# PROFORMA FOR ANNUAL REPORT OF KVKS, 2013-14

## 1. GENERAL INFORMATION ABOUT THE KVK

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

| Address | Telephone | | E mail |
|---|---|---|---|
| | Office | FAX | |
| Krishi Vigyan Kendra, AAU, Kokrajhar, Telipara, Gossaigaon, Dist.- Kokrajhar, Pin.: 783360, Assam | 03669- 292704 | - | kvkkokrajhar@gmail.com |

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

| Address | Telephone | | E mail |
|---|---|---|---|
| | Office | FAX | |
| Assam Agricultural University, Jorhat- 785013, Assam | 0376-2340029 | - | kvk.aau@gmail.com |

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

| Name | Telephone / Contact | | |
|---|---|---|---|
| | Residence | Mobile | Email |
| Dr. Manoj Kumar Bhuyan | - | 9435084843 | pcmkbhuyan@gmail.com |

1.4. Year of sanction: 1985

1.5. Staff Position **(As on 31st 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. M.K. Bhuyan | Programme Coordinator | Soil Science | 37400/-67000/- G.P. 9000/- | 53820/- | 11-08-2011 | Permanent | Gen |
| 2 | Subject Matter Specialist | Mrs S. Brahma | Subject Matter Specialist | Horticulture | 15600/--39,100/- G.P. 6000/- | 25050/- | 07-11-08 | Permanent | ST |
| 3 | Subject Matter Specialist | Mr. C. R. Deka | Subject Matter Specialist | Agriculture Extension | 15600/--39,100/- G.P. 6000/- | 25050/- | 07-11-08 | Permanent | Gen |
| 4 | Subject Matter Specialist | Mr. M. U. Basumata | Subject Matter | Agronomy | 15600/- | 25050/- | 29-07-09 | Permanent | ST |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | ry | Specialist | | 39,100/- G.P. 6000/- | | | | |
| 5 | Subject Matter Specialist | Dr. R. J. Deka | Subject Matter Specialist | Animal Science | 15600/- - 39,100/- G.P. 6000/- | 22920/- | 06-08-11 | Permanent | OBC |
| 6 | Subject Matter Specialist | Miss. S. Bhuyan | Subject Matter Specialist | Home Science | 15600/- - 39,100/- G.P. 5400/- | 21000/- | 01.02. 2014 | Permanent | Gen |
| 7 | Subject Matter Specialist | Mr. G. Bhagawati | Subject Matter Specialist | Plant Protection | 15600/- - 39,100/- G.P. 5400/- | 21000/- | 03.02. 2014 | Permanent | Gen |
| 8 | Programme Assistant | Dr. R. B. Kayastha | Programme Assistant | Animal Science | 8000/- - 35000/- G.P. 4900/- | 13690/- | 04-09-11 | Permanent | Gen |
| 9 | Computer Programmer | Mr. M. K. Haloi | Programme Assistant | Computer Application | 8000/- - 35000/- G.P. 4900/- | 13690/- | 13-09-11 | Permanent | SC |
| 10 | Farm Manager | Mr. P.K. Das | Farm Manager | Entomology | 8000/- - 35000/- G.P. 4900/- | 13290/- | 12-03-12 | Permanent | OBC |
| 11 | Accountant / Superintendent | Mr. J. Bora | Accountant / Superintendent | Accountancy | 8000/- - 35000/- G.P. 4900/- | 13290/- | 22-02-12 | Permanent | OBC |
| 12 | Stenographer | - | - | - | - | - | - | - | - |
| 13 | Driver | Mr. S. Das | Driver | - | 5200/- - 20200/- G.P 2200/- | 7940/- | 22-02-. 12 | Permanent | Gen |
| 14 | Driver | Mr. S. Ali Sk. | Driver | - | 5200/- - 20200/- G.P 2200/- | 7940/- | 22-02 12 | Permanent | Gen |
| 15 | Supporting staff | Mr. R.N. Narzary | Watchman | - | 5200/- - 20200/- G.P 2200/- | 12450/- | 01-11-85 | Permanent | ST |
| 16 | Supporting staff | Mr. D. Basumatary | Kitchen Attendant | - | 5200/- - 20200/- G.P 2200/- | 12450/- | 15-11-85 | Permanent | ST |
| | **Total** | **16** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |

1.6. a. Total land with KVK (in ha) : 11 Ha

b. Total cultivable land with KVK (in ha) :7.5

c. Total cultivated land (in ha) : 6.0

| **S. No.** | **Item** | **Area (ha)** |
|---|---|---|
| 1 | Under Buildings | 1.5 |
| 2. | Under Demonstration Units | 0.50 |
| 3. | Under Crops (Cereals, pulses, oilseeds etc.) | 7.5 |
| 4. | Under vegetables | - |
| 5. | Orchard/Agro-forestry | 1.5 |
| 6. | Others (specify) | - |

1.7. Infrastructural Development:

A) Buildings

| S. No. | Name of building | Source of funding | Stage | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Complete | | | Incomplete | | |
| | | | Completion Date | Plinth area (Sq.m) | Expenditure (Rs.) | Starting Date | Plinth area (Sq.m) | Status of construction |
| 1. A | Administrative Building (Old) | ICAR | 1987-88 | 157.45 | 2.00 lakh | - | - | - |
| B | Administrative Building (New) | ICAR | - | 332 | 86.73 lakh | Feb, 2012 | | Under construction |
| 2. | Farmers Hostel | ICAR | 1987-88 | 910.10 | 14.00 lakh | - | - | Damaged, need major repairing |
| 3. | Staff Quarters | ICAR | 2003 | 132.76 | 5.98 lakh | - | - | Working |
| 4. | Demonstration Units | | | | | | | |
| A | Poultry unit | RKVY | 2010 | 45.00 | 2.19 lakh | | | Working |
| B | Piggery unit | RKVY | 2010 | 145.00 | 6.06 lkah | | | Working |
| C | Goatery Unit | RKVY | 2010 | | 1.32 lakh | | | Working |
| D | Display & demonstration unit | RKVY | - | 6 m in hexagonal shape | 4.48 lakh | | | Completed |
| E | Rice-fish vegetable farming unit | RKVY | 2010 | 224 running meter | 2.0 lakh | | | Working |
| F | Polyhouse | ATMA | 2011 | | 1.0 lakh | | | Working |
| G | Vermicompost unit | RKVY | 2010 | 50.0 | 1.12 lakh | | | Working |
| 5 | Fencing | ICAR | 1995 | 0.80km | 4.92 lakh | - | - | Need Renovation |

B) Vehicles

| Type of vehicle | Regd. No. | Year of purchase | Cost (Rs.) | Total kms. Run | Present status |
|---|---|---|---|---|---|
| Jeep | AS-03E-0023 | 2006 | 490503.00/- | 97474 | Running |
| Tractor | AS-16C-0706 | 2003 | Transferred from RARS, Diphu | 1135 | Running Condition |

C) Equipments & AV aids

| Name of the equipment | Year of purchase | Cost (Rs.) | Present status |
|---|---|---|---|
| Amplifier | 1988 | 3202.00 | Repairable |
| Black Board | 1987 | 150.00 | Damaged |
| Calculator Machine | 1986 | 252.00 | Damaged |
| Camera | 1987 | 5544.00 | Repairable |
| Desktop Computer | 2005 | 46206.00 | Working |
| Digital Camera | 2006 | 15080.00 | Working |
| Digital Camera (Sony) | 2010 | 19000.00 | Working |
| Duplicating Machine (Manual) | 1986 | 6708.26 | Damaged |
| Duplicating Machine (Automatic) | 1995 | 39050.00 | Repairable |
| Fax Machine (Brother) | 2010 | 15,190.00 | Working |
| Film Rewinder | 1988 | 179.20 | Repairable |
| Flash Gun | 1988 | 570.00 | Damaged |
| Generator | 1987 | 17360.00 | Demaged |
| Horn | 1988 | 358.00 | Working |
| Line Connecting Transformer | 1988 | 616.00 | Damaged |
| Microphone | 1988 | 1891.00 | Repairable |
| Microphone Stand | 1988 | 276.00 | Working |
| Photophone OHP | 1988 | 4256.00 | Damaged |
| Photophone Superlite Sound Projector | 1988 | 12152.00 | Repairable |
| Projection Screen | 1988 | 856.80 | Working |
| Projector Roll (Cinema) | 1988 | 196.00 | Damaged |
| Projector Screen | 1988 | 442.90 | Working |
| Slide Projector | 1988 | 4256.00 | Damaged |
| Television Set | 1988 | 10145.00 | Damaged |
| Xerox Machine (KM – 1635 MFP Printer) | 2007 | 50440.00 | Working |
| Xerox Machine (Kilburn ) | 2010 | 101920.00 | Working |
| Digital Inverter (Electra – EEDI 800) | 2007 | 13540.00 | Battery damaged |
| LCD Projector | 2010 | 98331.00 | Damaged |
| UPS (Uniline-800VA FBLI UPS) | 2010 | 5964.00 | Working |
| Mechanized Grass Cutter | 2009 | 28000.00 | Working |
| Multi purpose power weeder | 2009 | 42078.00 | Working |
| Power paddy weeder | 2009 | 36254.00 | Working |
| Rice transplanter | 2009 | 188198.00 | Working |
| Earth Augar | 2009 | 56749.00 | Working |
| Water pumps (3 nos.) | 2009 & 2010 | 30,000.00 | Working |
| Seed cleaner | 2009 | 311012.00 | Working |
| Rotavator (2 nos.) | 2009 | 95805.00 | Working |
| Puddler | 2009 | 25896.00 | Working |

| | | | |
|---|---|---|---|
| Chaff cutter | 2009 | 15496.00 | Working |
| Voltage stabilizer | 2007 | 3999.00 | Working |
| Poly Sealing Machine | 2012 | 2838.00 | Working |
| Desktop Computer | 2010 | 27547.00 | Working |
| Balance | 2011 | 9591.00 | Working |
| BOD Incubator | 2011 | - | Working |
| Horizontal Leminar Flow | 2011 | - | Working |
| Ph meter | 2011 | 2270.00 | Working |
| Autoclave | 2011 | 93638.00 | Working |
| Hot Air Oven | 2011 | 36888.00 | Working |
| Incubator | 2012 | - | Working |
| Laminar Flow | 2012 | - | Working |
| Refrigerator | 2012 | 15990.00 | Working |

1.8. A). Details SAC meeting* conducted in the year 2013-14

| Sl. No. | Date | Name and Designation of Participants | Salient Recommendations | Action taken on last SAC recommendation |
|---|---|---|---|---|
| 1. | - | - | - | - |

**** Attach a copy of SAC proceedings along with list of participants***

**2. DETAILS OF DISTRICT**

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

| S. No | Farming system/enterprise |
|---|---|
| 1 | Agri + Horti + Dairy Cow + Goatery + Poultry + Duckery |
| 2 | Agri + Horti + Dairy Cow + Goatery + Piggery + Poultry + Duckery + Pigeon + Fishery |
| 3 | Agri + Horti + Dairy Cow + Piggery + Poultry |
| 4 | Agri + Horti + Dairy Cow + Buffalo + Piggery + Poultry + Duckery + Pigeon |
| 5 | Agri + Horti + Dairy Cow + Goatery + Poultry + Duckery + Fishery |

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

| S. No | Agro-climatic Zone | Characteristics |
|---|---|---|
| 1. | Lower Brahmaputra Valley Zone (LBVZ) of Assam | The climate is humid sub-tropical in nature characterised by warm – humid summer cool – dry winter. The monsoon months (June-September) are wet receiving 65-70% of the total rainfall while the winter months (December-February) remain virtually dry. The mean maximum and minimum temperature varies from 33-38°C and 8-10°C respectively. |
| | Agro ecological situation | |
| a. | Foot hills old mountain valley | Foot hills of Bhutan in northern part of the district. The soil is loamy to |

| | | |
|---|---|---|
| | | clay, rich in organic matter |
| b. | Flood free riverine old alluvial plain | Plain areas, sandy to sandy loam soil free from flood |
| c. | Flood prone riverine alluvial plain | Flood prone areas affected by river Champabati, Gaurang, Saralbhang and Sankosh |
| d. | Hills and hillocks | Hills and Hillocks areas, red clay soil |
| e. | Beels | Marshy/Swampy land, water logging low lying areas and covered with water hyacinth |

