       | Lowest | Avg  |             |             |                       |                               |             |
| KBSH-1, Imidacloprid seed treatment and wide row spacing | 08             | 5.0       | 10.50         | 5.25   | 7.11 | 04.81       | 49          | 460                   | -                             |             |

|                                 |                                  |                       |                            |
|---------------------------------|----------------------------------|-----------------------|----------------------------|
| Crop                            | : Groundnut                      | Season                | : Summer                   |
| Sowing date                     | : Ist week of Jan-2005           | Harvesting date       | : IInd week of May-2005    |
| Situation                       | : Irrigated                      | District              | : Bijapur                  |
| Agro-climatic zone              | : Northern dry zone of Karnataka | Previous crop pattern | : Bengalgram and Groundnut |
| Status of national productivity | : 1384 kg/ha                     | Rainfall distribution | : -                        |

| Variety/Technology            | No. of farmers | Area (ha) | Yield (q/ha)  |        |       |             | Local check | Increase in yield (%) | Cost of additional cash Rs/ha |             |
|-------------------------------|----------------|-----------|---------------|--------|-------|-------------|-------------|-----------------------|-------------------------------|-------------|
|                               |                |           | Demonstration |        |       | Local check |             |                       | Demo                          | Local check |
|                               |                |           | Highest       | Lowest | Avg   |             |             |                       |                               |             |
| Seeds GPBD-4, Rhizobium + PSB | 08             | 5.0       | 31.00         | 18.00  | 24.12 | 20.38       | 18.40       | 1310                  | -                             |             |

## ii. Pulses

|                                 |                                    |                       |                                   |
|---------------------------------|------------------------------------|-----------------------|-----------------------------------|
| Crop                            | : Redgram                          | Season                | : Kharif                          |
| Sowing date                     | : IInd and IIIrd week of July-2004 | Harvesting date       | : IInd and IIIrd week of Feb-2005 |
| Situation                       | : Irrigated                        | District              | : Bijapur                         |
| Agro-climatic zone              | : Northern dry zone of Karnataka   | Previous crop pattern | : Sunflower and maize             |
| Status of national productivity | : 690 kg/ha                        | Rainfall distribution | : -                               |

| Variety/Technology | No. of farmers | Area (ha) | Yield (q/ha)  |        |       |             | Increase in yield (%) | Cost of additional cash Rs/ha |             |
|--------------------|----------------|-----------|---------------|--------|-------|-------------|-----------------------|-------------------------------|-------------|
|                    |                |           | Demonstration |        |       | Local check |                       | Demo                          | Local check |
|                    |                |           | Highest       | Lowest | Avg   |             |                       |                               |             |
| Variety: ASHA, IPM | 12             | 5.0       | 24.35         | 13.05  | 19.78 | 15.90       | 24.33                 | -                             | 1375        |

|                                 |                                  |                       |                                 |
|---------------------------------|----------------------------------|-----------------------|---------------------------------|
| Crop                            | : Bengalgram                     | Season                | : Rabi                          |
| Sowing date                     | : Ist and IInd week of Oct-2004  | Harvesting date       | : Ist and IInd week of Jan-2005 |
| Situation                       | : Rainfed                        | District              | : Bijapur                       |
| Agro-climatic zone              | : Northern dry zone of Karnataka | Previous crop pattern | : Rabi sorghum, Sunflower       |
| Status of national productivity | : 792 kg/ha                      | Rainfall distribution | : 222.20 mm                     |

| Variety/Technology | No. of farmers | Area (ha) | Yield (q/ha)  |        |      |             | Increase in yield (%) | Cost of additional cash Rs/ha |             |
|--------------------|----------------|-----------|---------------|--------|------|-------------|-----------------------|-------------------------------|-------------|
|                    |                |           | Demonstration |        |      | Local check |                       | Demo                          | Local check |
|                    |                |           | Highest       | Lowest | Avg  |             |                       |                               |             |
| IPM                | 10             | 5.0       | 11.50         | 6.00   | 8.62 | 6.74        | 27.88                 | 850                           | -           |

**D) Farming situation and results of Demonstrations-2004-05**

| Sl No               | Agro-climatic zone             | Dist    | Soil type            | Crop & Variety        | Date of sowing                 | Date of harvesting            | No. of demon | Area (ha) | Highest yield (q/ha) | Avg yield (q/ha) | Cost input (Rs) | Gross return | Net return |
|---------------------|--------------------------------|---------|----------------------|-----------------------|--------------------------------|-------------------------------|--------------|-----------|----------------------|------------------|-----------------|--------------|------------|
| <b>i) Oil seeds</b> |                                |         |                      |                       |                                |                               |              |           |                      |                  |                 |              |            |
| 1.                  | Northern dry zone of Karnataka | Bijapur | Medium to deep black | Sunflower KBSH-1      | IInd week of Sept.-04          | IInd week of Jan.-05          | 08           | 05        | 10.5                 | 7.2              | 2,450=00        | 12,750=00    | 10,300=00  |
| 2.                  | Northern dry zone of Karnataka | Bijapur | Red and medium black | Groundnut GPBD-4      | Ist week of Jan.-05            | IInd week of May-05           | 08           | 05        | 31.0                 | 24.13            | 7,150=00        | 48,000=00    | 40,850=00  |
| <b>ii) Pulses</b>   |                                |         |                      |                       |                                |                               |              |           |                      |                  |                 |              |            |
| 1.                  | Northern dry zone of Karnataka | Bijapur | Medium black         | Redgram ICPL87119     | IInd and IIIrd week of July-04 | IInd and IIIrd week of Feb-05 | 12           | 05        | 24.35                | 19.78            | 4,184=00        | 32,620=00    | 28,436=00  |
| 2.                  | Northern dry zone of Karnataka | Bijapur | Medium black         | Bengalgram Annigeri-1 | Ist and IInd week of Oct.-04   | Ist and IInd week of Jan.-05  | 10           | 05        | 11.50                | 8.62             | 2,925=00        | 12,068=00    | 9,143=00   |

| <b>E. Analytical review of component demonstrations (details of each component for rainfed/irrigated situations)</b> |        |  |                   |               |             |  |
|--|--------|--|-------------------|---------------|-------------|--|
| Crop   | Season | Component  | Farming situation | Average yield | Local check | Percentage increase in productivity over local check |
| For the year 2004-05   |        |  |                   |               |             |  |
| Redgram  | Kharif | Combination of component (Var-ASHA and Rhizobium + PSB and IPM)                            | Irrigated         | 19.77         | 15.90       | 24.33  |
| Sunflower  | Kharif | Combination of component (Var-KBSH-1seed treatment with imdacloprid and wider row spacing) | RF                | 7.11          | 4.81        | 49.00  |
| Bengalgram   | Rabi   | IPM  | RF                | 8.62          | 6.74        | 27.88  |
| Groundnut  | Summer | Combination of component (Var-GPBD-4 and Rhizobium + PSB)                                  | Irrigated         | 24.125        | 20.38       | 18.40  |
| For the year 2005-06   |        |  |                   |               |             |  |
| Groundnut  | Kharif | Vermicompost, Bio-fertilizer (Rhizobium and PSB)   | RF                | -             | -           | -  |
| Sunflower  | Kharif | Vermicompost, wide row spacing   | RF                | -             | -           | -  |
| Redgram  | Kharif | Variety (WRP-1) and Rhizobium, PSB and IPM   | RF                | -             | -           | -  |
| Redgram  | Kharif | Variety (ASHA) and Rhizobium, PSB and IPM  | Irrigated         | -             | -           | -  |

## F. Technical Feed back on the demonstrated technology

### Oilseed

#### 1. Sunflower:

Variety: KBSH-1 Short duration hybrid.

