



TAMIL NADU AGRICULTURAL UNIVERSITY



**ANNUAL REPORT
(2012-13)**

**KRISHI VIGYAN KENDRA
VRIDDHACHALAM-606 001
CUDDALORE -TAMIL NADU**

ANNUAL REPORT 2012-13

(Apr. 2012 – Mar. 2013)

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 Vriddhachalam-606 001 Cuddalore District Tamil Nadu | 04143- 238353 | 04143- 238353 | kvkvri@tnau.ac.in | www.tnau.ac.in |

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 Lawley Road (Post Office) Coimbatore - 641 003 Tamil Nadu. | 0422- 2431222 | 0422 - 2431672 | registrar@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. R.Arunachalam | 04143-238896 | 9952197187 | kvkvri@tnau.ac.in |

1.4. Year of sanction: ICAR - F. No. 22 (17)/83-KVK dt 29.03.1985 of the Deputy Director General (AE)
ICAR, New Delhi

1.5. Staff Position (as 31st March 2012)

| Sl. No. | Sanctioned post | Name of the incumbent | Designation | M/F | Discipline | Highest Qualification | Pay Scale | Basic pay | Date of joining KVK | Permanent /Temporary | Category (SC/ST/OBC/ Others) |
|---------|--------------------------------------|-----------------------|-------------------------------------|-----|-----------------------|-----------------------|-----------------------|-----------|---------------------|----------------------|------------------------------|
| 1 | Programme Coordinator | Dr.R.Arunachalam | Programme coordinator | M | Agriculture Extension | Ph. D | 37400-67000-9000 (GP) | 52250 | 04.12.2012 | Permanent | OBC |
| 2 | SMS | Tmt. N.Dhara | Subject Matter Specialist | F | Crop Physiology | M.Sc | -- | -- | 31.12.2012 | Permanent | -- |
| 3 | SMS | Dr.S.Kannan | Subject Matter Specialist | M | Home Science | Ph. D | 15600-39100-7000(GP) | 29960 | 06.08.2009 | Permanent | SC |
| 4 | SMS | Dr.M.Raju | Subject Matter Specialist | M | Agronomy | Ph. D | 15600-39100-7000(GP) | 29960 | 09.05.2008 | Permanent | SC |
| 5 | SMS | Dr.T.Saravannan | Subject Matter Specialist | M | Pl. Pathology | Ph. D | 15600-39100-6000(GP) | 26370 | 18.03.2013 | Permanent | OBC |
| 6 | SMS | Dr.V.Dhanushkodi | Subject Matter Specialist | F | Soil Science | Ph. D | 15600-39100-6000(GP) | 26370 | 31.12.2009 | Permanent | ST |
| 7 | SMS | Dr.V.Vijaya geetha | Subject Matter Specialist | F | Seed Technology | Ph. D | 15600-39100-6000(GP) | 26370 | 08.01.2010 | Permanent | OBC |
| 8 | Programme Assistant (Lab Tech.)/T-4 | Mrs.G.Meenalakshmi | Programme Assistant (Lab Tech.)/T-4 | F | Horticulture | B.Sc. (Agri) | 9300-34800-4400 (GP) | 14120 | 28.02.2011 | Permanent | SC |
| 9 | Programme Assistant (Computer)/ T-4 | Mr.R.Samundeeswaran | Programme Assistant (Computer)/ T-4 | M | Computer Science | M.C.A. | 9300-34800-4400 (GP) | 16480 | 14.11.2012 | Permanent | OBC |
| 10 | Programme Assistant/ Farm Manager | Mr. R. Rajeshkannan | Farm Manager | M | Horticulture | M.Sc.(Agri) | 9300-34800-4400 (GP) | 16980 | 13.08.2010 | Permanent | OBC |
| 11 | Superintendent | Th. P. Mohandoss | Accountants Officer | M | - | B.Sc | 15600-39100-5400 (GP) | 21000 | 14.09.2009 | Permanent | SC |
| 12 | Jr. Stenographer | Mrs. T. Suganthi Rani | Superintendent | F | - | XII | 9300-34800-4800 (GP) | 16190 | 01.12.2008 | Permanent | SC |
| 13 | Driver | Th. C. Jayabal | Driver | M | - | XI | 9300-34800-4400 (GP) | 17330 | 28.11.1986 | Permanent | OBC |
| 14 | Driver | Th.S.Arul | Driver cum Mechanic | M | - | X | 5200-20200-2400(GP) | 9710 | 21.02.2007 | Permanent | OBC |
| 15 | Supporting staff | Th. A. Deivasigamani | Office Assistant | M | - | XII | 4800-10000-1300(GP) | 6290 | 27.01.2011 | Probationer | OBC |
| 16 | Supporting staff | Th. P. Narayanasami | PUSM | M | - | | 4800-10000-1300(GP) | 8520 | 08.08.1988 | Permanent | OBC |

1.6. Total land with KVK (in ha) :

| S. No. | Item | Area (ha) |
|--------|---------------------------|-----------------------|
| 1 | Under Buildings | 872.62 m ² |
| 2. | Under Demonstration Units | 208.66 m ² |
| 3. | Under Crops | 16.1 ha |
| 4. | Orchard/Agro-forestry | 3.8 ha |
| 5. | Others | Nil |

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 | 1989 | 309.45 | 5,00,000 | - | - | - |
| 2. | Farmers Hostel | ICAR | 1998 | 236.83 | 2,05,000 | - | - | - |
| 3. | Staff Quarters | | | | | | | |
| | 1 | ICAR | 1991 | 102.02 | 4,92,000 | - | - | - |
| | 2 | ICAR | 1991 | 102.02 | 4,92,000 | | | |
| 4. | Demonstration Units | | | | | | | |
| | 1 | ICAR | 2005 | 243.00 | 2,06,000 | - | - | - |
| 5 | Fencing | - | - | - | - | - | - | - |
| 6 | Rain Water harvesting system | - | - | - | - | - | - | - |
| 7 | Threshing floor | - | - | - | - | - | - | - |
| 8 | Farm godown | - | - | - | - | - | - | - |
| 9 | Jeep shed | ICAR | 1995 | 47.00 | 58,000 | - | - | - |
| 10 | Seminar hall | ICAR | 1996 | 224.32 | 12,00,000 | - | - | - |

B) Vehicles

| Type of vehicle | Year of purchase | Cost (Rs.) | Total kms. Run | Present status |
|---------------------------------------|------------------|------------|----------------|----------------|
| Motor cycle- Bajaj M80 (TN 31 V 4421) | 1995 | 20,448 | 7714 | Running |
| Mahindra Jeep | 2004 | 4,48,196 | 1,41,802 | Running |

| | | | | |
|---|------|----------|-----------|---------|
| (TN 31 L 7571) | | | | |
| Tractor – MF 1035 (TN 45 A 5582) | 1991 | 1,43,400 | 4490 | Running |
| Motor cycle-Hero Honda (TN 31V 4421) | 2009 | 48,255 | 17,290 | Running |
| Tractor - (New) | 2011 | 4,87,500 | 154 hours | Running |

C) Equipments & AV aids

| Nature of equipment | Year of purchase | Cost (Rs.) | Present status |
|--------------------------------|------------------|------------|-----------------|
| Sound projector (16mm) | 1986 | 8,750 | To be condemned |
| Philips radio recorder | 1986 | 1,495 | To be condemned |
| Pentax camera | 1988 | 7,572 | To be condemned |
| Colour TV | 1995 | 17,650 | To be condemned |
| VCR | 1995 | 19,500 | To be condemned |
| Mike system | 2002 | 5,250 | Condemned |
| Over head projector | 2004 | 25,488 | Good |
| Slide projector | 2004 | 14,588 | Good |
| Digital camera | 2005 | 19,900 | Good |
| LCD projector with accessories | 2006 | 1,00,000 | Good |
| Public address system | 2008 | 68,941 | Good |
| Projection screen (Manual) | 2009 | 2,500 | Good |
| Projection screen (Electrical) | 2009 | 28860 | Good |