2.3 Soil type/s

| S. No | Soil type | Characteristics | Area in ha |
|---|---|---|---|
| 1 | Alfisols (mountain valley) | Soil is loamy to clay and built up alluvial materials washed down from the hills slope. Medium to heavy textured soil | 93658 |
| 2 | Inceptisols (old alluvium) | Soils are old riverine alluvial type. Sandy loam to loamy soil and free from flood | 162962 |
| 3 | Entisols (recent alluvium) | Soils are recent riverine alluvial plain. Sandy or loamy sand and light textured soil | 20758 |
| 4 | Ultisols (laterised red) | Old alluvial soils are found. The surface soils are generally red to reddish brown and acidic in nature | 37824 |

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

| S. No | Crop | Area (ha) | Production (Qtl) | Productivity (Qtl /ha) |
|---|---|---|---|---|
| 1 | Autumn Rice | 28744 | 24649 | 8.71 |
| 2 | Winter Paddy | 54496 | 69621 | 12.97 |
| 3 | Summer Paddy | 8110 | 15955 | 19.67 |
| 4 | Maize | 1150 | 598 | 5.20 |
| 5 | Wheat | 2123 | 2481 | 11.68 |
| 6 | Black Gram | 949 | 545 | 5.75 |
| 7 | Green Gram | 100 | 49 | 4.89 |
| 8 | Lentil | 826 | 403 | 4.88 |
| 9 | Pea | 340 | 180 | 5.31 |

| | | | | |
|---|---|---|---|---|
| 10 | Rapeseed and Mustard | 18051 | 10229 | 5.67 |
| 11 | Niger | 995 | 496 | 5.00 |
| 12 | Sesamum | 710 | 421 | 5.92 |
| 13 | Linseed | 419 | 207 | 4.93 |
| 14 | Jute | 4953 | 57158 | 20.77 |
| 15 | Mesta | 1211 | 6621 | 9.85 |
| 16 | Banana | 1271 | 20165 | 158.66 |
| 17 | Pineapple | 311 | 4652 | 149.60 |
| 18 | Papaya | 383 | 5753 | 150.22 |
| 19 | Orange | 2 | 18 | 92.49 |
| 20 | Assam Lemon | 188 | 1380 | 77.40 |
| 21 | Jackfruit | 1513 | 10820 | 96.93 |
| 22 | Arecanut | 1991 | 23924 nos | 120 no/plant/year |
| 23 | Coconut | 435 | 4058550 nos | 80 no/plant/year |
| 24 | Potato | 2721 | 30139 | 110.77 |
| 25 | Colocasia | 1514 | 16654 | 110.00 |
| 26 | Tapioca | 736 | 3522 | 47.85 |
| 27 | Sweet Potato | 361 | 1373 | 38.04 |
| 28 | Kharif Vegetables | 2971 | 45097 | 151.80 |
| 29 | Rabi Vegetables | 4083 | 84648 | 207.31 |
| 30 | Chilli | 718 | 514 | 7.16 |
| 31 | Turmeric | 403 | 315 | 7.81 |
| 32 | Ginger | 615 | 4569 | 74.30 |
| 33 | Onion | 348 | 974 | 28.00 |
| 34 | Black Pepper | 44 | 73 | 16.50 |
| 35 | Coriander | 369 | 343 | 9.20 |

2.5. Weather data

| Month | Rainfall (mm) | Temperature $^0$ C | | Relative Humidity (%) | |
|---|---|---|---|---|---|
| | | Maximum | Minimum | Morning | Evening |
| April, 13 | 204.8 | 28.8 | 21.6 | 91.8 | 57.2 |
| May, 13 | 410.7 | 30.3 | 23.1 | 90.5 | 60.1 |
| June, 13 | 319.1 | 32.1 | 25.4 | 90.9 | 63.1 |
| July, 13 | 893.2 | 31.9 | 25.0 | 91.2 | 69.5 |
| August, 13 | 450.6 | 32.5 | 25.6 | 91.3 | 70.3 |
| September, 13 | 630.4 | 32.1 | 26.3 | 91.2 | 72.4 |
| October, 13 | 181.6 | 30.7 | 22.9 | 91.3 | 66.6 |
| November, 13 | 0.0 | 29.9 | 19.7 | 90.5 | 61.6 |
| December, 13 | 0.0 | 25.6 | 14.3 | 93.4 | 63.0 |
| January, 14 | 0.6 | 23.5 | 11.1 | 94.7 | 65.9 |
| February, 14 | 64.4 | 23.3 | 11.0 | 94.2 | 62.1 |
| March, 14 | 16.6 | 29.4 | 17.5 | 90.6 | 46.1 |

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

| Category | Population | Production | Productivity |
|---|---|---|---|
| **Cattle** | | | |
| *Crossbred* | 536 | 15,22,156 ltrs (Milk) | 6 ltrs/day/ Animal |
| *Indigenous* | 353253 | | 750 ml/day/Animal |
| **Buffalo** | **14983** | | 1.5 ltrs/day/Animal |
| **Sheep** | | | |
| Crossbred | - | - | - |
| *Indigenous* | 13686 | 14,84,350 kgs (Meat) | 8 kg/ Animal |
| **Goats** | **159979** | | 5 kg /animal |
| **Pigs** | **98970** | | |
| *Crossbred* | 32927 | | 60 kg /Animal |
| *Indigenous* | 66043 | | 30 kg / Animal |
| **Rabbits** | | | |
| **Poultry** | | | |
| Hens | 189999 | 4,51,800 Nos. | 160 Nos./ year/Bird |
| *Desi* | | | |
| *Improved* | | | |
| Ducks | 132610 | | 120 Nos. /year/ Bird |
| **Turkey and others** | - | - | - |

| Category | Area | Production | Productivity |
|---|---|---|---|
| Fish | | | |
| *Marine* | | | |
| *Inland* | 3197.87 ha | 30315.80 Qt | 948.00 kg / ha |
| Prawn | | | |
| Scampi | | | |
| Shrimp | | | |

2.6 Details of Operational area / Villages (2013-14)

| Sl.No. | Taluk | Name of the block | Name of the village | Major crops & enterprises | Major problem identified | Identified Thrust Areas |
|---|---|---|---|---|---|---|
| 1 | Gossaigaon | Gossaigaon | Matiajuri, Rangapara, Padmabil, Joyma, Kusumbil, Bhumka, Chakma, Bashbari, Babubil, Thuribari, Bhawraguri, Natunpara, Guwabari, Sagunhara, Choto Binnyakhata, Gambaribil, Kamalsing | Boro Rice and early Ahu, Lentil, Pea, Linseed, Rapeseed, Vegetables, Potato, Flowers | i. Low productivity of Oilseeds and Pulses due to non-adoption of recommended varieties<br>ii. Production problem in Potato | i. Popularisation of HYV of Summer and Boro rice<br>ii. Introduction of high yielding Pulse and Oilseed varieties<br>iii. Commercial potato and fruit production |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | Hatidhura | Jacobpur, Fwilaguri, Majadabri, Kamandanga, Haripur, Tamahat, Simaltapu, Grahampur, Srirampur, Palashkandi | Rice, Maize, Rapeseed, Niger, Wheat, Vegetables, Goatery | i. Poor yield in Oilseeds and Pulses<br>ii. Pest and Disease problem<br>iii. Low productivity due to rearing of local breed of goat<br>iv. Sandy and light textured soil | i.Popularisation of improved varieties of Oilseed and Pulse<br>ii. Integrated Pest and Disease management<br>iii. Improvement of productivity of Goatery<br>iv. Soil health and fertility management |
| | | Kachugaon | Ballamguri, Malaguri, Bhadiaguri, Ballimari, Jaymaguri, Dawaguri, Goladangi, Bajugaon, Jaraguri, Maktaigaon, Bhomrabil, Saraibil, Mothambil, Nasrabil, Borobadha, Burichattam, Haoriapet, Hashraobari, Hatigarh, Garufella, Sapkata, Gakulkata, Polashguri, Kachugaon | Rice, Maize, Vegetables, Rapeseed, Lentil, Pea, Buckwheat, Niger Beekeeping | i. Pre and Post Production problem in Vegetables<br>ii. Poor fertility status of soil<br>iii. Lack of scientific knowledge and skills about rearing of honey bee | i. Low volume – high value Vegetables<br>ii. Soil health and fertility management<br>iii. Commercial fruit production and processing<br>iv. Popularisation of Beekeeping |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2 | Kokrajhar | Titaguri | Debargaon, Narabari, Gendrabil, Kunthaibari, Titaguri, Kumguri, Sukanjhara, Chandrapara, Simborgaon, Uttar Patgaon, Amguri, Jharbari, Ghoramari, Bhumki, Dakhin Karigaon, Dawkibari, Kakrighola, Nayekgaon, Bandarmari, Harighola, Harigaon, Bamungaon, Diplaibil, Salakati, Bandarchara, Chautaki, Bangaldoba | Piggery, Poultry, Aqua-farming, Sericulture, Agro-forestry, Winter vegetables, | i. Low production of meat and egg<br>ii. Fish seed formulation, feeding technology and pond management<br>iii. Poor quality and low yield of worm due to traditional rearing method<br>iv. Dearth of scientific knowledge regarding agro-forestry plantation | i. Rearing of Pig and Poultry<br>ii. Integrated Fish farming<br>iii. Rearing of Eri, Muga and Silk worm<br>iv. Agro-forestry plantation technology<br>v. Spice production and value addition |
| | | Dotma | Angthihara, Simlaguri, Batabari, Dotma, Barshijhora, Umanagar, Baldiapathan, Fakiragram, Saktiashram, Chithilaghop, Athiabari, Ghoshkata, Sikargaon, Laudanga, Dangarkuti, Bhalukmari, Puthimari, Lakhnabari, Ramfalbil, Serfanguri, Medhipara, Pratapkahat | Dairy, Piggery, Mushroom, Fruit preservation, Tailoring and Stitching | i. Low productivity and management problem in Dairy and Piggery<br>ii. Lack of scientific knowledge about mushroom production<br>iii. Storage problem of fruit<br>iv. Lack of technical knowledge and skills regarding tailoring, stitching and knitting | i.Improvement of productivity of Dairy<br>ii. Rearing of Pig<br>iii. Production techniques of Mushroom<br>iv. Processing of fruit<br>v. Tailoring, Knitting and Embroidery techniques for women |

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 | Parbatjhora | Rupsi | Kajigaon, Manglajhora, Tipkai, Molandubi, Kurshakati | Ahu, Boro rice, Rapeseed, Potato, Summer vegetables | i. Low yield of Rice due to growing of local varieties<br>ii. Production and management problem of vegetables and spices<br>iii. Pest and Disease problem | i. Popularisation of HYV of Summer, Sali and Boro rice<br>ii. Low volume – high value Vegetables<br>iii. Spice production and value addition<br>iv. Integrated Pest and Disease management |

## 3. TECHNICAL ACHIEVEMENTS

### 3. A. Details of target and achievements of mandatory activities by KVK during 2013-14

| Discipline | OFT (Technology Assessment and Refinement) | | | | FLD (Oilseeds, Pulses, Maize, Other Crops/Enterprises) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | Number of OFTs | | Number of Farmers | | Number of FLDs | | Number of Farmers | |
| | Targets | Achievement | Targets | Achievement | Targets | Achievement | Targets | Achievement |
| | | | | | | | | |
| Horticulture | 3 | 2 | 11 | 7 | 18 | 18 | 18 | 18 |
| Animal Science | 5 | 4 | 15 | 11 | 14 | 14 | 14 | 14 |
| Agronomy | 4 | 4 | 19 | 17 | 20 | 14 | 20 | 14 |
| Soil Science | 2 | 1 | 6 | 3 | 9 | 3 | 9 | 3 |

| 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 | - | - | - | - | 622 | 644 | 3061 | 22651 |
| Rural youth | - | - | - | - | | | | |
| Extn. Functionaries | - | - | - | - | | | | |
| | | | | | | | | |

| Seed Production (ton.) | | Planting material (Nos. in lakh) | |
|---|---|---|---|
| 5 | | 6 | |
| Target | Achievement | Target | Achievement |
| Sali Rice -50.0 | 6.3, 200.0(PPP mode) | Lemon – 100 nos | 150 nos |
| Rape seed – 20.0 | 9.6 (PPP Mode) | Pineapple- 100 nos | - |
| | | Banana (Malbhog)- 100 nos | 300 nos |
| | | Black pepper- 200 nos | - |
| | | Chilli- 200 nos | - |

| | | | |
|---|---|---|---|
| | | Turmeric- 2 qt | - |
| | | Gerbera -300 nos | 500 nos |
| | | Chrysanthemum- 100 nos | - |
| | | Mussenda- 100 nos | - |
| | | Tepioca- 800 nos | - |
| | | Gladiolus - Nil | 400 corms |
| | | Hybrid Napier | 5000 nos |