Seed treatment: Imidacloprid controls thrips and reduces necrosis incidence

Wide row spacing (120cm): Repeated inter cultivation reduces capillary movement of water there by conserves the moisture in the soil.

#### 2. Ground nut:

Variety: GPBD-4 Less vegetative growth, high yielding, resistant to leaf spot.

Seed treatment: Bio-fertilizers like Rhizobium + PSB reduces external application of Inorganic fertilizers.

### Pulses

#### 1. Redgram:

Variety: ASHA resistant to wilt and SMD, best suited for irrigation condition.

Seed treatment: Bio-fertilizers like Rhizobium + PSB reduces application of inorganic fertilizers.

IPM: Adoption of botanicals, cultural practices as well as inorganic pesticides.

#### 2. Bengalgram:

IPM: Methomyl and HaNPV will manage the pod borer effectively.

## (G) Farmers reaction on specific technologies.

1. **Red gram: Asha** High yielding and long duration variety.

2. **Sunflower:** Short duration hybrid. There was no necrosis disease and obtained good yield

3. **Bengalgram:** By adoption of IPM obtained good yield

4. **Groundnut: GPBD-4:** Less vegetative growth, bold seeded, high yielding and poor stack attachment.

## (H). Extension and Training activities under FLD

| Sl. No | Activity         | No. of activities organized | Date  | No. of participants                                      |
|--------|------------------|-----------------------------|---|--|
| 1.     | Field days       | 04                          | 17-01-05 (Nandihal- Bengalgram)<br>20-01-05 (Hiremasali- Redgram)<br>04-02-05 (Muttagi- Sunflower and Rabi sorghum)<br>31-03-05 (Jainapur- Groundnut)   | 48<br>46<br>62<br>60                                     |
| 2.     | Farmers Training | 10                          | 03-06-04 (Chabanur-Greengram)<br>05-06-04 (H.Hipparagi- Greengram)<br>16-07-04 (Lalsangi- Redgram)<br>17-07-04 (Salatogi- Redgram)<br>19-07-04 (Hiremasali- Redgram)<br>13-09-04 (Narasalagi- Sunflower)<br>14-09-04 (Kotyal- Sunflower)<br>16-09-04 (Muttagai- Sunflower)<br>06-12-04 (Nandihal- Bengalgram)<br>06-01-05 (Jainapur- Groundnut) | 35<br>29<br>25<br>20<br>32<br>35<br>15<br>28<br>24<br>30 |



**(I). Results of FLD on cereals, horticulture crops and allied enterprises**

| Season& Year | Crop/Enterprise                                | Area (ha)  |             | No. of farmers/<br>demonstrations | Remarks      |
|--------------|--|------------|-------------|-----------------------------------|--------------|
|              |  | Sanctioned | Implemented |                                   |              |
| Kharif, 2004 | Cotton (DHH-11 + ICM)                          | 10         | 8           | 20                                | -            |
| Rabi, 2004   | Sorghum:<br>CSV216R<br>(Protective irrigation) | -          | 4           | 12                                | Good yielder |
| Rabi, 2004   | Sorghum:<br>CSV216R (RF)                       | -          | 11          | 12                                | Good yielder |
| Rabi, 2004   | Sorghum- DSV-5                                 | -          | 5           | 12                                | Good yielder |

**(J). Performance of FLD on cereals, horticulture and allied enterprises**

| Sl. No | Crop         | Variety                            | No. of Farmers | Area (ha) | Yield (q/ha)  |       |       |             | % Increase over local | Additional cost (Rs/ha) |       |
|--------|--------------|------------------------------------|----------------|-----------|---------------|-------|-------|-------------|-----------------------|-------------------------|-------|
|        |              |                                    |                |           | Demonstration |       |       | Local check |                       | Demo                    | Local |
|        |              |                                    |                |           | Max           | Min   | Avg   |             |                       |                         |       |
| 1.     | Cotton       | DHH-11                             | 20             | 08        | 27.5          | 12.5  | 21.26 | 18.00       | 18.00                 | -                       | 885   |
| 2.     | Rabi Sorghum | CSV216R<br>(protective irrigation) | 12             | 4         | 17.10         | 12.00 | 14.60 | 12.00       | 21.60                 | 405                     | -     |
| 3.     | Rabi Sorghum | CSV216R<br>(RF)                    | 12             | 11        | 14.00         | 8.30  | 11.30 | 9.20        | 22.80                 | 105                     | -     |
| 4.     | Rabi sorghum | DSV-5                              | 12             | 5         | 10.1          | 5.50  | 8.22  | 7.00        | 17.40                 | 105                     | -     |

| <b>(K). Analytical review of component demonstrations (details of each component for rainfed/irrigated situations)</b> |        |  |                       |               |             |  |
|--|--------|--|-----------------------|---------------|-------------|--|
| Crop   | Season | Component                              | Farming situation     | Average yield | Local check | Percentage increase in productivity over local check |
| For the year 2004-05   |        |  |                       |               |             |  |
| Cotton   | Kharif | DHH-11 and ICM                         | Irrigated             | 21.26         | 18.00       | 18.10  |
| Sorghum  | Rabi   | Var: CSV216R, Azospirillum + PSB       | Protective irrigation | 14.60         | 12.00       | 21.60  |
| Sorghum  | Rabi   | Var: CSV216R, Azospirillum + PSB       | RF                    | 11.30         | 9.20        | 22.80  |
| Sorghum  | Rabi   | Var: DSV-5, Azospirillum + PSB         | RF                    | 8.22          | 7.00        | 17.40  |
| For the year 2005-06   |        |  |                       |               |             |  |
| Bajra  | Kharif | Vermicompost, Azospirillum+PSB         | RF                    | -             | -           | -  |
| Bajra + Redgram  | Kharif | Redgram seeds (WRP-1), Rhizobium + PSB | RF                    | -             | -           | -  |
| Cotton   | Kharif | Seeds (DHH-11) and ICM                 | Irrigated             | -             | -           | -  |

## 9. On Farm Testing

### a. Number of on farm testing

| Crop/Enterprise | Varietal feed evaluation | Nutrient feed management | Cropping system | Zero tillage | Weed management | Insect disease management     | Total |
|-----------------|--------------------------|--------------------------|-----------------|--------------|-----------------|-------------------------------|-------|
| Pulses          | -                        | -                        | -               | -            | -               | Bangalgram- IPM               | 1     |
| Fruits          | -                        | -                        | -               | -            | -               | Pomegranate- Bacterial blight | 1     |

### b. Results of on farm testing

| Crop /Enterprise | Farming situation | Problem identified | Intervention made   | Treatments  | Production perunit * |
|------------------|-------------------|--------------------|---|---|----------------------|
| Bengalgram       | Rainfed           | Podborer           | Garlic chilli extract for the management of pod-borer   | T1- Endosulphan followed by chloropyriphos  | 785                  |
|                  |                   |                    |   | T2- Garlic chilli aqueous solution (2 sprays)   | 800                  |
| Pomegranate      | Irrigated         | Bacterial blight   | Bleaching powder 25kg/ha, stem smearing with bacterinashak 0.5g/l+ COC 2g/lit and regular spraying of bacterinashak 0.5g and COC 2g/lit | T1- Farmer's practice   | 2.5                  |
|                  |                   |                    |   | T2- Regular spraying of bacteri nashak 0.5g and COC 2g/lit  | 6.52                 |
|                  |                   |                    |   | T3- Bleaching powder @ 20kg/ha. Stem smearing with redoxide containing bacterinashak 0.5g/lit and COC 2g/lit and spraying with bactrinashak 0.5g/lit and COC 2g/lit | 7.66                 |

\* Production per unit –pulse: kg/ha, Fruits: t/ha

10 Literature developed / published (With full title, author & reference)

A) KVK News letters

| Date of start                   | Periodicity | Number of copies Distributed           |
|---------------------------------|-------------|--|
| December, 2004                  | Quarterly   | 200                                    |
| e-Newsletter,<br>1 September,05 | Quarterly   | KVKS and Other extension functionaries |

B) Literature developed

| Item            | Title  | Number | Author   |
|-----------------|--|--------|--|
| Research papers | 1. Studies on promotion of rooting in air layers of pomegranate as influenced by microbial inoculants  | -      | A.B.Patil, P.Jones and S.R.Patil                                     |
|                 | 2. Effect of growth substances on growth and yield of golden rod   | -      | S.R.Patil, B.Satyanarayan reddy, J.M.Prashant and B.S.Kulkarni       |
|                 | 3. Effect of organic, inorganic and <i>In situ</i> , vermiculture on chlrophyll and flower yield of <i>J. sambae</i>                           | -      | S.R.Patil, B.S.Reddy and J.M.Prashant                                |
|                 | 4. Evaluation of fungicides against wilt of Roses caused by Rhizoctonia species in Northern Karnataka  | -      | M.R.Ravikumar<br>Sateesh Patil<br>S. Jahagirdar<br>Pampanagouda B.   |
|                 | 5. Management of Jasmine root rot caused by Fusarium solani in Northern Karnataka  | -      | M.R.Ravikumar<br>Sateesh Patil<br>S. Jahagirdar<br>Pampanagouda B.   |
|                 | 6. Screening of pomegranate cultivars for wine production  | -      | Patil A.B, Matapati S.S<br>Jones Nirmalanath<br>Sheik M.K, Patil S.R |
|                 | 7. Influence of bending and pruning on different varieties of Roses under naturally ventilated polyhouse                                       | -      | S.M.Mantur,<br>A.N.Bagali, S.R.Patil                                 |
|                 | 8. Effect of citric acid and sucrose on post harvest water relation, fresh weight and vase life of golden rod ( <i>Solidago canadensis</i> L ) | -      | S.R.Patil, B.S.Reddy   |
|                 | 9. Studies on integrated nutrient management strategies for higher productivity in mango   | -      | Patil, D.R., Patil, H.B.<br>Prashanth, J.M. And<br>Patil, S.N.,      |
|                 | 10. Evaluation of <i>insitu</i> water harvesting techniques and use of low cost mulching materials in mango                                    | -      | Patil, D.R., Patil, H.B.<br>Prashanth, J.M. And<br>Patil, S.N.,      |

|                     |  |    |  |
|---------------------|--|----|--|
| Technical Reports   | 1. Annual report and Action plan 05-06                         | 01 | KVK staff  |
|                     | 2. SAC reports   | 02 | KVK Staff  |
|                     | 3. FLD Reports   | 06 | KVK Staff  |
|                     | 4. Action plan FLD oilseeds and pulses                         | 01 | KVK Staff  |
| Technical bulletins | 1. Improved agronomic practices for oilseed crops              | 01 | Sri. S.Y.Wali<br>Ravikumar M.R<br>Sunilkumar N.M<br>Somanagouda G.       |
| Popular articles    | 1. Jasmine cultivation a profitable crop                       | 01 | S.R.Patil, S.M.Mantur,<br>Sunilkumar N.M,<br>H.S.Patil                   |
|                     | 2. Capsicum cultivation under shade house                      | 01 | S.M.Mantur, S.R.Patil,<br>H.B.Patil                                      |
|                     | 3. Important pest of pomegranate                               | 01 | S.S.Navi,<br>pampanagouda,<br>S.R.Patil,<br>Somanagouda,<br>Prashant J.M |
|                     | 4. Preparation of raisin                                       | 01 | S.R.Patil, H.B.Patil,<br>D.R.Patil and Prashant<br>J.M                   |
|                     | 5. R.V.Patil- Revolutionist in horticulture crops in Bijapur   | 01 | S.R.Patil, D.R.Patil,<br>H.S.Patil                                       |
|                     | 6. Pomegranate diseases and their management                   | 01 | Pampanagouda, Navi ,<br>S.R.Patil, Prashant,<br>Somangouda.              |
|                     | 7. Management of problematic soils                             | 01 | H.S.Patil,<br>Somanagouda,<br>S.R.Patil                                  |
|                     | 8. Classification of problematic soils                         | 01 | H.S.Patil,<br>Somanagouda,<br>S.R.Patil                                  |
|                     | 9. Soils of northern Karnataka and their characteristics       | 01 | H.S.Patil,<br>Somanagouda,<br>Sunilkumar N.M                             |
|                     | 10. Moisture conservation techniques                           | 01 | H.S.Patil,<br>Somanagouda,<br>Sunilkumar N.M                             |
|                     | 11. Development of forage and fodder crops in water shed areas | 01 | H.S.Patil,<br>Somanagouda,<br>S.R.Patil                                  |
|                     | 12. Use of sulphur as a main source of nutrient                | 01 | H.S.Patil,<br>Somanagouda,<br>S.R.Patil                                  |
|                     | 13. Gopal reddy- A successful organic farmer                   | 01 | Sunilkumar N.M., Raju<br>Teggalli  |

|                               |  |    |  |
|-------------------------------|--|----|--|
|                               | 14. Integrated agriculture approaches and alternate land use system in dryland | 01 | Somanagouda, H.S.Patil, S.R.Patil  |
|                               | 15. Diseases of lime   | 01 | M.PBasavrajappa and H.S.Patil  |
|                               | 16. Phosphorous supplying biofertilizers                                       | 01 | A.G.Patil, Sunilkumar, Raju Teggali  |
|                               | 17. Importance of insects in medical world                                     | 01 | Sunilkumar N.M, Roopa S.Patil and Hanumantha M.  |
|                               | 18. Trichoderma- A biofungicide  | 01 | Sunilkumar , A.G.Patil, Raju Teggali   |
|                               | 19. Storage pest management  | 01 | Sunilkuma, Raju Teggali, Shashikala S.Rooli  |
| Extension literature          | 1. Oyster mushroom production  | 01 | KVK Staff  |
|                               | 2. Vermicompost production technology  | 01 | KVK Staff  |
| <b>Others:</b><br>1. Software | 1. Decision support system   | 01 | Kirankumar M.Vagaragi and H.B.Patil  |
| 2. Books                      | 1. Improved agronomic practices for pulses                                     | 01 | G.Somanagouda<br>Sunilkumar N.M<br>Basavarajappa M.P<br>Ravikumar M.R<br>S.Y.Wali, Sunita N.D<br>H.S.Patil |
|                               | 2. Oilseed crops   | 01 | Sunilkumar,N.M.<br>Basavarajappa,M.P.<br>G. Somanagouda<br>Ms. Sunita N.D                                  |

**Mushroom- A money spinner**



**1. Sri Ramappa M. Bandiwaddar** of Alakoppar village Tq. Muddebihal has completed his SSLC in 1997. He was working as a wireman in gram panchayat with meager salary of Rs.1200/- PM. After attending training programmes on “Mushroom production and marketing” organised by Krishi Vigyan Kendra on 16-07-2004. He started mushroom production unit of 100 bags with little investment in his own house. In the initial period he faced many production constraints but those were solved in consultation with KVK scientists. In the beginning he produced 50-55 kgs of fresh oyster mushrooms from 100 bags and sold at the rate of 40-50 Rs per Kg in Muddebihal, Bijapur and in surrounding villages. Initially he has faced the problem of marketing but in recent month he has identified many avenues for marketing of his produce. He is very confident about his production skills and marketing. Now he has expanded his production capacity to 1000 bags by constructing the new structure with an investment of Rs.50000/-. In a period of last four months he has taken two crops with a total production of 1000kgs of fresh oyster mushroom and sold at the rate of Rs. 40 per Kg for fresh mushrooms and Rs. 400 for dry mushrooms. According to him cost of production for 1kg fresh mushroom is Rs. 10-12. The net monetary gain is Rs.7000/- PM

**Wealth from waste**



**2. Smt. Shantabai S. Ambali** started vermicompost production with 2 pits in initial stage after attending training programme. At present she is producing 90 tonnes of vermicompost from 15 pits annually. She is having 10 acres of land under different crops like sugarcane, pomegranate and vegetables. The total quantity of vermicompost produced is being used in her own farm. For sugarcane she has adopted complete organic farming without any inorganic fertilizers. For pomegranate vermicompost as well as vermivash are being used. She says that there is no place for inorganic fertilizers in my farm.



**3. Sri Shivashankar Hiregoudar** of Nalwatwad village of Muddebihal taluk has taken up large scale production of vermicompost with 52 pits (30’X3’X2’) in recent months. He has used different types of materials (Talikota slabs, bricks) for construction of vermicompost pits. Besides this, he has pre decomposing unit also, for partial decomposition of agricultural waste, which hastens the harvesting period. With these units he has planned to produce 600-700 tones of vermicompost annually for own use and sale. Further, he has plan to establish a vermivash unit.

**12 Constraints – Nil**

**13 Functional Linkage with different organizations**

| <b>Sl No</b> | <b>Name of organization</b>  | <b>Name of Linkage</b>                    |
|--------------|--|---|
| 1.           | Dept. of Agriculture   | Joint diagnostic survey, Training and FLD |
| 2.           | Dept. of Horticulture  | Participating in meeting/training         |
| 3.           | Dept of Veterinary and Animal Husbandry                                    | Conducting training                       |
| 4.           | Karnataka Milk Federation  | Conducting training programmes            |
| 5.           | Rural Development and Self- Employment Training Institute (RUDSET) Bijapur | Conducting training programmes            |
| 6.           | Non Government Organizations (NGO's)                                       | Conducting trainings                      |
| 7.           | Banks  | Conducting trainings                      |
| 8.           | VVV Clubs  | Conducting trainings                      |
| 9.           | Self help Groups   | Conducting trainings                      |
| 10.          | Karnataka grape growers association  | Conducting trainings                      |

**14 Performance of Demonstration Units –Nil**

**15 Achievement of KVK instructional farm – Nil**

**16 Utilization of hostel facilities –Nil**

**17 Indicate innovative technology or any innovative methodology of Transfer of Technology developed during the year. – Nil**

**18 Indicate any indigenous technology practiced by farmers in the KVK operational area**

**a. Spraying of milk to prevent the viral diseases**

**b. Use of enriched dung slurry for improving soil fertility**

5000 liters dung slurry + Azospirillum 3kg+ PSB 3 kg + Trichoderma 3kg + 5g Jaggary keep it for eight days to ferment and then use 2 liters slurry per plant regularly at one month interval to improve the soil fertility



**c. Use of cow urine to manage mealybugs**

Cow urine collected and stored for at least 3 days before use, spraying of cow urine 3ml + neem oil 2ml + milk 3ml per liter of water reduces mealybug infestation.

**d. Use of butter milk to manage powdery mildew and downy mildew**

Butter milk is kept in copper container for 3 weeks and sprayed 3ml per liter of water.

**e. Use of tobacco for the management of sucking pest**

Ten kg raw tobacco is soaked in 100 liter of water for 24 hrs and filtrate is sprayed at 5ml per liter of water to control thrips and aphids.

**19 Indicate the specific training need tools/methodology followed for**

**Farmers/farm women/rural youth:** The survey of adopted villages conducted by field visits and discussions held with village leaders, group leaders, elected members and local extension personnel revealed that the soil types are shallow to deep black with rainfed and irrigated situation where in source of irrigation are open wells or bore wells. The important field crops cultivated in these villages are *rabi* jowar, maize, wheat, bajra, green gram, bengal gram, sunflower, safflower, groundnut and cotton. The fruit and vegetable crops grown are lime, banana, grape pomegranate, brinjal, chilli, cucumber, and ridge gourd. Based on the opinion of said members the courses were identified.

**In-service personnel:** The course curriculum has been finalized in consultation with Department officials.

**20 List of special programmes undertaken by the KVK, which have been financed by state Govt./Other agencies- Nil**

**21 Indicate the seed/seedling produced and sold to the farmers - Nil**

## 22 Scientific Advisory Committee meeting(s)

| Date of meeting | Salient recommendations  | Action taken   |
|-----------------|--|--|
| 03-02-2005      | <ol style="list-style-type: none"> <li>1. More emphasis should be laid on conducting training programmes on use of organic manures and botanicals.</li> <li>2. Organizing training programmes on dairy and sericulture.</li> <li>3. Organizing training programmes on preservation of vegetables and fruits</li> <li>4. Formation of TTC clubs</li> <li>5. Popularization of indigenous technologies</li> <li>6. Publish more number of Extension folders</li> <li>7. Reward for the progressive farmer and farm women.</li> </ol> | <p>Importance of organic manures and botanicals were taught in all training programmes.</p> <p>Training programmes were conducted</p> <p>Conducted two training programmes</p> <p>Two TTC were formed one at Muttagi and another at Siddapur village</p> <p>On farm testing of Garlic and chilly extract for the management of chick pea pod borer in Bengalgram was taken in Nandihal</p> <p>Two folders were published.</p> <p>In 2004 Krishi Mela awarded One best farm women and one best farmer for the Bijapur district.</p> |
| 01-09-2005      | <ol style="list-style-type: none"> <li>1. Popularization of VAM use in agriculture</li> <li>2. Demonstration of bore well recharge in the farmers filed.</li> <li>3. Conduct more vocational trainings to SHG.</li> <li>4. Training programmes on soil and water conservation</li> <li>5. Conduct more number of Vocational training programmes for farm women and rural youths</li> </ol>   | <p>Taught in all training programmes</p> <p>Submitted project proposal to the department of agriculture.</p> <p>Training programmes on vermicompost production technology, Mushroom production, Horticulture , Bee keeping were conducted</p> <p>Taught in all crop production training programmes.</p> <p>Conducted vocational training programmes on vermiculture, mushroom, bee keeping, sheep and goat rearing.</p>  |

23 a. Impact of training programmes

**Impact analysis of vermicompost training**

Sample size=67

**Table1: Opinion of trainees on vermicompost training**

| Opinion     | No. of trainees | Percentage |
|-------------|-----------------|------------|
| Very useful | 54              | 80         |
| Useful      | 13              | 20         |

**Table2: Adoption of vermicompost preparation after training**

| Adoption    | No. of trainees | Percentage |
|-------------|-----------------|------------|
| Adopted     | 43              | 64         |
| Not adopted | 24              | 36         |

\*Production by the individuals ranges from ½ ton. (Lowest) to 200 tons. (highest)

**Table3: Purpose of vermicompost production**

| Purpose                             | No. of trainees | Percentage |
|-------------------------------------|-----------------|------------|
| Used only in own land               | 35              | 82.5       |
| Used in own land and remaining sold | 06              | 15         |
| Only for sale                       | 01              | 2.5        |

\* Quantity and rate of vermicompost sold after the use at own land

Quantity: ½ to 80 q

Price: Rs. 2500 /t

**Table4: Advantages of using vermicompost**

| Advantages                                   | No. of trainees | Percentage |
|--|-----------------|------------|
| Increase in soil fertility (Increases yield) | 40              | 60         |
| Retains soil moisture for longer period      | 40              | 60         |
| Increases soil aeration                      | 30              | 45         |
| Higher availability of nutrient to crops     | 28              | 42         |
| Less attack of pest and disease              | 14              | 30         |

**Table5: Vermicompost used by the producers (43)**

| Use of vermicompost | No. of trainees | Percentage |
|---------------------|-----------------|------------|
| Used                | 42              | 98.0       |
| Not used            | 01              | 02.0       |

**b. Impact of frontline demonstrations:****Redgram:**

In the year 2003-04 the Asha (ICPL-87119) variety of redgram was introduced in Almel and cluster villages of Sindagi taluk. This variety has excelled in performance by recording 34 percent higher yield over existing variety Maruti. (Table-1)

**Table-1: Results of frontline demonstration**

| Variety | Season and farming situation | Area (ha) | Yield (q/ha) |             | % increase |
|---------|------------------------------|-----------|--------------|-------------|------------|
|         |                              |           | Demo         | Local check |            |
| Asha    | Kharif, Irrigated            | 5.0       | 21.72        | 16.20       | 34.07      |

In the year 2004-05 the area under Asha variety was 200ha in Almel, Kadani, Tarapur, Tavakhed, Kurabatta halli and Gundagi villages. The additional income generated by redgram growers in these villages was 19.87 lakhs (Table-2)

**Table-2: Additional income generated**

| Increase in yield (q/ha) | Area (ha) | Additional produce (q) | Price (Rs/q) | Additional income (Rs) |
|--------------------------|-----------|------------------------|--------------|------------------------|
| 5.52                     | 200       | 1104                   | 1800.00      | 1987200.00             |

## Groundnut:

The new variety of groundnut GPBD-4 was introduced into Balooti villages of B.Bagewadi taluk in the year 2003-04. This variety out yielded the existing the variety TMV-2 by 22.09 percent (Table-3)

**Table-3: Results of frontline demonstration**

| Variety | Season and farming situation | Area (ha) | Yield (q/ha) |             | % increase |
|---------|------------------------------|-----------|--------------|-------------|------------|
|         |                              |           | Demo         | Local check |            |
| GPBD-4  | Kharif, Irrigated            | 5.0       | 21.00        | 17.20       | 22.09      |

In the year 2004-05 the extent of area under this variety was around 30ha in Balooti, Sidnath and Rolli villages. The additional income generated by groundnut growers in these villages was Rs. 2.16 lakhs (Table-4)

**Table-4: Additional income generated**

| Increase in yield (q/ha) | Area (ha) | Additional produce (q) | Price (Rs/q) | Additional income (Rs) |
|--------------------------|-----------|------------------------|--------------|------------------------|
| 3.8                      | 30        | 114                    | 1900.00      | 216600.00              |

## 24 Field activities

- I. Number of villages adopted : 02
- II. Number of farm families selected : 48
- III. Number of Survey/PRA conducted : 02

## 25 Extension Activities

| Activities                              | No. of programmes                 | Dates  | No. of beneficiaries (Farmers/Rural youths) |        |        | No. of Extension Functionaries |        |       |
|---|-----------------------------------|--|---|--------|--------|--------------------------------|--------|-------|
|   |                                   |  | Male  | Female | Total  | Male                           | Female | Total |
| <b>Kisan mela (UAS, Dharwad)</b>        | 01                                | Oct 1-4, 04  | -   | -      | 113000 | -                              | -      | -     |
| <b>Field days</b>                       | 05                                |  |   |        |        |                                |        |       |
| 1. Atharga (Cotton)                     |                                   | 23-12-04   | 70  | -      | 70     | -                              | -      | -     |
| 2. Nandihal (Bengalgram)                |                                   | 17-01-05   | 48  | -      | 48     | -                              | -      | -     |
| 3. Hiremasali (Redgram)                 |                                   | 20-01-05   | 46  | -      | 46     | -                              | -      | -     |
| 4. Muttagi (Sunflower and Rabi sorghum) |                                   | 04-02-05   | 62  | -      | 62     | -                              | -      | -     |
| 5. Jainapur (Summer groundnut)          |                                   | 31-03-05   | 60  | -      | 60     | -                              | -      | -     |
| <b>TV Talk</b>                          | 11                                | <ol style="list-style-type: none"> <li>1. Management of thrips in onion.</li> <li>2. Leaf minor management in cucumber.</li> <li>3. Flea beetle management in grape.</li> <li>4. Management of thrips in pomegranate.</li> <li>5. Management of pomegranate fruit borer.</li> <li>6. Fruit cracking is a serious menace in pomegranate.</li> <li>7. Tomato cultivation under shade net.</li> <li>8. Improved production technology for lime.</li> <li>9. Management of leaf miner in lime.</li> <li>10. Improved production technology for summer groundnut.</li> <li>11. Advantage of intercropping systems.</li> </ol> |   |        |        |                                |        |       |
| <b>Exhibition</b>                       | 03                                |  |   |        |        |                                |        |       |
| 1. Krishi Mela, Dharwad                 |                                   | 1-10-04 to 4-10-04   | -   | -      | 113000 | -                              | -      | -     |
| 2. Sri. Siddeshwar Fair                 |                                   | 14-1-05 to 18-1-05   | -   | -      | 50000  | -                              | -      | -     |
| 3. DCC Bank, Bijapur                    |                                   | 30-07-05   | -   | -      | 10000  | -                              | -      | -     |
| <b>Newspaper coverage</b>               | : Few important coverage enclosed |  |   |        |        |                                |        |       |
| <b>Popular articles</b>                 | : Furnished in item no. 10.B      |  |   |        |        |                                |        |       |
| <b>Extension literature</b>             | : Furnished in item no. 10.B      |  |   |        |        |                                |        |       |
| <b>Advisory services</b>                |                                   | 1-10-04 to 14-09-05  | 894   | -      | 894    | -                              | -      | -     |

**26 Details of KVK Bank Accounts**

| Organization               | Name of the bank    | Location | Account No. |
|----------------------------|---------------------|----------|-------------|
| a. With the host institute | State Bank of India | Dharwad  |             |
| b. With the KVK            | State Bank of India | Bijapur  | 01100040062 |

**27 Utilization of KVK Funds under FLD on oil seeds (Rs. In thousand)**

| Item                 | Sanctioned by ZC |              | Released by ZC |              | Expenditure  |              | Un spent balance as on 1 <sup>st</sup> Apr-05 |
|----------------------|------------------|--------------|----------------|--------------|--------------|--------------|---|
|                      | Kharif 2004      | Rabi 2004-05 | Kharif 2004    | Rabi 2004-05 | Kharif 2004  | Rabi 2004-05 |   |
| Inputs               | 8750             | 12250        | 8750           | 12250        | 5980         | 12140        | 2880  |
| Extension activities | 1250             | 1750         | 1250           | 1750         | 1140         | 1402         | 458   |
| TA/DA/POL            | 1250             | 1750         | 1250           | 1750         | 3010         | -            | 2699  |
| <b>TOTAL</b>         | <b>11250</b>     | <b>15750</b> | <b>11250</b>   | <b>15750</b> | <b>10130</b> | <b>13542</b> | <b>3445</b>                                   |

**28 Utilization of KVK Funds under FLD on pulses (Rs. In thousand)**

| Item                 | Sanctioned by ZC |              | Released by ZC |              | Expenditure |              | Un spent balance as on 1 <sup>st</sup> Apr-05 |
|----------------------|------------------|--------------|----------------|--------------|-------------|--------------|---|
|                      | Kharif 2004      | Rabi 2004-05 | Kharif 2004    | Rabi 2004-05 | Kharif 2004 | Rabi 2004-05 |   |
| Inputs               | 14000            | 8750         | 14000          | 8750         | 7139        | 4470         | 11141   |
| Extension activities | 2000             | 1250         | 2000           | 1250         | 984         | 1168         | 1098  |
| TA/DA/POL            | 3000             | 1875         | 3000           | 1875         | 836         | -            | 4039  |
| <b>TOTAL</b>         | <b>19000</b>     | <b>11875</b> | <b>19000</b>   | <b>11875</b> | <b>8959</b> | <b>5638</b>  | <b>16278</b>                                  |

| <b>29. Utilization of funds during the year 2004-05 (From April-04 to March-05)</b> |  |                              |                               |
|---|--|------------------------------|-------------------------------|
| <b>Sl.No.</b>   | <b>Particulars</b>   | <b>Sanctioned<br/>In Rs.</b> | <b>Expenditure<br/>In Rs.</b> |
| <b>A. Recurring Contingencies</b>   |  |                              |                               |
| 1.  | Pay and Allowances   | 1700000                      | 1645373                       |
| 2.  | Traveling Allowances   | 50000                        | 40935                         |
| 3.  | Contingencies  |                              |                               |
|   | a. Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper and Magazines). | 73000                        | 72547                         |
|   | b. POL, repair of vehicles tractor and equipments.   | 47000                        | 46392                         |
|   | c. Meals/refreshments for trainees (Ceiling up to Rs.40/day/trainee be maintained)   | 80000                        | 29606                         |
|   | d. Training material (Posters, charts, demonstration material including chemicals etc. required for conducting the training)   | 30000                        | 9782                          |
|   | e. Frontline demonstration except oilseeds and pulses (Minimum of 30 demonstration in a year)  | 20000                        | 8470                          |
|   | f. On farm testing (On need based, location specific and newly generated information in the major production systems of the area)                                    | 20000                        | 3027                          |
|   | g. Training of extension functionaries   | 20000                        | -                             |
|   | h. Maintenance of building   | 10000                        | 9600                          |
|   | i. Establishment of soil, plant and water testing laboratory   | 320000                       | 317450                        |
|   | j. Library (Purchase of Journal, News papers & Magazines)  | -                            | -                             |
|   | <b>Total (A)</b>   | <b>2370000</b>               | <b>2183182</b>                |
| <b>B. Non- Recurring Contingencies</b>  |  |                              |                               |
| 1.  | Works  | -                            | -                             |
| 2.  | Equipments and Furniture   | -                            | -                             |
| 3.  | Establishment of soil, plant and water testing laboratory  | 860000                       | 859668                        |
| 4.  | Vehicle  | 500000                       | 498647                        |
| 5.  | Library (Purchase of assets like books and journals back volume)   | 10000                        | 9996                          |
|   | <b>Total (B)</b>   | <b>1370000</b>               | <b>1368311</b>                |
| <b>C. Revolving Fund</b>  |  | <b>100000</b>                | <b>100000</b>                 |
| <b>Grand Total (A+B+C)</b>  |  | <b>3840000</b>               | <b>3651493</b>                |



| <b>29. Utilization of funds during the year 2005-06 (From April-05 to August-05)</b> |  |                              |                               |
|--|--|------------------------------|-------------------------------|
| <b>Sl.No.</b>  | <b>Particulars</b>   | <b>Sanctioned<br/>In Rs.</b> | <b>Expenditure<br/>In Rs.</b> |
| <b>A. Recurring Contingencies</b>  |  |                              |                               |
| 1.   | Pay and Allowances   | 20,00,000                    | 7,26,285                      |
| 2.   | Traveling Allowances   | 1,00,000                     | 5,121                         |
| 3.   | Contingencies  | 5,00,000                     |                               |
|  | k. Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper and Magazines). | 1,50,000                     | 16,236                        |
|  | l. POL, repair of vehicles tractor and equipments.   | 1,00,000                     | 27,839                        |
|  | m. Meals/refreshments for trainees (Ceiling up to Rs.40/day/trainee be maintained)   | 75,000                       | 15,524                        |
|  | n. Training material (Posters, charts, demonstration material including chemicals etc. required for conducting the training)   | 40,000                       | -                             |
|  | o. Frontline demonstration except oilseeds and pulses (Minimum of 30 demonstration in a year)  | 50,000                       | 12,146                        |
|  | p. On farm testing (On need based, location specific and newly generated information in the major production systems of the area)                                    | 30,000                       | 1,600                         |
|  | q. Training of extension functionaries   | 25,000                       | -                             |
|  | r. Maintenance of building   | 20,000                       | -                             |
|  | s. SWTL  | -                            | -                             |
|  | t. Library (Purchase of Journal, News papers & Magazines)  | 10,000                       | -                             |
|  | <b>Total (A)</b>   | <b>26,00,000</b>             | <b>8,04,751</b>               |
| <b>B. Non- Recurring Contingencies</b>   |  |                              |                               |
| 1.   | Equipments and Furniture   | -                            | -                             |
| 2.   | Works  | -                            | -                             |
| 3.   | Library (Purchase of assets like books and journals back volume)   | 10,000                       | -                             |
| 3.   | Vehicle  | -                            | -                             |
| 4.   | SWTL   | -                            | -                             |
|  | <b>Total (B)</b>   | <b>10,000</b>                | <b>-</b>                      |
| <b>C. Revolving Fund</b>   |  |                              |                               |
|  | <b>Grand Total (A+B+C)</b>   | <b>2610000</b>               | <b>8,04,751</b>               |

**30 Status of revolving fund –yet to operate**

**31 Activities of soil, water and plant testing laboratory**

Status of establishment of lab

Yes

1. Date of Establishment

01-09-2005

2. List of equipments purchased with amount

| <b>Sl. No.</b> | <b>Name of the Equipment</b>  | <b>Qty</b> | <b>Cost (Rs)</b> |
|----------------|---|------------|------------------|
| 1.             | pH. Meter   | 01         | 8,900.00         |
| 2.             | Electrical conductivity Bridge  | 01         | 9,790.00         |
| 3.             | Flame Photometer  | 01         | 32,040.00        |
| 4.             | Visible spectro phtoto meter  | 01         | 40,050.00        |
| 5.             | Electronic automatic KEL Plus digestion system and Nitrogen distillation system | 01         | 1,42,844.00      |
| 6.             | Shaking machine   | 01         | 47,025.00        |
| 7.             | Electronic weighing machine   | 01         | 57,000.00        |
| 8.             | Physical balance  | 01         | 10,890.00        |
| 9.             | Hot air oven  | 01         | 16,471.00        |
| 10.            | Hot plate   | 01         | 2,912.00         |
| 11             | Grinder   | 01         | 14,700.00        |
| 12.            | Water distillation unit   | 01         | 62,444.00        |
| 13.            | Refrigerator  | 01         | 12,285.00        |

| <b>Accessories</b> |   |    |             |
|--------------------|---|----|-------------|
| 1.                 | Electronic acid neutralizer scrubber for KEL plus digestion and distillation unit     | 01 | 42,185.00   |
| 2.                 | Combined electrode for pH meter   | 01 | 23,451.00   |
|                    | Conductivity cell type for conductivity meter   | 01 |             |
|                    | Glass cuvettes, plastic cuvettes and tungston haloen lamp for spectro phtoto meter    | 01 |             |
|                    | Software and interfacing accessories for spectro phtoto meter                         | 01 |             |
|                    | Calcium filter for flame photo meter  | 01 |             |
| 3.                 | Water softner for water distillation unit   | 01 | 16,932.00   |
|                    | Silica heaters for water distillation unit  | 01 |             |
|                    | <b>TOTAL(A)</b>   |    | 5,39,919.00 |
| B.                 | Laboratory furnitures purchased<br>(Lab tables, Steel cabinet, Lab stools, Lab racks) |    | 3,19,749.00 |
|                    | <b>TOTAL (A+B)</b>  |    | 8,59,668.00 |
|                    | <b>Un spent balance</b>   |    | 332.00      |

3. Details of samples analyzed so far.- **Inaugurated on 1<sup>st</sup> September-2005, yet to start**

### **32. Important days celebrated:**

- ☞ World food day celebrated on 16-10-2004 at KVK, Bijapur

### **33. Research project proposal submitted for external funding**

- ☞ Sorghum based bakery products and preservation and processing of mushrooms.

### **34. Other activities**

- ☞ A meeting of Scientists, Dept. Officials and Pomegranate growers was organised on 7-8 of December, 2004 at KVK, Bijapur to find out the solution for the Pomegranate blight and adhoc recommendations were given to the pomegranate growers.

- ☞ **“Prakruti”** Savayava Krishikar Koota has been formed with the following objective.

- Conducting monthly meetings for the members in the farmer’s field who have adopted the organic farming and arranging the discussion.
- Arranging the lectures by the experts.
- Arranging the tour for club members.

Four meetings were organized, Two at KVK, Bijapur and two at farmers field.

- ☞ Felicitation of Best farmers and Farm women at Krishi Mela-04 Dharwad

### **35. Seminars:**

1. A seminar on Improved production technology, Storage and Marketing of Onion was held at Kandagal Hanumantaraya Ranga Mandir, Bijapur on 28-10-2004
2. Seminar on vermicompost and agriculture technology held at Margoor village Tq. Indi on 29-04-05. There were 276 farmers attended the seminar and got benefited.
3. Seminar on “Mushroom production technology and marketing” held at Jambagi Prabhudevarabetta, Tq. Sindagi on 01-08-2005. 225 farmers took the advantage of the seminar.

### **36. Campaign**

1. Three neem seed collection campaign were organized one on 07-07-2005 at Roodagi and another two on 25-07-2005 at Yaragal and Chandakote

### **37. Farmers educational tour**

1. From 14 to 18<sup>th</sup> may, 2005 eight progressive farmers of Bijapur district were taken to the Akhuj, Rahuri, Nasik, Jalagaon, and Tulajapur to see the intensive technologies and innovative farming adopted by the farmers.

### SUMMARY TABLES

**Table-1&2 Area-wise Distribution of Training Courses for Farmers and Farm women and Rural youths**

| Discipline           | No. of Courses  | Total No. of Beneficiaries |            |             |            |            |
|----------------------|---|----------------------------|------------|-------------|------------|------------|
|                      |   | Male                       | Female     | Total       | SC/ST      | Total      |
| Crop production      | 26  | 421                        | -          | 421         | 126        | 126        |
| Horticulture         | 23  | 196                        | 188        | 384         | 97         | 97         |
| Livestock production | 09  | 301                        | 216        | 517         | 2          | 2          |
| Plant Protection     | Plant protection aspects are covered in the respective training programmes. |                            |            |             |            |            |
| Organic Farming      | 02  | 16                         | -          | 16          | -          | -          |
| Vermiculture         | 16  | 502                        | 112        | 614         | 54         | 54         |
| <b>TOTAL</b>         | <b>76</b>   | <b>1436</b>                | <b>516</b> | <b>1952</b> | <b>279</b> | <b>279</b> |

**Table-3. Area-wise Distribution of Training Courses for In service Extension Personnel**

| Discipline       | No. of Courses | Total No. of Beneficiaries |          |           |          |          |
|------------------|----------------|----------------------------|----------|-----------|----------|----------|
|                  |                | Male                       | Female   | Total     | SC/ST    | Total    |
| Crop Production  | 1              | 24                         | -        | 24        | 3        | 3        |
| Plant Protection | 1              | 25                         | -        | 25        | 4        | 4        |
| <b>TOTAL</b>     | <b>2</b>       | <b>49</b>                  | <b>-</b> | <b>49</b> | <b>7</b> | <b>7</b> |

**Table-4. Number of Extension Activities and Beneficiaries**

| Nature of Extension Activity | No. of Activities | Farmers   |        |       | Extension Officials |        |       | Total |        |        |
|------------------------------|-------------------|---|--------|-------|---------------------|--------|-------|-------|--------|--------|
|                              |                   | Male  | Female | Total | Male                | Female | Total | Male  | Female | Total  |
| Kisan melas                  | 01                | -   | -      | -     | -                   | -      | -     | -     | -      | 113000 |
| Field days                   | 05                | -   | -      | -     | -                   | -      | -     | -     | -      | 286    |
| Farmers seminar              | 02                | -   | -      | -     | -                   | -      | -     | -     | -      | 501    |
| Radio and TV talk            | 11                | -   | -      | -     | -                   | -      | -     | -     | -      | wide   |
| Film/ video show             | 02                | Will be shown in the respective training programmes |        |       |                     |        |       |       |        |        |
| Exhibition                   | 03                | -   | -      | -     | -                   | -      | -     | -     | -      | 173000 |
| Extension literature         | 02                | -   | -      | -     | -                   | -      | -     | -     | -      | 4000   |
| Advisory services            | 894               | -   | -      | -     | -                   | -      | -     | -     | -      | wide   |

**Table-5: Production of seeds- Nil****Table-6: Production of sapling/seedling of fruits/vegetable/forest species – Nil****Table-7: Frontline demonstration on oilseed crops**

| Crop/Season       | No. of demonstrations | Area (ha) | Demonstration yield (q/ha) | Local yield (q/ha) | % Increase  |
|-------------------|-----------------------|-----------|----------------------------|--------------------|-------------|
| Sunflower, Kharif | 08                    | 5.0       | 7.11                       | 4.81               | 49.00       |
| Groundnut, Summer | 08                    | 5.0       | 24.12                      | 20.38              | 18.40       |
| <b>TOTAL</b>      | <b>16</b>             | <b>10</b> | <b>31.23</b>               | <b>25.19</b>       | <b>67.4</b> |

**Table-8: Frontline demonstration on pulse crops**

|                  |           |           |             |              |              |
|------------------|-----------|-----------|-------------|--------------|--------------|
| Redgram, Kharif  | 12        | 5.0       | 19.78       | 15.90        | 24.33        |
| Bengalgram, rabi | 10        | 5         | 8.62        | 6.74         | 27.88        |
| <b>TOTAL</b>     | <b>22</b> | <b>10</b> | <b>28.4</b> | <b>22.64</b> | <b>52.21</b> |

**Table-9: Frontline demonstration on other crops**

|  |    |    |       |       |       |
|--|----|----|-------|-------|-------|
| Cotton (DHH-11) ICM                              | 20 | 8  | 21.26 | 18.00 | 18.10 |
| Sorghum (CSV216R with protective irrigation)Rabi | 12 | 4  | 14.60 | 12.00 | 21.60 |
| Sorghum (CSV216R, rainfed) rabi                  | 12 | 11 | 11.30 | 9.20  | 22.80 |
| Sorghum (DSV-5, rainfed) rabi                    | 12 | 5  | 8.22  | 7.00  | 17.40 |

**Table-10: Frontline demonstration on other enterprises. –Nil****Table-11: No. of farm testing conducted**

| Crops  | Varietal/fe ed evaluation | Nutrient feed managem ent | Cropping system | Zero tillage | Weed managem ent | Insect/ disease management                 | Total |
|--------|---------------------------|---------------------------|-----------------|--------------|------------------|--|-------|
| Pulse  | -                         | -                         | -               | -            | -                | Bengalgram, Garlic chilli aqueous solution | 01    |
| Fruits | -                         | -                         | -               | -            | -                | Pomegranate, Bacterial blight              | 01    |

**a. Spraying of milk to prevent the viral diseases**

**b. Use of enriched dung slurry for improving soil fertility**

5000 liters dung slurry + Azospirillum 3kg+ PSB 3 kg + Trichoderma 3kg + 5g Jaggary keep it for eight days to ferment and then use 2 liters slurry per plant regularly at one month interval to improve the soil fertility

**c. Use of cow urine to manage mealybugs**

Cow urine collected and stored for at least 3 days before use, spraying of cow urine 3ml + neem oil 2ml + milk 3ml per liter of water reduces mealybug infestation.

**d. Use of butter milk to manage powdery mildew and downy mildew**

Butter milk is kept in copper container for 3 weeks and sprayed 3ml per liter if water.

**e. Use of tobacco for the management of sucking pest**

Ten kg raw tobacco is soaked in 100 liter of water for 24 hrs and filtrate is sprayed at 5ml per liter of water to control thrips and aphids.