# ANNUAL REPORT
# 2008 – 09

# KRISHI VIGYAN KENDRA BURDWAN

**KRISHI VIGYAN KENDRA**
Central Research Institute for Jute & Allied Fibres (ICAR)
Budbud, Burdwan, W.B. 713 403
Telefax: 0343-2513651
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## GENERAL INFORMATION ABOUT THE KVK

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

Name: Krishi Vigyan Kendra, Burdwan

| Address | Telephone | | E mail | Website |
|---|---|---|---|---|
| BudBud, Burdwan-713 403. West Bengal | Office - 0343 2513651 | Fax - 0343 2513651 | kvkburdwan@gmail.com | **www.kvkcrijaf.org** |

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

Name of Host organization: **Central Research Institute for Jute and Allied Fibres (ICAR)**

| Address | Telephone | | E mail | Website |
|---|---|---|---|---|
| | Office | Fax | | |
| Barrackpore Kolkata- 700 120. West Bengal | 033-25356124 | 033-25350415 | crijaf-wb@nic.in | **www.crijaf.org** |

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

| Name | Telephone / Contact | | |
|---|---|---|---|
| | Residence | Mobile | Email |
| DR. F. H. RAHMAN | 09432955117 | 09433586026 | fhrahmancal@gmail.com/rediffmail.com |

***1.4. Year of sanction:*** 2005 vide order No. 5-24 / 2002 – AE – I, dated April 01, 2005

### *1.5. Staff Position (as on 29th February 2008)*

| Sl. No. | Sanctioned post | Name of the incumbent | Designation | Discipline | Pay Scale with present basic | Date of joining | Category (SC/ST/ BC/Others) |
|---|---|---|---|---|---|---|---|
| 1 | Programme Coordinator | Dr. F. H. Rahman | Prog. Coordinator | Soil Science | Rs. 15600-39100 Grade Pay - 8000 Basic – Rs. 31650 | 10.04.2007 | GEN |
| 2 | Subject Matter Specialist | Mr. Dipankar Ghorai | SMS | Agriculture | Rs. 15600-39100 Grade Pay - 5400 Basic – Rs. 22280 | 26.04.2006 | GEN |
| 3 | Subject Matter Specialist | Mr. Golam Ziauddin | SMS | Fisheries | Rs. 15600-39100 Grade Pay - 5400 Basic – Rs. 22280 | 28.04.2006 | GEN |
| 4 | Subject Matter Specialist | Dr. Chandrakanta Jana | SMS | AH&VS | Rs. 15600-39100 Grade Pay - 5400 Basic – Rs. 22280 | 29.04.2006 | GEN |
| 5 | Subject Matter Specialist | Dr. Subrata Sarkar | SMS | Horticulture | Rs. 15600-39100 Grade Pay - 5400 Basic – Rs. 22280 | 04.05.2006 | GEN |
| 6 | Subject Matter Specialist | Mr. Manoj Kumar | SMS | Agriculture Extension | Rs. 15600-39100 Grade Pay - 5400 Basic – Rs. 22280 | 09.05.2006 | OBC |
| 7 | Subject Matter Specialist | Ms. Sujata Sethy | SMS | Home Science | Rs. 15600-39100 Grade Pay - 5400 Basic – Rs. 21630 | 12.03.2007 | SC |
| 8 | Programme Assistant | Mr. Sandipan Garai | Prog. Assistant | Agriculture | Rs. 9300-34800 Grade Pay - 4200 Basic – Rs. 14330 | 18.04.2006 | OBC |
| 9 | Computer Programmer | Sk. Golam Rasul | Prog. Assistant (Computer) | Computer | Rs. 9300-34800 Grade Pay - 4200 Basic – Rs. 14330 | 10.04.2006 | GEN |

| Sl. No. | Sanctioned post | Name of the incumbent | Designation | Discipline | Pay Scale with present basic | Date of joining | Category (SC/ST/ BC/Others) |
|---|---|---|---|---|---|---|---|
| 10 | Farm Manager | Mr. Soumya Sarathi Kundu | Prog. Assistant (Farm Manager) | Agriculture | Rs. 9300-34800 Grade Pay - 4200 Basic – Rs. 13910 | 06.01.2007 | GEN |
| 11 | Accountant / Superintendent | Mr. Baidyanath Mukhopadhyay | OSA | -- | Rs. 9300-34800 Grade Pay - 4200 Basic – Rs. 14330 | 15.03.2006 | GEN |
| 12 | Stenographer | Mr. Sushanta Dey | Jr. Steno-cum-Computer Operator | -- | Rs. 5200-20200 Grade Pay - 2400 Basic – Rs. 10520 | 20.03.2006 | GEN |
| 13 | Driver | Mr. Joydeep Pal | Driver – cum - mechanic | -- | Rs. 5200-20200 Grade Pay - 1900 Basic – Rs. 8210 | 06.07.2006 | GEN |
| 14 | Driver | Mr. Santi Nath Pal | Driver– cum - mechanic | - | Rs. 5200-20200 Grade Pay - 1900 Basic – Rs. 8210 | 10.07.2006 | OBC |
| 15 | Supporting staff | Mr. Shyamal Bhanja | Supporting staff | Peon | Rs. 4440-7440 Grade Pay - 1300 Basic – Rs. 6430 | 25.02.2006 | GEN |
| 16 | Supporting staff | Mr. Anup Das | Supporting staff | Cook | Rs. 4440-7440 Grade Pay - 1300 Basic – Rs. 6430 | 01.03.2006 | SC |

### *1.6. Total land with KVK (in ha)* : 18 ha

| S. No. | Item | Area (ha) |
|---|---|---|
| 1 | Under Buildings | 3.5 |
| 2. | Under Demonstration Units | 2.5 |
| 3. | Under Crops | 7.0 |
| 4. | Orchard/Agro-forestry | 2.0 |
| 5. | Others (Ponds) | 3.0 |

### *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. | Administrative Building | ICAR | 31.03.09 | 552 | 60.09 lakhs | - | - | Completed |
| 2. | Farmers Hostel | ICAR | 29.11.08 | 306 | 23.36 lakhs | - | - | Completed |
| 3. | Staff Quarters (6) | ICAR | - | | | - | 400 | Under Construction |
| 4. | Demonstration Units (2) | - | - | - | - | - | - | - |
| 5 | Fencing | ICAR | 08.02.2007 | 925 m | 4.30 lac | - | - | - |

**B) Vehicles**

| Type of vehicle | Year of purchase | Cost (Rs.) | Kms. Run during the year | Total Kms. Run | Present status |
|---|---|---|---|---|---|
| TATA Sumo | 01.04.1999 | - | 22725 | 64600 since its possession from PSB, Shantiniketan on 08.05.2006 | In running condition |
| Tractor | 01.04.1999 | - | 177 hrs | 291 since its possession from PSB, Shantiniketan on 08.05.2006 | In running condition. |

**C) Equipments & AV aids**

| Name of the equipment | Year of purchase | Cost (Rs.) | Present status |
|---|---|---|---|
| Photo copier with stabilizer | 2006-07 | 49499.00 | In working condition |
| Flame photometer | 2006-07 | 29813.00 | In working condition |
| Spectrophotometer | 2006-07 | 46283.00 | In working condition |
| Shaker | 2006-07 | 20756.00 | In working condition |
| Hot air oven | 2006-07 | 5344.00 | In working condition |
| Hot plate | 2007-08 | 14000.00 | In working condition |
| Glass distillation unit | 2007-08 | 28000.00 | In working condition |
| Conductivity bridge | 2007-08 | 10000.00 | In working condition |
| pH meter | 2007-08 | 9563.00 | In working condition |
| Refrigerator | 2007-08 | 12350.00 | In working condition |
| Electronic balance | 2007-08 | 12375.00 | In working condition |
| Grinder | 2007-08 | 19500.00 | In working condition |
| Kjeldahl N analyser | 2008-09 | 250474.00 | In working condition |
| Generator | 2008-09 | 68000.00 | In working condition |
| FAX machine | 2008-09 | 12080.00 | In working condition |
| LCD projector | 2008-09 | 109000.00 | In working condition |
| Godrej Iron Chest | 2008-09 | 9360.00 | In working condition |

### *1.8. Details SAC meeting conducted in the year*

| S.N | Date | Number of Participants | Salient Recommendations | Action taken |
|---|---|---|---|---|
| 1. 6th SAC Meeting | 06.09. 2008 | 45 | • Collaborative approach should be followed to mitigate farmers' problem.<br>• Variety replacement with latest varieties in all field crops should be duly done.<br>• Soil test based fertilizer prescription should be followed compulsorily.<br>• Micronutrient should be tested in regular basis.<br>• Toxin analysis of feed stuff for cattle should be done.<br>• Participants of the trainings should be maintained at par their population percent of the district<br>• Seeds produced in the farm should be certified seeds<br>• KVK should give emphasis on the value addition of produce like rice or potato etc.<br>• Improved farm machineries should be demonstrated to the farmers<br>• Micro financing steps should be undertaken at self help groups or farmers club level | To be Followed |

*Proceedings of the Sixth proceeding of Scientific Advisory Committee of Krishi Vigyan Kendra, Burdwan, held on 6th September, 2008*- **See Annexure - I**

## 2. DETAILS OF DISTRICT (2008-09)

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

| S. No | Farming system/enterprise |
|---|---|
| 1. | Rice production system |
| 2. | Fishery |
| 3. | Poultry |
| 4. | Goatary |
| 5. | Duckery |
| 6. | Rice –vegetable-Rice production system |
| 7. | Jute-rice production system |

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

| S. No | Agro-climatic Zone | Characteristics |
|---|---|---|
| 1. | New Alluvium | Average annual rainfall 1300-1600 mm,<br>Soil type- sandy loam, clay and clay loam,<br>Soil depth 4-6 ft with medium to good water holding capacity,<br>Neutral to acidic soil with good fertility. |
| 2. | Old Alluvium | Average annual rainfall 1300-1500 mm,<br>Soil type- sandy loam and clay loam<br>Soil depth 4-6 ft with medium to good water holding capacity<br>Neutral to acidic soil with good fertility |
| 3. | Red and Lateritic | Average annual rainfall 1100-1400 mm,<br>Soil type- sandy loam, coarse in texture<br>Undulating land with low soil depth, sometimes hard layer present in sub surface<br>Medium to highly acidic soil |

(Source: Dept. of Agriculture, Govt. of W.B.)

| S. N | Agro ecological situation | Characteristics |
|---|---|---|
| 1. | Agro ecological sub region 12.3 under the AES 12.0 (Eastern Plateau) | I Chhotonagpur Plateau and Garhjat hills, hot dry sub humid ecosystem with red & laterite soils and LGP 150-180 days covering the blocks of Durgapur & Asansol. Main crops are, paddy, mustard, vegetables, pulse etc. The area covers 186154 ha |
| | | II. Moist and sub humid ecosystem with alluvial soil with LGP of 180-200 days covering the blocks of Burdwan (N), Burdwan (S), Kalna & Katwa, Main crops paddy, mustard, sesame, potato, jute, vegetables etc. The area covers 517532 ha |

(Source: NBSS&LUP (ICAR),, 2007, Nagpur )

### *2.3 Soil type/s*

| S. No | Soil type | Characteristics | Area in ha |
|---|---|---|---|
| 1. | Gangetic alluvial | Soil order is entisols. Sandy loam to clay loam, fine in texture, slightly acidic to neutral in reaction. Rich in potash and medium to rich in available plant nutrients. | 206423 |
| 2 | Vindhya alluvial | Soil order is entisol Sandy loam to clay loam, fine to moderate coarse in texture, acidic to neutral in reaction. | 311000 |
| 3 | Red and Lateritic | Soil orders are mainly alfisol and ultisol. Coarse gritty soil blended with rock fragment, mainly acidic in nature, reddish in color due to high level of iron, low in nitrogen, calcium, phosphate and other plant nutrient. | 186054 |

(Source: Dept. of Agriculture, Govt. of W.B., 2006)

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

| S. No | Crop | Area ('000 ha) | Production ('0000 q) | Productivity (q/ha) |
|---|---|---|---|---|
| 01 | Aus paddy | 14.6 | 44.6 | 30.47 |
| 02 | Aman pady | 417.2 | 1365.5 | 32.73 |
| 03 | Boro paddy | 207.2 | 558.4 | 26.95 |
| 04 | Wheat | 2.2 | 4.8 | 21.99 |
| 05 | Pulses | 1.3 | 1.1 | 8.80 |
| 06 | Oilseeds | 42.0 | 42.1 | 10.01 |
| 07 | Jute & other fibres ** | 15.5 | 282.8 | 18.7 |
| 08 | Potato | 43.4 | 921.2 | 212.49 |
| 09 | Chilli (dry) | 2.6 | 3.7 | 14.13 |
| 10 | Ginger | 0.1 | 0.3 | 18.87 |

** Production in 1000 bales of 180 kg each & productivity in bales/ha

(Source: District statistical handbook, 2006, Bureau of Applied Economics & Statistics, Govt. of West Bengal)

## 2.5. *Weather data (Avg. of 5 years)*

| Month | Rainfall (mm) | Temperature $^0$ C | | Relative Humidity (%) |
|---|---|---|---|---|
| | | Maximum | Minimum | |
| April | 72.9 | 30.8 | 17.1 | 88 |
| May | 84.0 | 34.2 | 18.2 | 87 |
| June | 23.8 | 33.2 | 17.3 | 85 |
| July | 280.0 | 28.4 | 19.3 | 89 |
| August | 234.2 | 34.0 | 24.0 | 91 |
| September | 201.2 | 34.0 | 23.0 | 88 |
| October | 156.3 | 33.4 | 20.6 | 86 |
| November | 7.9 | 31.0 | 16.7 | 85 |
| December | 5.0 | 31.0 | 11.2 | 79 |
| January | 16.2 | 25.2 | 6.9 | 76 |
| February | 8.8 | 28.6 | 10.7 | 78 |
| March | 25.8 | 32.2 | 12.9 | 81 |

(Source: Agricultural Directorate, Burdwan Dist, 2003-07)

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

| Category | Population | Production | Productivity |
|---|---|---|---|
| **Cattle** | | | |
| *Crossbred* | 182149 | 464080 tonnes milk | 280 kg milk /year |
| *Indigenous* | 1473755 | | |
| **Buffalo** | 127539 | -- | -- |
| **Sheep** | | | |
| Crossbred | | | |
| *Indigenous* | 140873 | 61.887 kg (wool) | |
| **Goats** | 127184 | 4000 MT (meat) | |
| **Pigs** | | | |
| *Crossbred* | | | |
| *Indigenous* | 120994 | 420 MT (Meat) | |
| Rabbits | | | |
| **Poultry** | | | |
| Hens | | | |
| *Desi* | 3141669 | 2672.40 lakh egg | 85 no. eggs/year |
| *Improved* | | | |
| **Ducks** | 1835094 | | |
| Turkey and others | 27981 | | |

(Source: Livestock population, W.B., Animal Resources Development Department, 2006)

| Category | Area (ha) | **Production** (t) | **Productivity** (kg/ha) |
|---|---|---|---|
| **Fish** | | | |
| *Marine* | | | |
| *Inland* | 50448.19 | 36029.787 | 3250 |
| Prawn | | | |

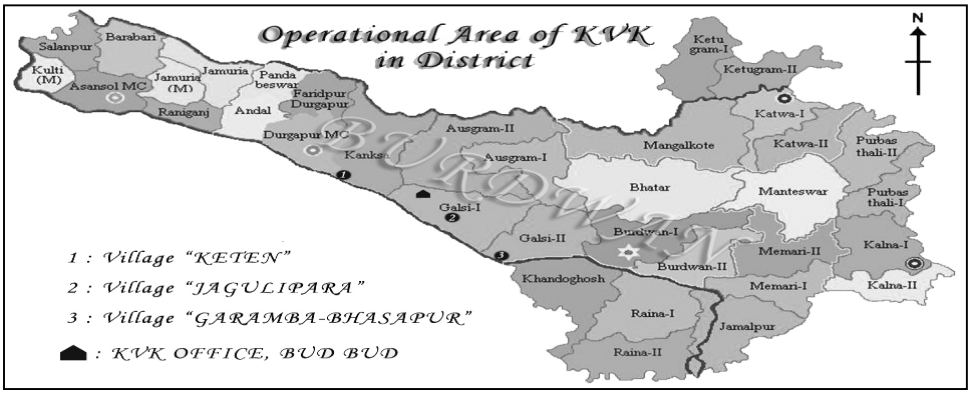
**(**Source: Annual report, 2007, Office of the Assistant Director of Fisheries, Meen bhavan, Burdwan)

## 2.7 *Details of Operational area / Villages (2008-09)*

| S.N | Taluk | Name of the block | Name of the village | Major crops & enterprises | Major problem identified | Identified Thrust Areas |
|---|---|---|---|---|---|---|
| 1 | Durgapur | Kanksa | Keten (Ghosh para, Bauri para and Pan para) | Paddy, potato, mustard, sesame, lentil, vegetable, cattle, poultry, duck, goat, fish | ***Bio-physical*** **Low productivity of all major crops** • Non-availability of quality seed / planting materials • Marginal soil • Limited water resources for irrigation • Indiscriminate and inappropriate use of chemical fertilizer **Inadequate descriptive/prolific breed of livestock** **Poor feed resources** ***Socio- economic*** **Lack of credit facilities** **Lack of awareness regarding good agronomic /husbandry practices** **Very restricted livelihood option** | • Integration of good agronomic practices • Providing quality seeds/planting materials • Diversification of land use • Soil health management like organic farming etc. • Livestock productivity improvement and health care • Efficient utilization of water bodies • Entrepreneurship development |
| 2 | Durgapur | Galsi-1 | Jaguli para (Mollapara and Bauripara) | Kharif Paddy, boro paddy, mustard, cattle, poultry, duck, goat, fish | ***Bio-physical*** **Low productivity of all major crops** • Non-availability of quality seed materials • High cost involvement for major crops • Indiscriminate and inappropriate use of chemical fertilizers • Low input of organics & biofertiliser **Lesser extent of crop diversification** **Low productivity of livestock & poultry** **Poor feed resources** ***Socio-economic*** • Lack of credit facilities • Inadequate house hold income generation | • Providing quality seeds/planting material • Diversification of land use • Entrepreneurship development • Organic farming • Health care • Improvement of women led vocations • Popularization of balanced feeding practices |
| 3. | Burdwan North | Galsi-II | Garamba-Bhasapur | Aus paddy, kharif paddy, jute, potato, mustard, vegetable cattle, poultry, Goat, fish | | |

## 2.8 *Priority thrust areas*

| S. N | Thrust area |
|---|---|
| 1 | Integration of good agronomic practices for cultivation of field and vegetable crops for vertical agricultural growth |
| 2 | Production of quality seeds/planting materials for major agricultural crops like rice, jute, mustard and vegetable and fruit crops |
| 3 | Diversification of land use through cultivation of vegetables and other horticultural crops |
| 4. | Soil health management like organic farming etc. |
| 5. | Livestock productivity improvement and health care |
| 6. | Efficient utilization of water bodies through composite fish culture and improved management practices |
| 7. | Entrepreneurship development for family income generation |



7. **TECHNICAL ACHIEVEMENTS**

***3.1. A. Abstract of interventions undertaken***

| S N | Thrust area | Crop/ Enterprise | Identified Problem | Interventions | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | **Title of OFT if any** | **Title of FLD if any** | **Title of Training if any** | **Title of training for extension personnel if any** | **Extension activities** | **Supply of seeds, planting materials etc.** |
| 1. | Improved agronomic practice | Mustard | Low yield | • Assessment of performance of Sulphur on productivity of mustard under rainfed and medium to low land situation of Burdwan district | Package demonstration on mustard | • Improved production technology of mustard<br>• Disease and insect management of mustard | • Improved fertilizer management in oil seed & pulses to augment productivity | - | Certified seed of var. B-9, Fertilizers, plant protection chemicals |
| | | Jute | High cost and low yield | -- | Improved package demonstration of jute | • Improved production technology of jute<br>• Weed management of jute<br>• Insect & pest management of jute<br>• Use of fibre extractor in fibre extraction | - | Field day, method demonstration | Certified seed of JRO 524, Fertilizer & PPC |
| | | Paddy | Low yield | • Assessment of performance of kharif rice productivity through judicious nutrition under medium to low land situation of Burdwan district<br>• Assessment of selective chemical measures for controlling stem borer in Kharif paddy in Burdwan district | Package demonstration of paddy | • Integrated Nutrient management<br>• Paddy seed production<br>• Pest and disease management of paddy<br>• Utilization of biofertiliser for kharif rice | -- | -- | Certified seed of MTU 7029, biofertilizers |

| S N | Thrust area | Crop/ Enterprise | Identified Problem | Interventions | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | **Title of OFT if any** | **Title of FLD if any** | **Title of Training if any** | **Title of training for extension personnel if any** | **Extension activities** | **Supply of seeds, planting materials etc.** |
| | | Potato | Low yield | • Evaluation of nutrient management in potato in Burdwan | Disease management of potato | • Seed tuber treatment of potato<br>• Production problems of potato and their management<br>• Identification of major diseases of potato & their control | -- | -- | PPC |
| | | Brinjal | Low yield, high pest infestation | Assessment of IPM and chemical measures against fruit and shoot borer, phomopsis blight and bacterial wilt of brinjal | Disease management of brinjal | • Management of Phomopsis blight in brinjal | Third generation pesticides: towards better crop production | -- | Seedling, PPC |
| | | Chili | -- | -- | -- | Improved production technology of chilli | -- | -- | -- |
| | | Okra | -- | -- | -- | Improved production technology of okra | -- | -- | -- |
| | | Cucurbits | -- | -- | -- | Improved production technology of cucurbits | -- | -- | -- |

| S N | Thrust area | Crop/ Enterprise | Identified Problem | Interventions | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Title of OFT if any | Title of FLD if any | Title of Training if any | Title of training for extension personnel if any | Extension activities | Supply of seeds, planting materials etc. |
| 2. | Production of quality seeds/planting materials | Paddy | Lack of quality seeds | -- | -- | Seed production of paddy | | -- | TL seed of MTU 7029, CR 1010 |
| | | Vegetable seedling | Lack of quality materials | -- | -- | Nursery management in vegetable crops | Seed production techniques of major vegetable cops | -- | Improved var. of tomato and brinjal, Arka Anamika of okra |
| | | Gladiolus | Lack of quality materials | | | Production technology of gladiolus | - | - | Corms and cormlets |
| 3. | Crop diversification | Rice bean (Fodder) | -- | -- | Package demonstration | Cultivation techniques of rice bean | - | Field day | Seed of Bidhan 1, biofertilizer |
| | | kitchen garden | -- | Supplementation of diversified vegetables to farm families through kitchen garden | -- | Management of nutrition garden | - | Farm school | Seeds of different vegetables |
| | | Tissue culture banana | -- | -- | -- | -- | -- | -- | TCB planting material |

| S N | Thrust area | Crop/ Enterprise | Identified Problem | Interventions | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | **Title of OFT if any** | **Title of FLD if any** | • **Title of Training if any** | •**Title of training for extension personnel if any** | **Extension activities** | **Supply of seeds, planting materials etc.** |
| 4. | Soil health management | Paddy | -- | | - | • Vermicompost production technology<br>• Need for soil testing and soil test based fertilizer application<br>• Sustainable restoration of soil health & importance of soil testing<br>• NADEP compost production<br>• Integrated nutrient management for enhancement of paddy productivity and better soil health<br>• | •Vermicompost production technology | -- | Biofertiliser/ vermicompost |
| | Livestock productivity improvement | Cattle | Low milk yield and infertility; disease prevalence | Evaluation of performance of supplemented feeding in lactating deshi cow in Burdwan district | Feed management in lactating cow | • Care of new born calf<br>• Cattle shed management and sanitation<br>• Cultivation of maize as fodder<br>• Feeding techniques of mineral mixture for dairy cattle<br>• Home made cattle feed preparation | Vaccination schedule for ruminants | Health camp on FMD | Mineral Mixture, feed and vaccine of FMD |

| S N | Thrust area | Crop/ Enterprise | Identified Problem | Interventions | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | **Title of OFT if any** | **Title of FLD if any** | **Title of Training if any** | **Title of training for extension personnel if any** | **Extension activities** | **Supply of seeds, planting materials etc.** |
| 5. | | Goats and sheep | Malnutrition of doe | Assessment of strategic supplementation for pregnant doe in Burdwan district | PPR disease prevention | • Feeding practice of doe<br>• Care of new born kids<br>• Care of doe during pregnancy<br>• Preventive measures against PPR | Techniques of biological specimen collection and precaution | Vaccination camp against PPR & Goat Pox | Feed and vaccine of PPR & Goat Pox |
| | | Poultry (Hen) | Poor egg production | | | • Integrated farming | -- | Vacc. camp against RD | High laying capacity chicks and vaccine of RD |
| | | Duck | Poor egg production | | | • Vaccination schedule of ducks<br>• Khaki Campbell duck rearing | -- | Vacc. camp against DP | Ducklings and vaccine of DP |
| 6. | Efficient use of water bodies through fish culture | IMC | Poor fish production | Evaluation of formulated feed for increasing fish productivity under pond ecosystem of Burdwan | Management of minor carp (*Labeo bata)* | • Nutrient management in freshwater fish ponds<br>• Nutritional requirement of IMC<br>• Feed formulation & management of IMC<br>• Preparation and management of nursery pond<br>• Aquatic weeds and algal blooms in fish ponds, their control and utilization<br>• Rearing pond preparation and management.<br>• Application of lime in fish culture<br>• Feed formulation & feed management of IMC<br>• Integrated duck-cum-fish farming in back yard pond | Sustainable aquaculture | **Farm school** | Fish fry and advanced fingerling of IMC, cowdung |
| 7. | Entrepreneurship development | Rural crafts | Lack of skill | -- | -- | • Preparation of Jute handicrafts<br>• Preparation of kantha stitch | -- | **Farm school** | Raw materials |
| | | Mushroom | Lack of knowledge and skill | -- | Production of oyster mushroom | Mushroom cultivation practices | -- | -- | Spawn |

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

**(Total number of OFT conducted – 10 Nos.)**

**OFT 1:**

| | | |
|---|---|---|
| 1 | Title of On farm Trial | **Assessment of performance of Sulphur on productivity of mustard under rainfed and medium to low land situation of Burdwan district** |
| 2 | Problem diagnose | Low productivity of mustard is due to abuse of nutrient mainly sulphur |
| 3 | Details of technologies selected for assessment/ refinement | **Farmers' practice:** (60: 60: 45 kg NPK/ha through DAP, urea and MOP)<br>**Technology - 1 to be assessed**: 80: 40: 40: 30 kg NPKS/ha through urea, SSP and MOP<br>**Technology - 2 to be assessed**: 80: 40: 40: 26 kg NPKS/ha through urea, 20:20:0:13 and MOP<br>**Technology - 3 to be assessed**: 80: 40: 40: 20 kg NPKS/ha through urea, 10:26:26 and elemental Sulphur |
| 4 | Source of Technology | B.C.K.V., Kalyani |
| 5 | Production system and thematic area | Rainfed rice based production system ; Nutrient management |
| 6 | Performance of the Technology with performance indicators | Application of SSP, 20:20:0:13 or elemental S resulted in significantly higher productivity as compared to FP and were more cost effective. However the use of different doses of S did not resulted in significant differences in productivity among themselves which may be attributed to the use of different sources of S. |
| 7 | Final recommendation for micro level situation | In case of non availability of SSP, farmers should use 20:20:0:13 or elemental S in recommended quantity |
| 8 | Constraints identified and feedback for research | Single Super Phosphate should be made more available, since apart from meeting the S requirement it also contains Ca and Mg in significant quantity |
| 9 | Process of farmers participation and their reaction | Through training and field level demonstration.<br>Farmers were satisfied with the performance of the technology. |

**OFT 2:**

| | | |
|---|---|---|
| 1 | Title of On farm Trial | **Assessment of performance of kharif rice productivity through judicious nutrition under medium to low land situation of Burdwan district** |
| 2 | Problem diagnose | It is observed that a gradual decline in productivity of rice due to non use of organics |
| 3 | Details of technologies selected for **assessment**/ refinement | **Farmers' practice**: (60:60:45 kg NPK/ha through DAP, urea and MOP)<br>**Technology - 1 to be assessed:** Recomm. dose of fertilizer (80: 40:40 kg NPK/ha)<br>**Technology - 2 to be assessed:** 75% recomm. dose + Sesbania (in situ ) *<br>**Technology - 3 to be assessed:** 75% recomm. dose + vermicompost |
| 4 | Source of Technology | PAU, Ludhiana |
| 5 | Production system and thematic area | Rainfed rice based production system ; Nutrient management |
| 6 | Performance of the Technology with performance indicators | Rice is the predominantly major crop of Burdwan. Nutrient management practices among farmers are grossly unbalanced and without use of organics in most cases. Application of 75% recommended dose + sesbania and application of 75% recommended dose + vermicompost significantly improved rice yield over recommended dose and farmers' practice and was more cost effective. |
| 7 | Final recommendation for micro level situation | Farmers should use organic sources of nutrient either sesbania or vermicompost. The former is more cost effective than the later. Farmers are also recommended to have their own vermicompost production units so that they can diminish the cost of production |
| 8 | Constraints identified and | Govt. should ensure adequate supply of sesbania seed to the farmers |

| | | |
|---|---|---|
| | feedback for research | and further research is needed to produce more nutrient enriched vermicompost. |
| 9 | Process of farmers participation and their reaction | Through training and field level demonstration.<br>Farmers were satisfied with the performance of the technology |

**OFT 3:**

| | | |
|---|---|---|
| 1 | Title of On farm Trial | **Assessment of IPM and chemical measures against fruit and shoot borer, phomopsis blight and bacterial wilt of brinjal** |
| 2 | Problem diagnose | Several insect, pest and disease invasion is one of the prime factors for low productivity in brinjal. |
| 3 | Details of technologies selected for assessment/ refinement | • **Farmers' practice**<br>• **Technology - 1 to be assessed: Selective chemicals**<br>• **Technology - 2 to be assessed: IPM approach** |
| 4 | Source of Technology | B.C.K.V., Kalyani |
| 5 | Production system and thematic area | Medium land under irrigated condition, Integrated management of important pest and diseases |
| 6 | Performance of the Technology with performance indicators | Better than the conventional in respect to yield, % pest and disease infestation and % disease index |
| 7 | Final recommendation for micro level situation | Farmers should adopt IPM approach as it is cost effective |
| 8 | Constraints identified and feedback for research | Difficulty in handling with so many IPM components |
| 9 | Process of farmers participation and their reaction | Through training and field level demonstration. They were convinced about the positive results IPM |

**OFT 4:**

| | | |
|---|---|---|
| 1 | Title of On farm Trial | **Evaluation of nutrient management in potato in Burdwan** |
| 2 | Problem diagnose | Most of the cases potato growers in Burdwan Dist. apply excess amount of fertilizers irrespective of soil availability to get higher yield. Such practice for years leads to deterioration of soil health, stagnant productivity and ultimately poor economy. |
| 3 | Details of technologies selected for **assessment**/ refinement | **Farmers' practice:** (240: 240: 240 NPK per ha through 10:26:26, urea)<br>**Technology - 1 to be assessed:** Recommended dose (200:150:150 NPK per ha through urea, SSP and MOP)<br>**Technology - 2 to be assessed:** Soil test based fertilization (200:150:125 NPK per ha through urea, SSP and MOP) |
| 4 | Source of Technology | B.C.K.V., Kalyani |
| 5 | Production system and thematic area | Medium land under irrigated condition, proper dose of fertilizers based on soil test data beneficial for maintaining soil health with better yield and economy |
| 6 | Performance of the Technology with performance indicators | Better than the conventional in respect to yield , economy and restoration of soil health |
| 7 | Final recommendation for micro level situation | Farmers should apply fertilizers on soil test basis |
| 8 | Constraints identified and feedback for research | Lack of soil testing facility |
| 9 | Process of farmers participation and their reaction | Through training and field level demonstration. They were convinced about the positive results of soil test based fertilizers application in potato. |

**OFT 5:**

| | | |
|---|---|---|
| 1 | Title of On farm Trial | **Assessment of strategic supplementation for pregnant doe in Burdwan district** |
| 2 | Problem diagnose | Mal-nutrition of pregnant doe (Breed- Bengal Goat) leads to production of under -weight kid |
| 3 | Details of technologies selected for **assessment**/refinement | **Farmers' practice** (only grazing and used to offer kitchen waste )<br>**Technology - 1 to be assessed:** Feeding of homemade concentrate* @ 50 gm/day/goat from 120 days of gestation to parturition<br>**Technology - 2 to be assessed:** Feeding of homemade concentrate* @ 50gm/day/goat from 90 days of gestation to parturition |
| 4 | Source of Technology | West Bengal University of Animal and Fishery Sciences, Kolkata |
| 5 | Production system and thematic area | Semi intensive goat based production system ; nutrition management |
| 6 | Performance of the Technology with performance indicators | Daily supplementation of homemade feed @50 gm per pregnant doe from 90 days of gestation to parturition gave better results in term of weight of kid in compare to traditional practice. |
| 7 | Final recommendation for micro level situation | Supplementation of 50g homemade feed in pregnant doe of Bengal breed from 90 days of gestation to parturition is advisable for production of healthy kid. |
| 8 | Constraints identified and feedback for research | Rat creates problem in storage of feed in farmers field; subsequent growth of kid after birth is faster than kid born under traditional practice. |
| 9 | Process of farmers participation and their reaction | Through training and group discussion;<br>Farmers able to minimize the productive losses through strategic supplementation of pregnancy allowance |

**OFT 6:**

| | | |
|---|---|---|
| 1 | Title of On farm Trial | **Evaluation of performance of supplemented feeding in lactating deshi cow in Burdwan district** |
| 2 | Problem diagnose | Poor milk yield in deshi cow is due to imbalanced feed supplementation |
| 3 | Details of technologies selected for **assessment**/refinement | **Farmers' practice:** (Feeding of rice polish (1-2 kg), 5-6 kg soaked straw and grazing)<br>**Technology 1 to be assessed:** Farmers' practice + soaked oil cake (0.5 kg) (locally available)<br>**Technology 2 to be assessed:** Farmers' practice + concentrate home made feed * (1kg) |
| 4 | Source of Technology | IVRI, Izatnagar |
| 5 | Production system and thematic area | Cattle based under semi intensive system ; Nutrition management |
| 6 | Performance of the Technology with performance indicators | Homemade feed was formulated by using broken wheat-30 %, mustard oil cake-25 %, rice husk-42 % mineral mixture-2% and common salt- 1%. It was supplemented @ 1 kg daily in lactating deshi cow. Milk yield was significantly increased with enhancement of lactation period in supplemented group |
| 7 | Final recommendation for micro level situation | Daily supplementation of homemade cattle feed @ 1kg/day/head cow should be followed for increasing lactation yield in deshi cow |
| 8 | Constraints identified and feedback for research | Thorough mixing of feed ingredients is time consuming ;<br>Feed should be used within one month for better efficiency |
| 9 | Process of farmers participation and their reaction | Through training , health camp and group discussion<br>Feed intake by cattle is increased and quality of milk is improved |

**OFT 7:**

| | | |
|---|---|---|
| 1. | Title of On farm Trial | **Evaluation of formulated feed for increasing fish productivity under pond ecosystem of Burdwan** |
| 2 | Problem diagnose | Poor fish productivity in domestic small and medium sized ponds due to improper feed management |
| 3 | Details of technologies selected for **assessment**/refinement | **Farmers' practice :** (Stocking density 7500 nos. fish/ha) without any application of feed<br>**Technology - 1 to be assessed:** Stocking density 7500 nos. fish/ha + Formulated feed*@ 1 % of total fish biomass<br>**Technology - 2 to be assessed:** Stocking density 7500 nos. fish/ha + + Formulated feed* @ 3 % of total fish biomass |
| 4 | Source of Technology | CIFA (BBSR) |
| 5 | Production system and thematic area | Extensive fish based production system , feed management |
| 6 | Performance of the Technology with performance indicators | Considering the length, weight and yield , feed application @ 3 % of tltal fish biomass appeared to be more efficient among all options |
| 7 | Final recommendation for micro level situation | feed application @ 3 % of tltal fish biomass appeared to be more efficient among all options |
| 8 | Constraints identified and feedback for research | Farmers are not aware of application of formulated feed and its impact. |
| 9 | Process of farmers participation and their reaction | Through training and awareness camp |

**OFT 8:**

| | | |
|---|---|---|
| 1 | Title of On farm Trial | **Supplementation of diversified vegetables to farm families through kitchen garden** |
| 2 | Problem diagnose | Two-three cucurbit plants in kitchen garden is practiced in village fail to supplement the farm families' vegetable requirement, leading to buy vegetables from market at a higher price. At the same time the land adjacent to the household become unutilized. |
| 3 | Details of technologies selected for **assessment**/ refinement | *Farmers' practice*( only cucurbits)<br>***Technology option 1*:** Diversified vegetables (cucurbits ,brinjal, chilli, tomato, okra, bean and GLV) without manuring<br>***Technology option 2*:** Diversified vegetables (cucurbits, brinjal, chilli, tomato, okra, bean and GLV) + Manuring |
| 4 | Source of Technology | ICAR |
| 5 | Production system and thematic area | Semi intensive, adjacent to the household , Increase production of the garden and nutritious vegetables improve diet of farm families |
| 6 | Performance of the Technology with performance indicators | Better than the conventional in respect to total yield and availability of diversified vegetables |
| 7 | Final recommendation for micro level situation | Diversified vegetables should be grown with good manuring |
| 8 | Constraints identified and feedback for research | Problem of grazing and availability of quality seed. Farm women were realizing the fact of supplementing the diversified vegetables for daily diet by doing kitchen gardening |
| 9 | Process of farmers participation and their reaction | Through training and awareness camp |

**OFT 9:**

| | | |
|---|---|---|
| 1 | Title of On farm Trial | **Evaluation of different storage structures for locally available and seasonal vegetables** |
| 2 | Problem diagnose | Spoilage of freshly harvested vegetables is a serious problem in the village. Farmers faces different problems due to rush selling of the vegetables still can not get the price for it. Cool storage can prolong the shelf life of fresh produce but refrigeration equipment is expensive to buy, run and maintain. |
| 3 | Details of technologies selected for assessment/ refinement | ***Farmers' practice*** i.e. storing the vegetables in the corner of the house or in bamboo basket.<br>***Technology option 1*****: Bamboo iceless refrigerator**<br>***Technology option 2*****: Zero energy cool chamber** |
| 4 | Source of Technology | ICAR |
| 5 | Production system and thematic area | Semi intensive, adjacent to the household or field , Reducing Post harvest losses by improving shelf life |
| 6 | Performance of the Technology with performance indicators | Better than the conventional in respect to storage temperature and shelf life |
| 7 | Final recommendation for micro level situation | Low cost storage structures should be used to keep the vegetable fresh fetching better price. |
| 8 | Constraints identified and feedback for research | Problem of Watering frequently, Farmers were made aware of Low cost storage structures to increase the shelf life of vegetables. |
| 9 | Process of farmers participation and their reaction | Through training and awareness camp |

**OFT 10:**

| | | |
|---|---|---|
| 1 | Title of On farm Trial | **Assessment of selective chemical measures for controlling stem borer in Kharif paddy in Burdwan district** |
| 2 | Problem diagnose | This is one of the major insects of Kharif paddy in this region causing heavy loss. |
| 3 | Details of technologies selected for assessment/ refinement | **Farmers' practice -:** Frequent use of Monocrotophos 36% E.C @ 750 ml/ha.<br>**Technology 1 to be assessed :** Phorate 10 G @12.5 Kg/ha at seed bed, + Spray with Cartap 50 % SP @ 800 g/ha in PI stage+ Spray with Fipronil 5% SC @ 1000 ml/ha in flowering stage and repeat of spray 10 days later.<br>**Technology 2 to be assessed :** Carbofuran 3 G @ 33 kg/ha at seed bed, 5 to 7 days before pulling the seedling for transplanting + Application of Cartap 4 G @ 25 kg/ha in planting to panicle initiation stage + Spray with Cartap 50 % SP @ 800 g/ha in panicle initiation to flowering stage + Spray with Acephate 75% SP @ 750 ml/ha in flowering stage. |
| 4 | Source of Technology | DRR, Hyderabad |
| 5 | Production system and thematic area | Rainfed rice based production system; disease management |
| 6 | Performance of the Technology with performance indicators | Application of carbofuran along with cartap and acephate gave better results |
| 7 | Final recommendation for micro level situation | Farmers are recommended to use tech 1 |
| 8 | Constraints identified and feedback for research | Nil |
| 9 | Process of farmers participation and their reaction | Training and group discussion |

### *3.1. C. Results of On Farm Trials*

**OFT 1**

| Crop/ enterprise | Farming situation | Problem Diagnosed | Title of OFT | No. of trials * | Technology Assessed | Parameters of assessment | Data on the parameter | Results of assessment | Feedback from the farmer | Any refinement done | Justification for refinement |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Mustard | Medium upland to lowland | Low yield of mustard | Assessment of performance of Sulphur on productivity of mustard under rainfed and medium to low land situation of Burdwan district | 5 | Nutrient management | • Yield attributing characters<br>• Yield<br>• Economics | See table 1 | Productivity of mustard increased with application of Sulfur | Single super phosphate should be made more available | No | |

| Technology Assessed | Production per unit (q/ha) | Net Return (Profit) in Rs. / ha | B:C Ratio (Gross return: Gross cost) |
|---|---|---|---|
| 13 | 14 | 15 | 16 |
| Farmers' practice: (60: 60: 45 kg NPK/ha through DAP | 9.91 | 3595 | 1.22 |
| Technology - 1 to be assessed: 80: 40: 40: 30 kg NPKS/ha through urea, SSP and MOP | 12.45 | 8320 | 1.50 |
| Technology - 2 to be assessed: 80: 40: 40: 26 kg NPKS/ha through urea, 20:20:0:13 and MOP | 13.25 | 9660 | 1.57 |
| Technology - 3 to be assessed: 80: 40: 40: 20 kg NPKS/ha through urea, 10:26:26 and elemental sulphur | 13.56 | 10020 | 1.59 |

Results:

*Table 1*

| Treatment | Plant height (cm) | No. of siliqua / plant | No. of seed /pod | Yield * (q/ha) | Input cost (Rs/ha) | Gross return (Rs/ha) | B:C ratio |
|---|---|---|---|---|---|---|---|
| FP | 98.5 | 92.3 | 12 | 9.91 | 16225 | 19820 | 1.22 |
| TO1 | 114.6 | 112.5 | 16 | 12.45 | 16580 | 24900 | 1.50 |
| TO2 | 116.8 | 116.2 | 19 | 13.25 | 16840 | 26500 | 1.57 |
| TO3 | 115.2 | 117.5 | 18 | 13.56 | 17100 | 27120 | 1.59 |
| LSD | 8.1* | 4.6** | 8.26* | 2.15* | -- | -- | -- |

The district of Burdwan is a minor oilseed producing district of West Bengal. Among the oilseed, mustard is the major one. Farmers do not get adequate yield owing to non scientific management practices especially nutrient management. They are oblivious of the necessity of application of S for oilseed like mustard. The object of the OFT was to show them the effectivity of S in augmenting productivity. Another problem the farmers face that due to scarce availability of SSP in the region they are forced to apply other fertilizers like DAP, 10:26:26 which do not contain S. Therefore the OFT was also aimed at showing the farmers that they can use other costly S containing fertilizers or elemental S profitably.

Application of SSP, 20:20:0:13 or elemental S resulted in significantly higher productivity as compared to FP and were more cost effective. However the use of different doses of S did not resulted in significant differences in productivity among themselves which may be attributed to the use of different sources of S.

**OFT 2**

| Crop/ enterprise | Farming situation | Problem Diagnosed | Title of OFT | No. of trials * | Technology Assessed | Parameters of assessment | Data on the parameter | Results of assessment | Feedback from the farmer | Any refinement done | Justification for refinement |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Rice | Medium upland to lowland | Application of fertilizer in an inappropriate and unbalanced manner and non use of organics | Assessment of performance of kharif rice productivity through judicious nutrition under medium to low land situation of Burdwan district | 5 | INM | • Yield attributing characters<br>• Yield<br>• Economics | See Table 2 | Farmers benefited equally through use of sesbania and vermicompost in comparison to conventional practice | Poor availability of sesbania seed and high cost of vermicompost | Nil | |

| Technology Assessed | *Production per unit (q/ha) | Net Return (Profit) in Rs. / ha | B: C Ratio (Gross return : cost) |
|---|---|---|---|
| **13** | **14** | **15** | **16** |
| Farmers practice (60:60:45 kg NPK/ha) | 38.56 | 13879 | 1.82 |
| TO1 : Recommended dose of fertilizer (80: 40:40 kg NPK/ha) | 42.15 | 16095 | 1.91 |
| TO2: 75% recommended dose + Sesbania (in situ ) * | **45.56** | 19417 | **2.14** |
| TO3: 75% recommended dose + vermicompost @ 2 tonnes/ha | **46.59** | 18647 | **2.00** |

Table 2:

| Technology options | Plant height (cm) | No. of effective tillers/hill | Panicle length (cm) | Yield * (q/ha) | Input cost (Rs./ha) | Gross return (Rs./ha) | B : C ratio |
|---|---|---|---|---|---|---|---|
| FP | 94.6 | 10.1 | 20.1 | 38.56 | 16969 | 30848 | 1.82 |
| TO1 | 102.5 | 12.2 | 25.2 | 42.15 | 17625 | 33720 | 1.91 |
| **TO2** | 112.3 | 14.6 | 28.6 | **45.56** | 17031 | 36448 | **2.14** |
| **TO3** | 114.5 | 15.0 | 29.3 | **46.59** | 18625 | 37272 | **2.00** |
| Average | 105.98 | 12.98 | 25.80 | 43.22 | 17563 | 34572 | 1.97 |
| LSD at 5% | 8.45 | 2.25 | NS | 2.98 | - | - | - |

Rice is the predominantly major crop of Burdwan. Nutrient management practices among farmers are grossly unbalanced and without use of organics in most cases. Application of 75% recommended dose + sesbania and application of 75% recommended dose + vermicompost significantly improved rice yield over recommended dose and farmers' practice and was more cost effective.

**OFT 3**

| Crop/ enterprise | Farming situation | Problem Diagnosed | Title of OFT | No. of trials * | Technology Assessed | Parameters of assessment | Data on the parameter | Results of assessment | Feedback from the farmer | Any refinement done | Justification for refinement |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Brinjal | Medium land under irrigated condition | Several insect, pest and disease invasion is one of the prime factors for low productivity in brinjal. | Assessment of IPM and chemical measures against fruit and shoot borer, phomopsis blight and bacterial wilt of brinjal | 7 | IPM | • Percentage pest and disease infestation.<br>• Yield<br>• Cost effectiveness. | See table 3 | Selective chemicals and IPM approach was more effective in controlling major pest and diseases of brinjal | IPM approach was more cost effective | No | |

| Technology Assessed | *Production per unit (q/ha) | Net Return (Profit) in Rs. / ha | B:C Ratio |
|---|---|---|---|
| 13 | 14 | 15 | 16 |
| Farmers' practice | 180 | 79100 | 2.21 |
| Technology - 1 to be assessed: Selective chemicals | 195 | 91450 | 2.41 |
| Technology - 2 to be assessed: IPM approach | 219 | 105900 | 2.52 |

**Farmerss' practice-**

- Phorate (10g/plant, after transplanting and again 45 DAT), Cypermethrin and Dithane M-45 (applied very frequently about 7-10 days interval)

**Technology - 1 to be assessed**

- Soil application of Carbofuran 3G @ 5g/plant
- Spray of carbosulfan
- Seedling treatment with Streptocycline.
- Foliar spray of Chlorothalonil.
- Foliar spray of Streptocycline

**Technology - 2 to be assessed** -

- Hot water seed treatment.
- Seedling treatment with Streptocycline
- Periodical removal & destruction of early infected fruit & shoots
- Alternate spray of neem based pesticides.
- Need based application of animal origin insecticide i.e., Spinosad.
- Foliar spray of Chlorothalonil

*Table 3: Effect of different treatment on control of* **fruit and shoot borer, phomopsis blight and bacterial wilt of brinjal**

| Treatment | Yield (q/ha) | % infestation of phomopsis blight | % affected fruits (Fruit and shoot borer) | % plant survival (Bacterial wilt) | Gross return | Net return | B:C ratio |
|---|---|---|---|---|---|---|---|
| FP | 180 | 30 | 29 | 91 | 144000 | 79100 | 2.21 |
| TO1 | 195 | 22 | 25 | 89 | 156000 | 91450 | 2.41 |
| TO2 | 219 | 18 | 13 | 93 | 175200 | 105900 | 2.52 |
| CD (0.05)<br>CD (0.01) | 1.96<br>2.53 | -- | -- | -- | -- | --- | -- |

Brinjal is highly infested with fruit shoot borer, phomopsis blight and wilt. Integrated approach was taken in this OFT to combine the target specific selected chemicals along with mechanical control measures. It had been found that periodical removal and destruction of infested fruit and shoot and alternate spray of neem pesticide and spinosad successfully managed fruit and shoot borer. Similarly hot water seed treatment and foliar spray of chlorothalonil was better than conventional practice for controlling phomopsis blight. Bacterial blight was not observed.

**OFT 4**

| Crop/ enterprise | Farming situation | Problem Diagnosed | Title of OFT | No. of trials * | Technology Assessed | Parameters of assessment | Data on the parameter | Results of assessment | Feedback from the farmer | Any refinement done | Justification for refinement |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Potato | Medium land under irrigated condition | Most of the cases potato growers in Burdwan Dist. apply excess amount of fertilizers irrespective of soil availability to get higher yield. Such practice for years leads to deterioration of soil health, stagnant productivity and ultimately poor economy. | Evaluation of nutrient management in potato in Burdwan | 7 | Soil test based fertilizers application | • Yield<br>• Weight of tuber/plant<br>• Cost effectiveness | See table 4 | Better than the conventional in respect to yield, economy and restoration of soil health | They were convinced about the positive results of soil test based fertilizers application in potato.. | No | |

| Technology Assessed | *Production per unit (q/ha) | Net Return (Profit) in Rs. / ha | B:C Ratio |
|---|---|---|---|
| 13 | 14 | 15 | 16 |
| Farmers' practice (240: 240: 240 NPK per ha through 10:26:26 and urea | 27.7 | 74495 | 2.49 |
| Technology - 1 to be assessed: Recommended dose (200:150:150 NPK per ha through urea, SSP and MOP | 28.4 | 79825 | 2.66 |
| Technology - 2 to be assessed: Soil test based fertilization (200:150:125 NPK per ha through urea, SSP and MOP | 28.3 | 79585 | 2.67 |

*Table 4 Effect of different nutrients on potato yield*

| Treatment | Weight of tuber/plant (g) | Yield (q/ha) | Gross return | Net return | B:C ratio |
|---|---|---|---|---|---|
| FP | 587.1 | 27.7 | 124650 | 74495 | 2.49 |
| TO1 | 614.4 | 28.4 | 127800 | 79825 | 2.66 |
| TO2 | 614.2 | 28.3 | 127350 | 79585 | 2.67 |
| CD (0.05) | 32.97 | 0.93 | | | |

Most of the cases potato growers in Burdwan Dist. apply excess amount of fertilizers irrespective of soil availability to get higher yield. Such practice for years leads to deterioration of soil health, stagnant productivity and ultimately poor economy. Application of fertilizers based on soil test data provides better yield (28.3 q/ha) and highest profit (B:C ratio: 2.67) in comparison to conventional practice.

**OFT 5**

| Crop/ enterprise | Farming situation | Problem Diagnosed | Title of OFT | No. of trials * | Technology Assessed | Parameters of assessment | Data on the parameter | Results of assessment | Feedback from the farmer | Any refinement done | Justification for refinement |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Goat | House hold farming with 4-6 goats of Bengal breed | Mal-nutrition of pregnant doe (Breed- Bengal Goat) leads to production of under -weight kid | Assessment of strategic supplementation for pregnant doe in Burdwan district | 7 | Strategic supplementation of pregnancy allowance | • Body weight of kid at birth<br>• Benefit cost ratio | See table 5 | Supplementation of homemade feed @ 50g/d/doe during 90 days post mating to parturition improved birth weight of kid with better survivability. | Most of beneficiaries expressed that body coat condition of pregnant doe was become very attractive and they received more healthy kids. | No | |

| Technology Assessed | *Production per unit (Avg. birth wt of kid) | Net Return (Profit) in Rs./ unit | BC Ratio |
|---|---|---|---|
| 13 | 14 | 15 | 16 |
| Farmers' practice (only grazing and used to offer kitchen waste ) | 842.86 | 78 | 1.86 |
| TO1: (Feeding of homemade concentrate @ 50 gm/day/goat from 120days of gestation to parturition ) | 1071.43 | 113 | 2.11 |
| TO2: (Feeding of homemade concentrate @ 50gm/day/goat from 90 days of gestation to parturition) | 1250.00 | 136 | 2.19 |

*Table 5 Effect of supplemented feeding during pregnancy on birth weight of kid*

| Technologies* | Birth wt of kid (g/kid) |
|---|---|
| FP | 842.86c |
| TO1 | 1071.43b |
| TO2 | 1250.00a |

a b c values with different superscripts differ significantly (P<0.05).

**Technology details including farmers' practice**

**Farmers' practice** :Grazing and feeding kitchen waste

**Technology - 1 to be assessed:** Feeding of homemade concentrate* @ 50 gm/day/goat from 120 days of gestation to parturation

**Technolog - 2 to be assessed:** Feeding of homemade concentrate* @ 50gm/day/goat from 90 days of gestation to parturition

* The homemade concentrate is composed of 1/3 part cereal grain, 1/3 part oil cake, 1/3 part cereal byproducts, salt and mineral mixture with vitamins Homemade feed goat concentrate was prepared with broken wheat-30 %, mustard oil cake -30 %, rice polish- 37 %, salt-1% and mineral mixture-2 % . Concentrate was supplemented @ 50 gm/day in pregnant doe of Bengal breed in wet form. Strategic supplementation of pregnancy allowance during the last two months of gestation was significantly better in term of birth weight of kids.

**OFT 6**

| Crop/ enterprise | Farming situation | Problem Diagnosed | Title of OFT | No. of trials* | Technology Assessed | Parameters of assessment | Data on the parameter | Results of assessment | Feedback from the farmer | Any refinement done | Justification for refinement |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Cattle | House hold farming with 2-4 deshi cattle under traditional feeding practices | Poor milk yield in deshi cow is due to imbalanced feed supplementation | Evaluation of performance of supplemented feeding in lactating deshi cow in Burdwan district | 7 | Supplemented feeding | • Milk Yield<br>• Lactation period | See table 6 | Milk yield was significantly increased with enhancement of lactation period by supplementing homemade feed @ 1kg/ day | Feed intake by cattle was increased and quality of milk was improved | No | |

| **Technology Assessed** | ***Production per unit** (Avg. milk yield in Kg/ lactation/cow) | **Net Return (Profit) in Rs. (one cow/lactation)** | **B:C Ratio (Gross return : cost)** |
|---|---|---|---|
| **13** | **14** | **15** | **16** |
| Farmers' practice: Feeding of rice polish (1-2 kg), soaked straw (5-6 kg) and grazing | 235 | 85 | 1.02 |
| TO1= Farmers' practice + soaked oil cake (0.5 kg) (locally available) | 421.92 | 1849 | 1.37 |
| TO2= Farmers' practice + concentrate home made feed * (1kg) | 561.14 | 3151 | 1.54 |

**Table 6 Effect of different technology options on milk yield and lactation day.**

| Treatment | Milk yield ( kg/ lactation ) | Lactation day |
|---|---|---|
| FP | 235c | 180b |
| TO1 | 421.92b | 202a |
| TO2 | 561.14 a | 215a |

a b c values with different superscripts in a row differ significantly ($p<0.05$).

Home made cattle feed was formulated by using locally available feed ingredients like broken wheat -30 parts, mustard oil cake-25 parts, rice husk-40 parts, rice bran- 2 parts, common salt-1 part and mineral mixture- 2 parts. It was supplementation in lactating deshi cow under farmers management condition @ 1kg/ day/cow. Milk yield was significantly increased in supplemented group with homemade feed . Lactation day was also enhanced significantly in compare to farmers' practice but no difference was observed between oilcake supplemented and homemade feed supplemented groups.

**OFT 7**

| Crop/ enterprise | Farming situation | Problem Diagnosed | Title of OFT | No. of trials * | Technology Assessed | Parameters of assessment | Data on the parameter | Results of assessment | Feedback from the farmer | Any refinement done | Justification for refinement |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Fish | Medium or small sized domestic water bodies | Less or no feeding practices, leading to poor fish productivity in domestic small and medium sized ponds. | Evaluation of formulated feed for increasing fish productivity under pond ecosystem of Burdwan | 7 | Feed prepared locally available materials etc. | Length data<br>Yield performance | see table 7 | Application of feed is very much necessary for better growth rate of fish and sustainable higher production from small and semi-medium domestic ponds. | Farmers are made aware of the application of formulated feed in fish culture | No | NA |

| 13 | 14 | 15 | 16 |
|---|---|---|---|
| | **Production per unit area of pond/ annum (t/ha)** | **Net Return in Rs. ha$^{-1}$** | **B:C Ratio (Gross return : cost)** |
| **Farmers' practice :** (Stocking density 7500 nos. fish/ha) without any application of feed | 0.90 | 12117 | 1.37 |
| **Technology – 1 to be assessed:** Stocking density 7500 nos. fish/ha + Formulated feed*@ 1 % of total fish biomass | 1.36 | 22949 | 1.68 |
| **Technology – 2 to be assessed:** Stocking density 7500 nos. fish/ha + + Formulated feed* @ 3 % of total fish biomass | 1.90 | 30128 | 1.88 |

Trial was conducted on standardization of different doses of cowdung application for increasing productivity freshwater ponds by culturing IMC.

FP= Farmers' practice (Stocking density 7500 nos fish/ha) without application of feed

TO1= Stocking density 7500 nos fish/ha + Formulated feed*@ 1 % of total fish biomass in each replication.

TO2= Stocking density 7500 nos fish/ha + Formulated feed*@ 1 % of total fish biomass in each replication.

*Formulated feed made by locally available feed ingredients (Mustard Oil

Farmers generally apply feed material made from locally available resources of that area. Feed was applied at the rate recommended at different research institutes.

Table – 7: Effect of formulated feed on fish production

| *Table:* Treatment | Length of fish (cm) | Yield (Qt/ha) |
|---|---|---|
| FP | 9.40±0.83$^{c}$ | 9.02±0.02$^{c}$ |
| TO1 | 14.02±0.64$^{b}$ | 13.61±0.03$^{b}$ |
| TO2 | 18.92±0.41$^{a}$ | 19.02±0.03$^{a}$ |

*Treatments are significantly different at 5% levels.

Objectives: To study the growth rate and yield performance of IMC fish in that particular pond ecosystem
Results obtained indicated that by optimizing feed application, which was previously not applied, increased the productivity . The OFT revealed that application of formulated feed gave the best result when applied @ 3 % of total biomass of fish.

**OFT 8:**

| Crop/ enterprise | Farming situation | Problem Diagnosed | Title of OFT | No. of trials* | Technology Assessed | Parameters of assessment | Data on the parameter | Results of assessment | Feedback from the farmer | Any refinement done | Justification for refinement |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Kitchen garden | Semi intensive, adjacent to the household | Two-three cucurbit plants in kitchen garden Which is practised in village fail to supplement the farm familiys' vegetable requirement, leading to buy vegetables from market at a higher price. At the same time the land adjacent to the household become unutilized. | Supplementation of diversified vegetables to farm families through kitchen garden | 7 | Crop diversification and Nutrient management | Total yield (component wise) Incorporation of vegetables in daily diet Surplus production Calculated nutritive value of available vegetables | See table 8 , 8a & 8b | Results revealed that diversified veg. with manuring performed well in terms of Incorporation of vegetables in daily diet (419), nutrient management and Yield (kg/unit). | Realized the benefits of diversified vegetable production with manuring | No | |

| Technology Assessed | *Production per unit (q/ha) | Net Return (Profit) in Rs./ ha | B:C Ratio |
|---|---|---|---|
| **13** | **10.5** | 32000.00 | 1.50 |
| FP– Farmers' practice (only cucurbits) | 21.5 | 37000.00 | 1.90 |
| TO1= Diversified vegetables (cucurbits ,brinjal, chilli, tomato, okra, bean and GLV) without manuring | 26.0 | 44000.00 | 2.30 |
| TO2= Diversified vegetables (cucurbits, brinjal, chilli, tomato, okra, bean and GLV) + Manuring | | | |

*Table 8 Effect of different treatments on vegetable production*

| Treatments | Incorporation of vegetables in daily diet (g) | | | | Surplus yield (Kg/unit) | | | |
|---|---|---|---|---|---|---|---|---|
| | Cucurbits | Other veg | GLV | Total | Cucurbits | Other veg | GLV | Total |
| **FP** | 149 | - | - | 149 | 28 | - | - | 28 |
| **$TO_1$** | 117 | 147.3 | 75 | 339.3 | 10.5 | 19.5 | 7 | 37 |
| **$TO_2$** | 137 | 204 | 78 | 419 | 13.5 | 29.75 | 7 | 50.25 |

*Table 8a Effect of different treatments on vegetable production* [Yield (kg/unit)]

| Treatments | Cucurbits | | | | Other vegetables | | | | | | GLV | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pumpkin | Bitter gourd | Ridge gourd | **Total** | Brinjal | Okra | Tomato | Dolichos bean | Chilli | **Total** | Amaranthus | Palak | **Total** |
| **FP** | 38 | 20 | 26 | 84 | - | - | - | - | - | - | - | - | - |
| **$TO_1$** | 27 | 12 | 15 | 54 | 28 | 12 | 25 | 08 | 02 | 75 | 15 | 18 | 33 |
| **$TO_2$** | 30 | 18 | 17 | 65 | 37 | 19 | 34 | 14 | 2.5 | 106.5 | 18 | 18.5 | 36.5 |

***Table 8b :*** Calculated nutritive value of available vegetables (Table value)

| Treatments | Vitamin A (µg) | Ascorbic acid (mg) | Calcium(mg) | Iron(mg) | Phosphorus(mg) |
|---|---|---|---|---|---|
| **FP** | 1605.7 | 35.94 | 22.04 | 1.35 | 57.6 |
| **$TO_1$** | 8788.5 | 118.8 | 266.49 | 33.28 | 146.9 |
| **$TO_2$** | 9300.5 | 145.8 | 425.6 | 43.8 | 184.9 |

It is now well conceived that by simply adding greens and other vegetables to the available food grains, the diet of the average Indians can substantially be upgraded and there is a scope for using the unutilized land adjacent to the household. In this OFT the treatments that include diversified vegetables with manuring performed best in terms of Incorporation of vegetables in daily diet (419g), availability of nutrient and Yield (208kg/unit) around the year.

**OFT 9**

| Crop/ enterprise | Farming situation | Problem Diagnosed | Title of OFT | No. of trials * | Technology Assessed | Parameters of assessment | Data on the parameter | Results of assessment | Feedback from the farmer | Any refinement done | Justification for refinement |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Vegetable | Semi intensive, adjacent to the household and field | Spoilage of freshly harvested vegetables is a serious problem in the village without proper storage facility. | Evaluation of different storage structures for locally available and seasonal vegetables | 5 | locally available low cost storage structures | • Storage temperature<br>• Percentage of rotting<br>• Duration of self life<br>• Loss in weight | See table 9 | It was observed that Zero Energy Cool Chamber was recorded lowest storage temperature of 22.88 °C and highest days of self life i.e. 6.2 days. With some minor modification in bamboo basket it is observed that the temperature is reducing and loss in weight and rotting percentage is lowered by 13 and 25 respectively | Farmers are made aware of different types of storagr structures can be prepared with the locally available low cost materials. | No | |

| Technology Assessed | *Production per unit (t/ha) | Net Return (Profit) in Rs. / q stored veg. | B:C Ratio |
|---|---|---|---|
| | - | | |
| FP– Farmers' practice (storing the vegetables in the corner of the house or in bamboo basket) | - | 325 | 1.76 |
| TO1= Bamboo iceless refrigerator | - | 427 | 1.85 |
| TO2 = Zero energy cool chamber | - | 517 | 2.10 |

Table 9

| Treatments | Storage Temperature (°C) | %of rotting | Shelf life (days) | Loss in weight (%) |
|---|---|---|---|---|
| **FP** | 35.96 | 40 | 3.2 | 22 |
| **$TO_1$** | 28.92 | 25 | 4.8 | 13 |
| **$TO_2$** | 22.88 | 15 | 6.2 | 8 |

*** Treatment details**

**Farmers' Practice**: Storing vegetables and fruits in a corner of the house or in a bamboo basket.

**Bamboo iceless refrigerator**: Some modification was done with the bamboo basket used for farmers practice. Big Bamboo basket with a lid was covered by wet gunny bag s and watering it frequently. The vegetables were stored in plastic crates in side the bamboo basket.

**Zero Energy cool chamber**: A double walled brick structure and in between two walls river sand was used and the sand was kept wet to retain the moisture. The chamber was covered by a frame of bamboo and straw

It was observed that Zero Energy Cool Chamber was recorded lowest storage temperature of 22.88 $^{o}C$ and highest days of self life i.e. 6.2 days. With some minor modification in bamboo basket it is observed that the temperature is reducing and loss in weight and rotting percentage is lowered by 13 and 25 respectively.

## OFT 10

| Crop/ enterprise | Farming situation | Problem Diagnosed | Title of OFT | No. of trials | Technology Assessed | Parameters of assessment | Data on the parameter | Results of assessment | Feedback from the farmer | Any refinement done | Justification for refinement |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
| Rice | Medium upland | Yellow Stem Borer is one of the major insects of Kharif paddy in this region causing heavy loss. | Assessment of selective chemical measures for controlling stem borer in Kharif paddy in Burdwan district | 7 | Granular pesticides in seed bed cause better protection | Percentage pest infestation Yield Benefit: cost ratio | See table 10 & 10a | Carbofuran 3 G @ 33 kg/ha at seed bed, 5 to 7 days before pulling the seedling for transplanting + Application of Cartap 4 G @ 25 kg/ha in planting to panicle initiation stage + Spray with Cartap 50 % SP @ 800 g/ha in panicle initiation to flowering stage + Spray with Acephate 75% SP @ 750 ml/ha in flowering stage. | Yield has been increased for better crop protection | No | |

| Technology Assessed | Production per unit (q/ha) | Net Return (Profit) in Rs. / ha | B:C Ratio (Gross return/Gross cost) |
|---|---|---|---|
| 13 | 14 | 15 | 16 |
| Farmers practice : Frequent use of Monocrotophos 36% E.C @ 750 ml/ha. | 39.46 | 14718 | 1.87 |
| TO1 : Phorate 10 G @12.5 Kg/ha at seed bed, + Spray with Cartap 50 % SP @ 800 g/ha in PI stage+ Spray with Fipronil 5% SC @ 1000 ml/ha in flowering stage and repeat of spray 10 days later. | 44.97 | 17426 | 1.93 |
| TO2: Carbofuran 3 G @ 33 kg/ha at seed bed, 5 to 7 days before pulling the seedling for transplanting + Application of Cartap 4 G @ 25 kg/ha in planting to panicle initiation stage + Spray with Cartap 50 % SP @ 800 g/ha in panicle initiation to flowering stage + Spray with Acephate 75% SP @ 750 ml/ha in flowering stage | 47.86 | 19240 | 2.01 |

***Table 10***

| Treatments | Percent damage caused by Yellow Stem Borer# | | |
|---|---|---|---|
| | 1st Observation | 2nd Observation | 3rd Observation |
| FP | 5.19[a] | 7.33[a] | 10.06[a] |
| TO1 | 3.40[b] | 4.73[b] | 6.36[b] |
| TO2 | 2.66[c] | 3.23[c] | 4.74[c] |
| Average | 3.75 | 5.10 | 7.05 |

* Duncan's Multiple Range Test (DMRT) was used.

# Percent damage per sq. m caused by Yellow Stem Borer = (No. of white ear head*100)/ No. of effective tiller

***Table 10a***

| Treatments | No. of effective tillers/hill | Panicle length (cm) | Yield (q/ha) | Input cost (Rs./ha) | Gross return (Rs./ha) | B : C ratio (Gross return/Gross cost) |
|---|---|---|---|---|---|---|
| FP | 13.2[a] | 22.3[a] | 39.46[a] | 16850 | 31568 | 1.87 |
| TO1 | 15.7[b] | 25.5[b] | 44.97[b] | 18550 | 35976 | 1.93 |
| TO2 | 16.1[c] | 26.2[c] | 47.86[c] | 19050 | 38290 | 2.01 |
| Average | 15.0 | 24.7 | 44.1 | | | |

* Duncan's Multiple Range Test (DMRT) was used.

### 3.2 Achievements of Frontline Demonstrations

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

List of technologies demonstrated during previous year and popularized during 2007-08 (October to September) and recommended for large scale adoption in the district

| S. No | Thematic Area* | Technology demonstrated | Details of popularization methods suggested to the Extension system | Horizontal spread of technology | | |
|---|---|---|---|---|---|---|
| | | | | No. of villages | No. of farmers | Area in ha |
| 1 | Crop diversification | Improved jute production technology | Training and demonstration | 1 | 20 | 3 |
| 2 | Agronomic practice | Improved production technology for lentil | Training and demonstration | - | - | - |
| | | Improved production technology for mustard | Training and demonstration | 3 | 50 | 10 |

*Details of FLDs implemented during 2008-09 (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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Proposed | Actual | SC | ST | Others | Total | |
| 1. | Mustard | Improved agronomic practice | Package demonstration | Rabi 08-09 | 4 | 4ha | 17 | 0 | 13 | 30 | - |
| 2. | Paddy | Improved agronomic practice | Package demonstration | Kharif 08 | 1.8 | 1 | 7 | 0 | 0 | 7 | |
| 3. | Jute | Improved agronomic practice | Package demonstration | Pre kharif 08 | 2 | 2 | 14 | 0 | 1 | 15 | - |
| 4. | Potato | Scientific management of late blight disease | Component | Rabi 08 | 1.8 | 1.8 | 7 | - | 10 | 17 | - |
| 5. | Rice bean (fodder) | Fodder production | Component (Bio fert) | Kharif 08 | 0.2 | 0.2 | 1 | - | 4 | 5 | - |
| 6. | Brinjal | Disease management | Component (Fungicide) | Kharif 08 | 0.75 | 0.75 | 11 | -- | 5 | 16 | - |
| 7. | Brinjal * | Improved agronomic package | Package demonstration | Kharif 08 | 0.8 | 0.8 | 2 | - | - | 2 | - |
| 8 | Tomato * | Improved agronomic package | Package demonstration | Rabi 2008 | 0.4 | 0.4 | 1 | - | - | 1 | - |
| 9. | Banana * | Improved agronomic package | Package demonstration | Rabi 2008 | 0.8 | 0.8 | - | - | 2 | 2 | - |

**Details of farming situation**

| Crop | Season | Farming situation (RF/Irrigated) | Soil type | Status of soil | | | Previous crop | Sowing date | Harvest date | Seasonal rainfall (mm) | No. of rainy days |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N (kg/ha) | P (kg/ha) | K (kg/ha) | | | | | |
| Mustard | Rabi 2008 | Irrigated | Garamba: Sandy loam Jagulipara: Clay loam | Garamba: 156 – 282 Jagulipara: 252 – 367 | Garamba: 23 – 54 Jagulipara: 22 - 65 | Garamba: 190 – 324 Jagulipara: 145 - 255 | Paddy | Garamba: 15.10. 08 Jagulipara: 12.11.08 | Garamba: 16.2. 08 Jagulipara: 10.3. 08 | -- | -- |
| Paddy | Kharif 08 | Irrigated | Sandy loam | 160 - 270 | 45-65 | 220–310 | Sesame | 5.7.08 | 1.11.2008 | -- | -- |
| Jute | Pre kharif 08 | Irrigated | Sandy loam | 205 - 350 | 23– 46 | 265 – 390 | Potato /Mustard | 30.4.2008 | 2.9.2008 | -- | -- |
| Potato | Rabi 08 | Irrigated | Sandy loam | 220 – 324 | 30– 64 | 195 – 298 | Paddy /vegetables | 10.11.2008 | 26.3.2009 | -- | -- |
| Rice bean (fodder) | Kharif 08 | Rainfed | Clay loam | 230 – 315 | 27 – 45 | 215 – 320 | Vegetables | 26.8.08 | 10.10.08 – 20.11.08 | -- | -- |
| Brinjal | Kharif 08 | Rainfed | Sandy loam | 215 - 330 | 32– 65 | 220 – 380 | Vegetables | 27.5.08 | 10.8.08- 25.10.08 | -- | -- |
| Tomato * | Rabi 08 | Rainfed | Sandy loam | 215 - 330 | 32– 65 | 220 – 380 | Vegetables | 10.10.08 | Several times | - | - |
| Banana * | Rabi 08 | Rainfed | Clay loam | 230 – 315 | 27 – 45 | 215 – 320 | Paddy | 07.10.08 | Standing | - | - |

* ATMA sponsored

***Performance of FLD***

| Sl. No. | Crop | Technology Demonstrated | Variety | No. of Farmers | Area (ha.) | Demo. Yield (q/ha) | | | Yield of local Check (q/ha) | Increase in yield (%) over local check | Data on parameter in relation to technology demonstrated (q/ha) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | H | L | A | | | Demo | Local |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1 | Mustard | Package demonstration | B – 9 | Garamba: 15 Jagulipara :15 | 4 | 13.6 | 9.8 | 11.3 | 10.2 | 11 | See below * | |
| 2 | Paddy | Package demonstration | MTU 7029 | 7 | 1 | 45.56 | 42.15 | 44.26 | 40.85 | 8 | See below * | |
| 3 | Jute | Improved package demonstration | JRO 524 | 15 | 2 | 29.50 | 26.00 | 27.66 | 25.08 | 10 | See below* | |
| 4 | Potato | Component demonstration (late blight disease management) | Kufri Jyoti | 15 | 1 | 300 | 260 | 280 | 250 | 12 | | |
| 5 | Rice bean (fodder) | Component demonstation (Biofertiliser) | Bidhan 1 | 5 | 0.2 | 208 | 188 | 197.6 | 161.2 | 22.5 | Only green fodder yield given | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | Brinjal | Component demonstration (Fungicide) | Local | 16 | 0.75 | 240.3 | 215.6 | 226.5 | 213.7 | 6 | See below * |
| 7 | Brinjal | Package demonstration | Local | 2 | 0.8 | - | - | 250.0 | 210.0 | 9 | See below * |
| 8 | Tomato | Package demonstration | Local | 1 | 0.4 | - | - | 240.0 | 200.0 | 12 | See below * |
| 9 | Banana | Package demonstration | | 2 | 0.8 | - | - | Standing | - | - | - |

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

| **Average Cost of cultivation (Rs./ha)** | | **Avg Gross Return (Rs./ha)** | | **Average Net Return (Profit) (Rs./ha)** | | **Benefit-Cost Ratio (Gross Return / Gross Cost)** |
|---|---|---|---|---|---|---|
| Demo | Local Check | Demo | Local Check | Demonstration | Local Check | |
| **14** | **15** | **16** | **17** | **18** | **19** | **20** |
| 17150 | 16621 | 33900 | 30600 | 16750 | 13979 | Demo : 1.98, L. Chk.: 1.84 |
| 16725 | 16125 | 38408 | 35680 | 21683 | 19555 | Demo : 2.30, L. Chk.: 2.21 |
| 18393 | 23063 | 31810 | 28840 | 13416 | 5777 | Demo : 1.73, L. Chk.: 1.25 |
| 47200 | 45800 | 126000 | 112500 | 78800 | 66700 | Demo: 2.67, L. Check: 2.45 |
| 5110 | 4990 | 9880 | 8060 | 4770 | 3070 | Demo : 1.93, L. Chk.: 1.61 |
| 40765 | 42143 | 104358 | 90607 | 63593 | 48464 | Demo : 2.56, L. Chk.: 2.15 |
| 41765 | 42843 | 98565 | 89970 | 56800 | 47127 | Demo : 2.36, L. Chk.: 2.10 |
| 40500 | 42300 | 93150 | 89676 | 52650 | 47376 | Demo : 2.30, L. Chk.: 2.12 |

*** Data on parameters: Mustard**

| **Crop** | **Parameters** | **Data on parameter in relation to technology demonstrated** | |
|---|---|---|---|
| | | **Demo** | **Local** |
| **Mustard** | No. of branches/plant | 15 | 12 |
| | No. of siliqua/plant | 110 | 91 |
| | No. of seeds/pod | 12 | 12 |
| | Test weight (1000 grain) (g) | 2.54 | 2.49 |
| | Insect-pest incidence (%) | 15 | 21 |
| | Disease incidence (%) | Nil | Nil |
| | Plant height (cm) | 130 | 126 |

*** Data on parameters: Jute**

| Crop | Parameters | Data on parameter in relation to technology demonstrated | |
|---|---|---|---|
| | | Demo | Local |
| **Jute** | Plant height (cm) | 287 | 267 |
| | Base diameter (cm) | 1.31 | 1.42 |
| | No. of siliqua/plant | 24.5 | 23.8 |
| | No. of seed/siliqua | 120 | 112 |
| | Weed biomass (q/ha) | 15.10 | 24.23 |

*** Data on parameters: Potato**

| Crop | Parameters | Data on parameter in relation to technology demonstrated | |
|---|---|---|---|
| | | Demo | Local |
| **Potato** | weight of tubers/plant (g) | 617 | 609 |
| | Disease incidence (%) | 16 | 27 |

*** Data on parameters: Paddy**

| Crop | Parameters | Data on parameter in relation to technology demonstrated | |
|---|---|---|---|
| | | Demo | Local |
| **Paddy** | Plant height (cm) | 115 | 95 |
| | No. of effective tillers/hill | 15 | 11 |
| | Panicle length (cm) | 30.5 | 19.5 |

*** Data on parameters: Brinjal**

| Crop | Parameters | Data on parameter in relation to technology demonstrated | |
|---|---|---|---|
| | | Demo | Local |
| **Brinjal** | Plant height (cm) | 72 | 66 |
| | No. of fruits/plant | 84 | 79 |
| | % disease infestation | 10 | 38 |
| | Yield (q/ha) | 250 | 210 |

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

| Crop | Season | Component | Farming situation | Average yield (q/ha) | Local check (q/ha) | Percentage increase in productivity over local check |
|---|---|---|---|---|---|---|
| | | 1. Seed/Variety | | | | |
| Rice bean | Kharif 2008 | 2. Bio-fertilizer | Medium upland | 197.6 | 161.2 | 22% |
| | | 3. Fertilizer management | | | | |
| Potato | | 4. Plant Protection (Disease management) | Medium upland | 280 | 250 | 12% over local check |
| | | 5. Combination of components (Please specify) | | | | |

**Technical Feedback on the demonstrated technologies**

| S. No | Crop | Feed Back |
|---|---|---|
| 1. | Mustard | Soils of Burdwan is general acidic in nature. Farmer often run losses in mustard productivity due to acidity induced diseases like club root. Development of acidity tolerant variety is needed to overcome this constraint |
| 2. | Paddy | Technology is required to make vermicompost more nutrient enriched |
| 3. | Jute | In case of using multiple row seed drill, a good amount of seed remains unutilized. Chemical+mechanical weed control give excellent control of weeds. |
| 4. | Potato | Specific Trichoderma strains need to be identified for controlling late blight of potato |
| 5. | Rice bean (fodder) | Long duration varieties need to be developed for use as fodder |
| 6. | Brinjal | Nil |
| 7. | Tomato | Soil test based fertilizer application needs to be practiced |

**Farmers' reactions on specific technologies**

| S. No | Crop | Feed Back |
|---|---|---|
| 1. | Mustard | Annexure III |
| 2. | Paddy | Annexure IV |
| 3 | Jute | Annexure V |
| 4. | Potato | Annexure VI |
| 5. | Rice bean (fodder) | Annexure VII |
| 6 | Brinjal | Annexure VIII |
| 7 | Tomato | Annexure IX |

**Extension and Training activities under FLD**

| S. N. | Activity | No. of activities organised | Dates | Number of participants | Remarks |
|---|---|---|---|---|---|
| 1 | Field days | 2 | 21.7.2008, 20.10.08 | 124 | Jute extractor was demonstrated |
| 2 | Farmers Training | 3 | 26.5.08, 27.5.08, 31.5.08, 7.7.08, , 1.9.08, 15.11.08, 29.12.08, 20.1.09, 28.1.09 | 270 | |
| 3 | Media coverage | -- | -- | -- | -- |
| 4 | Training for extension functionaries | -- | 28.7.08 | 20 | -- |

**c. Details of FLD on Enterprises**

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, etc. | Performance parameters / indicators | * Data on parameter in relation to technology demonstrated (kg/lactation) | | % change in the parameter | Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | Demon. | Local check | | |
| Cattle | Deshi cow | 10 | 10 | Milk yield | 331 | 251.8 | 31.5 | Lactation period in demo was increased over local check |
| Duck | K C | 10 | 100 | Egg | 210 | 180 | 16.6 | Egg production in demo was increased over local check |

***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 | Oyster | 30 | 240 beds | Yield | 900 gm/bed | 600 gm/bed | 50% over local chk. | - |
| Apiary | | | | | | | | |
| Sericulture | | | | | | | | |
| Vermi compost | | | | | | | | |
| Fish | Minor carp (*Labeo bata*) | 10 | 10 | Yield | 7 q/ha | 5 q/ha | 40% over conv. practice | - |
| Fish | IMC | 2 | 2 | Yield | 12.5 q/ha | 7 q/ha | 78.5 % over local chk | - |

*3.3 Achievements on Training (Including the sponsored and FLD training programmes):*

**A. ON Campus**

| Thematic Area | No. of Courses | No. of Participants | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Others | | | SC/ST | | | Grand Total |
| | | Male | Female | Total | Male | Female | Total | |
| **(A) Farmers & Farm Women** | | | | | | | | |
| **I Crop Production** | | | | | | | | |
| Weed Management | | | | | | | | |
| Resource Conservation Technologies | | | | | | | | |
| Cropping Systems | | | | | | | | |
| Crop Diversification | | | | | | | | |
| Integrated Farming | | | | | | | | |
| Water management | | | | | | | | |
| Seed production | | | | | | | | |
| Nursery management | | | | | | | | |
| Integrated Crop Management | | | | | | | | |
| Fodder production | | | | | | | | |
| Production of organic inputs | | | | | | | | |
| **II Horticulture** | | | | | | | | |
| **a) Vegetable Crops** | | | | | | | | |
| Production of low volume and high value crops | | | | | | | | |
| Off-season vegetables | 1 | 12 | 4 | 16 | 14 | 1 | 15 | 31 |
| Nursery raising | 1 | 10 | 4 | 14 | 11 | 1 | 12 | 26 |
| Exotic vegetables like Broccoli | | | | | | | | |
| Export potential vegetables | | | | | | | | |
| Grading and standardization | | | | | | | | |
| Protective cultivation (Green Houses, Shade Net etc.) | | | | | | | | |
| **b) Fruits** | | | | | | | | |
| Training and Pruning | | | | | | | | |
| Layout and Management of Orchards | | | | | | | | |
| Cultivation of Fruit | | | | | | | | |
| Management of young plants/orchards | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | |
| Export potential fruits | | | | | | | | |
| Micro irrigation systems of orchards | | | | | | | | |
| Plant propagation techniques | | | | | | | | |
| **c) Ornamental Plants** | | | | | | | | |
| Nursery Management | | | | | | | | |
| Management of potted plants | | | | | | | | |
| Export potential of ornamental plants | | | | | | | | |
| Propagation techniques of Ornamental Plants | | | | | | | | |
| **d) Plantation crops** | | | | | | | | |
| Production and Management technology | | | | | | | | |
| Processing and value addition | | | | | | | | |
| **e) Tuber crops** | | | | | | | | |
| Production and Management technology | | | | | | | | |
| Processing and value addition | | | | | | | | |
| **f) Spices** | | | | | | | | |
| Production and Management technology | | | | | | | | |
| Processing and value addition | | | | | | | | |
| **g) Medicinal and Aromatic Plants** | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Nursery management | | | | | | | | |
| Production and management technology | | | | | | | | |
| Post harvest technology and value addition | | | | | | | | |
| **III Soil Health and Fertility Management** | | | | | | | | |
| Soil fertility management | | | | | | | | |
| Soil and Water Conservation | | | | | | | | |
| Integrated Nutrient Management | | | | | | | | |
| Production and use of organic inputs | | | | | | | | |
| Management of Problematic soils | | | | | | | | |
| Micro nutrient deficiency in crops | | | | | | | | |
| Nutrient Use Efficiency | | | | | | | | |
| Soil and Water Testing | | | | | | | | |
| **IV Livestock Production and Management** | | | | | | | | |
| Dairy Management | | | | | | | | |
| Poultry Management | | | | | | | | |
| Piggery Management | | | | | | | | |
| Rabbit Management | | | | | | | | |
| Disease Management | 1 | 12 | 5 | 17 | 8 | 7 | 15 | 32 |
| Feed management | | | | | | | | |
| Production of quality animal products | | | | | | | | |
| **V Home Science/Women empowerment** | | | | | | | | |
| Household food security by kitchen gardening and nutrition gardening | | | | | | | | |
| Design and development of low/minimum cost diet | | | | | | | | |
| Designing and development for high nutrient efficiency diet | | | | | | | | |
| Minimization of nutrient loss in processing | | | | | | | | |
| Gender mainstreaming through SHGs | | | | | | | | |
| Storage loss minimization techniques | | | | | | | | |
| Value addition | 1 | 0 | 2 | 2 | 0 | 23 | 23 | 25 |
| Income generation activities for empowerment of rural Women | | | | | | | | |
| Location specific drudgery reduction technologies | | | | | | | | |
| Rural Crafts | | | | | | | | |
| Women and child care | | | | | | | | |
| **VI Agril. Engineering** | | | | | | | | |
| Installation and maintenance of micro irrigation systems | | | | | | | | |
| Use of Plastics in farming practices | | | | | | | | |
| Production of small tools and implements | | | | | | | | |
| Repair and maintenance of farm machinery and implements | | | | | | | | |
| Small scale processing and value addition | | | | | | | | |
| Post Harvest Technology | | | | | | | | |
| **VII Plant Protection** | | | | | | | | |
| Integrated Pest Management | | | | | | | | |
| Integrated Disease Management | | | | | | | | |
| Bio-control of pests and diseases | | | | | | | | |
| Production of bio control agents and bio pesticides | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **VIII Fisheries** | | | | | | | | |
| Integrated fish farming | | | | | | | | |
| Carp breeding and hatchery management | | | | | | | | |
| Carp fry and fingerling rearing | | | | | | | | |
| Composite fish culture | | | | | | | | |
| Hatchery management and culture of freshwater prawn | | | | | | | | |
| Breeding and culture of ornamental fishes | | | | | | | | |
| Portable plastic carp hatchery | | | | | | | | |
| Pen culture of fish and prawn | | | | | | | | |
| Shrimp farming | | | | | | | | |
| Edible oyster farming | | | | | | | | |
| Pearl culture | | | | | | | | |
| Fish processing and value addition | | | | | | | | |
| **IX Production of Inputs at site** | | | | | | | | |
| Seed Production | | | | | | | | |
| Planting material production | | | | | | | | |
| Bio-agents production | | | | | | | | |
| Bio-pesticides production | | | | | | | | |
| Bio-fertilizer production | | | | | | | | |
| Vermi-compost production | | | | | | | | |
| Organic manures production | | | | | | | | |
| Production of fry and fingerlings | | | | | | | | |
| Production of Bee-colonies and wax sheets | | | | | | | | |
| Small tools and implements | | | | | | | | |
| Production of livestock feed and fodder | | | | | | | | |
| Production of Fish feed | | | | | | | | |
| **X Capacity Building and Group Dynamics** | | | | | | | | |
| Leadership development | | | | | | | | |
| Group dynamics | | | | | | | | |
| Formation and Management of SHGs | | | | | | | | |
| Mobilization of social capital | | | | | | | | |
| Entrepreneurial development of farmers/youths | | | | | | | | |
| WTO and IPR issues | 2 | 32 | 0 | 32 | 18 | 0 | 18 | 50 |
| **XI Agro-forestry** | | | | | | | | |
| Production technologies | | | | | | | | |
| Nursery management | | | | | | | | |
| Integrated Farming Systems | | | | | | | | |
| **XII Others (Pl. Specify)** | | | | | | | | |
| **TOTAL** | **6** | **66** | **15** | **81** | **51** | **32** | **83** | **164** |
| **(B) RURAL YOUTH** | | | | | | | | |
| Mushroom Production | 2 | 30 | 12 | 42 | 16 | 2 | 18 | 60 |
| Bee-keeping | | | | | | | | |
| Integrated farming | | | | | | | | |
| Seed production | | | | | | | | |
| Production of organic inputs | | | | | | | | |
| Integrated Farming | | | | | | | | |
| Planting material production | 4 | 20 | 0 | 20 | 21 | 0 | 21 | 41 |
| Vermi-culture | | | | | | | | |
| Sericulture | | | | | | | | |
| Protected cultivation of vegetable crops | | | | | | | | |
| Commercial fruit production | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Repair and maintenance of farm machinery and implements | 5 | 85 | 0 | 85 | 25 | 0 | 25 | 110 |
| Nursery Management of Horticulture crops | | | | | | | | |
| Training and pruning of orchards | | | | | | | | |
| Value addition | | | | | | | | |
| Production of quality animal products | | | | | | | | |
| Dairying | | | | | | | | |
| Sheep and goat rearing | | | | | | | | |
| Quail farming | | | | | | | | |
| Piggery | | | | | | | | |
| Rabbit farming | | | | | | | | |
| Poultry production | 2 | 18 | 0 | 18 | 12 | 0 | 12 | 30 |
| Ornamental fisheries | | | | | | | | |
| Para vets | | | | | | | | |
| Para extension workers | | | | | | | | |
| Composite fish culture | | | | | | | | |
| Freshwater prawn culture | | | | | | | | |
| Shrimp farming | | | | | | | | |
| Pearl culture | | | | | | | | |
| Cold water fisheries | | | | | | | | |
| Fish harvest and processing technology | | | | | | | | |
| Fry and fingerling rearing | | | | | | | | |
| Small scale processing | | | | | | | | |
| Post Harvest Technology | | | | | | | | |
| Tailoring and Stitching | | | | | | | | |
| Rural Crafts | | | | | | | | |
| **TOTAL** | **13** | **153** | **12** | **165** | **74** | **2** | **76** | **241** |
| | | | | | | | | |
| **(C) Extension Personnel** | | | | | | | | |
| Productivity enhancement in field crops | 2 | 41 | 0 | 41 | 8 | 0 | 8 | 49 |
| Integrated Pest Management | | | | | | | | |
| Integrated Nutrient management | 1 | 22 | 0 | 22 | 6 | 0 | 6 | 28 |
| Rejuvenation of old orchards | | | | | | | | |
| Protected cultivation technology | | | | | | | | |
| Formation and Management of SHGs | | | | | | | | |
| Group Dynamics and farmers organization | | | | | | | | |
| Information networking among farmers | | | | | | | | |
| Capacity building for ICT application | 1 | 25 | 0 | 25 | 5 | 0 | 5 | 30 |
| Care and maintenance of farm machinery and implements | | | | | | | | |
| WTO and IPR issues | 1 | 18 | 0 | 18 | 4 | 0 | 4 | 22 |
| Management in farm animals | 1 | 8 | 2 | 10 | 17 | 3 | 20 | 30 |
| Livestock feed and fodder production | | | | | | | | |
| Household food security | | | | | | | | |
| Women and Child care | | | | | | | | |
| Low cost and nutrient efficient diet designing | | | | | | | | |
| Production and use of organic inputs | 1 | 24 | 0 | 24 | 5 | 0 | 5 | 29 |
| Gender mainstreaming through SHGs | | | | | | | | |
| Any other (Pl. Specify) (sustainable aquaculture) | 1 | 34 | 0 | 34 | 5 | 0 | 5 | 39 |
| **TOTAL** | **8** | **172** | **2** | **174** | **49** | **3** | **52** | **227** |

**B. OFF Campus**

| Thematic Area | No. of Courses | No. of Participants | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Others | | | SC/ST | | | Grand Total |
| | | Male | Female | Total | Male | Female | Total | |
| **(A) Farmers & Farm Women** | | | | | | | | |
| **I Crop Production** | | | | | | | | |
| Weed Management | 2 | 38 | 0 | 38 | 21 | 0 | 21 | 59 |
| Resource Conservation Technologies | | | | | | | | |
| Cropping Systems | | | | | | | | |
| Crop Diversification | 1 | 0 | 0 | 0 | 21 | 0 | 21 | 21 |
| Integrated Farming | | | | | | | | |
| Water management | 1 | 21 | 0 | 21 | 9 | 0 | 9 | 30 |
| Seed production | 2 | 40 | 0 | 40 | 20 | 0 | 20 | 60 |
| Nursery management | 2 | 33 | 0 | 33 | 28 | 0 | 28 | 61 |
| Integrated Crop Management | 5 | 126 | 0 | 126 | 28 | 0 | 28 | 154 |
| Fodder production | 1 | 29 | 0 | 29 | 1 | 0 | 1 | 30 |
| Production of organic inputs | | | | | | | | |
| **II Horticulture** | | | | | | | | |
| **a) Vegetable Crops** | | | | | | | | |
| Production of low volume and high value crops | 2 | 14 | 0 | 14 | 48 | 0 | 48 | 62 |
| Off-season vegetables | | | | | | | | |
| Nursery raising | 1 | 15 | 0 | 15 | 10 | 0 | 10 | 25 |
| Exotic vegetables like Broccoli | | | | | | | | |
| Export potential vegetables | | | | | | | | |
| Grading and standardization | | | | | | | | |
| Protective cultivation (Green Houses, Shade Net etc.) | | | | | | | | |
| Others (cultivation of summer veg.) | | | | | | | | |
| **b) Fruits** | | | | | | | | |
| Training and Pruning | | | | | | | | |
| Layout and Management of Orchards | 1 | 28 | 0 | 28 | 2 | 0 | 2 | 30 |
| Cultivation of Fruit | | | | | | | | |
| Management of young plants/orchards | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | |
| Export potential fruits | | | | | | | | |
| Micro irrigation systems of orchards | | | | | | | | |
| Plant propagation techniques | | | | | | | | |
| **c) Ornamental Plants** | | | | | | | | |
| Nursery Management | | | | | | | | |
| Management of potted plants | | | | | | | | |
| Export potential of ornamental plants | | | | | | | | |
| Propagation techniques of Ornamental Plants | | | | | | | | |
| **d) Plantation crops** | | | | | | | | |
| Production and Management technology | | | | | | | | |
| Processing and value addition | | | | | | | | |
| **e) Tuber crops** | | | | | | | | |
| Production and Management technology | 3 | 50 | 5 | 55 | 23 | 8 | 31 | 86 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Processing and value addition | | | | | | | | |
| **f) Spices** | | | | | | | | |
| Production and Management technology | | | | | | | | |
| Processing and value addition | | | | | | | | |
| **g) Medicinal and Aromatic Plants** | | | | | | | | |
| Nursery management | | | | | | | | |
| Production and management technology | | | | | | | | |
| Post harvest technology and value addition | | | | | | | | |
| **III Soil Health and Fertility Management** | | | | | | | | |
| Soil fertility management | 1 | 23 | 0 | 23 | 3 | 0 | 3 | 26 |
| Soil and Water Conservation | | | | | | | | |
| Integrated Nutrient Management | 1 | 30 | 0 | 30 | 0 | 0 | 0 | 30 |
| Production and use of organic inputs | 1 | 30 | 0 | 30 | 1 | 0 | 1 | 31 |
| Management of Problematic soils | | | | | | | | |
| Micro nutrient deficiency in crops | | | | | | | | |
| Nutrient Use Efficiency | | | | | | | | |
| Soil and Water Testing | | | | | | | | |
| **IV Livestock Production and Management** | | | | | | | | |
| Dairy Management | 2 | 59 | 0 | 59 | 1 | 0 | 1 | 60 |
| Poultry Management | 1 | 27 | 0 | 27 | 3 | 0 | 3 | 30 |
| Piggery Management | | | | | | | | |
| Rabbit Management | | | | | | | | |
| Disease Management | 3 | 56 | 10 | 66 | 8 | 18 | 26 | 92 |
| Feed management | 3 | 63 | 0 | 63 | 29 | 0 | 29 | 92 |
| Production of quality animal products | 2 | 10 | 38 | 48 | 2 | 10 | 12 | 60 |
| **V Home Science/Women empowerment** | | | | | | | | |
| Household food security by kitchen gardening and nutrition gardening | 2 | 0 | 30 | 30 | 0 | 25 | 25 | 55 |
| Design and development of low/minimum cost diet | | | | | | | | |
| Designing and development for high nutrient efficiency diet | | | | | | | | |
| Minimization of nutrient loss in processing | 1 | 0 | 20 | 20 | 0 | 8 | 8 | 28 |
| Gender mainstreaming through SHGs | | | | | | | | |
| Storage loss minimization techniques | 1 | 0 | 21 | 21 | 0 | 3 | 3 | 24 |
| Value addition | 3 | 0 | 57 | 57 | 0 | 26 | 26 | 83 |
| Income generation activities for empowerment of rural Women | | | | | | | | |
| Location specific drudgery reduction technologies | | | | | | | | |
| Rural Crafts | | | | | | | | |
| Women and child care | 1 | 0 | 9 | 9 | 0 | 15 | 15 | 24 |
| **VI Agril. Engineering** | | | | | | | | |
| Installation and maintenance of micro irrigation systems | | | | | | | | |
| Use of Plastics in farming practices | | | | | | | | |
| Production of small tools and implements | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Repair and maintenance of farm machinery and implements | | | | | | | | |
| Small scale processing and value addition | | | | | | | | |
| Post Harvest Technology | 1 | 5 | 0 | 5 | 25 | 0 | 25 | 30 |
| **VII Plant Protection** | | | | | | | | |
| Integrated Pest Management | 4 | 62 | 0 | 62 | 59 | 0 | 59 | 121 |
| Integrated Disease Management | 3 | 40 | 0 | 40 | 49 | 0 | 49 | 89 |
| Bio-control of pests and diseases | 2 | 30 | 0 | 30 | 22 | 8 | 30 | 60 |
| Production of bio control agents and bio pesticides | | | | | | | | |
| **VIII Fisheries** | | | | | | | | |
| Integrated fish farming | 1 | 25 | 0 | 25 | 1 | 0 | 1 | 26 |
| Carp breeding and hatchery management | 1 | 28 | 0 | 28 | 2 | 0 | 2 | 30 |
| Carp fry and fingerling rearing | 2 | 20 | 0 | 20 | 41 | 0 | 41 | 61 |
| Composite fish culture | 3 | 74 | 0 | 74 | 16 | 0 | 16 | 90 |
| Hatchery management and culture of freshwater prawn | | | | | | | | |
| Breeding and culture of ornamental fishes | 1 | 3 | 0 | 3 | 27 | 0 | 27 | 30 |
| Portable plastic carp hatchery | | | | | | | | |
| Pen culture of fish and prawn | | | | | | | | |
| Shrimp farming | | | | | | | | |
| Edible oyster farming | | | | | | | | |
| Pearl culture | | | | | | | | |
| Fish processing and value addition | | | | | | | | |
| Other, if any (Airbreathing fish culture, fish nutrition) | 2 | 46 | 0 | 46 | 14 | 0 | 14 | 60 |
| **IX Production of Inputs at site** | | | | | | | | |
| Seed Production | | | | | | | | |
| Planting material production | | | | | | | | |
| Bio-agents production | | | | | | | | |
| Bio-pesticides production | 1 | 27 | 0 | 27 | 2 | 0 | 2 | 29 |
| Bio-fertilizer production | 1 | 10 | 0 | 10 | 23 | 0 | 23 | 33 |
| Vermi-compost production | | | | | | | | |
| Organic manures production | 1 | 8 | 0 | 8 | 22 | 0 | 22 | 30 |
| Production of fry and fingerlings | | | | | | | | |
| Production of Bee-colonies and wax sheets | | | | | | | | |
| Small tools and implements | | | | | | | | |
| Production of livestock feed and fodder | 1 | 27 | 0 | 27 | 3 | 0 | 3 | 30 |
| Production of Fish feed | | | | | | | | |
| **X Capacity Building and Group Dynamics** | | | | | | | | |
| Leadership development | 1 | 20 | 0 | 20 | 2 | 0 | 2 | 22 |
| Group dynamics | 1 | 24 | 0 | 24 | 1 | 0 | 1 | 25 |
| Formation and Management of SHGs | 2 | 39 | 0 | 39 | 17 | 0 | 17 | 56 |
| Mobilization of social capital | | | | | | | | |
| Entrepreneurial development of farmers/youths | | | | | | | | |
| WTO and IPR issues | 2 | 40 | 0 | 40 | 16 | 0 | 16 | 56 |
| **XI Agro-forestry** | | | | | | | | |
| Production technologies | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Nursery management | | | | | | | | |
| Integrated Farming Systems | | | | | | | | |
| **XII Others (Pl. Specify)** | | | | | | | | |
| **TOTAL** | **73** | **1220** | **190** | **1410** | **600** | **121** | **721** | **2131** |
| **(B) RURAL YOUTH** | | | | | | | | |
| Mushroom Production | 2 | 19 | 0 | 19 | 42 | 2 | 44 | 63 |
| Bee-keeping | | | | | | | | |
| Integrated farming | | | | | | | | |
| Seed production | | | | | | | | |
| Production of organic inputs | | | | | | | | |
| Integrated Farming | | | | | | | | |
| Planting material production | | | | | | | | |
| Vermi-culture | | | | | | | | |
| Sericulture | | | | | | | | |
| Protected cultivation of vegetable crops | | | | | | | | |
| Commercial fruit production | | | | | | | | |
| Repair and maintenance of farm machinery and implements | | | | | | | | |
| Nursery Management of Horticulture crops | | | | | | | | |
| Training and pruning of orchards | | | | | | | | |
| Value addition | | | | | | | | |
| Production of quality animal products | | | | | | | | |
| Dairying | | | | | | | | |
| Sheep and goat rearing | | | | | | | | |
| Quail farming | | | | | | | | |
| Piggery | | | | | | | | |
| Rabbit farming | | | | | | | | |
| Poultry production | | | | | | | | |
| Ornamental fisheries | | | | | | | | |
| Para vets | | | | | | | | |
| Para extension workers | | | | | | | | |
| Composite fish culture | | | | | | | | |
| Freshwater prawn culture | | | | | | | | |
| Shrimp farming | | | | | | | | |
| Pearl culture | | | | | | | | |
| Cold water fisheries | | | | | | | | |
| Fish harvest and processing technology | | | | | | | | |
| Fry and fingerling rearing | | | | | | | | |
| Small scale processing | | | | | | | | |
| Post Harvest Technology | | | | | | | | |
| Tailoring and Stitching | 7 | 0 | 35 | 35 | 0 | 175 | 175 | 210 |
| Rural Crafts | 7 | 0 | 189 | 189 | 0 | 21 | 21 | 210 |
| **TOTAL** | **16** | **19** | **224** | **243** | **42** | **198** | **240** | **483** |
| | | | | | | | | |
| **(C) Extension Personnel** | | | | | | | | |
| Productivity enhancement in field crops | | | | | | | | |
| Integrated Pest Management | | | | | | | | |
| Integrated Nutrient management | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | |
| Protected cultivation technology | | | | | | | | |
| Formation and Management of SHGs | | | | | | | | |
| Group Dynamics and farmers organization | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Information networking among farmers | | | | | | | | |
| Capacity building for ICT application | | | | | | | | |
| Care and maintenance of farm machinery and implements | | | | | | | | |
| WTO and IPR issues | | | | | | | | |
| Management in farm animals | | | | | | | | |
| Livestock feed and fodder production | | | | | | | | |
| Household food security | | | | | | | | |
| Women and Child care | | | | | | | | |
| Low cost and nutrient efficient diet designing | | | | | | | | |
| Production and use of organic inputs | | | | | | | | |
| Gender mainstreaming through SHGs | | | | | | | | |
| Any other (Pl. Specify) | | | | | | | | |
| **TOTAL** | | | | | | | | |

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

| Thematic Area | No. of Courses | No. of Participants | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Others | | | SC/ST | | | Grand Total |
| | | Male | Female | Total | Male | Female | Total | |
| **(A) Farmers & Farm Women** | | | | | | | | |
| **I Crop Production** | | | | | | | | |
| Weed Management | 2 | 38 | 0 | 38 | 21 | 0 | 21 | 59 |
| Resource Conservation Technologies | | | | | | | | |
| Cropping Systems | | | | | | | | |
| Crop Diversification | 1 | 0 | 0 | 0 | 21 | 0 | 21 | 21 |
| Integrated Farming | | | | | | | | |
| Water management | 1 | 21 | 0 | 21 | 9 | 0 | 9 | 30 |
| Seed production | 2 | 40 | 0 | 40 | 20 | 0 | 20 | 60 |
| Nursery management | 2 | 33 | 0 | 33 | 28 | 0 | 28 | 61 |
| Integrated Crop Management | 5 | 126 | 0 | 126 | 28 | 0 | 28 | 154 |
| Fodder production | 1 | 29 | 0 | 29 | 1 | 0 | 1 | 30 |
| Production of organic inputs | | | | | | | | |
| **II Horticulture** | | | | | | | | |
| **a) Vegetable Crops** | | | | | | | | |
| Production of low volume and high value crops | 2 | 14 | 0 | 14 | 48 | 0 | 48 | 62 |
| Off-season vegetables | 1 | 12 | 4 | 16 | 14 | 1 | 15 | 31 |
| Nursery raising | 2 | 25 | 4 | 29 | 21 | 1 | 22 | 51 |
| Exotic vegetables like Broccoli | | | | | | | | |
| Export potential vegetables | | | | | | | | |
| Grading and standardization | | | | | | | | |
| Protective cultivation (Green Houses, Shade Net etc.) | | | | | | | | |
| Other (Cucurbits .) | | | | | | | | |
| **b) Fruits** | | | | | | | | |
| Training and Pruning | | | | | | | | |
| Layout and Management of Orchards | 1 | 28 | 0 | 28 | 2 | 0 | 2 | 30 |
| Cultivation of Fruit | | | | | | | | |
| Management of young plants/orchards | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | |
| Export potential fruits | | | | | | | | |
| Micro irrigation systems of orchards | | | | | | | | |
| Plant propagation techniques | | | | | | | | |
| **c) Ornamental Plants** | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Nursery Management | | | | | | | | |
| Management of potted plants | | | | | | | | |
| Export potential of ornamental plants | | | | | | | | |
| Propagation techniques of Ornamental Plants | | | | | | | | |
| **d) Plantation crops** | | | | | | | | |
| Production and Management technology | | | | | | | | |
| Processing and value addition | | | | | | | | |
| **e) Tuber crops** | | | | | | | | |
| Production and Management technology | 3 | 50 | 5 | 55 | 23 | 8 | 31 | 86 |
| Processing and value addition | | | | | | | | |
| **f) Spices** | | | | | | | | |
| Production and Management technology | | | | | | | | |
| Processing and value addition | | | | | | | | |
| **g) Medicinal and Aromatic Plants** | | | | | | | | |
| Nursery management | | | | | | | | |
| Production and management technology | | | | | | | | |
| Post harvest technology and value addition | | | | | | | | |
| **III Soil Health and Fertility Management** | | | | | | | | |
| Soil fertility management | 1 | 23 | 0 | 23 | 3 | 0 | 3 | 26 |
| Soil and Water Conservation | | | | | | | | |
| Integrated Nutrient Management | 1 | 30 | 0 | 30 | 0 | 0 | 0 | 30 |
| Production and use of organic inputs | 1 | 30 | 0 | 30 | 1 | 0 | 1 | 31 |
| Management of Problematic soils | | | | | | | | |
| Micro nutrient deficiency in crops | | | | | | | | |
| Nutrient Use Efficiency | | | | | | | | |
| Soil and Water Testing | | | | | | | | |
| **IV Livestock Production and Management** | | | | | | | | |
| Dairy Management | 2 | 59 | 0 | 59 | 1 | 0 | 1 | 60 |
| Poultry Management | 1 | 27 | 0 | 27 | 3 | 0 | 3 | 30 |
| Piggery Management | | | | | | | | |
| Rabbit Management | | | | | | | | |
| Disease Management | 4 | 68 | 15 | 83 | 16 | 25 | 41 | 124 |
| Feed management | 3 | 63 | 0 | 63 | 29 | 0 | 29 | 92 |
| Production of quality animal products | 2 | 10 | 38 | 48 | 2 | 10 | 12 | 60 |
| **V Home Science/Women empowerment** | | | | | | | | |
| Household food security by kitchen gardening and nutrition gardening | 2 | 0 | 30 | 30 | 0 | 25 | 25 | 55 |
| Design and development of low/minimum cost diet | | | | | | | | |
| Designing and development for high nutrient efficiency diet | | | | | | | | |
| Minimization of nutrient loss in processing | 1 | 0 | 20 | 20 | 0 | 8 | 8 | 28 |
| Gender mainstreaming through SHGs | | | | | | | | |
| Storage loss minimization techniques | 1 | 0 | 21 | 21 | 0 | 3 | 3 | 24 |
| Value addition | 4 | 0 | 59 | 59 | 0 | 49 | 49 | 108 |
| Income generation activities for empowerment of rural Women | | | | | | | | |
| Location specific drudgery reduction technologies | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Rural Crafts | | | | | | | | |
| Women and child care | 1 | 0 | 9 | 9 | 0 | 15 | 15 | 24 |
| **VI Agril. Engineering** | | | | | | | | |
| Installation and maintenance of micro irrigation systems | | | | | | | | |
| Use of Plastics in farming practices | | | | | | | | |
| Production of small tools and implements | | | | | | | | |
| Repair and maintenance of farm machinery and implements | | | | | | | | |
| Small scale processing and value addition | | | | | | | | |
| Post Harvest Technology | 1 | 5 | 0 | 5 | 25 | 0 | 25 | 30 |
| **VII Plant Protection** | | | | | | | | |
| Integrated Pest Management | 4 | 62 | 0 | 62 | 59 | 0 | 59 | 121 |
| Integrated Disease Management | 3 | 40 | 0 | 40 | 49 | 0 | 49 | 89 |
| Bio-control of pests and diseases | 2 | 30 | 0 | 30 | 22 | 8 | 30 | 60 |
| Production of bio control agents and bio pesticides | | | | | | | | |
| **VIII Fisheries** | | | | | | | | |
| Integrated fish farming | 1 | 25 | 0 | 25 | 1 | 0 | 1 | 26 |
| Carp breeding and hatchery management | 1 | 28 | 0 | 28 | 2 | 0 | 2 | 30 |
| Carp fry and fingerling rearing | 2 | 20 | 0 | 20 | 41 | 0 | 41 | 61 |
| Composite fish culture | 3 | 74 | 0 | 74 | 16 | 0 | 16 | 90 |
| Hatchery management and culture of freshwater prawn | | | | | | | | |
| Breeding and culture of ornamental fishes | 1 | 3 | 0 | 3 | 27 | 0 | 27 | 30 |
| Portable plastic carp hatchery | | | | | | | | |
| Pen culture of fish and prawn | | | | | | | | |
| Shrimp farming | | | | | | | | |
| Edible oyster farming | | | | | | | | |
| Pearl culture | | | | | | | | |
| Fish processing and value addition | | | | | | | | |
| Other (Airbreathing fish) | 2 | 46 | 0 | 46 | 14 | 0 | 14 | 60 |
| **IX Production of Inputs at site** | | | | | | | | |
| Seed Production | | | | | | | | |
| Planting material production | | | | | | | | |
| Bio-agents production | | | | | | | | |
| Bio-pesticides production | 1 | 27 | 0 | 27 | 2 | 0 | 2 | 29 |
| Bio-fertilizer production | 1 | 10 | 0 | 10 | 23 | 0 | 23 | 33 |
| Vermi-compost production | | | | | | | | |
| Organic manures production | 1 | 8 | 0 | 8 | 22 | 0 | 22 | 30 |
| Production of fry and fingerlings | | | | | | | | |
| Production of Bee-colonies and wax sheets | | | | | | | | |
| Small tools and implements | | | | | | | | |
| Production of livestock feed and fodder | 1 | 27 | 0 | 27 | 3 | 0 | 3 | 30 |
| Production of Fish feed | | | | | | | | |
| **X Capacity Building and Group Dynamics** | | | | | | | | |
| Leadership development | 1 | 20 | 0 | 20 | 2 | 0 | 2 | 22 |
| Group dynamics | 1 | 24 | 0 | 24 | 1 | 0 | 1 | 25 |
| Formation and Management of SHGs | 2 | 39 | 0 | 39 | 17 | 0 | 17 | 56 |
| Mobilization of social capital | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Entrepreneurial development of farmers/youths | | | | | | | | |
| WTO and IPR issues | 4 | 72 | 0 | 72 | 34 | 0 | 34 | 106 |
| **XI Agro-forestry** | | | | | | | | |
| Production technologies | | | | | | | | |
| Nursery management | | | | | | | | |
| Integrated Farming Systems | | | | | | | | |
| **XII Others (Pl. Specify)** | | | | | | | | |
| **TOTAL** | **79** | **1286** | **205** | **1491** | **651** | **153** | **804** | **2295** |
| **(B) RURAL YOUTH** | | | | | | | | |
| Mushroom Production | 4 | 49 | 12 | 61 | 58 | 4 | 62 | 123 |
| Bee-keeping | | | | | | | | |
| Integrated farming | | | | | | | | |
| Seed production | | | | | | | | |
| Production of organic inputs | | | | | | | | |
| Integrated Farming | | | | | | | | |
| Planting material production | 4 | 20 | 0 | 20 | 21 | 0 | 21 | 41 |
| Vermi-culture | | | | | | | | |
| Sericulture | | | | | | | | |
| Protected cultivation of vegetable crops | | | | | | | | |
| Commercial fruit production | | | | | | | | |
| Repair and maintenance of farm machinery and implements | 5 | 85 | 0 | 85 | 25 | 0 | 25 | 110 |
| Nursery Management of Horticulture crops | | | | | | | | |
| Training and pruning of orchards | | | | | | | | |
| Value addition | | | | | | | | |
| Production of quality animal products | | | | | | | | |
| Dairying | | | | | | | | |
| Sheep and goat rearing | | | | | | | | |
| Quail farming | | | | | | | | |
| Piggery | | | | | | | | |
| Rabbit farming | | | | | | | | |
| Poultry production | 2 | 18 | 0 | 18 | 12 | 0 | 12 | 30 |
| Ornamental fisheries | | | | | | | | |
| Para vets | | | | | | | | |
| Para extension workers | | | | | | | | |
| Composite fish culture | | | | | | | | |
| Freshwater prawn culture | | | | | | | | |
| Shrimp farming | | | | | | | | |
| Pearl culture | | | | | | | | |
| Cold water fisheries | | | | | | | | |
| Fish harvest and processing technology | | | | | | | | |
| Fry and fingerling rearing | | | | | | | | |
| Small scale processing | | | | | | | | |
| Post Harvest Technology | | | | | | | | |
| Tailoring and Stitching | 7 | 0 | 35 | 35 | 0 | 175 | 175 | 210 |
| Rural Crafts | 7 | 0 | 189 | 189 | 0 | 21 | 21 | 210 |
| **TOTAL** | **29** | **172** | **236** | **408** | **116** | **200** | **316** | **724** |
| | | | | | | | | |
| **(C) Extension Personnel** | | | | | | | | |
| Productivity enhancement in field crops | 2 | 41 | 0 | 41 | 8 | 0 | 8 | 49 |
| Integrated Pest Management | | | | | | | | |
| Integrated Nutrient management | 1 | 22 | 0 | 22 | 6 | 0 | 6 | 28 |
| Rejuvenation of old orchards | | | | | | | | |
| Protected cultivation technology | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Formation and Management of SHGs | | | | | | | | |
| Group Dynamics and farmers organization | | | | | | | | |
| Information networking among farmers | | | | | | | | |
| Capacity building for ICT application | 1 | 25 | 0 | 25 | 5 | 0 | 5 | 30 |
| Care and maintenance of farm machinery and implements | | | | | | | | |
| WTO and IPR issues | 1 | 18 | 0 | 18 | 4 | 0 | 4 | 22 |
| Management in farm animals | 1 | 8 | 2 | 10 | 17 | 3 | 20 | 30 |
| Livestock feed and fodder production | | | | | | | | |
| Household food security | | | | | | | | |
| Women and Child care | | | | | | | | |
| Low cost and nutrient efficient diet designing | | | | | | | | |
| Production and use of organic inputs | 1 | 24 | 0 | 24 | 5 | 0 | 5 | 29 |
| Gender mainstreaming through SHGs | | | | | | | | |
| Any other (Pl. Specify) | 1 | 34 | 0 | 34 | 5 | 0 | 5 | 39 |
| **TOTAL** | **8** | **172** | **2** | **174** | **49** | **3** | **52** | **227** |

Note: Please furnish the details of training programmes **as Annexure in the proforma** given below

| Date | Clientele | Title of the training programme | Duration in days | Venue (Off / On Campus) | Number of participants | | | Number of SC/ST | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Male | Female | Total | Male | Female | Total |
| 26.05.08 | PF | Improved production technology of Jute | 1 | Off | 21 | 0 | 21 | 21 | 0 | 21 |
| 27.05.08 | PF | Weed management of jute | 1 | Off | 29 | 0 | 29 | 21 | 0 | 21 |
| 28.05.08 29.05.08 | PF | Seed treatment and nursery management of *kharif* paddy | 2 | Off | 61 | 0 | 61 | 28 | 0 | 28 |
| 30.05.08 | PF | Need for soil testing and soil test based fertilizer application | 1 | Off | 26 | 0 | 26 | 3 | 0 | 3 |
| 31.05.08 | PF | Use of fibre extractor in extraction of fibre | 1 | Off | 30 | 0 | 30 | 25 | 0 | 25 |
| 18.07.08 | PF | Utilization of biofertiliser in kharif rice | 1 | Off | 31 | 0 | 31 | 1 | 0 | 1 |
| 23.07.08 | PF | Weed control of kharif paddy | 1 | Off | 30 | 0 | 30 | 0 | 0 | 0 |
| 01.09.08 | PF | Integrated nutrient management for enhancement of paddy productivity and better soil health | 1 | Off | 30 | 0 | 30 | 0 | 0 | 0 |
| 04.09.08 16.10.08 | PF | Paddy seed production technology | 2 | Off | 60 | 0 | 60 | 20 | 0 | 20 |
| 17.10.08 | PF | NADEP compost production | 1 | Off | 30 | 0 | 30 | 22 | 0 | 22 |
| 15.11.08 29.12.08 | PF | Improved production technology of mustard | 2 | Off | 60 | 0 | 60 | 16 | 0 | 16 |
| 15.01.09 16.01.09 | PF | Improved production technology of sesame | 2 | Off | 63 | 0 | 63 | 0 | 0 | 0 |
| 20.01.09 | PF | Improved production technology of lentil | 1 | Off | 31 | 0 | 31 | 12 | 0 | 12 |
| 21.03.09 | PF | Training on SRI | 1 | off | 30 | 0 | 30 | 9 | 0 | 9 |
| 02.06.08 | PF | Preparation of organic pesticides and its application | 1 | Off | 29 | 0 | 29 | 2 | 0 | 2 |
| 03.06.08 | PF | Use of mulch in horticultural crops | 1 | Off | 31 | 0 | 31 | 22 | 0 | 22 |
| 04.06.08 | PF | Impact and utilization of biofertilizers | 1 | Off | 33 | 0 | 33 | 23 | 0 | 23 |
| 05.08.08 | PF | Improved production technology of chilli | 1 | Off | 31 | 0 | 31 | 26 | 0 | 26 |

| Date | Clientele | Title of the training programme | Duration in days | Venue (Off / On Campus) | Number of participants | | | Number of SC/ST | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Male | Female | Total | Male | Female | Total |
| 08.08.08 | PF | Establishment of fruit orchard | 1 | Off | 30 | 0 | 30 | 2 | 0 | 2 |
| 22.08.08 | PF | Nursery management in vegetable crops | 1 | Off | 25 | 0 | 25 | 10 | 0 | 10 |
| 18.11.08 | PF | Improved production technology of potato | 1 | Off | 30 | 0 | 30 | 12 | 0 | 12 |
| 20.01.09 | PF | Identification of major diseases of potato & their control | 1 | off | 30 | 0 | 30 | 14 | 0 | 14 |
| 24.02.09 | PF | Improved production technology of okra | 1 | On | 21 | 5 | 26 | 11 | 1 | 12 |
| 07.03.09 | PF | Improved production technology of cucurbits | 1 | on | 26 | 5 | 31 | 14 | 1 | 15 |
| 05.06.08 | PF | Techniques of paneer preparation | 1 | off | 12 | 18 | 30 | 2 | 2 | 4 |
| 06.06.08 | PF | Feeding practices of doe | 1 | off | 30 | 0 | 30 | 2 | 0 | 2 |
| 07.06.08 | PF | Care of new born kids | 1 | off | 30 | 0 | 30 | 4 | 0 | 4 |
| 26.06.08 & 25.08.08 | PF | Feeding techniques of mineral mixture for dairy cow | 2 | off | 62 | 0 | 62 | 27 | 0 | 27 |
| 7.08.08 &22.08.08 | PF | Animal shed disinfection at rainy season | 2 | off | 34 | 28 | 62 | 4 | 18 | 22 |
| 23.08.08 | PF | Home made cattle feed preparation | 1 | off | 30 | 0 | 30 | 3 | 0 | 3 |
| 03.09.08 | PF | Cultivation techniques of rice bean | 1 | off | 30 | 0 | 30 | 1 | 0 | 1 |
| 15.11.08 | PF | Care of newborn calf | 1 | off | 30 | 0 | 30 | 1 | 0 | 1 |
| 06.01.09 | PF | Care of doe during pregnancy | 1 | Off | 30 | 0 | 30 | 0 | 0 | 0 |
| 16.01.09 | PF | Vaccination schedule for duck | 1 | Off | 30 | 0 | 30 | 3 | 0 | 3 |
| 24.02.09 | PF | Preventive measure against PPR | 1 | On | 20 | 12 | 32 | 8 | 7 | 15 |
| 10.06.08 | PF | Preparation and management of nursery pond | 1 | Off | 31 | 0 | 31 | 22 | 0 | 22 |
| 11.06.08 | PF | Aquatic weeds and algal blooms in fish ponds, their control and utilization | 1 | Off | 30 | 0 | 30 | 2 | 0 | 2 |
| 12.06.08 | PF | Rearing pond preparation and management. | 1 | Off | 30 | 0 | 30 | 19 | 0 | 19 |
| 22.07.08 | PF | Nutrition requirement of IMC | 1 | Off | 30 | 0 | 30 | 1 | 0 | 1 |
| 26.07.08 | PF | Application of lime in fish culture | 1 | Off | 30 | 0 | 30 | 13 | 0 | 13 |
| 07.08.08 | PF | Feed formulation & feed management of IMC | 1 | Off | 30 | 0 | 30 | 2 | 0 | 2 |
| 22.09.08 | PF | Integrated duck-cum-fish farming in back yard pond | 1 | Off | 26 | 0 | 26 | 1 | 0 | 1 |
| 16.10.08 | PF | Induced breeding of Indian major carp | 1 | Off | 30 | 0 | 30 | 2 | 0 | 2 |
| 18.11.08 | PF | Airbreathing fish culture | 1 | Off | 30 | 0 | 30 | 12 | 0 | 12 |

| Date | Clientele | Title of the training programme | Duration in days | Venue (Off / On Campus) | Number of participants | | | Number of SC/ST | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 20.01.09 | PF | Culture of some freshwater ornamental fishes | 1 | Off | 30 | 0 | 30 | 27 | 0 | 27 |
| 13.06.08 | PF | Leadership development | 1 | Off | 22 | 0 | 22 | 2 | 0 | 2 |
| 18.06.08 | PF | Group dynamics and farmers' organization | 1 | Off | 25 | 0 | 25 | 1 | 0 | 1 |
| 17.10.08 | PF | Formation and management of self help groups | 1 | Off | 26 | 0 | 26 | 16 | 0 | 16 |
| 18.10.08 21.10.08 | PF | WTO and IPR issue | 2 | Off | 56 | 0 | 56 | 16 | 0 | 16 |
| 19.03.09 | PF | WTO and Indian agriculture | 1 | On | 30 | 0 | 30 | 10 | 0 | 10 |
| 20.03.09 | PF | WTA & its impact on Indian agriculture | 1 | On | 20 | 0 | 20 | 8 | 0 | 8 |
| 21.10.08 | PF | Formation and management of self help groups | 1 | Off | 30 | 0 | 30 | 1 | 0 | 1 |
| 23.06.08 26.07.08 | PF | Pest management of Jute | 2 | Off | 61 | 0 | 61 | 41 | 0 | 41 |
| 07.07.08 28.07.08 | PF | Pest management of Kharif rice | 2 | Off | 60 | 0 | 60 | 18 | 0 | 18 |
| 29.07.08 | PF | Integrated Pest Management (IPM) in rice | 1 | Off | 30 | 0 | 30 | 17 | 0 | 17 |
| 05.08.08 | PF | Management of Phomopsis blight in brinjal | 1 | Off | 29 | 0 | 29 | 18 | 0 | 18 |
| 05.09.08 06.09.08 | PF | Details of pesticides and safety use | 2 | Off | 52 | 8 | 60 | 22 | 8 | 30 |
| 18.11.08 20.11.08 | PF | Seed treatment of Potato | 2 | Off | 43 | 13 | 56 | 11 | 8 | 19 |
| 11.06.08 | PF | Minimization of nutrients loss during cooking food. | 1 | Off | 0 | 28 | 28 | 0 | 8 | 8 |
| 12.06.08 | PF | Clean milk production from cattle | 1 | Off | 0 | 30 | 30 | 0 | 8 | 8 |
| 28.06.08 | PF | Preparation of mango squash. | 1 | Off | 0 | 30 | 30 | 0 | 10 | 10 |
| 25.08.08 15.09.08 | PF | Management of nutrition garden. | 2 | Off | 0 | 55 | 55 | 0 | 25 | 25 |
| 22.09.08 | PF | Effective storage of grain, fruits and vegetables | 1 | Off | 0 | 24 | 24 | 0 | 3 | 3 |
| 15.10.08 | PF | Balance diet and RDA of foods for expectant and nursing mothers | 1 | Off | 0 | 24 | 24 | 0 | 15 | 15 |
| 15.11.08 | PF | Preparation of tomato sauce | 1 | Off | 0 | 25 | 25 | 0 | 3 | 3 |
| 18.11.08 | PF | Preparation of guava jam and jelly | 1 | Off | 0 | 28 | 28 | 0 | 13 | 13 |
| 26.12.08 | PF | Preparation of mixed vegetable pickle | 1 | On | 0 | 25 | 25 | 0 | 23 | 23 |

| Date | Clientele | Title of the training programme | Duration in days | Venue (Off / On Campus) | Number of participants | | | Number of SC/ST | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Male | Female | Total | Male | Female | Total |
| 18.10.08, 20.11.08, 21.11.08 & 20.03.09 | RY | Improved production technology of gladiolus | 4 | On | 41 | 0 | 41 | 21 | 0 | 21 |
| 17.10.08 & 18.10.08 | RY | Rearing of Khaki Campbell duck in village | 2 | On | 30 | 0 | 30 | 12 | 0 | 12 |
| 23.02.09-27.02.09 | RY | Operation, maintenance and repairing of power tiller, pumpset and other agricultural implements | 5 | On | 110 | 0 | 110 | 25 | 0 | 25 |
| 19.01.09, 20.01.09 | RY | Improved method of oyster mushroom cultivation | 2 | Off | 61 | 2 | 63 | 42 | 2 | 44 |
| 17.02.09, 18.02.09 | RY | Scientific cultivation of different types of mushroom | 2 | on | 46 | 14 | 60 | 16 | 2 | 18 |
| 26.07.08, 01.08.08, 05.08.08,13.08.08,24.08.08-26.08.08 | RY | Preparation of kantha stitch | 7 | Off | 0 | 210 | 210 | 0 | 175 | 175 |
| 25.02.09-03.03.09 | RY | Preparation of jute handicrafts | 7 | Off | 0 | 210 | 210 | 0 | 21 | 21 |
| 21.01.09 | EF | Techniques of biological specimen collection and precaution | 1 | On | 21 | 5 | 26 | 13 | 3 | 16 |
| 12.02.09 | EF | Sustainable aquaculture | 1 | On | 29 | 0 | 29 | 5 | 0 | 5 |
| 28.01.09 | EF | Improved fertilizer management in oil seed & pulses to augment productivity | 1 | on | 20 | 0 | 20 | 6 | 0 | 6 |
| 28.01.09 | EF | Seed production technologies of major vegetable crop | 1 | on | 20 | 0 | 20 | 6 | 0 | 6 |
| 28.01.09 | EF | Capacity building up for ICT application | 1 | On | 18 | 0 | 18 | 5 | 0 | 5 |
| 12.02..09 | EF | Vermicompost production & its utilization for better soil health | 1 | On | 24 | 0 | 24 | 5 | 0 | 5 |
| 12.02.09 | EF | Third generation pesticides: towards better crop production | 1 | On | 23 | 0 | 23 | 2 | 0 | 2 |
| 12.02.09 | EF | WTO & IPR issue | 1 | On | 22 | 0 | 22 | 4 | 0 | 4 |

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

| Crop / Enterprise | Identified Thrust Area | Training title* | Duration (days) | No. of Participants | | | Self employed after training | | | Number of persons employed else where |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | M | F | Total | Type of units | No. of units | Number of persons employed | |
| Kantha stitch | Design, stitching and preparation of diversified dress material | Preparation of Kantha stitch | 7 | - | 210 | 210 | SHG | 2 | 20 | |
| Jute handicrafts | Entrepreneurship development | Preparation of jute handicrafts | 7 | - | 210 | 210 | SHG | 2 | 15 | |
| Mushroom | House hold consumption | Mushroom cultivation | 6 | 172 | 8 | 180 | Newly introduced farming yet to be adopted | | | |

*training title should specify the major technology /skill transferred

**(E) Sponsored Training Programmes**

| S.N | Title | Thematic area | Month | Duration (days) | Client | No. of courses | No. of Participants | | | | | | | Sponsoring Agency |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | PF/RY/EF | | Male | | Female | | Total | | | |
| | | | | | | | Others | SC/ST | Others | SC/ST | Others | SC/ST | Total | |
| 1. | Restoration of soil health | Soil health management | July 08 | 1 | PF | 4 | 16 | 4 | - | - | 16 | 4 | 20 | **ATMA** |
| 2. | Organic pesticide & its impact in hort. crop | organic farming | July,08 | 1 | PF | 4 | 15 | 5 | - | - | 15 | 5 | 20 | **ATMA** |
| 3. | Fish culture & induced breeding | Composite fish culture | July,08 | 1 | PF | 4 | 16 | 4 | - | - | 16 | 4 | 20 | **ATMA** |
| 4. | K C duck rearing | Poultry production | Aug.08 | 1 | PF | 4 | 14 | 6 | - | - | 14 | 6 | 20 | **ATMA** |
| 5 | Composite fish culture | Composite fish production | Aug 08 | 10 | PF | 10 | 270 | 30 | 0 | 0 | 270 | 30 | 300 | **NFDB** |
| 6. | Biopesticide preparation & its use | Organics farming | March 09 | 1 | PF | 1 | 12 | 10 | 0 | 2 | 12 | 12 | 24 | **ATMA** |
| 7. | Seed production technology of paddy | Crop production | March 09 | 1 | PF | 1 | 12 | 10 | 0 | 2 | 12 | 12 | 24 | **ATMA** |
| 8. | Control measures of Bird flu | Disease management | March 09 | 1 | PF | 1 | 12 | 10 | 0 | 2 | 12 | 12 | 24 | **ATMA** |
| Total | | | | | | 29 | 367 | 79 | 0 | 6 | 367 | 85 | 452 | |

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

| Nature of Extension Activity | No. of activities | Farmers | | | Extension Officials | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Field Day | 2 | 105 | - | 105 | 18 | 1 | 19 | 123 | 1 | 124 |
| Kisan Mela | | | | | | | | | | |
| Kisan Ghosthi | | | | | | | | | | |
| Exhibition | 2 | 150 | 50 | 200 | 10 | 2 | 12 | 160 | 52 | 212 |
| Film Show | 5 | 80 | 15 | 95 | 5 | 3 | 8 | 85 | 18 | 103 |
| Method Demonstrations **(seed drill/ jute fibre extractor)** | 3 | 75 | 15 | 90 | 4 | 1 | 5 | 79 | 16 | 95 |
| Farmers Seminar | | | | | | | | | | |
| Workshop | | | | | | | | | | |
| Group meetings | | | | | | | | | | |
| Lectures delivered as resource persons | 5 | 120 | 20 | 140 | 5 | - | 5 | 125 | 20 | 145 |
| Newspaper coverage | 7 | | | | | | | | | |
| Radio talks | | | | | | | | | | |
| TV talks | 1 | | | | | | | | | |
| Popular articles | 3 | | | | | | | | | |
| Extension Literature | 10 | 586 | 154 | 740 | | | | 586 | 154 | 740 |
| Advisory Services | 229 | 119 | 30 | 229 | | | | 119 | 30 | 229 |
| Scientific visit to farmers field | 50 | 324 | 42 | 366 | | | | 324 | 42 | 366 |
| Farmers visit to KVK | 50 | 620 | 70 | 690 | | | | 620 | 70 | 690 |
| Diagnostic visits | 30 | 80 | 0 | 80 | | | | 80 | 0 | 80 |
| Exposure visits | 2 | 60 | 0 | 60 | | | | 60 | 0 | 60 |
| Ex-trainees Sammelan | | | | | | | | | | |
| Soil health Camp | | | | | | | | | | |
| Animal Health Camp | 13 | 641 | 47 | 688 families | | | | 641 | 47 | 688 families |
| Agri mobile clinic | | | | | | | | | | |
| Soil test campaigns | | | | | | | | | | |
| Farm Science Club Conveners meet | 15 | 150 | 20 | 170 | | | | 150 | 20 | 170 |
| Self Help Group Conveners meetings | 5 | 0 | 120 | 120 | | | | 0 | 120 | 120 |
| Mahila Mandals Conveners meetings | 2 | 0 | 20 | 20 | | | | 0 | 20 | 20 |
| Celebration of important days (specify) | (2) 15th August and 26th April (World Vet. Day) | 21 | 48 | 69 | | | | 21 | 48 | 69 |
| Any Other (Farmer participation in inauguration programme of Trainees hostel) | 1 | 150 | 50 | 200 | 20 | 5 | 25 | 170 | 55 | 225 |
| Total | 437 | **3281** | **701** | **4062** | **62** | **12** | **74** | **3343** | **713** | **4136** |

### *3.5 Production and supply of Technological products*

A. SEED MATERIALS PRODUCED AT KVK FARM

| Sl. No. | Crop | Variety | Quantity (q) | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|
| **CEREALS** | Paddy | MTU 7029<br>CR 1010 | 150 | 225000 | 100 |
| | Paddy straw | MTU 7029<br>CR 1010 | 101 | 6060 | - |
| **PULSES** | | | | | |
| **VEGETABLES** | Brinjal seedling | Muktokeshi | 6500 nos. | 1950 | 15 |
| **FLOWER CROPS** | Gladiolus | Different varieties | 300 corms and 5 kg corm lets | Not sold | - |
| **Spices & plantation crop** | Turmeric | BH- 4 | 2.0 | - | - |
| OTHERS (Specify) | - | - | - | - | - |

**SUMMARY**

| Sl. No. | Crop | Quantity (q) | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|
| 1 | CEREALS (Rice) | 150 | 225000 | 100 |
| 2. | Paddy straw | 101 | 6060 | - |
| 4 | PULSES | | | |
| 5 | Brinja seedling | 6500 nos. | 1950 | 15 |
| 6 | Gladiolus | 300 corms and 5 kg corm lets | Not sold | - |
| 7. | Turmeric | 2.0 | - | - |
| **TOTAL** | | | **233010** | 115 |

B. ***SEED MATERIALS PRODUCED THROUGH VILLAGE SEED PRODUCTI****ON PROGRAMME*

| Sl. No. | Crop | Variety | Quantity (qtl.) | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|
| CEREALS | -- | -- | -- | -- | -- |
| OILSEEDS | -- | -- | -- | -- | -- |
| PULSES | -- | -- | -- | -- | -- |
| VEGETABLES | -- | -- | -- | -- | -- |
| FLOWER CROPS | -- | -- | -- | -- | -- |
| OTHERS (Specify) | -- | -- | -- | -- | -- |

PLANTING MATERIALS

| Sl. No. | Crop | Variety | Quantity (Nos.) | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|
| FRUITS | -- | -- | -- | -- | -- |
| SPICES | -- | -- | -- | -- | -- |
| VEGETABLES | -- | -- | -- | -- | -- |
| FOREST SPECIES | -- | -- | -- | -- | -- |
| ORNAMENTAL CROPS | -- | -- | -- | -- | -- |
| PLANTATION CROPS | -- | -- | -- | -- | -- |
| Others (specify) 1 | | | | | |

**SUMMARY**

| Sl. No. | Crop | Quantity (Nos.) | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|
| 1 | FRUITS | -- | -- | -- |
| 2 | VEGETABLES | -- | -- | -- |
| 3 | SPICES | -- | -- | -- |
| 4 | FOREST SPECIES | -- | -- | -- |
| 5 | ORNAMENTAL CROPS | -- | -- | -- |
| 6 | PLANTATION CROPS | -- | -- | -- |
| 7 | OTHERS | | | |
| | **TOTAL** | | | |

**BIO PRODUCTS**

| Sl. No. | Product Name | Species | Quantity | | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|---|
| | | | No | (kg) | | |
| | -- | -- | -- | -- | -- | -- |
| **BIOAGENTS** | -- | -- | -- | -- | -- | -- |
| **BIOFERTILIZERS** | -- | -- | -- | -- | -- | -- |
| **BIO PESTICIDES** | -- | -- | -- | -- | -- | -- |

**SUMMARY**

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

**LIVESTOCK**

| Sl. No. | Type | Breed | Quantity | | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|---|
| | | | (Nos | Kgs | | |
| **Cattle** | -- | -- | -- | -- | -- | -- |
| **SHEEP AND GOAT** | -- | -- | -- | -- | -- | -- |
| **POULTRY** | Duck feed | KC | | 185 | 2220 | 18 |
| **FISHERIES** | IMC advanced Fingerling | Rohu, catla mrigal | - | 463 | 16980 | 45 |
| **Others (Specify)** | -- | -- | -- | -- | -- | -- |

**SUMMARY**

| Sl. No. | Type | Breed | Quantity | | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|---|
| | | | Nos | Kgs | | |
| 1 | CATTLE | -- | -- | -- | -- | -- |
| 2 | SHEEP & GOAT | -- | -- | -- | -- | -- |
| 3 | POULTRY | Duck feed | | 185 | 2220 | 18 |
| 4 | FISHERIES | IMC advanced Fingerling | | 463 | 16980 | 45 |
| | **TOTAL** | | | 648 | 19200 | 63 |

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

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

(B) Literature developed/published : ***Annexure II***

| Item | Title | Authors name | Number |
|---|---|---|---|
| Research papers | - | - | 4 |
| Technical reports | - | - | - |
| News letters | - | - | - |
| Technical bulletins | 1. Towards food and economic security through enterprise diversification | S.K. Jha, D. Ghorai, F. H. Rahman, M.K. Sinha and B.S. Mahapatra | 1 |
| | 2. Towards profitable agriculture- A guide line for farmers | F. H. Rahman, D. Ghorai S. Sarkar, C. Jana S. Sarkar, G. Ziauddin, S.Sethy, M. Kumar S. Garai, SS Kundu | 1 |
| Popular articles | Cultivation of Hybrid Napier as green fodder, *Barddhaman Jyoti* | C. Jana, S. Garai and F. H. Rahman | 1 |
| | Scientific cultivation of Mushrooms, *Barddhaman Jyoti* | S. Garai, D. Ghorai and F.H. Rahman | 1 |
| | Oyster Mushroom - An income generating enterprise, *Barddhaman Jyoti* | S. Garai and F.H. Rahman | 1 |
| Extension literature | 1. Preparation of Vegetable seedling<br>2. Organic pesticide preparation and its application<br>3. System of rice intensification – an alternative system<br>4. Pest and disease of paddy<br>5. Vaccination schedule for animal<br>6. Rearing of Khaki Campbell duck<br>7. Preventive measures against PPR<br>8. Cultivation of Ricebean as fodder<br>8 Induced breeding of Indian Major Carps<br>9. Clean milk production<br>10. Oyster mushroom – a profitable enterprise | S. Sarkar<br>S. Sarkar<br>D. Ghorai<br>S. Garai & SS Kundu<br>C. Jana<br>C.Jana<br>C.Jana<br>C.Jana<br>G. Ziauddin<br>S.Sethy<br>S. Garai | |
| Others (Pl. specify) | | | |
| **TOTAL** | **Nineteen (19)** | | |

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 : Two (2)

| S. No. | Type of media (CD / VCD / DVD / Audio-Cassette) | Title of the programme | Number |
|---|---|---|---|
| **1** | **CD** | **Fish culture and development (in local language)** | **1** |
| **2.** | **CD** | **Khaki Campbell duck rearing ( in local language)** | **1** |

### D) Details of personnel development

| Title of training/ winter school | Venue and date | Scientists attended |
|---|---|---|
| Protected Cultivation Technologies | Precision Farming Development Centre, Agricultural and Food Engineering Dept., IIT, Karagpur from October 21-22, 2008 | Dr. S. Sarkar and D. Ghorai |
| Precision farming on Agriculture | BAU, Ranchi, from 16.06.08 to 20.06.08 | Mr. D. Ghorai |
| National workshop on orienting Home Science activities in KVKs | S. V. B. P. U. A. & T., Meerut | S. Sethy |

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

- KVK gave due stress on areas of seed treatment of all crops, fertilizer management for oilseed and pulse crop for enhanced productivity. The areas of seed treatment and fertilizer management in oilseed crops have often been neglected by the farmers. KVK repeatedly interacted with farmers on these aspects through group discussion, awareness camps etc. Farmers obtained significantly higher production through adopting these technologies. The technologies have also been horizontally transferred to number of adjoining villages.
- Jute was an alien crop for the farmers of the village KETEN, the adopted village by KVK. Villagers were first motivated towards it's cultivation through mass awareness camps, group meetings, farmers' tour to Central Research Institute for Jute and Allied Fibres and training. Farmers were then selected for frontline demonstration. Barring few cases most of the farmers generated good earnings in the range of Rs. 1500 to Rs. 2000 per bigha by selling of jute fibre
- Besides farmers were shown the way of utilizing the jute fibre in another possible way – this time through entrepreneurship development for rural women. Selected farm women and school dropout girls were thoroughly trained in a 7 day workshop by KVK for preparation of jute handicrafts from fibre. After completion of the training 2 Mahila Mandals were formed and two members of the groups namely Namita Lohar and Tanushree Majhi mastered the skills so well that they started preparing crafts like jute bags, pen stands and other ornamental items themselves. The crafts were marketed in the gramin melas, women fairs and they earned incomes of Rs. 1400 and Rs. 1800 respectively till date, thereby ensuring grater livelihood security for their families.
- A total of 30 women were trained on 'kantha stitch' in one of the adopted village of Jagulipara through a long duration training spaning over 7 days during June 2008 by the KVK with an eye to develop entrepreneurship among womenfolk of the village. After getting trained two the farm women namely, Mrs. Jyotsna Chowdhury and Sakila Begum have generated nearly Rs.3300 to add to his family income so far.
- Success has been achieved in the fisheries sector as well. Mr. Mazhar-ul-Ali was identified as one of the progressive fish farmer of the region. He, along with some other fish farmers of the adopted villages, were extensively trained on various improved techniques of fish farming like composite fish culture, induced breeding, maintenance of fish pond etc. Mr. Ali have now developed so much expertise that he is now being engaged by KVK and different self help groups as resource person on payment basis.

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

-

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

| S. No. | Crop / Enterprise | ITK Practiced | Purpose of ITK |
|---|---|---|---|
| 1 | **Goat and Cattle** | Paste of leaves of **kalmeg** is made in water which is drenched orally. | Deworming for cattle and goat |
| 2 | **Cattle** | Leaves and twigs (20g) of **neem** are boiled in water (1 liter) till the colour of leaves turn greyish. The decoction, after cooling, is applied externally on the affected area | To control Foot and mouth disease in cattle |
| 3 | **Goat and Cattle** | Paste of branch of **lonka suti** (2 for adult cow and 1 for goat) in semi-solid form is fed to the affected animals for 2 days | For treatment of diarrhoea of cattle and goat |

| | | | |
|---|---|---|---|
| **4** | **Goat and Cattle** | Black pepper is mixed with **ghee** and fed to the affected animals. | For treatment of fever (HS) for cattle and goat |
| **5** | **Goat and Cattle** | Paste of **harjora** is applied on the affected area which is fixed by using bamboo stick | Setting of fractured bone of small and large animals |
| **6** | **Buffalo** | Paste of **raw turmeric and mustard cake** is applied on the affected area with rice glue on back | Swelling and pain in hump of buffalo |
| **7** | **Paddy/ wheat** | Dried neem leaves are placed in different layers of grain during storage | To check pest attack in paddy/ wheat during storage |

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

- Identification of courses for farmers/farm women :
  Through multidisciplinary PRA method and Group discussion
- Rural Youth
  Through multidisciplinary PRA method and Group discussion
- In-service personnel: Training and discussion using A/V aids

***3.11 Field activities***

i. Number of villages adopted – 3 so far ***(Two during the year)***
ii. No. of farm families selected- 1227 ***(1023 during the year)***
iii. No. of survey/PRA conducted- 3 ***(Two PRAs during the year)***

***3.12. Activities of Soil and Water Testing Laboratory***
**Status of establishment of Lab** :

1. Year of establishment : 2007- 2008
2. List of equipments purchased with amount :

| Name of the equipment | Qty | Cost (Rs.) |
|---|---|---|
| Flame photometer | One | 29813.00 |
| Spectrophotometer | One | 46283.00 |
| Shaker | One | 20756.00 |
| Hot air oven | One | 5344.00 |
| Hot plate | One | 14000.00 |
| Glass distillation unit | One | 28000.00 |
| Conductivity bridge | One | 10000.00 |
| pH meter | One | 9360.00 |
| Refrigerator | One | 12350.00 |
| Electronic balance | One | 12375.00 |
| Grinder | One | 19500.00 |
| Kjeldahl N semi auto analyzer | One | 250474.00 |

3. Details of samples analyzed so far :

| Details | No. of Samples | No. of Farmers | No. of Villages | Amount realized |
|---|---|---|---|---|
| Soil Samples | 234 | 200 | 4 | - |
| Water Samples | 20 | 20 | 4 | - |
| Total | 254 | 220 | 4 | - |

## 4.0 IMPACT

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

| Name of specific technology/skill transferred | No. of participants | % of adoption | Change in income (Rs.) | |
|---|---|---|---|---|
| | | | Before (Rs./Unit) | After (Rs./Unit) |
| Preparation of jute handicrafts | 30 | 85 | - | 1600 |
| Introduction of cultivation of jute in new areas | 40 | 75 | - | 15000/ha |
| Cultivation of Oyster mushroom in new areas | 40 | 50 | - | - |
| Preparation of kantha stitch | 30 | 80 | - | 3000/month |
| Introduction of Khaki Campbell duck | 25 | 80 | - | 300/month |
| Fish fry and fingerling production | 25 | 60 | 8000/ha | 18000/ha |

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

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

## 5.0 LINKAGES

### *5.1 Functional linkage with different organizations*

| Name of organization | Nature of linkage |
|---|---|
| Animal Resource Development Department, Govt. of W.B., | • Ducklings supply<br>• Vaccination camp against FMD, PPR, Rani khet disease<br>• Health camp against infertility |
| ATMA | • Governing body and management committee member<br>• SREP preparation<br>• Collaborative programmes:-<br>**Farm School - 2 nos.**<br>**Trainings – 05 nos.**<br>**Demonstration – 10 nos**. |
| RKVY | • Governing body and management committee member<br>• Adhoc projects etc. |
| National Seed Corporation, State Seed Corporation, | Foundation and certified paddy and potato seed etc. |
| Department of Fisheries, Govt. of W.B | • Fish fingerlings supply<br>• Training on fish culture, management<br>• Awareness camp on subsidized loan scheme, fisherman identity card |
| Bidhan Chandra Krishi Viswavidyalaya, Mohanpur | • Time to time planning execution<br>• Planting material collection<br>• Bio fertilizers collection<br>• Resource persons |
| West Bengal University of Animal and Fishery Science | Feed and milk sample analysis |
| State Department of Agriculture, Burdwan | Time to time planning execution |
| Regional Station for Forage Production Demonstration, Kalyani | Training and fodder seed collection |
| CIFA, Kalyani | Exposure visit |
| State Agricultural Management Extension Training Institute, Narendrapur | Training on SREP preparation for ATMA programme |
| NABARD, CBI, SBI & RRBs ,Burdwan Region | Farmers; club, Credit facility for farmers |
| NGOs like Men at Work, Ujjiban, SSSNS, Meghdhoot | Farmers' tour , Training etc |

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

| Name of the scheme | Date/ Month of initiation | Funding agency | Amount (Rs.) |
|---|---|---|---|
| Farm School (2 nos.) | June – July, 2008 | **ATMA** | **1,00,000.00** |
| Training and demonstration | Mar, 2008 | **ATMA** | **60,000.00** |
| Training-cum-demonstration on Fisheries | Aug- Sept, 2008 | **NFDB** | **82,500.00** |

### *5.3 Details of linkage with ATMA*

a) Is ATMA implemented in your district Yes (2007)

| S. No. | Programme | Nature of linkage | Remarks |
|---|---|---|---|
| 1 | Governing body Meeting | Decision making on SREP and annual work plan as GB member | - |
| 2 | Management committee meeting | Approval for SREP, PRA and Accounts etc. as MC member | - |
| 3 | Master training on SREP preparation | Training attended at SAMETI | - |
| 4 | PRA | Collaborative programmes in SREP preparation | - |
| 5. | Farm School (2 nos),. | Sponsorship | - |
| 6. | Training, demonstration etc | Sponsorship | - |

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

| S. No. | Programme | Nature of linkage | Constraints if any |
|---|---|---|---|
| 1. | Introduction of new planting materials in the villages | Tissue culture banana distribution | - |
| | | | |

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

| S. No. | Programme | Nature of linkage | Remarks |
|---|---|---|---|
| 1. | Training and Demonstration on Composite Fish culture | Sponsorship | Rs. 82,250/- received from NFDB, Hyderabad for conducting programme |

## 6. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

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

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

| Name Of the crop | Date of sowing/ transplanting | Date of harvest | Area (ha) | Details of production | | | Amount (Rs.) | | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Variety | Type of Produce | Qty. | Cost of inputs | Gross income | |
| Cereals (paddy) | 23.07.2008 | 15.12.2008 | 3.5 | MTU 7029 | Certified and TL seed | 150 q | 100,000 | 2,25,000 | |
| Turmeric | 13.02.08 | 10.03.09 | 350 sq.m | BH-4 | TL seed | 2 q | - | - | |
| Floriculture (gladiolus) | 10.10.08 | 14.02.08 | 70 sq.m | Diff. vars.(*Pusa suhagan,candiman, rippling water, summer sunshine, sunset etc)* | Corms & cormlets | 300 corms and 5 kg cormlets | - | - | |
| Vegetables (Brinjal) | 28.09.09 | 28.0.08 | - | Muktokeshi | seedling | 6500 nos. | | 1950 | |

### *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 | Type of Produce | Qty. | Cost of inputs | Gross income | |
| | Fish fingerling | IMC | Fry and Fingerling | 463 kg | 6000 | 10980 | - |
| | Duck | Khaki Campbell | Duck feed | 185 kg | 8950 | 2220 | Selling in progress |

### *6.5 Utilization of hostel facilities*

Accommodation available (No. of beds) – 20

| Months | No. of trainees stayed | Trainee days (days stayed) | Reason for short fall (if any) |
|---|---|---|---|
| November 2008 | -- | -- | -- |
| December 2008 | -- | -- | -- |
| January 2009 | 22 | 5 | -- |
| February 2009 | -- | -- | -- |
| March 2009 | -- | -- | -- |

## 7. FINANCIAL PERFORMANCE

### *7.1 Details of KVK Bank accounts*

| Bank account | Name of the bank | Location | Account Number |
|---|---|---|---|
| With Host Institute | State Bank of India Railway Station Branch, Barrackpore | Barrackpore | 10391779335 |
| With KVK | State Bank of India Mankar | Mankar | 30466431682 |

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

| Item | Released by ICAR | | Expenditure | | Unspent balance as on 1st April 2008 |
|---|---|---|---|---|---|
| | Kharif 2007 | Rabi 2007-08 | Kharif 2007 | Rabi 2007-08 | |
| Inputs | | | | | Rs. 15910.00 |
| Extension activities | | | | | |
| TA/DA/POL etc. | | | | | |
| TOTAL | | | | | |

** FLD on mustard conducted from contingency and results given in the page no 34*

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

| Item | Released by ICAR | | Expenditure | | Unspent balance as on 1st April 2008 |
|---|---|---|---|---|---|
| | Kharif 2006 | Rabi 2006 -07 | Kharif 2006 | Rabi 2006-07 | |
| Inputs | | | | | Rs. 1286.00 |
| Extension activities | | | | | |
| TA/DA/POL etc. | | | | | |
| TOTAL | - | | | | |

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

| Item | Released by ICAR | | Expenditure | | Unspent balance as on 1st April 2009 |
|---|---|---|---|---|---|
| | Kharif 2007 | Rabi 2007 -08 | Kharif 2007 | Rabi 2007-08 | |
| Inputs | | | | | |
| Extension activities | | | | | |
| TA/DA/POL etc. | | | | | |
| TOTAL | | | | | |

## *7.5 Utilization of KVK funds during the year 2008-09 till date*

7.5 A. Utilization of KVK funds during the year 2007- 08

| S. No. | Particulars | Sanctioned (Rs. In Lakh) | Released (Released in Lakh) | Expenditure (Rs. In Lakh) |
|---|---|---|---|---|
| | **A. Recurring Contingencies** | | | |
| 1 | **Pay & Allowances** | 50.50 | 50.50 | 42.16 |
| 2 | **Traveling allowances** | 1.00 | 1.00 | 0.50 |
| 3 | **Contingencies** ( A+B+C+D+E+F+G+H+I+J) | 6.45 | 6.45 | 5.90 |
| *A* | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines) | 2.65 | 2.65 | 2.37 |
| *B* | POL, repair of vehicles, tractor and equipments | | | |
| *C* | Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained) | 2.40 | 2.40 | 2.37 |
| *D* | Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training) | | | |
| *E* | Training of extension functionaries | | | |
| *F* | Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year) | 0.68 | 0.68 | 0.48 |
| *G* | On farm testing (on need based, location specific and newly generated information in the major production systems of the area) | 0.72 | 0.72 | 0.68 |
| *H* | Maintenance of buildings | -- | -- | |
| *I* | Establishment of Soil, Plant & Water Testing Laboratory | -- | -- | |
| *J* | Library | -- | -- | |
| | **TOTAL (A)** | **57.95** | **57.95** | **48.56** |
| | **B. Non-Recurring Contingencies** | | | |
| 1 | **Works** | 92.12 | 92.12 | 51.75 |
| 2 | **Equipments including SWTL & Furniture** | 8.00 | 8.00 | 5.49 |
| 3 | **Vehicle** (Four wheeler/Two wheeler, please specify) | -- | -- | -- |
| 4 | **Library** (Purchase of assets like books & journals) | -- | -- | -- |
| | **TOTAL (B)** | **100.12** | **100.12** | **57.24** |
| | **GRAND TOTAL (A+B)** | **158.07** | **158.07** | **105.80** |

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

| Year | Opening balance as on 1st April (Rs) | Income during the year (Rs) | Expenditure during the year (Rs) | Net balance in hand as on 1st April of each year (Rs) |
|---|---|---|---|---|
| April 2004 to March 2005 | - | - | - | - |
| April 2005 to March 2006 | 100,000 | - | - | - |
| April 2006 to March 2007 | 100,000 | 18974/- | 19309/- | 99665/- |
| April 2007 to March 2008 | 99,665 | 83106/- | 63681/- | 1,19,090/- |
| April 2008 to March, 2009 | 1,19,090 | 29400/- | 1,39,468/- | 9022/- |

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

***8.1 Constraints - Nil***

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

## SUMMARY TABLES

### 1 Details of Technology assessment and refinement

*Table 1A: Abstract on the number of technologies assessed in respect of crops*

| Thematic areas | Cereals | Oilseeds | Pulses | Commercial Crops | Vegetables | Fruits | Flower | Plantation crops | Tuber Crops | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| Varietal Evaluation | | | | | | | | | | |
| Seed / Plant production | | 1 | | | 1 | | | | 1 | 3 |
| Weed Management | | | | | | | | | | |
| Integrated Crop Management | | | | | | | | | | |
| Integrated Nutrient Management | 1 | | | | | | | | | 1 |
| Integrated Farming System | | | | | | | | | | |
| Mushroom cultivation | | | | | | | | | | |
| Drudgery reduction | | | | | 1 | | | | | 1 |
| Farm machineries | | | | | | | | | | |
| Value addition | | | | | | | | | | |
| Integrated Pest Management | 1 | | | | 1 | | | | | 2 |
| Integrated Disease Management | | | | | | | | | | |
| Resource conservation technology | | | | | | | | | | |
| Small Scale income generating enterprises | | | | | | | | | | |
| **TOTAL** | 2 | 1 | | | 3 | | | | 1 | 7 |

*Table 1 B; Abstract on the number of technologies refined in respect of crops*

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

***Table 1 C: Abstract on the number of technologies assessed in respect of livestock enterprises***

| Thematic areas | Cattle | Poultry | Piggery | Rabbitary | Fisheries | TOTAL |
|---|---|---|---|---|---|---|
| Evaluation of Breeds | | | | | | |
| Nutrition Management | 1 | | | | 1 | 2 |
| Disease of Management | | | | | | |
| Value Addition | | | | | | |
| Production and Management | | | | | | |
| Feed and Fodder | | 1 | | | | 1 |
| Small Scale income generating enterprises | | | | | | |
| **TOTAL** | 1 | 1 | | | 1 | 3 |

***Table 1 D: Abstract on the number of technologies refined in respect of livestock enterprises***

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

*Table – 1 E Details of technology refined*

| Crop / Enterprise | Technology Assessed | No. replications | Technology refined | Result justifying the refinement |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

## 2. Details of Frontline Demonstrations

*Table – 2 A Front Line Demonstrations on Oilseed Crops*

| Crop | Technology Demonstrated | No. of Farmers | Area (ha.) | Demo. Yield | Local Check | Increase in yield (%) | Data on parameter in relation to technology demonstrated | | Average Net Return (Profit) (Rs./ha) | Benefit-Cost Ratio (Gross Return / Gross Cost) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Demo | Local | | |
| Mustard | Package demonstration | 30 | 4 | 11.3 q/ha | 10.2 q/ha | 11% | Given in Page No. 33 | | Demo: 16750 L. Chk.: 13979 | Demo : 1.98, L. Chk.: 1.84 |

*Table – 2 B Front Line Demonstrations on Pulse Crops*

| Crop | Technology Demonstrated | No. of Farmers | Area (ha.) | Demo. Yield | Local Check | Increase in yield (%) | Data on parameter in relation to technology demonstrated | | Average Net Return (Profit) (Rs./ha) | Benefit-Cost Ratio (Gross Return / Gross Cost) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Demo | Local | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

*Table – 2 C Front Line Demonstrations on Other Crops*

| Crop | Technology Demonstrated | No. of Farmers | Area (ha.) | Demo. Yield (q/ha) | Local Check | Increase in yield (%) | Data on parameter in relation to technology demonstrated | | Average Net Return (Profit) (Rs./ha) | Benefit-Cost Ratio (Gross Return / Gross Cost) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Demo | Local | | |
| Paddy | Package demonstration | 7 | 1 | 44.26 | 40.85 | 8% over local check | Given in Page No. 34 | | 21683 | Demo : 2.30, L. Chk.: 2.21 |
| Jute | Improved package demonstration | 15 | 2 | 27.66 | 25.08 | 10% over local check | Given in Page No. 34 | | 13416 | Demo : 1.73, L. Chk.: 1.25 |
| Potato | Component demonstration (late blight disease management) | 15 | 1 | 280 | 250 | 12% over local check | Given in Page No. 34 | | 78800 | Demo: 2.67, L. Check: 2.45 |
| Rice bean (as fodder) | Component demonstation (Biofertiliser) | 5 | 0.2 | 197.6 | 161.2 | 22.5 % over local check | Given in Page No. 32 | | 4770 | Demo : 1.93, L. Chk.: 1.61 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Brinjal | Component demonstration (Fungicide) | 16 | 0.75 | 226.5 | 213.7 | 6 % over local check | Given in Page No. 34 | 63593 | Demo : 2.56, L. Chk.: 2.15 |
| Brinjal | Imp. Agro. package | 2 | 0.8 | 250 | 210 | 9 % over local check | Given in Page No. 34 | 56800 | Demo : 2.36 L. Chk.: 2.10 |
| Tomato | Imp. Agro. package | 1 | 0.4 | 240 | 200 | 12 % over local check | Given in Page No. 33 | 52650 | Demo :2.30 L. Chk.: 2.12 |

***Table – 2 D Front Line Demonstrations on Other enterprises***

| **Enterprise** | **Variety/ breed /Species /others** | **No. of farmers** | **No. of Units** | **Size of Unit** | **Parameter indicators** | **Data on parameter in relation to technology demonstrated** | | **% change in the parameter** | **Remarks** |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Demon. | Local check | | |
| Cattle | Deshi cow | 10 | 10 | 1 | Milk yield | 331 | 251.8 | 31.5 | Lactation pd in was increased over local check |
| Duck | KC | 10 | 100 | 10 nos. | Egg | 210 | 180 | 16.6 | - |
| Mushroom | Oyster | 30 | 240 beds | 8 | Yield | 900 gm/bed | 600gm /bed | 50% over local chk | - |
| Fish | Minor carp (*Labeo bata*) | 10 | 10 | 1 | Yield | 7 q/ha | 5 q/ha | 40% over conv. Practice | - |
| Fish | IMC | 2 | 2 | 0.4 ha | Yield | 12.5 q/ha | 7 q/ha | 78.5% over conv. practice | - |

**3. Details of training programmes conducted:**

***Table – 3 A Area-wise distribution of On + Off Campus Training Courses for Farmers and Farm Women (regular + sponsored)***

| Thematic Area | No. of Participants | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. of Courses | Others | | | SC | | | ST | | | Grand Total |
| | | M | F | T | M | F | T | M | F | T | |
| | | | | | | | | | | | |
| **Crop Production** | | | | | | | | | | | |
| Weed Management | 2 | 38 | 0 | 38 | 21 | 0 | 21 | 0 | 0 | 0 | 59 |
| Resource Conservation Technologies | | | | | | | | | | | |
| Cropping Systems | | | | | | | | | | | |
| Crop Diversification | 1 | 0 | 0 | 0 | 21 | 0 | 21 | 0 | 0 | 0 | 21 |
| Integrated Farming | | | | | | | | | | | |
| Micro Irrigation/Irrigation | 1 | 21 | 0 | 21 | 8 | 0 | 8 | 1 | 0 | 1 | 30 |
| Seed production | 2 | 40 | 0 | 40 | 20 | 0 | 20 | 0 | 0 | 0 | 60 |
| Nursery management | 2 | 33 | 0 | 33 | 28 | 0 | 28 | 0 | 0 | 0 | 61 |
| Integrated Crop Management | 5 | 126 | 0 | 126 | 28 | 0 | 28 | 0 | 0 | 0 | 154 |
| Fodder production | 1 | 29 | 0 | 29 | 1 | 0 | 1 | 0 | 0 | 0 | 30 |
| Soil and Water Conservation | | | | | | | | | | | |
| Integrated Nutrient Management | | | | | | | | | | | |
| Production of organic inputs | | | | | | | | | | | |
| Other | | | | | | | | | | | |
| **Horticulture** | | | | | | | | | | | |
| **a) Vegetable Crops** | | | | | | | | | | | |
| Production of low value and high volume crop | 2 | 14 | 0 | 14 | 48 | 0 | 48 | 0 | 0 | 0 | 62 |
| Off-season vegetables | 1 | 12 | 4 | 16 | 12 | 1 | 13 | 2 | 0 | 2 | 31 |
| Nursery raising | 2 | 25 | 4 | 29 | 19 | 1 | 20 | 2 | 0 | 2 | 51 |
| Exotic vegetables | | | | | | | | | | | |
| Export potential vegetables | | | | | | | | | | | |
| Grading and standardization | | | | | | | | | | | |
| Protective cultivation | | | | | | | | | | | |
| Other (summer veg) | | | | | | | | | | | |
| **b) Fruits** | | | | | | | | | | | |
| Training and Pruning | | | | | | | | | | | |
| Layout and Management of Orchards | 1 | 28 | 0 | 28 | 2 | 0 | 2 | 0 | 0 | 0 | 30 |
| Cultivation of Fruit | | | | | | | | | | | |
| Management of young plants/orchards | | | | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | | | | |
| Export potential fruits | | | | | | | | | | | |
| Micro irrigation systems of orchards | | | | | | | | | | | |
| Plant propagation techniques | | | | | | | | | | | |
| **c) Ornamental Plants** | | | | | | | | | | | |
| Nursery Management | | | | | | | | | | | |
| Management of potted plants | | | | | | | | | | | |

| Thematic Area | No. of Participants | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. of Courses | Others | | | SC | | | ST | | | Grand Total |
| | | M | F | T | M | F | T | M | F | T | |
| Export potential of ornamental plants | | | | | | | | | | | |
| Propagation techniques of Ornamental Plants | | | | | | | | | | | |
| **d) Plantation crops** | | | | | | | | | | | |
| Production and Management technology | | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | | |
| **e) Tuber crops** | | | | | | | | | | | |
| Production and Management technology | 3 | 50 | 5 | 55 | 23 | 8 | 31 | 0 | 0 | 0 | 86 |
| Processing and value addition | | | | | | | | | | | |
| **f) Spices** | | | | | | | | | | | |
| Production and Management technology | | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | | |
| **g) Medicinal and Aromatic Plants** | | | | | | | | | | | |
| Nursery management | | | | | | | | | | | |
| Production and management technology | | | | | | | | | | | |
| Post harvest technology and value addition | | | | | | | | | | | |
| **Soil Health and Fertility Management** | | | | | | | | | | | |
| Soil fertility management | 1 | 23 | 0 | 23 | 3 | 0 | 3 | 0 | 0 | 0 | 26 |
| Integrated water management | | | | | | | | | | | |
| Integrated nutrient management | 1 | 30 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| Production and use of organic inputs | 1 | 30 | 0 | 30 | 1 | 0 | 1 | 0 | 0 | 0 | 31 |
| Management of Problematic soils | | | | | | | | | | | |
| Micro nutrient deficiency in crops | | | | | | | | | | | |
| Nutrient use efficiency | | | | | | | | | | | |
| Balanced use of fertilizers | | | | | | | | | | | |
| Soil and water testing | | | | | | | | | | | |
| **Livestock Production and Management** | | | | | | | | | | | |
| Dairy Management | 2 | 59 | 0 | 59 | 1 | 0 | 1 | 0 | 0 | 0 | 60 |
| Poultry Management | 1 | 27 | 0 | 27 | 3 | 0 | 3 | 0 | 0 | 0 | 30 |
| Piggery Management | | | | | | | | | | | |
| Rabbit Management | | | | | | | | | | | |
| Animal Disease Management | 4 | 68 | 15 | 83 | 16 | 23 | 39 | 0 | 2 | 2 | 124 |
| Feed and Fodder technology | 3 | 63 | 0 | 63 | 29 | 0 | 29 | 0 | 0 | 0 | 92 |
| Production of quality animal products | 2 | 10 | 38 | 48 | 2 | 10 | 12 | 0 | 0 | 0 | 60 |
| **Home Science/Women empowerment** | | | | | | | | | | | |
| Household food security by kitchen gardening and nutrition gardening | 2 | 0 | 30 | 30 | 0 | 25 | 25 | 0 | 0 | 0 | 55 |

| Thematic Area | No. of Participants | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. of Courses | Others | | | SC | | | ST | | | Grand Total |
| | | M | F | T | M | F | T | M | F | T | |
| Design and development of low/minimum cost diet | | | | | | | | | | | |
| Designing and development for high nutrient efficiency diet | | | | | | | | | | | |
| Minimization of nutrient loss in processing | 1 | 0 | 20 | 20 | 0 | 8 | 8 | 0 | 0 | 0 | 28 |
| Processing and cooking | | | | | | | | | | | |
| Gender mainstreaming through SHGs | | | | | | | | | | | |
| Storage loss minimization techniques | 1 | 0 | 21 | 21 | 0 | 3 | 3 | 0 | 0 | 0 | 24 |
| Value addition | 4 | 0 | 59 | 59 | 0 | 49 | 49 | 0 | 0 | 0 | 108 |
| Women empowerment | | | | | | | | | | | |
| Location specific drudgery reduction | | | | | | | | | | | |
| Rural Crafts | | | | | | | | | | | |
| Women and child care | 1 | 0 | 9 | 9 | 0 | 15 | 15 | 0 | 0 | 0 | 24 |
| **Agril. Engineering** | | | | | | | | | | | |
| Farm machinery and its maintenance | | | | | | | | | | | |
| Installation and maintenance of micro irrigation systems | | | | | | | | | | | |
| Use of Plastics in farming practices | | | | | | | | | | | |
| Production of small tools and implements | | | | | | | | | | | |
| Repair and maintenance of farm machinery and implements | | | | | | | | | | | |
| Small scale processing and value addition | | | | | | | | | | | |
| Post Harvest Technology | 1 | 5 | 0 | 5 | 25 | 0 | 25 | 0 | 0 | 0 | 30 |
| **Plant Protection** | | | | | | | | | | | |
| Integrated Pest Management | 4 | 62 | 0 | 62 | 59 | 0 | 59 | 0 | 0 | 0 | 121 |
| Integrated Disease Management | 3 | 40 | 0 | 40 | 49 | 0 | 49 | 0 | 0 | 0 | 89 |
| Bio-control of pests and diseases | 2 | 30 | 0 | 30 | 22 | 8 | 30 | 0 | 0 | 0 | 60 |
| Production of bio control agents and bio pesticides | | | | | | | | | | | |
| **Fisheries** | | | | | | | | | | | |
| Integrated fish farming | 1 | 25 | 0 | 25 | 1 | 0 | 1 | 0 | 0 | 0 | 26 |
| Carp breeding and hatchery management | 1 | 28 | 0 | 28 | 2 | 0 | 2 | 0 | 0 | 0 | 30 |
| Carp fry and fingerling rearing | 2 | 20 | 0 | 20 | 41 | 0 | 41 | 0 | 0 | 0 | 61 |
| Composite fish culture | 3 | 74 | 0 | 74 | 16 | 0 | 16 | 0 | 0 | 0 | 90 |
| Hatchery management and culture of freshwater prawn | | | | | | | | | | | |
| Breeding and culture of ornamental fishes | 1 | 3 | 0 | 3 | 27 | 0 | 27 | 0 | 0 | 0 | 30 |
| Portable plastic carp hatchery | | | | | | | | | | | |

| Thematic Area | No. of Participants | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. of Courses | Others | | | SC | | | ST | | | Grand Total |
| | | M | F | T | M | F | T | M | F | T | |
| Pen culture of fish and prawn | | | | | | | | | | | |
| Shrimp farming | | | | | | | | | | | |
| Edible oyster farming | | | | | | | | | | | |
| Pearl culture | | | | | | | | | | | |
| Fish processing and value addition | | | | | | | | | | | |
| Other (Airbreathing fish) | 2 | 46 | 0 | 46 | 14 | 0 | 14 | 0 | 0 | 0 | 60 |
| **Production of Inputs at site** | | | | | | | | | | | |
| Seed Production | | | | | | | | | | | |
| Planting material production | | | | | | | | | | | |
| Bio-agents production | 1 | 27 | 0 | 27 | 2 | 0 | 2 | 0 | 0 | 0 | 29 |
| Bio-pesticides production | 1 | 10 | 0 | 10 | 23 | 0 | 23 | 0 | 0 | 0 | 33 |
| Bio-fertilizer production | | | | | | | | | | | |
| Vermi-compost production | | | | | | | | | | | |
| Organic manures production | 1 | 8 | 0 | 8 | 22 | 0 | 22 | 0 | 0 | 0 | 30 |
| Production of fry and fingerlings | | | | | | | | | | | |
| Production of Bee-colonies and wax sheets | | | | | | | | | | | |
| Small tools and implements | | | | | | | | | | | |
| Production of livestock feed and fodder | 1 | 27 | 0 | 27 | 3 | 0 | 3 | 0 | 0 | 0 | 30 |
| Production of Fish feed | | | | | | | | | | | |
| **Capacity Building and Group Dynamics** | | | | | | | | | | | |
| Leadership development | 1 | 20 | 0 | 20 | 2 | 0 | 2 | 0 | 0 | 0 | 22 |
| Group dynamics | 1 | 24 | 0 | 24 | 1 | 0 | 1 | 0 | 0 | 0 | 25 |
| Formation and Management of SHGs | 2 | 39 | 0 | 39 | 17 | 0 | 17 | 0 | 0 | 0 | 56 |
| Mobilization of social capital | | | | | | | | | | | |
| Entrepreneurial development of farmers/youths | | | | | | | | | | | |
| WTO and IPR issues | 4 | 72 | 0 | 72 | 25 | 0 | 25 | 9 | 0 | 9 | 106 |
| **Agro-forestry** | | | | | | | | | | | |
| Production technologies | | | | | | | | | | | |
| Nursery management | | | | | | | | | | | |
| Integrated Farming Systems | | | | | | | | | | | |
| Others (Pl. specify) | | | | | | | | | | | |
| **TOTAL** | 79 | 1286 | 205 | 1491 | 637 | 151 | 788 | 14 | 2 | 16 | 2295 |

*Table – 3 B Area-wise distribution of On + Off Campus Training Courses for Rural Youth (regular + sponsored + vocational)*

| **Thematic Area** | **No. of Courses** | **No. of Participants** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Others | | | | | | | | | Grand Total |
| | | Male | Female | Total | SC | | | ST | | | |
| | | | | | M | F | T | M | F | T | |
| Mushroom Production | 4 | 49 | 12 | 61 | 58 | 4 | 62 | 0 | 0 | 0 | 123 |
| Bee-keeping | | | | | | | | | | | |
| Integrated farming | | | | | | | | | | | |
| Seed production | | | | | | | | | | | |
| Production of organic inputs | | | | | | | | | | | |
| Integrated Farming | | | | | | | | | | | |
| Planting material production | 4 | 20 | 0 | 20 | 19 | 0 | 19 | 2 | 0 | 2 | 41 |
| Vermi-culture | | | | | | | | | | | |
| Sericulture | | | | | | | | | | | |
| Protected cultivation of vegetable crops | | | | | | | | | | | |
| Commercial fruit production | | | | | | | | | | | |
| Repair and maintenance of farm machinery and implements | 5 | 85 | 0 | 85 | 25 | 0 | 25 | 0 | 0 | 0 | 110 |
| Nursery Management of Horticulture crops | | | | | | | | | | | |
| Training and pruning of orchards | | | | | | | | | | | |
| Value addition | | | | | | | | | | | |
| Production of quality animal products | | | | | | | | | | | |
| Dairying | | | | | | | | | | | |
| Sheep and goat rearing | | | | | | | | | | | |
| Quail farming | | | | | | | | | | | |
| Piggery | | | | | | | | | | | |
| Rabbit farming | | | | | | | | | | | |
| Poultry production | 2 | 18 | 0 | 18 | 12 | 0 | 12 | 0 | 0 | 0 | 30 |
| Ornamental fisheries | | | | | | | | | | | |
| Composite fish culture | | | | | | | | | | | |
| Freshwater prawn culture | | | | | | | | | | | |
| Shrimp farming | | | | | | | | | | | |
| Pearl culture | | | | | | | | | | | |
| Cold water fisheries | | | | | | | | | | | |
| Fish harvest and processing technology | | | | | | | | | | | |
| Fry and fingerling rearing | | | | | | | | | | | |
| Small scale processing | | | | | | | | | | | |
| Post Harvest Technology | | | | | | | | | | | |
| Tailoring and Stitching | 7 | 0 | 35 | 35 | 0 | 175 | 175 | 0 | 0 | 0 | 210 |
| Rural Crafts | 7 | 0 | 189 | 189 | 0 | 21 | 21 | 0 | 0 | 0 | 210 |
| Others, if any | | | | | | | | | | | |
| **TOTAL** | **29** | **172** | **236** | **408** | **114** | **200** | **314** | **2** | **0** | **2** | **724** |

*Table – 3 C Area-wise distribution of On + Off Campus Training Courses for In-service Extension Personnel (regular + sponsored )*

| Thematic Area | No. of Courses | No. of Participants | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Others | | | | | | | | | Grand Total |
| | | Male | Female | Total | SC | | | ST | | | |
| | | | | | M | F | T | M | F | T | |
| Productivity enhancement in field crops | 2 | 41 | 0 | 41 | 8 | 0 | 8 | 0 | 0 | 0 | 49 |
| Integrated Pest Management | | | | | | | | | | | |
| Integrated Nutrient management | 1 | 22 | 0 | 22 | 6 | 0 | 6 | 1 | 0 | 1 | 28 |
| Rejuvenation of old orchards | | | | | | | | | | | |
| Protected cultivation technology | | | | | | | | | | | |
| Formation and Management of SHGs | | | | | | | | | | | |
| Group Dynamics and farmers organization | | | | | | | | | | | |
| Information networking among farmers | | | | | | | | | | | |
| Capacity building for ICT application | 1 | 25 | 0 | 25 | 5 | 0 | 5 | 0 | 0 | 0 | 30 |
| Care and maintenance of farm machinery and implements | | | | | | | | | | | |
| WTO and IPR issues | 1 | 18 | 0 | 18 | 4 | 0 | 4 | 0 | 0 | 0 | 22 |
| Management in farm animals | 1 | 8 | 2 | 10 | 17 | 3 | 20 | 0 | 0 | 0 | 30 |
| Livestock feed and fodder production | | | | | | | | | | | |
| Household food security | | | | | | | | | | | |
| Women and Child care | | | | | | | | | | | |
| Low cost and nutrient efficient diet designing | | | | | | | | | | | |
| Production and use of organic inputs | 1 | 24 | 0 | 24 | 5 | 0 | 5 | 0 | 0 | 0 | 29 |
| Gender mainstreaming through SHGs | | | | | | | | | | | |
| Any other (Sustainable aquaculture) | 1 | 34 | 0 | 34 | 5 | 0 | 5 | 0 | 0 | 0 | 39 |
| Total | **8** | **172** | **2** | **174** | **49** | **3** | **52** | **1** | **0** | **1** | **227** |

*Table – 4 Numbers of Extension Activities and Beneficiaries*

| Nature of Extension Activity | No. of activities | Farmers | | | Extension Officials | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Field Day | 2 | 105 | - | 105 | 18 | 1 | 19 | 123 | 1 | 124 |
| Kisan Mela | | | | | | | | | | |
| Kisan Ghosthi | | | | | | | | | | |
| Exhibition | 2 | 150 | 50 | 200 | 10 | 2 | 12 | 160 | 52 | 212 |
| Film Show | 5 | 80 | 15 | 95 | 5 | 3 | 8 | 85 | 18 | 103 |
| Method Demonstrations (seed drill/ jute fibre extractor) | 3 | 75 | 15 | 90 | 4 | 1 | 5 | 79 | 16 | 95 |
| Farmers Seminar | | | | | | | | | | |
| Workshop | | | | | | | | | | |
| Group meetings | | | | | | | | | | |
| Lectures delivered as resource persons | 5 | 120 | 20 | 140 | 5 | - | 5 | 125 | 20 | 145 |
| Newspaper coverage | 7 | | | | | | | | | |
| Radio talks | | | | | | | | | | |
| TV talks | 1 | | | | | | | | | |
| Popular articles | 3 | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Extension Literature | 10 | 586 | 154 | 740 | | | | 586 | 154 | 740 |
| Advisory Services | 229 | 119 | 30 | 229 | | | | 119 | 30 | 229 |
| Scientific visit to farmers field | 50 | 324 | 42 | 366 | | | | 324 | 42 | 366 |
| Farmers visit to KVK | 50 | 620 | 70 | 690 | | | | 620 | 70 | 690 |
| Diagnostic visits | 30 | 80 | 0 | 80 | | | | 80 | 0 | 80 |
| Exposure visits | 2 | 60 | 0 | 60 | | | | 60 | 0 | 60 |
| Ex-trainees Sammelan | | | | | | | | | | |
| Soil health Camp | | | | | | | | | | |
| Animal Health Camp | 13 | 641 | 47 | 688 families | | | | 641 | 47 | 688 families |
| Agri mobile clinic | | | | | | | | | | |
| Soil test campaigns | | | | | | | | | | |
| Farm Science Club Conveners meet | 15 | 150 | 20 | 170 | | | | 150 | 20 | 170 |
| Self Help Group Conveners meetings | 5 | 0 | 120 | 120 | | | | 0 | 120 | 120 |
| Mahila Mandals Conveners meetings | 2 | 0 | 20 | 20 | | | | 0 | 20 | 20 |
| Celebration of important days (specify) | (2) 15th August and 26th April (World Vet. Day) | 21 | 48 | 69 | | | | 21 | 48 | 69 |
| Any Other (Farmer participation in inauguration programme of Trainees hostel) | 1 | 150 | 50 | 200 | 20 | 5 | 25 | 170 | 55 | 225 |
| Total | 437 | **3281** | **701** | **4062** | **62** | **12** | **74** | **3343** | **713** | **4136** |

***Table – 5 A Productions of Seeds***

| Sl. No. | Crop | Variety | Quantity (q) | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|
| **CEREALS** | Paddy | MTU 7029<br>CR 1010 | 150 | 225000 | 100 |
| | Paddy straw | MTU 7029<br>CR 1010 | 101 | 6060 | - |
| **PULSES** | | | | | |
| **VEGETABLES** | Brinjal seedling | Muktokeshi | 6500 nos. | 1950 | 15 |
| **FLOWER CROPS** | Gladiolus | Different varieties | 300 corms and 5 kg corm lets | Not sold | - |
| **Spices & plantation crop** | Turmeric | BH- 4 | 2.0 | - | - |
| OTHERS (Specify) | - | - | - | - | - |

## SUMMARY

| Sl. No. | Crop | Quantity (q) | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|
| **CEREALS** | Rice | 150 | 225000 | 100 |
| **VEGETABLES** | Brinjal seedling | 6500 nos. | 1950 | 15 |
| **FLOWER CROPS** | Gladiolus | 300 corms and 5 kg corm lets | - | - |
| Spice & plantation | Turmeric | 2.0 | - | - |
| OTHERS (Specify | - | - | - | - |

*Table – 5 B Production of planting/seedling materials of Fruits/Vegetables/Forest Species*

| Sl. No. | Crop | Variety | Quantity (Nos.) | Value ( in Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|
| **I. FRUITS** | | | | | |
| **Total** | | | | | |
| **II. VEGETABLES** | | | | | |
| 1 | Brinjal seedling | Muktokeshi | 6500 nos. | 1950 | 15 |
| **Total** | | | | **1950** | 15 |
| **III. SPICES** | | | | | |
| **Total** | Turmeric | BH 4 | 2.0 q rhizome | - | - |
| **IV. FOREST SPECIES** | | | | | |
| **Total** | | | | | |
| **V. ORNAMENTAL CROPS** | | | | | |
| 1 | **Gladiolus** | Different | 300 corms and 5kg corm lets | - | - |
| **Total** | | | | **-** | **-** |
| **VI. PLANTATION CROPS** | | | | | |
| **Total** | | | | | |
| **VII. OTHERS** | | | | | |

## SUMMARY

| Sl. No. | Crop | Quantity (Nos.) | Value ( in Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|
| **I** | **FRUITS** | | | |
| **II** | **Brinjal seedling** | 6500 nos. | 1950 | 15 |
| **IV** | **Turmeric** | 2.0 | - | - |
| **V** | **ORNAMENTAL CROPS (Gladiolus)** | 300 corms and 5kg corm lets | - | - |
| **TOTAL** | | | **1950** | **15** |

*Table –5 C Production of bio products*

| Sl. No. | Product Name | Species | Quantity | | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|---|
| | | | No | (kg) | | |
| | -- | -- | -- | -- | -- | -- |
| **I. BIOAGENTS** | -- | -- | -- | -- | -- | -- |

## SUMMARY

| Sl. No. | Product Name | Species | Quantity | | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|---|
| | | | No | (kg) | | |
| I | BIOAGENTS | -- | -- | -- | -- | -- |
| II | BIO FERTILIZERS | -- | -- | -- | -- | -- |

*Table 5 Livestock materials*

| Sl. No. | Type | Breed | Quantity | | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|---|
| | | | (Nos | Kgs | | |
| III. POULTRY | Duck feed | KC | - | 185 | 2220 | 18 |
| IV. FISHERIES | IMC fry fingerling | Rohu, catla mrigal | - | 463 | 16980 | 45 |

## SUMMARY

| Sl. No. | Type | Breed | Quantity | | Value (Rs.) | Provided to No. of Farmers |
|---|---|---|---|---|---|---|
| | | | Nos | Kgs | | |
| I | CATTLE | | | | | |
| II | SHEEP & GOAT | | | | | |
| III | POULTRY | KC feed | | 185 | 2220 | 18 |
| IV | FISHERIES | Rohu, catla mrigal | | 463 | 16980 | 45 |
| V | OTHERS | | | | | |
| | TOTAL | | | **648** | **19200** | **63** |

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