**3. B. Abstract of interventions undertaken during 2013-14**

| Sl. No | Thrust area | Crop/ Enterprise | Identified problems | Interventions | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Title of OFT if any | Title of FLD if any | Title of Training if any | Title of training for extension personnel if any | Extension activities | Supply of seeds, planting materials etc. |
| 1 | Varietal evaluation | Black gram | Low yield of black gram due to local variety | Varietal performance of Black gram (var. KU- 301) | - | Scientific production technology of black gram | - | Field visit & monitoring | Supply of seed, fertilizer, plant protection chemical etc. |
| 2 | | Boro rice | Low yield of Boro rice due to local variety | - | FLD on Boro rice (Var.- Kanaklata) | - | - | Field visit & monitoring | Supply of seed, fertilizer, plant protection chemical etc. |
| 3 | | Rape seed | Low yield of Rapeseed due to local variety | - | FLD on Toria (Var.- TS-46) | Scientific production technology for Rabi Oil seed crops | - | Field visit & monitoring | Supply of seed, fertilizer, plant protection chemical etc. |
| 4 | | Maize | Low yield of Maize due to local variety | - | FLD on Maize (Dekalb Hichell) | - | - | Field visit & monitoring | Supply of seed, fertilizer, plant protection chemical etc. |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 5 | Weed management | Boro rice | Low yield of Boro rice due to weed infestation | Weed Management in boro rice | - | - | - | Field visit & monitoring | Supply of weedicide |
| 6 | Resource conservation (Zero tillage) | Lathyrus | Late sowing of 2nd crop due to late harvest of Sali rice | Rice based relay cropping of Lathyrus (var. Ratan) | - | - | - | Field visit & monitoring | Supply of seed, fertilizer, plant protection chemical etc. |
| 7 | INM | Rice | Low yield of Sali rice due to imbalance fertilization | Packages on Zinc of rice (var. Ranjit) | - | - | - | Field visit & monitoring | Supply of seed, fertilizer, plant protection chemical etc. |
| 8 | Integrated Crop Management | Rice | Low yield of rice due to faulty agronomic management practices | - | FLD on System of rice intensification | Seed production of rice with SRI practices | - | Field visit & monitoring | Supply of seed, fertilizer, plant protection chemical etc. |
| 9 | Breed introduction | Poultry | Low productivity of indigenous poultry | Introduction of Giriraja bird under backyard managemental condition | Production performance of vanaraja birds in backyard under natural managemental condition | Management of backyard poultry unit | - | Field visit & monitoring | Supply of giriraja & vanaraja chicks, vaccines, antibiotic & vitamin |
| 10 | | Livestock | Low productivity of indigenous pig | - | Scientific management of cross bred piglet (Hampshire/ T&D) | - | - | Field visit & monitoring | T&D piglets |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 11 | Housing management | Livestock | Practice of unscientific housing of dairy animal leading to low production | Studies on the impact of scientific housing on milk production and general health management of cross bred Dairy animals | - | Planning & management of dairy cows | - | Field visit & monitoring | Provision for construction of dairy shed scientifically |
| 12 | Feeding management | Poultry | Low productivity of indigenous poultry | Incorporation of commercial broiler feed for growth performance of local bird for meat purpose | - | Small scale broiler production | - | Field visit & monitoring | Desi chicks- 50 nos, broiler chicks- 50 nos, Broiler feed- 3.5 qtl, vaccines, antibiotic, vitamin |
| | | Livestock | Low production performance of dairy cattle | - | Supplementation of calcium & mineral mixture for maximum milk production | 1. Planning & management of dairy cows<br>2. Care & management of pregnant cows | - | Field visit & monitoring | Commercially available calcium & mineral mixture (VM All & Lactaid Oral) |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 13 | Breed upgradation | Livestock | Slow growth rate of indigenous pig | Introduction of Artificial Inseminati on in cross bred female Pig with Hampshire boar semen under backyard farming system. | | Artificial insemination in Pig: Importance and advantages | - | Field visit & monitoring | Artificial inseminati on |
| 14 | Health & clinic | Livestock | High mortality & mulnutrition of pigs reared under backyard condition | - | Preventive healthcare management of pig reared under backyard condition | - | - | Field visit & monitoring | Commercially available feed supplement, vaccines, dewormers |
| 15 | INM | Chilli | Low yield of chilli grown in the medium land situation after harvest of winter rice, under alternate wetting and drying cycles, which needs special nutrient management. | Integrated nutrient management in chilli | | - | - | Field visit, monitoring | Supply of chilli seed, bio fertilizers, Plant protection chemicals |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 16 | | Mandarin | Low yield of mandarin due to improper fertilization and lack of knowledge & awareness on integrated nutrient management of the crop. | - | Integrated nutrient management in mandarin | - | - | Field visit, monitoring | Supply of bio fertilizer, fertilizer, neem cake & plant protection chemicals |
| 17 | Crop management | Banana | Micronutrient deficiency and low nutrient use efficiency of soil applied fertilizer affect quality of banana. | Foliar application of micro-nutrient formulation (Banana Special) in banana | - | - | - | Field visit, monitoring, advisory service | Supply of Banana special, fertilizers & plant protection chemicals |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 18 | Protected cultivation | High value vegetable crops | Market glut of high value vegetables during on-season fetches lower prices to the farmers. Off-season cultivation of high value vegetables can help the farmers for realizing higher return in Kokrajhar district. | - | Off-season cultivation of high value vegetable crops inside low cost polyhouse | Training on protected cultivation technology of off season vegetables | - | Field visit, monitoring | Supply of seeds, fertilizer, pesticides / fungicides |
| 19 | Varietal evaluation | Marigold | Low yield of local varieties of marigold due to non-availability of high yielding varieties. | - | Performance assessment of marigold variety Pusa Narangi Gainda | - | - | Monitoring, field visit | Supply of seeds, fertilizer, pesticides / fungicides / insecticides |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 20 | | Brocolli | High protein content of broccoli & non acceptability for commercial cultivation by farmers compared to cabbage & cauliflower | - | Performance assessment of broccoli variety KTS-1 | - | - | Field visit, monitoring | Supply of seeds, fertilizer, pesticides / fungicides / insecticides |
| 21 | Weed management | Tomato | Tomato is grown in medium to upland condition alone as mono crop or in cropping sequence. However weeds, severely hampers its growth and development in different | - | Weed management in tomato | - | - | Field visit, monitoring | Supply of seeds, fertilizer, pesticides / fungicides / insecticides, herbicides |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 22 | Soil health | Rice - Rapeseed | Low use of chemical fertilizer and no use of indigenous azolla | Nitrogen management in rice- rice sequence | Nitrogen supplement through azolla in rice-rapeseed sequence | - | Soil health management & soil health card | Field visit and group discussion and demonstration | Seed, chemical fertilizers, pesticides, polythene for azolla |

### 3.1 Achievements on technologies assessed and refined during 2013-14

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

| Thematic areas | Cereals | Oilseeds | Pulses | Commercial Crops | Vegetables | Fruits | Flower | Plantation crops | Tuber Crops | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| Varietal Evaluation | - | - | 1 | - | - | - | - | - | - | 1 |
| Seed / Plant production | - | - | - | - | - | - | - | - | - | - |
| Weed Management | 1 | - | - | - | - | - | - | - | - | 1 |
| Integrated Crop Management | 1 | - | - | - | - | 1 | - | - | - | 2 |
| Integrated Nutrient Management | 1 | - | - | - | 1 | - | - | - | - | 2 |
| Integrated Farming System | - | - | - | - | - | - | - | - | - | - |
| Mushroom cultivation | - | - | - | - | - | - | - | - | - | - |
| Drudgery reduction | - | - | - | - | - | - | - | - | - | - |
| Farm machineries | - | - | - | - | - | - | - | - | - | - |
| Value addition | - | - | - | - | - | - | - | - | - | - |
| Integrated Pest Management | - | - | - | - | - | - | - | - | - | - |
| Integrated Disease Management | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Resource conservation technology | - | - | 1 | - | - | - | - | - | - | 1 |
| Small Scale income generating enterprises | - | - | - | - | - | - | - | - | - | - |
| **TOTAL** | 3 | - | 2 | - | 1 | 1 | - | - | - | 7 |

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

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

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

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **TOTAL** | - | - | - | - | - | - | - | - | - | - |

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

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

| Thematic areas | Cattle | Poultry | Sheep | Goat | Piggery | Rabbitary | Fisheries | TOTAL |
|---|---|---|---|---|---|---|---|---|
| Evaluation of Breeds | - | 1 | - | - | 1 | - | - | 2 |
| Nutrition Management | - | - | - | - | - | - | - | - |
| Disease of Management | - | - | - | - | - | - | - | - |
| Value Addition | - | - | - | - | - | - | - | - |
| Production and Management | 1 | - | - | - | - | - | - | 1 |
| Feed and Fodder | - | 1 | - | - | - | - | - | 1 |
| Small Scale income generating enterprises | - | - | - | - | - | - | - | |
| **TOTAL** | 1 | 2 | - | - | 1 | - | - | 4 |

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 | - | - | - | - | - | - | - | - |
| Production and Management | - | - | - | - | - | - | - | - |
| Feed and Fodder | - | - | - | - | - | - | - | - |
| Small Scale income generating enterprises | - | - | - | - | - | - | - | - |
| **TOTAL** | - | - | - | - | - | - | - | - |

11). Results of On Farm Testing

| Title of OFT | Problem Diagnosed | Technology Assessed | No. of Trials | Results of Assessment/ Refined (Data on the parameter should be provided) | Feedback from the farmer | Feedback to the Researcher | B.C . Ratio (if applicable) |
|---|---|---|---|---|---|---|---|
| Varietal evaluation of Black gram (var. KU-301) | Low yield of Black gram due to local variety | Black gram Var. KU-301 | 1 | The average grain yield was recorded 9 qt /ha which is 30% increased over the local variety( 5qt/ha) | The farmers are satisfied with the higher grain yield of Black gram | Seed is not readily available | 2.2 |
| Weed Management in Boro rice | Low yield of Boro rice due to weed infestation | Application of pre emergence herbicide after 3 days of transplanting in Boro rice | 1 | Ongoing . Crop is at vegetative stage | - | - | - |
| Rice based relay cropping of Lathyrus (var. Ratan) | Late sowing of 2nd crop due to late harvest of Sali rice | Application of 6 kg DAP in the relay cropping of Lathyrus | 1 | The highest grain yield was recorded by 9.5 qt/ha which is 47 % more over the local check (5qt/ha) | The farmers are satisfied with the higher return of lathyrus | Inputs are not readily available | 2.8 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Packages on Zinc of rice (var. Ranjit) | Low yield of rice due to imbalance fertilization | **i)**Famer's practice: practice adopted by the farmer ii) State recommendation: N: P2O5: K2O= 60:20:40 iii) Developed Package: 25kg Zinc+ Compost 2ton/ha + RD of NPK (N: P2O5: K2O= 60:20:40 kg/ha) | 1 | Highest Grain yield (75 q/ha) recorded in developed package which is 35 % more than the state recommendation (54 q/ha) | The farmers are convinced with the higher yield of rice due to application of zinc | Soil based recommendation is needed | 2.09 |
| Introduction of Giriraja bird under backyard management condition | Low productivity of indigenous poultry | Giriraja chicks as quality input | 1 | Av. Wt. at 15 days= 130gm 1 month= 361 gm 2 months= 1.24 kg 3 months= 2.2 kg 4 months= 2.7 kg 5 months= 3.2 kg Age at 1st lay155 days | Farmers showed shift of preference from rearing of indigenous birds for the fast growth rate of Giriraja birds | Input is not readily available as per the demand | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Introduction of Artificial Insemination in cross bred female Pig with Hampshire boar semen under backyard farming system. | Slow growth rate of indigenous pigs. | Use of Artificial Inseminati on technology in field condition using Hampshire semen. | 1 | Successful AI has been done on 03/03/2014. | Farmer are interested to adopt the technology | Use of the technology is economical to the farmers | - |
| Incorporation of commercial broiler feed for growth performance of local bird for meat purpose | Low productivity of indigenous poultry | Local desi birds for intensive rearing, feeding of broiler feed to the desi birds, rearing of broiler chicks | 1 | Av. wt. of broiler and local birds (kg)<br>1 st week<br>Broiler- 0.102<br>Desi-0.0 54<br>2nd week<br>Broiler- 0.745<br>Desi- 0.168<br>3rd week<br>Broiler- 1.2<br>Desi- 0.430<br>4th week<br>Broiler-1.79<br>Desi- 0.840<br>5thweek<br>Broiler- 1.95<br>Desi- 0.980<br>6th week<br>Broiler- sold<br>Desi-1.4<br>Vaccination has been done against IBD, Ranikhet and Gumbaroo. No specific diseases have been recorded | Farmers are happy with the growth rate of desi birds incorporati ng commercia l feed as the prevailing market price of desi bird is almost double to the rate of broiler birds | Desi birds grow well with incorporati on of commercia l broiler feed and occurrence of disease can also be prevented in intensive rearing | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Studies on the impact of scientific housing on milk production and general health management of cross bred Dairy animals. | Practice of unscientific housing leading to low production | Provision for Scientific housing | 1 | Milk production increase by 1.5 ltrs/day with milk production of 12 ltrs/day. No significance diseases have been recorded. Previous history of mastitis has been restricted | Farmers are satisfied by observing the increase production trait under scientific housing. | Farmers are not getting maximum outcome from their dairy units because of their improper housing | - |
| Integrated nutrient management in chilli | Low yield of chilli grown in the medium land situation after harvest of winter rice, under alternate wetting and drying cycles, which needs special nutrient management. | i) Biofertilizer incubated (Azospirillum, Azotobacter and PSB @ 1% on dry weight basis) vermicompost 1.0 t ha-1 mixed with 50% RD fertilizer, applied in ring method in 2 equal splits at planting and at 30 DAP<br>ii) Farmers practice without bio-fertilizers. | 1 | Green Chilli yield: Demo-48.5q/ha Control (Farmers practice)-38.0q/ha | Farmers were highly satisfied with technology due to the impact of bio-fertilizers along with 50% RD fertilizers on the growth & yield of chilli resulting in high C:B ratio as compared to the farmer's practice | - | Demo-1:4.14 Control (Farmers practice)-1:3.21 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Foliar application of micro-nutrient formulation (Banana Special) in banana | Micronutrient deficiency and low nutrient use efficiency of soil applied fertilizer affect quality of banana. | Use of foliar application of 75g of Banana Special-micronutrient formulation (Zn-3%, B-1.5%, Mn-1.0%, Fe-1.5%) +juice of 2 lemon fruits in 15lit of water from 5th month onward once in 30 days till 10th month stage | 1 | - | - | - | In progress |
| Nitrogen management in rice- rice sequence | Improper N management | 40:20:20:N :P2O5:K2O kg/ha + ZnSO4 (25kg/ha) + FYM (5t/ha) in sequence | 1 | Performance of Sali paddy under recommended fertilizer dose 22.56% better than farmers' practice.<br>Boro paddy is at growing stage | The technology is useful as there is yield increase | Fertilizer dose may be enhanced | Winter rice demo-2.1:1 Control-1.72:1 |

***Field crops – kg/ha, * for horticultural crops -= kg/t/ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area.***

***** Give details of the technology assessed or refined and farmer's practice***

## 3.2 Achievements of Frontline Demonstrations during 2013-14

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

List of technologies demonstrated during previous year and popularized during 2012-13 and recommended for large scale adoption in the district

| Sl. No | Crop/ Enterprise | Technology demonstrated | Horizontal spread of technology | | |
|---|---|---|---|---|---|
| | | | No. of villages | No. of farmers | Area in ha |
| 1 | Turmeric (Megha Turmeric-1) | Popularization of Megha Turmeric-1 | 5 | 5 | 1.0 |
| 2 | Rice-Rapeseed | 50% supplementation of recommended doze of N through Azolla in rice, rest as recommended | 3 | 12 | 5.0 |
| 3 | Boro rice (kanaklata) | performance of Boro rice var. Kanaklata) | 2 | 10 | 2.6 |

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

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

| Sl. No. | Crop | Thematic area | Technology Demonstrated | Season and year | Area (ha) | | No. of farmers/ demonstration | | | Reasons for shortfall in achievement | Farming situation (Rf/ Irrigated, Soil type, altitude, etc) | Status of soil (Kg/ha) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | N | P | K |
| | | | | | Proposed | Actual | SC/ST | Others | Total | | | | | |
| 1 | Mandarin Orange | Integrated Nutrient Management | Application of 75% RD of fertilizer (450gN+ 225g$P_2O_5$ +450 g $K_2O$), 5.6 kg Neem cake, 500g VAM, 100g PSB, 100g Azospirillum and 100g Trichoderma harzianum/plant /year in two split doses in March/April & | Kharif, 2014 | 0.13 | 0.13 | 3 | - | 3 | - | RF/ Sandy Loam/Medium Land | M | L | L |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sept./Oct. | | | | | | | | | | | |
| 2 | High value vegetable crops (Tomato-Palak-Coriander-Cucumber) | Protected cul cultivation of high value vegetable crops | Cultivation of high value vegetables (Tomato-Palak-Coriander-Cucumber) inside polyhouse as off-season crop. | Kharif, 2014 | 0.04 | 0.04 | 4 | - | 4 | - | RF/Sandy Loam/Medium Land | M | L | L |
| 3 | Marigold | Varietal Evaluation | Marigold Variety –Pusa Narangi Gainda | Rabi, 2013 | 0.13 | 0.13 | 4 | - | 4 | - | RF/Sandy Loam/Medium Land | M | L | L |
| 4 | Broccoli | Varietal Evaluation | Broccoli Variety-KTS-1 | Rabi, 2013 | 0.13 | 0.13 | 3 | - | 3 | - | RF/Sandy Loam/Medium Land | M | L | L |
| 5 | Tomato | Integrated Weed Management | Weed management in tomato using pre-emergent application of | Rabi, 2013 | 0.13 | 0.13 | 4 | - | 4 | - | RF/Sandy Loam/Mediu | M | L | L |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Metolachlor & use of grubber at 40 DAP | | | | | | | | m Land | | | |
| 6 | Rice-Rapeseed | Soil health | 50% supplementation of recommended dose of N through azolla in rice, rests as recommeded | Kharif, 2013, Rabi 2013-14 | 1.0 | 1.0 | 3 | - | 3 | Nil | Rainfed, Clay loam to sandy loam | M | L | L-M |
| 7 | Rice | Integrated crop management | SRI practices | Kharif, 2013 | 1.0 | 1.0 | 5 | - | 5 | | RF/Sandy Loam/Medium Land | M | L | L |
| 8 | Boro rice | varietal evaluion | Growing of HYV of boro rice (var. kanaklata under recommended package of practice | summer, 2013-14 | 1.0 | 1.0 | 3 | - | 3 | | RF/Sandy Loam/Medium Land | M | L | L |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | Maize | Varietal evalution | Growing of Hybrid maize variety | summer, 2014 | 1.0 | 1.0 | 3 | - | 3 | | RF/Sandy Loam/Medium Land | M | L | L |
| 10 | Rape seed | Varietal evalution | Growing of HYV of rape seed (var. TS-46) under recommended package of practice | Rabi 2013-14 | 1.0 | 1.0 | 3 | - | 3 | | RF/Sandy Loam/Medium Land | M | L | L |

Performance of FLD

| Sl. No. | Crop | Demo. Yield Qtl/ha | | | Yield of local Check Qtl./ha | Data on parameter in relation to technology demonstrated (Yield, Disease incidence, etc. as specified in FLD Programme) | | Economic Impact | | | | Technical Feedback on the Demonstrated Technology | Farmers' Reaction on specific Technologies |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Average Net Return (Profit) (Rs./ha) | | B.C. Ratio | | | |
| | | | | | | | | Demo | Local Check | Demo | Local Check | | |
| | | H | L | A | | Demo | Local | | | | | | |
| 1 | 2 | 7 | 8 | 9 | 10 | 12 | 13 | | | | | | |
| 1 | Mandarin | - | - | - | - | - | - | - | - | - | - | - | 2nd phase of nutrient application in mandarin plants |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | in progress |
| 2 | High value vegetable crops | - | - | - | - | - | - | - | - | - | - | - | Harvesting of coriander is over which recorded an av. yield of 18.0 kg/100 sq.m. Next crop of cucumber is in fruiting stage inside polyhouse. |
| 3 | Broccoli | 180.0 | 140.0 | 160.0 | - | Head yield-160q/ha | - | 55,210.00 | - | 1:5 | - | KTS-1 variety of broccoli is found suitable under the agro-climatic conditions of Kokrajhar district with less incidence of pest and diseases | Farmers preferred the broccoli variety compared to cauliflower and cabbage due to its high return and protein content coupled with good taste and palatability. |
| 4 | Marigold | 140.0 | 126.0 | 133.0 | 95.0 | 133.0 | 95.0 | 42,984.00 | 35,600.00 | 1:4 | 1:3 | Pusa Narangi Gainda variety of marigold is found suitable for fresh flower production compared to local varieties when pinched at | Farmers showed satisfaction over the performance of Pusa Naragi Gainda compared to the local varieties in fresh flower production and higher return |
| 5 | Tomato | - | - | - | - | - | - | - | - | - | - | - | Actual yield of tomato could not be recorded as the crop failed at |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | harvesting stage due to late blight incidence |
| 6 | Rice-Rapeseed -*Sali* rice - Rapeseed | 51.0<br>97.0 | 39.7<br>82.5 | 44.3<br>89.0 | 37.5<br>67.0 | 44.3 q<br>89.0 q | 37.5 q<br>67.0 q | 62810.00<br>21067.00 | 51018.00<br>15715.00 | 2.21<br>1.45 | 2.02<br>1.42 | 18.13% increase in yield of *Sali* rice and 32.84% increase in yield of rapeseed | As azolla is locally available and residual affect was observed, so farmers expressed eagerness to use azolla to supplement N for paddy |
| 7 | Rice | 70 | 62 | 66.0 | 48.0 | 66.0 | 48.0 | 59,380.00 | 39,750.00 | 2.5 | 1.9 | SRI method is a resource conservation technology | Farmer showed satisfaction over the performance of SRI practices |
| 8 | Boro rice | - | - | - | - | - | - | - | - | - | - | In progress The crop is under observation | - |
| 9 | Maize | - | - | - | - | - | - | - | - | - | - | In progress. The crop is under observation | - |
| 10 | Rapeseed | 12 | 9 | 10.5 | 7.5 | 10.5 | 7.5 | 18,290.00 | 11,300.00 | 1.38 | 1.0 | Performance of TS-46 rape seed is very good under late sown condition. | The farmer were satisfied with the higher grain yield of TS-46 variety of rape seed. |

Extension and Training activities under FLD

| Sl.No. | Activity | No. of activities organised | Date | Number of participants | Remarks |
|---|---|---|---|---|---|
| 1 | Field days | FLD on Rice Rapeseed sequence | 07.03.2014 | 33 | |
| | | FLD on SRI | 18.11.13 | 33 | |
| | | FLD on rape seed | 26.02.14 | 22 | |
| 2 | Farmers Training | 1 (Training on off-season cultivation technology of high value vegetables and flower crops) | 7th Jan-12th Jan, 2014 | 20 | - |
| 3 | Media coverage | | | | |
| 4 | Training for extension functionaries | 1 (Soil health management & soil health card) | 19.20.2014 | 25 | |

c. Details of FLD on Enterprises

(i) Farm Implements

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

**** Field efficiency, labour saving etc.***

(ii) Livestock Enterprises

| 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 | | |
| Livestock | Jersey X | 4 | 4 cows | Milk yield & lactation length | - | - | - | Daily milk production increases 2 lit in Jersey X and 0.750 lit in local X animals |
| Livestock | T&D | 3 | 3 pigs | Growth rate upto 8-9 months, Occurrence of diseases | - | - | - | Av. Wt. at 3 moths: 7 kg 6 months: 32 kg 8 month: 57 kg |
| Poultry | Vanaraja | 5 | 100 birds | Weight gain, Age at 1st | - | - | | Av. Wt. at 15 days: 380 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | lay, egg production | | | | gm<br>1 month: 571.5 gm<br>2 months: 1.8 kg<br>3 months: 2.7 kg<br>4 months: 3.2 kg<br>5 months: 3.54 kg<br>Laying started. Age at 1st lay: 147 days |
| Livestock | Cross bred piglets | 2 | 6 pigs | Growth rate upto 8-9 months, Occurrence of diseases | | | | Beneficiaries have been selected |

**** Milk production, meat production, egg production, reduction in disease incidence etc.***

(iii) Other Enterprises

| Enterprise | Variety/ breed/Species/others | No. of farmers | No. of Units | Performance parameters / indicators | Data on parameter in relation to technology demonstrated | | % change in the parameter | Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | Demon. | Local check | | |
| Mushroom | - | - | - | - | - | - | - | - |
| Apiary | - | - | - | - | - | - | - | - |
| Sericulture | - | - | - | - | - | - | - | - |
| Vermi compost | - | - | - | - | - | - | - | - |

**3.4. Achievements on Training both On and Off Campus (Including the sponsored, vocational, FLD and trainings under Rainwater Harvesting Unit):**

| Thematic area | No. of courses | | | Participants | | | | | | | | | | | | | | | | | | |
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| | | | | Others | | | | | | SC/ST | | | | | | Total | | | | | | Grand Total |
| | On | Off | Total | Male | | Female | | Total | | Male | | Female | | Total | | Male | | Female | | Total | | |
| | | | | On | Off | On | Off | On | Off | On | Off | On | Off | On | Off | On | Off | On | Off | On | Off | |
| **(A) FARMERS & FARM WOMEN** | | | | | | | | | | | | | | | | | | | | | | |
| **I. Crop Production** | | | | | | | | | | | | | | | | | | | | | | |
| Weed Management | - | 1 | 1 | - | 15 | - | - | - | 15 | - | 10 | - | - | - | 10 | - | 25 | - | - | - | 25 | 25 |
| Resource Conservation Technologies | | | | | | | | | | | | | | | | | | | | | | |
| Cropping Systems | - | 1 | 1 | - | 19 | - | - | - | 19 | - | 6 | - | - | - | 6 | - | 25 | - | - | - | 25 | 25 |
| Crop Diversification | - | 2 | 2 | - | 10 | - | - | - | 10 | - | 39 | - | 3 | - | 42 | - | 42 | - | 3 | - | 52 | 52 |
| Integrated Farming | | | | | | | | | | | | | | | | | | | | | | |
| Water management | | | | | | | | | | | | | | | | | | | | | | |
| Seed production | - | 1 | 1 | - | - | - | - | - | - | - | 25 | - | - | - | 25 | - | 25 | - | - | - | 25 | 25 |

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| 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 vegetables | | | | | | | | | | | | | | | | | | | | | |
| Nursery raising | | | | | | | | | | | | | | | | | | | | | |
| Exotic vegetables like Broccoli | | | | | | | | | | | | | | | | | | | | | |
| Export potential vegetables | | | | | | | | | | | | | | | | | | | | | |

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| 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 | | | | | | | | | | | | | | | | | | | | | |

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| 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 | 1 | - | 1 | 9 | - | - | - | 9 | - | 16 | - | - | - | 16 | - | 25 | - | - | - | 25 | - | 25 |
| Processing and value | | | | | | | | | | | | | | | | | | | | | | |

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| 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 | | | | | | | | | | | | | | | | | | | | | |

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| addition | | | | | | | | | | | | | | | | | | | | | |
| **III Soil Health and Fertility Management** | | | | | | | | | | | | | | | | | | | | | |
| Soil fertility management | - | 1 | 1 | - | 7 | - | 6 | - | 13 | - | 10 | - | 2 | - | 12 | - | 17 | - | 8 | - | 25 | 25 |
| Soil and Water Conservation | | | | | | | | | | | | | | | | | | | | | |
| Integrated Nutrient Management | | | | | | | | | | | | | | | | | | | | | |
| Production and use of organic inputs | - | 1 | 1 | - | 5 | - | - | - | 5 | - | 15 | - | 5 | - | 20 | - | 20 | - | 5 | - | 25 | 25 |
| Management of Problematic soils | - | 1 | 1 | - | - | - | - | - | - | - | 23 | - | 2 | - | 25 | - | 23 | - | 2 | - | 25 | 25 |
| Micro nutrient deficiency in crops | | | | | | | | | | | | | | | | | | | | | |
| Nutrient Use Efficiency | | | | | | | | | | | | | | | | | | | | | |
| Soil and Water Testing | | | | | | | | | | | | | | | | | | | | | |
| **IV Livestock Production and Management** | | | | | | | | | | | | | | | | | | | | | |

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| Dairy Management | - | 1 | 1 | - | - | - | - | - | - | - | - | - | 25 | - | 25 | - | - | - | 25 | - | 25 | 25 |
| Poultry Management | - | 3 | 3 | - | - | - | 58 | - | 58 | - | 2 | - | 23 | - | 25 | - | 2 | - | 81 | - | 83 | 83 |
| Piggery Management | - | 1 | 1 | - | 4 | - | - | - | 4 | - | 18 | - | - | - | 18 | - | 22 | - | - | - | 22 | 22 |
| Rabbit Management | | | | | | | | | | | | | | | | | | | | | | |
| Disease Management | | | | | | | | | | | | | | | | | | | | | | |
| Feed management | | | | | | | | | | | | | | | | | | | | | | |
| Production of quality animal products | 1 | - | 1 | 5 | - | 5 | - | 10 | - | 5 | - | 10 | - | 15 | - | 10 | - | 15 | - | 25 | - | 25 |
| Sheep & Goat Management | - | 1 | 1 | - | 7 | - | 8 | - | 15 | - | 5 | - | 5 | - | 10 | - | 12 | - | 13 | - | 25 | 25 |
| **V Home Science/Women empowerment** | | | | | | | | | | | | | | | | | | | | | | |
| Household food security by kitchen gardening and nutrition gardening | | | | | | | | | | | | | | | | | | | | | | |

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| 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 | | | | | | | | | | | | | | | | | | | | | |
| Income generation activities for empowerment of | | | | | | | | | | | | | | | | | | | | | |

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| 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 | | | | | | | | | | | | | | | | | | | | | |

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| 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** | | | | | | | | | | | | | | | | | | | | | |

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| 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 | | | | | | | | | | | | | | | | | | | | | |

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| 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 | | | | | | | | | | | | | | | | | | | | | |

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| 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 Manage | | | | | | | | | | | | | | | | | | | | | |

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| ment of SHGs | | | | | | | | | | | | | | | | | | | | | | |
| Mobilization of social capital | | | | | | | | | | | | | | | | | | | | | | |
| Entrepreneurial development of farmers/ youths | | | | | | | | | | | | | | | | | | | | | | |
| WTO and IPR issues | | | | | | | | | | | | | | | | | | | | | | |
| **XI Agro-forestry** | | | | | | | | | | | | | | | | | | | | | | |
| Production technologies | | | | | | | | | | | | | | | | | | | | | | |
| Nursery management | | | | | | | | | | | | | | | | | | | | | | |
| Integrated Farming Systems | | | | | | | | | | | | | | | | | | | | | | |
| **TOTAL** | 2 | 14 | 16 | 14 | 67 | 5 | 72 | 19 | 139 | 21 | 153 | 10 | 65 | 31 | 218 | 35 | 213 | 15 | 137 | 50 | 357 | 407 |
| **(B) RURAL YOUTH** | | | | | | | | | | | | | | | | | | | | | | |
| Mushroom Production | 1 | - | 1 | 10 | - | 3 | - | 13 | - | 10 | - | 2 | - | 12 | - | 20 | - | 5 | - | 25 | - | 25 |

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| Bee-keeping | | | | | | | | | | | | | | | | | | | | | | |
| Integrated farming | | | | | | | | | | | | | | | | | | | | | | |
| Seed production | | | | | | | | | | | | | | | | | | | | | | |
| Production of organic inputs | | | | | | | | | | | | | | | | | | | | | | |
| Integrated Farming | | | | | | | | | | | | | | | | | | | | | | |
| Planting material production | | | | | | | | | | | | | | | | | | | | | | |
| Vermi-culture | | | | | | | | | | | | | | | | | | | | | | |
| Sericulture | | | | | | | | | | | | | | | | | | | | | | |
| Protected cultivation of vegetable crops | - | 1 | 1 | - | - | - | - | - | - | - | 16 | - | 9 | - | 25 | - | 16 | - | 9 | - | 25 | 25 |
| Commercial fruit production | | | | | | | | | | | | | | | | | | | | | | |
| Repair and maintenance of farm | | | | | | | | | | | | | | | | | | | | | | |

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| machinery and implements | | | | | | | | | | | | | | | | | | | | | | |
| Nursery Management of Horticulture crops | | | | | | | | | | | | | | | | | | | | | | |
| Training and pruning of orchards | | | | | | | | | | | | | | | | | | | | | | |
| Value addition | | | | | | | | | | | | | | | | | | | | | | |
| Production of quality animal products | | | | | | | | | | | | | | | | | | | | | | |
| Dairying | 1 | - | 1 | 17 | - | - | - | 17 | - | 6 | - | - | - | 6 | - | 23 | - | - | - | 23 | - | 23 |
| Sheep and goat rearing | | | | | | | | | | | | | | | | | | | | | | |
| Quail farming | | | | | | | | | | | | | | | | | | | | | | |
| Piggery | | | | | | | | | | | | | | | | | | | | | | |
| Rabbit farming | | | | | | | | | | | | | | | | | | | | | | |
| Poultry production | | | | | | | | | | | | | | | | | | | | | | |
| Ornamental | | | | | | | | | | | | | | | | | | | | | | |

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| 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 | | | | | | | | | | | | | | | | | | | | | |

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| Technology | | | | | | | | | | | | | | | | | | | | | | |
| Tailoring and Stitching | | | | | | | | | | | | | | | | | | | | | | |
| Rural Crafts | | | | | | | | | | | | | | | | | | | | | | |
| Agro-forestry | - | 1 | 1 | - | 5 | - | 5 | - | 10 | - | 11 | - | 4 | - | 15 | - | 16 | - | 9 | - | 25 | 25 |
| **TOTAL** | 2 | 2 | 4 | 27 | 5 | 3 | 5 | 30 | 10 | 16 | 27 | 2 | 13 | 18 | 40 | 43 | 32 | 5 | 18 | 48 | 50 | 98 |
| | | | | | | | | | | | | | | | | | | | | | | |
| **(C) EXTENSION PERSONNEL** | | | | | | | | | | | | | | | | | | | | | | |
| Productivity enhancement in field crops | 1 | 1 | 2 | 20 | 15 | 0 | 0 | 25 | 15 | 5 | 10 | 0 | 0 | 5 | 10 | 25 | 25 | 0 | 0 | 25 | 25 | 50 |
| Integrated Pest Management | | | | | | | | | | | | | | | | | | | | | | |
| Integrated Nutrient management | | | | | | | | | | | | | | | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | | | | | | | | | | | | | | | |
| Protected cultivation technolo | | | | | | | | | | | | | | | | | | | | | | |

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| gy | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | |

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| 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** | 1 | 1 | 2 | 20 | 15 | 0 | 0 | 25 | 15 | 5 | 10 | 0 | 0 | 5 | 10 | 25 | 25 | 0 | 0 | 25 | 25 | 50 |

(D) Vocational training programmes for Rural Youth

| Crop / Enterprise | Date | Training title* | Identified Thrust Area | Duration (days) | No. of Participants | | | Self employed after training | | | Number of persons employed else where |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Male | Female | Total | Type of units | Number of units | Number of persons employed | |

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| Horticultural nursery management | 12th – 17th March, 2014 | Nursery management of horticultural crops | Nursery management | 6 days | 20 | - | 20 | - | - | - | - |
| Vegetable and flower | 8-12 Jan, 2014 | Off- season vegetable and flower production technology | Off season vegetable cultivation | 6 days | 10 | 10 | 20 | - | - | - | - |
| Integrated farming system | 12th – 17th March, 2014 | Vocational training programme Integrated farming System | Integrated farming system | 6 days | 26 | - | 26 | - | - | - | - |

*training title should specify the major technology /skill transferred

(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 | | | | |
| | | | | | | | | Male | Female | Total | Male | Female | Total | Male | Female | Total | | |
| 1 | 16th-18th May, 2013 | Capacity building on integrated planning for Agricultural Development | Multidiscipline | Integrated planning for Agricultural Development | 3 days | PF/RY | 1 | 9 | - | 9 | 25 | 6 | 31 | 34 | 6 | 40 | SIRD, Assam | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 21st - 23rd may, 2013 | Capacity building on integrated planning for Agricultural Development | | | 3 days | PF/RY | 1 | 11 | - | 11 | 13 | 16 | 28 | 24 | 16 | 40 | | |
| 3 | 30th May - 1st June, 2013 | Women empowerment and agricultural development | | Women Empowerment and Agricultural Development | 3 days | PF/RY | 1 | - | - | - | - | 41 | 41 | 0 | 41 | 41 | | |
| 4 | 18th – 20th June, 2013 | Capacity building on integrated planning for Agricultural Development | | Integrated planning for Agricultural Development | 3 days | PF/RY | 1 | 21 | - | 21 | 7 | 16 | 23 | 28 | 16 | 44 | | |
| 5 | 26th – 28th June, 2013 | Capacity building on integrated planning for Agricultural Development | | | 3 days | PF/RY | 1 | 42 | - | 42 | - | - | - | 42 | 0 | 42 | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 10th-16th December, 2013 | Employment opportunities through agriculture and allied sectors | | Employment opportunities through agriculture and allied sectors | 7 days | PF/RY | 1 | 43 | - | 43 | 22 | - | 32 | 65 | 0 | 65 | Department of Agriculture, Govt. of Assam | |
| **Total** | - | - | - | - | - | - | **6** | 126 | 0 | 126 | 67 | 79 | 155 | 193 | 79 | 272 | - | - |

**3.4. Extension Activities (including activities of FLD programmes) (Please mention specific Extension Activity conducted by the KVK such as Field Day, Kisan Mela, Exhibition, Diagnostic Visit, etc) during 2013-14**

| Sl. No. | Extension Activity | Purpose / topic and Date | No. of activities | Participants | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Farmers (Others) (I) | | | SC/ST (Farmers) (II) | | | Extension Officials (III) | | | Grand Total (I+II+III) | | |
| | | | | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| | Field day | 18.11.2013 | 5 | 7 | - | 7 | 23 | 3 | 26 | - | - | - | 30 | 3 | 33 |
| | | 28.11.2013 | | 8 | - | 8 | 30 | 8 | 38 | - | - | - | 38 | 8 | 46 |
| | | 06.03.2014 | | - | 11 | 11 | 10 | - | 10 | - | - | - | 10 | 11 | 21 |
| | | 07.03.2014 | | 26 | 7 | 33 | - | - | - | - | - | - | 26 | 7 | 33 |
| | | 31-03-2014 | | - | - | - | 30 | 5 | 35 | - | - | - | 30 | 5 | 35 |
| | F.S. Interacti | - | 3 | - | - | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | on | | | | | | | | | | | | | | |
| | Diagnostic visit | - | 95 | 32 | 6 | 38 | 77 | 1 | 78 | - | - | - | 109 | 7 | 116 |
| | Scientist visit to farmers field | - | 122 | 33 | - | 33 | 86 | 3 | 89 | - | - | - | 119 | 3 | 122 |
| | Farmers visit to KVK | - | 189 | 110 | 2 | 112 | 71 | 6 | 77 | - | - | - | 181 | 8 | 189 |
| | Advisory service | -- | 57 | 11 | - | 11 | 46 | - | 46 | - | - | - | 57 | - | 57 |
| | SMS | - | 160 | 11003 | 391 | 11394 | 8502 | 654 | 9156 | - | - | - | 19505 | 1045 | 20550 |
| | Voice SMS | - | 13 | 783 | 29 | 812 | 594 | 43 | 637 | - | - | - | 1377 | 72 | 1449 |
| **Grand Total** | | | 644 | 12013 | 446 | 12459 | 9469 | 723 | 10192 | - | - | - | 21482 | 1169 | 22651 |

* Example for guidance only

### 3.5 Production and supply of Technological products during 2013-14

**a. SEED MATERIALS**

| Major group/class | Crop | Variety | Quantity (qt) | Value (Rs.) | Provided to No. of Farmers/Other Agencies |
|---|---|---|---|---|---|
| **CEREALS** | Sali Rice | Ranjit | 63.0<br>2000.0 (PPP mode) | 163800.00<br>- | - |
| | Buckwheat | Local | 9.4 | 37600.00 | - |
| **OILSEEDS** | Sesamum | Local | 1.68 | 20160.00 | - |
| | Toria | TS-38 | 96.0 (PPP mode) | - | - |
| | Niger | NG-1 | 2.3 | - | - |
| **PULSES** | - | - | - | - | - |
| **VEGETABLES** | Chilli | King chilli | 0.915 | 1830.00 | - |
| **FLOWER CROPS** | - | - | - | - | - |
| **FRUITS** | Litchi | | 0.7333 | 2200.00 | 1 |
| | Citrus | Assam lemon | 8200 nos | 6015.00 | 6 |
| | Mango | | 0.37 | 370.00 | 1 |
| | Coconut | | 284 nos | 2840.00 | 2 |
| | Jackfruit | | 1750 nos | 7000.00 | 1 |
| **FIBRE CROPS** | Mesta | HC-583 | 1.52 | 3040.00 | - |
| **OTHERS (Spices)** | Turmeric | Megha turmeric-1 | 1.15 | 3450.00 | |

**SUMMARY**

| Sl. No. | Major group/class | Quantity (ton.) | Value (Rs.) | Provided to No. of Farmers/Other Agencies |
|---|---|---|---|---|
| 1 | CEREALS | 2072.40 | 201400.00 | -- |
| 2 | OILSEEDS | 99.98 | 20160.00 | - |
| 3 | PULSES | - | - | - |
| 4 | VEGETABLES | 0.915 | 1830.00 | - |
| 5 | FLOWER CROPS | - | - | - |
| 6 | FRUITS | 1.1033 qt<br>10234 nos | 18425.00 | 11 |
| 7 | FIBER CROPS | 1.52 | 3040.00 | - |
| 8 | OTHERS | 1.15 | 3450.00 | |
| **TOTAL** | | **2177.0683<br>10234 nos** | **248305.00** | **11** |

**b. PLANTING MATERIALS (Nos. in lakh)**

| Major group/class | Crop | Variety | Quantity (Nos.) | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|
| **FRUITS** | Lemon | Assam | 150 nos | 1050.00 | - |

| | | | | | |
|---|---|---|---|---|---|
| | | lemon | | | |
| | Banana | Malbhog | 300 nos | 1500.00 | - |
| **SPICES** | - | - | - | - | - |
| **VEGETABLES** | - | - | - | - | - |
| **FOREST SPECIES** | - | - | - | - | - |
| **ORNAMENTAL PLANTS** | Gladiolus | - | 400 corm | 2000.00 | |
| | Gerbera | - | 500 sucker | 2500.00 | |
| **ORNAMENTAL CROPS** | - | - | - | - | - |
| **PLANTATION CROPS** | - | - | - | - | - |
| **Others (FODDER CROPS)** | Napier | - | 5000 | 25000.00 | |
| **Total** | | | | | |

**SUMMARY**

| Sl. No. | Major group/class | Quantity (Nos. in lakh) | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|
| 1 | FRUITS | 0.0045 | 2550.00 | - |
| 2 | VEGETABLES | - | - | - |
| 3 | SPICES | - | - | - |
| 4 | FOREST SPECIES | - | - | - |
| 5 | ORNAMENTAL Plants | 0.009 | 4500.00 | - |
| 6 | PLANTATION CROPS | - | - | - |
| 7 | OTHERS (FOODER CROPS) | 0.05 | 25000.00 | |
| | **TOTAL** | **0.0635** | **32050.00** | - |

**c. BIO PRODUCTS**

| Major group/class | Product Name | Species | Quantity | | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|---|
| | | | No | (qt) | | |
| | | | | | | |
| **BIOAGENTS** | - | - | - | - | - | - |
| **BIOFERTILIZERS** | - | - | - | - | - | - |
| 1 Vermicompost | Vermicompost | | - | 5.2 | 5200.00 | 23 |
| 2 Azolla | Azolla | | - | 2.0 | - | - |
| **BIO PESTICIDES** | - | - | - | - | - | - |

**SUMMARY**

| Sl. No. | Product Name | Species | Quantity | | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|---|
| | | | Nos | (kg) | | |
| 1 | BIOAGENTS | - | - | - | - | - |
| 2 | BIO FERTILIZERS | | - | 7.2 | 5200.00 | 23 |
| 3 | BIO PESTICIDE | | - | - | - | - |
| | **TOTAL** | | **-** | **7.2** | **5200.00** | **23** |

**d. LIVESTOCK**

| Sl. No. | Type | Breed | Quantity | | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|---|
| | | | (Nos) | Kgs | | |
| **1** | **Cattle** | - | - | - | - | - |
| **2** | **SHEEP AND GOAT** | Beetal cross | 3 | - | 6600.00 | 2 |
| **3** | **PIGGERRY** | Hampshire & T&D | 10 | - | 19500.00 | 5 |
| **4** | **POULTRY** | Broiler | - | 154.0 | 11550.00 | - |
| **5** | | Vanaraja (Egg) | 341 | - | 1705.00 | 34 |
| **FISHERIES** | | | | | | |
| **Others (Specify)** | | | | | | |

**SUMMARY**

| Sl. No. | Type | Breed | Quantity | | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|---|
| | | | Nos | Kgs | | |
| 1 | CATTLE | - | - | - | - | - |
| 2 | SHEEP & GOAT | Beetal cross | 3 | - | 6600.00 | 2 |
| 3 | POULTRY | Broiler, Vanaraja egg | 341 | 154.0 | 13255.00 | **39** |
| 4 | Piggery | Hampshire & T&D | 10 | - | 19500.00 | |
| 4 | FISHERIES | - | - | - | - | - |
| 5 | OTHERS (FODDER) | - | 10 | - | - | - |

| | | | | | | |
|---|---|---|---|---|---|---|
| | **TOTAL** | **-** | **364** | **154.0** | **39355.00** | |

### 3.6. Literature Developed/Published (with full title, author & reference) during 2013-14

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

(B) Literature developed/published

| Item | Title | Authors name | Number of copies |
|---|---|---|---|
| Research papers | - | - | - |
| 1. | - | - | - |
| 2. | - | - | - |
| 3. | - | - | - |
| Training manuals | - | - | - |
| Technical reports | - | - | - |
| 1. | - | - | - |
| 2. | - | - | - |
| 3. | - | - | - |
| Book/ Book Chapter | - | - | - |
| Popular articles | Pond side livestock farming | Deka, R.J.: Kayastha, R.B. | - |
| | Bird flu | Deka, R.J. | - |
| | Artificial insemination in pig: Advantages & economic consideration | Kayastha, R.B.: Deka, R.J. | - |
| | Potentiality of horticulture based crop diversification in Assam and North-East Region | Brahma, Sanchita and Buragohain, Nayanmoni | - |
| | Importance and food value of mushrooms. | Brahma, Sanchita and Buragohain, Nayanmoni | - |
| | Orchid diversity in North East India | Buragohain, Nayanmoni and Brahma, Sanchita | - |
| Technical bulletins | - | - | - |
| Extension bulletins | - | - | - |
| Newsletter | - | - | - |
| Conference/ workshop proceedings | - | - | - |
| Leaflets/folders | - | - | - |
| e-publications | - | - | - |
| Any other (Pl. specify) | - | - | - |

| | | | |
|---|---|---|---|
| **TOTAL** | **6** | **-** | **-** |

N.B. Please enclose a copy of each. In case of literature prepared in local language, please indicate the title in English

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

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

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

**A) Success story of Sri. Bimal Chandra Basumatary of Pakriguri, Kokrajhar District**

Shri. Bimal Chandra Basumatary is a progressive farmer of village Janagaon under Kokrajhar Development Block who has adopted Integrated Farming System in his farm. He has a total farming area of 68.6 ha having 40 ha under field crops, 26.6 ha under horticultural crops and 2 ha in agroforestry. The main crops grown are rice (Sali paddy), high value vegetable crops in polyhouses and rose for distant market. He has adopted the scientific methods of rearing of diary, poultry, fishery, duckery and piggery with significant animal population. Further he has adopted the concept of drip irrigation (in strawberry crop and vegetables) and mulching with black plastic film in strawberry. Apiculture and sericulture is also adopted in the farm. The farm is well mechanized with 3 number of tractor, 1 minitractor, powertillers, minitruck, pumpsets and drip irrigation system. By adopting the latest scientific know-how he has significantly increased his farm income during 2010-2013.