1.8. Details SAC meeting conducted in 2012-13

| Sl. No. | Date | Number of Participants | No. of absences | Salient Recommendations | Action taken |
|---------|------------|------------------------|-----------------|--|--|
| 1. | 12.04.2012 | 22 | -- | More number of mini sprinkler system may be purchased cater the needs of Cuddalore District. It may be provided to the farmers for demonstration without any charges | Under CM's special programme for drought mitigation 10 mini sprinklers are allotted to this Kendra and utilized for drought mitigation in samba paddy of delta regions. In addition to this, 20 boom sprayers are also allotted and being utilized for foliar application of PPFM and KCI to mitigate the stress in paddy. Totally 1602 farmers were benefitted by covering 5575 ha comprising Kattumanarkoil, Parangipetti, Keerapalayam, Kumaratchi and Bhuvanagiri blocks. Needy farmers are also spared the above equipments free of cost. |
| 2. | | | | Farm implements may be purchased by this Kendra and implements may be lend to the farmers on custom hiring basis | The following implements are available at this Kendra <ul style="list-style-type: none"> ✚ Paddy drum seeder ✚ Paddy drum seeder cum green manure seeder ✚ Conoweeder ✚ Power operated SRI weeder ✚ Power weeder ✚ Rotatvator ✚ Laser guided land leveller ✚ Wood cutter – chain saw ✚ Multiple crop thresher ✚ Maize sheller |

| | | | | <ul style="list-style-type: none"> ✚ Groundnut pod stripper ✚ Boardbed furrow former ✚ Decordicator ✚ Sugarcane sett cutter ✚ Sugarcane bud chipper ✚ Cultivator ✚ Disc plough ✚ Tractor mounded sprayer ✚ Post hole digger ✚ Shredder <p>The above implements are utilized by the farmers of Cuddalore District and also demonstrated to the needy people. Needy farmers are also spared the above equipments free of cost.</p> | | | | | | | | | | | | | | | |
|--------|---|---|--|---|--------|-----------------------|---------|----|--|----------------------|----|---|------------------------|----|---|---------------------|----|---|---|
| 3. | | | Complete crop loss due to hit of Thane cyclone for the individual farmers should be documented | The functionaries of the state dept of Agriculture and horticulture assessed the crop losses of the individual farmers in association with the SMS of this Kendra. . Appropriate recommendations and crop recovery measures have been taught to the local farmers through on campus and off campus trainings / demonstrations, besides publishing the remedial strategies in the local news papers. The particulars of crop losses incurred and the proposed recommendations are given in the annexure. | | | | | | | | | | | | | | | |
| 4. | | | Arranging training of SHGs regarding new technologies in Value added products | <p>All the SMS were guided to offer value added trainings to the local farmers and SHGs. Accordingly we offered the following value added trainings</p> <table border="1"> <thead> <tr> <th>Sl. No</th> <th>Title of the Training</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Value addition in amla – Jam, Juice and candy making</td> <td>30 farmers on .10.12</td> </tr> <tr> <td>2.</td> <td>Value addition in Guava – Jam, Juice and candy making</td> <td>27 farmers on 27.12.12</td> </tr> <tr> <td>3.</td> <td>Post harvest technology in agriculture and horticulture products (Idli mix, Puffs making, varagu biscuits, Tomato jam etc)</td> <td>30 farmers / .10.12</td> </tr> <tr> <td>4.</td> <td>Preparation of value added products in Mushroom</td> <td>Vocational trainings (Period) for 40 farmers and members of local] SHGs</td> </tr> </tbody> </table> | Sl. No | Title of the Training | Remarks | 1. | Value addition in amla – Jam, Juice and candy making | 30 farmers on .10.12 | 2. | Value addition in Guava – Jam, Juice and candy making | 27 farmers on 27.12.12 | 3. | Post harvest technology in agriculture and horticulture products (Idli mix, Puffs making, varagu biscuits, Tomato jam etc) | 30 farmers / .10.12 | 4. | Preparation of value added products in Mushroom | Vocational trainings (Period) for 40 farmers and members of local] SHGs |
| Sl. No | Title of the Training | Remarks | | | | | | | | | | | | | | | | | |
| 1. | Value addition in amla – Jam, Juice and candy making | 30 farmers on .10.12 | | | | | | | | | | | | | | | | | |
| 2. | Value addition in Guava – Jam, Juice and candy making | 27 farmers on 27.12.12 | | | | | | | | | | | | | | | | | |
| 3. | Post harvest technology in agriculture and horticulture products (Idli mix, Puffs making, varagu biscuits, Tomato jam etc) | 30 farmers / .10.12 | | | | | | | | | | | | | | | | | |
| 4. | Preparation of value added products in Mushroom | Vocational trainings (Period) for 40 farmers and members of local] SHGs | | | | | | | | | | | | | | | | | |
| 5. | | | Sales counter should be given at KVK premises for entrepreneur developed at this KVK | New Project proposal for establishing Sales counter in front of KVK has been submitted to the NABARD regional office, Chennai by the Directorate of Extension Education. On the receipt of the approval, speedy steps will be initiated to carry out the said work | | | | | | | | | | | | | | | |
| 6. | | | Training should be arranged for benny beer preparation | Cuddalore district progressive farmers has selected for training on benny beer preparation given by KVK Kannur, Kerala state but due financial position we could not send the farmers. Eventhough this year we will planning for the training programme on benny beer preparation | | | | | | | | | | | | | | | |
| 7. | | | IFS should be planned in such a way that each farmer should get Rs. 10,000/- per month | <ul style="list-style-type: none"> • Two IFS programmes as FLD have been proposed and got approved. The components of this programme include vermi compost, fish farming, mush production unit, fodder crops and goat rearing • The above units will give an income of approximately Rs.10000 – Rs.15000/month | | | | | | | | | | | | | | | |

| | | | | | |
|----|--|--|--|---|--|
| | | | | | <ul style="list-style-type: none"> • For this FLD five beneficiaries who have permanent structures like vermin shed and fish pond were selected • The work has been initiated. • The performance of the above components will be assessed and documented for further recommendation to the farming community of the Cuddalore district |
| 8. | | | | Parasitoid for papaya mealy bug should be produced and released | <ul style="list-style-type: none"> • Production of papaya mealy bug parasitoid is being carried out by Regional Research Station, Vriddhachalam for this district and this facility is being utilized by us. • This Kendra was involved in conducting awareness campaign and release of parasitoids in the farmers' field by procuring the parasitoids from RRS, Vriddhachalam and conducting demonstrations in the needy farmers' field • During the year 2012-13 we have conducted ten such awareness cum demonstrations in severely affected blocks like Panruti, Kunrinchipadi, Nallur and Vriddhachalam. |
| 9. | | | | Farmer may be encouraged to form commodity based groups | <ul style="list-style-type: none"> • A Cumbu producers groups (22 farmers) has been established in Karupanchavadi village of Kurinchipadi block under INSIMP scheme • A value addition society has been formed by this KVK during the year 2010 and still it is being facilitated by this KVK |

PART II - DETAILS OF DISTRICT

2. Geographical location of the District

The district of Cuddalore lies on the East Coast of Tamil Nadu. It is bounded on the north by Villupuram district, on the south by Nagapattinam district, on the west by Perambalur and Villupuram and on the east by Bay of Bengal. Headquarter of this district is Cuddalore. The southern boundary follows for the greater part of its length the course of two rivers - the Vellar and the Coleroon. The district lies between 78^o 42' and 80^o 12' east latitude and 12^o 27' 30" and 11^o 10' 45" north longitude. Great part of it is covered Archean Rock of the gneiss family, resting on the three great groups of sedimentary rocks belonging to different geological periods and overlying each other in regular succession from the coast on the east to the hills on the west. The most part of the district is a flat plain slopping very gently to the sea on the east. The hills are only on the southwestern border. Mount Capper plateau or the Red hills run parallel to the sea with an elevation of not more than 20 meters above M.S.L., forming part of red lateritic "Cuddalore Sand Stones" running between Marakkanam in Kumalampattu South south westwards to near Srimushnam. The total geographical area of the district is about 3633.04 sq.km with coastal line of 68 kms.

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

| S. No | Farming system/enterprise |
|-------|-----------------------------------|
| 1 | Irrigated agricultural systems |
| 2 | Rainfed agricultural systems |
| 3 | Animal Husbandry -Dairy, Poultry |
| 4 | Sericulture |
| 5 | Fisheries |
| 6 | Cashew Processing unit, Nurseries |

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

| S. No | Agro-climatic Zone | Characteristics |
|-------|-------------------------------|--|
| 1. | Heavy clay soils | Command areas Rice-rice-pulses; Rice-pulses/sesame/cotton |
| 2. | Heavy Clay soils | Tankfed areas Rice-pulses |
| 3. | Laterite, red and black soils | Well irrigated areas Sugarcane-ratoon-rice-groundnut (3 yrs); rice-groundnut-sesame |
| 4. | Laterite and black soils | Rainfed Groundnut-sesame |

| AES | Agro ecological situation | Characteristics |
|---------|---|-------------------------|
| AES-I | Sandy Clay loam, Medium texture, Normal Rainfall, Well irrigated area | Diversified agriculture |
| AES-II | Clay loam, Heavy texture, Normal Rainfall, Delta area | Paddy areas |
| AES-III | Sandy clay loam, Medium to light texture, Rainfed area. | Rainfed agriculture |

2.3 Soil type/s

| S. No | Soil type | Characteristics | Area in ha |
|-------|-----------------|---|------------|
| 1. | Sandy loam | Slightly acidic to alkaline in pH Poor in water holding capacity, low in Nitrogen medium in P and K | 91679 |
| 2. | Sandy | Neutral to Saline pH, poor in water holding capacity, low in Nitrogen medium in P and K. | 31974 |
| 3. | Clay loam | Neutral to alkaline pH, poorly drained soil, medium in N and P and high in K. | 115565 |
| 4. | Sandy Clay loam | Neutral to Saline pH, low in Nitrogen medium in P and K | 128573 |
| | Total | | 367791 |

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

| S. No | Crop | Area (ha) | Production (Metric tons) | Productivity (kg /ha) |
|--------------------|---------|-----------|--------------------------|-----------------------|
| Field crops | | | | |
| 1 | Rice | 110515 | 5.432 | 4915 |
| 2 | Sorghum | 2067 | 0.008 | 382 |
| 3 | Cumbu | 5327 | 0.066 | 1243 |
| 4 | Ragi | 1019 | 0.022 | 2150 |

| | | | | |
|------------------|--------------|-------|-------|-------------|
| 5 | Maize | 1769 | 0.042 | 2352 |
| 6. | Varagu | 1034 | 0.021 | 1890 |
| Pulses | | | | |
| 1 | Redgram | 1385 | 0.007 | 512 |
| 2 | Blackgram | 42076 | 0.159 | 378 |
| 3 | Greengram | 4423 | 0.014 | 319 |
| 4 | Other pulses | 827 | 0.003 | 429 |
| Oilseeds | | | | |
| 1 | Groundnut | 34848 | 0.903 | 2592 |
| 2 | Gingelly | 8599 | 0.035 | 410 |
| 3 | Sunflower | 382 | 0.005 | 1212 |
| 4 | Castor | 172 | 0.001 | 585 |
| Cash crop | | | | |
| 1 | Cotton | 1299 | 0.004 | 305 |
| 2 | Sugarcane | 34744 | 4.586 | 132 (t /ha) |

District statistics: Assistant Director of Statistics, Cuddalore district, Tamil Nadu

Table 6. b. Horticultural crops

| S.No. | Crops | Area (ha) | Production (t) | Productivity (t/ha) |
|--------------------------------|--------------------|-----------|----------------|---------------------|
| Fruits/plantation crops | | | | |
| 1 | Cashew nut | 28497 | 22157 | 0.78 |
| 2 | Banana | 3756 | 93525 | 24.90 |
| 3 | Jack | 529 | 5111 | 9.66 |
| 4 | Guava | 499 | 3504 | 7.02 |
| 5 | Mango | 571 | 2372 | 4.15 |
| Vegetables/spices | | | | |
| 1 | Brinjal | 296 | 3309 | 11.18 |
| 2 | Chillies | 149 | 79 | 0.53 |
| 3 | Bhendi | 78 | 546 | 7.00 |
| 4 | Tapioca | 5168 | 177563 | 34.36 |
| 5 | Snakegourd | 181 | 2715 | 15.00 |
| 6 | Moringa | 69 | 3450 | 50.00 |
| 7 | Bittergourd | 57 | 684 | 12.00 |
| 8 | Lablab | 31 | 403 | 13.00 |
| 9 | Coriander | 5996 | 2421 | 0.40 |
| Flowers | | | | |
| 1 | Rose | 31 | 225 | 7.25 |
| 2 | Jasmine-Gundumalli | 139 | 1077 | 7.75 |
| 3 | Jasmine-Mullai | 319 | 2712 | 8.50 |
| 4 | Crossandra | 82 | 164 | 2.00 |

2.5. Weather data

| Month | Rainfall (mm) | Temperature (⁰ C) | | Mean Relative Humidity (%) |
|-------------------|---------------------|-------------------------------|-------------|----------------------------|
| | | Maximum | Minimum | |
| April 2011 | 0.0 | 39.5 | 24.5 | 64.2 |
| May 2011 | 21.0 | 39.7 | 26.1 | 69.8 |
| June 2011 | 33.8 | 38.4 | 25.5 | 71.6 |
| July 2011 | 48.4 | 36.8 | 24.7 | 75.3 |
| August 2011 | 147.6 | 35.5 | 23.7 | 79.7 |
| September 2011 | 181.6 | 35.4 | 23.6 | 74.0 |
| October 2011 | 168.8 | 38.9 | 23.1 | 73.3 |
| November 2011 | 654.9 | 30.5 | 18.5 | 76.2 |
| December 2011 | 296.5 | 30.4 | 18.3 | 82.7 |
| January 2012 | 0.0 | 32.7 | 18.3 | 85.3 |
| February 2012 | 0.0 | 34.3 | 19.5 | 83.7 |
| March 2012 | 0.0 | 39.2 | 22.4 | 85.0 |
| Total/Mean | 1552.6/114.8 | 35.5 | 22.8 | 75.2 |

Source: Regional Research Station, Vriddhachalam, Cuddalore district, Tamil Nadu

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

| Category | Population | Production | Productivity |
|-------------------|------------|------------|--------------|
| Cattle | 3,81,538 | - | - |
| <i>Crossbred</i> | - | - | - |
| <i>Indigenous</i> | - | - | - |
| Buffalo | 79,242 | - | - |
| Sheep | 57,607 | - | - |
| <i>Crossbred</i> | - | - | - |
| <i>Indigenous</i> | - | - | - |
| Goats | 2,51,160 | - | - |
| Pigs | 25,137 | - | - |
| <i>Crossbred</i> | - | - | - |
| <i>Indigenous</i> | - | - | - |
| Rabbits | - | - | - |
| Poultry | 3,33,043 | - | - |
| Hens | - | - | - |
| <i>Desi</i> | - | - | - |
| <i>Improved</i> | - | - | - |
| Ducks | - | - | - |
| Turkey and others | - | - | - |

District statistics: Assistant Director of Statistics, Cuddalore district, Tamil Nadu

| Category | Area | Production | Productivity |
|---------------|------|------------|--------------|
| Fish | - | 5823 MT | - |
| <i>Marine</i> | - | 18000 MT | - |
| <i>Inland</i> | - | - | - |
| Prawn | - | - | - |
| Scampi | - | - | - |
| Shrimp | - | - | - |

* Please provide latest data from authorized sources. Please quote the source

2.7 District profile has been prepared and submitted Yes / No: Yes

2.8 Details of Operational area / Villages

| Sl. No. | Taluk | Blocks / groups of villages | Major crops and enterprises being practiced | Major problems identified | Identified thrust areas |
|---------|---------------|--|---|--|--|
| 1. | Vriddhachalam | Vriddhachalam Kammapuram Nallur Panrutti Cuddalore Annagiramam Kurinjiyadi | <p>Crop: Groundnut, sesame, cashew, rice, sugarcane, pulses, vegetables and tapioca.</p> <p>Livestock: Dairy animals and goat rearing.</p> <p>Other enterprises: Tractor and power tiller EDP products Mushroom production Agroforestry Vegetative propagation of horticultural crops.</p> | <p>Groundnut:</p> <ul style="list-style-type: none"> ➤ Inadequate plant population ➤ Yield loss due to <i>Spodoptera</i>, Leaf minor ➤ Incidence of root rot, stem rot, LLS & rust ➤ Labour shortage during peak season ➤ Low soil fertility ➤ Poor pod setting <p>Sesame:</p> <ul style="list-style-type: none"> ➤ Use of local varieties ➤ Inadequate nutrient application ➤ Incidence of pod borer ➤ More incidence of wilt <p>Sugarcane:</p> <ul style="list-style-type: none"> ➤ ESB, INB & Woolly aphids incidence ➤ More labour cost for detrashing ➤ Imbalanced nutrient application ➤ Improper water management <p>Rice:</p> <ul style="list-style-type: none"> ➤ Higher seed rate ➤ Weeds problem at initial stage ➤ More incidence of leaf folder & stem borer Imbalance nutrient usage ➤ Incidence of leaf streak, blast and grain discoloration <p>Pulses:</p> <ul style="list-style-type: none"> ➤ Inadequate knowledge on seed treatment ➤ Improper nutrient | <ul style="list-style-type: none"> ✓ Introduction of improved varieties ✓ Integrated crop management practices ✓ INM technologies ✓ IPM technologies ✓ Quality seedling production ✓ Popularization of farm mechanization ✓ Management practices for dairy animals ✓ Generating self employment ✓ Value addition of agrl. / horti produce |

| | | | | | |
|----|------------|-------------------------------------|--|--|--|
| | | | | <p>management</p> <ul style="list-style-type: none"> ➤ Incidence of Pod borer & YMV <p>Other enterprises</p> <ul style="list-style-type: none"> ➤ Non availability of green fodder ➤ Non adoption of deworming in calf ➤ Unemployment during off season ➤ Lack of awareness on value addition ➤ Lack of knowledge in farm mechanization | |
| 2. | Thittakudi | Thittakudi Mangalore Pennadam | <p>Crop: Rice, sunflower, maize, vegetables, cotton, kodomillet, coriander and sugarcane.</p> <p>Livestock: Dairy animal and sheep rearing</p> <p>Other enterprises: Mushroom Apiary EDP products Agroforestry Farm mechanization</p> | <p>Sunflower: (Rainfed)</p> <ul style="list-style-type: none"> ➤ Poor plant stand ➤ Ill filling ➤ Head rot, LR virus and <i>Helicoverpa</i> incidence <p>Maize: (Rainfed)</p> <ul style="list-style-type: none"> ➤ Traditional method of sowing ➤ Inadequate plant population ➤ Improper nutrient management ➤ Poor management of weed, pest & disease <p>Kodomillet:</p> <ul style="list-style-type: none"> ➤ Use of local varieties ➤ Inadequate plant population ➤ No manuring ➤ Poor crop management <p>Cotton: (Rainfed)</p> <ul style="list-style-type: none"> ➤ Weeds problem in initial stage ➤ Flower drop ➤ Magnesium deficiency ➤ No earthing up ➤ Poor sand preparation ➤ Use of higher dose of pesticides <p>Sugarcane:</p> <ul style="list-style-type: none"> ➤ Higher incidence of INB and woolly aphids ➤ Improper water management ➤ No de-trashing ➤ Burning of harvested trash due to labour | <ul style="list-style-type: none"> ✓ Introduction of newly released hybrids / varieties / Bt ✓ INM practice ✓ IPM technologies ✓ Introduction of alternate crop ✓ Popularizing of farm machineries ✓ Introduction of integrated farming system ✓ Feed management practices for animals ✓ ICM – Production technologies |

| | | | | | |
|----|-------------|---|---|---|--|
| | | | | <p>shortage</p> <p>Other enterprises</p> <ul style="list-style-type: none"> ➤ Lack of knowledge on farm mechanization ➤ Unawareness on apiculture ➤ Lack of knowledge on use of mineral mixture for dairy animals | |
| 3. | Chidambaram | Chidambaram Keerapalayam Bhuvanagiri Kumarachi Kattumannargudi Parangipettai | <p>Crops: Rice, pulses, groundnut and sesame</p> <p>Livestock: Fish culture</p> <p>Other enterprises: Mushroom production EDP products Agroforestry Vermicompost</p> | <p>Rice:</p> <ul style="list-style-type: none"> ➤ Higher weed population in direct sown rice ➤ Use of inadequate/higher seed rate ➤ Improper nutrient management ➤ Higher incidence of leaf folder & stem borer ➤ More incidence of grain discolouration & bacterial leaf streak ➤ Improper use of pesticide ➤ Broadcasting of paddy seeds in direct sown rice <p>Pulses:</p> <ul style="list-style-type: none"> ➤ Inadequate plant population & low yield ➤ Repeated use of low yielding varieties in rice fallow ➤ Non availability of high yielding varieties suitable for rice fallow ➤ Improper nutrient management ➤ Incidence of pod borer & powdery mildew ➤ Water stress during critical stages <p>Agroforestry</p> <ul style="list-style-type: none"> ➤ Poor growth and biomass in <i>Casuarina</i> ➤ Local thorny bamboo variety produces low yield and and very difficult to maintain plantation. ➤ Poor maintenance at early stage ➤ Planting seed progenies | <ul style="list-style-type: none"> ✓ Introduction of newly released varieties ✓ SRI technique ✓ IPM ✓ Popularization of mechanization ✓ Seed treatment & IPM practices in pulses ✓ Converting crop waste in to vermicompost ✓ Utilization of paddy straw for mushroom production ✓ Value addition of mushroom and pulses ✓ Cottage scale preparation of home care products ✓ Popularization of direct sowing with seed drill |

| | | | | | |
|--|--|--|--|--|--|
| | | | | <p>of Eucalyptus results in poor growth and wood production.</p> <p>Livestock</p> <ul style="list-style-type: none"> ➤ Non availability of green fodder ➤ Unawareness of mineral mixture usage & animal hygiene <p>Other enterprises</p> <ul style="list-style-type: none"> ➤ Unutilization of crop residues ➤ Unemployment during lean season ➤ Unawareness of F & M disease preventive measures | |
|--|--|--|--|--|--|

2.9 Priority thrust areas

S. No Thrust area

- 1 Introduction and popularization of high yielding varieties
- 2 Introduction of alternate cropping system and crop management practices
- 3 Integrated nutrient management for improving crop productivity and soil health
- 4 Establishment of nursery and improving the productivity of horticultural crops
- 5 Integrated pest and disease management
- 6 Farm mechanization for major oil seeds, cereals and horticultural crops
- 7 Improving the yield of milch animals, preventive measures for diseases & introduction of improved varieties in fodder crops
- 8 Self employment and entrepreneur development programmes
- 9 Processing, preservation and value addition
- 10 Production and supply of quality seed / seedling materials

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 | 37 | 37 | 15 | 15 | 114 | 114 |

| 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 |
| 284 | 284 | 9409 | 9409 | 910 | 910 | 25491 | 25491 |

| Seed Production (Qtl.) | | Planting materials (Nos.) | |
|---------------------------------|--------------------|--|--------------------|
| 5 | | 6 | |
| Target | Achievement | Target | Achievement |
| | | Jack grafts Palur 1 (100nos) | 24 nos |
| Cumbu Napier setts (25000 nos) | 20000 nos | Protray Brinjal (2500 nos) | 2200 nos |
| Sugarcane setts (7.5 tonnes) | 7 tonnes | Protray Watermelon seedlings (15000nos) | 13500 nos |
| | | Redgram seedlings (7000nos) | 6000 nos |
| | | Cashew grafts VRI 3 (3000 nos) | 2905 nos |
| | | Protray Sugarcane Seedling SSI (7000nos) | 6000 nos |
| | | Annual Moringa seedling (1500 nos) | 1200 nos |
| | | Protray Tapioca setts (10000 nos) | 10000 nos |
| | | Coconut seedlings (50 nos) | 15 nos |

| Livestock, poultry strains and fingerlings (No.) | | Bio-products (Kg) | |
|---|--------------------|--------------------------|--------------------|
| 7 | | 8 | |
| Target | Achievement | Target | Achievement |
| Telicherry goat (10 nos) | 4 nos | Vermicompost (1000 kgs) | 580 Kgs |

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 Trainings (farmers) | Number of Trainings (Youth) | Number of Trainings (extension personnel) | Extension activities (No.) | Supply of seeds (Qtl.) | Supply of planting materials (No.) | Supply of livestock (No.) | No. | Kg | |
| 01. | Suitable HYV variety | Paddy | Low yield Non-availability of HYV | Assessment of high yielding rice variety for rainfed ecosystem | - | 2 | 2 | 2 | 5 | ANNA 4 100 kg Poornima 95 kg | - | - | - | - | |
| 02. | Nutrient management | Groundnut | Low yield | Assessment of sulphur oxidizing bacterial inoculants in groundnut | - | 2 | 1 | - | - | - | - | - | - | - | |
| 03. | Introduction of new high yielding varieties | Red gram | Low yield and high cost of cultivation | Assessment of suitable varieties for transplanted redgram | | 2 | 2 | 1 | 2 | - | - | - | - | - | |

| | | | | | | | | | | | | | | |
|-----|----------------------------|---------------|--|---|--|---|---|---|---|---|---|---|---|---|
| 04. | Nutrient management | Cotton | Low yield due to severe incidence of reddening | Assessment of different approaches for the control of reddening in cotton | - | 2 | 2 | 1 | 4 | - | - | - | - | - |
| 05. | Selecting Suitable Variety | Moringa | Scope for increasing pod yield and marketing and high density planting | Assessment of the varietal performance of Annual Moringa PKM1 | - | 2 | - | 1 | - | - | - | - | - | - |
| 06. | Animal nutrient management | Dairy farming | Low yield | Assessment of GRAND supplement in cross bred dairy cows | - | 2 | 1 | 1 | - | - | - | - | - | - |
| 07. | Varietal popularisation | Rice | Low yield of local varieties | - | Paddy ADT(R) 49 seed production through farmers participatory approach | 2 | 2 | 2 | 5 | - | - | - | - | - |

| | | | | | | | | | | | | | | |
|-----|------------------|------------------------|---|----|---|---|---|---|---|---|---|---|---|---|
| 08. | Crop improvement | ICM Hybrid Cumbu | Low yield | - | Integrated Crop Management of Bajra (Cumbu) hybrid Co9 | 3 | 1 | 1 | - | - | - | - | - | - |
| 09. | Crop Management | Maize | Low yield from existing variety | -- | Integrated Crop Management of Maize hybrid Co6 | 2 | 2 | 1 | - | - | - | - | - | - |
| 10. | Crop Management | Black gram | High incidence of disease and low yield | | Integrated Crop Management in blackgram var VBN 6 | 2 | - | 1 | 1 | - | - | - | - | - |
| 11 | Crop management | Rice fallow black gram | Low yield | | Improving productivity in rice fallow blackgram | 2 | - | 1 | 1 | - | - | - | - | - |
| 12 | Crop Management | Sugarcane | Low yield from existing practices | -- | Sustainable Sugarcane Initiatives | 2 | 2 | 1 | - | - | - | - | - | - |
| 13 | Weed management | Sugarcane | Severe incidence of twining weeds | - | Integrated Weed management practices for controlling twining weeds in sugarcane | 2 | 2 | 2 | 5 | - | - | - | - | |

| | | | | | | | | | | | | | | |
|-----|---|-------------------------------------|--------------------------------------|----|--|---|---|---|---|----|----|---|---|---|
| 14 | Production of quality planting material | Tapioca | Heavy incidence of virus disease | - | Protray raised single budded Tapioca setts | 2 | - | 2 | - | - | - | - | - | - |
| 15 | Nutrient management | Onion | Poor yield in Onion | - | Integrated Crop Management for Co5 onion | 2 | - | 1 | 3 | - | - | - | - | - |
| 16 | Crop Protection | Water melon | Pests incidence are more in moringa | - | Introduction of watermelon as intercrop in moringa with IPM components | 1 | 2 | - | 2 | - | - | - | - | - |
| 17. | Integrated farming system | Crops, Goat, Poultry and Vermi unit | Effective uses of all farm resources | - | Popularization of suitable Integrated Farming System with crops and Fodder crop-Goat-Poultry-Vermiunit | 3 | 1 | - | 1 | -- | -- | - | - | - |
| 18 | Carp farming | Fish culture | Low yield | -- | Popularization of Carp farming in village ponds | 2 | 1 | 1 | 1 | -- | -- | - | - | - |

| | | | | | | | | | | | | | | |
|----|------------------|----------------|--|---|--|---|---|---|----|----|----|----|----|---|
| 19 | Extrusion making | Millets | Low income | - | Popularization of extrusion cooking of Minor Millets (Ragi) | 2 | 1 | 1 | -- | -- | -- | - | - | - |
| 20 | Farm machinery | Cashew | Labour problems in digging of hole for planting | - | Demonstration of Post-hole digger for planting cashew grafts in cashew plantation. | 2 | 2 | 1 | -- | -- | -- | - | - | - |
| 21 | Farming system | All components | To utilize all resources and get additional income | | Integrated Farming Systems (Minimum two demonstrations need be taken) | 2 | 2 | 1 | -- | -- | -- | -- | -- | - |

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 (Specify) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1. | Assessment of high yielding rice variety for rainfed ecosystem | TNAU 2010 IGKV 2010,Raipur | Paddy | 1 | - | 6 | Demonstrations like direct sowing methods, weed management, ICMP, Field visit, on-campus and off-campus training |
| 2. | Assessment of different approaches for the control of reddening in cotton | TNAU, 2010 | Cotton | 1 | - | 5 | Demonstrations like Basal and flair application of nutrient, weed management, ICMP, Field visit, on-campus and off-campus training |
| 3. | Integrated Weed management practices for controlling twining weeds in sugarcane | CPG, TNAU 2012 | Sugarcane | - | 1 | 6 | Demonstrations like weed management, ICMP and Field visit, on-campus off-campus training |
| 4. | Assessment of suitable varieties for transplanted redgram | KVK, Bidar, Karnataka 2010 | Redgram | 5 | - | 2 | Demonstration on transplanting and crop management |
| 5 | Assessment of GRAND supplement in cross bred dairy cows | TANUVAS | Dairy cows | 2 | | | -- |
| 6. | Assessment of Sulphur oxydizing bacterial inoculants in groundnut | TNAU, Coimbatore 2012 | Groundnut | 2 | - | 3 | Demonstrations on seed treatment |
| 7 | Paddy ADT (R) 49 seed production through farmers participatory approach | TNAU 2010 | Paddy | - | 29 | 2 | Demonstration, off-campus training |

| | | | | | | | |
|----|--|----------------|---------------|----|----|----|--|
| 8 | Integrated crop management practices for maize Co 6 hybrid | TNAU 2010 | Maize | -- | 5 | -- | -- |
| 9 | Integrated Crop Management in blackgram var VBN 6 | TNAU 2011 | Blackgram | -- | 5 | 1 | - |
| 10 | Improving productivity in rice fallow blackgram | TNAU | Blackgram | -- | 5 | 1 | - |
| 11 | Sustainable Sugarcane Initiatives | TNAU | Sugarcane | -- | 2 | 1 | Demonstration on crop management practices |
| 12 | Popularization of Integrated Crop Management in Hybrid CO9 Cumbu | TNAU, 2010 | Cumbu | - | 1 | 5 | Demonstrations like, ICMP and Field visit, on-campus off-campus training |
| 13 | Popularization of fish culture in village pond | TANUVAS | Carp farming | - | 1 | 4 | Demonstration, Field visit, and off-campus training |
| 14 | Assessment of grand supplements in dairy cows | TANUVAS - 2012 | Dairy farming | 1 | - | 4 | Demonstration, Field visit, and off-campus training |
| 15 | Popularization of extrusion cooking in minor millets (Ragi) | TNAU, 2010 | Ragi | - | 1 | 4 | Demonstrations like extrusion of Ragi flour and Field visit, on-campus off-campus training |
| 16 | Assessment of the varietal performance of Annual Moringa PKM-1 | TNAU | Moringa | 1 | -- | 3 | Demonstration on seed treatment and planting |
| 17 | Integrated Crop management for Co (On) 5 Onion | TNAU | Onion | -- | 5 | 3 | Demonstration on seed treatment, Planting and nutrient and weed management |

| | | | | | | | |
|----|--|------|-----------------------|----|----|----|---|
| 18 | Protray raised single budded Tapioca setts | TNAU | Tapioca | -- | 2 | 4 | Demonstration on nursery raised on protray and planting |
| 19 | Introduction of watermelon as intercrop in moringa with IPM Components | TNAU | Watermelon | -- | 2 | 3 | Demonstration on sowing |
| 20 | Demonstraion of post hole digger for planting casshew grafts in cahsew plantations | TNAU | Cashew | -- | 1 | 4 | Demonstration on instrument usage and digging of pits |
| 21 | Integrated farming system | TNAU | All components of IFS | - | 2 | -- | Demonstration of maintenance of all components of IFS |
| | Total | | | 13 | 62 | 61 | |

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 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 1 | - | 2 | - | - | - | - | - | 50 | 15 | 25 | 5 | 45 | 20 | 15 | 8 |
| 1 | - | 4 | - | - | - | - | - | 65 | 18 | 24 | 6 | 24 | 15 | 20 | 10 |
| - | - | - | - | 3 | - | 1 | - | 55 | 20 | 22 | 15 | 25 | 15 | 15 | 10 |
| 3 | 2 | 4 | 1 | -- | -- | -- | -- | 17 | 28 | 26 | 5 | 10 | 2 | -- | -- |
| 2 | 1 | - | 1 | -- | -- | -- | -- | 49 | 06 | 18 | 10 | 19 | 09 | 25 | 10 |
| 2 | - | - | 1 | -- | - | -- | -- | 12 | 4 | 5 | 2 | 5 | 2 | 6 | 3 |
| -- | -- | -- | -- | 10 | -- | 5 | 2 | 8 | 3 | 6 | 3 | 0 | 4 | 5 | 2 |
| -- | -- | -- | -- | 2 | - | 2 | 1 | 25 | 13 | 2 | 1 | 18 | 6 | 2 | 5 |
| -- | -- | -- | -- | 3 | -- | 2 | -- | 17 | 10 | 8 | 0 | 0 | 2 | 1 | 2 |

| | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|-----|-----|-----|----|-----|-----|-----|----|
| -- | -- | -- | -- | 3 | -- | 1 | -- | 10 | 8 | 1 | 0 | 16 | 4 | 11 | 2 |
| -- | -- | -- | -- | 2 | -- | -- | -- | 15 | 12 | 3 | 0 | 0 | 2 | 2 | 2 |
| -- | -- | -- | -- | 2 | -- | 2 | -- | 13 | 9 | 6 | 3 | 14 | 2 | 3 | 2 |
| -- | -- | -- | -- | 1 | -- | 1 | -- | 16 | 11 | 7 | 0 | 0 | 10 | 5 | 1 |
| 2 | - | - | 1 | -- | -- | - | -- | 10 | 5 | 2 | 0 | 32 | 2 | 3 | 0 |
| -- | -- | -- | -- | 1 | -- | -- | - | 11 | 6 | 0 | 0 | 21 | 5 | 2 | 0 |
| 5 | 2 | 1 | 1 | -- | -- | -- | - | 19 | 4 | 3 | 1 | 10 | 1 | 1 | 0 |
| -- | -- | -- | -- | 2 | - | 2 | -- | 25 | 2 | 6 | 0 | 0 | 6 | 0 | 2 |
| -- | -- | -- | -- | 1 | -- | 2 | 1 | 15 | 3 | 8 | 0 | 10 | 3 | 0 | 1 |
| -- | -- | -- | -- | 2 | - | 1 | -- | 20 | 4 | 11 | 6 | 10 | 5 | 0 | 1 |
| -- | -- | -- | -- | 1 | -- | 2 | -- | 16 | 8 | 4 | 1 | 15 | 1 | 2 | 1 |
| -- | -- | -- | -- | 2 | -- | 1 | 1 | 14 | 4 | 6 | 0 | 12 | 3 | 1 | 1 |
| 10 | 3 | 12 | 4 | 35 | - | 22 | 5 | 482 | 193 | 193 | 58 | 286 | 119 | 119 | 63 |

PART IV - On Farm Trial for 2012-13**4.A1. Abstract on the number of technologies assessed in respect of crops**

| Thematic areas | Cereals | Oil seeds | Pulses | Commercial Crops | Vegetables | Fruits | Flower | Plantation crops | Tuber Crops | Animal husbandry | TOTAL |
|----------------------------------|----------------|------------------|---------------|-------------------------|-------------------|---------------|---------------|-------------------------|--------------------|-------------------------|--------------|
| Integrated Nutrient Management | | 1 | | 1 | | | | | | | 2 |
| Varietal Evaluation | 1 | | 1 | | 1 | | | | | | 3 |
| Integrated Pest Management | | | | | | | | | | | |
| Integrated Disease Management | | | | | | | | | | | |
| Resource Conservation Technology | | | | | | | | | | | |
| Nutrient management | | | | | | | | | | 1 | 1 |
| Total | | | | | | | | | | | 6 |

4.A2. Abstract on the number of technologies refined in respect of crops: NIL

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

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

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 trial covering all the Technological Options) |
|---------------------|--------------------------------|---|---------------|-------------------|---|
| Varietal assessment | Paddy | Assessment of high yielding rice variety for rainfed ecosystem | 5 | 5 | 2 ha |
| Nutrient management | Cotton | Assessment of different approaches for the control of reddening in cotton | 5 | 5 | 2 ha |
| | Moringa | Assessment of the varietal performance of Annual Moringa PKM-1 | 10 | 10 | 2 |
| Crop improvement | Redgram | Assessment of suitable varieties for transplanted redgram | 5 | 5 | 2ha |
| | Groundnut | Assessment of Sulphur oxidizing bacterial inoculants in groundnut | 2 | 2 | 2 ha |
| Animal Husbandry | Grand supplement to dairy cows | Assessment of grand supplements in dairy cows | 20 cows | 1 | - |
| Total | | | 37 | 37 | -- |

4.B.2. Technologies Refined under various Crops : Nil

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

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

4. C1. Results of Technologies Assessed

4. C1. 1. Assessment of high yielding rice variety for rainfed ecosystem

Results of On Farm Trial

| 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 | 8 | 9 | 10 | 11 | 12 |
| Paddy | Rainfed | Low yield Non-availability of HYV | Assessment of high yielding rice variety for rainfed ecosystem | 5 | T1: Farmers practice (Local kar variety) | Growth and yield attributes economics | Yield and economics | ANNA 4 paddy performed better than IGKV R1 | Satisfy with ANNA 4 paddy | - | - |
| | | | | T2: ANNA 4 paddy variety | | | | | | | |
| | | | | T3: IGKVR1/IGKVR2 paddy variety | | | | | | | |

Contd..

| Technology Assessed | Source of Technology | Production | Yield (kg/ha) | Net Return (Profit) in Rs. / unit | BC Ratio |
|--|----------------------|------------|---------------|-----------------------------------|----------|
| 13 | 14 | 15 | 16 | 17 | 18 |
| Technology option 1 - (Farmers practice) –ADT 43 | - | 4660 | kg/ha | 41020 | 2.41 |
| Technology option 2- ANNA 4 | TNAU 2010 | 5330 | kg/ha | 60205 | 3.40 |
| Technology option 3- IGKV R 1 | IGKV 2010,Raipur | 4120 | kg/ha | 36684 | 2.31 |

C 2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details

1. Title of Technology Assessed : Assessment of high yielding rice variety for rainfed ecosystem
2. Problem Definition : Low productivity due to use of local and old variety.
3. Details of technologies selected for assessment :

| | |
|---------------------|----------------------------------|
| Farmers practice | Local variety/old variety ADT 43 |
| Technology option 1 | ANNA 4 |
| Technology option 2 | IGKV R1 |
4. Source of technology : TNAU, Coimbatore & IGKV, Raipur
5. Production system and thematic area : Rainfed farming and drought management
6. Performance of the Technology with performance indicators : The growth and yield attributes recorded in different paddy variety revealed that the ANNA 4 performed better than IGKV R1 and ADT 43. The highest yield of 5330 kg /ha recorded in ANNA 4 as compared to IGKV R1 (4120 kg/ha) and ADT 43 (4660 kg/ha). ANNA 4 recorded an increased yield of 29.37 and 14.37 % over IGKV R1 and ADT 43 respectively. Similar trend was also observed in economics.
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques

| Seed treatment | Agronomic practices | INM | IPM | PHT |
|----------------|---------------------|-----|------|------|
| 40 % | 80 % | 80% | 75 % | 50 % |

8. Final recommendation for micro level situation : ANNA 4 paddy variety is more suitable for drought.
9. Constraints identified and feedback for research : -
10. Process of farmers participation and their reaction :
 - Farmers were realized the performance of ANNA 4 due to its profuse growth and yield parameters.

4. C1.2. Assessment of suitable varieties for transplanted redgram

| Crop/ enterprise | Farmin g situ atio n | Problem definition | Title of OFT | N o . o f t r i a l s | Technology Assessed | Parameters of assessment | Data on the parameter | Results of assessment | Feedback from the farmer | Any refine ment need ed | Justi ficati on for refin eme nt |
|---------------------|----------------------------------|--|---|---|--|--|--|--|---|-------------------------------------|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Red gram | Irrig ated | <p>Use of local variety and low yielding variety. Existing redgram varieties are mostly short and medium duration and are suitable for Adi Pattam (June-Aug).</p> <p>Use of short and Medium duration varieties for transplanting methods are not suitable. Highly damaged due to heavy and continuous rain.</p> <p>The pest and disease incidence are more during pod development and maturity stage (November – December). Hence the yield loss is more and those varieties are not suitable for transplanting methods</p> | Assessment of suitable varieties for transplante d redgram | 5 | <ol style="list-style-type: none"> 1. Var Co (Rg) 7 2. Var LRG 41 3. Var BSMR 736 | Growth and yield attributes of redgram | No. of branches per plant, No. of pods per plant and grain yield | Transplanting methods of redgram resulted higher yield in redgram. among the three varieties BSMR 736 gave higher yield compared to LRG 41 and CO(RG) 7 | Farmers were impressed with the Transplanting methods in redgram. However the higher yield was observed in BSMR 736 fields and there is no mosaic incidence. | - | - |

| Technology Assessed | Source of Technology | Production | Yield (kg/ha) | Net Return (Profit) in Rs. / unit | BC Ratio |
|---|-----------------------------------|------------------|---------------|-----------------------------------|----------|
| 13 | 14 | 15 | 16 | 17 | 18 |
| Technology option 1 - Delaying in seedling production in poly bag (Co (Rg)7) and planting in main field | KVK in Bidar, Gulbarga, Karnataka | Grain yield-6.29 | Yield (kg/q) | 9810.0 | 1.8 |
| Technology option 2- Seedling production in poly bag of redgram (LRG 41) and planting in main field | | Grain yield-9.22 | Yield (kg/q) | 21530 | 2.3 |
| Technology option 3- Seedling production in poly bag of redgram (BSMR-736) and planting in main field | | Grain yield-12.5 | Yield (kg/q) | 34250 | 2.5 |

1. Title of Technology Assessed : **Assessment of suitable varieties for transplanted redgram**
2. Problem Definition : Use of local variety and low yielding variety. Existing redgram varieties are mostly short and medium duration and are suitable for Adi Pattam (June-Aug). Use of short and Medium duration varieties for transplanting methods are not suitable. Highly damaged due to heavy and continuous rain. The pest and disease incidence are more during pod development and maturity stage (November –December). Hence the yield loss is more and those varieties are not suitable for transplanting methods
3. Details of technologies selected for assessment :

| | |
|---------------------|---|
| Technology option 1 | Delaying in seedling production in poly bag (Co (Rg)7) and planting in main field |
| Technology option 2 | Seedling production in poly bag of redgram (LRG 41) and planting in main field |
| Technology option 3 | Seedling production in poly bag of redgram (BSMR-736) and planting in main field |
4. Source of technology : KVK in Bidar, Gulbarga, Karnataka
5. Production system and thematic area : Irrigated and Crop management
6. Performance of the Technology with performance indicators : Seeds requirement is low. No. of branches and No. of pods per plants were higher in transplanting techniques. Through integrated pest management (placing pheromone traps for Spodoptera and Helicoverpa) we can reduce the pest incidence during pod development stage and thereby we can increase the grain yield.
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : Farmers were impressed with the Transplanting methods in redgram. However the higher yield was observed in BSMR 736 fields and there is no mosaic incidence.

| Seed treatment | Transplanting | INM | IPM | PHT |
|----------------|---------------|-----|-----|-----|
| 11 | 23 | 23 | 23 | 20 |
8. Final recommendation for micro level situation : Through this transplanting methods we can reduce seeds requirement. More No. of branches and No. of pods per plants were observed. Through integrated pest management (placing pheromone traps for Spodoptera and Helicoverpa) we can reduce the pest incidence during pod development stage and thereby we can increase the grain yield.
9. Constraints identified and feedback for research : -
10. Process of farmers participation and their reaction :
 - Farmers were actively participated in this techniques.

4. C1. 3. Assessment of different approaches for the control of reddening in cotton

| 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 | Feed back from the farmer | Any refinement needed | Justification for refinement |
|-----------------|-------------------|---|---|---------------|---|--|-----------------------|--|--|-----------------------|------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Cotton | Rainfed | Most of the farmers are cultivating a Bt cotton hybrids. In Bt hybrids, leaf reddening observed every year and its intensity is 45-60 percent or more. Nearly 80-85 per cent crop fields has been affected due to leaf reddening every year at boll development stage. This declined the crop yield by 25-30 per cent. | Assessment of different approaches for the control of reddening in cotton | 5 | Recommended dose of N:P:K+Foliar application of 0.5%MgSo4+0.1 % urea+ZnSO40.10 % as foliar spray on 50th and 80th day Rec. dose of N:P:K+ soil application of MgSo4 25kg/ha by chelating with FYM + Foliar application of 0.5% MgSo4+0.5% KNO3 (2 spray at boll development stage) Recommended dose of N:P:K+ basal of 10 kg/ha of TNAU MN mixture Enriched with FYM and TNAU PGR foliar formulation @1.5 % at Square and Boll formation stage | Growth and yield attributes, Economics | Yield and economics | Basal of 10 kg/ha of TNAU MN mixture Enriched with FYM and TNAU PGR foliar formulation @1.5 % at Square and Boll formation stage reduced the reddening in cotton | Farmers were realized the results of basal and foliar application of cotton plus | - | - |

Technology Option

| Technology Refined | Source of Technology for Technology Option1 / Justification for modification of assessed Technology Option 1 | Production | kg/ha | Net Return (Profit) in Rs. / unit | BC Ratio |
|---|--|------------|-------|-----------------------------------|----------|
| 13 | 14 | 15 | 16 | 17 | 18 |
| Technology Option 1 Recommended dose of N:P:K+Foliar application of 0.5%MgSo4+0.1 % urea+ ZnSO40.10 % as foliar spray on 50th and 80th day | TNAU 2008 | 973 | Kg/ha | 17431 | 1.62 |
| Technology Option 2 Recommended dose of N:P:K+ soil application of MgSo4 25kg/ha by chelating with FYM + Foliar application of 0.5% MgSo4+0.5% KNO3 (2 spray at boll development stage) | TNAU 2010 | 1110 | Kg/ha | 22060 | 1.76 |
| Technology Option 3 Recommended dose of N:P:K+Basal application of 10 kg/ha of TNAU MN mixture Enriched with FYM and TNAU PGR foliar formulation @1.5 % at Square and Boll formation stage | CICR,2010 | 1880 | Kg/ha | 57540 | 3.06 |

1. Title of Technology refined : Assessment of different approaches for the control of reddening in cotton

2. Problem Definition:

Nutrient management: Cotton is one of the most important commercial crops grown in Nallore, Mangalore blocks of Cuddalore district covered in area about 1299 ha (305 kg/ha). Most of the farmers are cultivating a Bt cotton hybrids. In Bt hybrids, leaf reddening observed every year and its intensity is 45-60 percent or more. Nearly 80-85 per cent crop fields have been affected due to leaf reddening every year at boll development stage. This declined the crop yield by 25-30 per cent.

3. Details of technologies selected for refinement

| | |
|---|--|
| Technology Option 1 (Farmer's practice) | Recommended dose of N:P:K+Foliar application of 0.5%MgSo4+0.1 % urea+ ZnSO40.10 % as foliar spray on 50th and 80th day |
| Technology Option 2 (Recommended practice) | Recommended dose of N:P:K+ soil application of MgSo4 25kg/ha by chelating with FYM + Foliar application of 0.5% MgSo4+0.5% KNO3 (2 spray at boll development stage) |
| Technology Option 2 (Assessment) | Recommended dose of N:P:K+Basal application of 10 kg/ha of TNAU MN mixture Enriched with FYM and TNAU PGR foliar formulation @1.5 % at Square and Boll formation stage |

4. Source of technology : TNAU, CICR 2010

5. Production system and thematic area : Rainfed system

6. Performance of the Technology with performance indicators:

Application of recommended dose of N:P:K+Basal application of 10 kg/ha of TNAU MN mixture Enriched with FYM and TNAU PGR foliar formulation @1.5 % at Square and Boll formation stage recorded higher yield of 1118 kg/ha as compared to recommended dose of N:P:K+Foliar application of 0.5%MgSo₄+0.1 % urea+ ZnSO₄.10 % as foliar spray on 50th and 80th day (973 kg/ha) and Recommended dose of N:P:K+ soil application of MgSo₄ 25kg/ha by chelating with FYM + Foliar application of 0.5% MgSo₄+0.5% KNO₃ (2 spray at boll development stage) (1110 kg/ha). The higher net return and BC ratio of Rs.57540 and 3.06 respectively in application recommended dose of N:P:K+Basal application of 10 kg/ha of TNAU MN mixture Enriched with FYM and TNAU PGR foliar formulation @1.5 % at Square and Boll formation stage.

7. Feedback, matrix scoring of various technology parameters done through farmer's participation :

Other scoring techniques

| Seed treatment | Agronomic practices | INM | IPM | PHT |
|-----------------------|----------------------------|------------|------------|------------|
| 80 % | 75 % | 70% | 80 % | 50 % |

8. Final recommendation for micro level situation : Application recommended dose of N:P:K+Basal application of 10 kg/ha of TNAU MN mixture Enriched with FYM and TNAU PGR foliar formulation @1.5 % at Square and Boll formation stage reduced the incidence of reddening in cotton.

9. Constraints identified and feedback for research : --

10. Process of farmers participation and their reaction : The farmers were actively participated in the entire OFT programme and realized the results of the OFT.

4. C1. 4. **Assessment of Sulphur Oxidizing Bacterial Inoculants in Groundnut**

| 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 | Feed back from the farmer | Any refi nem ent nee ded | Justificatio n for refinement |
|---------------------|----------------------|---|---|---------------------|---|--|--|--|---|---|-------------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Ground nut | Irriga ted | Lack of awareness in adoption of bacterial inoculants Low yield due to S deficiency Low soil fertility and improper nutrinet management | Assessment of Sulphur oxydizing bacterial inoculants in groundnut | 5 | T ₁ . Seed treatment with Rhizobium T ₂ . RDF of NPK + seed treatment with <i>Rhizobium</i> and + Sulphur oxidizing bacteria 1kg/ha +Soil application of Sulphur oxidizing bacteria 5kg/ha on 45 th DAS + Soil application of gypsum at 200kg/ha T ₃ . RDF of NPK + seed treatment with Rhizobium and + Sulphur oxidizing bacteria 1kg/ha +Soil application of Sulphur oxydising bacteria 5kg/ha on 45 th DAS+ Soil application of gypsum at 400kg/ha | Growth and yield attributes of ground nut | No. of pod per plant, 100 pod weight and pod yield | Application of SOB combined with gypsum resulted in more pod per plant and increased the pod yield | Farmers were impressed with the SOB in ground nut . However the higher yield was observed in SOB application through seed treatment combined with gypsum. | - | - |

| Technology Refined | Source of Technology for Technology Option1 / Justification for modification of assessed Technology Option 1 | Production | kg/ha | Net Return (Profit) in Rs. / unit | BC Ratio |
|--|--|------------|--------------|-----------------------------------|----------|
| 13 | 14 | 15 | 16 | 17 | 18 |
| T ₁ . Seed treatment with Rhizobium | TNAU | 77.0 | Yield (kg/q) | 67000 | 1.5 |
| T ₂ . RDF of NPK + seed treatment with <i>Rhizobium</i> and + Sulphur oxidizing bacteria 1kg/ha +Soil application of Sulphur oxidizing bacteria 5kg/ha on 45 th DAS + Soil application of gypsum at 200kg/ha | | 80.0 | Yield (kg/q) | 73300 | 1.8 |
| T ₃ . RDF of NPK + seed treatment with Rhizobium and + