

ANNUAL REPORT 2012-13

(FOR THE PERIOD APRIL 2012 TO MARCH 2013)

KRISHI VIGYAN KENDRA (NAGAPATTINAM)

PART I - GENERAL INFORMATION ABOUT THE KVK

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

| KVK Address | Telephone | | E mail | Web Address |
|---|-------------------|-------------------|----------------------|-------------------|
| | Office | Fax | | |
| Krishi Vigyan Kendra Tamil Nadu Agricultural University Sikkal, Nagapattinam Pin – 611 108. | 04365 – 246266 | 04365 – 246266 | kvksikkal@tnau.ac.in | www.kvksikkal.org |

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

| Address | Telephone | | E mail | Web Address |
|--|------------------|---------------------|--|----------------|
| | Office | Fax | | |
| Tamil Nadu Agricultural University Coimbatore – 641 003. | 0422- 2431222 | 91- 422- 2431672 | vc@tnau.ac.in | www.tnau.ac.in |

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

| Name | Telephone / Contact | | |
|----------------|---------------------|------------|-------|
| | Residence | Mobile | Email |
| Dr. K.Sasikala | 0435 - 2411966 | 9489829345 | - |

1.4. Year of sanction: 2004

1.5. Staff Position (as on 15th April 2013)

| Sl. No. | Sanctioned post | Name of the incumbent | Designation | M/F | Discipline | Highest Qualification (for PC, SMS and Prog. Asstt.) | Pay Scale | Basic pay | Date of joining KVK | Permanent /Temporary | Category (SC/ST/OBC/ Others) |
|---------|--------------------------------------|-----------------------|----------------------|-----|-----------------------------|--|---------------------|-------------|---------------------|----------------------|------------------------------|
| 1 | Programme Coordinator | Dr.R. Rajendran | Professor &Head | M | Agronomy | Ph.D | 37400-67000+10000 | 57660+10000 | 01.06.11 | Permanent | BC |
| 2 | SMS | D.K.Sasikala | Professor | M | Seed science and Technology | Ph.D | 37400-67000+9000 | 41720+9000 | 04.12.12 | Permanent | SC |
| 4 | SMS | Dr. G. Thangamani | Asst. Prof. | F | Agrl. Microbiology | Ph.D | 15600-39100+7000 | 25610+7000 | 05.08.09 | Permanent | MBC |
| 5 | SMS | Dr.T. Elaiyabharathi | Asst. Prof. | M | Agrl. Entomology | Ph.D | 15600-39100+6000 | 21170+6000 | 30.12.09 | Permanent | BC |
| 6 | SMS | Dr. G. Malathi | Asst. Prof. | F | Horticulture | Ph.D | 15600-39100+6000 | 21170+6000 | 31.12.09 | Permanent | MBC |
| 7. | SMS | Dr.M.Karthikeyan | Asst. Prof. | M | Plant Pathology | Ph.D | 15600-39100+6000 | 21170+6000 | 02.01.2013 | Permanent | BC |
| 7 | SMS | Dr.A.Anuradha | Asst. Prof. | M | Soil Science | Ph.D | 15600-39100+6000 | 21170+6000 | 08.04.2013 | Permanent | BC |
| 8 | Programme Assistant (Lab Tech.)/T-4 | Mr.V. Gnanabharathi | Prog. Asst.(Tech) | M | Agriculture | B.Sc.,(Agri) | 9300-34800+4400 | 13090+4400 | 05.06.07 | Permanent | SC |
| 9 | Programme Assistant (Computer)/ T-4 | Mr.G.Karthik | Prog. Asst. (Comp) | M | Computer Applications | BCA | 9300-34800+4400 | 12080+4400 | 22.11.2012 | Permanent | BC |
| 10 | Programme Assistant/ Farm Manager | Mr.R.Vedharethinam | Farm Manager | M | Agronomy | M.Sc. (Ag.) | 9300-34800+4400 | 13090+4400 | 04.06.07 | Permanent | MBC |
| 11 | Assistant | Mrs.S.Shanthi | Jr. Asst. cum Typist | F | Junior Assistant cum Typist | M.A. | 5200-20200+2400 | 5950+2400 | 28.02.11 | Permanent | BC |
| 12 | Jr. Stenographer | Mr. N.Sankar | Jr. Asst. cum Typist | M | Junior Assistant cum Typist | M.A., B.Ed., | 5200-20200+2400 | 5950+2400 | 28.02.11 | Permanent | BC |
| 13 | Driver | Mr.S.D.Baburao | Foreman | M | Agrl. Engg. Supervisor | - | 9300 – 34800 + 4200 | 14420+4200 | 16.11.2012 | Permanent | BC |
| 14 | Driver | Mr.P.Govindaraj | Driver | M | Mechanic Grade II | H.Sc., | 5200-20200+2400 | 5670+2400 | 01.03.2011 | Permanent | SC |
| 15 | Supporting staff | Mr.A.Ravi | Consolidated Driver | M | - | - | Consolidated | 6000 | 01.12.2011 | Temporary | SC |
| 16 | Supporting staff | Mr.K.Krishnasamy | Consolidated Driver | M | - | - | Consolidated | 6000 | 01.12.2011 | Temporary | BC |

1.6. Total land with KVK (in ha)**: 22.6 ha**

| S. No. | Item | Area (ha) |
|--------|---------------------------|-------------|
| 1 | Under Buildings | 2.40 |
| 2. | Under Demonstration Units | 3.60 |
| 3. | Under Crops | 16.60 |
| 4. | Orchard/Agro-forestry | 0.00 |
| | Total | 22.6 |

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 | 2009 | 548 m2 | 41.65 | | | Completed |
| 2. | Farmers Hostel | ICAR | 2009 | 300 m2 | 26.38 | | | Completed |
| 3. | Staff Quarters | ICAR | 2009 | 400 m2 | 33.30 | | | Completed |
| 4. | Demonstration Units | | | | | | | |
| | Rain Water Harvesting | RSVY Agri (GOI) | March 2009 | 5000 m2 | 6.00 | | | Completed |
| 5 | Fencing | ICAR | 2011 | -- | 5.00 | | | Completed |
| 6 | Rain Water harvesting system | AED, Nagai – (subsidy) | 11.2.2007 | 2100 m2 | 0.08 | | | Completed |
| 7 | Threshing floor | ICAR | Yet to start | -- | 3.00 | | | In progress |
| 8 | Implement/ vehicle shed | ICAR | April 2012 | -- | 3.00 | | | Completed |
| 9 | Irrigation system | ICAR | Jun 2011 | -- | 3.00 | | | Completed |
| 10 | Land leveling | ICAR | Jun 2011 | -- | 3.00 | | | In progress |
| 11 | Farm godown | -- | | -- | -- | | | -- |

B) Vehicles

| Type of vehicle | Year of purchase | Cost (Rs.) | Total kms. Run | Present status |
|---------------------------------|------------------|------------|----------------|----------------|
| Four Wheeler Bolero Jeep | 2004 | 4,88,210/- | 167927 | Good condition |
| Two Wheeler (TVS – star city) | 2006 | 39,641/- | 74286 | Good condition |
| Two Wheeler (Suzuki Access 125) | 2009 | 49,651/- | 31625 | Good condition |

C) Equipments & AV aids

| Name of the equipment | Year of purchase | Cost (Rs.) | Present status |
|---------------------------|------------------|------------|----------------|
| Tractor – TN-51-C-1924 | 2004 | 3,47,607 | Good |
| Rotavator | 2004 | 68,500 | Good |
| Cultivator | 2004 | 14,645 | Good |
| Cage Wheel | 2004 | 11,684 | Good |
| Leveller | 2004 | 8,922 | Good |
| Computer with Accessories | 2005 | 75,000 | Good |
| Xerox machine | 2005 | 73,968 | Good |
| Shredder | 2006 | 25,605 | Good |

| | | | |
|---|------|----------|------|
| Digital Camera | 2006 | 19,950 | Good |
| Flow through paddy thresher | 2006 | 50,000 | Good |
| Laminar air flow chamber | 2007 | 37,856 | Good |
| Autoclave – vertical | 2007 | 33,560 | Good |
| Digital pH meter | 2007 | 14,850 | Good |
| Digital electronic balance | 2007 | 18,150 | Good |
| Computer – Desktop – 2No | 2007 | 93,000 | Good |
| Computer (Laptop – Compaq) | 2007 | 49,400 | Good |
| LCD Projector – 2 No | 2007 | 1,07,000 | Good |
| Power Tiller | 2011 | 1,35,870 | Good |
| SWTL Components | | | |
| Digital Visible Spectrophotometer | 2011 | 39,104 | Good |
| Digital pH meter “Elico” Make | 2011 | 5,970 | Good |
| All Glass Single Distillation unit | 2011 | 36,400 | Good |
| Khan Shaker “Labline” | 2011 | 20,800 | Good |
| Hot air oven | 2011 | 17,680 | Good |
| Hot plate | 2011 | 7956 | Good |
| Willey mill | 2011 | 32,760 | Good |
| Water Bath | 2011 | 7,249 | Good |
| UP based Flame Photometer “Elico” Make | 2011 | 45,240 | Good |
| Digital conductivity meter “Elico” Make | 2011 | 11,326 | Good |
| Electronic Top loading balance “Cyberlab” | 2011 | 6760 | Good |
| Electronic Top loading balance “Shimadzu” | 2011 | 20,592 | Good |
| Water and Soil analysis kit | 2011 | 19,750 | Good |
| Digestion system (Kelplus) | 2011 | 1,12,216 | Good |
| Distillation system (Kelplus) | 2011 | 1,82,936 | Good |
| Instrument table | 2011 | 78,000 | Good |
| Rack,Almirah, Angle Iron rack | 2011 | 70,000 | Good |
| Soil and Plant storage cabin | 2011 | 1,00,000 | Good |
| Wash basin, sink and exhauster fan | 2011 | 70,000 | Good |
| Servo relay stabilizer – 2 Kva | 2011 | 7,500 | Good |
| Micropipette | 2011 | 3600 | Good |
| Buchner funnel with flask | 2011 | 2000 | Good |
| Titration unit | 2011 | 10,000 | Good |
| Vacuum pump | 2011 | 5000 | Good |
| HCL Computer with printer | 2011 | 37,600 | Good |
| * PHDF Components | | | |
| Wall Table | 2011 | 58,800 | Good |
| Sink with table | 2011 | 11,025 | Good |
| Wall Cuboard | 2011 | 24,150 | Good |
| Revolving Stools | 2011 | 6,720 | Good |
| Air Conditioner | 2011 | 5,562 | Good |
| Vertical blinds | 2011 | 26,250 | Good |
| Separator | 2011 | 15,750 | Good |
| Microwave Oven | 2011 | 5,775 | Good |
| Analytical Balance | 2011 | 23,100 | Good |
| Micro Pipettes | 2011 | 17,168 | Good |
| Auto Clave | 2011 | 34,650 | Good |
| Laminar Air Flow Chamber | 2011 | 29,400 | Good |
| Stereo Zoom Microscope | 2011 | 81,900 | Good |
| Magnifier | 2011 | 4,987 | Good |
| Hot Air Oven | 2011 | 25,200 | Good |
| Deep Freezer | 2011 | 20,475 | Good |
| BOD Incubator | 2011 | 37,800 | Good |
| pH Meter | 2011 | 6,300 | Good |

| | | | |
|-------------------------------------|------|----------|------|
| Refrigerated Centrifuge | 2011 | 1,51,725 | Good |
| D.O. Meter | 2011 | 9,922 | Good |
| UV Chamber | 2011 | 8,925 | Good |
| Digital Moisture Meter | 2011 | 9,450 | Good |
| Display Cabinet | 2011 | 25,200 | Good |
| Cold Water Supplier | 2011 | 40,950 | Good |
| UPS | 2011 | 42,000 | Good |
| Data Processing System | 2011 | 74,500 | Good |
| Single Glass Distillation Apparatus | 2011 | 63,000 | Good |

1.8. Details SAC meeting conducted in 2012-13

| Sl.No. | Date | Number of Participants | No. of absentees | Salient Recommendations | Action taken |
|--------|------|------------------------|------------------|-------------------------|------------------------------------|
| - | - | - | - | - | Will be conducted during June 2013 |

PART II - DETAILS OF DISTRICT

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

| S. No | Farming system/enterprise |
|---|--|
| Rice based farming system is followed in this district | |
| 1. | Rice – Rice – Rice fallow Pulse |
| 2. | Rice – Rice - fallow Cotton |
| 3. | Rice – Rice – Groundnut / Sesame |
| 4. | Rice – Rice – Sugarcane (3 years rotation) |
| 5. | Rice – vegetables / flower crops |
| 6 | Rice – Fallow |

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

| S. No | Agro-climatic Zone | Characteristics |
|-------|--------------------|---|
| 1 | Cauvery Delta Zone | Nagapattinam a coastal district of Tamil Nadu, lies between 10 ^o 8' and 11 ^o 28' in North Latitude and 76 ^o 34' and 75 ^o 53' in East Longitude. It is bounded on the North by Cuddalore, South by Palk Strait, West by Tiruvarur and on the East by Bay of Bengal |

| S. No | Agro ecological Region | Characteristics |
|-------|------------------------|--|
| 1 | Coastal Eco system | Nagapattinam is categorized as agro-ecological region 18, representing the Coastal eco-system-Eastern coastal plain, hot sub-humid to semi-arid eco-system with a growing period of 90 to 210 days |

2.3 Soil type/s

| S. No | Soil type | Characteristics | Area in ha |
|--------------|-----------------|-----------------|------------|
| 1. | Clay loam | High WHC | 98000 |
| 2. | Clay sandy loam | Medium WHC | 55000 |
| 3. | Sandy soil | Low WHC | 35000 |
| Total | | | 188000 |

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

| S. No | Crop | Area (ha) | Production (Metric tons)* | Productivity (kg /ha)* |
|-------|------------|-----------|---------------------------|------------------------|
| 1. | Paddy | 144055 | NA | NA |
| 2. | Millets | NA | NA | NA |
| 3. | Pulses | | | |
| | Blackgram | 31391 | NA | NA |
| | Greengram | 23999 | NA | NA |
| 4. | Sugarcane | 2685 | NA | NA |
| 5. | Cotton | 321 | NA | NA |
| 6. | Oilseeds | | | |
| | Groundnut | 2673 | NA | NA |
| | Gingelly | 1184 | NA | NA |
| | Oil palm | 208 | NA | NA |
| | Coconut | 4135 | NA | NA |
| | Vegetables | 605 | NA | NA |
| 8 | Cashew | 869 | NA | NA |
| 9 | Mango | 1845 | NA | NA |

*Data will be available only after May 2013 – will be collected from Joint Director of Agriculture, Nagapattinam

2.5. Weather data

| Month | Rainfall (mm) | Temperature ° C | | Relative Humidity (%) |
|----------------|---------------|-----------------|---------|-----------------------|
| | | Maximum | Minimum | |
| April 2012 | 13.0 | 34.3 | 25.8 | 76.3 |
| May 2012 | 62.0 | 36.7 | 27.5 | 73.5 |
| June 2012 | 9.5 | 37.1 | 26.9 | 63.3 |
| July 2012 | 37.0 | 36.5 | 26.3 | 45.0 |
| August 2012 | 87.0 | 35.2 | 25.8 | 96.7 |
| September 2012 | 137.0 | 32.5 | 25.5 | 98.2 |
| October 2012 | 577.5 | 31.1 | 24.8 | 50.8 |
| November 2012 | 108.5 | 30.1 | 23.5 | 67.4 |
| December 2012 | 42.5 | 28.8 | 22.9 | 93.7 |
| January 2013 | 12.0 | 29.0 | 21.3 | 95.9 |
| February 2013 | 25.0 | 29.8 | 22.2 | 97.4 |
| March 2013 | 27.0 | 34.0 | 24.4 | 75.5 |

Source: AWS at KVK, Nagapattinam

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

| Category | Population | Production | Productivity |
|-------------------|------------|--------------|--------------|
| Cattle | | | |
| <i>Cow</i> | 256981 | NA | NA |
| <i>Crossbred</i> | NA | 6 lit / day | NA |
| <i>Indigenous</i> | NA | 2 lit / day | NA |
| Buffalo | | | |
| <i>Crossbred</i> | 11512 | 6 lit / day | NA |
| Sheep | | | |
| <i>Crossbred</i> | 7122 | NA | NA |
| <i>Indigenous</i> | NA | NA | NA |
| Goats | 417186 | 277 kg / day | NA |
| <i>Crossbred</i> | NA | NA | NA |
| <i>Indigenous</i> | NA | NA | NA |
| Pigs | 981 | NA | NA |

| | | | |
|-------------------|-------------|-------------------|---------------------|
| <i>Crossbred</i> | NA | NA | NA |
| <i>Indigenous</i> | NA | NA | NA |
| Rabbits | 386 | NA | NA |
| Poultry | | | |
| Hens | 268910 | 11,000 Egg / day | NA |
| <i>Desi</i> | NA | NA | NA |
| <i>Improved</i> | NA | NA | NA |
| Ducks | 532 | NA | NA |
| Turkey and others | NA | NA | NA |
| Category | Area | Production | Productivity |
| Fish | NA | NA | NA |
| <i>Marine</i> | NA | 67627 tonnes | NA |
| <i>Inland</i> | NA | 7832 tonnes | 2.2 t / ha |
| Prawn | NA | NA | NA |
| Scampi | NA | NA | NA |
| Shrimp | NA | NA | NA |

