VASANTRAO NAIK MARATHWADA KRISHI VIDYAPEETH
**KRISHI VIGYAN KENDRA**
**PAITHAN ROAD**
**AURANGABAD- 431 005 [MS]**

*e-mail:* ***pckvkmau@rediffmail.com***, ***pckvkmau@gmail.com*** *Ph: 0240- 2376558*

NO. KVK/ 25 / 15
Date: 17/4/15

To,
The Zonal Project Director
Zonal Project Directorate KVK (Zone-V)
CRIDA, Complex Santoshnagar
Hyderabad-59

Sub: Submission of Annual Progress Report reg…..
Ref: PA/ZPD/APR-15 /2014-15 dt. 10/3/15

Respected Sir,

With reference to above subject, please find enclosed herewith Annual Progress Report of KVK, Aurangabad for the year of 2014-15

Submitted for your kind information please.

Thanking you

Yours faithfully,

Sd/-
Programme Co-ordinator
KVK, Aurangabad

Copy submitted to
The Director, Extension Education, VNMKV, Parbhani for favor of information please

# ANNUAL REPORT – 2014-15

## 1. GENERAL INFORMATION ABOUT THE KVK

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

| Address | Telephone | | E mail |
|---|---|---|---|
| Programme Coordinator, Krishi Vigyan Kendra, Paithan Road, Aurangabad | 0240-2376558 | 2376558 | pckvkmau@rediffmail.com & pckvkmau@gmail.com |

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

| Address | Telephone | | E mail |
|---|---|---|---|
| | Office | FAX | |
| Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani. | 02452-223801/02 | 02452-223583 | vcmau@rediffmail.com |

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

| Name | Telephone / Contract | | |
|---|---|---|---|
| | Residence | Telephone / Mobile | E mail |
| Dr. S.B.Pawar | Dhillon Residency R.H. No. A-6, Kanchanwadi ,Paithan road, Aurangabad | 9422178982 | pckvkmau@gmail.com pckvkmau@rediffmail.com |

1.4. Year of sanction: ICAR F.No. 21 (88) KVK Extn dated 19.03. 1983

1.5. Staff Position (as on 31 March, 2014)

| Sl. No. | Sanctioned post | Name of the incumbent | Designation | Discipline | Pay Scale (Rs.) | Present basic (Rs.) | Date of joining | Permanent /Temporary | Category (SC/ST/ OBC/ Others) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Programme Coordinator | Dr. S.B. Pawar | Programme Coordinator | Agronomy | - | - | 01.05.2013 | Additional charge | Open |
| 2 | Subject Matter Specialist | Prof. D.C.Patgaonkar | Subject Matter Specialist | Home Science | 15600-39100 6000 | 25810 | 04.09.2007 | Permanent | Open |
| 3 | Subject Matter Specialist | Prof. V.S. Jadhav | Subject Matter Specialist | Animal Science | 15600-39100 5400 | 21000 | 03.10.2013 | Permanent | OBC |
| 4 | Subject Matter Specialist | Dr. K.K.Zade | Subject Matter Specialist | Agronomy | 15600-39100 5400 | 21000 | 04.10.2013 | Permanent | Open |
| 5 | Subject Matter Specialist | Prof. D.S.Bhujbal | Subject Matter Specialist | Horticulture | 15600-39100 5400 | 21000 | 22.10.2013 | Permanent | OBC |
| 6 | Subject Matter Specialist | Prof. G.B. Yadav | Subject Matter Specialist | Agril. Engg. | 15600-39100 5400 | 21000 | 19.10.2013 | Permanent | Open |
| 7 | Subject Matter Specialist | Dr. N.D. Deshmukh | Subject Matter Specialist | Exten. Educ. | 15600-39100 5400 | 21000 | 24.01.2014 | Permanent | Open |
| 8 | Programme Assistant | Shri A.N. Puri | Programme Assistant | - | 9300-34800 4600 | 29780 | | Permanent | NT |
| 9 | Computer Programmer | Vacant | Computer Programmer | - | - | | | | |
| 10 | Farm Manager | Shri N.H Chavan | Farm Manager | - | - | | | | |
| 11 | Accountant / Superintendent | Shri. H.M. Deothankar | Accountant / Superintendent | - | 9300-34800 4200 | 13500 | 05.10.2013 | Permanent | Open |
| 12 | Stenographer | Smt. M.W.Kadale | Stenographer III | - | 5200-20500 2400 | 10840 | 25.01.2010 | Permanent | ST |
| 13 | Driver | Shri. V. H. Candane | Driver | - | 5200-20200 2000 | 8460 | 16.09.2013 | Permanent | Sc |
| 14 | Driver | Shri. K. S..Sudewad | Driver | - | 5200-20200 2000 | 8460 | 26.08.2013 | Permanent | ST |
| 15 | Supporting staff | Lakshaman Shinde | Watch man | - | 4400-7400 1300 | 4400 | 20.02.2015 | Permanent | - |
| 16 | Supporting staff | Vacant | - | - | - | - | - | - | - |

.6. Total land with KVK (in ha) :

| Sr.No. | Item | Area (ha) |
|---|---|---|
| 1. | Under Buildings | 00.50 |
| 2. | Under Demonstration Units. | 00.40 |
| 3. | Under crops | 10.00 |
| 4. | Orchard / Agro forestry | 06.80 |
| 5. | Others | 02.30 |
| | Total | 20.00 |

1.7. Infrastructural Development:

A) Buildings

| Sr. No. | Name of building | Source of funding | Stage | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Complete | | | Incomplete | | |
| | | | Completion Date | Plinth area (Sq.m) | Expenditure (Rs. | Starting Date | Plinth area (Sq.m) | Status of construction |
| 1. | Administrative Building | ICAR | - | 363.00 | 5,21,523 | - | - | - |
| 2. | Farmers Hostel | ICAR | - | 213.60 | 9,90,223 | - | - | - |
| 3. | Staff quarters (6) | ICAR | - | 252.60 | 5,68,892 | - | - | - |
| 4. | Demonstration Units(2) | | | | | | | |
| 1 | Goat shed | ICAR | - | 36.50 | 40,000 | - | - | - |
| 2 | Sale counter | MKV, Parbhani | 2003-04 | 56.94 | 70,000 | - | - | - |
| 3 | Net shed (Nursery) | ICAR | 2004-05 | 92.90 | 70,000 | - | - | - |
| 4 | Vermicompost<br>1. Culture unit<br><br>2. Composting Unit (3) | State Deptt of Agril (MS)<br><br>ICAR | 2002-03<br><br>2004-05 | 11.11<br><br>92.90 | 10.000<br><br>2,75,000 | -<br><br>- | -<br><br>- | -<br><br>- |
| 5 | NADEP unit | Revolving fund of KVK | 2004-05 | - | - | - | - | - |
| 6. | Zero energy cool chamber | -do- | 2004-05 | - | 10,000 | - | - | - |
| 7. | Threshing yard | MKV, Parbhani | 2004-05 | 65.52 | 90,000 | - | - | - |
| 8. | Erection of MS Umbrella | -do- | 2004-05 | - | 29,000 | - | - | - |
| 9. | Implement shed | ICAR, MKV, Parbhani | 2005-06 | 107.05 | 5,36,000 | - | - | - |
| 10. | Sericulture unit | ICAR | 2007-08 | 95.00 | 2,29,000 | - | - | - |
| 11 | Poultry Unit | ICAR | 2007-08 | 92.50 | 2,85,000 | - | - | - |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 12 | Temp Go down | MKV, Parbhani | 2006-07 | 120.00 | 1,26,000 | - | - | - |
| 13 | Fencing | MKV, Parbhani | 2006-07 | - | 1,97,000 | - | - | - |
| 15 | Threshing floor | - | 2006-07 | - | - | - | - | - |
| 16 | Farm pond. | MKV, Parbhani | 2006-07 | - | 72,000 | | | |

B) Vehicles

| Type of vehicle | Year of purchase | Cost (Rs.) | Total kms. Run | Present status |
|---|---|---|---|---|
| Mahindra Bolero | 2010-11 | 564721 | | Working condition |
| Tractor Farm Trac (Supplied by Govt. of Maharashtra) | 2007-08 | 4,23,750/- | - | Under repair |
| Tractor Mahindra (ICAR) | 2008-09 | 4,95,00/- | 1655 | Working condition |
| Tractor Mitsubishi Shakti MT-180D (Supplied by Govt. of Maharashtra) | 2007-08 | -- | - | Under repair |
| Motor cycle (TVS Max) | 2003-04 | 31,998/- | - | Under repair |
| | | | | |

C) Equipments & AV aids

| **Sr.No.** | **Name of the item** | **Year of purchase** | **Value (RS)** | **Present condition** |
|---|---|---|---|---|
| 1. | Aquatex 5 HP submibersible set. | 2004-05 | 18360 | Working condition |
| 2. | Hot plates | 2004-05 | 16600 | Working condition |
| 3. | Water bath (2) | -do- | 10795 | Working condition |
| 4. | PH meter | -do- | 11157 | Working condition |
| 5. | EC meter | -do- | 12079 | Working condition |
| 6. | Systronic Micro controller | -do- | 36031 | Working condition |
| 7. | Calcium filter | -do- | 5234 | Working condition |
| 8. | Lab willy | -do- | 18260 | Working condition |
| 9. | Monopan Electrical balance | -do- | 14280 | Working condition |
| 10. | Electrical Digital balance | -do- | 41650 | Working condition |
| 11. | Shaker Electrically operated | -do- | 11750 | Working condition |
| 12. | Plant sample grander | -do- | 13430 | Working condition |
| 13. | Meffle furniture | -do- | 30090 | Working condition |
| 14. | Electrolux refrigerator | -do- | 11875 | Working condition |
| 15. | Compaq lab top | -do- | 4800 | Working condition |
| 16. | Compaq PC work station | -do- | 31900 | Working condition |
| 17. | Hot air oven | -do- | 25193 | Working condition |
| 18. | Shaker conical MAC | -do- | 74800 | Working condition |

| | | | | |
|---|---|---|---|---|
| 19. | Lab stood 10 Nos. | -do- | 8500 | Working condition |
| 20 | Steel office table 5 Nos. | -do- | 17480 | Working condition |
| 21 | Steel cubboard 4 Nos. | -do- | 28232 | Working condition |
| 22 | Steel chair 10 Nos. | -do- | 14580 | Working condition |
| 23 | Computer work station table | -do- | 4579 | Working condition |
| 24 | Laboratory table 3 Nos. | -do- | 10530 | Working condition |
| 25 | Computer work chair. | -do- | 5880 | Working condition |
| 26. | Steel book case | -do- | 13908 | Working condition |
| 27. | Blue star Air conditioner 2 Nos. | -do- | 56400 | Working condition |
| 28 | Office table 2 Nos. | -do- | 6992 | Working condition |
| 29 | Erose steel cupboard 2 Nos. | -do- | 14116 | Working condition |
| 30. | Erose steel rack 4 Nos. | -do- | 12160 | Working condition |
| 31. | Steel chair 5 Nos. | -do- | 7290 | Working condition |
| 32 | Eros laboratory table 3 Nos. | -do- | 10530 | Working condition |
| 33. | MS Gate with RCC piller | -do- | 26664 | Working condition |
| 34 | Direct Projector | 1998- 99 | 18500 | Working condition |
| 35 | Collaprable gate | 2000-01 | 6300 | Working condition |
| 36. | Texmo Aquatex electric motor | 2000-01 | 7000 | Working condition |
| 37. | Sugar cane crushing machine | 2004-05 | 5000 | Working condition |
| 38. | 2 HP electric motor | -do- | 6500 | Working condition |
| 39. | Padle operated grain grader | -do- | 6250 | Working condition |
| 40. | Dall mill | -do- | 12500 | Working condition |
| 41. | Sharp Digital photo copier | -do- | 103500 | Working condition |
| 42 | Fax machine | -do- | 13000 | Working condition |
| 43 | Lam inated photographs. | -do- | 15750 | Working condition |
| 44. | Automatic Egg hatcher | -do- | 65000 | Working condition |
| 45. | Sintex water tank | 2000-01 | 7800 | Working condition |
| 46. | VCR (BOR) | 2000-01 | 16990 | Working condition |
| 47. | BPL colour TV | 2000-01 | 26265 | Working condition |
| 48. | Ceiling fan 8 Nos. | 2001-02 | 8880 | Working condition |
| 49. | Godrej refrigerator | 2000-01 | 14900 | Working condition |
| 50. | Plastic chairs 50 Nos. | 1995-96 | 19000 | Working condition |
| 51. | Plastic chairs 25 Nos. | 1999-2000 | 8625 | Working condition |
| 52. | Almirah 4 No.s | 2003-04 | 20008 | Working condition |
| 59 | Lesar printer | 2003-04 | 14535 | Working condition |
| 60 | Office chairs " S "type 12 Nos. | 2000-01 | 12060 | Working condition |
| 61 | Conference table (2) | 2000-01 | 15791 | Working condition |
| 62 | Sr. Executive table | -do- | 4999 | Working condition |
| 63 | Office table 10 No. | -do- | 27670 | Working condition |
| 64 | Almara 5 Nos. | -do- | 27270 | Working condition |
| 65 | Bookcase | -do- | 4836 | Working condition |
| 67. | Taxmo submiersible pump | 2005-06 | 12550 | Working condition |
| 68. | Digital camera | 2005-06 | 24500 | Working condition |
| 69 | HP: DX PC 17" LCD Monitor | 2006-07 | 41175 | Working condition |
| 70. | HP laser jet printer. | -do- | 6807 | Working condition |
| 71. | Tractor MF 1035 DI (35HP) | 2000-01 | 282257 | Working condition |
| 72. | Jeep Tata Sumo | 2002-03 | 404985 | Working condition |
| 73. | Motor cycle TVS – Max | 2003-04 | 31998 | Working condition |

| | | | | |
|---|---|---|---|---|
| 74 | Offset dice Harrow | 2000-01 | 22100 | Working condition |
| 75. | Trailer | 2000-01 | 69500 | Working condition |
| 76. | Cultivator 9 fined | 2002-03 | 10530 | Working condition |
| 77. | " V " Pass | -do- | 8100 | Working condition |
| 78. | Two furrow Rev plough 35 HP | -do- | 42400 | Working condition |
| 79. | Seed drill | 2006-07 | 33930 | Working condition |
| 80. | Automatic perniyentra | 2000-01 | 18900 | Working condition |
| 81. | Nath Keni | 2000-01 | 5000 | Working condition |
| 82. | 2 FMB Plough | 2000-01 | 13500 | Working condition |
| 83. | Multi crop thresher | 2006-07 | 23500 | Working condition |
| 84. | Panja tiller | 2006-07 | 18907 | Working condition |
| 85. | ' Shaktiman ' Rotavator | 2006-07 | 64536 | Working condition |
| 86. | LCD Multimedia Projector | 2006-07 | 63590 | Working condition |
| 87. | 5 HP Aquatex submersible | 2006-07 | 10800 | Working condition |
| 88. | Aspee HPT Ps-16 | 2006-07 | 9500 | Working condition |
| 89 | Fertigation unit | 2014-15 | 35464/- | Working condition |
| 90 | Gravel filter | 2014-15 | 23122/- | Working condition |

**Moveable Assets created out of State Funds**

| Sr.No. | Name of the item | Year of purchase | Value | Present condition |
|---|---|---|---|---|
| 1. | Cotton Gin | 2007-08 | 38390 | Working condition |
| 2. | Cotton planter bullock drawn | 2007-08 | 21275 | Working condition |
| 3. | Cultivator 9 tine | 2007-08 | 13196 | Working condition |
| 4. | Dall Mill | 2007-08 | 56826 | Working condition |
| 5. | Fertilizer Brodcaster | 2007-08 | 1545 | Working condition |
| 6. | Furrow surry Ridger | 2007-08 | 17342 | Working condition |
| 7. | HTP sprayer | 2007-08 | 7450 | Working condition |
| 8. | Horticulture Tool kit | 2007-08 | 2000 | Working condition |
| 9. | Krushivator 1 Mtr. | 2007-08 | 67117 | Working condition |
| 10. | Leaf shredder | 2007-08 | 140600 | Working condition |
| 11. | Mitsubishi Tractor (18.5 HP) | 2007-08 | 231156 | Working condition |
| 12. | Multicrop Thresher 20 HP | 2007-08 | 70899 | Working condition |
| 13. | Past hole Digger | 2007-08 | 77000 | Working condition |
| 14. | Power weeder / cultivator | 2007-08 | 52964 | Working condition |
| 15. | Reaper | 2007-08 | 81286 | Working condition |
| 16. | Seed cum fertilizer drill 9 tine | 2007-08 | 32280 | Working condition |
| 17. | Single furrow reversible plangh | 2007-08 | 35849 | Working condition |
| 18. | Tractor farmtrac FT-30 with ACC | 2007-08 | 423750 | Working condition |
| 19. | Tractor mounted sprayer | 2007-08 | 29500 | Working condition |
| 20. | Vegetable preservator 30 kg | 2007-08 | 2781 | Working condition |
| 21 | Telescopic pole pruner HT-75 | 2007-08 | 62920 | Working condition |
| 22 | Chain saw MS-180 | 2007-08 | 33313 | Working condition |
| 23 | Dal mill 2Hp 500kg/day | 2008-09 | 56826 | Working condition |
| 24 | MKV bullock drawn turmeric digger | 2014-15 | 4235 | Working condition |
| 25 | MKV twin ferti hoe | 2014-15 | 3825 | Working condition |
| 26 | Turmeric digging blade (03) | 2014-15 | 3540 | Working condition |
| 27 | BBF planter | 2013-14 | | Working condition |

1.8. A). Details SAC meeting conducted in the year

| Sl. No. | Date | Name and Designation of Participants | Salient Recommendations | Action taken |
|---|---|---|---|---|
| 1. | 27/1/2015 | Dr. B. Venkateswarlu, VC, VNMKV, Parbhani | 1.Formation of farmers group for seed bank<br>2. More Training should be organize on Maize processing | Work is in progress |
| 2. | 27/1/2015 | Dr.B.B.Bhosale , DEE, VNMKV, Parbhani | 1. Implement Seed Bank Concept in collaboration with ATMA and State Dept. of Agriculture. | Work is in progress |
| 3. | 27/1/2015 | Shri Trimbakbhau Pathrikar , Progressive Farmer | Organise Training programme on vegetable cultivation in Shade net. | Work is in progress |
| 4. | 27/1/2015 | Shri. Vithhalrao Bhosale, Progressive Farmer | Provide information on low cost hydroponics technology | Work is in progress |

## 2. DETAILS OF DISTRICT (2014-15)

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

| Sr. No. | Farming system / enterprise. |
|---|---|
| 1. | Agriculture + Horticulture |
| 2. | Agriculture + Horticulture + Dairy |
| 3. | Agriculture + Dairy |
| 4 | Agriculture + Sericulture |
| 5. | Agriculture + Poultry |

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

| Sr.No. | Agro-climatic zone | Characteristics. |
|---|---|---|
| 1 | Western Maharashtra Dry Zone | Rainfall ranges from 700-900<br>Soils one medium black calcareous formed from trap with varing depths and textures. |
| 2. | Central Maharashtra plateau zone | |

| Sr.No. | Agro ecological situation | Characteristics. |
|---|---|---|
| 1. | Scarcity zone | Low rainfall, light to medium soils. |
| 2. | Central Maharashtra plateau Zone-I | Low rainfall, Medium to heavy soils ,CADA area, |
| 3. | CMP-II | Assured rainfall medium to heavy soils. |

| | | |
|---|---|---|
| 4. | CMP-III | Assured rainfall medium to heavy soils. |
| 5. | CMP-IV | Command area heavy soils. |

**2.3 Soil type**

| Sr. No. | Soil type | Characteristics | Area in ha |
|---|---|---|---|
| 1. | Shallow soils | 1. Depth 22.5 cm<br>2. Particle size < 0.02 mm<br>3. Well drain soil<br>4. Low water holding capacity | 46 % |
| 2. | Medium black soils | 1. Depth 22.5 to 45 cm<br>2. Silt plus clay<br>3. Medium water holding capacity | 10 % |
| 3. | Deep black soils. | 1. Depth 60 to 90 cm<br>2. Particle size < 0.002 mm<br>3. Poor drain soil<br>4. High water holding capacity<br>5. High swelling and Shrinkage capacity | 35 % |

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

Ref: State dept of Agril . year 2013

| Sr. No. | Crop | Area ha) | Production (MTon) | Productivity (kg/ha) |
|---|---|---|---|---|
| 1. | Cotton | 433458 | 517115 | 1193 |
| 2. | Rabi Jowar | 12000 | 9245 | 770.4 |
| 3. | Kh. Jowar | 3840.4 | 6751.8 | 1758.09 |
| 4. | Kf. Maize | 169776 | 710852 | 4187 |
| 5. | Rabi Maize | 560 | 1043 | 1862.5 |
| 6. | Bajra | 39387 | 47973 | 1218 |
| 7. | Pigean pea | 27914 | 25597 | 917 |
| 8. | Green gram | 11996 | 10209 | 851 |
| 9. | Black gram | 6928 | 6651 | 960 |
| 10. | Soybean | 13769 | 22154 | 1609 |
| 11. | Wheat | 4345 | 7243 | 1666.9 |
| 12. | Bengal gram | 5842 | 3863 | 661.2 |
| 13. | Ground nut | 4416 | 4442 | 1006 |

2.5. Weather data

| Month | Rainfall (mm) | Temperature $^0$ C | | Relative Humidity (%) | |
|---|---|---|---|---|---|
| | | Maximum | Minimum | Maximum | Minimum |
| April 2014 | 0 | 38.09 | 24.33 | NA | NA |
| May | 0 | 39.42 | 26.32 | NA | NA |
| June | 18.4 | 37.80 | 25.90 | NA | NA |
| July | 137.2 | 31.30 | 24.34 | NA | NA |
| August | 154.5 | 29.61 | 22.19 | NA | NA |
| September | 98.5 | 29.09 | 23.13 | NA | NA |
| October | 13.6 | 32.38 | 21.00 | NA | NA |
| November | 0 | 31.13 | 18.06 | 98.06 | 27.93 |
| December | 0 | 29.22 | 12.20 | 95.06 | 29.25 |
| January 2015 | 0 | 29.13 | 14.15 | 95.68 | 21.40 |
| February | 23.50 | 32.17 | 14.62 | 80.00 | 21.65 |
| March | 29.00 | 33.76 | 17.60 | 82.41 | 25.64 |
| Total | 474.7 | - | - | - | - |

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

| Category | Population | Production | Productivity |
|---|---|---|---|
| **Cattle** | | | |
| **Cow** | | | |
| Crossbred | 48621 | 1,8586 Lit / day | 7 Lit / cow / day |
| Indigenous | 102705 | 8,3251 Lit / day | 1.5 Lit / cow / day |
| **Buffalo** | | | |
| Crossbred | 4889 | 22869 Lit / day | 7 Lit / Buffalo / day |
| Indigenous | 45804 | 67920 Lit / day | 2.5 Lit / buffalo / day |
| **Sheep** | | | |
| Crossbred | N.A. | N. A. | N.A. |
| Indigenous | 82000 | N.A. | N.A |
| **Goats** | 3,81,000 | 1,42,875 | 0.5 Lit / goat / day |
| **pigs.** | | | |
| Crossbred | N.A | N.A | N.A |
| Indigenous | 10,500 | 262.5 MT. | Meat 25 kg / animal |
| **Rabbits** | N.A | N.A | N.A |
| **Poultry** | | | |
| Hens | 4,99,000 | | |
| Desi | 1,22,510 | 7.3 Millennium egg/annum | 60 egg / year |
| Improved | 3,76.490 | 67.3 Millennium egg/annum | 160 egg / year |
| Ducks | 17,500 | N.A | N.A |
| Turkey and others. | N.A | N.A | N.A |
| Horse | 1966 | N.A | N.A |
| Bull | 2,31,000 | N.A | N.A |

**2.7** Details of Operational area / Villages (2014-15)

| Sl.No. | Taluk | Name of the block | Name of the village | Major crops & enterprises | Major problem identified | Identified Thrust Areas |
|---|---|---|---|---|---|---|
| | Aurangabad | Gangapur | Shiregaon, Mahebubkheda Sekta | Cotton<br>Maize<br>Pigeaonpea<br>Wheat<br>Gram<br>Sweet orange<br>Pomegranate<br>Bajra<br>Jowar<br>Green gram | 1) In adequate use of organic manures in cotton<br>2) Imbalance use of fertilizers in cotton<br>3) Infestation of Mealy bug on cotton<br>4) Low plant population in cotton<br>5) Sowing at closure spacing in bajra<br>6) Inadequate moisture availability during terminal stage in Bajra<br>7) Imbalance nutrient management in Maize<br>8) Continuous cultivation of maize on same land.<br>9) Use of poor quality seed in gram,<br>10) Infestation of pod borer in gram.<br>11) Dieback in sweet orange<br>12) Gummosis in sweet orange<br>13) Imbalance nutrient management in sweet orange.<br>14) Improper techniques of pruning in Pomegranate.<br>15) Malnutrition in children<br>16) Women drudgery<br>17) Anemia in female | 1)Nutrient management in cotton<br>2) INM in cotton<br>3) Moisture conservation techniques in bajra & cotton.<br>4) Nutritional management in maize crops.<br>5) Crop rotation in maize.<br>6) Seed production programme in gram.<br>7) Nutrition and irrigation management in sweet orange.<br>8) Gummosis management in sweet orange.<br>9) Pruning techniques in pomegranate.<br>10) Nutrition management in farm families<br>11) Drudgery reduction in farm women |

2.8 Priority/thrust areas

| Sr. No. | Crop/Enterprise | Thrust area |
|---|---|---|
| 1. | Cotton | Integrated Nutrient Management |
| 2. | Cotton | Integrated Pest Management |
| 3. | Pigeon pea | Integrated crop management |
| 4. | Drudgery reduction | Drudgery reduction in farmwomen |
| 5. | Soybean | Varietal improvement in Soybean |
| 6. | Pigeon pea | Intercropping (Soybean+ pigeon pea) |
| 7. | Chick pea | Varietal improvement in Chick pea<br>INM in gram |
| 8. | Pomegranate | Pruning techniques in Pomegranate |
| 9. | Mango | Nutrition management |
| 10. | Poultry | Breed improvement |
| 11. | Goatary | Disease management |
| 12. | - | Nutrition Management of farm families |

## 3. TECHNICAL ACHIEVEMENTS

### 3.A. Details of target and achievements of mandatory activities by KVK during 2014-15

| OFT (Technology Assessment and Refinement) | | | | FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises) | | | |
|---|---|---|---|---|---|---|---|
| 1 | | | | 2 | | | |
| Number of OFTs | | Number of Farmers | | Number of FLDs | | Number of Farmers | |
| Targets | Achievement | Targets | Achievement | Targets | Achievement | Targets | Achievement |
| 17 | 11 | 160 | 115 | 18 | 11 | 320 | 185 |
| | | | | | | | |

| Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit) | | | | | Extension Activities | | | |
|---|---|---|---|---|---|---|---|---|
| 3 | | | | | 4 | | | |
| Number of Courses | | | Number of Participants | | Number of activities | | Number of participants | |
| Clientele | Targets | Achievement | Targets | Achievement | Targets | Achievement | Targets | Achievement |
| Farmers | 44 | 31 | 1300 | 977 | - | 156 | Mass scale | |
| Rural youth | 30 | 8 | 950 | 180 | | | | |
| Extn. Functionaries | 18 | 6 | 515 | 248 | | | | |

| Seed Production (Qtl.) | | Planting material (Nos.) | |
|---|---|---|---|
| 5 | | 6 | |
| Target | Achievement | Target | Achievement |
| Soybean | 12.78 | Pomegranate – 50000 sapling | 60000 sapling (Expected ) |
| Pigeon pea | 6.60 | | |
| Safflower | 0.94 | | |
| Wheat | **45 (Tentative)** | | |

### 3. B Abstract of interventions undertaken

| S. No | Thrust area | Crop/ Enterprise | Identified Problem | Interventions | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Title of OFT if any | Title of FLD if any | Title of Training if any | Title of training for extension personnel if any | Extension activities | Supply of seeds, planting materials etc. |
| 1 | Integrated Crop Management | Pigeon pea | Low productivity of non-descript and local pigeon pea varieties grown on rainfed | Assessment of improved variety of Pigeon pea ( BDN-711) in rainfed situation | ICM in Pigeon pea | Pest management in Pigeon pea | - | Field day | Seed |
| 2 | Integrated Crop Management | Cotton | Low productivity of cotton under rainfed medium black soils | Effect of high density planting in desi cotton in medium to light soil under rainfed condition | - | High density planting in desi cotton under rainfed condition | - | Field day | Seed |
| 3 | Integrated Crop Management | Wheat | Low production under dryland condition | Assessment of improved Wheat variety (NIAW-1415 /Netravati) under rainfe condition | - | Modern cultivation practices in Wheat crop | - | Field day | Seed |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 4 | Integrated Crop Management | Bt cotton | Increased cost of cultivation and low productivity of Bt cotton | - | ICM in Bt cotton | Integrated crop management technology in Bt cotton | - | - | Whole technology |
| 5 | Integrated Crop Management | Pigeon pea | Low productivity of non-descript and local pigeon pea varieties grown on rainfed | - | ICM in Pigeon pea | Integrated crop management technology in Pigeon pea | - | - | seed |
| 6 | Integrated Crop Management | Soybean | Monocropping of Bt cotton and maize results into low productivity and increase in cost of cultivation of crops. | - | Introduction of new soybean crop with improved variety. | Integrated crop management of soybean crop | - | Field day | Seed |
| 7 | Integrated Crop Management | Intercropping in bt cotton | Low productivity and increase in cost of cultivation of Bt cotton crops. | - | Introduction of intercropping in bt cotton. (Green gram, Black gram and soybean ) | Intercropping in different crops for increasing in productivity. | - | Field day | Seed |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 8 | Integrated Crop Management | Sorghum | Low productivity due to use of local sorghum variety. | - | Use of improved variety Parbhani moti of sorghum crop | - | - | Field day | Seed |
| 9 | Integrated Crop Management | Green gram | Low productivity due to use of local green gram variety. | - | Use of improved variety BM-2003-02 of green gram crop | - | - | Field day | Seed |
| 10 | Integrated Crop Management | Bengal gram | Low productivity of non-descript and local Bengal gram varieties grown and production technologies | - | ICM in Bengal gram | Pest management in Bengal gram | - | Field day | Seed |
| 3 | Nutrition Management | Bio – fortified pearl pillet (ICTP-803) | 1.Anemia in farm women | Effect of Biofortified pearl pillet (ICTP-803) on anemic farm women | Establishment of nutrition garden | 1.Correct method of cooking 2. Use of local available foods | Importance of nutrition for human being | Health camp | Seed |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 4 | Local specific drudgery reduction technologies | - | More drudgery in farm work and poor health status | 2. Effect of different wheel hoe for weeding & intercultural operation. | Use of different type of hoe for weeding & intercultural operation in rabe crops | 1.introduction of farm implements | - | Method demonstration. | Different type of Cycle hoe |
| 5 | Value addition | Processing center | - Post harvest losses in fruit and vegetables<br>- Poor Socio-economic status of SHG<br>- Malnutrition in children | - | - | 1. Vocational training on Fruit & vegetable processing<br>2.Soya processing<br>3.Maize processing<br>4.Entrepreneurs dev. | - | Method demonstration | - |
| 6 | INM | Sweet orange | Low yield and Low quality fruits | Effect of major and micro nutrient on production and quality of sweet orange | - | Sweet orange production on technology | - | - | Supply of micro nutrient |
| 7 | Varietal | Onion | Low yield losses | - | Varietal demosted of onion ex. Bhima shakti | Onion production technology | - | Field day | Supply of seed of Bhima shakti |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 8 | | Poultry | 1. Low egg lying capacity of local breeds<br>2. Low body weight of local breeds in back yard poultry | Use of Giriraja breed in back yard poultry | - | Commercial Poultry Production | | Field visit<br><br>Diagnostic visit | Supply of Giriraja breed of poultry |
| 9 | | Goat | Unadoptation of any practices for control of ecto and endo parasites | Eradication of ecto and endo parasites in Goat | - | 1.Diseases of Goat and their prevention<br>2. Eradication of ecto and endo parasites in goat | - | Field visit<br><br>Diagnostic visit | Supply of Inj. Neomac-SX |

### 3.1 Achievements on technologies assessed and refined

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

| Thematic areas | Cereals | Oilseeds | Pulses | Commercial Crops | Vegetables | Fruits | Anemic farmwomen | Plantation crops | Tuber Crops | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| Varietal Evaluation | 1 | | 1 | 1 | | | | | | 3 |
| Integrated Crop Management | | | | | 1 | | | | | 1 |
| Integrated Nutrient Management | | | | | 1 | | | | | 1 |
| Drudgery reduction | | | 1 | | 1 | | | | | 2 |
| Farm machineries | | 1 | | | | | | | | 1 |
| Nutrition management | | | | | | | 1 | | | 1 |
| Total | 1 | 1 | 2 | 1 | 3 | 0 | 1 | - | - | 09 |

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

| Thematic areas | Cereals | Oilseeds | Pulses | Commercial Crops | Vegetables | Fruits | Flower | Plantation crops | Tuber Crops | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| Varietal Evaluation | | | | | | | | | | |
| Seed / Plant production | | | | | | | | | | |
| Weed Management | | | | | NIL | | | | | |
| Integrated Crop Management | | | | | | | | | | |

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

| Thematic areas | Cattle | Poultry | Sheep | Goat | Piggery | Rabbitary | Fisheries | TOTAL |
|---|---|---|---|---|---|---|---|---|
| Evaluation of Breeds | | 1 | | | | | | 1 |
| Nutrition Management | | | | | | | | |
| Disease of Management | | | | 1 | | | | 1 |
| Value Addition | | | | | | | | |
| Production and Management | | | | | | | | |
| Feed and Fodder | | | | | | | | |
| Small Scale income generating enterprises | | | | | | | | |
| **TOTAL** | | **1** | | **1** | | | | **2** |

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

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

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

**A. <u>Technology Assessment</u>**

**Discipline: AGRONOMY**

**OFT- 1**

| | | | |
|---|---|---|---|
| 1) | Title | : | Assessment of improved variety of pigeon pea (BDN- 711) in rainfed situation. |
| 2) | Problem diagnose/defined | : | Low productivity of non-descript and local pigeon pea varieties grown on Rainfed medium to shallow soils of Aurangabad district. |
| 3) | Details of technologies selected for assessment /refinement | : | T1- Local variety (Farmers Practice)<br>T2- BDN-711 |
| 4) | Source of technology | : | VNMKV, Parbhani |
| 5) | Production system thematic area | : | Rainfed Pulse based system |
| 6) | Thematic area | : | Varietal evaluation |
| 7) | Performance of the Technology with performance indicators: | | Results showed that BDN-711 recorded highest seed yield (1500 kg/ha), B:C ratio (1: 2.01), and produced 16.83 % more yield over farmers practice. |
| 8) | Final recommendation for micro level situation | : | One more year is required to final recommendation |
| 9) | Constraints identified and feedback for research | : | Constraints: Seed availability is less feedback for research- Drought resistant/ tolerant variety should be develop . |
| 10) | Process of farmers participation and their reaction | : | Participatory approach in implementation |

11) Results of On Farm Trials

| Crop/ enterprise | Farming situation | Problem Diagnosed | Title of OFT | No. of trials | Technology Assessed | Parameters of assessment | Data on the parameter | Results of assessment | Feedback from the farmer |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Pigeon pea | Rainfed | Low productivity of local varieties | Varietal evaluation | 5 | 1. Local variety (Farmers Practice) | - Height of plant (cm)<br>-Duration (days)<br>-Yield (q/ha)<br>- C:B Ratio | 170-175<br>175-180<br>10.10<br>1:1.76 | Assessed technology produce16.83 % more yield over farmers practice. | BDN- 711 variety of pigeon pea is well suitable for rainfed condition due to short duration |
| | | | | | 2. BDN-711 | - Height of plant (cm)<br>-Duration (days)<br>-Yield (q/ha)<br>- C:B Ratio | 160-165<br>155-160<br>11.80<br>1:2.01 | | |

| Technology Assessed | *Production per unit | Net Return (Profit) in Rs. / unit | BC Ratio |
|---|---|---|---|
| 11 | 12 | 13 | 14 |
| 1. Local variety (Farmers Practice) | 1010 kg/ ha | 26189 | 1:1.76 |
| 2. BDN-711 | 1180 kg/ ha | 35585 | 1:2.01 |

**OFT- 2**

1) Title : Assessment of improved wheat variety (NIAW-1415/ Netaravati) under rained condition.
2) Problem diagnose/defined : Low yield of wheat under rainfed
3) Details of technologies selected for assessment /refinement : i. Local variety (Farmers Practice): Lok-1
   ii. New released variety NIAW - 1415
4) Source of technology : MPKV, Rahuri
5) Production system thematic area : Rainfed based system
6) Thematic area : Varietal evaluation
7) Performance of the Technology with performance indicators : Results showed that NIAW - 1415 recorded highest yield (2500 kg/ha), B:C ratio (1: 1.51), and produced 22 % more yield over farmers practice.
8) Final recommendation for micro level situation : One more year is required to final recommendation
9) Constraints identified and feedback for research : Constraints: Seed availability is less
   : Feedback for research- Drought resistant/ tolerant variety should be develop.
10) Process of farmers participation and their reaction : Participatory approach in implementation

11) Results of On Farm Trials

| Crop/ enterprise | Farming situation | Problem Diagnosed | Title of OFT | No. of trials | Technology Assessed | Parameters of assessment | Data on the parameter | Results of assessment | Feedback from the farmer |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Wheat | Rainfed | Low productivity of local varieties | Varietal evaluation | 05 | 1. Local variety (Farmers Practice): Lok – 1 | -Duration (days)<br>- Yield (q/ha)<br>- C:B Ratio | 120-125<br>18.90<br>1:1.31 | Assessed technology produce 22% more yield over farmers practice. | NIAW-1415 variety of wheat is well suitable for rainfed condition due to short duration |
| | | | | | 2. NIAW-1415 | -Duration (days)<br>- Yield (q/ha)<br>- C:B Ratio | 110-120<br>23.10<br>1:1.51 | | |

| Technology Assessed | *Production per unit | Net Return (Profit) in Rs. / unit | BC Ratio |
|---|---|---|---|
| 11 | 12 | 13 | 14 |
| 1. Local variety (Farmers Practice) : Lok -1 | 1890 kg/ ha | 9575 | 1:1.31 |
| 2. NIAW-1415 | 2310 kg/ ha | 16520 | 1:1.51 |

**OFT- 3**

1) Title : Assessment of High density planting in non bt cotton under rainfed condition

2) Problem diagnose/defined : Low yield and high cost of inputs in Bt cotton under rainfed condition

3) Details of technologies selected for : i. **T1** Farmers practice: bt cotton planting with spacing assessment/refinement 4ftx2ft

ii **T2** Technology assessed NH-615 desi cotton with spacing 0.6ftx0.1ft

iii **T3** Technology assessed: Suraj desi cotton with spacing 0.6ftx.01ft

4) Source of technology : VNMKV , Parbhani, CICR, Nagpur

5) Production system : Rainfed based system

6) Thematic area : High density planting system.

7) Performance of the Technology with performance indicators : Results showed that Bt cotton with 4ftx2ft spacing compares with NH-615 desi cotton with spacing 0.6ftx0.1ft & Suraj desi cotton with spacing 0.6ftx.0.1ft highest yield over Bt cotton .

8) Final recommendation for micro level situation : Two more year is required to final recommendation

9) Constraints identified and feedback for research : Constraints: Seed availability is less Variety should be develop.

10) Process of farmers participation and their reaction : Participatory approach in implementation

11) Results of On Farm Trials

| Crop/ enterprise | Farming situation | Problem Diagnosed | Title of OFT | No. of trials | Technology Assessed | Parameters of assessment | Data on the parameter | Results of assessment | Feedback from the farmer |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Desi cotton | Rainfed | Low yield and high cost of inputs in Bt cotton under rainfed condition | Crop geometry (HDP) High density planting system | 10 | **T1** Farmers practice: bt cotton planting with spacing 4ftx2ft | -Yield (q/ha) | 05 | Assessed technology produce 41.96 % more yield over farmers practice | HDP system of planting cotton is well suitable for rainfed condition due to increased planting population. |
| | | | | | **T2** Technology assessed NH-615 desi cotton with spacing 0.6ftx0.1ft | -Yield (q/ha) | 13 | | |
| | | | | | **T3** Technology assessed: Suraj desi cotton with spacing 0.6ftx.01ft | -Yield (q/ha) | 11 | | |

| Technology Assessed | *Production per unit | Net Return (Profit) in Rs. / unit | BC Ratio |
|---|---|---|---|
| 11 | 12 | 13 | 14 |
| **T1 Farmers practice:** Bt cotton planting with spacing 4ftx2ft | 05 | -18800 | 1:0.50 |
| **T2 Technology assessed:** NH-615 desi cotton with spacing 0.6ftx0.1ft | 13 | 28325 | 1:2.20 |
| **T3 Technology assessed:** Suraj desi cotton with spacing 0.6ftx.01ft | 11 | 20325 | 1:1.86 |

**Discipline: HOME SCIENCE**
**OFT – 1**

In view of high incidence of anemia in vulnerable group , KVK Aurangabad had assessed the performance of Bio fortified pearl millet ie. ICTP -8203 on anemic farmwomen of selected village Sheregaon, Taluka Gangapur of Aurangabad district. Consumption of Jowar roti as a staple food of self produces high Fe bio fortified pearl millet variety ICTP-8203.

| | | | |
|---|---|---|---|
| **1** | Title | **:** | **To assess the Bio fortified pearl millet on anemic vulnerable group** |
| **2** | Problem diagnose/defined | **:** | Anemia in vulnerable group |
| **3** | Details of technologies selected for assessment /refinement | **:** | Consumption of Bio fortified pearl millet (Bajra) variety Fe version ICTP-8203 |
| **4** | Source of technology | **:** | Bajra Research Station, NARP, Aurangabad & ICRISAT, Hyderabad |
| **5** | Production system | **:** | N.A |
| **6** | Thematic area | **:** | Nutrition Management |
| **7** | Performance of the Technology with performance indicators | **:** | Hb level increased by 9.5% more as compare to T1 |
| **8** | Final recommendation for micro level situation | **:** | Biofortified verity of Pearl Millet ie. ICTP -8203 is recommended for daily consumption as stable food of villages to minimize the anemia . |
| **9** | Constraints identified and feedback for research | **:** | Nil |
| **10** | Process of farmers participation and their reaction | **:** | Participatory approach in implementation |

11) Results of On Farm Trials

| Thematic area | Problem Diagnosed | Title of OFT | No. of trials | Technology Assessed | Parameters | | Data on the parameter | | | Results of Recommendation | Feedback from the farmer | Justification for refinement |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | | Before trial | After trial | % in increased | 7 | 8 | 9 |
| Nutrition management | - Iron & folic acid deficiency farm women<br>- Lack of knowledge about available nutrient resources<br>- Hygienic condition is poor | To assess the Bio fortified pearl millet on anemic vulnerable group | 30 | T1- consumption of pearl millet roti of hybrid variety | Average Hemoglobin level (HB) (100mg /100ml blood) | T1 | 8.6 | 8.9 | 3.4 | Hb level increased by 9.5% more as compare to T1 | - Farm families were satisfied with this new variety of pearl millet ie. ICTP-8203 | |
| | | | | T2- Consumption of biofortified pearl millet Ie ICTP-8203 | Average Hemoglobin level (Hb) (100mg /100ml blood) | T2 | 8.5 | 9.4 | 12.9% | | | |

**Result:** It was observed from above table that Hb level of anemic farmwomen is increased 9.5% more over T1 after consumption of (Jowar roti) made by biofortified pearl millet ie ICTP-8203

**Discipline: HOME SCIENCE**

**OFT – 2**

In this trial, KVK Aurangabad assessed the efficiency of brinjal mitten for harvesting of brinjal to reduce the drudgery of farmwomen and also control the physiological hazardous. The technology was assessed on 10 farmwomen of Maheboobkhada village having normal pulse rate, body temperature and heart beats.

| | | | |
|---|---|---|---|
| **1** | Title | **:** | **To assess the efficiency of Brinjal Mittens for picking the Brinjals** |
| **2** | Problem diagnose/defined | **:** | .1. Scratches in palm<br>2.. Low work efficiency<br>3. More time consumption |
| **3** | Details of technologies selected for asse/refinement | **:** | Use of VNMKV Brinjal mitten for picking of brinjal |
| **4** | Source of technology | **:** | VNMKV, Parbhani |
| **5** | Production system | **:** | N.A |
| **6** | Thematic area | **:** | Drudgery & physical hazardous reduction |
| **7** | Performance of the Technology with performance indicators | **:** | When mitten was used for performing brinjal harvesting produce outcome was increased by 29.2 % and also time saving by 28.7 % over traditional method. |
| **8** | Final recommendation for micro level situation | **:** | It is recommended for large scale adoption. |
| **9** | Constraints identified and feedback for research | **:** | Mittens should be having 5 separate fingers for easy assessable |
| **10** | Process of farmers participation and their reaction | **:** | Participatory approach in implementation |

11). Results of On Farm Trials

| Thematic area | Problem Diagnosed | Title of OFT | No. of trials | Technology Assessed | Parameters | Data on the parameter | | | Results of Assessment | Feedback from the farmwomen | Justification for refinement |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | T1 | T2 | **% change in parameter** | 9 | 10 | 11 |
| Drudgery Reduction | 1. Scratches in palm<br>2.. Low work efficiency<br>3. More time consumption | To assess the efficiency of Brinjal Mittens for picking the Brinjals | 10 | T1- **Farmwomen practice** Manual harvesting of brinjal | 1. Work output (Kg/day) | 62 | 48 | 29.2% | Mitten were used for performing brinjal harvesting produce outcome was increased by 29.2 % and also time saving by 28.7 % over traditional method. | 1. No scratches were found in palm at the time of brinjal harvestings<br>2. Easy to handle<br>3. Economically feasible | Prepared separate five fingers in mitten |
| | | | | T2- **Recommended practice** Use of VNMKV Brinjal mitten for harvesting of brinjal | 2.Time Saving (hr /day) | - | 2.3 hrs | 28.7% | | | |
| | | | | | Health hazards | Very less body discomfort | More body discomfort | - | | | |

**Conclusion :** From above table it was observed that, when mitten were used for performing brinjal harvesting produce outcome was increased by 29.2 % and also time saving by 28.7 % over traditional method.

**Discipline: HOME SCIENCE**

**OFT – 3**

In this trial, KVK Aurangabad, Maharashtra had assessed the suitability of different types of wheel hoe for weeding and intercultural operation to reduce the drudgery of farmwomen of rabi rainfed crops in village Sheregaon, taluka Gangapur. The technology was assessed on 10 farmwomen having normal blood pressure, body temperature and heart beats. The tools used for the ergonomic analysis were sytheticscope, thermometer and visual analog body discomfort scale.

| | | | |
|---|---|---|---|
| **1** | Title | **:** | **To assess the suitability of different types of wheel hoe for weeding and intercultural operation** |
| **2** | Problem diagnose/defined | **:** | 1.Pain in hand<br>2. Pain in fingers<br>3. Pain in shoulder<br>4. Low work efficiency<br>5. Fatigue<br>6. More time consumption |
| **3** | Details of technologies selected for asse/refinement | **:** | Use of different types of wheel hoe for weeding and intercultural operation<br>1. MAU wheel hoe<br>2. Twin wheel hoe weeder<br>3. Cycle hoe |
| **4** | Source of technology | **:** | VNMKV, Parbhani, CIAE, Bhopal and MPKV, Rahuri |
| **5** | Production system | **:** | N.A |
| **6** | Thematic area | **:** | Drudgery reduction |
| **7** | Performance of the Technology with performance indicators | **:** | Performance is in next table . |
| **8** | Final recommendation for micro level situation | **:** | MPKV Rahuri cycle hoe is recommended for FLD |
| **9** | Constraints identified and feedback for research | **:** | Twin wheel hoe's handle is long as per women physiology, it should be adjustable length wise. |
| **10** | Process of farmers participation and their reaction | **:** | Participatory approach in implementation |

11). Results of On Farm Trials

| Thematic area | Problem Diagnosed | Title of OFT | No. of trials | Technology Assessed | Parameters | Treatment | | | | Results of Assessment | Feedback from the farmwomen | Justification for refinement |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | T1 | T2 | T3 | T4 | 9 | 10 | 11 |
| Drudgery Reduction | 1.Pain in hand, arms, shoulders, back, knees etc<br>2. Labour problems<br>3. Low work efficiency<br>4. Fatigue | Assess the suitability of different types of wheel hoe for weeding and intercultural operation | 10 | **Farmwomen practice**<br>T1 Use of local Khurpi for weeding & intercultural operation | Average HR (beats/min.) | 98 | 86 | 90 | 82 | Average working heart rates & energy expenditure for hoeing of Bengal gram were reduced by 16 % & 36.7% respectively T-4 over T1 ,8 % & 17.6 % respectively T-3 over T1 and 12 % & 26.4% respectively T2 over T1. | Farmwomen felt MPKV, Rahuri recommended cycle hoe is very easy to handle and also area coverage is 3 times more over T1. | - |
| | | | | **Recommended practice**<br>T2 – MAU wheel hoe<br>T3- Twin wheel hoe weeder<br>T4- Cycle hoe | Average Energy Expenditure (Kj/min.) | 6.8 | 5.0 | 5.6 | 4.3 | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Area coverage (ha/day) | 0.05 | 0.20 | 0.11 | 0.24 | | |
| | | | | | Reduction in Drudgery (%) | | 16 % & 36.7 % reduction in AHR & EE respectively T4 over T1 | 8 % & 17.6 % reduction in AHR & EE respectively T3 over T1 | 12% & 26.4 % reduction in AHR & EE respectively T2 over T1 | | |

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

**Agricultural Engineering**

A. Technology Assessment

**Trial 1**

| | | | |
|---|---|---|---|
| **1** | Title | | Assessment of tractor operated BBF planter |
| **2** | Problem diagnose/defined | | Crop failure due to high rainfall/ drought condition, Reduced available soil moisture for rabi crops, Uneven plant population |
| **3** | Details of technologies selected for assessment/refinement | | Introduction of BBF method of crop cultivation |
| **4** | Source of technology | | DR. PDKV, Akola |
| **5** | Production system thematic area | | Rainfed Soybean |
| **6** | Thematic area | | Farm mechanization |
| **7** | Performance of the Technology with performance indicators | | 1. Use of BBF planter gives 14.28 per cent yield over traditional practice.<br>2. Gives better aeration for growth of plant |
| **8** | Final recommendation for micro level situation | | The implement can be utilized for different crop |
| **9** | Constraints identified and feedback for research | | During operation it is observed that the setting of rear wheels of tractor was changed for getting better furrow |
| **10** | Process of farmers participation and their reaction | | Participatory approach in implementation |

| Crop/ enterprise | Farming situation | Problem Diagnosed | Title of OFT | No. of trials | Technology Assessed | Parameters of assessment | Data on the parameter | | Results of Assessment | Feedback from the farmer |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | 9 | 10 |
| | | | | | | | T1 | T2 | | |
| Soybean | Improved Farm implements | Traditional crop sowing/cultivation methods are time consuming and labour intensive. Crop failure due to high rainfall or drought condition. Low Yield | Assessment of tractor operated BBF planter | 05 | $T_1$ Traditional sowing | 1. Field Capacity ha/ hr | 0.85 | 0.4 | 1. Use of BBF planter gives 14.28 per cent yield over traditional practice. 2. Gives better aeration for growth of plant | The rainfall water is conserved in furrow formed by BBF planter. The space of Furrow can be well utilize for Installing Sprinkler pipeline |
| | | | | | $T_2$ - Use of tractor drawn BBF planter | 2.Field efficiency | 78.7 | 50.63 | | |
| | | | | | | 3.Operational Cost Rs/ha | 374 | 782 | | |
| | | | | | | 4. Yield (q/ha) | 4.2 | 4.8 | | |

**Discipline: Horticulture**
**OFT – 1**
**Result of on farm testing**

**Year : 2014-15**

| **Sr.No.** | **Title** | **:** | **Planting method in ginger** |
|---|---|---|---|
| **1** | Objectives | **:** | Planting in ridges & furrow Method<br>Planting on raised bed |
| **2** | Problem diagnose/defined | **:** | Low yield in Ginger in Ridges & furrow Method |
| **4** | Description of microfarming situation | | irrigated , Medium black soils |
| **5** | Source of technology | **:** | MPKV, Rahuri |
| **6** | Interventions planned | **:** | Introduction of new planting Method |
| **7** | No. of farmers | **:** | 5 (Five) |
| **8** | Treatments | **:** | $T_1$ – Farmers practice: Planting in Ridges & furrow Method<br>$T_2$ - Technology: Planting on raised bed |
| **9** | Observations/parameters of study | | 1. Height of crop<br>2. Av. Wt. of Rhizome<br>3. Occurrence of Disease<br>4. Yield (Qt./ha.) |

**Results of On Farm Trials**

| Thematic area | Problem Diagnosed | Title of OFT | No. of trials | Technology Assessed | Parameters | Data on the parameter | | Results of Assessment | Feedback from the farmer |
|---|---|---|---|---|---|---|---|---|---|
| **1** | **3** | **4** | **5** | **6** | **7** | **T1** | **T2** | **9** | **10** |
| Cultivation practices | low yield in ridges and furow method | Planting method in ginger | 10 | T1: Farmers practice: Planting in Ridges & furrow Method | 1.Height of crop | **60 cm** | **80 cm** | Assessed technology produced 25%more yield over farmers practice. | Plantin on raised bed increase the yield of ginger as it conserve the soil moisture and maintain proper aeration of soil. |
| | | | | T2: Planting on raised bed | 2.Av. weight of rhizome | **900 gm** | **1200 gm** | | |
| | | | | | 3. Yield, q/ha | **90 q/ha** | **120 q/ha** | | |

| Technology Assessed | Production per unit | Net Return (Profit) in Rs. / unit | BC Ratio |
|---|---|---|---|
| **11** | **12** | **13** | **14** |
| 1 T1: Farmers practice: Planting in Ridges & furrow Method | 90 qtl / ha | 270000 | 1:3 |
| T2: Technology assessed Planting on raised bed | 120 qtl/ha | 390000 | I:4.33 |

**OFT – 2**

| Sr.No. | Title | : | Integrated nutrient management for Rabi onion |
|---|---|---|---|
| **1** | Objectives | **:** | To improve the yield of onion |
| **2** | Problem diagnose/defined | **:** | Low yield |
| **3** | Description of microfarming situation | | irrigated , Medium soils |
| **4** | Source of technology | **:** | DOGR, Rajgurunagar, PUNE (M.S) |
| **5** | Interventions planned | **:** | Introduction of INM for rabi onion |
| **6** | No. of farmers | **:** | 5 (Five) |
| **7** | Treatments | **:** | $T_1$ – Farmers practice: 150:50:80:50 NPKS (kg/ha) + 20 t FYM /ha<br>$T_2$ - Technology:110:40:60:40 NPKS (kg/ha) + 15 t FYM + Azospirillum and phosphate solubilising bacteria @ 5 kg each/ha |
| **8** | Observations/parameters of study | | Average weight of Bulb,<br>Yield/ha<br>C: B Ratio |

**Results of On Farm Trials**

| Thematic area | Problem Diagnosed | Title of OFT | No. of trials | Technology Assessed | Parameters | Data on the parameter | | Results of Assessment | Feedback from the farmer |
|---|---|---|---|---|---|---|---|---|---|
| **1** | **3** | **4** | **5** | **6** | **7** | **T1** | **T2** | **9** | **10** |
| INM | low yield | Integrated nutrient management for Rabi onion | 10 | T1: Farmers practice: Farmers practice: 150:50:80:50 NPKS (kg/ha) + 20 t FYM /ha | 1.Weight of bulb | **5 g** | **70 g** | Assessed technology produced 16.22 %more yield over farmers practice. | Due to use of biofertilizers yield of onion has been increased |
| | | | | T2: Technology:110:40:60:40 NPKS (kg/ha) + 15 t FYM + Azospirillum and phosphate solubilising bacteria @ 5 kg each/ha | 2. Yield, q/ha | **310 q/ha** | **370 q/ha** | | |

| Technology Assessed | Production per unit | Net Return (Profit) in Rs. / unit | BC Ratio |
|---|---|---|---|
| **11** | **12** | **13** | **14** |
| 1 T1: Farmers practice: 150:50:80:50 NPKS (kg/ha) + 20 t FYM /ha | 310 qtl / ha | 190000 | 1:1.58 |
| T2: Technology assessed 1. 110:40:60:40 NPKS (kg/ha) + 15 t FYM + Azospirillum and phosphate solubilising bacteria @ 5 kg each/ha | 370 qtl/ha | 250000 | 1:2.08 |

Rate of cotton: Rs.5000/- qt.

**Discipline: Animal Science**
**OFT : 1**

**Title**- Use of Giriraja breed in back yard poultry

**Objectives** : 1) To get 160-180 eggs per bird per year in back yard poultry

2) To increase the body weight of the birds in back yard poultry

3) To lower the mortality rate.

**Problem identified & its intensity-**

1) Low egg lying capacity of local breeds.
2) Low body weight of local breeds in back yard poultry.

**Intervention planed-** Introducing Giriraja breed in back yard poultry.

**Treatments-** $T_1$-Farmers practice- Local poultry breeds used by farmers

$T_2$- Technology assessed – Giriraja breed in back yard poultry.

**Source of Technology**-Central Poultry Development Organization, Hassarghatta, Bangluru, Karnataka

**No of Farmers**- 10

**Result :**

| **Parameters** | **Data on Parameters** | | **% change in parameter** | **Feedback** |
|---|---|---|---|---|
| | **Giriraj** | **Local check** | | |
| Egg Production per bird per year | 135 | 100 | 35% | More Egg production.. |
| Weight gain per birds | 1.5 Kg in | 1Kg in 10 weeks | 50% | More body weight in less time. |
| | 10 weeks | | | Less Mortality. |
| Mortality | 3% | 5% | 66.7% less | Early egg laying |
| Age at first egg | 170 days | 225 days | 32% less | |
| C:B ratio | 01:07.5 | 01:06.0 | 25% | |

**Discipline: Animal Science**

**OFT 2**

**Title**- Eradication of ecto and endo parasites in Goat

**Objectives** : 1)To increase the body weight gain of the goats

2) To improve the body coat

3) To boost the immunity system.

**Problem identified & its intensity-**

Unadoptation of any practices for control of ecto and endo parasites

**Intervention planed**- Use of Neomec tablets (Ivermectin) for control of ecto and endo parasites

**Treatments**- $T_1$-Farmers practice- No medicines used

$T_2$- Technology assessed – Neomec tab( 1 Tab per 50Kg body wt)

**Source of Technology**- MAFSU, Nagpur

**No of Farmers**- 10

**Result :**

| **Parameters** | **Data on Paramaters** | | **% increase in parameter** | **Feedback** |
|---|---|---|---|---|
| | **Neomac- SX** | **Local check** | | |
| **Weight gain per goat** | 4 Kg in 4 months | 2.5 Kg in 4 months | 60% | More Weight Smoot and shiny hairs No ticks |
| **Body coat** | Smooth and shiny hair | Coarse hair with hair loss in some patches | - | |
| **Efficacy of drug** | No ticks | 30 to 40 ticks per goat | - | |

## B. Technology Refinement Nil

### 3.2 Achievements of Frontline Demonstrations

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

List of technologies demonstrated during previous year and popularized during 2014-15 and recommended for large scale adoption in the district

| Sr. No | Crop/ Enterprise | Thematic Area* | Technology demonstrated | Details of popularization methods suggested to the Extension system | Horizontal spread of technology | | |
|---|---|---|---|---|---|---|---|
| | | | | | No. of villages | No. of farmers | Area in ha |
| 1 | Red gram | ICM | Whole demonstration | Result demonstration followed by field visit and conduct of field day | 3 | 285 | 75 |
| 2 | Bengal gram | ICM | Whole demonstration | Result demonstration followed by field visit and conduct of field day | 3 | 322 | 68 |
| 3 | Onion | Varietal | Varietal | Organization of demonstration followed by field visit and conduct field day | 12 | 285 | 130 |

b. Details of FLDs implemented during 2014-15 (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops**.)

| Sr.No. | Crop | Thematic area | Technology Demonstrated | Season and year | Area (ha) | | | No. of farmers/ demonstration | | Reasons for shortfall in achievement |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Proposed | Actual | SC/ST | Others | Total | |
| 1 | Red gram | ICM | Whole demonstration | Kharif 2014 | 12 | 12 | 3 | 27 | 30 | - |
| 2 | Bengal gram | ICM | Whole demonstration | Rabi-2014 | 12 | 12 | 6 | 24 | 30 | - |
| 3 | ICM Bt cotton | ICM | Whole demonstration | Kharif 2014 | 8 | 8 | 4 | 16 | 20 | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 4 | Soybean | ICM | Whole demonstration | Kharif 2014 | 8 | 8 | 3 | 17 | 20 | - |
| 5 | Intercropping in bt cotton | ICM | Whole demonstration | Kharif 2014 | 4 | 4 | 2 | 8 | 10 | - |
| 6 | Sorghum | ICM | Whole demonstration | Rabi-2014 | 8 | 8 | 3 | 17 | 20 | - |
| 7 | Green gram | ICM | Whole demonstration | Kharif 2014 | 8 | 8 | 2 | 18 | 20 | - |
| 8 | Onion | Varietal | Variety | Rabi | 2 | 2 | -- | 10 | 10 | |

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | P | K | | | | | |
| Pigeon pea | Kharif | Rainfed | Medium to Shallow | - | - | - | Rabi sorghum | 23.07.2014 | 27.01.2015 | 474.7 | 26 |
| Bengal gram | Rabi | Rainfed | Medium to Shallow | - | - | - | Maize | 18.10.2014 | 12.02.2015 | 474.7 | 26 |

**Performance of FLD**

| Sl. No. | Crop | Technology Demonstrated | Variety | No. of Farmers | Area (ha.) | Demo. Yield Qtl/ha | | | Yield of local Check Qtl./ha | Increase in yield (%) | Data on parameter in relation to technology demonstrated | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | H | L | A | | | Demo | Local |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| | **Pulses** | | | | | | | | | | | |
| 1 | Pigeon pea | ICM | BDN-711 | 30 | 12 | 15 | 09 | 12.10 | 10.30 | 17.47 | - | - |
| 2 | Bengal gram | ICM | Akash | 30 | 12 | 18 | 08 | 12.50 | 9.00 | 38 | - | - |
| 3 | ICM Bt cotton | ICM | Bt cotton hybrid | 20 | 8 | 19 | 08 | 15 | 13 | 15.30 | - | - |
| 4 | Soybean | ICM | MAUS-71 | 20 | 8 | 16 | 09 | 11.80 | 9.70 | 21.64 | - | - |
| 5 | Intercropping in bt cotton | ICM | Green gram & Black gram | 5<br>5 | 2<br>2 | 19<br>16 | 10<br>9.70 | 15<br>14 | 13<br>12.5 | 15<br>12 | | |
| 6 | Sorghum | ICM | Parbhani moti | 20 | 8 | 5.00 | 1.00 | 1.80 | 1.00 | 39 | - | - |
| 7 | Green gram | ICM | BM-2003-2 | 20 | 8 | 13 | 09 | 10.70 | 9.50 | 12.70 | - | - |
| | **Other than O & P** | | | | | | | | | | | |
| 8 | Onion | Varietal | Bhima Shakti | 10 | 2 | 180 | 80 | 100 | 80 | 25 | 100 Q/ha | 80 Q/ha |

**Economic Impact (continuation of previous table)**

| Average Cost of cultivation (Rs./ha) | | Average Gross Return (Rs./ha) | | Average Net Return (Profit) (Rs./ha) | | Benefit-Cost Ratio (Gross Return / Gross Cost) |
|---|---|---|---|---|---|---|
| Demonstration | Local Check | Demonstration | Local Check | Demonstration | Local Check | |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 17500 | 15500 | 49200 | 36900 | 31700 | 21400 | 1:2.81 |
| 14500 | 12200 | 33000 | 26400 | 18500 | 14200 | 1:2.27 |
| 35447 | 38907 | 53000 | 62000 | 17552 | 23093 | 1:1.59 |
| 28585 | 30237 | 34125 | 42000 | 5540 | 11763 | 1:1.39 |
| 38605 | 39600 | 60000 | 72000 | 21395 | 32400 | 1:1.82 |
| 28535 | 30252 | 34150 | 47650 | 13505 | 17288 | 1:1.45 |
| 27545 | 29130 | 33100 | 41000 | 5310 | 11210 | 1:1.30 |
| 100000 | 80000 | 120000 | 96000 | 20000 | 16000 | 1:1.2 |

Rate of Pigeon pea –Rs.4000=00 / qt
Rate of Bengal gram –Rs.2000=00 / qt
Rate of cotton –Rs.4000=00 / qt
Rate of Soybean –Rs.2400=00 / qt
Rate of Green gram –Rs.3000=00 / qt
Rate of Black gram –Rs.3500=00 / qt
Rate of Sorghum –Rs.1000=00 / qt
Rate of Onion –Rs.1200 / qtl

Analytical Review of component demonstrations (details of each component for rainfed / irrigated situations to be given separately for each season).

| Crop | Season | Component | Farming situation | Average yield (q/ha) | Local check (q/ha) | Percentage increase in productivity over local check |
|---|---|---|---|---|---|---|
| Pigeon pea | Kharif | ICM | Rainfed | 12.10 | 10.30 | 17.47 |
| Bengal gram | Rabi | ICM | Rainfed | 12.50 | 9.00 | 38 |
| ICM Bt cotton | Kharif | ICM | Rainfed | 15 | 13 | 15.30 |
| Soybean | Kharif | ICM | Rainfed | 11.80 | 9.70 | 21.64 |
| Intercropping in bt cotton | Kharif | ICM | Rainfed | 15<br><br>14 | 13<br><br>12.5 | 15<br><br>12 |
| Sorghum | Kharif | ICM | Rainfed | 1.80 | 1.00 | 39 |
| Green gram | Kharif | ICM | Rainfed | 10.70 | 9.50 | 12.70 |
| Onion | Rabi | Varietal | Irrigated | 100 | 80 | 25 |

Technical Feedback on the demonstrated technologies

| S. No | Feed Back |
|---|---|
| Red gram | - Early vegetative growth, branching, flowering was better but scorching of flower and pod was happened due to bad whether (cloudy & Fog condition) in the month of September to December<br>- Research should be developed for management of fog condition |
| Bengal gram | - Akash is having pod from top to bottom so that number of pods are more<br>- Major and micronutrient helped to avoid yellow and red leaves |
| Onion | - AFLR variety is suitable for storage and high yielding. |
| Onion | - Bhima Shakti variety is suitable for high yielding and has moderate size and red in colour. |

Farmers' reactions on specific technologies

| S. No | Feed Back |
|---|---|
| Red gram | - BSMR-736, 853 & BDN-708 are resistant to wilt disease<br>- BSMR-736, 853 produces high density of flowering<br>- BSMR-853 is somewhat late<br>- Pre-emergence application of Pendamithelin (Herbicide) controls Weed population but it affects on germination.<br>- All this three varieties are very sensitive under adverse climatic Condition |
| Bengal gram | - Seed is having some what bold<br>- Height and canopy is better as compared to local variety<br>- Better yield production as compared to other varieties<br>- Pre emergence application of weedcides helps to reduce in weeding operatic<br>- No disease problem occurs in treating of seeds with tricoderma and vitavax |
| Onion | - Increase yield 25 % as compared to local check |

Extension and Training activities under FLD

| Sl. No. | Activity | No. of activities organised | Date | Number of participants | Remarks |
|---|---|---|---|---|---|
| 1 | Field days | 6 | 20/01/2015, 08/10/2014, 22/10/2014,11/03/2015 | 238 | |
| 2 | Farmers Training | 13 | 20/05/14, 21/05/14, 22/05/14, 18/06/14, 19/06/14,20/06/14, 25/06/14, 11/10/14, 23/10/14, 21/01/15,12/06/14, 10/06/14, 11/02/15 | 429 | |
| 3 | Media coverage | - | - | - | - |
| 4 | Training | - | - | - | - |

**c. Details of FLD on Enterprises (Agril. Engineering)**

**1) Farm Implements**

| | crop | No. of farmers | Area (ha) | Performance parameters / indicators | Data on parameter in relation to technology demonstrated | | Per cent change in the parameter | Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | Demon. | Local check | | |
| In situ moisture conservation (Tide ridge) | Soybean | 10 | 04 | 1. Moisture contents of soil, per cent | 22.65 | 17.08 | 32.63 | Use of tide ridges technique maintains soil moisture up to 32.63 per cent over farmers practice and also increases yield by 9.30 per cent. |
| | | | | 2. Yield, kg/ha | 430 | 470 | 9.30 | |

**i) Farm Implements – FLD 02**

| Name of the implement | crop | No. of farmers | Area (ha) | Performance parameters / indicators | Data on parameter in relation to technology demonstrated | | Per cent change in the parameter | Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | Demon. | Local check | | |
| Twin Ferti hoe | Sorghum | 10 | 04 | 1.Field capacity ha/ day | 0.293 | - | - | Use of MAU twin Ferti- hoe is more suitable and required less time than local method |
| | | | | 2. Labour requirement Man-hr/day | 08 | 14 | 75.00 | |
| | | | | 3. operational cost Rs/ ha | 202 | 300 | 48.51 | |

(ii) Livestock Enterprises - Nil

| Enterprise | Breed | No. of farmers | No. of animals, poultry birds etc. | Performance parameters / Indicators | * Data on parameter in relation to technology demonstrated | | % change in the parameter | Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | Demon. | Local check | | |
| | | | | | | | | |
| | | | | | | | | |

**ii) FLD on Enterprises (Home Science)**

| **Name of the critical input** | **Crop/ Intervention** | **No. of farm women** | **% of damage** | | **Loss of weight (gm/kg)** | | **Loss in Cost (Rs/qtl)** | |
|---|---|---|---|---|---|---|---|---|
| | | | **Check** | **Demo** | **Check** | **Demo** | **Check** | **Demo** |
| **TANU Two in one probe trap** | Wheat | 10 | 19 | 6 | 190 | 60 | 380 | 120 |
| | Bengal gram | | 26 | 8 | 260 | 80 | 910 | 280 |

(iii) Other Enterprises

**Nutrition Garden:**

**Village: Maheboobkheda** **Year: 2014-15**

| **Name of the critical input** | **Crop /Intervention** | **No. of farmers/ farm women** | **Performance parameters / indicators** | **Demonstration Consumption** | | **Local Consumption** | | **Remarks** |
|---|---|---|---|---|---|---|---|---|
| | | | | **Days/ Week** | **Quantity (gm) / week** | **Days/ Week** | **Quantity (gm) / week** | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Seed of leafy Vegetable, other veg. and seedlings of Curry leaves , Lemon, Custard apple etc. | Nutrition Garden | 10 | Consumption per head | 4 | 310 | 2 | 170 | Due to nutritional garden 33% more consumption of vegetables per week by responded as compared to local check |

**3.3 Achievements on Training (Including the sponsored, vocational, FLD and trainings under Rainwater Harvesting Unit) :**

**A) ON Campus**

| Thematic area | No. of courses | Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Others | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **(A) Farmers & Farm Women** | | | | | | | | | | |
| **I Crop Production** | | | | | | | | | | |
| Weed Management | - | - | - | - | - | - | - | - | - | - |
| Resource Conservation Technologies | - | - | - | - | - | - | - | - | - | - |
| Cropping Systems | - | - | - | - | - | - | - | - | - | - |
| Crop Diversification | - | - | - | - | - | - | - | - | - | - |
| Integrated Farming | - | - | - | - | - | - | - | - | - | - |
| Water management | - | - | - | - | - | - | - | - | - | - |
| Seed production | - | - | - | - | - | - | - | - | - | - |
| Nursery management | - | - | - | - | - | - | - | - | - | - |
| Integrated Crop Management | - | - | - | - | - | - | - | - | - | - |
| Fodder production | - | - | - | - | - | - | - | - | - | - |
| Production of organic inputs | - | - | - | - | - | - | - | - | - | - |
| **II Horticulture** | | | | | | | | | | |
| **a) Vegetable Crops** | | | | | | | | | | |
| Production of low volume and high value crops | - | - | - | - | - | - | - | - | - | - |
| Off-season ve getables | - | - | - | - | - | - | - | - | - | - |
| Nursery raising | - | - | - | - | - | - | - | - | - | - |
| Exotic vegetables like Broccoli | - | - | - | - | - | - | - | - | - | - |
| Export potential vegetables | - | - | - | - | - | - | - | - | - | - |
| Grading and | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| standardization | | | | | | | | | | |
| Protective cultivation (Green Houses, Shade Net etc.) | - | - | - | - | - | - | - | - | - | - |
| **b) Fruits** | | | | | | | | | | |
| Training and Pruning | - | - | - | - | - | - | - | - | - | - |
| Layout and Management of Orchards | - | - | - | - | - | - | - | - | - | - |
| Cultivation of Fruit | - | - | - | - | - | - | - | - | - | - |
| Management of young plants/orchards | - | - | - | - | - | - | - | - | - | - |
| Rejuvenation of old orchards | - | - | - | - | - | - | - | - | - | - |
| Export potential fruits | - | - | - | - | - | - | - | - | - | - |
| Micro irrigation systems of orchards | - | - | - | - | - | - | - | - | - | - |
| Plant propagation techniques | - | - | - | - | - | - | - | - | - | - |
| **c) Ornamental Plants** | | | | | | | | | | |
| Nursery Management | - | - | - | - | - | - | - | - | - | - |
| Management of potted plants | - | - | - | - | - | - | - | - | - | - |
| Export potential of ornamental plants | - | - | - | - | - | - | - | - | - | - |
| Propagation techniques of Ornamental Plants | - | - | - | - | - | - | - | - | - | - |
| **d) Plantation crops** | | | | | | | | | | |
| Production and Management technology | - | - | - | - | - | - | - | - | - | - |
| Processing and value addition | - | - | - | - | - | - | - | - | - | - |
| **e) Tuber crops** | | | | | | | | | | |
| Production and Management | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| technology | | | | | | | | | | |
| Processing and value addition | - | - | - | - | - | - | - | - | - | - |
| **f) Spices** | | | | | | | | | | |
| Production and Management technology | - | - | - | - | - | - | - | - | - | - |
| Processing and value addition | - | - | - | - | - | - | - | - | - | - |
| **g) Medicinal and Aromatic Plants** | | | | | | | | | | |
| Nursery management | - | - | - | - | - | - | - | - | - | - |
| Production and management technology | - | - | - | - | - | - | - | - | - | - |
| Post harvest technology and value addition | - | - | - | - | - | - | - | - | - | - |
| **III Soil Health and Fertility Management** | | | | | | | | | | |
| Soil fertility management | - | - | - | - | - | - | - | - | - | - |
| Soil and Water Conservation | - | - | - | - | - | - | - | - | - | - |
| Integrated Nutrient Management | - | - | - | - | - | - | - | - | - | - |
| Production and use of organic inputs | - | - | - | - | - | - | - | - | - | - |
| Management of Problematic soils | - | - | - | - | - | - | - | - | - | - |
| Micro nutrient deficiency in crops | - | - | - | - | - | - | - | - | - | - |
| Nutrient Use Efficiency | - | - | - | - | - | - | - | - | - | - |
| Soil and Water Testing | - | - | - | - | - | - | - | - | - | - |
| **IV Livestock Production and Management** | | | | | | | | | | |
| Dairy Management | - | - | - | - | - | - | - | - | - | - |
| Poultry | 1 | 9 | - | 9 | 7 | 3 | 10 | 16 | 3 | 19 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Management | | | | | | | | | | |
| Piggery Management | - | - | - | - | - | - | - | - | - | - |
| Rabbit Management | - | - | - | - | - | - | - | - | - | - |
| Disease Management | - | - | - | - | - | - | - | - | - | - |
| Feed management | - | - | - | - | - | - | - | - | - | - |
| Production of quality animal products | - | - | - | - | - | - | - | - | - | - |
| **V Home Science/Women empowerment** | | | | | | | | | | |
| Household food security by kitchen gardening and nutrition gardening | - | - | - | - | - | - | - | - | - | - |
| Design and development of low/minimum cost diet | - | - | - | - | - | - | - | - | - | - |
| Designing and development for high nutrient efficiency diet | - | - | - | - | - | - | - | - | - | - |
| Minimization of nutrient loss in processing | - | - | - | - | - | - | - | - | - | - |
| Gender mainstreaming through SHGs | - | - | - | - | - | - | - | - | - | - |
| Storage loss minimization techniques | - | - | - | - | - | - | - | - | - | - |
| Value addition | 1 | - | 17 | 17 | - | 3 | 3 | - | 20 | 20 |
| Income generation activities for empowerment of rural Women | - | - | - | - | - | - | - | - | - | - |
| Location specific drudgery reduction technologies | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Rural Crafts | - | - | - | - | - | - | - | - | - | - |
| Women and child care | - | - | - | - | - | - | - | - | - | - |
| **VI Agril. Engineering** | | | | | | | | | | |
| Installation and maintenance of micro irrigation systems | - | - | - | - | - | - | - | - | - | - |
| Use of Plastics in farming practices | - | - | - | - | - | - | - | - | - | - |
| Production of small tools and implements | - | - | - | - | - | - | - | - | - | - |
| Repair and maintenance of farm machinery and implements | - | - | - | - | - | - | - | - | - | - |
| Small scale processing and value addition | - | - | - | - | - | - | - | - | - | - |
| Post Harvest Technology | - | - | - | - | - | - | - | - | - | - |
| **VII Plant Protection** | | | | | | | | | | |
| Integrated Pest Management | - | - | - | - | - | - | - | - | - | - |
| Integrated Disease Management | - | - | - | - | - | - | - | - | - | - |
| Bio-control of pests and diseases | - | - | - | - | - | - | - | - | - | - |
| Production of bio control agents and bio pesticides | - | - | - | - | - | - | - | - | - | - |
| **VIII Fisheries** | | | | | | | | | | |
| Integrated fish farming | - | - | - | - | - | - | - | - | - | - |
| Carp breeding and hatchery management | - | - | - | - | - | - | - | - | - | - |
| Carp fry and fingerling rearing | - | - | - | - | - | - | - | - | - | - |
| Composite fish | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| culture | | | | | | | | | | |
| Hatchery management and culture of freshwater prawn | - | - | - | - | - | - | - | - | - | - |
| Breeding and culture of ornamental fishes | - | - | - | - | - | - | - | - | - | - |
| Portable platic carp hatchery | - | - | - | - | - | - | - | - | - | - |
| Pen culture of fish and prawn | - | - | - | - | - | - | - | - | - | - |
| Shrimp farming | - | - | - | - | - | - | - | - | - | - |
| Edible oyster farming | - | - | - | - | - | - | - | - | - | - |
| Pearl culture | - | - | - | - | - | - | - | - | - | - |
| Fish processing and value addition | - | - | - | - | - | - | - | - | - | - |
| **IX Production of Inputs at site** | | | | | | | | | | |
| Seed Production | - | - | - | - | - | - | - | - | - | - |
| Planting material production | - | - | - | - | - | - | - | - | - | - |
| Bio-agents production | - | - | - | - | - | - | - | - | - | - |
| Bio-pesticides production | - | - | - | - | - | - | - | - | - | - |
| Bio-fertilizer production | - | - | - | - | - | - | - | - | - | - |
| Vermi-compost production | - | - | - | - | - | - | - | - | - | - |
| Organic manures production | - | - | - | - | - | - | - | - | - | - |
| Production of fry and fingerlings | - | - | - | - | - | - | - | - | - | - |
| Production of Bee-colonies and wax sheets | - | - | - | - | - | - | - | - | - | - |
| Small tools and implements | - | - | - | - | - | - | - | - | - | - |
| Production of livestock feed and fodder | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Production of Fish feed | - | - | - | - | - | - | - | - | - | - |
| **X Capacity Building and Group Dynamics** | | | | | | | | | | |
| Leadership development | - | - | - | - | - | - | - | - | - | - |
| Group dynamics | - | - | - | - | - | - | - | - | - | - |
| Formation and Management of SHGs | - | - | - | - | - | - | - | - | - | - |
| Mobilization of social capital | - | - | - | - | - | - | - | - | - | - |
| Entrepreneurial development of farmers/youths | 1 | 2 | 46 | 48 | - | 6 | 6 | 2 | 52 | 54 |
| WTO and IPR issues | - | - | - | - | - | - | - | - | - | - |
| **XI Agro-forestry** | | | | | | | | | | |
| Production technologies | - | - | - | - | - | - | - | - | - | - |
| Nursery management | - | - | - | - | - | - | - | - | - | - |
| Integrated Farming Systems | - | - | - | - | - | - | - | - | - | - |
| **TOTAL** | **3** | **11** | **63** | **74** | **7** | **12** | **19** | **18** | **75** | **93** |
| **(B) RURAL YOUTH** | - | - | - | - | - | - | - | - | - | - |
| Mushroom Production | - | - | - | - | - | - | - | - | - | - |
| Bee-keeping | - | - | - | - | - | - | - | - | - | - |
| Integrated farming | 1 | 24 | - | 24 | 3 | - | 3 | 27 | - | 27 |
| Seed production | - | - | - | - | - | - | - | - | - | - |
| Production of organic inputs | - | - | - | - | - | - | - | - | - | - |
| Integrated Farming | - | - | - | - | - | - | - | - | - | - |
| Planting material production | - | - | - | - | - | - | - | - | - | - |
| Vermi-culture | - | - | - | - | - | - | - | - | - | - |
| Sericulture | - | - | - | - | - | - | - | - | - | - |
| Protected cultivation of vegetable crops | - | - | - | - | - | - | - | - | - | - |
| Commercial fruit production | - | - | - | - | - | - | - | - | - | - |
| Repair and | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| maintenance of farm machinery and implements | | | | | | | | | | |
| Nursery Management of Horticulture crops | - | - | - | - | - | - | - | - | - | - |
| Training and pruning of orchards | - | - | - | - | - | - | - | - | - | - |
| Value addition | 1 | 10 | 9 | 19 | - | - | - | 10 | 9 | 19 |
| Production of quality animal products | - | - | - | - | - | - | - | - | - | - |
| Dairying | - | - | - | - | - | - | - | - | - | - |
| Sheep and goat rearing | - | - | - | - | - | - | - | - | - | - |
| Quail farming | - | - | - | - | - | - | - | - | - | - |
| Piggery | - | - | - | - | - | - | - | - | - | - |
| Rabbit farming | - | - | - | - | - | - | - | - | - | - |
| Poultry production | 1 | 28 | - | 28 | 2 | - | 2 | 30 | - | 30 |
| Ornamental fisheries | - | - | - | - | - | - | - | - | - | - |
| Para vets | - | - | - | - | - | - | - | - | - | - |
| Para extension workers | - | - | - | - | - | - | - | - | - | - |
| Composite fish culture | - | - | - | - | - | - | - | - | - | - |
| Freshwater prawn culture | - | - | - | - | - | - | - | - | - | - |
| Shrimp farming | - | - | - | - | - | - | - | - | - | - |
| Pearl culture | - | - | - | - | - | - | - | - | - | - |
| Cold water fisheries | - | - | - | - | - | - | - | - | - | - |
| Fish harvest and processing technology | - | - | - | - | - | - | - | - | - | - |
| Fry and fingerling rearing | - | - | - | - | - | - | - | - | - | - |
| Small scale processing | 1 | - | 4 | 4 | - | 6 | 6 | - | 10 | 10 |
| Post Harvest Technology | - | - | - | - | - | - | - | - | - | - |
| Tailoring and Stitching | - | - | - | - | - | - | - | - | - | - |
| Rural Crafts | - | - | - | - | - | - | - | - | - | - |
| **TOTAL** | **4** | **62** | **13** | **75** | **5** | **6** | **11** | **67** | **19** | **86** |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **(C) Extension Personnel** | | | | | | | | | | |
| Productivity enhancement in field crops | 1 | 35 | - | 35 | - | - | - | 35 | - | 35 |
| Integrated Pest Management | - | - | - | - | - | - | - | - | - | - |
| Integrated Nutrient management | 1 | 15 | - | 15 | - | - | - | 15 | - | 15 |
| Rejuvenation of old orchards | - | - | - | - | - | - | - | - | - | - |
| Protected cultivation technology | - | - | - | - | - | - | - | - | - | - |
| Formation and Management of SHGs | - | - | - | - | - | - | - | - | - | - |
| Group Dynamics and farmers organization | 5 | 167 | 1 | 168 | 10 | 20 | 30 | 177 | 21 | 198 |
| Information networking among farmers | - | - | - | - | - | - | - | - | - | - |
| Capacity building for ICT application | - | - | - | - | - | - | - | - | - | - |
| Care and maintenance of farm machinery and implements | - | - | - | - | - | - | - | - | - | - |
| WTO and IPR issues | - | - | - | - | - | - | - | - | - | - |
| Management in farm animals | - | - | - | - | - | - | - | - | - | - |
| Livestock feed and fodder production | - | - | - | - | - | - | - | - | - | - |
| Household food security | - | - | - | - | - | - | - | - | - | - |
| Women and Child care | - | - | - | - | - | - | - | - | - | - |
| Low cost and nutrient efficient diet designing | - | - | - | - | - | - | - | - | - | - |
| Production and use of organic inputs | - | - | - | - | - | - | - | - | - | - |
| Gender mainstreaming through SHGs | - | - | - | - | - | - | - | - | - | - |
| **TOTAL** | **7** | **217** | **1** | **218** | **10** | **20** | **30** | **227** | **21** | **248** |

**B) OFF Campus**

| Thematic area | No. of courses | Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Others | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **(A) Farmers & Farm Women** | | | | | | | | | | |
| **I Crop Production** | | | | | | | | | | |
| Weed Management | 2 | 64 | - | 64 | 5 | - | 5 | 69 | - | 69 |
| Resource Conservation Technologies | 1 | 65 | - | 65 | 16 | - | 16 | 81 | - | 81 |
| Cropping Systems | - | - | - | - | - | - | - | - | - | - |
| Crop Diversification | 1 | 20 | - | 20 | 1 | - | 1 | 21 | - | 21 |
| Integrated Farming | - | - | - | - | - | - | - | - | - | - |
| Water management | - | - | - | - | - | - | - | - | - | - |
| Seed production | - | - | - | - | - | - | - | - | - | - |
| Nursery management | - | - | - | - | - | - | - | - | - | - |
| Integrated Crop Management | 6 | 169 | - | 169 | 12 | - | 12 | 181 | - | 181 |
| Fodder production | - | - | - | - | - | - | - | - | - | - |
| Production of organic inputs | - | - | - | - | - | - | - | - | - | - |
| **II Horticulture** | | | | | | | | | | |
| **a) Vegetable Crops** | | | | | | | | | | |
| Production of low volume and high value crops | - | - | - | - | - | - | - | - | - | - |
| Off-season vegetables | - | - | - | - | - | - | - | - | - | - |
| Nursery raising | - | - | - | - | - | - | - | - | - | - |
| Exotic vegetables like Broccoli | - | - | - | - | - | - | - | - | - | - |
| Export potential vegetables | - | - | - | - | - | - | - | - | - | - |
| Grading and standardization | - | - | - | - | - | - | - | - | - | - |
| Protective | - | - | - | - | - | - | - | - | - | - |

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|---|---|---|---|---|---|---|---|---|---|---|
| cultivation (Green Houses, Shade Net etc.) | | | | | | | | | | |
| **b) Fruits** | | | | | | | | | | |
| Training and Pruning | 1 | 24 | - | 24 | 2 | - | 2 | 26 | - | 26 |
| Layout and Management of Orchards | 1 | 17 | - | 17 | 3 | - | 3 | 20 | - | 20 |
| Cultivation of Fruit | - | - | - | - | - | - | - | - | - | - |
| Management of young plants/orchards | - | - | - | - | - | - | - | - | - | - |
| Rejuvenation of old orchards | - | - | - | - | - | - | - | - | - | - |
| Export potential fruits | - | - | - | - | - | - | - | - | - | - |
| Micro irrigation systems of orchards | - | - | - | - | - | - | - | - | - | - |
| Plant propagation techniques | - | - | - | - | - | - | - | - | - | - |
| **c) Ornamental Plants** | | | | | | | | | | |
| Nursery Management | - | - | - | - | - | - | - | - | - | - |
| Management of potted plants | - | - | - | - | - | - | - | - | - | - |
| Export potential of ornamental plants | - | - | - | - | - | - | - | - | - | - |
| Propagation techniques of Ornamental Plants | - | - | - | - | - | - | - | - | - | - |
| **d) Plantation crops** | | | | | | | | | | |
| Production and Management technology | 2 | 38 | 5 | 43 | 7 | - | 7 | 45 | 5 | 50 |
| Processing and value addition | - | - | - | - | - | - | - | - | - | - |
| **e) Tuber crops** | | | | | | | | | | |
| Production and Management technology | - | - | - | - | - | - | - | - | - | - |
| Processing and value addition | - | - | - | - | - | - | - | - | - | - |
| **f) Spices** | | | | | | | | | | |
| Production and Management | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| technology | | | | | | | | | | |
| Processing and value addition | - | - | - | - | - | - | - | - | - | - |
| **g) Medicinal and Aromatic Plants** | | | | | | | | | | |
| Nursery management | - | - | - | - | - | - | - | - | - | - |
| Production and management technology | - | - | - | - | - | - | - | - | - | - |
| Post harvest technology and value addition | - | - | - | - | - | - | - | - | - | - |
| **III Soil Health and Fertility Management** | | | | | | | | | | |
| Soil fertility management | - | - | - | - | - | - | - | - | - | - |
| Soil and Water Conservation | 2 | 62 | - | 62 | 8 | - | 8 | 70 | - | 70 |
| Integrated Nutrient Management | - | - | - | - | - | - | - | - | - | - |
| Production and use of organic inputs | - | - | - | - | - | - | - | - | - | - |
| Management of Problematic soils | - | - | - | - | - | - | - | - | - | - |
| Micro nutrient deficiency in crops | - | - | - | - | - | - | - | - | - | - |
| Nutrient Use Efficiency | - | - | - | - | - | - | - | - | - | - |
| Soil and Water Testing | - | - | - | - | - | - | - | - | - | - |
| **IV Livestock Production and Management** | | | | | | | | | | |
| Dairy Management | - | - | - | - | - | - | - | - | - | - |
| Poultry Management | - | - | - | - | - | - | - | - | - | - |
| Piggery Management | - | - | - | - | - | - | - | - | - | - |
| Rabbit Management | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Disease Management | 2 | 38 | 2 | 40 | 8 | 2 | 10 | 46 | 4 | 50 |
| Feed management | - | - | - | - | - | - | - | - | - | - |
| Production of quality animal products | - | - | - | - | - | - | - | - | - | - |
| **V Home Science/Women empowerment** | | | | | | | | | | |
| Household food security by kitchen gardening and nutrition gardening | 1 | - | 12 | 12 | - | 3 | 3 | - | 15 | 15 |
| Design and development of low/minimum cost diet | - | - | - | - | - | - | - | - | - | - |
| Designing and development for high nutrient efficiency diet | 1 | - | 29 | 29 | - | 2 | 2 | - | 31 | 31 |
| Minimization of nutrient loss in processing | 1 | - | 21 | 21 | - | 2 | 2 | - | 23 | 23 |
| Gender mainstreaming through SHGs | - | - | - | - | - | - | - | - | - | - |
| Storage loss minimization techniques | 1 | - | 29 | 29 | - | 14 | 14 | - | 43 | 43 |
| Value addition | - | - | - | - | - | - | - | - | - | - |
| Income generation activities for empowerment of rural Women | 1 | - | 17 | 17 | - | 5 | 5 | - | 22 | 22 |
| Location specific drudgery reduction technologies | 1 | 7 | 33 | 40 | 2 | 8 | 10 | 9 | 41 | 50 |
| Rural Crafts | - | - | - | - | - | - | - | - | - | - |
| Women and child care | - | - | - | - | - | - | - | - | - | - |
| **VI Agril.** | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|
| **Engineering** | | | | | | | | | | |
| Installation and maintenance of micro irrigation systems | - | - | - | - | - | - | - | - | - | - |
| Use of Plastics in farming practices | - | - | - | - | - | - | - | - | - | - |
| Production of small tools and implements | - | - | - | - | - | - | - | - | - | - |
| Repair and maintenance of farm machinery and implements | 02 | 61 | – | 61 | 5 | – | 5 | 66 | - | 66 |
| Small scale processing and value addition | - | - | - | - | - | - | - | - | - | - |
| Post Harvest Technology | 01 | - | 25 | 25 | - | 4 | 4 | - | 29 | 29 |
| **VII Plant Protection** | | | | | | | | | | |
| Integrated Pest Management | - | - | - | - | - | - | - | - | - | - |
| Integrated Disease Management | - | - | - | - | - | - | - | - | - | - |
| Bio-control of pests and diseases | - | - | - | - | - | - | - | - | - | - |
| Production of bio control agents and bio pesticides | - | - | - | - | - | - | - | - | - | - |
| **VIII Fisheries** | | | | | | | | | | |
| Integrated fish farming | - | - | - | - | - | - | - | - | - | - |
| Carp breeding and hatchery management | - | - | - | - | - | - | - | - | - | - |
| Carp fry and fingerling rearing | - | - | - | - | - | - | - | - | - | - |
| Composite fish culture | - | - | - | - | - | - | - | - | - | - |
| Hatchery management and culture of freshwater | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| prawn | | | | | | | | | | |
| Breeding and culture of ornamental fishes | - | - | - | - | - | - | - | - | - | - |
| Portable plastic carp hatchery | - | - | - | - | - | - | - | - | - | - |
| Pen culture of fish and prawn | - | - | - | - | - | - | - | - | - | - |
| Shrimp farming | - | - | - | - | - | - | - | - | - | - |
| Edible oyster farming | - | - | - | - | - | - | - | - | - | - |
| Pearl culture | - | - | - | - | - | - | - | - | - | - |
| Fish processing and value addition | - | - | - | - | - | - | - | - | - | - |
| **IX Production of Inputs at site** | - | - | - | - | - | - | - | - | - | - |
| Seed Production | - | - | - | - | - | - | - | - | - | - |
| Planting material production | - | - | - | - | - | - | - | - | - | - |
| Bio-agents production | - | - | - | - | - | - | - | - | - | - |
| Bio-pesticides production | - | - | - | - | - | - | - | - | - | - |
| Bio-fertilizer production | - | - | - | - | - | - | - | - | - | - |
| Vermi-compost production | - | - | - | - | - | - | - | - | - | - |
| Organic manures production | - | - | - | - | - | - | - | - | - | - |
| Production of fry and fingerlings | - | - | - | - | - | - | - | - | - | - |
| Production of Bee-colonies and wax sheets | - | - | - | - | - | - | - | - | - | - |
| Small tools and implements | - | - | - | - | - | - | - | - | - | - |
| Production of livestock feed and fodder | - | - | - | - | - | - | - | - | - | - |
| Production of Fish feed | - | - | - | - | - | - | - | - | - | - |
| **X Capacity Building and Group Dynamics** | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Leadership development | - | - | - | - | - | - | - | - | - | - |
| Group dynamics | - | - | - | - | - | - | - | - | - | - |
| Formation and Management of SHGs | - | - | - | - | - | - | - | - | - | - |
| Mobilization of social capital | 2 | 64 | - | 64 | 2 | - | 2 | 66 | - | 66 |
| Entrepreneurial development of farmers/youths | - | - | - | - | - | - | - | - | - | - |
| WTO and IPR issues | - | - | - | - | - | - | - | - | - | - |
| **XI Agro-forestry** | | | | | | | | | | |
| Production technologies | - | - | - | - | - | - | - | - | - | - |
| Nursery management | - | - | - | - | - | - | - | - | - | - |
| Integrated Farming Systems | - | - | - | - | - | - | - | - | - | - |
| **TOTAL** | **28** | **629** | **148** | **777** | **71** | **36** | **107** | **700** | **184** | **884** |
| **(B) RURAL YOUTH** | | | | | | | | | | |
| Mushroom Production | - | - | - | - | - | - | - | - | - | - |
| Bee-keeping | - | - | - | - | - | - | - | - | - | - |
| Integrated farming | - | - | - | - | - | - | - | - | - | - |
| Seed production | - | - | - | - | - | - | - | - | - | - |
| Production of organic inputs | - | - | - | - | - | - | - | - | - | - |
| Integrated Farming | - | - | - | - | - | - | - | - | - | - |
| Planting material production | - | - | - | - | - | - | - | - | - | - |
| Vermi-culture | - | - | - | - | - | - | - | - | - | - |
| Sericulture | - | - | - | - | - | - | - | - | - | - |
| Protected cultivation of vegetable crops | 1 | 18 | 2 | 20 | 1 | 3 | 4 | 19 | 5 | 24 |
| Commercial fruit production | - | - | - | - | - | - | - | - | - | - |
| Repair and maintenance of farm machinery and implements | - | - | - | - | - | - | - | - | - | - |
| Nursery Management of | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Horticulture crops | | | | | | | | | | |
| Training and pruning of orchards | - | - | - | - | - | - | - | - | - | - |
| Value addition | - | - | - | - | - | - | - | - | - | - |
| Production of quality animal products | - | - | - | - | - | - | - | - | - | - |
| Dairying | 1 | 28 | - | 28 | 2 | - | 2 | 30 | - | 30 |
| Sheep and goat rearing | - | - | - | - | - | - | - | - | - | - |
| Quail farming | - | - | - | - | - | - | - | - | - | - |
| Piggery | - | - | - | - | - | - | - | - | - | - |
| Rabbit farming | - | - | - | - | - | - | - | - | - | - |
| Poultry production | 1 | 11 | - | 11 | - | - | - | 11 | - | 11 |
| Ornamental fisheries | - | - | - | - | - | - | - | - | - | - |
| Para vets | - | - | - | - | - | - | - | - | - | - |
| Para extension workers | - | - | - | - | - | - | - | - | - | - |
| Composite fish culture | - | - | - | - | - | - | - | - | - | - |
| Freshwater prawn culture | - | - | - | - | - | - | - | - | - | - |
| Shrimp farming | - | - | - | - | - | - | - | - | - | - |
| Pearl culture | - | - | - | - | - | - | - | - | - | - |
| Cold water fisheries | - | - | - | - | - | - | - | - | - | - |
| Fish harvest and processing technology | - | - | - | - | - | - | - | - | - | - |
| Fry and fingerling rearing | - | - | - | - | - | - | - | - | - | - |
| Small scale processing | - | - | - | - | - | - | - | - | - | - |
| Post Harvest Technology | 1 | - | 25 | 25 | - | 4 | 4 | - | 29 | 29 |
| Tailoring and Stitching | - | - | - | - | - | - | - | - | - | - |
| Rural Crafts | - | - | - | - | - | - | - | - | - | - |
| **TOTAL** | **04** | **57** | **27** | **84** | **3** | **7** | **10** | **60** | **34** | **94** |
| **(C) Extension Personnel** | - | - | - | - | - | - | - | - | - | - |
| Productivity enhancement in field crops | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Integrated Pest Management | - | - | - | - | - | - | - | - | - | - |
| Integrated Nutrient management | - | - | - | - | - | - | - | - | - | - |
| Rejuvenation of old orchards | - | - | - | - | - | - | - | - | - | - |
| Protected cultivation technology | - | - | - | - | - | - | - | - | - | - |
| Formation and Management of SHGs | - | - | - | - | - | - | - | - | - | - |
| Group Dynamics and farmers organization | - | - | - | - | - | - | - | - | - | - |
| Information networking among farmers | - | - | - | - | - | - | - | - | - | - |
| Capacity building for ICT application | - | - | - | - | - | - | - | - | - | - |
| Care and maintenance of farm machinery and implements | - | - | - | - | - | - | - | - | - | - |
| WTO and IPR issues | - | - | - | - | - | - | - | - | - | - |
| Management in farm animals | - | - | - | - | - | - | - | - | - | - |
| Livestock feed and fodder production | - | - | - | - | - | - | - | - | - | - |
| Household food security | - | - | - | - | - | - | - | - | - | - |
| Women and Child care | - | - | - | - | - | - | - | - | - | - |
| Low cost and nutrient efficient diet designing | - | - | - | - | - | - | - | - | - | - |
| Production and use of organic inputs | - | - | - | - | - | - | - | - | - | - |
| Gender mainstreaming through SHGs | - | - | - | - | - | - | - | - | - | - |
| **TOTAL** | | | | | | | | | | |

**C) Consolidated table (ON and OFF Campus)**

| Thematic area | No. of courses | Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Others | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **(A) Farmers & Farm Women** | | | | | | | | | | |
| **I Crop Production** | | | | | | | | | | |
| Weed Management | 2 | 64 | - | 64 | 5 | - | 5 | 69 | - | 69 |
| Resource Conservation Technologies | 1 | 65 | - | 65 | 16 | - | 16 | 81 | - | 81 |
| Cropping Systems | - | - | - | - | - | - | - | - | - | - |
| Crop Diversification | 1 | 20 | - | 20 | 1 | - | 1 | 21 | - | 21 |
| Integrated Farming | - | - | - | - | - | - | - | - | - | - |
| Water management | - | - | - | - | - | - | - | - | - | - |
| Seed production | - | - | - | - | - | - | - | - | - | - |
| Nursery management | - | - | - | - | - | - | - | - | - | - |
| Integrated Crop Management | 6 | 169 | - | 169 | 12 | - | 12 | 181 | - | 181 |
| Fodder production | - | - | - | - | - | - | - | - | - | - |
| Production of organic inputs | - | - | - | - | - | - | - | - | - | - |
| **II Horticulture** | | | | | | | | | | |
| **a) Vegetable Crops** | | | | | | | | | | |
| Production of low volume and high value crops | 01 | 22 | -- | 22 | -- | -- | -- | 22 | -- | 22 |
| Off-season vegetables | - | - | - | - | - | - | - | - | - | - |
| Nursery raising | - | - | - | - | - | - | - | - | - | - |
| Exotic vegetables like Broccoli | - | - | - | - | - | - | - | - | - | - |
| Export potential vegetables | - | - | - | - | - | - | - | - | - | - |
| Grading and standardization | - | - | - | - | - | - | - | - | - | - |
| Protective | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| cultivation (Green Houses, Shade Net etc.) | | | | | | | | | | |
| **b) Fruits** | | | | | | | | | | |
| Training and Pruning | 1 | 24 | - | 24 | 2 | - | 2 | 26 | - | 26 |
| Layout and Management of Orchards | 1 | 17 | - | 17 | 3 | - | 3 | 20 | - | 20 |
| Cultivation of Fruit | - | - | - | - | - | - | - | - | - | - |
| Management of young plants/orchards | - | - | - | - | - | - | - | - | - | - |
| Rejuvenation of old orchards | - | - | - | - | - | - | - | - | - | - |
| Export potential fruits | - | - | - | - | - | - | - | - | - | - |
| Micro irrigation systems of orchards | - | - | - | - | - | - | - | - | - | - |
| Plant propagation techniques | - | - | - | - | - | - | - | - | - | - |
| **c) Ornamental Plants** | | | | | | | | | | |
| Nursery Management | - | - | - | - | - | - | - | - | - | - |
| Management of potted plants | - | - | - | - | - | - | - | - | - | - |
| Export potential of ornamental plants | - | - | - | - | - | - | - | - | - | - |
| Propagation techniques of Ornamental Plants | - | - | - | - | - | - | - | - | - | - |
| **d) Plantation crops** | | | | | | | | | | |
| Production and Management technology | 2 | 38 | 5 | 43 | 7 | - | 7 | 45 | 5 | 50 |
| Processing and value addition | - | - | - | - | - | - | - | - | - | - |
| **e) Tuber crops** | | | | | | | | | | |
| Production and Management technology | - | - | - | - | - | - | - | - | - | - |
| Processing and value addition | - | - | - | - | - | - | - | - | - | - |
| **f) Spices** | | | | | | | | | | |
| Production and | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Management technology | | | | | | | | | | |
| Processing and value addition | - | - | - | - | - | - | - | - | - | - |
| **g) Medicinal and Aromatic Plants** | | | | | | | | | | |
| Nursery management | - | - | - | - | - | - | - | - | - | - |
| Production and management technology | - | - | - | - | - | - | - | - | - | - |
| Post harvest technology and value addition | - | - | - | - | - | - | - | - | - | - |
| **III Soil Health and Fertility Management** | | | | | | | | | | |
| Soil fertility management | - | - | - | - | - | - | - | - | - | - |
| Soil and Water Conservation | 2 | 62 | - | 62 | 8 | - | 8 | 70 | - | 70 |
| Integrated Nutrient Management | - | - | - | - | - | - | - | - | - | - |
| Production and use of organic inputs | - | - | - | - | - | - | - | - | - | - |
| Management of Problematic soils | - | - | - | - | - | - | - | - | - | - |
| Micro nutrient deficiency in crops | - | - | - | - | - | - | - | - | - | - |
| Nutrient Use Efficiency | - | - | - | - | - | - | - | - | - | - |
| Soil and Water Testing | - | - | - | - | - | - | - | - | - | - |
| **IV Livestock Production and Management** | | | | | | | | | | |
| Dairy Management | - | - | - | - | - | - | - | - | - | - |
| Poultry Management | 1 | 9 | - | 9 | 7 | 3 | 10 | 16 | 3 | 19 |
| Piggery Management | - | - | - | - | - | - | - | - | - | - |
| Rabbit | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Management | | | | | | | | | | |
| Disease Management | 2 | 38 | 2 | 40 | 8 | 2 | 10 | 46 | 4 | 50 |
| Feed management | - | - | - | - | - | - | - | - | - | - |
| Production of quality animal products | - | - | - | - | - | - | - | - | - | - |
| **V Home Science/Women empowerment** | | | | | | | | | | |
| Household food security by kitchen gardening and nutrition gardening | 1 | - | 12 | 12 | - | 3 | 3 | - | 15 | 15 |
| Design and development of low/minimum cost diet | - | - | - | - | - | - | - | - | - | - |
| Designing and development for high nutrient efficiency diet | 1 | - | 29 | 29 | - | 2 | 2 | - | 31 | 31 |
| Minimization of nutrient loss in processing | 1 | - | 21 | 21 | - | 2 | 2 | - | 23 | 23 |
| Gender mainstreaming through SHGs | - | - | - | - | - | - | - | - | - | - |
| Storage loss minimization techniques | 1 | - | 29 | 29 | - | 14 | 14 | - | 43 | 43 |
| Value addition | 1 | - | 17 | 17 | - | 3 | 3 | - | 20 | 20 |
| Income generation activities for empowerment of rural Women | 1 | - | 17 | 17 | - | 5 | 5 | - | 22 | 22 |
| Location specific drudgery reduction technologies | 1 | 7 | 33 | 40 | 2 | 8 | 10 | 9 | 41 | 50 |
| Rural Crafts | - | - | - | - | - | - | - | - | - | - |
| Women and child care | - | - | - | - | - | - | - | - | - | - |
| **VI Agril.** | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Engineering** | | | | | | | | | | |
| Installation and maintenance of micro irrigation systems | - | - | - | - | - | - | - | - | - | - |
| Use of Plastics in farming practices | - | - | - | - | - | - | - | - | - | - |
| Production of small tools and implements | - | - | - | - | - | - | - | - | - | - |
| Repair and maintenance of farm machinery and implements | 2 | 61 | - | 61 | 5 | - | 5 | 66 | - | 66 |
| Small scale processing and value addition | - | - | - | - | - | - | - | - | - | - |
| Post Harvest Technology | - | - | - | - | - | - | - | - | - | - |
| **VII Plant Protection** | | | | | | | | | | |
| Integrated Pest Management | - | - | - | - | - | - | - | - | - | - |
| Integrated Disease Management | - | - | - | - | - | - | - | - | - | - |
| Bio-control of pests and diseases | - | - | - | - | - | - | - | - | - | - |
| Production of bio control agents and bio pesticides | - | - | - | - | - | - | - | - | - | - |
| **VIII Fisheries** | | | | | | | | | | |
| Integrated fish farming | - | - | - | - | - | - | - | - | - | - |
| Carp breeding and hatchery management | - | - | - | - | - | - | - | - | - | - |
| Carp fry and fingerling rearing | - | - | - | - | - | - | - | - | - | - |
| Composite fish culture | - | - | - | - | - | - | - | - | - | - |
| Hatchery management and culture of | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| freshwater prawn | | | | | | | | | | |
| Breeding and culture of ornamental fishes | - | - | - | - | - | - | - | - | - | - |
| Portable plastic carp hatchery | - | - | - | - | - | - | - | - | - | - |
| Pen culture of fish and prawn | - | - | - | - | - | - | - | - | - | - |
| Shrimp farming | - | - | - | - | - | - | - | - | - | - |
| Edible oyster farming | - | - | - | - | - | - | - | - | - | - |
| Pearl culture | - | - | - | - | - | - | - | - | - | - |
| Fish processing and value addition | - | - | - | - | - | - | - | - | - | - |
| **IX Production of Inputs at site** | | | | | | | | | | |
| Seed Production | - | - | - | - | - | - | - | - | - | - |
| Planting material production | - | - | - | - | - | - | - | - | - | - |
| Bio-agents production | - | - | - | - | - | - | - | - | - | - |
| Bio-pesticides production | - | - | - | - | - | - | - | - | - | - |
| Bio-fertilizer production | - | - | - | - | - | - | - | - | - | - |
| Vermi-compost production | - | - | - | - | - | - | - | - | - | - |
| Organic manures production | - | - | - | - | - | - | - | - | - | - |
| Production of fry and fingerlings | - | - | - | - | - | - | - | - | - | - |
| Production of Bee-colonies and wax sheets | - | - | - | - | - | - | - | - | - | - |
| Small tools and implements | - | - | - | - | - | - | - | - | - | - |
| Production of livestock feed and fodder | - | - | - | - | - | - | - | - | - | - |
| Production of Fish feed | - | - | - | - | - | - | - | - | - | - |
| **X Capacity Building and Group Dynamics** | | | | | | | | | | |
| Leadership | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| development | | | | | | | | | | |
| Group dynamics | - | - | - | - | - | - | - | - | - | - |
| Formation and Management of SHGs | - | - | - | - | - | - | - | - | - | - |
| Mobilization of social capital | 2 | 64 | - | 64 | 2 | - | 2 | 66 | - | 66 |
| Entrepreneurial development of farmers/youths | 1 | 2 | 46 | 48 | - | 6 | 6 | 2 | 52 | 54 |
| WTO and IPR issues | - | - | - | - | - | - | - | - | - | - |
| **XI Agro-forestry** | | | | | | | | | | |
| Production technologies | - | - | - | - | - | - | - | - | - | - |
| Nursery management | - | - | - | - | - | - | - | - | - | - |
| Integrated Farming Systems | - | - | - | - | - | - | - | - | - | - |
| **TOTAL** | **31** | **640** | **211** | **851** | **78** | **48** | **126** | **718** | **259** | **977** |
| **(B) RURAL YOUTH** | | | | | | | | | | |
| Mushroom Production | - | - | - | - | - | - | - | - | - | - |
| Bee-keeping | - | - | - | - | - | - | - | - | - | - |
| Integrated farming | 1 | 24 | - | 24 | 3 | - | 3 | 27 | - | 27 |
| Seed production | - | - | - | - | - | - | - | - | - | - |
| Production of organic inputs | - | - | - | - | - | - | - | - | - | - |
| Integrated Farming | - | - | - | - | - | - | - | - | - | - |
| Planting material production | - | - | - | - | - | - | - | - | - | - |
| Vermi-culture | - | - | - | - | - | - | - | - | - | - |
| Sericulture | - | - | - | - | - | - | - | - | - | - |
| Protected cultivation of vegetable crops | 1 | 18 | 2 | 20 | 1 | 3 | 4 | 19 | 5 | 24 |
| Commercial fruit production | - | - | - | - | - | - | - | - | - | - |
| Repair and maintenance of farm machinery and implements | - | - | - | - | - | - | - | - | - | - |
| Nursery Management of Horticulture | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| crops | | | | | | | | | | |
| Training and pruning of orchards | - | - | - | - | - | - | - | - | - | - |
| Value addition | 1 | 10 | 9 | 19 | - | - | - | 10 | 9 | 19 |
| Production of quality animal products | - | - | - | - | - | - | - | - | - | - |
| Dairying | 1 | 28 | - | 28 | 2 | - | 2 | 30 | - | 30 |
| Sheep and goat rearing | - | - | - | - | - | - | - | - | - | - |
| Quail farming | - | - | - | - | - | - | - | - | - | - |
| Piggery | - | - | - | - | - | - | - | - | - | - |
| Rabbit farming | - | - | - | - | - | - | - | - | - | - |
| Poultry production | 2 | 39 | - | 39 | 2 | - | 2 | 41 | - | 41 |
| Ornamental fisheries | - | - | - | - | - | - | - | - | - | - |
| Para vets | - | - | - | - | - | - | - | - | - | - |
| Para extension workers | - | - | - | - | - | - | - | - | - | - |
| Composite fish culture | - | - | - | - | - | - | - | - | - | - |
| Freshwater prawn culture | - | - | - | - | - | - | - | - | - | - |
| Shrimp farming | - | - | - | - | - | - | - | - | - | - |
| Pearl culture | - | - | - | - | - | - | - | - | - | - |
| Cold water fisheries | - | - | - | - | - | - | - | - | - | - |
| Fish harvest and processing technology | - | - | - | - | - | - | - | - | - | - |
| Fry and fingerling rearing | - | - | - | - | - | - | - | - | - | - |
| Small scale processing | 1 | - | 4 | 4 | - | 6 | 6 | - | 10 | 10 |
| Post Harvest Technology | 1 | - | 25 | 25 | - | 4 | 4 | - | 29 | 29 |
| Tailoring and Stitching | - | - | - | - | - | - | - | - | - | - |
| Rural Crafts | - | - | - | - | - | - | - | - | - | - |
| **TOTAL** | **8** | **119** | **40** | **159** | **8** | **13** | **21** | **127** | **53** | **180** |
| **(C) Extension Personnel** | | | | | | | | | | |
| Productivity enhancement in field crops | 1 | 35 | - | 35 | - | - | - | 35 | - | 35 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Integrated Pest Management | - | - | - | - | - | - | - | - | - | - |
| Integrated Nutrient management | 1 | 15 | - | 15 | - | - | - | 15 | - | 15 |
| Rejuvenation of old orchards | - | - | - | - | - | - | - | - | - | - |
| Protected cultivation technology | - | - | - | - | - | - | - | - | - | - |
| Formation and Management of SHGs | - | - | - | - | - | - | - | - | - | - |
| Group Dynamics and farmers organization | 5 | 167 | 1 | 168 | 10 | 20 | 30 | 177 | 21 | 198 |
| Information networking among farmers | - | - | - | - | - | - | - | - | - | - |
| Capacity building for ICT application | - | - | - | - | - | - | - | - | - | - |
| Care and maintenance of farm machinery and implements | - | - | - | - | - | - | - | - | - | - |
| WTO and IPR issues | - | - | - | - | - | - | - | - | - | - |
| Management in farm animals | - | - | - | - | - | - | - | - | - | - |
| Livestock feed and fodder production | - | - | - | - | - | - | - | - | - | - |
| Household food security | - | - | - | - | - | - | - | - | - | - |
| Women and Child care | - | - | - | - | - | - | - | - | - | - |
| Low cost and nutrient efficient diet designing | - | - | - | - | - | - | - | - | - | - |
| Production and use of organic inputs | - | - | - | - | - | - | - | - | - | - |
| Gender mainstreaming through SHGs | - | - | - | - | - | - | - | - | - | - |
| **TOTAL** | **6** | **217** | **1** | **218** | **10** | **20** | **30** | **227** | **21** | **248** |

*The details of above training programmes as <u>Annexure</u> in the proforma given below*

| Date | Clientele | Title of the training Programme | Discipline | Thematic area | Duration in days | Venue (Off / On Campus) | Number of other participants | | | Number of SC/ST | | | Total number of participangs | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **Agronomy** | | | | | | | | | | | | | | | |
| | Farmer & farm women | | | | | | | | | | | | | | |
| 20/05/14 | Farmer | Soil testing and its importance in field and horticultural crops | Agronomy | Fertilizer management | 01 | Off | 26 | - | 26 | 01 | - | 01 | 27 | - | 27 |
| 21/05/14 | Farmer | Soil testing and its importance in field and horticultural crops | Agronomy | Fertilizer management | 01 | Off | 38 | - | 38 | 01 | - | 01 | 39 | - | 39 |
| 22/05/14 | Farmer | Soil testing and its importance in field and horticultural crops | Agronomy | Fertilizer management | 01 | Off | 47 | - | 47 | 06 | - | 06 | 53 | - | 53 |
| 18/06/14 | Farmer | Integrated weed management in kharif crops | Agronomy | Crop management | 01 | Off | 36 | - | 36 | 03 | - | 03 | 39 | - | 39 |
| 19/06/14 | Farmer | Integrated weed management in kharif crops | Agronomy | Crop management | 01 | Off | 28 | - | 28 | 02 | - | 02 | 30 | - | 30 |
| 20/06/14 | Farmer | Improved technology for higher production of maize and bajra | Agronomy | Crop management | 01 | Off | 17 | - | 17 | 01 | - | 01 | 18 | - | 18 |
| 25/06/14 | Farmer | Integrated pest and disease management in | Agronomy | Crop management | 01 | Off | 20 | - | 20 | 02 | - | 02 | 22 | - | 22 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | kharif crops | | | | | | | | | | | | | |
| 11/10/14 | Farmer | Integrated pest and disease management in rabi crops | Agronomy | Crop management | 01 | Off | 21 | - | 21 | 01 | - | 01 | 22 | - | 22 |
| 23/10/14 | Farmer | Modern cultivation practices in Bengal gram and wheat crops | Agronomy | Crop management | 01 | Off | 20 | - | 20 | 01 | - | 01 | 21 | - | 21 |
| 21/01/15 | Farmer | Sugarcane trash management and production technology in ratoon sugarcane crop | Agronomy | Crop management | 01 | Off | 65 | - | 65 | 16 | - | 16 | 81 | - | 81 |
| | **Rural Youth** | | | | | | | | | | | | | | |
| 12/06/14 | Rural Youth | Drip irrigation and fertigation in Bt cotton | Agronomy | Crop management | 01 | On | 24 | - | 24 | 03 | - | 03 | 27 | - | 27 |
| | **Extension functionaries** | | | | | | | | | | | | | | |
| 10/06/14 | Extension functionaries | Drip irrigation and fertigation in Bt cotton | Agronomy | Crop management | 01 | On | 15 | - | 15 | - | - | - | 15 | - | 15 |
| 11/02/15 | Extension functionaries | Sugarcane trash management & ratoon crop management | Agronomy | Crop management | 01 | On | 35 | - | 35 | - | - | - | 35 | - | 35 |

| Date | Clientele | Title of the training programme | Discipline | Thematic area | Duration in days | Venue (Off / On Campus) | Number of other participants | | | Number of SC/ST | | | Total number of participants | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **Home Science** | | | | | | | | | | | | | | | 20 |
| 15/5/14 | Farm women | Recycling of agro waste through Vermicompost method and its use in farming. | Home Science | Income generating activity | 1 | Off | - | 17 | 17 | - | 5 | 5 | - | 22 | 22 |
| 5/6/14 | Farm women | Different methods of cooking for prevention of nutrient loss in diet | Home Science | Minimization of nutrient loss in cooking | 1 | Off | - | 21 | 21 | - | 2 | 2 | - | 23 | 23 |
| 25/6/14 | Farm women | Planning and maintenance of nutritional Garden | Home Science | Household food security | 2 | Off | - | 12 | 12 | - | 3 | - | - | 15 | 15 |
| 19/7/14 | Farm women | Introduction & use of women friendly implements for farmwomen | Home Science | Drudgery reduction | 1 | Off | 7 | 33 | 40 | 2 | 8 | 10 | 9 | 41 | 50 |
| 8/8/14 | Rural youth | Preparation of tomato ketch up, banana chips, and potato chips various types of pickles for increasing self-life of products by various preservation methods. | Home Science | Value addition | 3 | On | - | 17 | 17 | - | 3 | 3 | - | 20 | 20 |
| 12/9/14 | Farm women | Scientific storage techniques of food grains | Home Science | House hold food security | 1 | Off | - | 29 | 29 | - | 14 | 14 | - | 43 | 43 |
| 19/9/14 | Farm women | Soya processing as a small scale enterprises and its importance for human health | Home Science | Design & Dev. Of high nutrient efficiency | 1 | Off | - | 29 | 29 | - | 2 | 2 | - | 31 | 31 |
| 29/11/14 | Rural youth (SHG) | Spices processing (gram masala, samber masala, tea masala,pani puri masala etc.) | Home Science | Income generation activities for empowerment of women | 2 | On | - | 4 | 4 | - | 6 | 6 | - | 10 | 10 |
| 1/12/14 | Rural youth (SHG) | Value addition in Tomato | Home Science | Value addition | 2 | On | 10 | 9 | 19 | - | - | - | 10 | 9 | 19 |
| 29/12/14 | Extension functionaries | Khoa based enterprises (preparation of Pedha, gulab jamun, kalakand, kulkand barfi etc.) | Home Science | Income generation activities for \|\|\| empowerment of women | 2 | On | 2 | 1 | 3 | - | 20 | 20 | 2 | 21 | 23 |

| Date | Clientele | Title of the training programme | Discipline | Thematic area | Duration in days | Venue (Off / On Campus) | Number of other participants | | | Number of SC/ST | | | Total number of participangs | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **Agril. Engg.** | | | | | | | | | | | | | | | |
| 16.05.14 | Practicing Farmer | Rain water harvesting – farm pond | Agil. Engg | Soil and Water Conservation | 01 | Off | 30 | - | 30 | 2 | - | 2 | 32 | - | 32 |
| 22.06.14 | Practicing Farmer | In situ soil moisture conservation techniques in cotton | Agil. Engg | Soil and Water Conservation | 01 | Off | 32 | - | 32 | 6 | - | 6 | 38 | - | 38 |
| 12.07.14 | Practicing Farmer | BBF Planter | Agil. Engg | Repair and maintenance of farm machinery and implements | 01 | Off | 36 | - | 36 | 2 | - | 2 | 38 | - | 38 |
| 15.08.14 | Farm Women | Processing of fruits and vegetables | Agil. Engg | Post Harvest Technology | 01 | Off | - | 25 | 25 | - | 4 | 4 | - | 29 | 29 |
| 19.09.14 | Practicing Farmer | Use of Farm implements | Agil. Engg | Repair and maintenance of farm machinery and implements | 01 | Off | 25 | - | 25 | 3 | - | 3 | 28 | - | 28 |
| | | | | Total | | | | | | | | | | | |

| Date | Clientele | Title of the training programme | Discipline | Thematic area | Duration in days | Venue (Off / On Campus) | Number of other participants | | | Number of SC/ST | | | Total number of participants | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Extension Education | | | | | | | | | | | | | | | |
| 20/5/14 | PF | Importance of soil testing and method of soil sample collection | Extension Education | Mobilization of social capital | 01 | Off | 26 | - | 26 | 1 | - | 1 | 27 | - | 27 |
| 21/5/14 | PF | Importance of soil testing and method of soil sample collection | Extension Education | Mobilization of social capital | 01 | Off | 38 | - | 38 | 1 | - | 1 | 39 | - | 39 |
| 4/9/2014 | EF (Farmers group leader ) | Management of kharif crops during drought situation | Extension Education | Group dynamics | 03 | On | 25 | - | 25 | - | - | - | 25 | - | 25 |
| 29/9/14 | EF (Farmers group leader ) | Management of kharif crops during drought situation | Extension Education | Group dynamics | 03 | On | 25 | - | 25 | - | - | - | 25 | - | 25 |
| 3/12/14 | EF (Farmers group leader ) | Management of kharif crops during drought situation | Extension Education | Group dynamics | 03 | On | 50 | - | 50 | - | - | - | 50 | - | 50 |
| 8/1/15 | PF (SHG) | Goat farming | Extension Education | Entrepreneurial development of farmwomen | 03 | On | 2 | 46 | 48 | - | 6 | 6 | 2 | 52 | 54 |
| 27/3/15 | EF (Farmers group leader ) | Management of kharif crops during drought situation | Extension Education | Group dynamic | 03 | On | 65 | - | 65 | 10 | - | 10 | 75 | - | 75 |

| Date | Clientele | Title of the training programme | Discipline | Thematic area | Duration in days | Venue (Off / On Campus) | Number of other participants | | | Number of SC/ST | | | Total number of participangs | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **Animal Science** | | | | | | | | | | | | | | | |
| 22/04/2014 | Rural Youth and Farm Women | Back yard poultry | Animal Science | Income generation | 1 | On | 09 | - | 09 | 07 | 03 | 10 | 16 | 03 | 19 |
| 05/06/2014 | Rural Youth and Farm Women | Back yard poultry | Animal Science | Income generation | 1 | On | 28 | - | 28 | 02 | - | 02 | 30 | - | 30 |
| 27/11/2014 | Rural Youth | Clean milk production | Animal Science | Value addition | 1 | Off | 28 | - | 28 | 02 | - | 02 | 30 | - | 30 |
| 06/01/2015 | Rural Youth | Commercial Poultry Production | Animal Science | Income generation | 1 | Off | 11 | - | 11 | - | - | - | - | - | 11 |
| 07/01/2015 | Rural Youth and Farm Women | Diseases of Goat and their prevention | Animal Science | Value addition | 1 | Off | 18 | 01 | 19 | 07 | 02 | 09 | - | - | 28 |
| 15/01/2015 | Rural Youth | Eradication of ecto and endo parasites in goat | Animal Science | Value addition | 1 | Off | 20 | 01 | 21 | 01 | - | 01 | - | - | 22 |

| Date | Clientele | Title of the training programme | Discipline | Thematic area | Duration in days | Venue (Off / On Campus) | Number of other participants | | | Number of SC/ST | | | Total number of participangs | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 21/6/14 | Farmers | Sweet Orange production technology | Horticulture | Layout and management of orchard | 01 | Off | 17 | - | 17 | 3 | - | 3 | 20 | - | 20 |
| 17/10/14 | Farmers | Production techniques of onion | Horticulture | Production & management technology | 02 | Off | 19 | 5 | 24 | 5 | - | 5 | 24 | 5 | 29 |
| 14/11/14 | Farmers | Pomegranate cultivation technology | Horticulture | Commercial fruit production | 02 | Off | 19 | - | 19 | 2 | - | 2 | 21 | - | 21 |
| 8/7/14 | Farmers | Training & pruning of Guava & Sapota. | Horticulture | Training & pruning of orchards. | 01 | Off | 24 | - | 24 | 2 | - | 2 | 26 | - | 26 |
| 1/12/15 | Rural youth | Vegetable production technology | Horticulture | Production & management technology | 02 | Off | 18 | 2 | 20 | 1 | 3 | 4 | 19 | 3 | 24 |

(D) Vocational training programmes for Rural Youth

| Crop / Enterprise | Date | Training title | Thematic Area | Duration (days) | No. of Participants | | | Self employed after training | | | Number of persons employed else where |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Male | Female | Total | Type of units | Number of units | Number of persons employed | |
| Processing centre | 29/11/2014 | Masala preparation and papad making | Value addition | 02 | - | 10 | 10 | Masala processing centre | 1 | 12 self employed | - |
| Processing centre | 1/12/2014 | Value addition in tomato | Value addition | 02 | 10 | 10 | 20 | Pickle processing | 1 | 2 self employed | - |
| Processing centre | 29/12/2014 | Khoa based by products | Value addition | 03 | 2 | 22 | 24 | - | - | - | - |

E) Sponsored Training Programmes

| Sl.No | Date | Title | Discipline | Thematic area | Duration (days) | Client (PF/RY/EF) | No. of courses | No. of Participants | | | | | | | | | Sponsoring Agency | Amount of fund received (Rs.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Others | | | SC/ST | | | Total | | | | |
| | | | | | | | | M | F | Total | M | F | Total | M | F | Total | | |
| 1 | 4 to 6.9.2014 | Dry farming mission under (Khrif crops) | Exten. Edun. | HRD | 03 | PF | 01 | 25 | 00 | 25 | 00 | 00 | 00 | 25 | 00 | 25 | Dry land farming mission | 30,000 |
| 2 | 29.9.2014 to 1.10.2014 | Dry farming mission under (Khrif crops) | Exten. Edun. | HRD | 03 | PF | 01 | 21 | 00 | 21 | 00 | 00 | 00 | 21 | 00 | 21 | Dry land farming mission | 3,000 |
| 3 | 3 to 5.12.2014 | Dry farming mission under (Kharif crops) | Exten. Edun. | HRD | 03 | PF | 01 | 50 | 00 | 50 | 00 | 00 | 00 | 50 | 00 | 50 | Dry land farming mission | 60,000 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 29/12/14 to 31/12/14 | Khowa based by products for SHG women | Exten. Edun. | Entrepreneurs development | 03 | SHG | 01 | 01 | 01 | 02 | - | 20 | 20 | 01 | 20 | 21 | MAVIM, Jalna | Technical backstopping with live demo (3,000) |
| 5 | 8-10 /01/2015 | Goat Farming | Exten. Edun. | Entrepreneurship Development | 3 | PF | 01 | 00 | 44 | 44 | 00 | 06 | 06 | 00 | 50 | 50 | MAVIM, Jalna | Technical backstopping. (3,000) |
| 6 | 27-29.3.2015 | Dry farming mission under (Rabi crops) | Exten. Edun. | HRD | 03 | PF | 01 | 63 | 00 | 63 | 12 | 00 | 12 | 75 | 00 | 75 | Dryland farming mission | 63,000 |
| 7 | 11/2/15 | Sugarcane trash management & ratoon crop management technology | Agronomy | HRD | 01 | EF | 01 | 35 | - | 35 | - | - | - | 35 | - | 35 | State Agril. Dept., Aurangabad | Technical backstopping. |

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

| Nature of Extension Activity | Date | Title/topic | No. of activities | Participants | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Farmers (Others) | | | SC/ST (Farmers) | | | Extension Officials | | | Grand Total | | |
| | | | | I | | | II | | | III | | | (I+II+III) | | |
| | | | | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Field Day | 20/01/2015 | Pigeon pea | 03 | 118 | - | 118 | - | - | - | - | - | - | 118 | - | 118 |
| | 08/10/2014<br>22/10/2014 | Soybean | 02 | 75 | - | 75 | - | - | - | - | - | - | 75 | - | 75 |
| | 11/03/2015 | Wheat | 01 | 45 | - | 45 | - | - | - | - | - | - | 45 | - | 45 |
| | | Onion | | | | | | | | | | | 32 | 7 | 39 |
| Kisan Mela | 18/5/2014 | Kharif Crop | Mass Scale | | | | | | | | | | | | |
| | 17/09/2014 | Rabi Crop | Mass Scale | | | | | | | | | | | | |
| Kisan gosthi | 13/5/2014 | Kharif planning | 01 | 27 | - | 27 | - | - | - | - | - | - | 27 | - | 27 |
| | 16/5/2014 | Kharif planning | 01 | 19 | - | 19 | 2 | - | 2 | - | - | - | 21 | - | 21 |
| | 19/7/2014 | Cotton | 01 | 14 | - | 14 | 2 | - | 2 | - | - | - | 16 | - | 16 |
| | 18/09/2014 | Insect pest management | 01 | 09 | - | 09 | 2 | - | 2 | - | - | - | 11 | - | 11 |
| | 26/09/2014 | | 01 | 14 | - | 14 | 1 | - | 1 | - | - | - | 15 | - | 15 |
| | 14/11/2014 | Insect pest management | 01 | 18 | - | 18 | 3 | - | 3 | - | - | - | 21 | - | 21 |
| | 21/11/2014 | Foliar application of fertilizers | 01 | 20 | - | 20 | 4 | - | 4 | - | - | - | 24 | - | 24 |
| | 27/11/2014 | Insect pest management | 01 | 15 | - | 15 | 4 | - | 4 | - | - | - | 19 | - | 19 |
| | 6/1/15 | Poultry | 01 | 9 | - | 9 | 1 | - | 1 | - | - | - | 10 | - | 10 |
| | | Rabi crops | 01 | 13 | - | 13 | - | - | - | - | - | - | 13 | - | 13 |
| Exhibition | 11/2/2015 to 13/02/2015 | Technology week at KVK | 01 | - | - | - | - | - | - | - | - | - | 1243 | 171 | 1414 |
| | | | | | | | | | | | | | | | |
| Film Show | 9/1/15 | Poultry | 01 | - | 46 | - | - | 04 | 04 | 02 | 02 | 04 | 02 | 52 | 54 |
| | 10/1/15 | Goat farming | 01 | - | 46 | - | - | 04 | 04 | 02 | 02 | 04 | 02 | 52 | 54 |
| Method | | | | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| demonstration | | | | | | | | | | | | | | | |
| 1 | 19/9/14 | Nutrition Garden | 01 | | | | | | | | | | | | |
| 2 | 20/11/14 | Cycle hoe | 01 | | | | | | | | | | | | |
| 3 | 12/12/14 | Brinjal mitten | 01 | | | | | | | | | | | | |
| 4 | 5/5/2014 | Seed treatment of Soyabean | 03 | 28 | - | 28 | 04 | - | 04 | - | - | - | 32 | - | 32 |
| 5 | | Weedicide use | 03 | 30 | - | 30 | 06 | - | 06 | - | - | - | 36 | - | 36 |
| 6 | | Fertigation scheduling | 04 | 41 | - | 41 | 06 | - | 06 | - | - | - | 47 | - | 47 |
| 7 | 29/12/14 | Khoa based products | 01 | | | | | | | 2 | 1 | 03 | | | |
| 8 | 1/12/14 | Value addition in tomato | 02 | | | | | | | - | - | - | | | |
| 9 | 20,22,23/05/2014 | Soil sample collection | 03 | 29 | - | 29 | 05 | - | 05 | | - | - | 34 | - | 34 |
| 10 | 25/06/2014 | Spraying of weedicide | 02 | 19 | - | 19 | 03 | - | 03 | - | - | - | 22 | - | 22 |
| 11 | 01/07/2014 | Seed treatment | 02 | 18 | - | 18 | 01 | - | 01 | - | - | - | 19 | - | 19 |
| 12 | 04/07/2014 | Fertilizer application methods | 01 | 08 | - | 08 | 01 | - | 01 | - | - | -- | 09 | - | 09 |
| 13 | 04/07/2014 | Fertigation scheduling | 02 | 21 | - | 21 | 02 | - | 02 | - | - | - | 23 | - | 23 |
| 14 | 18/07/2014 | Insitu moisture conservation methods | 02 | 27 | - | 27 | 05 | - | 05 | - | - | - | 32 | - | 32 |
| 15 | 01/11/2015 | Insecticide & fungicide spraying | 02 | 18 | - | 18 | 03 | - | 03 | - | -- | - | 21 | - | 21 |
| | | | | | | | | | | | | | | | |
| Workshop | | | | | | | | | | | | | | | |
| | 25 & 26/4/2014 | Review & planning workshop of NICRA KVKs of zone-5 at KVK, Bableshwar, | | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ahmadnagar | | | | | | | | | | | | | |
| | 30-31 /05/14 | 1 Kharif ZREAC at NARP Aurangabad | | | | | | | | | | | | | |
| | 26 /9 /2014 | 2.EEC workshop at VNMKV , Parbhani | | | | | | | | | | | | | |
| | / /2014 | 3. Rabi ZREAC at NARP Aurangabad | | | | | | | | | | | | | |
| | 10-12/9/2014 | Annual Zonal Workshop of KVK at Baramati | | | | | | | | | | | | | |
| | 24-25/4/2014 | Dry Land Farming Mission Workshop at VNMKV Parbhani | | | | | | | | | | | | | |
| | 11-13/11/2014 | Kharif review & Rabi Planning workshop of NICRA KVKs | | | | | | | | | | | | | |
| | 25-26/3/2015 | Annual action plan workshop of KVK at VNMKV, Parbhani | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Group meetings | | 1. Low cost technology<br>2 Method to mitigate drought condition<br>3. BBF Technology<br>4. Mulching in sweet orange<br>5. Pruning in pomegranate | | | | | | | | | | | | | 404 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 6. sugarcane trash management<br>7 Dieback management in sweet orange<br>8. Vaccination of farm animal<br>9. Drudgery reducing tools<br>10. Value addition<br>11Fertilizer management in kharif crop<br>12 .Crop management in climate change<br>13 poultry keeping | | | | | | | | | | | | | |
| Lectures delivered as resource persons | | | | | | | | | | | | | | | |
| 5 | 27/3/15 | Moisture Conservation technology in Rabi Crops | 01 | 63 | 00 | 63 | 12 | 00 | 12 | - | - | - | 75 | 00 | 75 |
| 6 | 27/3/15 | Self Help Group | 01 | 63 | 00 | 63 | 12 | 00 | 12 | - | - | - | 75 | 00 | 75 |
| 7 | 28/3/15 | Vegetable Dehydration | 01 | 63 | 00 | 63 | 12 | 00 | 12 | - | - | - | 75 | 00 | 75 |
| 8 | 28/3/15 | Agriculture Marketing | 01 | 63 | 00 | 63 | 12 | 00 | 12 | - | - | - | 75 | 00 | 75 |
| 9 | 29/3/15 | Jowar Processing | 01 | 63 | 00 | 63 | 12 | 00 | 12 | - | - | - | 75 | 00 | 75 |
| 10 | 29/3/15 | Dry Land Horticulture | 01 | 63 | 00 | 63 | 12 | 00 | 12 | - | - | - | 75 | 00 | 75 |
| 11 | 08/01/2014 | Cultivation of | 01 | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Forage Crops | | | | | | | | | | | | | |
| 12 | 15/01/2014 | i) Milk and its constituents ii)Adulteration of milk and its detection | 01 | | | | | | | | | | | | |
| 13 | 18/01/2014 | i) Importance of Artificial Insemination and programme for increae in milk production ii) Indian milch breeds and their selection | 01 | | | | | | | | | | | | |
| 14 | 24/01/2014 | Different diseases of animal- contagious, non contagious and their prevention | 01 | | | | | | | | | | | | |
| 15 | 28/02/2014 | Animal Husbandry and Poultry raring- A new prospective | 01 | | | | | | | | | | | | |
| 16 | 05/12/2014 | Goat Farming | 01 | 50 | 00 | 50 | 00 | 00 | 00 | - | - | - | 50 | 00 | 50 |
| 17 | 09/01/02015 | Goat Farming- A Business for rural ladies | 01 | - | 46 | 46 | - | 04 | 04 | 02 | 02 | 04 | 02 | 52 | 54 |
| 18 | 08/05/2014 | Pre kharif planning | 88 | - | 88 | - | - | - | - | - | - | - | 88 | - | 88 |
| 19 | 13/05/2014 | Pre kharif planning | 81 | - | 81 | - | - | - | - | - | - | - | 81 | - | 81 |
| 20 | 20/05/2014 | Importance of soil | 17 | - | 17 | - | - | - | - | - | - | - | 17 | - | 17 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | 22/05/2014 | testing & method of collection of soil sample | 28 | - | 28 | - | - | - | - | - | - | - | 28 | - | 28 |
| 22 | 23/05/2014 | | 110 | - | 110 | - | - | - | - | - | - | - | 110 | - | 110 |
| 23 | 18/06/2014 | Bt cotton production technology | 90 | - | 90 | -- | - | - | - | - | - | - | 90 | - | 90 |
| 24 | 25/06/2014 | | 60 | - | 60 | - | - | - | - | - | - | - | 60 | - | 60 |
| 8 | 01/07/2014 | Site specific contingency crop management | 38 | - | 38 | - | - | - | - | - | - | - | 38 | - | 38 |
| 9 | 03/07/2014 | Pigeon pea crop management | 45 | - | 45 | - | - | - | - | - | - | - | 45 | - | 45 |
| 10 | 28/08/2014 | Insitu soil & water conservation techniques | 19 | - | 19 | - | - | -- | - | -- | - | - | 19 | - | 19 |
| 11 | 18/09/2014 | Bt cotton reddening management | 60 | - | 60 | - | - | - | - | - | - | - | 60 | - | 60 |
| 12 | 26/09/2014 | Non bt cotton management practices | 40 | - | 40 | - | - | - | - | - | - | - | 40 | - | 40 |
| 13 | 31/10/2014 | Bt cotton reddening management & insect pest management | 15 | - | 15 | - | - | - | - | - | - | - | 15 | - | 15 |
| 14 | 01/11/2014 | Bt cotton , Ginger & Bengal gram management practices | 44 | - | 44 | - | - | - | - | - | - | - | 44 | - | 44 |
| 15 | 21/01/2015 | `Sugarcane trash management & ratoon crop management | 87 | - | 87 | - | -- | - | - | - | - | - | 87 | - | 87 |
| 16 | 03/02/2015 | | 35 | - | 35 | - | - | - | - | - | - | - | 35 | - | 35 |
| Newspaper coverage | | | 40 | | | | | | | | | | | | |
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| Radio talk | Aug. 2014 | Nutrition garden | 01 | | | | | | | | | | | | |
| | | Bt cotton production technology | 01 | | | | | | | | | | | | |
| TV talk | | | | | | | | | | | | | | | |
| | 24/12/14 | Hydroponics | | | | | | | | | | | | | |
| | 22/10/14 | Goat Farming | | | | | | | | | | | | | |
| | 9/3/15 | Drying of Fruits and Vegetables | | | | | | | | | | | | | |
| | 8/3/15 | Vermicompost technology as a income generating | 01 | | | | | | | | | | | | |
| | 10/3/15 | Drudgery reducing farmwomen tools | 01 | | | | | | | | | | | | |
| | 15/3/15 | Importance of Soya in human health | 01 | | | | | | | | | | | | |
| | 26.11.2014 | Varieties developed by VNMKV, Parbhani | 01 | | | | | | | | | | | | |
| | Nov 2014 | Wheat cultivation technology | 01 | | | | | | | | | | | | |
| | Nov 2014 | Safflower management technology | 01 | | | | | | | | | | | | |
| | Dec 2014 | Drought management techniques | 01 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Popular Articles | | Mass scale | | | | | | | | | | | | | |
| | Bt kapasachi lagwad tantrdyan | Mass scale | | | | | | | | | | | | | |
| | Sugarcane | Mass scale | | | | | | | | | | | | | |

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|---|---|---|
| | Trash management | |
| | Bharaddhanya-badlatya hawaman paristhitit arogyasahi wardan | Mass scale |
| | Pani shudhikarnache sope upay | Mass scale |
| | Shendriya shetila wardan : gandulpani | |
| | Nutrition Garden banvinyachi padhhat | |
| | Pawsalyat manwi , aahar arogyachi kalji | |
| | Sheti madhe mahilancha sahbhag | |
| | Dudhatil bhesal olakhanyachi padhhat | |
| | Soya khadycha khurak phayedeshir | |
| | Gruhinisathi Arogya vardhak | |

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| | daha tips | | | | | | | | | | | | | | |
| | Health is Wealth | | | | | | | | | | | | | | |
| | Shewga : Arogyasathi Wardan | | | | | | | | | | | | | | |
| | Shetitil kasht kami karnari awjare | Mass scale | | | | | | | | | | | | | |
| | Drying of Fruit and Vegetable | | | | | | | | | | | | | | |
| | *Karadai Lagwad Tantradnyan* | Mass scale | | | | | | | | | | | | | |
| Advisory services | Weekly | Meteorological agro advisory given by VNMKV Parbhani through KVK | Mass scale | | | | | | | | | | | | |
| Scientists visit to farmers field | | | 109 | | | | | | | | | | | | 1704 |
| | | | | | | | | | | | | | | | |
| Farmers visit to KVK farms | | | | | | | | | | | | | | | 2872 |
| | | | | | | | | | | | | | | | |
| Diagnostic Visits | | | 17 | | | | | | | | | | | | |
| 1 | Nov 2014 | Mites attack on mosambi | 01 | 20 | - | 20 | - | - | - | - | - | - | 20 | - | 20 |
| 2 | Sep 2014 | Soft rot of Ginger | 01 | 15 | - | 15 | - | - | - | - | - | - | 15 | - | 15 |
| 3 | Oct 2014 | Untrained pomegranate orchard | 01 | 13 | - | 13 | - | - | - | - | - | - | 13 | - | 13 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | Oct 2014 | Unawareness about proper bahar management in pomegranate | 01 | 20 | - | 20 | - | - | - | - | - | - | 20 | - | 20 |
| 5 | Nov 2014 | Incedence of thrips attack in onion | 01 | 18 | - | 18 | - | - | - | - | - | - | 18 | - | 18 |
| 6 | May 2014 | Water soluble fertilizers adoption for bt cotton | 01 | 10 | - | 10 | - | - | - | - | - | - | 10 | - | 10 |
| 7 | May 2014 | Soil sample collection | 03 | 15 | - | 15 | - | - | - | -- | - | - | 15 | - | 15 |
| 8 | July 2014 | Weed problems in pigeon & cotton | 01 | 14 | - | 14 | - | - | - | - | - | - | 14 | - | 14 |
| 9 | Sep 2014 | Incidence of sucking pest in bt cotton | 01 | 20 | - | 20 | - | - | - | - | - | - | 20 | - | 20 |
| 10 | July 2014 | Crop growth affected due to low soil moisture | 01 | 17 | - | 17 | - | -- | - | - | - | - | 17 | - | 17 |
| 11 | Nov 2014 | Stunted growth of wheat | 01 | 30 | - | 30 | - | - | - | - | - | - | 30 | - | 30 |
| 12 | Sep 2014 | Reddening in bt cotton | 01 | 25 | - | 25 | - | - | - | -- | - | - | 25 | - | 25 |
| 13 | Nov 2014 | Wilting in Bengal gram | 01 | 18 | - | 18 | - | -- | - | - | - | - | 18 | - | 18 |
| 14 | Nov 2014 | Incidence of pod borer on pigeon pea | 01 | 20 | - | 20 | - | - | - | - | - | - | 20 | - | 20 |
| 15 | Jan 2015 | Red rot in sugarcane crop | 01 | 33 | - | 33 | - | - | - | - | - | - | 33 | - | 33 |
| Exposures visit | | | 02 | | - | - | - | - | - | - | - | - | 1 | 29 | 30 |
| | | | | | | | | | | | | | | | |
| Soil test | 20, 22 & | | 03 | 223 | - | 223 | 2 | - | 2 | | | | 225 | - | 225 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| campaigns | 23/5/2014 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Extension literature | | | | | | | | | | | | | | | |
| | Folder | *Gut sheti : Faydyachi sheti* | | | | | | | | | | | | | |
| | Folder | *Vividh Chara Pike* | | | | | | | | | | | | | |
| | Folder | *Thibak cinchan : Niga va Durusti* | | | | | | | | | | | | | |
| | Folder | *Dushkali Paristithi madhe Falbageche niyojan* | | | | | | | | | | | | | |
| | Folder | *Bt kapus lagvad tantradyan* | | | | | | | | | | | | | |
| | Folder | *Gheuya Dyan Paras bageche* | | | | | | | | | | | | | |
| Farm Science Club Conveners meet | 18/9/2014 | | 01 | 49 | - | 49 | - | - | - | - | - | - | 49 | - | 49 |
| | 27/11/2014 | | 01 | 29 | - | 29 | 1 | - | 1 | - | - | - | 30 | - | 30 |
| Self Help Group Conveners meetings | 1) 5/8/14<br>2) 14/9/14<br>3)12/11/2013<br>4) 3/01/2014<br>5) 28/2/2014 | 1 Market led extension<br>2. Food processing<br>3. Drudgery reducing technology<br>4.Entrepreneurship programme for women<br>5- fruit & veg. processing | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Celebration of important days (specify) | 1/7/2013 | Krishi din | 38 | - | 38 | - | - | - | - | - | - | - | 38 | - | 38 |
| | 16/07/2014 | ICAR Foundation Day | 68 | - | 68 | - | - | - | - | - | - | - | 68 | - | 68 |
| | 3/1/2014 | Mahila mela on the eve of savitribai phule jayanti | Mass Scale | | | | | | | | | | | | |

**3.5 (A). Kisan Mobile Advisory Services: NIL**

**(B). Details of SMSs Nil**

| Content category | No.of Messages | No.of Farmers | Feedback from farmers |
|---|---|---|---|
| Crop Production | | | |
| Crop Protection | | | |
| Livestock & Fisheries Advisory | | | |
| Weather Advisory | | | |
| Market information | | | |
| Events information | | | |
| Inputs availability | | | |
| Others (specify) | | | |
| Total | | | |

**Details on Technology Week Celebrations**

| Period of Technology Week observed | Types of Activities | No.of Activities (No./Qty) | No. of beneficiaries | | | Related crop/livestock technology |
|---|---|---|---|---|---|---|
| | | | Male | Female | Total | |
| 11 /2/2015 to 13/02/2015 | Group Discussion | | | | | |
| | Lectures organized | 10 | 1243 | 171 | 1414 | Crop<br>Horticultural crops<br>Livestock<br>Sericulture<br>Farm mechanization<br>Processing<br>Entrepreneurship |
| | Exhibition/Fair | 01 | 1243 | 171 | 1414 | |
| | Film show | 03 | | | | |
| | Farm Visit | | 1243 | 171 | 1414 | |
| | Diagnostic activities | | | | | |
| | Extension Literature provided (No.) | 1719 | - | - | 1719 | |
| | Total number of farmers visited the technology week | | 1243 | 171 | 1414 | |
| | No.of other agencies involved | 11 agencies | | | | |

### 3.5 Production and supply of Technological products

**SEED MATERIALS**

| Major group/class | Crop | Variety | Quantity (qtl.) | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|
| **CEREALS** | | | | | |
| | Wheat | NIAW-301 | - | - | |
| OILSEEDS | | | | | |
| | Soybean | JS-335 | 12.78 | 89460 | |
| | Safflower | PBNS-12 | 0.94 | 5170 | |
| PULSES | | | | | |
| | Pigeon pea | BSMR-736 | 6.60 | 72600 | |
| | | | | | |

**SUMMARY**

| Sl. No. | Major group/class | Quantity (qtl.) | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|
| 1 | CEREALS | | | |
| 2 | OILSEEDS | 19.38 | 162060 | |
| 3 | PULSES | 6.60 | 72600 | |
| 4 | VEGETABLES | | | |
| 5 | FLOWER CROPS | | | |
| 6 | OTHERS | | | |
| **TOTAL** | | | | |

**PLANTING MATERIALS**

| Major group/class | Crop | Variety | Quantity (Nos.) | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|
| **FRUITS** | | | | | |
| | Pomegranate | Bhagwa | 60000 Expected | - | - |

**SUMMARY**

| Sl. No. | Major group/class | Quantity (Nos.) | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|
| | FRUITS | | | |
| 1 | Pomegranate | 60000 Expected | - | - |
| | **TOTAL** | | | |

## BIO PRODUCTS

| Major group/class | Product Name | Species | Quantity | | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|---|
| | | | No | (kg) | | |
| **BIOAGENTS** | | **Nil** | | | | |
| | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |

## SUMMARY

| Sl. No. | Product Name | Species | Quantity | | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|---|
| | | | Nos | (kg) | | |
| 1 | BIOAGENTS | | | | | |
| 2 | BIO FERTILIZERS | | **Nil** | | | |
| 3 | BIO PESTICIDE | | | | | |
| | **TOTAL** | | | | | |

**LIVESTOCK**

| Sl. No. | Type | Breed | Quantity | | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|---|
| | | | (Nos | Kgs | | |
| **SHEEP AND GOAT** | **Goat** | **Osmanabadi** | **20** | **488 kg** | **1,10,000** | **25** |
| | | | | | | |

## SUMMARY

| Sl. No. | Type | Breed | Quantity | | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|---|
| | | | Nos | Kgs | | |
| 1 | CATTLE | | | | | |
| 2 | SHEEP & GOAT | Osmanabadi | 20 | 488 kg | 1,10,000 | 25 |
| 5 | OTHERS | | | | | |
| | **TOTAL** | | **20** | **488 kg** | **1,10,000** | **25** |

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

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

(B) Literature developed/published

| Item | Title | Authors name | Number of copies |
|---|---|---|---|
| Research papers | | | |
| Technical reports | | | |
| | ZREAC Kharif 201415 | Prof. D.C.Patgaonkar | 40 |
| | Annual progress report 2013-14 | Prof. D.C.Patgaonkar & Dr. N.D.deshmukh | 10 |
| | ZREAC Rabi.2014-15 | Prof. D.C.Patgaonkar | 40 |
| | Extension Education Council report | Prof. D.C.Patgaonkar | 25 |
| | Action plan 2015-16 | All SMS | 10 |
| Popular articles | | | |
| | **Topic** | | |
| | Bt kapasachi lagwad tantrdyan | Dr. K.K.Zade<br>Dr. S. B. Pawar | |
| | Sugarcane trash management | Dr. K.K.Zade<br>Dr. S. B. Pawar | |
| | Bharaddhanya- badlatya hawaman paristhitit arogyasahi wardan | Prof.D.C.Patgaonkar<br>Prof D.M.Lomte<br>Dr. R.D.Ahire | |
| | Pani shudhikarnache sope upay | Prof.D.C.Patgaonkar | |
| | Shendriya shetila wardan : gandulpani | Dr. P.H.Gawdkhere<br>Prof.D.C.Patgaonkar<br>Prof D.M.Lomte | |
| | Nutrition Garden banvinyachi padhhat | Prof.D.C.Patgaonkar | |
| | Pawsalyat manwi , aahar arogyachi kalji | Prof.D.C.Patgaonkar | |

| | | | |
|---|---|---|---|
| | Sheti madhe mahilancha sahbhag | Prof.D.C.Patgaonkar | |
| | Dudhatil bhesal olakhanyachi padhhat | Prof.D.C.Patgaonkar | |
| | Soya khadycha khurak phayedeshir | Prof.D.C.Patgaonkar | |
| | Gruhinisathi Arogya vardhak daha tips | Prof.D.C.Patgaonkar | |
| | Health is Wealth | Prof.D.C.Patgaonkar | |
| | Shewga : Arogyasathi Wardan | Prof.D.C.Patgaonkar | |
| | Shetitil kasht kami karnari awjare | Prof.D.C.Patgaonkar | |
| | Drying of Fruit and Vegetable | Prof G B Yadav<br>Dr S B Pawar | |
| | *Karadai Lagwad Tantradnyan* | Dr.N.D.Deshmukh<br>SMS (Ext.) | |
| | | | |
| Folder | *Gut sheti : Faydyachi sheti* | Dr N D Deshmukh | |
| | *Vividh Chara Pike* | V S Jadhav | |
| | *Thibak cinchan : Niga va Durusti* | G B Yadav | |
| | *Dushkali Paristithi madhe Falbageche niyojan* | Dr D S Bhujbal | |
| | *Bt kapus lagvad tantradyan* | Dr K K Zade | |
| | *Gheuya Dyan Paras bageche* | D C Patgaonkar | |
| Booklet | | | |

**(C) Details of Electronic Media Produced -**

| S. No. | Type of media (CD / VCD / DVD / Audio-Cassette) | Title of the programme | Number |
|---|---|---|---|
| 1 | VCD | Hydroponics Maize Production | 01 |

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

## *Success story on Vocational training programme*

During recent years large number of Self Help Group (SHG) have been formed by the govt. and Non-govt. development organization in the country under the various scheme, but most of these groups are working as a saving & credit kitty which required organizing in a business organization. It was also observed that there were no business plan with the groups and the members meet only once in a month for collect the saving and contribute the loans to members.

Some of the members were willing to start some business but due to lack of guidance they don't have faith to do some business and they contacted to Krishi Vigyan Kendra , Aurangabad and discussed their problems. Afterwards KVK had taken a lead to promote the SHG,s of this district which are interested to develop micro enterprises. After completion of market survey and schemes information KVK, A'bad had decided to give technical & scientific knowledge in food processing and planed vocational training on "Specices processing and Preparation of papad 40 women of SHG,s from waluj , Aurangabad district had attended the vocational training programme on food processing with live demonstration. After that the 12 member of SHGs had started their small scale enterprises of various type of masala like chilli powder, Coriender powder, turmeric powder , samber masala , gram masala, moong dal papad, udad dal papad, soya papad etc . All 12 members prepared the products in a single roof and KVK Aurangabad has tie up with various urban societies for marketing

This unit has started from last three months and after struggling they earn Rs 20000/- to 25000/- per month. Finally we can say that due to vocational training programme women of SHG were economically empowered and also there was gain in knowledge regarding products preparation, keeping quality, marketing skill etc.

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

### 1. *Umed* Campaign

Due to insufficient rainfall in Marathwada region of Maharashtra state, farmers could not obtained expected yield during *Kharif* and *Rabi* 2014-15 and facing lot of problems. To overcome on these problems Hon. Vice Chancellor, Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani Dr. B. Venkateswarlu initiate hope generation concept *i.e.* **'***Umed'* campaign for eight district of Marathwada through which it is proposed to provide technical guidance to the farmers regarding rabi crops, orchard management, fodder crop management, crop management during summer season etc.

Keeping in view KVK, Aurangabad started the implementation of Umed programme for Aurangabad District from January 2015. For implementation of programme, help of village schools have been taken. During morning session students rallies were organized in village and they appeal to the farmers through various slogans that do not commit suicide and be positive towards agriculture. After rally, discussion of scientist with farmers was organized and scientist solved the farmer's problems and also promoted VNMKV's technologies among farmers. Like wise 9 villages with 2014 farmers have been covered by KVK, Aurangabad. The details of which is given below.

| **Sr. No.** | **Date** | **Village Name** | **Taluka** | **District** | **Participants (Farmers, Students)** |
|---|---|---|---|---|---|
| 1. | 6.1.2015 | Devgaon | Paithan | Aurangabad | 66 |
| 2. | 7.1.2015 | Shiregaon | Gangapur | Aurangabad | 470 |
| 3. | 17.1.2015 | Golegaon | Khultabad | Aurangabad | 404 |
| 4. | 25.2.2015 | Kaudgaon | Aurangabad | Aurangabad | 362 |
| 5. | 10.3.2015 | Maheboobkheda | Gangapur | Aurangabad | 252 |
| 6. | 11.3.2015 | Shekta | Gangapur | Aurangabad | 70 |
| 7. | 31.3.2015 | Kanakshil | Khultabad | Aurangabad | 145 |
| 8. | 9.4.2015 | Dhawalapuri | Aurangabad | Aurangabad | 175 |
| 9 | 9.4.2015 | Janephal | Vaijapur | Aurangabad | 70 |
| | | **Total** | | | 2014 |

## 2. *Couple group farming*

To built networking & strategy skills among farm families from different community & economic levels, KVK Aurangabad develop a concept of "Couple group farming" in which make a group of couple of farmers. Every month couple group & agriculture scientists gathered together & have discussion on new concepts, current problems related to agriculture enterprises, processing techniques, marketing etc. It serves the purpose to have a 'Stage' where farm families can put their problem, solve & share their experience & strategies with one another. Here we find the factors that support the change of perspectives, internal factor such as personality traits of the whole group.

When women were alone involve in a group, she was depend on her husband decision . In that case after some years SHGs were inactive and it is in the path of close the SHG. After seeing and handling this problem KVK Aurangabad gave much more stress regarding the development of couple group and form two couple groups namely Laxmi narayan damptya shetkari group, Gewrai (basi) & Annapurna dampatya shetkari group , Aurangabad . After that Vocational trainings, demonstrations were arranged on Value addition, Processing etc and now Laxmi narayan damptya shetkari group, Gewrai (basi )have started their own small scale industries of Tomato pickles , Potato chips, Papad and they earned approx. Rs.12000/- from tomato pickle only for last two months.

### 3. Vidyapeeth aapalay Dari tantradyan Shetawari (Plant protection campaign)

In order to reach the University technologies to the real use is a special campaign was organized in Aurangabad district specially in Auranagabad , Kannad, Vaijapur and Gangapur tahasils. Here the SAU scientists, KVK scientists with the officer of state Agriculture department had visited the fields and guided farmer's on the field itself in clusters villages bases.

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

| S. No. | Crop / Enterprise | ITK Practiced | Purpose of ITK |
|---|---|---|---|
| 1 | Cotton, Pigeaon pea and Bengal gram | Garlic + Green chilli + Tobacco extract mix with kerosin | To control boll worm in cotton , pigeon pea and Bengal gram |
| 2. | Chilli | Tobacco extract | To control of leaf curling in chilly |
| 3. | Grain storage | Use of Jetrofa, Glyrecidia flowers and neem leaves | To control the rats and pest viz. Weevil |
| 4. | Gasses in ruminant | Feeding of ground nut | To release the gases of animal |

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

- Identification of courses for farmers/farm women: Through PRA, Diagnostic visit etc.
- Rural Youth: Questioning method, group discussion etc.
- In-service personnel: meeting, group discussion, field visit etc

**3.11 Field activities**

i. Number of villages adopted -03
ii. No. of farm families selected - 475
iii. No. of survey/PRA conducted - 1

**3.12. Activities of Soil and Water Testing Laboratory**

Status of establishment of Lab : Functioning

1. Year of establishment :2005-06
2. List of equipments purchased with amount :

| Sr.No. | Name of the Equipment | Qty. | Cost |
|---|---|---|---|
| 1. | Gas cylinder | 1 | 3000/- |
| 2. | Hot plates | 2 | 16600/- |
| 3. | Water steel distillation | 1 | 6995/- |
| 4. | PH meter | 1 | 11157/- |
| 5. | EC meter | 1 | 12079/- |
| 6. | Flame photometer | 1 | 41265/- |
| 7. | Lab villy | 1 | 18260/- |
| 8. | Monopan Electrical balance (cap.200g) | 1 | 14280/- |

| | | | |
|---|---|---|---|
| 9. | Electrical Digital balance | 1 | 41650/- |
| 10. | Sieve Shaker | 1 | 11730/- |
| 11. | Physical balance (cap.200gm) | 1 | 2040/- |
| 12. | Plant sample grander | 1 | 13430/- |
| 13. | Muffle furniture | 1 | 30090/- |
| 14. | Electrolux refrigerator | 1 | 11875/- |
| 15. | Mixer grinder | 1 | 2850/- |
| 16. | Juice extractor | 1 | 1900/- |
| 17. | Laptop | 1 | 48000/- |
| 18. | Computer | 1 | 33970/- |
| 19. | Hot air oven | 1 | 25193/- |
| 20 | Conical shaker | 2 | 74800/- |
| 21 | Spectrophotometer | 1 | 39360/- |

3. Details of samples analyzed so far

| Details | No. of Samples | No. of Farmers | No. of Villages | Amount realized |
|---|---|---|---|---|
| Soil Samples | 263 | 263 | 03 | Soil samples analyses done through state agril. Dept. laboratory, Aurangabad |
| Water Samples | | | | |
| Plant Samples | | | | |
| Petiole Samples | | | | |
| Total | | | | |

### 3.13. Activities under rainwater harvesting (for those KVKs

| Date | Nature of Activity | Title | Client (PF/ RY/ EF) | No. of Courses | No. of Participants including SC/ST | | | No. of SC/ST Participants | | | Total Participants | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| | | | Nil | | | | | | | | | | |
| | | | | | | | | | | | | | |

## 4.0 IMPACT

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

| Name of specific technology/skill transferred | No. of participants | % of adoption | Change in income (Rs.) | |
|---|---|---|---|---|
| | | | Before (Rs./Unit) | After (Rs./Unit) |
| Intercropping (Soybean + Pigeon pea) | 55 | 22 | 22000 | 32000 |
| INM in Cotton | 180 | 36 | 25000 | 39000 |
| Drudgery reducing technology | 118 | 17 | - | They were aware the improved |

| | | | | |
|---|---|---|---|---|
| | | | | technologies and reduce their drudgery by 10 to 20% |
| Poultry keeping | 119 | 27 | - | 3500/- per unit(200 birds) |
| Pruning techniques in Pomegranate | 175 | 65 | 1,40,000/- per acre | 2,00,000/- per acre |
| Food processing | 88 | 12 | - | 3000/- per month |
| Fruit processing | 47 | 19 | - | 4000/- PM |
| Use of serrated sickles for harvesting | 102 | 26 | More drudgery in harvesting | 31 % reduces their drudgery and also harvesting done faster than local sickle. Farmwomen is ready to purchases their own cost also. |

**4.2. Cases of large scale adoption**
**(Please furnish detailed information for each case)**

***Adoption of Phule Jaywant Napeir Grass***

As there was need to supply green fodder throughout the year to cattle. It was essential to introduce new fodder which is superior to Ginni grass & yashwant grass. Krishi Vigyan Kendra conducted F.L.D. in adopted village Dhavalapuri total 10 no. of demonstration were conducted on an area of 0.2 ha each. Phule Jaywant variety was introduced. The sets were brought from MPKV rahuri. As Phule Jaywant contains low oxalic acid as compare to Yaswant & 9% more protein as compare to Yaswant & Ginni grass. It was observed that Ginni grass had hairs & spines on leaves because of which the cattle's did not prefer. Whereas yield of Phule Jaywant is 200 ton/ha which is more as compared to other fodder grass. As a result of successfully implementation of F.L.D. in nearby village's namely Ramewadi, Bendewadi, Feranjalgoan farmers are taking Phule Jaywant to fulfill the shortage of fodder to their cattle.

Horizontal spread of Phule Jaywant Grass in various villages

| Sr. No. | Name of village | No. of farmers | Area (ha) |
|---|---|---|---|
| 1. | Ramewadi | 35 | 5 |
| 2. | Bendewadi | 23 | 3 |
| 3. | Feranjalgoan | 37 | 11 |
| 4 | Kasnapur | 11 | 2 |
| 5 | Shekta | 9 | 1.5 |
| 6 | Sheregaon | 15 | 7.5 |

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

***Impactof Vocational training programme***

During recent years large number of Self Help Group (SHG) have been formed by the govt. and Non-govt. development organization in the country under the various scheme, but most of these groups are working as a saving & credit kitty which required organizing in a business organization. It was also observed that there were no business plan with the groups and the members meet only once in a month for collect the saving and contribute the loans to members.

Some of the members were willing to start some business but due to lack of guidance they don't have faith to do some business and they contacted to Krishi Vigyan Kendra , Aurangabad and discussed their problems. Afterwards KVK had taken a lead to promote the SHG,s of this district which are interested to develop micro enterprises. After completion of market survey and schemes information KVK, A'bad had decided to give technical & scientific knowledge in food processing and planed vocational training on "Specices processing and Preparation of papad 40 women of SHG,s from waluj , Aurangabad district had attended the vocational training programme on food processing with live demonstration. After that the 12 member of SHGs had started their small scale enterprises of various type of masala like chilli powder, Coriender powder, turmeric powder , samber masala , gram masala, moong dal papad, udad dal papad, soya papad etc . All 12 members prepared the products in a single roof and KVK Aurangabad has tie up with various urban societies for marketing

This unit has started from last three months and after struggling they earn Rs 20000/- to 25000/- per month. Finally we can say that due to vocational training programme women of

SHG were economically empowered and also there was gain in knowledge regarding products preparation, keeping quality, marketing skill etc.

**5.1 Functional linkage with different organizations**

| Sr.No. | Name of the organization | Nature of Linkages |
|---|---|---|
| 1. | Dept. Of Agriculture | Training programme for extension person to organize demonstrations, farmers rally and trainings in all talukas. Diagnostic visits, monthly district workshops, farmers scientist interaction, national watershed development programms, training and feed back are organized jointly. |
| 2. | Zilla Parishad and Panchayat Samiti | Pre-seasonal training to agro inputs dealers and farmers. |
| 3. | DRDA | Poultry training |
| 4. | Dy.Director Sericulture | Training on sericulture and group discussion |
| 5. | Sheep and goat project | Training programs |
| 6. | Dept. of Animal Husbandry | Diseases of Animals, Diagnostic and Vaccination Camps. |
| 7. | Social forestry | Training |
| 8. | Nationalized and cooperative banks | Training to farmers of bank adopted villages and awareness trainings in Agriculture to bank officers. |
| 9. | NARP, FRS and Agril. School | Infrastructure use for training and demonstration |
| 10. | MCED | Training of farm women and rural youth |
| 11. | Dr. Babasaheb Ambedkar Marathawada University, Aurangabad | Training to rural youth under SGS |
| 12. | WALMI | Collection of secondary data, soil and water sample analysis and collaborative trainings. |
| 13. | Adult Education deptt. | Training to new literate for development of skills in agriculture |
| 14 | RCF | Soil testing, soil reclamation, training on farm testing and demonstration |
| 15. | E TV (Annadata) | Transfer of technology through mass media |
| 16. | ATMA | Officers training in watershed and allied trainings. Also having close collaboration in all field activities. |
| 17. | Traditional colleges | Field visit and trainings. |
| 18 | Jankidevi Bajaj Trust | Farmers training, demonstration, on farm testing, visits. |
| 19 | IIRD | Trainings on organic farming, mushroom and sericulture |
| 20 | IFFCO, RCF, Krubhco, Zuari | Soil sampling, testing and trainings. |
| 21 | Seed companies | On farm testing (Farmers field), sponsorship in |

| | | |
|---|---|---|
| | | organization of workshop training of workshop, training and publication. |
| 22 | Shramik Vidyapeeth | Training and Demonstration |
| 23 | Agro service center | Collection of advertisement and sponsorship publications |
| 24 | IIRW | Training and farm research |
| 25 | DILASA | Vermicompost, trainings and biological Parthenium weed control. |
| 26 | GRASP | Organic manure, NADEP Training etc. |
| 27 | Jigyasa | Trainings and farm advisory services |
| 28 | Mahila Arthik Vikas Mandal , Aurangabad | Training and Demonstration for Self Help Group |
| 29 | MCED | For entrepreneurship training programme |
| 30 | Monsanto | Collaborative Training programme and Innovative Extension activities |

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

| Name of the scheme | Date/ Month of initiation | Funding agency | Amount (Rs.) |
|---|---|---|---|
| NICRA | | ICAR | lakh |
| Maharashtra Agricultural Competitive programme (ATMA) | June 2014 | ATMA | 2,20,000/- |
| Dry Land Farming Mission | July 2014 | Dry land mission | 1,56,000/- |
| MAVIM , Jalna | | MAVIM , Jalna | 6000/- and technical support |

**5.3 Details of linkage with ATMA**

a) Is ATMA implemented in your district **Yes/**No

| S. No. | Programme | Nature of linkage | Remarks |
|---|---|---|---|
| 1 | Demonstration of drudgery reducing tools to farm women | Funding & technical | 30 demonstrations |
| 2 | Training Programme for Extension Functionaries under Dryl and Farming mission | Funding & technical | Four training programme conducted in this reporting period |

**.4 Give details of programmes implemented under National Horticultural Mission**
**Nil**

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

**5.5 Nature of linkage with National Fisheries Development Board Nil**

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

## 6. PERFORMANCE OF INFRASTRUCTURE IN KVK

### 6.1 Performance of demonstration units (other than instructional farm)

| Sl. No. | Demo Unit | Year of estt. | Area | Details of production | | | Amount (Rs.) | | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Variety | Produce | Qty. | Cost of inputs | Gross income | |
| 1. | Goat unit | 2008 | 400 Sq.ft. | Osmanabadi | Male, female goats | 39 | 68,000 | 1,10,000 | - |
| 2. | Nursery unit | 2009-10 | 0.40 | Bhagwa | Pomegranate sapling | 60000 seedlings | 66000 | - | Not sale |
| 3 | Crop cafeteria | 2012 | 0.20 ha | Cotton, Soybean, Mung, Urid, Jowar, Bajra, Intercropping | | | | | |
| 4 | Nutrition Garden | 2012 | | Spinach, fenugreek leaves, coriander ,Tomato, brinjal, cabbage, chilies, lady finger, etc. | | | | | |
| 5. | Fodder cafeteria | 2008 | 0.20 ha | Paragrass, , Phule jaymant , Stylo hamata Lucerne, Berseem, Oat, Dasharth grass, BNH-10, BAIF Bajara, Cango Signal , African tall , Ginni grass , DHN-6, | | | | | |

## 6.2 Performance of instructional farm (Crops) including seed production

| Name Of the crop | Year of planting | Date of harvest | Area | Details of production | | | Amount (Rs.) | | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Variety | Type of Produce | Qty. | Cost of inputs | Gross income | |
| **Fruits** | | | | | | | | | |
| 1.Guava | 2005-06<br>2006-07 | Nov.12 | 0.80 | L-49<br>Lalit | Fruits | 7 t | Rs.25000 | | - |
| 2.Tamarind | 2003-04 | Jan-March 13 | 0.40 | No.263<br>Pratisthan | Fruits | 2.1 qt | Rs.3000 | 140500/- | - |
| 4.Custar apple | 1986-87 | July 12 | 0.30 | Balanagar | Fruits | - | Rs.1000 | | - |
| 5.Mango | 2003-04 | May 12 | 0.30 | Keshar,Ratna, Hapus,Bainganpalli, Amrapalli | Fruits | - | Rs.5000 | 7000/- | |
| | 2008-09 | - | 0.40 | Kesar | Fruits | - | Rs. 5000/- | - | - |
| 6.Sapota | 2003-04 | - | 0.40 | Kalipatti | Fruits | - | Rs.1000 | 4000/- | - |
| 7.Rangpurlime | 1986-87<br>2007-08 | - | 0.40 | Rangpurlime (Rootstock) | Fruits | 6200 nos. | Rs.5000 | - | - |
| 8.Jambul | 1986-87<br>2007-08 | - | 0.60 | Bahadoli<br>Raijambul | - | - | Rs.2000 | - | - |
| 9..Kagzilime | 2004-05 | - | 0.20 | Sai sarbati | - | - | Rs.200 | - | - |

**6.3 Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,) Nil**

| Sl. No. | Name of the Product | Qty | Amount (Rs.) | | Remarks |
|---|---|---|---|---|---|
| | | | Cost of inputs | Gross income | |
| | | | | | |
| | | | | | |

**6.4 Performance of instructional farm (livestock and fisheries production)**

| Sl. No | Name of the animal / bird / aquatics | Details of production | | | Amount (Rs.) | | Remarks |
|---|---|---|---|---|---|---|---|
| | | Breed | Type of Produce | Qty. | Cost of inputs | Gross income | |
| 1 | Goat | Osmanabadi | Male Goat | 39 | 68000/- | 1,10,000/- | |
| | | | | | | | |

**6.5 Rainwater Harvesting Nil**

**Training programmes conducted by using Rainwater Harvesting Demonstration Unit**

| Date | Title of the training course | Client (PF/RY /EF) | No. of Courses | No. of Participants including SC/ST | | | No. of SC/ST Participants | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Male | Female | Total | Male | Female | Total |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

### 6.5 Utilization of hostel facilities

Accommodation available (No. of beds): 30

| Months | Title of the training course/Purpose of stay | No. of trainees stayed | Trainee days (days stayed) | Reason for short fall (if any) |
|---|---|---|---|---|
| Sept. 2014 | Dry land Farming Mission training | 25 | 2 | |
| Dec. 14 | Dry land Farming Mission training | 50 | 2 | |
| Dec. 14 | Khoa based by products training | 22 | 2 | |
| Jan. 15 | Goat farming training | 50 | 2 | |
| March 15 | Dry land Farming Mission training | 75 | 2 | |
| Total | | 222 | 10 | |
| Grand total | | 222 | 10 | |

## 7. FINANCIAL PERFORMANCE

### 7.1 Details of KVK Bank accounts

| Bank account | Name of the bank | Location | Account Number |
|---|---|---|---|
| With Host Institute | SBH | VNMKV, Parbhani | 52070026407 |
| With KVK | SBH | Station Road , Aurangabad | 52065882741 (Main account) |
| With KVK | SBH | Station Road , Aurangabad | 52065875711 (Revolving account) |

### 7.2 Utilization of funds under FLD on Oilseed *(Rs. In Lakhs) Nil*

| Item | Released by ICAR | | Expenditure | | Unspent balance as on 1st April 2014 |
|---|---|---|---|---|---|
| | Kharif 2014-15 | Rabi 2014-15 | Kharif 2014-15 | Rabi 2014-15 | |
| Inputs | | | | | |
| Extension activities | | | | | |
| TA/DA/POL etc. | | | | | |
| TOTAL | | | | | |

### 7.3 Utilization of funds under FLD on Pulses *(Rs. In Lakhs) Nil*

| Item | Released by ICAR | | Expenditure | | Unspent balance as on 1st April 2015 |
|---|---|---|---|---|---|
| | Kharif 2014-15 | Rabi 2014-15 | Kharif 2014-15 | Rabi 2014-15 | |
| Inputs | 00 | 00 | 18900 | 43800 | (-) 62700** |
| Extension activities | 00 | 00 | 00 | 00 | 00 |
| TA/DA/POL etc. | 00 | 00 | 00 | 00 | 00 |
| TOTAL | 00 | 00 | 18900 | 43800 | (-) 62700** |

** As per revised sanction dated 22/1/15 , the sanction amount has been nil but already expenditure of Rs. 62700 has been made as per previous sanction dt. 13/8/14.

### 7.4 Utilization of funds under FLD on Cotton *(Rs. In Lakhs) Nil*

| Item | Released by ICAR | Expenditure | Unspent balance as on 1st April 2014 |
|---|---|---|---|
| | Kharif 2013-14 | Kharif 2013-14 | |
| Inputs | | | |
| Extension activities | | | |
| TA/DA/POL etc. | | | |
| TOTAL | | | |

## 7.5 Utilization of KVK funds during the year 2013-14 and 2014-15 (upto March, 2015) (year-wise separately) (current year and previous year)

### Year 2013-14

| S. No. | Particulars | Sanctioned | Released | Expenditure |
|---|---|---|---|---|
| **A. Recurring Contingencies** | | | | |
| 1 | **Pay & Allowances** | 5600000 | | 5340477 |
| 2 | **Traveling allowances** | 200000 | | 60629 |
| 3 | **Contingencies** | | | |
| *A* | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines) | 550000 | | 360461 |
| *B* | POL, repair of vehicles, tractor and equipments | | | |
| *C* | Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained) | 310000 | | 299463 |
| *D* | Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training) | | | |
| *E* | Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year) | | | |
| *F* | On farm testing (on need based, location specific and newly generated information in the major production systems of the area) | | | |
| *G* | Training of extension functionaries | | | |
| *H* | Maintenance of buildings | | | |
| *I* | Establishment of Soil, Plant & Water Testing Laboratory | | | |
| *J* | Library | | | |
| **TOTAL (A)** | | **6660000** | **6565378** | **6061030** |
| **B. Non-Recurring Contingencies** | | | | |
| 1 | **Works** | | | |
| 2 | **Equipments including SWTL & Furniture** | | | |
| 3 | **Vehicle** (Four wheeler/Two wheeler, please specify) | | | |
| 4 | **Library** (Purchase of assets like books & journals) | | | |
| **TOTAL (B)** | | | | |
| **C. REVOLVING FUND** | | | | |
| **GRAND TOTAL (A+B+C)** | | **6660000** | **6565378** | **6061030** |

**7.5 Utilization of KVK funds during the year 2013-14 and 2014-15 (upto March, 2015) (year-wise separately) (current year and previous year)**

**Year : 2014-15**

| S. No. | Particulars | Sanctioned | Released | Expenditure |
|---|---|---|---|---|
| **A. Recurring Contingencies** | | | | |
| 1 | **Pay & Allowances** | 63,00,000 | | 5356795 |
| 2 | **Traveling allowances** | 75,000 | | 29125 |
| 3 | **Contingencies** | | | |
| *A* | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines) | | | |
| *B* | POL, repair of vehicles, tractor and equipments | 1,30,000 | | (-) 216549 |
| *C* | Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained) | | | |
| *D* | Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training) | | | |
| *E* | Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year) | | | |
| *F* | On farm testing (on need based, location specific and newly generated information in the major production systems of the area) | | | |
| *G* | Training of extension functionaries | | | |
| *H* | Maintenance of buildings | | | |
| *I* | Establishment of Soil, Plant & Water Testing Laboratory | | | |
| *J* | Library | 1,60,000 | | (-) 425562 |
| **TOTAL (A)** | | **6665000** | **41,66000** | **6028031**** |
| **B. Non-Recurring Contingencies** | | | | |
| 1 | **Works** | | | |
| 2 | **Equipments including SWTL & Furniture** | | | |
| 3 | **Vehicle** (Four wheeler/Two wheeler, please specify) | | | |
| 4 | **Library** (Purchase of assets like books & journals) | | | |
| **TOTAL (B)** | | | | |
| **C. REVOLVING FUND** | | | | |
| **GRAND TOTAL (A+B+C)** | | **6665000** | **4166000** | **6028031**** |

** **Rs.1862031** /- (Rs.6028031 – Rs 41,66000) had expended more than released .

**7.4 Status of revolving fund (Rs. in lakhs) for the three years**

| Year | Opening balance as on 1st April | Income during the year | Expenditure during the year | Net balance in hand as on 1st April of each year |
|---|---|---|---|---|
| April 2011 to March 2012 | 14,07,539/- | 5,49,645/- | 4,51,834/- | 15,01,510/- |
| April 2012 to March 2013 | 15,01,510/- | 3,30,764/- | 3,09,414/- | 15,22,860/- |
| April 2013 to March 2014 | 15,22,860/- | 4,65,826/- | 4,98,401/- | 13,43,795/- |
| April 2014 to March 2015 | 13,43,795/- | 7,63,277 | 5,73,106 | 15,33,966 |

**1.0. Traning/Capacity building programme attended by the KVK staff during the year under report (01.04.2013 to 31.03.2014)**

| S.No. | Name of the training programme | Name of the Institute | Duration | | Name of the staff along with designation |
|---|---|---|---|---|---|
| | | | From | To | |
| 1 | Participatory Rural Appraisal Techniques | RAMETI, Aurangabad | 26.6.2014 | 28.6.2014 | Dr.N.D.Deshmukh SMS (Exten. Edu.) |
| 2 | Writing for print and electronic media | MANAGE, Hyderabad | 21.7.2014 | 25.7.2014 | Dr.N.D.Deshmukh SMS (Exten. Educ.) |
| 3 | Annual Review meeting of the AICRP-NICRA | CRIDA, Hyderabad | 26.08.2014 | 27.08.2014 | V S Jadhav, SMS, (AHD S) |
| 4 | Advances in Food Processing Technologies for Value Addition and Enterprise Development | Post graduate & Research Centre , Faulty of Home Science,Hyderabad Telangana State | 21.01.2015 | 10.2.2015 | D.C. Patgaonkar SMS (Home sci.) |
| 5 | Insect & pest management in field crops | DEE, VNMKV, Parbhani | 14.08.14 | 14.08.2014 | Dr. K.K.Zade SMS (Agronomy) |
| 6 | Capacity building programme on technology demonstrations for climate resilience & value added agromet advisories | CRIDA, Hyderabad | 28.01.2015 | 29.01.2015 | Dr. K.K.Zade SMS (Agronomy) |
| 7 | Model training course on Rational weedicide use for better crop productivity | Dept. of Agronomy, VNMKV,Parbhani | 06.01.2015 | 13.01.2015 | Dr. K.K.Zade SMS (Agronomy) |
| 8 | Dryland management practices | Dryland Project , VNMKV,Parbhani | 13/01/2015 | 13.01.2015 | Dr. K.K.Zade SMS (Agronomy) |

**9.0 Please include information which has not been reflected above (write in detail).**

**9.1 Constraints**

(a) Administrative- Nil
(b) Financial - Nil
(c) Technical - Nil

## DISTRICT PROFILE

## PROFILE STRUCTURE OF KRISHI VIGYAN KENDRA, AURANGABAD

Krishi Vigyan Kendra, Aurangabad , under the administrative control of Marathwada Agricultural University, Parbhani started it's functioning in the year 1983, with the financial support from the Indian Council of agricultural Research, New Delhi. Krishi Vigyan Kendra is innovative transfer of technology project. The main object of KVK is to reduce the time lag between the generation of technologies and their transfer to the farmer's fields in the largest interest of the clientele. Krishi Vigyan Kendra, Aurangabad has carried out services of Training programmes, Front-Line Demonstrations, On-farm trials, Lab to Land programmes and allied extension activities during last 24 years. This is the first Krishi Vigyan Kendra of the Marathwada region in the state.

**Historical Background :**

Aurangabad city is established by Mallik Amber the then Chief of Nizam's regime for Ahmednagar, during 1610 A.D. Before that Aurangabad was termed as " Khadki". For many years this city / province was ruled by Mogals which was followed by independent rule by Nizam of Deccan Hyderabad even after independence of country upto 1948 A.D. Due to long time rule by emperor Aurangjeb, most of the historical movements are still seen in undamaged and good conditions. Aurangabad is a important city in the tourist map of India and world especially due to it's historical significance and world famous ancient paintings of Ajanta caves and sculpturous Marvel at Ellora caves situated at 100 km & 30 km away from Aurangabad city respectively. Moreover this city is regional head quarter of eight districts of Maharashtra State which is generally pronounced as " Marathwada Region " which previously was a part of Nizam's provincial state of Hyderabad. Aurangabad city is linked with the network of Air Service, Broad-gauge Railways and Road routes which are situated at about 10,2 and 4 kms from Krishi Vigyan Kendra campus respectively.

**2. General census**

| | |
|---|---|
| Total population of district | : 28,97,013 |
| Total population of farmers of the district | : 4,41,125 |
| Marginal farmers | : 1,22,809 |
| Small | : 1,32,660 |
| Semi medium | : 1,11,322 |
| Marginal | : 70,095 |
| Big farmers | : 4,239 |

**3. Agricultural and allied census**

Total land in the district (ha)

| | | |
|---|---|---|
| Total land | : | 10,07,700 ha |
| Forest | : | 81,400 ha |
| Barren land | : | 9800 ha |
| Permanent pasture | : | 43,500 ha |
| Net sown area | : | 7,25,000 ha |
| Area sown more than once | : | 1,76,800 ha |
| Total cropped area | : | 8,25,500 ha |
| Total cultivaable land | : | 7,25,000 ha |
| Irrigated land (ha) | : | 15,4500 ha |
| Rainfed land (ha) | : | 5,70,500 ha |

**4. Agro-climatic zones**

| Sr.No | Agro climatic zone | Characteristics |
|---|---|---|
| 1. | Western Maharasthra dry zone | Rainfall ranges from 700-900mm. Soils are medium black calcareous. |
| 2. | Central Maharashtra plateau zone | Low rainfall , medium to heavy soils non CADA area |

**4. Agro-ecosystems**

| Sr.No. | Agro ecological situation | Characteristics |
|---|---|---|
| 1. | Scarcity zone | Low rainfall light to medium soils. |
| 2. | Central Maharashtra plateau zone-1 | Low rainfall , medium to heavy soils non CADA area. |
| 3. | CMP-II | Assured rainfall medium to heavy soils. |
| 4. | CMP-III | Assured rainfall medium to heavy soils. |
| 5. | CMP-IV | Command area heavy soils. |

**5. Major and micro-farming systems**

| Major farming system | Micro farming system |
|---|---|
| 1. Cotton | Cotton under rainfed condition |
| | Cotton under shallow soil |
| 2. Bajara | Bajara under rainfed condition |
| 3. Sweet orange | Sweet orange is main horticulture crop of district grown under medium to black under irrigated situation |
| 4. Maize | Grown under medium to light soil. |
| 5. Mango | Grown on medium soil under rainfed situation |

6. **Major production systems cotton based, etc.**

Cotton - Bengalgram

Cotton - Wheat

Cotton - Summer Groundnut

Maize - Wheat

Maize- Bengalgram

Bajara- Wheat/ Bengalgram

Green gram - Rabi jowar.

**7. Major agriculture and allied enterprises**

1. Dairy
2. Goatory
3. Poultry
4. Fruit and vegetable processing unit by SHG's

## Agro-ecosystem Analysis of the focus/target area - II

**Include**

1. **Names of villages, focus area, target area etc.**

KVK has adopted cluster of villages for effective transfer of technology. New cluster of three villages namely Mahebubkheda, Siregaon, Sultanabad Tq. Gangapur the details are given below

| Sr. No. | Name of the village | Taluka /Dist. | Area (ha) | No. of house holds | Focus area | Target area |
|---|---|---|---|---|---|---|
| 1 | Mahebubkheda | Gangapur /Aurangabad | 480 | 125 | Agriculture, Horticulture, Plant protection Poultry, Dairy Self employment, Women empowerment | Farmers, Farm women, Unemployed youth, Self Help Group, |
| 2 | Siregaon | Gangapur /Aurangabad | 548 | 123 | Agriculture, Horticulture, Goatry & Dairy Self employment, Women empowerment | Farmers, Farm women, Unemployed youth, Self Help Group |
| 3 | Shekta | Gangapur /Aurangabad | 380 | 102 | Agriculture, Horticulture, Goatry & Dairy Self employment, Women empowerment | Farmers, Farm women, Unemployed youth, Self Help Group |

2. **Survey methods used (survey by questionnaire, PRA, RRA, etc.)**

- PRA
- Questionnaire
- Personal discussions with farmers & farm women
- Group discussion
- Secondary data available at Taluka level

3. **Various techniques used and brief documentation of process involved in applying the techniques used like release transect, resource map, etc.**

All the SMS jointly visited the villages & conducted meetings, Group discussion to each village. Social mapping, resource mapping, matrix ranking methods were used for the documentation of farmers needs. Subject wise groups of interested farmers were formed and each SMS discussed with farmers,

farmwomen, youths and problem wise technology were identified and ranked accordingly. Action plan formulated on this basis.

**4. Analysis and conclusions**

| Sr. No. | **Analysis** | **Conclusion** |
|---|---|---|
| 1 | Cotton, Soybean, Maize, pigeon pea, Wheat, Bengal gram, Rabi Jowar Sugarcane are the major crops | Sufficient no. of OFT ,FLD, and Training needs to be conducted |
| 2 | Sweet Orange, Mango, Pomegranate are the major fruit crops and dieback is the major problems | Effective control measures needs to be suggested through training and FLD |
| 3 | Most of the soils are medium to heavy with high pH and highCaCO3 % | Awareness about soil fertility management depend upon soil test reports needs to be created |
| 4 | Farmers are not aware about scientific plant protection measures | Demonstration and OFT on IPM and pest identification needs to be undertaken on large scale |
| 5 | Major livestock is draft animals about local milch breeds with limited no. of goatary and poultry | Awareness about improved breeds of animals needs to be created through training. Demonstration on fodder management, poultry, and animal nutrition need to be conducted |
| 6 | More than 80 % farm works are done by women folk manually but most of them are under nourished, anaemic, poor earner etc. | More no. of OFT, FLD, Vocational training needs to be conducted for farm women on drudgery reducing technologies, income generating activities and nutrition management., |

**5. List of location specific problems and brief description of frequency and extent/ intensity/severity of each problem**

**Agronomy**

**Cotton**

- Imbalance use of major and micronutrients
- Low plant population per unit area
- Reddening of cotton
- Heavy infestation of mealy bugs at latter stage
- Sucking pest complex throughout year
- Attack of wilt and dahiya disease
- Inadequate moisture availability during square to boll development

Non-adoption of intercropping

**Bajara**

- Low use of chemical fertilizer
- Non use of seed treatment with Azatobactor

**Maize**

- Imbalance use of Organic and Inorganic fertilizer
- Continuous use of Maize on same pease of land
- Non adoption of crop rotation

**Bengalgram**

- Infestation of pod borer
- Use of local veriety

**Wheat**

- Low and improper use of fertilizer
- Infestation of rust and loose smut.

**Horticulture**

**Sweet orange: -**

**1.**Early dieback
2.Poor fertilizer and irrigation management
3. Improper bahar management
4. Improper selection of variety
5. Improper cultivation practices
6. Flower and fruit drop
7. Attack of sucking pest

**Mango :-**

1. Infestation of powdery mildew on bloom
2. Irregular bearing
3. Infestation of stem borer
4. fruit drop

**Pomegranate :-**

1. Heavy infestation of fruit sucking mouth and Anar butterfly
2. Flower and fruit drop
3.Fruit cracking due to deficiency of boron
4. Lack knowledge about cultivation practices
5. Nutrient management
6. Improper irrigation management

**Guava :-**

1.Lack knowledge about training and pruning
2. Improper use of fertilizers
3. Infestation of mealy bugs

**Onion :-**

1. Low yield
2. Storage losses
3. Improper cultivation practices
4. Excessive vegetative growth
5. Bolting
6. Imbalance use of fertilizers

**Animal Science**

1. Low milk yield in crossbred animal / buffalo.
   - Causes.
   - Unawareness of the importance of balance ration.
   - High cost of the concentrate.
   - Limited availability of green fodder.
   - No use of mineral mixture.

2. Unavailability of green fodder in lean period.
   - Causes.
   - High cost of fodder.
   - Non-availability of irrigation facilities for fodder production.
   - Fetching of more money from vegetable than fodder.

3. Mastitis disease in milch cattle.
   Causes
   - Unawareness about the losses in milk yield due to mastitis.
   - Poor sanitation in cattle byre. Faulty method of milking.

**Home Science**

**1. Poor nutritional status of vulnerable groups**
- Lack of technical knowledge of food and nutrition
- Low intake of nutritional diet as per dietary recommended allowances
- Ignorance about the regular check-up with the doctor about health
- Poor health & hygiene

**2. Drudgery in women**
- Lack of technical knowledge about improved implements
- Multiple role and responsibility
- Less participation in agri. based programme due to social binding

**3. Poor Socio economic status**
- Illiteracy
- Low self steam
- Less capacity of decision making
- Lack of knowledge regarding small scale industries

**6. Matrix ranking of problems**

| Sr. No | Specific Problems | Matrix ranking |
|---|---|---|
| 1. | Reddening in cotton | I |
| 2. | Heavy infestation of sucking pest in cotton | I |
| 3. | Dieback in sweet orange | III |
| 4. | Infestation of pod borer in Bengal gram | IV |
| 5. | Flower and fruit drop in Pomegranate | V |
| 6. | Dry spell during vegetative and fruit development | II |
| 7. | Degraded soil chemical and biological properties | VI |
| 8. | Low milk yield in crossbred animal / buffalo. | VII |
| 9. | Low weight gain, less egg production, disease outbreaks in backyard poultry, high FCR and mortality | IX |
| 10. | women drudgery in farm as well as house hold work | IV |
| 11. | Anaemia among vulnerable groups | VIII |
| 12. | Malnutrition among preschoolers | VIII |
| 13. | Poor farm mechanisation | III |

**7. List of location specific thrust areas**

- Integrated nutrient management in cotton
- Integrated nutrient management in maize
- Crop geometry in rainfed hybrid cotton
- Use of recommended spacing and fertiliser in bajara
- IPM in pigeon pea
- Soil moisture management in sweet orange
- Integrated approaches in plant protection of sweet orange
- Integrated disease management in bengalgram
- Water management in wheat
- Keeping quality in onion
- Shift in crop from sweet orange to pomegranate under limited water availability
- Develop communication skill in newly recruited “Krishi sevak”
- Diet management among rural women and child
- Drudgery reduction in rural women

**8. List of location specific technology needs for OFT and FLD**

- Use of improved variety of pigeon pea
- Introduction of alternative crop spacing in cotton without change in plant population
- Integrated crop management in Bengal gram.
- Introduction improved farm implements i.e. ferti hoe & MAU seed cum ferti drill.

- Use of improved sickles to harvest the crops and fodder to reduces the drudgery in Farmwomen
- Use improved cotton stalk puller for uprooting cotton stalk to reduce drudgery
- Incorporate fresh vegetables to improve nutritional status
- Use of improved variety of onion for better production and good keeping quality
- Use of micro nutrient in sweet Orange for enhancing the quality
- INM in sweet orange

## 9. Matrix ranking of technologies

| Sr. No | Specific technology | Matrix ranking |
|---|---|---|
| 1. | INM in Cotton | I |
| 2. | IPM in cotton | II |
| 3. | Reclamation of soil | VI |
| 4. | Dieback management in Citrus | III |
| 5. | Introduction of farm machineries | III |
| 6. | Nutrient management in Pomegranate | V |
| 7. | Balance nutrition for milking animals | VII |
| 8. | Vaccination among cattle, sheep and goat | IX |
| 9. | Use of improved tools and implements to reduce drudgery among rural women | IV |
| 10. | Nutrition management among vulnerable groups | VIII |
| 11. | Soil moisture conservation techniques in rain fed condition | II |

10. List of location specific training needs

As per sr. no. 5