During the years, he started growing high yielding varieties of paddy, pulses and oilseeds adopting the principles of Integrated Nutrient Management and got increased productivity. By adopting mechanized system of farming, the labour cost was significantly reduced along with time. Introduction of large size breed of pig (Ghungroo) and high yielding duck (Chara Chemballi) enhanced meat and egg production, respectively.

During 2010, Mr. Basumatary through his friends heard about the services offered by KVK Kokrajhar and he started attending trainings and awareness programme organized by the Kendra. Getting himself well trained, he started integrated farming in his land and completely shifted his farming to scientific one instead of his father's traditional method. He started SRI system of rice in 200 bighas, vegetables in 100 bighas and remunerative crops (rose and off season vegetables) in his three ploy houses having an area of 500 sq. metres area each. The income was very encouraging. The systems adopted by Mr. Basumatary encouraged the local farmers of the area as a profitable self-employment means of livelihood. They approached Mr. Basumatary to learn the practices of growing improved crop of paddy and oilseeds. Today, he could provide employment to 30 number of agricultural labourers all the year around. Such is the impact of Shri. Bimal Basumatary's *Aie Afa Jugami Abad Thilli* (Local name of his farm) that the BTC govt. and Deptt. of Agriculture, Kokrajhar has recognized his exemplary deeds which

is attracting the general people for the adoption of advanced and scientific method of diversified farming.

KVK, Kokrajhar undertook OFT and FLD on HYV of paddy (var.Ranjit) and rapeseed (var.TS-36) in his crop field. Under direct supervision and guidance from the KVK Scientist, Shri. Basumatary used plastic mulching and drip irrigation in high value crops could conserve water, control weed and minimize labour cost. Through high crop intensity, year round utilization of land resources by cultivation of high value off season vegetable crops inside greenhouse could be realized.

Shri. Bimal followed the strategies such as IPM (Botanical pesticides) and INM (Vermicompost, FYM, compost, green manure and biofertilizer) in his crop field to avert deterioration of soil and water resources. He took special interest in the conservation of local germplasm of paddy such as Jeera Joha, Anaras Maibra, Kunkuni Joha, Keshro, Mainagiri, Phulpakhri, etc. He adopted prophylactic measures against diseases and insect pests to prevent outbreak of pests and while doing so he used organic formulations, botanicals and biopesticides.

Such has been the influence of Mr. Basumatary's IFS model that local youth such as Shri. Kwrwm Basumatary got inspired and started following the scientific methods of vegetable cultivation and today he is a progressive farmer of the locality supporting his family with the farm income. Recently, he has established a duckery farm and is getting good returns.

The KVK proposed his name for the Jagjivan Ram Abhinav Kisan Puruskar on Zonal level for 2013-14.

**Annual income of Sri. Bimal Chandra Basumatary from different farm enterprises during 2013:**

| Sl. No. | Name of the Enterprise | Area/ Nos. | Net Income |
|---|---|---|---|
| 1 | Field crops | 40 ha | Rs.15,19,000.00 |
| 2 | Horticulture | 26.6 ha | Rs.6,82,500.00 |
| 3 | Livestock | Diary unit-40 no<br>Poultry-100 nos<br>Duckeries-100 nos<br>Piggaries-15 nos | Rs.1,35,000.00 |
| 4 | Fishery | 0.5ha | Rs.1,57,500.00 |
| 5 | Agro forestry, arecanut, bamboo plantation | 1 ha. | Rs.1,05,000.00 |
| | | **Total** | **Rs.25,82,000.00** |

The net income of Shri Bimal Basumatary has been on increasing trend since 2009; from Rs.9,74,890.00 the figure increased to Rs.25,82,000.00 during a span of 4 years which can easily be considered as a remarkable increase.

**B) Success story of Mr. Pranab Kumar Narzary**

**Engineered in changing the mindset of rural youth to adopt scientific agricultural practices**

Mr. Pranab Kumar Narzary S/O Sri Hemkanta Narzary of Dhauliguri village under Gossaigaon sub-division of Kokrajhar District is an unemployed educated rural youth. After qualifying the degree in arts stream, like the other youths of the society he ran after jobs, but every time he failed. His father was a retired police officer and had ancestral agricultural land. There is a Agar wood plantation covering 2 ha of land under the supervision of his family. The plantation is of 10-12 years old. Inspired by his father, Pranab gave up all the hopes for a govt. job and involved himself in agricultural farming. The farming system adopted by him wad multi enterprise. He grows almost every essential crops in his field involving all the seasons. He also started a broiler farm with a capacity of 700 birds per batch. He also decided to convert his household pond to a commercial pond for carp farming, but could not get profit. He was also not aware about that the poultry excreta can be used as substitute feed for fish.

In 2012, a team of SMSs led by the programme coordinator, KVK, Kokrajhar made a diagnostic visit to his agricultural field. Mr. Narzary was very much influenced by the innovative interaction held between him and the KVK team. Understanding the disadvantages and the constrain of traditional agricultural practices followed by him, he inclined for adopting scientific agricultural practices. He soon put himself on transition to scientific farming.

The KVK team took stock of his resources and constrain faced by him and suggested to attend more training programme on different discipline like agronomy, horticulture, soil science, animal science etc. By attending numbers of training & regular visiting to KVK, Kokrajhar he gathered a vast knowledge on scientific agricultural practices.

He expanded his broiler poultry unit from 700 capacity to 2800 capacity per batch. He has been linked with bank for financial assistance for expanding his activity. The bank also showed keen interest to support him with assistance from NABARD. He is earning around 1.8 lakh to 2.0 lakh from the existing broiler unit of 2800 nos per batch as the net income. He has also provided employment for two local poor youth from the nearby village from the broiler unit. He is using the poultry litter material in the agricultural land as fertilizer.

He is also practicing composite fish farming in his 5 bigha pond & earning around Rs. 60000/- per year from his pond. He is rearing rohu, catla, mrigal, common carp in his composite fish farming.

Earning the technical know how and scientific information from KVK scientist, he is practicing cultivation of rice in 23 bighas of land. He is cultivating high yielding variety (Ranjit) & earned Rs. 1.10 lakh from them during 2013.

He has also started an unit of integrated farming system in an around 10 bighas of land where he is growing horticultural crops like citrus, lemon, coconut, rice, tuber crops & banana. The total income earned by Mr. Narzary during 2013-14 is as follows:

| Sl no | Crop/ enterprise | Area/ no | Income (Rs.) |
|---|---|---|---|
| 1 | Broiler unit | 2800 batch | 2,52,000.00 |
| 2 | Fishery | 0.6 ha | 60,000.00 |
| 3 | Rice | 3 ha | 1,10,000.00 |

| | | | |
|---|---|---|---|
| 4 | Vegetables and others | LS | 45,000.00 |
| Total | | | 4,67,000.00 |

The willingness of Mr. Pranab Kumar Narzary to adopt new technology in his farm helped him to be a successful farmer. He has acquired all the qualities to be an entrepreneur & engineered in changing the mindset of local youth to adopt scientific agricultural practices, however, the limited resources & knowledge on scientific agricultural technologies & poor economic conditions are the main drawback faced by Mr. Narzary.

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

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

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

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

- Identification of courses for farmers/farm women

PRA techniques, SAC meeting, ZREAC meeting, Farmers visit to KVK, Bimonthly/Quarterly Zonal Workshop, Interaction with extension functionaries, Discussion with district and primary Pathar Parichalana Samiti (PPS) etc.

- Rural Youth

PRA techniques, SAC meeting, ZREAC meeting, Farmers visit to KVK, Bimonthly/Quarterly Zonal Workshop, Discussion with district and primary Pathar Parichalana Samiti (PPS), Extension Functionaries, Youth organizations, NGOs, SHGs etc

- In-service personnel

Bimonthly/quarterly Zonal Workshop, SAC meeting, ZREAC meeting, Interaction with extension functionaries, PRA techniques, Interaction with youth organizations, NGOs, SHGs etc.

**3.11 Field activities**

i. Number of villages adopted:

ii. No. of farm families selected:

iii. No. of survey/PRA conducted: Nil

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

| Sl. No | Name of the Equipment | Qty. | Cost |
|---|---|---|---|

| | | | |
|---|---|---|---|
| 1 | Spectrophotometer | 1 No | 23,488.00 |
| 2 | Flame photometer | 1 No | 22,490.00 |
| 3 | PH Meter | 1 No | 7,384.00 |
| 4 | Conductivity Bridge | 1 No | 8,673.00 |
| 5 | Physical Balance ( 5 Kg capacity) | 1 No | 4,500.00 |
| 6 | Physical Balance ( 2.5 Kg capacity) | 1 No | 3,000.00 |
| 7 | Chemical Balance | 1 No | 32,500.00 |
| 8 | Shaker | 1 No | 16,500.00 |
| 9 | Rotary Shaker | 1 No | 19,800.00 |
| 10 | Refrigerator | 1 No | 14,062.00 |
| 11 | Hot Plate | 1 No | 3,000.00 |
| 12 | Oven | 1 No | 18,960.00 |
| 13 | Grinder | 1 No | 15,750.00 |
| 14 | Double Water Distillation Apparatus | 1 No | 27,800.00 |
| 15 | Water Distillation Still | 1 No | 9,970.00 |
| 16 | Electronic Automatic KEL PLUS Digestion System | 1 No | 80,497.00 |
| 17 | Electronic KEL PLUS Automatic Distillation System | 1 No | 1,50,110.00 |
| Total | | 17 nos | 308,374.00 |

Status of establishment of Lab :

1. Year of establishment : 2009

2. List of equipments purchased with amount :

3. Details of samples analyzed so far :

| Details | No. of Samples | No. of Farmers | No. of Villages | Amount realized |
|---|---|---|---|---|
| Soil Samples | - | - | - | - |
| Water Samples | - | - | - | - |
| Plant Samples | - | - | - | - |
| Petiole Samples | - | - | - | - |
| Total | - | - | - | - |

**4.0. IMPACT**

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

| **Name of specific technology/skill transferred** | **No. of participants** | **% of adoption** | **Change in income (Rs.)** | |
|---|---|---|---|---|
| | | | **Before (Rs./Unit)** | **After (Rs./Unit)** |
| Summer vegetables cultivation techniques | 300 | 85 | 28700/ha | 55500/ha |
| Cole crops production technology | 210 | 70 | 34000/ha | 50000/ha |
| Nursery techniques | 170 | 60 | 74000/ha | 120000/ha |
| Mushroom production technology | 350 | 35 | - | 20000/Season |
| Fertilizer application in Boro rice | 180 | 67 | 8000/ha | 12000/ha |
| Improved variety of Rapeseed | 260 | 60 | 8000/ha | 22000/ha |

| | | | | |
|---|---|---|---|---|
| Improved cultivation of Potato | 150 | 80 | 19000/ha | 32000/ha |
| Improved method of Banana plantation | 265 | 83 | 10000/ha | 180000/ha |
| Broiler farming | 105 | 75 | 2500/month | 6000/month |
| Composite Fish farming | 56 | 30 | 35000/ha | 75000/ha |
| HYV in Sali rice (Ranjit) | 900 | 92 | 20000/ha | 32000/ha |
| Control of shoot and fruit borer in Brinjal | 135 | 45 | 6000/ha | 9000/ha |
| Control of fruit scaring beetle in Banana | 210 | 69 | 50000/ha | 66000/ha |
| Techniques for preparation of Vermicompost | 180 | 35 | - | 35000/year |
| Rearing of Pig | 215 | 65 | 4500/pig | 6500/pig |
| Rearing of Duck | 80 | 16 | 110 egg/duck | 180 egg/duck |

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

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

| | | |
|---|---|---|
| 1 | Adoption of HYV of Boro Rice – Joymati, Kanaklata & swarnav | Area increased – 55 % |
| 2 | Adoption of HYV of Rapeseed – TS – 36 , TS – 38 & TS-46 | Increase in area – 52 % |
| 3 | Commercial cultivation of Banana variety – Malbhog | Increase in area – 60 % |
| 4 | Adoption of control measures for late blight of Potato | Adoption – 90 % |
| 5 | Adoption of Broiler farming | Adoption – 30% |
| 6 | Adoption of Piggery farming | Adoption – 52 % |
| 7 | Adoption of cultivation of Oyster mushroom | Adoption – 42 % |
| 8 | Adoption of Fish farming | Adoption – 34 % |
| 9 | Adoption of Vanaraja bird farming | Adoption – 17 % |
| 10 | Adoption of duck farming | Adoption – 10 % |
| 11 | Adoption of vermicompost production technology | Adoption- 10 % |

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

| Sl. No. | Name of the specific technology/skill transferred | No. of participant | % of adoption | Changes in income (Rs.) | |
|---|---|---|---|---|---|
| | | | | Before | After |
| 1 | HYV in Boro rice (Joymati & Kanaklata & swarnav) | 76 | 22 | Rs. 22500/ha | Rs. 37000/ha |
| 2 | Production technology of Oyster mushroom | 25 | 50 | - | Rs. 18000/Sesaon |
| 3 | Improved variety of Rapeseed (TS 36, TS-38 & TS 46) | 75 | 75 | Rs. 7000/ha | Rs. 21000/ha |

| | | | | | |
|---|---|---|---|---|---|
| 4 | Improved method of Banana production | 70 | 35 | Rs. 75000/ha | Rs. 180000/ha |
| 5 | Vermi-compost production techniques | 80 | 15 | - | Rs. 35000/Year |
| 6 | Rearing of Pig | 47 | 60 | Rs. 2000/Pig | Rs. 6000/Pig |
| 7 | Nursery management of Horticultural crops | 30 | 18 | Rs. 50000/ha | Rs. 135000/ha |
| 8 | Goatery management | 140 | 71 | Rs. 1500/goat | Rs. 2200/goat |
| 9 | Poultry management | 200 | 70 | 110 egg/duck | 180 egg/duck |

**5.0. LINKAGES**

**5.1 Functional linkage with different organizations**

| **Name of organization** | **Nature of linkage** |
|---|---|
| 1. Department of Agriculture, Kokrajhar | Training, Diagnostics visit, Reviewing departmental projects, Beneficiary selection |
| 2. Department of AH & Vety., Kokrajhar | Training organization, selection of cluster of farmers |
| 3. Dept. of Fishery, Kokrajhar | Training |
| 4. Department of Soil Conservation, Kokrajhar | Integrated Water shed management Project, Training |
| 5. NABARD, Kokrajhar | Training, Farmers group formation |
| 6. SIRD, Assam | Backyard rearing of Chara Chembelli ducks for women empowerment, Exposure visit |
| 7. National Research Centre on Pig, ICAR, Rani | Artificial Insemination of Pig in Kokrajhar District |
| 8. IIT, Kanpur | Voice message service |
| 9. Discovery Club, Kokrajhar | Livelihood promotion through integrated farming system (NAIP) |
| 10. LWS, Gossaigaon | Resource person |
| 11. Wild Life Trust of India | Community development initiative through alternative livelihood in the fringe areas of Manas Tiger Reserve |
| 12. NERSWN | Guidance, resource person, preparation of work plan |
| 13. Socio Economic Development | Guidance, resource person, preparation of work plan |
| 14. Gana Chetana Samaj | Guidance, resource person, preparation of work plan |

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

**5.2 List special programmes undertaken by the KVK, which have been financed by State Govt./Other Agencies during 2013-14**

| Name of the scheme | Activity | Date/ Month of initiation | Funding agency | Amount (Rs.) |
|---|---|---|---|---|
| | | | | |
| | | | | |

### 5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

| S. No. | Programme | Nature of linkage | Remarks |
|---|---|---|---|
| 1 | Identification of problems and constraints faced by different socio-economic groups and farmers | Collaboration in Field survey, PRA, Group meeting & training | - |
| 2 | Strategy for research and extension programme | Cooperation in preparation of integrated SREP | - |
| 3 | Demonstration | Scientific Advisory Service, Diagnostic visit | - |
| 4 | Training | As resource person | - |
| 5 | Farmers Scientist Interaction | As resource Person | - |

### 5.4 Give details of programmes implemented under National Horticultural Mission

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

### 5.5 Nature of linkage with National Fisheries Development Board

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

## 6. PERFORMANCE OF INFRASTRUCTURE IN KVK DURING 2013-14

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

| Sl. No. | Demo Unit | Year of estd. | Area | Details of production | | | Amount (Rs.) | | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Variety | Produce | Qty. | Cost of inputs | Gross income | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Piggery | 2010 | 145 sq m | Hampshire & T&D | Piglets | 10 nos | - | 19500.00 | |
| 2 | Poultry | 2010 | 45 s m | Vanaraja | Eggs & meat | 341 nos egg | - | 1705.00 | |
| 3 | Goatery | 2010 | - | Beetle cross & Sirohi | Kids | 3 | - | 6600.00 | |
| 4 | Vermicompost | 2010 | 50 sq m | *Eichornia Foetida* | Vermi compost | 520 kg | - | 5200.00 | |
| 5 | Rice-fish vegetable farming unit | 2010 | 224 r m | - | - | | | | |

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

| Name of the crop | Date of sowing | Date of harvest | Area (ha) | Details of production | | | Amount (Rs.) | | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Variety | Type of Produce | Qty. | Cost of inputs | Gross income | |
| **Cereals** | | | | | | | | | |
| Rice | - | - | - | - | - | - | - | - | - |
| Wheat | - | - | - | - | - | - | - | - | - |
| Maize | - | - | - | - | - | - | - | - | - |
| Any other | - | - | - | - | - | - | - | - | - |
| **Pulses** | | | | | | | | | |
| Green gram | - | - | - | - | - | - | - | - | - |
| Black gram | - | - | - | - | - | - | - | - | - |
| Arhar | - | - | - | - | - | - | - | - | - |
| Lentil | - | - | - | - | - | - | - | - | - |
| Ay other | - | - | - | - | - | - | - | - | - |
| **Oilseeds** | | | | | | | | | |
| Mustard | - | - | - | - | - | - | - | - | - |
| Soy bean | - | - | - | - | - | - | - | - | - |
| Groundnut | - | - | - | - | - | - | - | - | - |
| Any other | - | - | - | - | - | - | - | - | - |
| **Fibers** | | | | | | | | | |
| i. | - | - | - | - | - | - | - | - | - |
| ii. | - | - | - | - | - | - | - | - | - |
| **Spices & Plantation crops** | | | | | | | | | |
| i. | - | - | - | - | - | - | - | - | - |
| ii. | - | - | - | - | - | - | - | - | - |
| **Floriculture** | | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| i. | - | - | - | - | - | - | - | - | - |
| ii. | - | - | - | - | - | - | - | - | - |
| **Fruits** | | | | | | | | | |
| i. | - | - | - | - | - | - | - | - | - |
| ii. | - | - | - | - | - | - | - | - | - |
| **Vegetables** | | | | | | | | | |
| **i.** | - | - | - | - | - | - | - | - | - |
| **ii.** | - | - | - | - | - | - | - | - | - |
| **Others (specify)** | | | | | | | | | |
| i. | - | - | - | - | - | - | - | - | - |
| ii. | - | - | - | - | - | - | - | - | - |

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

| 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/ species | Type of Produce | Qty. | Cost of inputs | Gross income | |
| - | - | - | - | - | - | - | - |

### 6.5 Rainwater Harvesting

### 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 (Month-Wise) during 2013-14

Accommodation available (No. of beds) :

| Months | Title of the training course/Purpose of stay | Duration of Training | No. of trainees stayed | Trainee days (days stayed) | Reason for short fall (if any) |
|---|---|---|---|---|---|
| April, 12 to | - | - | Nil | Nil | - |

| | | | | | |
|---|---|---|---|---|---|
| March, 13 | | | | | |
| Total | - | - | Nil | Nil | - |
| **Grand total** | - | - | Nil | Nil | - |

## 7. FINANCIAL PERFORMANCE

### 7.1 Details of KVK Bank accounts

| Bank account | Name of the bank | Location | Account Number |
|---|---|---|---|
| With Host Institute | SBI | Jorhat | 10253820770 |
| With KVK | SBI | Gossaigaon | 11378641024 |

### 7.2 Utilization of funds under FLD on Maize *(Rs. In Lakhs) if applicable*

| Item | Released by ICAR/ZPD | | Expenditure | | Unspent balance as on 31st March, 2014 |
|---|---|---|---|---|---|
| | 2010–11 | 2011-12 | 2012-13 | 2013-14 | |
| Inputs | 0.2196 | - | - | - | 0.3868 |
| Extension activities | - | - | - | - | - |
| TA/DA/POL etc. | - | - | - | - | - |
| **TOTAL** | **0.2196** | **-** | **-** | **-** | **0.3868** |

### 7.3 Utilization of KVK funds during the year 2013 -14

| S. No. | Particulars | Sanctioned (in Lakh) | Released (in Lakh) | Expenditure (in Lakh) |
|---|---|---|---|---|
| **A. Recurring Contingencies** | | | | |
| 1 | **Pay & Allowances** | 62.85 | 64.40922 | 64.40922 |
| 2 | **Traveling allowances** | 2.0 | 1.44 | 1.43980 |
| 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 | | | |
| *C* | Meals/refreshment for trainees | 3.30 | | |
| *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 | 7.70 | 10.98250 | 10.33250 |

| | | | | |
|---|---|---|---|---|
| *I* | Establishment of Soil, Plant & Water Testing Laboratory | | | |
| *J* | Library | | | |
| **TOTAL (A)** | | **75.85** | **76.83172** | **76.18152** |
| **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** | | 0.50 | 1.55899 | 1.55899 |
| **GRAND TOTAL (A+B+C)** | | **76.35** | **78.39071** | **77.74051** |

### 7.4 Status of revolving fund (Rs. in lakhs) for last three years

| Year | Opening balance as on 1st April | Income during the year | Expenditure during the year | Net balance in hand as on 1st April of each year |
|---|---|---|---|---|
| April 2011 to March 2012 | 0.78183 | 1.93347 | 1.04488 | 1.67042 |
| April 2012 to March 2013 | 1.67042 | 0.85455 | 1.17159 | 1.35338 |
| April 2013 to March 2014 | 1.35338 | 3.02056 | 1.55899 | 2.81495 |

### 8.0 Please include information which has not been reflected above.

**(Write in detail)**

### 8.1 Constraints

| |
|---|
| **a. Administrative** |
| 1. Long distance from the head quarter (600 km) with poor transport and communication facility |
| 2. On-campus vocational training could not conducted due to lack of proper hostel facilities |
| **b. Financial** |
| 1. Provision of funds for Traveling Allowance for trainees |
| 2. Separate fund for publication of literature |
| 4. Non-availability of funds in time for FLD hampers technology dissemination process and reduces KVK's impact |
| 5. Procedures for release of fund should be more simplified |
| 6. Budget should be provided timely so that fund can be utilized properly |
| 7. More fund for infrastructure development |
| 8. More fund for TA/DA for the Scientists and Staffs |

| **c. Technical** |
|---|
| 1. Lowest speed of the existing internet facility. |
| 2. Lack of STW and Godown hinders the farm activities of KVK |
| 3. Deplorable office furnitures and inadequate space for sitting arrangement leads to poor working environment and low zeal of scientists |
| 4. Existing computers are 7-10 years old , of low configuration. So 7 computers and 1 laptop may be provided for speady and quality performance. |
| 5. Frequent power cut hampers the official work. |
| 6. Engagement of PC, SMS, Computer programmer and other staff in election process for long term hampers the official work and reporting in time. |

**(Signature)**

**Programme Coordinator**