Source: Joint Director of Animal Husbandry, Nagapattinam

2.7 District profile has been Updated for 2012-13 Yes / No: Yes

2.8 Details of Operational area / Villages

| Sl.No. | Taluk | Name of the block | Name of the village | How long the village is covered under operational area of the KVK (specify the years) | Major crops & enterprises | Major problem identified | Identified Thrust Areas |
|--------|-------------|-------------------|---|---|---|---|--|
| 1. | Vedharanyam | Vedharanyam | Panchanathikulam, Thennadar, Vanduvancheri, Vaimedu | 2 | Rice, Pulses, Coconut, Mango, Cahsew, Groundnut, Casuarina and Vegetables | <p>Problematic saline and alkaline soil</p> <p>Low productivity in Vegetables and Mango</p> <p>Heavy incidence of coconut Rhinoceros beetle throughout the year</p> <p>Incidence of shoot and fruit borer in brinjal</p> <p>Labour problem for crop cultivation</p> | <p>Soil Health Management SSNM and organic manuring</p> <p>Introduction of newly released vegetable hybrids and use of IIHR mango special</p> <p>IPM for coconut Rhinoceros beetle</p> <p>ICM in brinjal</p> <p>Mechanized small scale vegetable cultivation</p> |

| | | | | | | | |
|----|---------------|--------------|---|---|--|--|---|
| 2. | Vedharanyam | Thalainayar | Neermulai, Panangadi, Pangal, Sithaimoor, Umbalachery, Kolapadu | 1 | Rice, Pulses, Mango, Cashew and Vegetables | Yield reduction due to salinity and water logging and scarcity | Introduction of new rice varieties for submergence condition and saline tolerance. |
| | | | | | | Incidence of shoot and fruit borer in brinjal | ICM in brinjal |
| | | | | | | Low productivity of vegetable varieties | Introduction of newly released vegetable hybrids and use of IIHR mango special |
| | | | | | | Labour problem | Mechanization in rice, horticultural crops |
| 3. | Thirukkuvalai | Keelaiyur | Etukudi, Thaliyamalai, P.R.Puram, Vizhuthanmavadi, Tirukkuvalai | 2 | Rice, Pulses and Gingelly | <ul style="list-style-type: none"> • Loss of yield due to inundation of water and salinity • Low productivity of existing rice varieties | Introduction of new rice varieties for submergence condition and saline tolerance |
| | | | | | | Crop diversification | Introduction of flower crops |
| | | | | | | Labour problem | Mechanization |
| 4. | Kilvelur | Kilvelur | Anthakudi, Adhamangalam, Valivalam, Kodiyalathur, Anaimangalam, Agarakadambanur | 1 | Rice and Pulses | <ul style="list-style-type: none"> • Heavy incidence of stem borer and bacterial leaf streak in rice during samba season • Low productivity of existing rice varieties | Eco-friendly pest and disease management in rice |
| | | | | | | Crop diversification | Introduction of flower crops, vegetables |
| 5. | Nagapattinam | Nagapattinam | Agra orathur, orathur, perungakambanoor, vadagudi, Vadavur | 2 | Rice, Pulses, Mango and Vegetables | Soil salinity, water logging due to flood and low soil fertility | Introduction of saline and submergence tolerant rice varieties and soil health management |
| | | | | | | Heavy incidence of <i>Spodoptera litura</i> in rice-fallow pulses | IPM for <i>Spodoptera litura</i> |

| | | | | | | | |
|----|----------------|----------------|---|---|--|--|---|
| | | | | | | Incidence of shoot and fruit borer in brinjal | ICM in brinjal |
| | | | | | | Low productivity of vegetable varieties and mango | Introduction of newly released vegetable hybrids and use of IIHR mango special |
| 6. | Nagapattinam | Thirumarugal | Kangalancheri, Kothamangalam, Kotarakudi, Thiruchenkatankudi, Vadakarai | 3 | Rice, Pulses, Cotton and Gingelly | Water logged condition and soil salinity | Introduction of saline tolerant rice variety and submergence tolerant rice variety and soil health management |
| | | | | | | Crop diversification | Introduction of flower crops |
| 7. | Tranqubar | Sembanarkoil | Kelaperumpallam, kuranguputhur, T.Manalmedu, Tirukadiyur, Thiruchampalli | 1 | Rice, Pulses, Groundnut, Cotton, Sugarcane Banana, Mango Vegetables and Oil palm | Water scarcity, water logging and salinity | Increasing the productivity of rice and rice fallow crops |
| | | | | | | High labour cost | Farm mechanization |
| | | | | | | Incidence of shoot and fruit borer in brinjal. | ICM in brinjal |
| | | | | | | Alternative crop for rice fallow pulse | Introduction of Vegetable Cowpea |
| | | | | | | Low productivity in Mango | Use of IIHR mango special |
| 8. | Mayiladuthurai | Mayiladuthurai | Ayvanallur, Mannampandal, Moovalur, | 1 | Rice, Pulses, Groundnut, Cotton, Sugarcane and Banana | Weed infestation leads to high cost of labour | Introduction of herbicides and mechanical weeding. |
| | | | | | | Labour scarcity | Farm Mechanization |
| | | | | | | Heavy incidence of Spodoptera litura in rice-fallow and irrigated pulses | IPM for Spodoptera litura |
| | | | | | | Algal problem in rice eco-system | Integrated algal management |
| 9. | Kuttalam | Kuttalam | Sethirabalapuram, Senniyanallur, Theralandur, Tirumanacheri, Vanathirajapuram | 1 | Rice, Pulses, Groundnut, Cotton, Sugarcane, Banana and | Weed infestation leads to high cost of labour | Introduction of herbicides and mechanical weeding. |
| | | | | | | Labour scarcity | Farm Mechanization |

| | | | | | | | |
|-----|---------|----------|--|---|--|--|---|
| | | | | | Vegetables | Heavy incidence of Spodoptera litura in rice-fallow and irrigated pulses | IPM for Spodoptera litura |
| | | | | | | Low productivity of vegetable varieties | Introduction of Vegetable Cowpea and introduction of newly released vegetable hybrids |
| 10. | Sirkali | Sirkali | Poompuhar, Maruthuvakudi, Thilavidangan, Vilanthidasamuthiram, Thittai | 1 | Rice, Pulses, Groundnut, Cotton, Sugarcane Banana and Vegetables | Weed infestation leads to high cost of labour | Introduction of herbicides and mechanical weeding. |
| | | | | | | Labour scarcity | Farm Mechanization |
| | | | | | | Soil salinity, flooding and low soil fertility | Soil health management and introduction of salt and submergence tolerant rice varieties |
| | | | | | | Heavy incidence of Spodoptera litura in rice-fallow and irrigated pulses | IPM for Spodoptera litura |
| | | | | | | Incidence of shoot and fruit borer in brinjal | ICM in brinjal |
| | | | | | | Low productivity of vegetable varieties | Introduction of Vegetable Cowpea and introduction of newly released vegetable hybrids |
| | | | | | | Algal problem in rice eco-system | Integrated algal management |
| | | | | | | | |
| 11. | Sirkali | Kollidam | Gopalamuthiram, Kelamathur, Achalpuram, Palayapalayam | 2 | Rice, Pulses, Groundnut, Cotton, Sugarcane Banana and Vegetables | Water logging, soil salinity | Introduction of saline and submergence tolerant rice variety and soil health management |
| | | | | | | Labour scarcity | Farm mechanization |

| | | | | | | | |
|--|--|--|--|--|--|--|---------------------------|
| | | | | | | Heavy incidence of Spodoptera litura in rice-fallow and irrigated pulses | IPM for Spodoptera litura |
|--|--|--|--|--|--|--|---------------------------|

2.9 Priority thrust areas

| | |
|----|---|
| 1 | Soil health management |
| 2 | Seed production |
| 3 | Influence of climate resilience on crop production and their management |
| 4 | Integrated Crop Management (ICM) Practices |
| 5 | IPM for major field crops |
| 6 | Entrepreneurs developments through Apiary and Sericulture |
| 7 | Organic crop production |
| 8 | Integrated Farming Systems |
| 9 | Farm mechanization |
| 10 | Value added fishery products |
| 11 | Hi – tech Horticulture technologies |
| 12 | Location specific alternative cropping system |

PART III - TECHNICAL ACHIEVEMENTS**3.A. Details of target and achievements of mandatory activities**

| OFT | | | | FLD | | | |
|-----------------------|--------------------|--------------------------|--------------------|-----------------------|--------------------|--------------------------|--------------------|
| 1 | | | | 2 | | | |
| Number of OFTs | | Number of farmers | | Number of FLDs | | Number of farmers | |
| Targets | Achievement | Targets | Achievement | Targets | Achievement | Targets | Achievement |
| 6 | 6 | 60 | 69 | 14 | 13 | 125 | 120 |

| Training | | | | Extension Programmes | | | |
|--------------------------|--------------------|-------------------------------|--------------------|-----------------------------|--------------------|-------------------------------|--------------------|
| 3 | | | | 4 | | | |
| Number of Courses | | Number of Participants | | Number of Programmes | | Number of participants | |
| Targets | Achievement | Targets | Achievement | Targets | Achievement | Targets | Achievement |
| 75 | 63 | 3000 | 2936 | 30 | 855 | 1500 | 8880 |

| Seed Production (Qtl.) | | | | Planting materials (Nos.) | | | |
|-------------------------------|--|--------------------|--|----------------------------------|--|--------------------|--|
| 5 | | | | 6 | | | |
| Target | | Achievement | | Target | | Achievement | |
| 530 | | 77 | | 5000 | | 5904 | |

| Livestock, poultry strains and fingerlings (No.) | | | | Bio-products (Kg) | | | |
|---|--|--------------------|--|--------------------------|--|--------------------|--|
| 7 | | | | 8 | | | |
| Target | | Achievement | | Target | | Achievement | |
| 150 | | 40 | | 1500 | | 1420 | |

3.B1. Abstract of interventions undertaken based on thrust areas identified for the district as given in Sl.No.2.7

| S. No | Thrust area | Crop/ Enterprise | Identified Problem | Interventions | | | | | | | | | | Supply of bio products | |
|-------|-------------------------------------|------------------|---|--|--|------------------------------|-----------------------------|--|----------------------------|------------------------|------------------------------------|---------------------------|-----|------------------------|--|
| | | | | Title of OFT if any | Title of FLD if any | Number of Training (farmers) | Number of Training (Youths) | Number of Training (extension personnel) | Extension activities (No.) | Supply of seeds (Qtl.) | Supply of planting materials (No.) | Supply of livestock (No.) | No. | Kg | |
| 1. | Increasing the productivity of rice | Rice | Farmers need on alternative rice variety to TKM 9 | Assessment of new rice varieties alternative to TKM 9 in Nagapattinam district | - | 3 | - | 1 | 1 | 1.2 | - | - | - | - | |
| | | Rice | Difficult to plant single seedling per hill, owing to weak and puny seedlings under SRI | - | Assessment of elite rice seedling production thro' bio - fertilizers | 2 | - | 1 | 2 | 0.5 | - | - | 3 | 133 | |
| | | Rice | Low uptake of Potassium nutrient & High cost of Potassic fertilizers | Substitution of K for economic rice productivity | - | 1 | - | - | 1 | - | - | - | 1 | 1500ml | |
| | | Rice | Low productivity of existing rice varieties | - | Popularization of fine grain rice variety TNAU Rice ADT 49 | 3 | - | 2 | 1 | 0.5 | - | - | 1 | 10 | |

| | | | | | | | | | | | | | | |
|--|--|------|---|---|--|---|---|---|---|-----|---|---|---|----|
| | | Rice | Low productivity of existing rice varieties | - | Popularization of newly released TNAU rice hybrid Co R H 4 in Nagapattinam dist. | 1 | - | 1 | 1 | 0.2 | - | - | - | - |
| | | Rice | Low rice productivity in saline soil | - | ICM in saline soils with rice variety TRY3 | 3 | - | 1 | 1 | 1.0 | - | - | 3 | 12 |
| | | Rice | Labour scarcity and lack of skilled labour for planting young seedling under SRI during peak transplanting season leads to hurried manual random planting | Farmer friendly mechanized planting with ideal weed management (partial adoption of SRI principles) | - | 5 | - | 2 | 5 | - | - | - | - | - |
| | | Rice | Difficult to operate multi (2 or 3) row weeder because of curved or bent rows and damage to rice plants while power weeding | Evaluation of weeders for paddy cultivation | - | 3 | - | 2 | 3 | - | - | - | - | - |

| | | | | | | | | | | | | | | |
|---|---|--------|---|---|--|---|---|---|---|------|---|---|---|----|
| | | Rice | Weed menace especially sedges and BLW reduce dry seeded rice yield considerably in Vedaranyam, Thalainayar blocks | - | Demonstrating IWM including new formulation of herbicides for effective weed management and high rice productivity | 2 | - | 1 | 1 | - | - | - | - | - |
| 2 | Increasing the productivity of rice fallow pulses | Pulses | Non availability of high yielding and pest and Disease tolerant varieties | Assessment of black gram varieties suitable for rice fallow condition | - | 2 | - | 1 | 1 | 1.03 | - | - | - | - |
| | | Pulses | Establishment and management of black gram under combine harvested rice field conditions | - | ICM for rice fallow black gram under combined harvested rice field (SPP) | 1 | - | - | 1 | 2.5 | - | - | 2 | 25 |
| | IPM | Pulses | Severe incidence of <i>Spodoptera</i> observed in all pulse growing areas due to non adoption of IPM | - | Management of <i>spodoptera litura</i> in pulses | 3 | - | 2 | 1 | - | - | - | 4 | 60 |

| | | | | | | | | | | | | | | |
|---|---|---------------------|---|---|---|--|---|---|---|-------|---|---|---|------|
| | Farm mechanization | Pulses | Labour scarcity for harvesting, manual sowing due to soil moisture conditions | - | Farm mechanization in pulses | Sowing was taken up and trial was failed due to severe drought | | | | | | | | |
| 3 | Increasing the productivity of vegetables | Vegetables (Tomato) | Low productivity of local varieties and dependency on particular commercial hybrids | - | Popularization of newly released TNAU tomato hybrid Co3 in Nagapattinam District | 1 | - | 1 | 1 | 0.005 | - | - | 2 | 6 |
| | Increasing the productivity of vegetables | Vegetable Cowpea | Lack of awareness on vegetable cowpea | - | Popularization of vegetable cowpea PKM1 as summer irrigated pulse crop in Nagapattinam District | 2 | - | 1 | 1 | 0.7 | - | - | - | - |
| 4 | IPM | Coconut | Heavy incidence of rhinoceros beetle throughout the year reduce nut yields and profit | - | IPM strategies for coconut rhinoceros beetle | 2 | - | 1 | 1 | - | - | - | 4 | 60 |
| 5 | Increasing the productivity of Sugarcane | Sugarcane | Low productivity of conventional method of cultivation | - | Enhancing sugarcane productive thro' SSI | 2 | - | 2 | 2 | 25 | - | - | 1 | 1000 |

| | | | | | | | | | | | | | | |
|---|------------------------------|---------------------|--|--|---|---|---|---|---|---|---|---|---|----|
| 6 | IFS | Poultry / fisheries | Poor yield of local breed due to unfavorable environmental condition | - | Demonstrating IFS concept in rice based wetland systems with introduction of rodo white bird and Pangasius fish culture and mushroom unit | 2 | 1 | 1 | 2 | - | - | 26 Nos. Rodo white bird, 500Nos. Pangasius fish, 3100 Nos. composite fish | 1 | 50 |
| 7 | Increasing milk productivity | Animal husbandry | Low productive of milk due to conventional feeding method | Assessment of TANUVAS GRAND supplement in cross breed dairy cows | - | 2 | 1 | - | 1 | - | - | - | - | - |

Special Pulses Programme:

| S. No | Thrust area | Crop/ Enterprise | Identified Problem | Interventions | | | | | | | | | | Supply of bio products | |
|-------|---|------------------|--|---------------------|-------------------------------|------------------------------|-----------------------------|--|----------------------------|------------------------|------------------------------------|---------------------------|-----|------------------------|--|
| | | | | Title of OFT if any | Title of FLD if any | Number of Training (farmers) | Number of Training (Youths) | Number of Training (extension personnel) | Extension activities (No.) | Supply of seeds (Qtl.) | Supply of planting materials (No.) | Supply of livestock (No.) | No. | Kg | |
| 1. | Increasing the productivity of rice fallow pulses | Black gram | Very low yield due to non adoption of management practices | - | ICM in rice fallow black gram | 2 | - | 1 | 1 | 2.4 | - | - | 1 | 4.0 | |

3.B2. Details of technology used during reporting period

| S.No | Title of Technology | Source of technology | Crop/enterprise | No.of programmes conducted | | | |
|------|---|----------------------|-----------------|----------------------------|-----|----------|----------------------------|
| | | | | OFT | FLD | Training | Others(extension activity) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Assessment of new rice varieties alternative to TKM 9 in Nagapattinam district | TNAU | Rice | 2 | - | 4 | 1 |
| 2 | Substitution of K for economic rice productivity | TNAU | Rice | 5 | - | 1 | 1 |
| 3 | Farmer friendly mechanized planting with ideal weed management (partial adoption of SRI principles) | TNAU | Rice | 2 | - | 7 | 5 |
| 4 | Evaluation of weeders for paddy cultivation | TNAU | Rice | 5 | - | 5 | 3 |
| 5 | Assessment of black gram varieties suitable for rice fallow condition | TNAU | Pulses | 5 | - | 3 | 1 |
| 6 | Assessment of TANUVAS GRAND supplement in cross breed dairy cows | TANUVAS | Livestock | 30 | - | 3 | 1 |
| 7 | Assessment of elite rice seedling production thro' bio - fertilizers | TNAU | Rice | - | 5 | 3 | 2 |
| 8 | Popularization of fine grain rice variety TNAU Rice ADT 49 | TNAU | Rice | - | 5 | 5 | 1 |
| 9 | Popularization of newly released TNAU rice hybrid Co RH 4 in Nagapattinam dist. | TNAU | Rice | - | 2 | 2 | 1 |
| 10 | ICM in saline soils with rice variety TRY3 | TNAU | Rice | - | 10 | 4 | 1 |

| | | | | | | | |
|-----|---|---------|---------------------|---|---|---|---|
| 11. | Demonstrating IWM including new formulation of herbicides for effective weed management and high rice productivity | TNAU | Rice | - | 5 | 2 | |
| 12 | ICM for rice fallow black gram under combined harvested rice field (SPP) | TNAU | Pulses | - | 20 | 1 | 1 |
| 13 | Management of <i>spodoptera litura</i> In pulses | TNAU | Pulses | - | 10 | 5 | 1 |
| 14 | Farm mechanization in pulses | TNAU | Pulses | - | Sowing was taken up and trial is failed due to severe drought | | |
| 15 | Popularization of newly released TNAU tomato hybrid Co3 in Nagapattinam District | TNAU | Vegetables(Tomato) | - | 10 | 2 | 1 |
| 16 | Popularization of vegetable cowpea PKM1 as summer irrigated pulse crop in Nagapattinam District | TNAU | Vegetables(Cow pea) | - | 10 | 3 | 1 |
| 17 | IPM strategies for coconut rhinoceros beetle | TNAU | Coconut | - | 10 | 3 | 1 |
| 18 | Enhancing sugarcane productive thro' SSI | ICRISAT | Sugarcane | - | 5 | 4 | 2 |
| 19 | Demonstrating IFS concept in rice based wetland systems with introduction of rodo white bird and Pangasius fish culture and mushroom unit | TANUVAS | Livestock | - | 5 | 4 | 2 |
| 20 | ICM in rice fallow black gram | TNAU | Pulses | - | 20 | 3 | 1 |

3.B2 contd..

No. of farmers covered

| OFT | | FLD | | | | Training | | | | Others (Specify) | | | | | |
|---------|---|-------|---|---------|---|----------|---|---------|----|------------------|----|---------|----|-------|----|
| General | | SC/ST | | General | | SC/ST | | General | | SC/ST | | General | | SC/ST | |
| M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| 50 | 1 | 9 | - | 83 | 2 | 15 | - | 550 | 50 | 210 | 40 | 540 | 48 | 98 | 14 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Small Scale Income Generation Enterprises | - | - | - | - | - | - | - | - | - | - |
| Weed Management | - | - | - | - | - | - | - | - | - | - |
| Resource Conservation Technology | - | - | - | - | - | - | - | - | - | - |
| Farm Machineries | - | - | - | - | - | - | - | - | - | - |
| Integrated Farming System | - | - | - | - | - | - | - | - | - | - |
| Seed / Plant production | - | - | - | - | - | - | - | - | - | - |
| Value addition | - | - | - | - | - | - | - | - | - | - |
| Drudgery Reduction | - | - | - | - | - | - | - | - | - | - |
| Storage Technique | - | - | - | - | - | - | - | - | - | - |
| Mushroom cultivation | - | - | - | - | - | - | - | - | - | - |
| Total | - | - | - | - | - | - | - | - | - | - |

4.A3. Abstract on the number of technologies assessed in respect of livestock enterprises

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

4.A4. Abstract on the number of technologies refined in respect of livestock enterprises

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

4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

| Thematic areas | Crop | Name of the technology assessed | No. of trials | Number of farmers | Area in ha (Per trail covering all the Technological Options) |
|---|--------|---|---------------|-------------------|---|
| Integrated Nutrient Management | Rice | Substitution of K for economic rice productivity | 5 | 5 | 2.0 |
| | - | - | - | - | - |
| Varietal Evaluation | Rice | Assessment of new rice varieties alternative to TKM 9 in Nagapattinam district | 5 | 2 | 0.8 |
| | Pulses | Assessment of black gram varieties suitable for rice fallow condition | 10 | 5 | 2.0 |
| Integrated Pest Management | - | - | - | - | - |
| | - | - | - | - | - |
| Integrated Crop Management | - | - | - | - | - |
| | - | - | - | - | - |
| Integrated Disease Management | - | - | - | - | - |
| | - | - | - | - | - |
| Small Scale Income Generation Enterprises | - | - | - | - | - |
| | - | - | - | - | - |
| Weed Management | Rice | Farmer friendly mechanized planting with ideal weed management (partial adoption of SRI principles) | | | |
| Resource Conservation Technology | - | - | - | - | - |
| | - | - | - | - | - |
| Farm Machineries | Rice | Evaluation of weeders for paddy cultivation | 5 | 5 | 2.0 |
| | - | - | - | - | - |
| Integrated Farming System | - | - | - | - | - |
| | - | - | - | - | - |
| Seed / Plant production | - | - | - | - | - |
| | - | - | - | - | - |
| Value addition | - | - | - | - | - |
| | - | - | - | - | - |
| Drudgery Reduction | - | - | - | - | - |
| | - | - | - | - | - |
| Storage Technique | - | - | - | - | - |
| | - | - | - | - | - |
| Mushroom cultivation | - | - | - | - | - |
| | - | - | - | - | - |
| Total | | | 25 | 17 | 6.8 |

4.B.2. Technologies Refined under various Crops

| Thematic areas | Crop | Name of the technology assessed | No. of trials | Number of farmers | Area in ha (Per trail covering all the Technological Options) |
|---|------|---------------------------------|---------------|-------------------|---|
| Integrated Nutrient Management | - | - | - | - | - |
| | - | - | - | - | - |
| Varietal Evaluation | - | - | - | - | - |
| | - | - | - | - | - |
| Integrated Pest Management | - | - | - | - | - |
| | - | - | - | - | - |
| Integrated Crop Management | - | - | - | - | - |
| | - | - | - | - | - |
| Integrated Disease Management | - | - | - | - | - |
| | - | - | - | - | - |
| Small Scale Income Generation Enterprises | - | - | - | - | - |
| | - | - | - | - | - |
| Weed Management | - | - | - | - | - |
| | - | - | - | - | - |
| Resource Conservation Technology | - | - | - | - | - |
| | - | - | - | - | - |
| Farm Machineries | - | - | - | - | - |
| | - | - | - | - | - |
| Integrated Farming System | - | - | - | - | - |
| | - | - | - | - | - |
| Seed / Plant production | - | - | - | - | - |
| | - | - | - | - | - |
| Value addition | - | - | - | - | - |
| | - | - | - | - | - |
| Drudgery Reduction | - | - | - | - | - |
| | - | - | - | - | - |
| Storage Technique | - | - | - | - | - |
| | - | - | - | - | - |
| Mushroom cultivation | - | - | - | - | - |
| | - | - | - | - | - |
| Total | - | - | - | - | - |

4.B.3. Technologies assessed under Livestock and other enterprises

| Thematic areas | Name of the livestock enterprise | Name of the technology assessed | No. of trials | No. of farmers |
|---|----------------------------------|--|---------------|----------------|
| Evaluation of breeds | - | - | - | - |
| Nutrition management | - | - | - | - |
| Disease management | - | - | - | - |
| Value addition | - | - | - | - |
| Production and management | - | - | - | - |
| Feed and fodder | Cattle | Assessment of TANUVAS GRAND supplement in cross breed dairy cows | 30 | 60 |
| Small scale income generating enterprises | - | - | - | - |
| Total | | | 30 | 60 |

4.B.4. Technologies Refined under Livestock and other enterprises

| Thematic areas | Name of the livestock enterprise | Name of the technology assessed | No. of trials | No. of farmers |
|---|----------------------------------|---------------------------------|---------------|----------------|
| Evaluation of breeds | - | - | - | - |
| Nutrition management | - | - | - | - |
| Disease management | - | - | - | - |
| Value addition | - | - | - | - |
| Production and management | - | - | - | - |
| Feed and fodder | - | - | - | - |
| Small scale income generating enterprises | - | - | - | - |
| Total | - | - | - | - |

4.C1. Results of Technologies Assessed

Results of On Farm Trial

OFT - 1

| Crop/enterprise | Farming situation | Problem definition | Title of OFT | No. of trials | Technology Assessed | Parameters of assessment | Data on the parameter | | | Results of assessment | Feedback from the farmer | Any refinement needed | Justification for refinement |
|-----------------|-------------------|--|--|---------------|--|--|-----------------------|--------|--------|--|--|-----------------------|------------------------------|
| | | | | | | | TO 1 | TO 2 | TO 3 | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | TO 1 | TO 2 | TO 3 | 9 | 10 | 11 | 12 |
| Rice | Irrigated | Farmers need alternative rice variety to TKM 9 | Assessment of New rice varieties alternative to TKM 9 in Nagapattinam District | 5 | TO1 – FP (TKM 9) TO2 – ADT (R) 45 TO3 – Anna 4 | Number of productive tiller / m ² | 320 | 353 | 342 | Though Anna 4 produced more number of tillers, per panicle weight was higher which survived better during dry periods and recorded higher yield and BC ratio than TKM 9 and ADT 45 | Anna 4 performed better – sowing time need to be taken care of as drought occurs during early period | Nil | - |
| | | | | | | Yield kg / ha | 4150 | 4500 | 4750 | | | | |
| | | | | | | BCR | 1:1.6 | 1:1.80 | 1:1.90 | | | | |

Contd..

| Technology Assessed | Source of Technology | Production | Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year) | Net Return (Profit) in Rs. /ha | BC Ratio |
|---|---|------------|---|--------------------------------|----------|
| 13 | 14 | 15 | 16 | 17 | 18 |
| Technology option 1 (Farmer's practice) | Farmers use on their own though discourages the variety | 4150 | Kg / ha | 22 250 | 1:1.6 |
| Technology option 2 | TNAU | 4500 | Kg / ha | 26975 | 1:1.80 |
| Technology option 3 | TNAU | 4750 | Kg / ha | 30350 | 1:1.90 |

OFT - 2

| Crop/enterprise | Farming situation | Problem definition | Title of OFT | No. of trials | Technology Assessed | Parameters of assessment | Data on the parameter | | | Results of assessment | Feedback from the farmer | Any refinement needed | Justification for refinement |
|-----------------|-------------------|---|--|---------------|---|---|-----------------------|--------|--------|--|---|-----------------------|------------------------------|
| | | | | | | | TO 1 | TO 2 | TO 3 | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | TO 1 | TO 2 | TO 3 | 9 | 10 | 11 | 12 |
| Rice | Irrigated | Non application of potassic fertilizers leads to reduction in yield | Substitution of K for economic rice productivity | 5 | TO1 – Farmers practice | No of productive tillers/m ² | 263 | 288 | 338 | Application of 75% recommended K + K - humate as basal (10kg/ha) + root dipping (0.1 %) and foliar spray (0.3%) were effective and recorded 20% higher yield (5700kg/ha) than check with BC ratio of 1:2.05. | Farmers are very interested to use K – humate | Nil | Nil |
| | | | | | TO2 - 75% Recommended K + soil – K Solubiliser (750ml / ha) | Yield | 5000 | 5600 | 5700 | | | | |
| | | | | | TO3 – 75% Recommended K + K – humate | BCR | 1:1.80 | 1:1.94 | 1:2.05 | | | | |

Contd..

| Technology Assessed | Source of Technology | Production | Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year) | Net Return (Profit) in Rs. / unit | BC Ratio |
|---|----------------------|------------|---|-----------------------------------|----------|
| 13 | 14 | 15 | 16 | 17 | 18 |
| Technology option 1 (Farmer's practice) | Conventional method | 5000 | Kg / ha | 30000 | 1:1.80 |
| Technology option 2 | TNAU, 2008 | 5600 | Kg / ha | 35400 | 1:1.94 |
| Technology option 3 | TNAU, 2010 | 5700 | Kg / ha | 39450 | 1:2.05 |

OFT - 3

| Crop/enterprise | Farming situation | Problem definition | Title of OFT | No. of trials | Technology Assessed | Parameters of assessment | Data on the parameter | | | Results of assessment | Feedback from the farmer | Any refinement needed | Justification for refinement |
|-----------------|-------------------|---|---|---------------|--|---|-------------------------------|-------------------------------|-------------------------------|---|---|--|--|
| | | | | | | | TO 1 | TO 2 | TO 3 | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | TO 1 | TO 2 | TO 3 | 9 | 10 | 11 | 12 |
| Rice | Irrigated | Difficult to operate multi (2 or 3) row weeder because of curved or bent rows and damage to rice plants while power weeding | Evaluation on weeders for paddy cultivation | 5 | TO1 – FP (Cono weeder) TO2 – double row power weeder TO3 – Single row power weeder | Number of productive tillers/m ² Yield BCR | 352 6200 1:2.09 | 348 5800 1:1.96 | 355 6290 1.2.12 | Weeding through manual cono weeder and single row power weeder were very efficient than double row power weeder. Stirring of soil, weed control and easy operation in manual planted rows by using single row power weeder as compared to double row weeder | Cono weeder and single row power weeders are very effective | Single row power weeder may be modified slightly by adjusting height of engine from soil | Based on soil type single row power weeder is to be modified |

Contd..

| Technology Assessed | Source of Technology | Production | Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year) | Net Return (Profit) in Rs. / unit | BC Ratio |
|---|---------------------------------|------------|---|-----------------------------------|----------|
| 13 | 14 | 15 | 16 | 17 | 18 |
| Technology option 1 (Farmer's practice) | Farmers practice (Cono weeder) | 6200 | Kg / ha | 43700 | 1:2.09 |
| Technology option 2 | TNAU | 5800 | Kg / ha | 38300 | 1:1.96 |
| Technology option 3 | (KVK, Sikkal 2011) | 6290 | Kg / ha | 44915 | 1:2.12 |

OFT – 4

| Crop/enterprise | Farming situation | Problem definition | Title of OFT | No. of trials | Technology Assessed | Parameters of assessment | Data on the parameter | | | Results of assessment | Feedback from the farmer | Any refinement needed | Justification for refinement |
|-----------------|-------------------|---|---|---------------|---|---|-----------------------|--------|------|---|--|-----------------------|------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | TO 1 | TO 2 | TO 3 | 9 | 10 | 11 | 12 |
| Rice | Irrigated | Labour scarcity and lack of skilled labour for planting young seedling under SRI during peak transplanting season leads to hurried manual random planting | Farmer friendly mechanized planting with ideal weed management in paddy | 5 | TO1 – FP (Manual random planting) TO2 – Machine planting + power weeder twice TO3 – Machine planting + Herbicide + power weeder | Number of productive tillers/m ² | 295 | 415 | 388 | Machine planting with power weeding twice recorded higher yield and BC ratio than herbicide with power weeding once and manual weeding. Early soil stirring triggered tiller production resulting in higher yield and BC ratio. | Early power weeder operation is must but maintaining ideal soil moisture conditions seems to be challenging. | NIL | NIL |
| | | | | | Yield | 4100 | 5975 | 5440 | | | | | |
| | | | | | BCR | 1:1.58 | 1:1.98 | 1:1.84 | | | | | |

Contd..

| Technology Assessed | Source of Technology | Production | Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year) | Net Return (Profit) in Rs. / ha | BC Ratio |
|---|-----------------------|------------|---|---------------------------------|----------|
| 13 | 14 | 15 | 16 | 17 | 18 |
| Technology option 1 (Farmer's practice) | Conventional practice | 4100 | Kg/ha | 21900 | 1:1.58 |
| Technology option 2 | TNAU | 5975 | Kg/ha | 36750 | 1:1.98 |
| Technology option 3 | TNAU | 5440 | Kg/ha | 31350 | 1:1.84 |

OFT – 5

| Crop/ enterprise | Farming situation | Problem definition | Title of OFT | No. of trials | Technology Assessed | Parameter s of assessment | Data on the parameter | | | Results of assessment | Feedback from the farmer | Any refinement needed | Justification for refinement |
|-------------------------|----------------------|--|--|------------------|--|--|-----------------------|--------------|--------------|---|---|-----------------------------|------------------------------------|
| | | | | | | | TO 1 | TO 2 | TO 3 | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | TO 1 | TO 2 | TO 3 | 9 | 10 | 11 | 12 |
| Pulses Black gram | Rice fallow | Non availabili ty of high yielding and pest and disease tolerance varieties | Assessmen t of black gram varieties suitable for rice fallow condition | 10 | TO1-Existing variety- ADT3 , TO2-VBN 4, TO3- VBN 6 | Yield | 650 kg/ha | 675 kg/ha | 640 kg/ha | VBN 4 black gram variety was performed well with yield of 675kg/ha in rice fallow condition which was on par with the existing variety ADT 3 black gram. The YMV incidence was low in VBN 4 (15%) as compared to ADT 3 (20%) and VBN 6 (18%). | VBN 4 black gram variety is suitable to rice fallow condition than VBN 6 | nil | nil |
| | | | | | | Disease /pest inciden ce(yello w mosaic virus) | 20% | 15% | 18% | | | | |

Contd..

| Technology Assessed | Source of Technology | Production | Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year) | Net Return (Profit) in Rs. / unit | BC Ratio |
|---|----------------------|------------|---|--------------------------------------|----------|
| 13 | 14 | 15 | 16 | 17 | 18 |
| Technology option 1 (Existing variety-ADT3) | TNAU | 650 | kg/ha | 19750 | 1:3.08 |
| Technology option 2- VBN 4, | TNAU | 675 | kg/ha | 20875 | 1:3.20 |
| Technology option 3- VBN 6 | TNAU | 640 | kg/ha | 19300 | 1:3.03 |

OFT – 6

| Crop/ enterprise | Farming situation | Problem definition | Title of OFT | No. of trials | Technology Assessed | Parameter s of assessment | Data on the parameter | | | Results of assessment | Feedback from the farmer | Any refinement needed | Justification for refinement |
|--|----------------------|--|---|---------------------|---|---|--|---|------|---|---|-----------------------------|------------------------------------|
| | | | | | | | TO 1 | TO 2 | TO 3 | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | TO 1 | TO 2 | TO 3 | 9 | 10 | 11 | 12 |
| Animal husband ry (Dairy cows) | - | Low productive of milk due to convention al feeding method | Assess ment of TANU VAS GRAN D supplem ent in cross breed dairy cows | 60 | TO1- Conventional feeding (Farmers practice), TO2- TANUVAS GRAND supplement | Milk yield | 105 lit/mon th/cow | 125 litres/ mont h/cow | - | After feeding of TANUVAS GRAND Increasing milk yield from 400 ml to 650 ml per day than conventional method of feeding. | Apart from milk productivity appearance of cows and thickness of cow dung had improved and disease resistance can be achieved through this GRAND supplement. | nil | nil |
| | | | | | | Consist ency (Thick ness) of cowdun g | Semi solid (60 %) | Solid (90 %) | - | | | | |
| | | | | | | Skin appearan ce of cow | Normal appearan ce 50 % | Non wrinkle Shining appearan ce 90 % | - | | | | |

Contd..

| Technology Assessed | Source of Technology | Production | Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year) | Net Return (Profit) in Rs. / unit | BC Ratio |
|--|----------------------|------------|---|--------------------------------------|----------|
| 13 | 14 | 15 | 16 | 17 | 18 |
| Technology option 1-Farmers practice | Conventional feeding | 105 | Litres/cow/month | 1310/month | 1:2.31 |
| Technology option 2- TANUVAS GRAND supplement | TANUVAS -2011 | 124.5 | Litres/cow/month | 1739/month | 1:2.74 |

4.C2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details

OFT-1

| | | | |
|----|--|---|---|
| 1 | Title of Technology Assessed | : | Assessment of new rice varieties alternative to TKM 9 in Nagapattinam district |
| 2 | Problem Definition | : | Farmers need on alternative rice variety to TKM 9 |
| 3 | Details of technologies selected for assessment | : | Technology option 1 - Farmer practice (TKM 9) |
| | | | Technology option 2 – ADT (R) 45 |
| | | | Technology option 3 - Anna 4 |
| 4 | Source of technology | : | TO1 – FP |
| | | | TO2 – TNAU |
| | | | TO3 – TNAU |
| 5 | Production system and thematic area | : | Rice – Rice – Pulses Increasing productivity of rice |
| 6 | Performance of the Technology with performance indicators | : | Technology Assessed |
| | | | Production (kg/ha) |
| | | | Technology option 1 - 4150 |
| | | | Technology option 2 – 4500 |
| | Technology option 3 - 4750 | | |
| 7 | Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques | : | Farmers themselves assessed the crop stand and tiller production. Rating was given by the farmer in comparison with other check variety – as Better and Best as compared to check variety TKM 9 Farmers adjudged the variety in the order of TKM 9, ADT 45 and Anna 4 |
| 8 | Final recommendation for micro level situation | : | Anna 4 performs better under water scarce situation. Need to be recommended for early kuruvai(kharif) season during water scarce conditions |
| 9 | Constraints identified and feedback for research | : | Precise sowing time depending upon the Cauvery water availability |
| 10 | Process of farmers participation and their reaction | : | Farmers had shown much interest as this variety is drought resistant and medium slender grains as compared to bold TKM 9 variety |

OFT-2

| | | | |
|---|---|---|--|
| 1 | Title of Technology Assessed | : | Substitution of K for economic rice productivity |
| 2 | Problem Definition | : | Non application of potassic fertilizers leads to reduction in yield |
| 3 | Details of technologies selected for assessment | : | Technology option 1 – farmers practice |
| | | | Technology option 2 – 75% Recommended K + soil – K Solubiliser |
| | | | Technology option 3 – 75% Recommended K + K-humate |
| 4 | Source of technology | : | TO1 – Conventional method |
| | | | TO2 – TNAU 2008 |
| | | | TO3 – TNAU 2010 |
| 5 | Production system and thematic area | : | Irrigated and Nutrient management |
| 6 | Performance of the Technology with performance indicators | : | Technology Assessed |
| | | | Production (kg/ha) |
| | | | Technology option 1 – 5000 |
| | | | Technology option 2 – 5600 |
| | Technology option 3 – 5700 | | |
| 7 | Feedback, matrix scoring of various technology parameters done through farmer's | : | Farmers are interested to use K humate because of better crop stand and increasing yield |

| | | | |
|----|---|---|---|
| | participation / other scoring techniques | | |
| 8 | Final recommendation for micro level situation | : | 75% Recommended K + K-humate |
| 9 | Constraints identified and feedback for research | : | Nil |
| 10 | Process of farmers participation and their reaction | : | Evinced keen interest as there is reduction in K fertilizer bill due to non-availability and escalation of K fertilizers. |

OFT-3

| | | | | |
|----|--|---|--|--------------------|
| 1 | Title of Technology Assessed | : | Evaluation of weeders for paddy cultivation | |
| 2 | Problem Definition | : | Difficult to operate multi (2 or 3) row weeder because of curved or bent rows and damage to rice plants while power weeding | |
| 3 | Details of technologies selected for assessment | : | Technology option 1 – Farmers practice (Cono weeder) | |
| | | | Technology option 2 – double row power weeder | |
| | | | Technology option 3 - Single row power weeder (KVK, Sikkal 2011) | |
| 4 | Source of technology | : | TO1 - TNAU | |
| | | | TO2 – TNAU | |
| | | | TO3 – KVK, Sikkal, 2011 | |
| 5 | Production system and thematic area | : | Rice – rice – pulses Increasing rice productivity thro farmer friendly weed management | |
| 6 | Performance of the Technology with performance indicators | : | Technology Assessed | Production (kg/ha) |
| | | | Technology option 1 - | 6200 |
| | | | Technology option 2 – | 5800 |
| | | | Technology option 3 - | 6290 |
| 7 | Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques | : | Farmers expressed their scoring by better than double row weeder because of less weight and easy to operate although it has to be passed thro' all the rows. | |
| 8 | Final recommendation for micro level situation | : | Single row power weeder Could be operated easily in between rows as double row weeders damage crop rows because of zigzag planting by the labourers | |
| 9 | Constraints identified and feedback for research | : | Height of the engine in the single row power weeder to be modified in future | |
| 10 | Process of farmers participation and their reaction | : | Very receptive for rice mechanization techniques especially to see the farmer friendly single row power weeder | |

OFT - 4

| | | | | |
|---|---|---|---|--|
| 1 | Title of Technology Assessed | : | Farmer friendly mechanized planting with ideal weed management (partial adoption of SRI principles) | |
| 2 | Problem Definition | : | Labour scarcity and lack of skilled labour for planting young seedling under SRI during peak transplanting season leads to hurried manual random planting | |
| 3 | Details of technologies selected for assessment | : | Technology option 1 – Farmers practice (Manual random planting) | |
| | | | Technology option 2 – Machine planting + power weeder twice | |
| | | | Technology option 3 – Machine planting + Herbicide + power weeder | |
| 4 | Source of technology | : | TO1 – FP | |
| | | | TO2 – TNAU | |
| | | | TO3 – TNAU | |
| 5 | Production system and | : | Rice - Rice – Pulses cropping system | |

| | | | | |
|----|--|---|--|--------------------|
| | thematic area | : | Increasing rice productivity thro mechanization | |
| 6 | Performance of the Technology with performance indicators | : | Technology Assessed | Production (kg/ha) |
| | | | Technology option 1 - | 4100 |
| | | | Technology option 2 – | 5975 |
| | | | Technology option 3 - | 5440 |
| 7 | Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques | : | Farmers expressed difficulty in power weeder operation due to non-availability of skilled labourers Visual rating done with the farmers on weed density and tiller production - ratings given as Average – Better and Best for the options experimented | |
| 8 | Final recommendation for micro level situation | : | Machine planting with two power weeder operations at 10- 15 and 30 – 35 DAT. | |
| 9 | Constraints identified and feedback for research | : | Maintaining ideal soil moisture for power weeder operation by efficient water management | |
| 10 | Process of farmers participation and their reaction | : | Farmers visited the field during important operations viz., transplanting by machine, power weeder and herbicide applications - expressed difficulties of water management | |

OFT-5

| | | | | |
|----|--|---|--|--------------------|
| 1 | Title of Technology Assessed | : | Assessment of black gram varieties suitable for rice fallow condition | |
| 2 | Problem Definition | : | Non availability of high yielding and pest and Disease tolerance varieties | |
| 3 | Details of technologies selected for assessment | : | Technology option 1 – ADT 3-existing black gram variety | |
| | | | Technology option 2 – VBN 4 black gram | |
| | | | Technology option 3 – VBN 6 black gram | |
| 4 | Source of technology | : | TO1 –TNAU | |
| | | | TO2 – TNAU | |
| | | | TO3 –TNAU | |
| 5 | Production system and thematic area | : | Rice-Rice-Pulses, Increasing the productivity of rice fallow crops. | |
| 6 | Performance of the Technology with performance indicators | : | Technology Assessed | Production (kg/ha) |
| | | | Technology option 1 - | 650 kg/ha |
| | | | Technology option 2 – | 675 kg/ha |
| | | | Technology option 3 - | 640 kg/ha |
| 7 | Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques | : | VBN 4 black gram seems to be resistant to yellow mosaic virus | |
| 8 | Final recommendation for micro level situation | : | VBN 4 black gram variety is suitable to rice fallow condition as compared to VBN 6 | |
| 9 | Constraints identified and feedback for research | : | Lack of awareness on VBN 4 black gram variety among the farmers | |
| 10 | Process of farmers participation and their reaction | : | Evinced keen interest on alternate variety for rice fallow condition as they dependent on ADT 3 variety for many years | |

OFT-6

| | | | | | |
|----|--|---|---|---------------------------|--|
| 1 | Title of Technology Assessed | : | Assessment of TANUVAS GRAND supplement in cross breed dairy cows | | |
| 2 | Problem Definition | : | Low productive of milk due to conventional feeding method | | |
| 3 | Details of technologies selected for assessment | : | Technology option 1 - Conventional feeding (Farmers practice), Technology option 2 – TANUVAS GRAND supplement | | |
| 4 | Source of technology | : | TO1 - Conventional feeding TO2 – TANUVAS | | |
| 5 | Production system and thematic area | : | Animal husbandry and Milk productivity | | |
| 6 | Performance of the Technology with performance indicators | : | Technology Assessed | Production (kg/ha) | |
| | | | Technology option 1 | 105 lit/month/cow | |
| | | | Technology option 2 | 125 litres/month/cow | |
| 7 | Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques | : | Apart from milk productivity appearance of cows and thickness of cow dung are improved and disease resistance could be achieved through GRAND supplement. | | |
| 8 | Final recommendation for micro level situation | : | TANUVAS GRAND supplement performed better than conventional feeding due high milk production | | |
| 9 | Constraints identified and feedback for research | : | Lack of awareness among farmers on availability of TANUVAS GRAND | | |
| 10 | Process of farmers participation and their reaction | : | Receptive participation and ready for adoption | | |

4.D1. Results of Technologies Refined

Results of On Farm Trial

| Crop/enterprise | Farming situation | Problem definition | Title of OFT | No. of trials | Technology refined | Parameters of refined t | Data on the parameter | Results of refinement | Feedback from the farmer | Details of refinement done |
|-----------------|-------------------|--------------------|--------------|---------------|--------------------|-------------------------|-----------------------|-----------------------|--------------------------|----------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| | | | | | NIL | | | | | |

Contd..

| Technology Refined | Source of Technology for Technology Option1 / Justification for modification of assessed Technology Option 1 | Production | Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year) | Net Return (Profit) in Rs. / unit | BC Ratio |
|--|--|------------|---|-----------------------------------|----------|
| 13 | | 14 | 15 | 16 | 17 |
| Technology Option 1 (best performing Technology Option | - | - | - | - | - |

| | | | | | |
|---|---|---|---|---|---|
| in assessment) | | | | | |
| Technology Option 2 (Modification over Technology Option 1) | - | - | - | - | - |
| Technology Option 3 (Another Modification over Technology Option 1) | - | - | - | - | - |

4.D.2. Details of each On Farm Trial for refinement to be furnished in the following format separately as per the following details:

1. Title of Technology refined
2. Problem Definition
3. Details of technologies selected for refinement
4. Source of technology
5. Production system and thematic area
6. Performance of the Technology with performance indicators
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
8. Final recommendation for micro level situation
9. Constraints identified and feedback for research
10. Process of farmers participation and their reaction

Does not arise

PART V - FRONTLINE DEMONSTRATIONS

5.A. Summary of FLDs implemented during 2012-13

| Sl. No | Category | Farming Situation | Season and Year | Crop | Variety/breed | Hybrid | Thematic area | Technology Demonstrated | Area (ha) | | No. of farmers/ demonstration | | | Reasons for shortfall in achievement |
|--------|----------|-------------------|-----------------|----------------------|----------------|--------|------------------------------|--|-----------|--------|-------------------------------|--------|-------|---|
| | | | | | | | | | Proposed | Actual | SC/ST | Others | Total | |
| 1 | Oilseeds | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2 | Pulses | Rice fallow | Winter 2012 | Black gram | ADT 3 | - | ICM | Integrated Crop Management of rice fallow blackgram under combine harvested rice field | 10 | 10 | 5 | 15 | 20 | - |
| | | Rice fallow | Winter 2012 | Blackgram/ Greengram | ADT 3 | - | IPM | Management of <i>Spodoptera Litura</i> in pulses | 4 | 4 | - | 10 | 10 | - |
| | | Rice fallow | Winter 2012 | Blackgram/ Greengram | ADT 3 | - | Farm mechanization | Farm mechanization in pulses | 5 | 5 | 2 | 3 | 5 | Sowing was taken up and trial was failure due to severe drought |
| 3. | Cereals | Wet land | Rabi 2012-13 | Rice | CO R 50 ADT 49 | - | Increasing rice productivity | Assessment of elite rice seedling production using bio – fertilizers | 5 | 5 | - | 10 | 10 | - |

| | | | | | | | | | | | | | | | |
|----|------------------------|-------------|-----------------|------------|--------|---|-------------------------|---|-----|-----|---|---|----|---|--|
| 9 | Spices and condiments | NIL | | | | | | | | | | | | | |
| 10 | Commercial | | | | | | | | | | | | | | |
| | | Wet land | Mid season 2013 | Sugar cane | COSI 8 | - | Increasing productivity | Enhancing sugarcane productivity through Sustainable Sugarcane Initiative | 10 | 10 | 2 | 8 | 10 | - | |
| 11 | Medicinal and aromatic | NIL | | | | | | | | | | | | | |
| 12 | Fodder | NIL | | | | | | | | | | | | | |
| 13 | Plantation | Garden land | Perennial | Coconut | ECT | - | IPM | Management of coconut Rhinoceros beetle | 4 | 4 | 1 | 9 | 10 | - | |
| 14 | Fibre | NIL | | | | | | | | | | | | | |
| 15 | Dairy | NIL | | | | | | | | | | | | | |
| 16 | Poultry | NIL | | | | | | | | | | | | | |
| 17 | Rabbitry | NIL | | | | | | | | | | | | | |
| 18 | Pigerry | NIL | | | | | | | | | | | | | |
| 19 | Sheep and goat | NIL | | | | | | | | | | | | | |
| 20 | Duckery | NIL | | | | | | | | | | | | | |
| 21 | Common carps | NIL | | | | | | | | | | | | | |
| 22 | Mussels | NIL | | | | | | | | | | | | | |
| 23 | Ornamental fishes | NIL | | | | | | | | | | | | | |
| 24 | Oyster mushroom | NIL | | | | | | | | | | | | | |
| 25 | Button mushroom | | | | | | | | | | | | | | |
| 26 | Vermicompost | NIL | | | | | | | | | | | | | |
| 27 | Sericulture | NIL | | | | | | | | | | | | | |
| 28 | Apiculture | NIL | | | | | | | | | | | | | |
| 29 | Implements | NIL | | | | | | | | | | | | | |
| 30 | Others (specify) | Wet land | - | - | | | IFS | Demonstration IFS concept | 2.5 | 2.5 | - | 5 | 5 | - | |

| | | | | | | | | | | | | | |
|--|------------------------|-------------|------------------|------------------|--------|--------|---------------------------------------|--|------------------|---|---|---|-----------|
| | Vegetables | Garden land | Rabi 2012 – 2013 | Tomato | - | COTH 3 | ICM | Integrated Crop Management of COTH 3 tomato | Rabi 2012 – 2013 | L | M | M | Vegetable |
| | | Garden land | Rabi 2012 – 2013 | Vegetable cowpea | PKM1 | - | ICM | Sustainable live hood through introduction and marketing of vegetable cowpea PKM1 as summer irrigated pulse crop | Rabi 2012 – 2013 | L | M | M | Vegetable |
| | Flowers | - | - | - | - | - | - | - | - | - | - | - | - |
| | Ornamental | - | - | - | - | - | - | - | - | - | - | - | - |
| | Fruit | | | | | | | | | | | | |
| | Spices and condiments | | | | | | | | | | | | |
| | Commercial | Wet land | Mid season 2013 | Sugar cane | COSI 8 | - | Increasing the productivity Thro' SSI | Enhancing sugarcane productivity through Sustainable Sugarcane Initiative | Mid season 2013 | L | M | H | Sugarcane |
| | Medicinal and aromatic | | | | | | | | | | | | |
| | Fodder | | | | | | | | | | | | |
| | Plantation | Garden land | Perennial | Coconut | ECT | - | IPM | Management of coconut Rhinoceros beetle | Perennial | L | M | M | Coconut |
| | Fibre | | | | | | | | | | | | |

5.B. Results of Frontline Demonstrations-

5.B.1. Crops

| Crop | Name of the technology demonstrated | Variety | Hybrid | Farming situation | No. of Demo. | Area (ha) | Yield (q/ha) | | | | % Increase | *Economics of demonstration (Rs./ha) | | | | *Economics of check (Rs./ha) | | | |
|----------|---|---------|--------|-------------------|--------------|-----------|---|------|------|-------|------------|--------------------------------------|--------------|------------|--------|------------------------------|--------------|------------|--------|
| | | | | | | | Demo | | | Check | | Gross Cost | Gross Return | Net Return | ** BCR | Gross Cost | Gross Return | Net Return | ** BCR |
| | | | | | | | H | L | A | | | | | | | | | | |
| Oilseeds | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Pulses | Management of <i>Spodoptera litura</i> in pulses | ADT 3 | - | Rice-Fallow | 10 | 4 | 2.38 | 1.00 | 1.95 | 1.40 | 39.29 | 8075 | 8775 | 700 | 1.09 | 7500 | 7650 | 150 | 1:1.02 |
| | Integrated Crop Management of rice fallow black gram under combine harvested rice field | ADT 3 | - | Rice-Fallow | 3 | 2 | 3.00 | 2.25 | 2.50 | 2.10 | 19.05 | 8500 | 12500 | 4000 | 1.47 | 7500 | 10500 | 3000 | 1:1.40 |
| | Farm mechanization in pulses | ADT 3 | - | Rice fallow | 10 | 4 | Sowing was taken up and trial was failure due to severe drought | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | |
|------------------------|--|-------|---|-----------|----|---|-------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|--------|--|
| Medicinal and aromatic | | | | | | | | | | | | | | | | | | | | |
| Fodder | | | | | | | | | | | | | | | | | | | | |
| Plantation | Management of coconut Rhinoceros beetle | Local | - | Irrigated | 10 | 5 | 16304 | 14000 | 15315 | 12500 | 22.5 | 16850 | 48000 | 31150 | 2.85 | 13500 | 35250 | 21750 | 1:2.61 | |

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

H – Highest Yield, L – Lowest Yield A – Average Yield

Data on additional parameters other than yield (viz., reduction of percentage in weed/pest/ diseases etc.)

| Data on other parameters in relation to technology demonstrated | | |
|---|------|-------|
| Parameter with unit | Demo | Check |
| Weed management in rice | | |
| Weed control efficiency (%) | 80 | 30 |

5.B.2. Livestock and related enterprises (Nil)

| Type of livestock | Name of the technology demonstrated | Breed | No. of Demo | No. of Units | Yield (q/ha) | | | Check if any | % Increase | *Economics of demonstration Rs./unit) | | | | *Economics of check (Rs./unit) | | | | | | |
|---------------------|--|--------------------------------|-------------|--------------|---------------|---------------|---------------|--------------|------------|---------------------------------------|--------------|-------------|--------|--------------------------------|--------------|------------|--------|--|--|--|
| | | | | | Demo | | | | | Gross Cost | Gross Return | Net Return | ** BCR | Gross Cost | Gross Return | Net Return | ** BCR | | | |
| | | | | | H | L | A | | | | | | | | | | | | | |
| Duckery | | | | | | | | | | | | | | | | | | | | |
| Others (pl.specify) | Demonstration IFS concept in rice based wetland system with introduction of Rodo white bird and Pangasius fish culture and mushroom unit | Rodo white bird four way cross | 5 | 9:1Nos. | 252eggs/month | 198eggs/month | 225eggs/month | - | - | 607 / month | 1125/ month | 518 / month | 1:1.8 | - | -- | - | -- | | | |
| | | Pangasious Fish | | 20000Nos. | 75 | 70 | 72.5 | - | - | 215000/ha | 507500/ha | 292500/ha | 1:2.3 | - | - | - | - | | | |
| | | Inland Fish | | 7500Nos. | 63 | 58 | 60.5 | - | - | 206250/ha | 400000/ha | 193750/ha | 1:1.9 | - | - | - | - | | | |

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Data on additional parameters other than yield (viz., reduction of percentage diseases, increase in conceiving rate, inter-calving period etc.) Nil

| Data on other parameters in relation to technology demonstrated | | |
|---|-------------|--------------|
| Parameter with unit | Demo | Check if any |
| Pangasious Fish weight gain / 6 month | 500g | - |
| Inland Fish weight gain / 8 month | 800g | - |

5.B.3. Fisheries Nil

| Type of Breed | Name of the technology demonstrated | Breed | No. of Demo | Units/ Area (m ²) | Yield (q/ha) | | | % Increase | *Economics of demonstration Rs./unit or (Rs./m ²) | | | | *Economics of check Rs./unit or (Rs./m ²) | | | | | |
|---------------|-------------------------------------|-------|-------------|-------------------------------|--------------|---|---|------------|---|------------|--------------|------------|---|------------|--------------|------------|--------|--|
| | | | | | Demo | | | | Check if any | Gross Cost | Gross Return | Net Return | ** BCR | Gross Cost | Gross Return | Net Return | ** BCR | |
| | | | | | H | L | A | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

H-High L-Low, A-Average

Data on additional parameters other than yield (viz., reduction of percentage diseases, effective use of land etc.) Nil

| Data on other parameters in relation to technology demonstrated | | |
|---|------|--------------|
| Parameter with unit | Demo | Check if any |
| | | |

5.B.4. Other enterprises - Nil

| Enterprise | Name of the technology demonstrated | Variety/ species | No. of Demo | Units/ Area {m ² } | Yield (q/ha) | | | % Increase | *Economics of demonstration (Rs./unit) or (Rs./m ²) | | | | *Economics of check (Rs./unit) or (Rs./m ²) | | | | | |
|---------------------|-------------------------------------|------------------|-------------|-------------------------------|--------------|---|---|------------|---|------------|--------------|------------|---|------------|--------------|------------|--------|--|
| | | | | | Demo | | | | Check if any | Gross Cost | Gross Return | Net Return | ** BCR | Gross Cost | Gross Return | Net Return | ** BCR | |
| | | | | | H | L | A | | | | | | | | | | | |
| Others (pl.specify) | | | | | | | | | | | | | | | | | | |

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

H-High L-Low, A-Average

Data on additional parameters other than yield (viz., additional income realized, employment generation, quantum of farm resources recycled etc.)

| Data on other parameters in relation to technology demonstrated | | |
|---|------|-------|
| Parameter with unit | Demo | Local |
| | | |

5.B.5. Farm implements and machinery - Nil

| Name of the implement | Cost of the implement in Rs. | Name of the technology demonstrated | No. of Demo | Area covered under demo in ha | Labour requirement in Mandays | | % save | Savings in labour (Rs./ha) | *Economics of demonstration (Rs./ha) | | | | *Economics of check (Rs./ha) | | | | |
|-----------------------|------------------------------|-------------------------------------|-------------|-------------------------------|-------------------------------|-------|--------|----------------------------|--------------------------------------|--------------|------------|--------|------------------------------|--------------|------------|--------|--|
| | | | | | Demo | Check | | | Gross cost | Gross Return | Net Return | ** BCR | Gross Cost | Gross Return | Net Return | ** BCR | |
| | | | | | | | | | | | | | | | | | |

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Data on additional parameters other than labour saved (viz., reduction in drudgery, time etc.)

| Data on other parameters in relation to technology demonstrated | | |
|---|------|-------|
| Parameter with unit | Demo | Local |
| | | |

5.B.6. Extension and Training activities under FLD

| Sl.No. | Activity | No. of activities organized | Number of participants | Remarks |
|--------|---|-----------------------------|------------------------|---------|
| 1 | Field days | 14 | 300 | - |
| 2 | Farmers Training | 25 | 500 | |
| 3 | Media coverage | 5 | - | |
| 4 | Training for extension functionaries | 15 | 45 | |
| 5 | Others (Please specify) Exposure visit on IFS concept | 1 | 120 | - |

PART VI – DEMONSTRATIONS ON CROP HYBRIDS**Demonstration details on crop hybrids**

| Type of Breed | Name of the technology demonstrated | Name of the hybrid | No. of Demo | Area (ha) | Yield (q/ha) | | | | % Increase | *Economics of demonstration (Rs./ha) | | | | *Economics of check (Rs./ha) | | | |
|-------------------------|---|--------------------|-------------|-----------|--------------|------|------|-------|------------|--------------------------------------|--------------|------------|--------|------------------------------|--------------|------------|--------|
| | | | | | Demo | | | Check | | Gross Cost | Gross Return | Net Return | ** BCR | Gross Cost | Gross Return | Net Return | ** BCR |
| | | | | | H | L | A | | | | | | | | | | |
| Cereals | | | | | | | | | | | | | | | | | |
| Paddy | Popularization of Co RH 4 paddy hybrid | CORH4 | 10 | 10 | 52.5 | 50.5 | 51.5 | 48.0 | 7.3 | 38,000 | 69,525 | 39,525 | 1:1.83 | 37,500 | 64,800 | 27,300 | 1:1.73 |
| Total | 1 | | 10 | 10 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Oilseeds | | | | | | | | | | | | | | | | | |
| Total | | | | | | | | | | | | | | | | | |
| Pulses | | | | | | | | | | | | | | | | | |
| Total | Nil | | | | | | | | | | | | | | | | |
| Vegetable crops | | | | | | | | | | | | | | | | | |
| Tomato | Integrated Crop Management of CO 3 tomato | CO 3 Hybrid | 10 | 2 | 835 | 611 | 723 | 538 | 34.39 | 98900 | 289200 | 190300 | 2.92 | 88500 | 188300 | 99800 | 1:2.12 |
| Total | 1 | | 5 | 1 | -- | - | - | - | - | - | - | - | - | - | - | - | - |
| Commercial crops | | | | | | | | | | | | | | | | | |
| Total | | | | | | | | | | | | | | | | | |
| Total | | | | | | | | | | | | | | | | | |

H-High L-Low, A-Average

*Please ensure that the name of the hybrid is correct pertaining to the crop specified

PART VII. TRAINING

7.A.. Training of Farmers and Farm Women including sponsored training programmes (On campus)

| Area of training | No. of Courses | No. of Participants | | | | | | | | |
|--|----------------|---------------------|------------|------------|------------|----------|------------|-------------|------------|-------------|
| | | General | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Crop Production | | | | | | | | | | |
| Cropping Systems | 1 | 20 | - | 20 | - | - | - | 20 | - | 20 |
| Integrated Crop Management | 4 | 109 | 3 | 112 | 40 | - | 40 | 149 | 3 | 152 |
| Soil and Water Conservation | 1 | 30 | - | 30 | - | - | - | 30 | - | 30 |
| Horticulture | | | | | | | | | | |
| a) Vegetable Crops | | | | | | | | | | |
| Production of low value and high volume crop | 2 | 55 | 3 | 58 | 7 | - | 7 | 62 | 3 | 65 |
| Livestock Production and Management | | | | | | | | | | |
| Dairy Management | 1 | 101 | 19 | 120 | - | - | - | 101 | 19 | 120 |
| Poultry Management | 1 | 101 | 19 | 120 | - | - | - | 101 | 19 | 120 |
| Feed and Fodder technology | 1 | 50 | - | 50 | 10 | - | 10 | 60 | - | 60 |
| Plant Protection | | | | | | | | | | |
| Integrated Pest Management | 2 | 55 | 6 | 61 | 9 | - | 9 | 64 | 6 | 70 |
| Integrated Disease Management | 2 | 40 | 16 | 56 | 9 | 5 | 14 | 49 | 21 | 70 |
| Fisheries | | | | | | | | | | |
| Integrated fish farming | 3 | 151 | 34 | 185 | 15 | - | 15 | 166 | 34 | 200 |
| Production of livestock feed and fodder | 1 | 20 | 6 | 26 | 9 | - | 9 | 29 | 6 | 35 |
| Agro-forestry | | | | | | | | | | |
| Others (Disaster management) | 2 | 148 | 12 | 160 | 30 | - | 30 | 178 | 12 | 190 |
| TOTAL | 21 | 880 | 118 | 998 | 129 | 5 | 134 | 1009 | 123 | 1132 |

7.B Training of Farmers and Farm Women including sponsored training programmes (Off campus)

| Area of training | No. of Courses | No. of Participants | | | | | | | | |
|---|----------------|---------------------|--------|-------|-------|--------|-------|-------------|--------|-------|
| | | General | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Crop Production | | | | | | | | | | |
| Cropping Systems | 1 | 30 | 2 | 32 | 8 | - | 8 | 38 | 2 | 40 |
| Integrated Crop Management | 7 | 175 | 30 | 205 | 23 | 14 | 37 | 198 | 44 | 242 |
| Soil and Water Conservation | 1 | 35 | 15 | 50 | - | - | - | 35 | 15 | 50 |
| Integrated Nutrient Management | 1 | 34 | 4 | 38 | 10 | - | 10 | 44 | 4 | 48 |
| Livestock Production and Management | | | | | | | | | | |
| Feed and Fodder technology | 1 | 18 | 20 | 38 | 6 | 10 | 16 | 24 | 30 | 54 |
| Agril. Engineering | | | | | | | | | | |
| Farm machinery and its maintenance | 6 | 197 | 20 | 217 | 47 | - | 47 | 244 | 20 | 264 |
| Plant Protection | | | | | | | | | | |
| Integrated Pest Management | 1 | 28 | - | 28 | - | - | - | 28 | - | 28 |
| Integrated Disease Management | 1 | 28 | - | 28 | - | - | - | 28 | - | 28 |
| Capacity Building and Group Dynamics | | | | | | | | | | |
| Leadership development | 2 | 40 | 40 | 80 | 10 | 10 | 20 | 80 | 20 | 100 |

| | | | | | | | | | | | |
|------------|--------------------------------------|----------|------------|-----------|------------|----------|-----------|-----------|------------|-----------|------------|
| | management | | | | | | | | | | |
| 11. | Home Science | | | | | | | | | | |
| 11.b | Economic empowerment of women | 1 | - | 40 | 40 | - | 10 | 10 | - | 50 | 50 |
| 12 | Agricultural Extension | | | | | | | | | | |
| 12.a | Capacity Building and Group Dynamics | 1 | 25 | 5 | 30 | - | - | - | 25 | 5 | 30 |
| | Total | 9 | 411 | 85 | 496 | 6 | 10 | 16 | 417 | 95 | 512 |

Details of sponsoring agencies involved

1. State Dept. of Agriculture
2. Agricultural Engineering Department
3. Fisheries University, Nagapattinam
4. Dept of Horticulture
5. NABARD
6. CIKS (NGO)
7. SWEET (NGO)
8. NAMCO (NGO)
9. WORLD VISION (NGO)
10. MSSRF(NGO)

7.H. Details of Vocational Training Programmes carried out by KVKs for rural youth

| S.No. | Area of training | No. of Courses | No. of Participants | | | | | | | | |
|-----------|---|----------------|---------------------|--------|-------|-------|--------|-------|-------------|--------|-------|
| | | | General | | | SC/ST | | | Grand Total | | |
| | | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 1 | Crop production and management | - | - | - | - | - | - | - | - | - | - |
| 2 | Post harvest technology and value addition | - | - | - | - | - | - | - | - | - | - |
| 3. | Livestock and fisheries | - | - | - | - | - | - | - | - | - | - |
| 4. | Income generation activities | - | - | - | - | - | - | - | - | - | - |
| 5 | Agricultural Extension | - | - | - | - | - | - | - | - | - | - |
| | Grand Total | - | - | - | - | - | - | - | - | - | - |

PART VIII – EXTENSION ACTIVITIES

Extension Programmes (including extension activities undertaken in FLD programmes)

| Nature of Extension Programme | No. of Programmes | No. of Participants (General) | | | No. of Participants SC / ST | | | No. of extension personnel | | |
|--|-------------------|-------------------------------|--------|-------|-----------------------------|--------|-------|----------------------------|--------|-------|
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Field Day | 26 | 605 | 53 | 658 | 100 | 17 | 117 | 5 | - | 5 |
| Kisan Mela | - | - | - | - | - | - | - | - | - | - |
| Kisan Ghosthi | - | - | - | - | - | - | - | - | - | - |
| Exhibition | 4 | 650 | 50 | 700 | 75 | 25 | 100 | - | - | - |
| Film Show | 12 | 820 | 380 | 1200 | 30 | 15 | 45 | - | - | - |
| Method Demonstrations | 29 | 490 | 25 | 515 | 50 | 15 | 65 | - | - | - |
| Farmers Seminar | 2 | 65 | 75 | 140 | 20 | - | 20 | - | - | - |
| Workshop | 12 | - | - | - | - | - | - | 360 | 60 | 420 |
| Group meetings | 12 | 1300 | - | 1300 | 115 | - | 115 | 300 | - | - |
| Lectures delivered as resource persons | - | - | - | - | - | - | - | - | - | - |
| Newspaper coverage | 47 | Mass | | | | | | | | |
| Radio talks | 52 | Mass | | | | | | | | |
| TV talks | 15 | Mass | | | | | | | | |
| Popular articles | 5 | Mass | | | | | | | | |
| Extension Literature | 8 (2300 Nos.) | Mass | | | | | | | | |
| Advisory Services | 250 | 240 | 10 | 250 | - | - | - | - | - | - |
| Scientific visit to farmers field | 150 | 520 | 40 | 560 | 160 | 15 | 175 | 10 | 5 | 15 |
| Farmers visit to KVK | - | 925 | 45 | 965 | 400 | 35 | 435 | - | - | - |
| Diagnostic visits | 215 | 210 | 5 | 215 | - | - | - | - | - | - |
| Exposure visits | 6 | 200 | 30 | 230 | - | - | - | - | - | - |

| | | | | | | | | | | |
|--|------------|-------------|-------------|-------------|------------|------------|-------------|------------|-----------|------------|
| Ex-trainees Sammelan | - | - | - | - | - | - | - | - | - | - |
| Soil health Camp | 1 | 50 | - | 50 | - | - | - | - | - | - |
| Animal Health Camp | 1 | 50 | - | 50 | - | - | - | - | - | - |
| Agri mobile clinic | - | - | - | - | - | - | - | - | - | - |
| Soil test campaigns | 1 | 35 | - | 35 | - | - | - | - | - | - |
| Farm Science Club Conveners meet | 5 | 75 | 25 | 100 | - | - | - | - | - | - |
| Women Self Help Group Conveners meetings | 2 | - | 85 | 85 | - | 15 | 15 | - | - | - |
| Mahila Mandals Conveners meetings | - | - | - | - | - | - | - | - | - | - |
| Celebration of important days (Farm Innovators Meet) | - | - | - | - | - | - | - | - | - | - |
| Any Other (Specify) Animal Health Campaign | - | - | - | - | - | - | - | - | - | - |
| Total | 855 | 6235 | 1063 | 7053 | 950 | 137 | 1087 | 675 | 65 | 740 |

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS

9.A. Production of seeds by the KVKs

| Crop category | Name of the crop | Variety | Hybrid | Quantity of seed (qtl) | Value (Rs) | Number of farmers to whom provided |
|---------------------|------------------|----------------|----------|------------------------|--------------|------------------------------------|
| Cereals (crop wise) | | | | | | |
| | Paddy | ADT 50 | - | 1.56 | 3542 | 20 |
| | Paddy | Swarna sub – 1 | - | 1.07 | 2183 | 15 |
| | Paddy | TRY – 3 | - | 2.20 | 4240 | 30 |
| | Paddy | ADT – 49 | - | 0.55 | 1260 | 10 |
| | Paddy | ADT – 45 | - | 2.40 | 5280 | 30 |
| Vegetables | Bitter Gourds | Palur 1 | - | 33 Nos. | 825 | 33 |
| Fodder crop seeds | COFS 29 | - | - | 0.22 | 8800 | 70 |
| Total | - | - | - | - | 26130 | 208 |

9.B. Production of planting materials by the KVKs

| Crop category | Name of the crop | Variety | Hybrid | Number | Value (Rs.) | Number of farmers to whom provided |
|-----------------------------|------------------|---------|--------|-------------|--------------|------------------------------------|
| Plantation | Coconut seedling | ECT | - | 730 | 21900 | 150 |
| Fodder crop saplings /Slips | CN Fodder slips | CO3 | - | 5094 | 2547 | 50 |
| Forest Species | Kumil | - | - | 80 | 800 | 20 |
| Total | | | | 5904 | 25247 | 220 |

9.C. Production of Bio-Products

| Bio Products | Name of the bio-product | Quantity Kg | Value (Rs.) | Number of farmers to whom provided |
|--------------|-------------------------|-------------|-------------|------------------------------------|
| Bio Agents | | | | |
| | Coco peat | 350 | 1400 | 10 |

| | | | | |
|--------------|---------------|-------------|-------------|-----------------------------------|
| | Vermi compost | 500 | 2000 | KVK farm use |
| | Azolla | 300 | 1500 | KVK farm use |
| | Azolla | 20 | 100 | 40 |
| | Azolla | 250 | - | Free distribution to farmers (25) |
| | Coco peat | 350 | 1400 | 10 |
| Total | | 1420 | 5000 | |

9.D. Production of livestock materials

| Particulars of Live stock | Name of the breed | Number | Value (Rs.) | Number of farmers to whom provided |
|---------------------------|-----------------------|--------------|-------------|------------------------------------|
| Dairy animals | - | - | - | - |
| Fisheries | | | | |
| Fingerlings | Composite inland fish | 16 kg | 1600 | 10 |
| Others (Pl. specify) | | | | |
| Total | | 16 kg | 1600 | 10 |

PART X – PUBLICATION, SUCCESS STORY, SWTL, TECHNOLOGY WEEK AND DROUGHT MITIGATION

10. A. Literature Developed/Published (with full title, author & reference)

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

| | | |
|---|---|----------------|
| Name | : | Uzhavan |
| Date of start | : | Oct – Dec 2007 |
| Periodicity | : | Quarterly |
| No. of copies distributed every quarter | : | 100 |

(B) Literature developed/published

| Item | Title | Authors name | Number |
|-----------------------------|---|----------------|------------------|
| Literature published | | | |
| Leaflet | Director sown rice | All SMS & PAs | 1000 |
| | PPFM /KCl technology | All SMS & PAs | 1000 |
| Popular article | Direct sown rice | Dr.R.Rajendran | News paper daily |
| | Summer ploughing | Dr.R.Rajendran | News paper daily |
| | INM & IPM for rice | Dr.R.Rajendran | News paper daily |
| Literature developed | | | |
| | Cultivation of CORH 4 paddy | - | 50 |
| | Cultivation of ADT 49 | - | 50 |
| | Cultivation of ADT 50 | - | 50 |
| | Coconut cultivation | - | 50 |
| | Management of Thanjavur wilt in coconut | - | 50 |
| | Azolla production technology | - | 50 |
| Booklet | SSI technology | - | 50 |
| TOTAL | | | 2350 |

10.B. Details of Electronic Media Produced

| S. No. | Type of media (CD / VCD / DVD/ Audio-Cassette) | Title of the programme | Number |
|--------|--|--|--------|
| 1. | VCD | Success story of Pogainallur brinjal | 5 |
| 2. | VCD | Structure of cono weeder | 5 |
| 3. | VCD | Maintenance of drip irrigation accessories | 5 |
| 4. | VCD | Boron deficiency and management in coconut | 5 |
| 5 | VCD | Management of meal bug in brinjal | 5 |
| 6. | VCD | Impact of Mass spraying PPFM / KCl | 10 |

10.C. Success Stories / Case studies, if any (two or three pages write-up on each case with suitable action photographs. The Success Stories / Case Studies need not be restricted to the reporting period).

FARMERS SUCCESS STORY – 1 (AGRICULTURE)

| | | |
|----|--|---|
| 1. | Name of the Farmer | Th.R.Perumal |
| 2. | Father name | Th.Rangaraj |
| 3. | Gender | Male |
| 4. | Complete Postal address | 34, Alangudi Alangudi Post, Kuthalam (TK) Nagapattinam District. |
| 5. | Contact Phone Number and E-mail ID. | 9486835547 |
| 6. | Land & water assets details | 0.8 ha and 1 borewell |
| 7. | Details of Interventions made by the farmer with methodology | He is a progressive rice farmer having knowledge on System of Rice Intensification (SRI) and he modified the SRI according to his field soil fertility. He used the seed rate of 300 g / acre under SRI with spacing of 50 X 50 cm. He practiced the technology of seed treatment with Azophos, Pseudomonas. He also cultivated <i>sesbania rostrata</i> and incorporated it into the soil before planting. |
| 8. | Outcome | The average productive tillers recorded were 327 / m ² and he attained the yield of 10050 kg / ha |

| | | |
|----|--|--|
| 9. | Lessons learnt from the farmers experience | With the lesser seed rate of 300g / acre he has obtained maximum yield of 10050 kg / ha with partial SRI practices |
|----|--|--|

FARMERS SUCCESS STORY – 2 ON HORTICULTURE

| | | |
|----|--|--|
| 1. | Name of the Farmer | Th.U.Thangarasu |
| 2. | Father name | Th. Uthirapathi |
| 3. | Gender | Male |
| 4. | Complete Postal address | 243, Veerangudi kadu, North Poigai Nallur, South Poigai Nallur (PO) Nagapattinam District. |
| 5. | Contact Phone Number and E-mail ID. | 73731 33014 |
| 6. | Land & water assets details | 1.4 ha, Farm pond |
| 7. | Details of Interventions made by the farmer with methodology | Being a farmer growing rice and pulse crop, he could not able to generate good remuneration. Moreover, he had struggled a lot and he used to fight against natural calamities viz., flood, drought etc. After establishment of KVK at Sikkal in 2004, he used to visit KVK to get knowledge and training on vegetables cultivation techniques. He discussed with KVK scientist about his resource and difficulties in doing regular agriculture and received appropriate advice to go for cultivation of vegetables crops viz., tomato, chillies, gourds etc. Then switched over from cultivating rice and pulses and to vegetable cultivation and medicinal crop gloriosa. He used to get knowledge and training on hybrid vegetable cultivation techniques and get expertise on the above technique and get expertise exposure visits on precision farming to Dharmapuri, Krishinagri Districts. Then started cultivating hybrid vegetable such us tomato, |

| | | |
|----|--|---|
| | | chillies etc., From an area of half an acre, he had taken the highest yield of 16 tonnes of hybrid tomato Lakshmi. He got the per plant yield of 2 kg green chillies (Priyanka hybrid). He is also getting more than Rs. 50,000 net profit per year from vegetables and more than Rs.25,000 through gloriosa cultivation. |
| 8. | Outcome | Rs.75,000/- per year |
| 9. | Lessons learnt from the farmers experience | Farmers skill in raising vegetable crops viz., brinjal, chillies, cluster bean etc involving family labour. |

FARMERS SUCCESS STORY- 3 (ANIMAL HUSBANDRY)

| | | |
|----|--|---|
| 1. | Name of the Farmer | Th.G.Jeevanandam |
| 2. | Father name | Th.M.Ganapathy |
| 3. | Gender | Male |
| 4. | Complete Postal address | Nangudi Village Kilvelur (TK) 611104 |
| 5. | Contact Phone Number and E-mail ID. | 9443375262 |
| 6. | Land & water assets details | 20 ha (Conventional cultivation), 5 farm ponds, 2 borewells and one borewell with Drip irrigation unit. IFS 1.56 ha (Citrus 10 cent, Mango 20 cent, amla 20 cent coconut 20 cent, moringa 100 cent, vegetable (brinjal, bhendi) 100 cent, chilles 20 cent, tomato 10 cent, poultry shed 10 cent, fish pond 30 cent) |
| 7. | Details of Interventions made by the farmer with methodology | He is a progressive farmer having knowledge on not only IFS but also other crop cultivation rice, pulses, vegetables etc., He also the first person in Nagapattinam to adopt SRI with the advice of the scientist TRRI, Aduthurai and practicing since 2001. He used to get the net profit of 65,000 / ha |

| | | |
|----|--|---|
| | | only from the commercialized cropping system of rice – rice – blackgram. But after the intervention through KVK, Sikkal and his own involvement and interest he emerged as a model farmer of adopting IFS suited to the low land rice system. |
| 8. | Outcome | Through IFS with the agriculture components of banana tree – 600 nos, Amla – 45 Nos, annual moringa – 0.4 ha, mango – 50 Nos. Citrus – 15 nos, bapkok poultry - 100Nos, four way cross – 100 nos. fish pond and fodder grass CO4 cultivation, he is getting a net profit 1,78,900 / ha / year as compared to Rs. 65,000 /ha / year under conventional crop cultivation alone. |
| 9. | Lessons learnt from the farmers experience | <ol style="list-style-type: none"> 1. Novel feeding of pulses haulm to goats without spillage / wastage install fed method 2. Growing tree crops with protection from flooded water 3. Skill of all available resource management more efficiently |

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

DROUGHT MITIGATION PROGRAMME

In Nagapattinam District around **73,600 ha** of standing rice crop raised during samba and thaladi season (Rabi 2012-13) is under water stress condition. Out of 11 blocks, Nagapattinam, Keelaiyur, Thirumarugal, Thalainayur and Kilvelur blocks are severely affected by the prevailing drought. As per the report given by the Joint Director Agriculture, Department of Agriculture Nagapattinam about **56,000 ha** of rice under water stress condition can be saved with supplemental irrigation. As part of the samba package II announced by the Government of Tamil Nadu, Krishi Vigyan Kendra Sikkal, Nagapattinam is actively involved in taking up the mass spraying campaign cum demonstration programme of foliar spraying of water / liquid bio fertilizer (PPFM) through mobile sprinkler / boom sprayer for mitigating drought in rice crop under the guidance of TNAU.

Around **7097.5 ha** of rice fields have been covered by KVK, in Nagapattinam district. Th.T.Munisamy, District Collector, Tmt. Ashiya Mariyam, DRO, Nagapattinam, Dr.T.Jayaraj, Director TRRI and Nodal Officer drought mitigation programme in Cauvery Delta Zone, Dr.P.Kalaiselvan, Director of Extension Education, TNAU, Dr.Chellamuthu, Director, WTC, TNAU, Dr. Santhana Bosu Dean, AEC&RI, Th.U.Rajendran, JDA, Nagapattinam and other extension officials of the district were present in the demonstration programme and encourage the farmers to utilize the facility from KVK and extend the coverage by using this technique as quickly as possible.

Prof. Dr.K.Ramasamy, Vice Chancellor, TNAU inspected the demonstration at Seeravattam village, Keelaiyur block about the performance of the mass spraying campaign using PPFM and KCL on 04.01.2013 and discussed with farmers regarding the importance of mass spraying at this crop stage and also addressed to Jaya TV about the drought mitigation programme in the Cauvery Delta Zone.

The TNAU video team under the leadership of Dr. Venkat Prabu, Professor (Extension) has recorded direct live interview with farmer at Perunkadambanur and Nangudi villages in Nagapattinam and Kilvelur blocks on 6.1.2013 about the feed back after spraying PPFM/KCL.

On 10.01.2013 a high level committee under the Chairmanship of Hon'ble Finance Minister, Govt. of Tamil Nadu, Th. O. Panneer Selvam accompanied with Agricultural minister Th.T.Dhamodaran with six state Ministers/15 IAS officials including State Agricultural Production Commissioner Th. Sandheep Saxena, IAS and Commissioner of Agriculture, Th. Shivadas Meena, IAS inspected the mass spraying campaign organized by KVK, Sikkal at Seeravattam village, Keelaiyur block and interacted with the farmers about the performance and feedback of PPFM and MOP to mitigate the drought in rice crop. During the occasion Dr. T. Jayaraj, Director TRRI, and Nodal Officer, Drought mitigation programme in CDZ and his team along with Joint Director of Agriculture, Nagapattinam explained the results of PPFM spray to the high level committee.

10.E. 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. | Animal husbandry | Novel feeding of pulses haulm to goats without spillage / wastage in stallfed method of goat raring | Feeding method |
| 2. | All crops | Broken palm tree pieces used for making owl perches and bio diversity | Rat control |

10.F. Indicate the specific training need analysis tools/methodology followed for**- Identification of courses for farmers/farm women –**

field visits and informal discussion with farmers

- Rural Youth

- field visits and informal discussion with farmers

- In-service personnel

- Monthly Zonal Meetings and Farmers Grievances Day meeting proceedings and Oral discussions thro phone

10.G. Field activities

- i. Number of villages adopted: one
 ii. No. of farm families selected: Nil
 iii. No. of survey/PRA conducted: one

10.H. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : Completed

1. Year of establishment : 2011

2. List of equipments purchased with amount :

| Sl. No | Name of the Equipment | Qty. | Cost |
|--------------|---|------|-----------------|
| 1. | Digital Visible Spectrophotometer | 1 | 39,104 |
| 2. | Digital pH meter “Elico” Make | 1 | 5,970 |
| 3. | All Glass Single Distillation unit | 1 | 36,400 |
| 4. | Khan Shaker “Labline” | 1 | 20,800 |
| 5. | Hot air oven | 1 | 17,680 |
| 6. | Hot plate | 1 | 7956 |
| 7. | Willey mill | 1 | 32,760 |
| 8. | Water Bath | 1 | 7,249 |
| 9. | UP based Flame Photometer “Elico” Make | 1 | 45,240 |
| 10. | Digital conductivity meter “Elico” Make | 1 | 11,326 |
| 11. | Electronic Top loading balance “Cyberlab” | 1 | 6760 |
| 12. | Electronic Top loading balance “Shimadzu” | 1 | 20,592 |
| 13. | Water and Soil analysis kit | 1 | 19,750 |
| 14. | Digestion system (Kelplus) | 1 | 1,12,216 |
| 15. | Distillation system (Kelplus) | 1 | 1,82,936 |
| 16. | Instrument table | 5 | 78,000 |
| 17. | Rack,Almirah, Angle Iron rack | - | 70,000 |
| 18. | Soil and Plant storage cabin | - | 1,00,000 |
| 19. | Wash basin, sink and exhauster fan | | 70,000 |
| 20. | Servo relay stabilizer – 2 Kva | 1 | 7,500 |
| 21. | Micropipette | 2 | 3600 |
| 22. | Buchner funnel with flask | 1 | 2000 |
| 23. | Titration unit | 2 | 10,000 |
| 24. | Vacuum pump | 1 | 5000 |
| 25. | HCL Computer with printer | 1 | 37,600 |
| Total | | | 9,50,439 |

Details of samples analyzed so far since establishment of SWTL:

| Details | No. of Samples analyzed | No. of Farmers benefited | No. of Villages | Amount realized (Rs.) |
|------------------|-------------------------|--------------------------|-----------------|-----------------------|
| Soil Samples | 212 | 53 | 53 | 3180 |
| Water Samples | 44 | 44 | 38 | 440 |
| Plant samples | - | - | - | - |
| Manure samples | - | - | - | - |
| Others (specify) | - | - | - | - |
| Total | 256 | 97 | 91 | 3620 |

Details of samples analyzed during the 2012-13:

| Details | No. of Samples analyzed | No. of Farmers benefited | No. of Villages | Amount realized (Rs.) |
|------------------|-------------------------|--------------------------|-----------------|-----------------------|
| Soil Samples | 202 | 50 | 40 | 3030 |
| Water Samples | 34 | 34 | 28 | 340 |
| Plant samples | - | - | - | - |
| Manure samples | - | - | - | - |
| Others (specify) | - | - | - | - |
| Total | 236 | 84 | 68 | 3370 |

10. I. Technology Week celebration during 2012-13 Yes/No: No

Period of observing Technology Week: From _____ to _____

Total number of farmers visited _____ :

Total number of agencies involved _____ :

Number of demonstrations visited by the farmers within KVK campus: _____

Other Details

| Types of Activities | No. of Activities | Number of Farmers | Related crop/livestock technology |
|---|-------------------|-------------------|-----------------------------------|
| Gosthies | | | Nil |
| Lectures organized | | | |
| Exhibition | | | |
| Film show | | | |
| Fair | | | |
| Farm Visit | | | |
| Diagnostic Practicals | | | |
| Supply of Literature (No.) | | | |
| Supply of Seed (q) | | | |
| Supply of Planting materials (No.) | | | |
| Bio Product supply (Kg) | | | |
| Bio Fertilizers (q) | | | |
| Supply of fingerlings | | | |
| Supply of Livestock specimen (No.) | | | |
| Total number of farmers visited the technology week | | | |

10. J. Interventions on drought mitigation (if the KVK included in this special programme)

A. Introduction of alternate crops/varieties

| State | Crops/cultivars | Area (ha) | Number of beneficiaries |
|---------------------------|----------------------|-----------|-------------------------|
| Tamil Nadu – Nagapattinam | Anna 4 rice variety | 2.0 | 5 |
| | TRY 3 Paddy | 4.0 | 10 |
| | YRCH 1 Castor | 1.6 | 4 |
| | CO 4 Fodder grass | 0.3 | 5 |
| | COFS 29 Fodder | 3.0 | 75 |
| | Hedge Lucerne fodder | 1.0 | 25 |

B. Major area coverage under alternate crops/varieties

| Crops | Area (ha) | Number of beneficiaries |
|----------------------|-------------|-------------------------|
| Oilseeds | 1.6 | 4 |
| Pulses | - | - |
| Cereals | 6.0 | 15 |
| Vegetable crops | - | - |
| Tuber crops | - | - |
| Other – fodder crops | 4.3 | 105 |
| Total | 11.9 | 124 |

C. Farmers-scientists interaction on livestock management

| State | Livestock components | Number of interactions | No.of participants |
|---------------------------|---|------------------------|--------------------|
| Tamil Nadu – Nagapattinam | Animal husbandry on dairy cows, goat rearing and fish farming | 1 | 120 |
| | Inland Fish farming | 1 | 45 |
| Total | | 2 | 165 |

D. Animal health camps organized

| State | Number of camps | No.of animals | No.of farmers |
|---------------------------|-----------------|---------------|---------------|
| Tamil Nadu – Nagapattinam | - | - | - |
| Total | - | - | - |

E. Seed distribution in drought hit states

| State | Crops | Quantity (qtl) | Coverage of area (ha) | Number of farmers |
|---------------------------|----------------|----------------|-----------------------|-------------------|
| Tamil Nadu – Nagapattinam | Paddy – Anna 4 | 0.4 | 2 | 5 |
| | TRY 3 | 1.0 | 4 | 10 |
| | Fodder seeds | 0.25 | 4.3 | 105 |
| Total | | 1.65 | 10.3 | 120 |

F. Large scale adoption of resource conservation technologies

| State | Crops/cultivars and gist of resource conservation technologies introduced | Area (ha) | Number of farmers |
|--------------|---|-----------|-------------------|
| | Nil | | |
| Total | | | |

G. Awareness campaign

| State | Meetings | | Gosthies | | Field days | | Farmers fair | | Exhibition | | Film show | |
|---------------------------|----------|----------------|----------|----------------|------------|----------------|--------------|----------------|------------|----------------|-----------|----------------|
| | No. | No. of farmers | No. | No. of farmers | No. | No. of farmers | No. | No. of farmers | No. | No. of farmers | No. | No. of farmers |
| Tamil Nadu – Nagapattinam | 1 | 48 | - | - | 4 | 200 | - | - | - | - | - | - |
| Total | 1 | 48 | - | - | 4 | 200 | - | - | - | - | - | - |

PART XI. IMPACT**11.A. 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) |
| Introduction of Swarna Sub 1 Flood Tolerant Rice Varieties | 30 | 25 | 10,000/ha | 15,000/ha |
| Introduction of TRY 3 Rice Variety for Saline Patches | 30 | 27 | 8000/ha | 12,000/ha |
| Introduction of TNAU Hybrid Co1 Chillies | 20 | 20 | 62,000 | 1,00,000. |
| Protray Nursery Technique for Hybrid Vegetables | 50 | 55 | 15,000 | 25,000 |
| Sustainable Sugarcane Initiative | 40 | 10 | - | - |
| Popularization of TNAU Yellow Stem Borer Trap | 20 | 27 | Rs.19,000/ha | Rs.27,000/ha |
| Stallfed method of goat farming | 50 | 25 | - | - |
| Fourway cross poultry | 50 | 25 | - | - |
| Mass spraying of PPFM / KCl | 6500 | 50 | - | - |

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

**11.B. Cases of large scale adoption
(Please furnish detailed information for each case)****1. Use of saline resistant TRY 3 rice variety in salt affected blocks of the district**

About 35,000 ha area is affected by salinity for which KVK initiated the soil health management activities under the NADP project. To begin with, 60 farmers were selected from 5 blocks of Nagapattinam District. KVK distributed about 470 kg of saline tolerant rice varieties TRY3/ CO43 for Rabi season 2011 – 12. Farmers in Nagapattinam District produced their own seeds and spreading the new variety TRY 3 by themselves in larger area and the exact statistics on area of spread is being analyzed. The saline tolerant TRY 3 variety is high yielding, non-lodging in addition to the good cooking quality and suitable for idly making.

2. Farmer to farmer spread of PPFM spray to mitigate drought during samba season 2012-13

Under samba special package II around 7098 ha rice crop were saved by spraying of PPFM / KCl covering 6500 farmers in Nagapattinam district. Based on the effectiveness of PPFM in withstanding drought and favouring

crop growth, this technology has been spread from farmer to farmer by using about 630 litres of PPFM covering 1260 ha of rice crop directly without any intervention by KVK due to its positive impact.

11.C. Details of impact analysis of KVK activities carried out during the reporting period

Under Samba Special Package II scheme, all the scientists including Programme Coordinator involved in the drought mitigation work. The impact assessment on PPFM spray was carried out by Dr.G.Thangamani, AP (Microbiology) by randomly selecting 10 farmers and report submitted to University.

PART XII - LINKAGES

12.A. Functional linkage with different organizations

| Name of organization | Nature of linkage |
|---|--|
| State dept. of Agriculture | 1.Joint training, extension programmes and implementations of Rashtriya Sam Vikas Yojana, 2. Giving technical support and infrastructural support during monthly zonal workshop. 3.Joint field diagnostic survey for pest and disease management 4. Pre kharif and rabi training programme 5. Flood / Drought assessment 6. yield performance assessment 7. Organizing Agricultural Exhibition and seminar at block and District level |
| Dept. of Horticulture | 1.Joint training programmes 2.Offering need based technical guidance to the extension functionaries. 4. Field diagnostic visit 5. Flood / Drought assessment 6. yield performance assessment |
| NABARD | Organizing Farm Science Club and exposure visits. |
| Local, NGOs -DHAN, MSSRF, SWEET, NAMCO, WORLD VISION, VAANGHAI | Organizing on/off campus training Programmes and exposure visits, offering need based technical guidance |
| ZPD, CRIDA, TANUVAS, IICPT, DEE, SCMS, CPPS, CPBG, TRRI-Aduthurai, SWMRI-Thanjavur, K VK-Thiruvarur, KVK-Trichy, KVK-Karaikal | Technical consultancy and exchange of SMS during training programmes. |
| AIR (Trichy, Karaikal) | Offering radio programmes on latest crop production technologies and periodical announcements of technologies on critical crop stage. |
| District Collectorate DRDA, Nagapattinam | Farmers grievance day meeting, Organizing skill development training programme to rural youth SHGs. Organizing need based training programme and promoting agricultural entrepreneurship |

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

12.B. List special programmes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies

| Name of the scheme | Date/ Month of initiation | Funding agency | Amount (Rs.) |
|--|---------------------------|-------------------|--------------|
| IFS | 2007 | RSVY- Agriculture | 15,00,000/- |
| Climate resilient agriculture – village adoption program - NICRA | 2010 – 11 | CRIDA, HYD | 30,35,000 |

| | | | |
|--|------------|------------|-----------|
| Salt Affected soil management in Nagapattinam district - NADP | 2011-2012 | GOI | 4,00,000 |
| Nutrient Manager for Rice for balanced nutrition in irrigated rice | 2011-2012 | IRRI & IPI | 10,49,000 |
| CMs Samba (Rabi) special package programme for drought management | 13.12.2012 | NADP –GOI | 30,00,000 |

12.C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

Coordination activities between KVK and ATMA during 2012 - 13

| S. No. | Programme | Particulars | No. of programmes attended by KVK staff | No. of programmes Organized by KVK | Other remarks (if any) |
|--------|--------------------------------|---|---|------------------------------------|------------------------|
| 01 | Meetings | ATMA farmers advisory committee | 1 | 1 | |
| 02 | Research projects | | | | |
| 03 | Training programmes | Preseason Kurvai / samba technology | 1 | 2 | - |
| | | ICM for rice | 4 | 1 | |
| 04 | Demonstrations | Azolla production | 2 | 1 | |
| 05 | Extension Programmes | | | | |
| | Kisan Mela | - | - | - | - |
| | Technology Week | - | - | - | - |
| | Exposure visit | Ultra high density planting on mango | 1 | 1 | - |
| | Exhibition | - | - | - | - |
| | Soil health camps | - | - | - | - |
| | Animal Health Campaigns | - | - | - | - |
| | Others (Pl. specify) | - | - | - | - |
| 06 | Publications | | | | |
| | Video Films | | | | |
| | Books | - | - | - | - |
| | Extension Literature | Azolla production technology (30 Nos.) | 2 | 1 | - |
| | Pamphlets | TNAU Technical Calendar 2013 distributed (50 nos) | 1 | 1 | - |
| | Others (Pl. specify) | - | - | - | - |
| 07 | Other Activities (Pl. specify) | - | - | - | - |
| | Watershed approach | - | - | - | - |
| | Integrated Farm Development | - | - | - | - |
| | Agri-preneurs development | - | - | - | - |

12.D. Give details of programmes implemented under National Horticultural Mission

| S. No. | Programme | Nature of linkage | Funds received if any Rs. | Expenditure during the reporting period in Rs. | Constraints if any |
|--------|-----------|-------------------|---------------------------|--|--------------------|
| - | - | - | - | - | - |

12.E. Nature of linkage with National Fisheries Development Board

| S. No. | Programme | Nature of linkage | Funds received if any Rs. | Expenditure during the reporting period in Rs. | Remarks |
|--------|-----------|-------------------|---------------------------|--|---------|
| - | - | - | - | - | - |

12.F. Details of linkage with RKVY

| S. No. | Programme | Nature of linkage | Funds received if any Rs. | Expenditure during the reporting period in Rs. | Remarks |
|--------|--|--------------------------|---------------------------|--|---------|
| 1 | Infrastructure development on training | Furnishing training hall | 40000 | 40000 | - |

12. G Kisan Mobile Advisory Services

| Month | No. of SMS sent | No. of farmers to which SMS was sent | No. of feedback / query on SMS sent |
|----------------|-----------------|--------------------------------------|-------------------------------------|
| April 2012 | 5 | 78 | 8 |
| May 2012 | 5 | 65 | 4 |
| June 2012 | 5 | 78 | 2 |
| July 2012 | 5 | 78 | - |
| August 2012 | 5 | 78 | - |
| September 2012 | 5 | 66 | - |
| October 2012 | 5 | 78 | 1 |
| November 2012 | 5 | 78 | - |
| December 2012 | 5 | 78 | - |
| January 2013 | 5 | 78 | 5 |
| February 2013 | 5 | 65 | - |
| March 2013 | 5 | 78 | 2 |

PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK**13.A. Performance of demonstration units (other than instructional farm)**

| Sl. No. | Demo Unit | Year of Establishment | Area (ha) | Details of production | | | Amount (Rs.) | | Remarks |
|---------|----------------------------------|-----------------------|-----------|------------------------------------|------------------------------------|-----|----------------|--------------|---------|
| | | | | Variety | Produce | Qty | Cost of inputs | Gross income | |
| 1 | Community nursery under shadenet | 2011 | 0.25 | Forest saplings, Ornamental plants | Forest saplings, Ornamental plants | 80 | 200 | 800 | Sold |

| | | | | | | | | | |
|---|------------------------|------|--------|-------------------|-------------------------|-------------|--------|------------------|---|
| | | | | | | 150 | 250 | | Planted in the borders of our KVK |
| 2 | Low cost drip | 2011 | 0.25 | Vegetables | Maize Bhendi | 74 No 49 kg | 200.00 | 222.00 245.00 | |
| 3 | Azolla Production Unit | 2011 | 1 cent | Azolla microphila | Azolla as seed material | 570 kg | - | 100 | 20 kg of azolla were sold and 550 kg of azolla were used in kvk farm and free distribution to the farmers |

13.B. Performance of instructional farm (Crops) including seed production

| Name of the crop | Date of sowing | Date of harvest | Area (ac) | Details of production | | | Amount (Rs.) | | Remarks |
|---------------------------|----------------|-----------------|-----------|-----------------------|-----------------|-----------|----------------|--------------|---------|
| | | | | Variety | Type of Produce | Qty. (Kg) | Cost of inputs | Gross income | |
| Cereals | | | | | | | | | |
| Paddy | 18.10.2011 | 07.02.13 | 1.5 | ADT 50 | Seed (TFL) | 1000 | - | 20000 | |
| Paddy | 19.10.2012 | 26.03.13 | 4.59 | ADT 46 | Seed (TFL) | 750 | - | 15000 | |
| Paddy | | | | | Grain | 4160 | - | 56160 | |
| Paddy | 06.10.2012 | 04.03.13 | 0.71 | White Ponnai | Seed (TFL) | 750 | - | 15000 | |
| Oilseeds | | | | | | | | | |
| Fibers | | | | | | | | | |
| Spices & Plantation crops | | | | | | | | | |
| Floriculture | | | | | | | | | |
| Fruits | | | | | | | | | |
| Vegetables | | | | | | | | | |
| Green chillies | | | | | Vegetable | 40 | - | 493 | |
| Tomato | | | | | Vegetable | 80 | - | 363 | |
| Water | | | | | Consumab | 390 | - | 3900 | |

| | | | | | | | | | |
|--|--|--|--|---|-----------------|-----|----|--|--|
| | | | | 8 | Maize Bhendi | 650 | 40 | | |
|--|--|--|--|---|-----------------|-----|----|--|--|

PART XIV - FINANCIAL PERFORMANCE

14.A. Details of KVK Bank accounts

| Bank account | Name of the bank | Location | Branch code | Account Name | Account Number | MICR Number | IFSC Number |
|--------------|---------------------|--------------|-------------|--------------|----------------|-------------|-------------|
| With KVK | State Bank of India | Nagapattinam | 879 | ICAR-KVK | 109778831 | 611002001 | SBIN0000879 |

14.B. Utilization of KVK funds during the year 2012-13 (Rs. in lakh)

| S. No. | Particulars | Sanctioned | Released | Expenditure |
|---------------------------------------|--|--------------|--------------|--------------|
| A. Recurring Contingencies | | | | |
| 1 | Pay & Allowances | 70.00 | 70.00 | 84.80 |
| 2 | Traveling allowances | 1.00 | 1.00 | 1.00 |
| 3 | Contingencies | | | |
| A | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines) | 2.00 | 2.00 | 2.00 |
| B | POL, repair of vehicles, tractor and equipments | 1.50 | 1.50 | 1.50 |
| C | Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained) | 0.60 | 0.60 | 0.60 |
| D | Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training) | 0.60 | 0.60 | 0.60 |
| E | Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year) | 2.40 | 2.40 | 2.40 |
| F | FLD on Special Pulses Programme | 0.00 | 0.00 | 0.00 |
| G | On farm testing (on need based, location specific and newly generated information in the major production systems of the area) | 0.45 | 0.45 | 0.45 |
| H | Training of extension functionaries | 0.20 | 0.20 | 0.20 |
| I | Maintenance of buildings | 0.20 | 0.20 | 0.20 |
| J | Extension Activities | 0.25 | 0.25 | 0.25 |
| K | Farmer's Field School | 0.25 | 0.25 | 0.25 |
| O | Library | 0.05 | 0.05 | 0.05 |
| TOTAL (A) | | 8.50 | 8.50 | 8.50 |
| B. Non-Recurring Contingencies | | | | |
| 1 | Works | - | - | - |
| 2 | Equipments including Furniture Plant Health Diagnpstic | - | - | - |
| 3 | Vehicle (Four wheeler/Two wheeler, please specify) | - | - | - |
| 4 | Library (Purchase of assets like books & journals) | - | - | - |
| TOTAL (B) | | 0 | 0 | 0 |
| C. REVOLVING FUND | | 0 | 0 | 0 |
| GRAND TOTAL (A+B+C) | | 79.50 | 79.50 | 94.30 |

14.C. Status of revolving fund (Rs. in lakh) for the three years

| Year | Opening balance as on 1 st April | Income during the year | Expenditure during the year | Net balance in hand as on 1 st April of each year |
|------|---|------------------------|-----------------------------|--|
| | | | | |

| | | | | |
|--------------------------|------|------|------|------|
| April 2010 to March 2011 | 0.80 | 3.19 | 2.62 | 1.37 |
| April 2011 to March 2012 | 1.37 | 5.24 | 4.20 | 2.41 |
| April 2012 to March 2013 | 2.41 | 3.01 | 1.36 | 4.06 |

15. Details of HRD activities attended by KVK staff during 2012-13

| Name of the staff | Designation | Title of the training programme | Institute where attended | Dates |
|--------------------------|----------------------|--|---------------------------------|-----------------------------|
| Dr.T.Elaiyabharathi | SMS (Agrl. Ento.) | Refreshment course on rodent control | NIPHM, Hyderabad | 08.08.2012 to 14.08.2012 |
| Dr.K.Sivakumar | SMS (SS& AC) | Preparation of Agromet Advisory services and use of weather data | CRIDA, Hyderabad | 14.9.12 to 15.9.12 |
| Dr.M.Karthikeyan | SMS (Plant Path.) | Fascination microbial bio inoculants for plant and human health | TNAU, Coimbatore | 25.02.13 to 11.03.13 |
| Dr.R.Rajendran | PC | Commodity futures Market | DoEE, TNAU, CBE | 19.3.2013 to 20.3.2013 |
| Dr.G.Thangamani | SMS (Agrl. Micro) | Efficient use of locally available natural resource | DoEE, TNAU, CBE | 21.3.2013 &22.3.2013 |
| Dr.K.Sivakumar | SMS (SS& AC) | Community Radio Service | DoEE, TNAU, CBE | 25.3.2013 to 28.3.2013 |

16. Please include any other important and relevant information which has not been reflected above (write in detail).

NIL

SUMMARY FOR 2012-13
I. TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops

| Thematic areas | Crop | Name of the technology assessed | No. of trials | Number of farmers | Area in ha (Per trail covering all the Technological Options) |
|---|--------|---|---------------|-------------------|---|
| Integrated Nutrient Management | Rice | Substitution of K for economic rice productivity | 5 | 5 | 2.0 |
| | - | - | - | - | - |
| Varietal Evaluation | Rice | Assessment of new rice varieties alternative to TKM 9 in Nagapattinam district | 5 | 2 | 0.8 |
| | Pulses | Assessment of black gram varieties suitable for rice fallow condition | 10 | 5 | 2.0 |
| Integrated Pest Management | - | - | - | - | - |
| | - | - | - | - | - |
| Integrated Crop Management | - | - | - | - | - |
| | - | - | - | - | - |
| Integrated Disease Management | - | - | - | - | - |
| | - | - | - | - | - |
| Small Scale Income Generation Enterprises | - | - | - | - | - |
| | - | - | - | - | - |
| Weed Management | Rice | Farmer friendly mechanized planting with ideal weed management (partial adoption of SRI principles) | | | |
| Resource Conservation Technology | - | - | - | - | - |
| | - | - | - | - | - |
| Farm Machineries | Rice | Evaluation of weeders for paddy cultivation | 5 | 5 | 2.0 |
| Total | | | 25 | 17 | 6.8 |

Summary of technologies assessed under livestock

| Thematic areas | Name of the livestock enterprise | Name of the technology assessed | No. of trials | No. of farmers |
|---|----------------------------------|--|---------------|----------------|
| Feed and fodder | Cattle | Assessment of TANUVAS GRAND supplement in cross breed dairy cows | 30 | 50 |
| Small scale income generating enterprises | - | - | - | - |
| Total | | | 30 | 50 |

Summary of technologies assessed under various enterprises

| Thematic areas | Name of the livestock enterprise | Name of the technology assessed | No. of trials | No. of farmers |
|----------------|----------------------------------|---------------------------------|---------------|----------------|
| Total | - | - | - | - |

Summary of technologies assessed under home science – Nil

| Thematic areas | Enterprise | Name of the technology assessed | No. of trials |
|----------------|------------|---------------------------------|---------------|
| | | | |

II. TECHNOLOGY REFINEMENT**Summary of technologies refined under various crops - Nil**

| Thematic areas | Crop | Name of the technology refined | No. of trials |
|----------------|------|--------------------------------|---------------|
| | | | |
| Total | | | |

Summary of technologies assessed under refinement of various livestock - Nil

| Thematic areas | Name of the livestock enterprise | Name of the technology refined | No. of trials |
|----------------|----------------------------------|--------------------------------|---------------|
| | | | |
| Total | | | |

Summary of technologies refined under various enterprises - Nil

| Thematic areas | Enterprise | Name of the technology assessed | No. of trials |
|----------------|------------|---------------------------------|---------------|
| | | | |

Summary of technologies refined under home science - Nil

| Thematic areas | Enterprise | Name of the technology assessed | No. of trials |
|----------------|------------|---------------------------------|---------------|
| | | | |

III. FRONTLINE DEMONSTRATION

Crops

| Crop | Name of the technology demonstrated | Variety | Hybrid | Farming situation | No. of Demo. | Area (ha) | Yield (q/ha) | | | | % Increase | *Economics of demonstration (Rs./ha) | | | | *Economics of check (Rs./ha) | | | |
|---------|---|--------------------|--------|-------------------|--------------|-----------|---|-------|-------|--------|------------|--------------------------------------|--------------|------------|--------|------------------------------|--------------|------------|--------|
| | | | | | | | Demo | | | Check | | Gross Cost | Gross Return | Net Return | ** BCR | Gross Cost | Gross Return | Net Return | ** BCR |
| | | | | | | | H | L | A | | | | | | | | | | |
| Pulses | Management of <i>Spodoptera Litura</i> in pulses | ADT 3 | - | Rice-Fallow | 10 | 4 | 2.38 | 1.00 | 1.95 | 1:1.40 | 28.21 | 8075 | 8775 | 700 | 1.09 | 7500 | 7650 | 150 | 1:1.02 |
| | Integrated Crop Management of rice fallow black gram under combine harvested rice field | ADT 3 | - | Rice-Fallow | 3 | 2 | 3.00 | 2.25 | 2.50 | 2.10 | 19.0 | 8500 | 12500 | 4000 | 1.48 | 7500 | 10500 | 3000 | 1:1.40 |
| | Farm mechanization in pulses | - | - | - | - | - | Sowing was taken up and trial was failure due to severe drought | | | | | | | | | | | | |
| Cereals | Assessment of elite rice seedling production using bio – fertilizers | ADT 49 | - | Irrigated | 10 | 5 | 61.25 | 58.74 | 60.00 | 51.20 | 17.20 | 35500 | 78300 | 42800 | 2.21 | 29496 | 68345 | 38940 | 1:2.32 |
| | | ADT 50 | | | | | 59.84 | 53.00 | 56.42 | 48.62 | 16.04 | 35500 | 75690 | 40190 | 2.13 | 29496 | 65081 | 35586 | 1:2.21 |
| | Popularization of fine grain rice variety TNAU rice ADT 49 | ADT(R) 49 | | Irrigated | 10 | 10 | 58.8 | 46.5 | 52.65 | 45.0 | 17.0 | 37,500 | 71078 | 33578 | 1.90 | 37,500 | 60,750 | 23,250 | 1:1.62 |
| | Integrated Crop Management in saline soils with rice variety TRY 3 | TRY 3 | - | Irrigated | 10 | 10 | 58.00 | 54.00 | 56.0 | 51.00 | 9.8 | 37,500 | 72,800 | 35300 | 1:1.9 | 37,500 | 66,150 | 28,650 | 1:1.70 |
| | Integrated Weed management in rice | ADT(R) 49, CO R 50 | - | Irrigated | 5 | 5 | 51.25 | 47.75 | 50.50 | 46.40 | 9.0 | 37500 | 55550 | 18050 | 1.50 | 38000 | 51040 | 13040 | 1:1.34 |
| | Sustainable live hood through introduction and marketing of vegetable cowpea PKM1 as summer irrigated vegetable | PKM1 | - | Garden land | 10 | 2 | 201.53 | 156.5 | 179 | 126 | 42 | 81500 | 196900 | 115400 | 2.42 | 76500 | 138600 | 62100 | 1:1.81 |

| | | | | | | | | | | | | | | | | | | | |
|------------|---|---------|---|-----------|----|---|---|-------|-------|-------|-------|--------|----------|--------|------|--------|--------|--------|--------|
| Commercial | Popularization of CO Si7 sugarcane in Nagapattinam District (2011 – 12) | CO Si 7 | - | Irrigated | 10 | 5 | 46 | 54 | 50 | 42.22 | 18.43 | 55,000 | 1,10,000 | 55,000 | 2.00 | 55,000 | 92,884 | 37,884 | 1.69 |
| | Enhancing sugarcane productivity through Sustainable Sugarcane Initiative | CO Si 8 | - | Irrigated | 5 | 2 | Sowing was taken up & trials is in progress | | | | | | | | | | | | |
| Plantation | Management of coconut Rhinoceros beetle | Local | - | Irrigated | 10 | 5 | 16304 | 14000 | 15315 | 12500 | 22.5 | 16850 | 48000 | 31150 | 2.85 | 13500 | 35250 | 21750 | 1:2.61 |

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Livestock

| Type of livestock | Name of the technology demonstrated | Breed | No. of Demo | No. of Units | Yield (q/ha) | | | | % Increase | *Economics of demonstration Rs./unit) | | | | *Economics of check (Rs./unit) | | | | | | |
|---------------------|--|--------------------------------|-------------|--------------|---------------|---------------|---------------|--------------|------------|---------------------------------------|--------------|-------------|--------|--------------------------------|--------------|------------|--------|--|--|--|
| | | | | | Demo | | | Check if any | | Gross Cost | Gross Return | Net Return | ** BCR | Gross Cost | Gross Return | Net Return | ** BCR | | | |
| | | | | | H | L | A | | | | | | | | | | | | | |
| Duckery | | | | | | | | | | | | | | | | | | | | |
| Others (pl.specify) | Demonstration IFS concept in rice based wetland system with introduction of Rodo white bird and Pangasius fish culture and mushroom unit | Rodo white bird four way cross | 5 | 9:1Nos. | 252eggs/month | 198eggs/month | 225eggs/month | - | - | 607 / month | 1125/ month | 518 / month | 1:1.8 | - | -- | - | -- | | | |
| | | Pangasious Fish | | 20000Nos. | 75 | 70 | 72.5 | - | - | 215000/ha | 507500/ha | 292500/ha | 1:2.3 | - | - | - | - | | | |
| | | Inland Fish | | 7500Nos. | 63 | 58 | 60.5 | - | - | 206250/ha | 400000/ha | 193750/ha | 1:1.9 | - | - | - | - | | | |

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Fisheries - Nil

| Category | Thematic area | Name of the technology demonstrated | No. of KVKs | No. of Farmer | No. of units | Major parameters | | % change in major parameter | Other parameter | | *Economics of demonstration (Rs.) | | | | *Economics of check (Rs.) | | | | |
|----------|---------------|-------------------------------------|-------------|---------------|--------------|------------------|-------|-----------------------------|-----------------|-------|-----------------------------------|--------------|------------|--------|---------------------------|--------------|------------|--------|--|
| | | | | | | Demonstration | Check | | Demonstration | Check | Gross Cost | Gross Return | Net Return | ** BCR | Gross Cost | Gross Return | Net Return | ** BCR | |
| | | | | | | | | | | | | | | | | | | | |

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Other enterprises - Nil

| Category | Name of the technology demonstrated | No. of KVKs | No. of Farmer | No. of units | Major parameters | | % change in major parameter | Other parameter | | *Economics of demonstration (Rs.) or Rs./unit | | | | *Economics of check (Rs.) or Rs./unit | | | | | |
|--------------|-------------------------------------|-------------|---------------|--------------|------------------|-------|-----------------------------|-----------------|-------|---|--------------|------------|--------|---------------------------------------|--------------|------------|--------|--|--|
| | | | | | Demonstration | Check | | Demonstration | Check | Gross Cost | Gross Return | Net Return | ** BCR | Gross Cost | Gross Return | Net Return | ** BCR | | |
| Total | | | | | | | | | | | | | | | | | | | |

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Women empowerment - Nil

| Category | Name of technology | No. of KVKs | No. of demonstrations | Name of observations | Demonstration | Check |
|-----------------|--------------------|-------------|-----------------------|----------------------|---------------|-------|
| Women | | | | | | |
| Children | | | | | | |

Farm implements and machinery - Nil

| Name of the implement | Crop | Name of the technology demonstrated | No. of KVKs | No. of Farmer | Area (ha) | Filed observation (output/man hour) | | % change in major parameter | Labor reduction (man days) | | | | Cost reduction (Rs./ha or Rs./Unit ect.) | | | | | | |
|-----------------------|------|-------------------------------------|-------------|---------------|-----------|-------------------------------------|-------|-----------------------------|----------------------------|--|--|--|--|--|--|--|--|--|--|
| | | | | | | Demonstration | Check | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

| | | | | | | | | | | |
|--------------------------------------|----------|------------|-----------|------------|----------|-----------|-----------|------------|-----------|------------|
| and value addition | | | | | | | | | | |
| Farm machinery | - | - | - | - | - | - | - | - | - | - |
| Farm machinery, tools and implements | 2 | 182 | 15 | 197 | - | - | - | 182 | 15 | 197 |
| Home Science | - | - | - | - | - | - | - | - | - | - |
| Economic empowerment of women | 1 | - | 40 | 40 | - | 10 | 10 | - | 50 | 50 |
| Agricultural Extension | - | - | - | - | - | - | - | - | - | - |
| Capacity Building and Group Dynamics | 1 | 25 | 5 | 30 | - | - | - | 25 | 5 | 30 |
| Total | 9 | 411 | 85 | 496 | 6 | 10 | 16 | 417 | 95 | 512 |

Details of Vocational Training Programmes carried out for rural youth

| S.No. | Area of training | No. of Courses | No. of Participants | | | | | | | | |
|-------|--------------------|----------------|---------------------|--------|-------|-------|--------|-------|-------------|--------|-------|
| | | | General | | | SC/ST | | | Grand Total | | |
| | | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| | Grand Total | - | - | Nil | | | | | | - | - |

V. Extension Programmes

| Nature of Extension Programme | No. of Programmes | No. of Participants (General) | | | No. of Participants SC / ST | | | No. of extension personnel | | |
|--|-------------------|-------------------------------|-------------|-------------|-----------------------------|------------|-------------|----------------------------|-----------|------------|
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Field Day | 26 | 605 | 53 | 658 | 100 | 17 | 117 | 5 | - | 5 |
| Kisan Mela | - | - | - | - | - | - | - | - | - | - |
| Kisan Ghosthi | - | - | - | - | - | - | - | - | - | - |
| Exhibition | 4 | 650 | 50 | 700 | 75 | 25 | 100 | - | - | - |
| Film Show | 12 | 820 | 380 | 1200 | 30 | 15 | 45 | - | - | - |
| Method Demonstrations | 29 | 490 | 25 | 515 | 50 | 15 | 65 | - | - | - |
| Farmers Seminar | 2 | 65 | 75 | 140 | 20 | - | 20 | - | - | - |
| Workshop | 12 | - | - | - | - | - | - | 360 | 60 | 420 |
| Group meetings | 12 | 1300 | - | 1300 | 115 | - | 115 | 300 | - | - |
| Lectures delivered as resource persons | - | - | - | - | - | - | - | - | - | - |
| Newspaper coverage | 47 | Mass | | | | | | | | |
| Radio talks | 52 | Mass | | | | | | | | |
| TV talks | 15 | Mass | | | | | | | | |
| Popular articles | 5 | Mass | | | | | | | | |
| Extension Literature | 8 (2300 Nos.) | Mass | | | | | | | | |
| Advisory Services | 250 | 240 | 10 | 250 | - | - | - | - | - | - |
| Scientific visit to farmers field | 150 | 520 | 40 | 560 | 160 | 15 | 175 | 10 | 5 | 15 |
| Farmers visit to KVK | - | 925 | 45 | 965 | 400 | 35 | 435 | - | - | - |
| Diagnostic visits | 215 | 210 | 5 | 215 | - | - | - | - | - | - |
| Exposure visits | 6 | 200 | 30 | 230 | - | - | - | - | - | - |
| Ex-trainees Sammelan | - | - | - | - | - | - | - | - | - | - |
| Soil health Camp | 1 | 50 | - | 50 | - | - | - | - | - | - |
| Animal Health Camp | 1 | 50 | - | 50 | - | - | - | - | - | - |
| Agri mobile clinic | - | - | - | - | - | - | - | - | - | - |
| Soil test campaigns | 1 | 35 | - | 35 | - | - | - | - | - | - |
| Farm Science Club Conveners meet | 5 | 75 | 25 | 100 | - | - | - | - | - | - |
| Women Self Help Group Conveners meetings | 2 | - | 85 | 85 | - | 15 | 15 | - | - | - |
| Total | 855 | 6235 | 1063 | 7053 | 950 | 137 | 1087 | 675 | 65 | 740 |

Details of other extension programmes

| Particulars | Number |
|--|-------------|
| Electronic Media | 6 |
| Extension Literature | 2353 |
| News Letter | 100 |
| News paper coverage | 17 |
| Technical Articles | |
| Technical Bulletins (Popular Article) | 3 |
| Technical Reports | |
| Radio Talks | 52 |
| TV Talks | 15 |
| Animal health amps (Number of animals treated) | - |
| Others (pl.specify) | - |
| Total | 2546 |

VI. PRODUCTION OF SEED/PLANTING MATERIAL

Production of seeds by the KVKs

| Crop category | Name of the crop | Variety | Hybrid | Quantity of seed (qtl) | Value (Rs) | Number of farmers to whom provided |
|---------------------|------------------|----------------|--------|------------------------|--------------|------------------------------------|
| Cereals (crop wise) | | | | | | |
| | Paddy | ADT 50 | - | 1.56 | 3542 | 20 |
| | Paddy | Swarna sub – 1 | - | 1.07 | 2183 | 15 |
| | Paddy | TRY – 3 | - | 2.20 | 4240 | 30 |
| | Paddy | ADT – 49 | - | 0.55 | 1260 | 10 |
| | Paddy | ADT – 45 | - | 2.40 | 5280 | 30 |
| Vegetables | Bitter Gourds | Palur 1 | - | 33 Nos. | 825 | 33 |
| Fodder crop seeds | COFS 29 | - | - | 0.22 | 8800 | 70 |
| Total | - | - | - | - | 26130 | 208 |

Production of planting materials by the KVKs

| Particulars of Live stock | Name of the breed | Number | Value (Rs.) | Number of farmers to whom provided |
|---------------------------|-----------------------|--------------|-------------|------------------------------------|
| Fingerlings | Composite inland fish | 16 kg | 1600 | 10 |
| Total | | 16 kg | 1600 | 10 |

Production of Bio-Products

| Bio Products | Name of the bio-product | Quantity Kg | Value (Rs.) | Number of farmers to whom provided |
|--------------|-------------------------|-------------|-------------|------------------------------------|
| Bio Agents | - | - | - | - |
| | Coco peat | 350 | 1400 | 10 |
| | Vermi compost | 500 | 2000 | KVK farm use |
| | Azolla | 300 | 1500 | KVK farm use |
| | Azolla | 20 | 100 | 40 |
| | Azolla | 250 | - | Free distribution to farmers (25) |
| | Coco peat | 350 | 1400 | 10 |
| Total | | 1420 | 5000 | |

Production of livestock and related enterprise materials

| Particulars of Live stock | Name of the breed | Number | Value (Rs.) | Number of farmers to whom provided |
|---------------------------|-----------------------|--------------|-------------|------------------------------------|
| Fingerlings | Composite inland fish | 16 kg | 1600 | 10 |
| Total | | 16 kg | 1600 | 10 |

VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS 2012 – 13

| Details | No. of Samples analyzed | No. of Farmers benefited | No. of Villages | Amount realized (Rs.) |
|---------------|-------------------------|--------------------------|-----------------|-----------------------|
| Soil Samples | 202 | 50 | 40 | 3030 |
| Water Samples | 34 | 34 | 28 | 340 |
| Total | 236 | 84 | 68 | 3370 |

VIII. SCIENTIFIC ADVISORY COMMITTEE

| Number of SACs conducted |
|--------------------------|
| Not conducted |

IX. NEWSLETTER

| Number of issues of newsletter published |
|--|
| 100 |

X. RESEARCH PAPER PUBLISHED

| Number of research paper published |
|------------------------------------|
| Nil |

XI. DETAILS ON RAIN WATER HARVESTING STRUCTURE AND MICRO-IRRIGATION SYSTEM

| Activities conducted | | | | |
|----------------------------|-----------------------|---------------------------------|------------------------|--------------------------|
| No. of Training programmes | No. of Demonstrations | No. of plant materials produced | Visit by farmers (No.) | Visit by officials (No.) |
| - | 8 | Maize Bhendi | 650 | 40 |

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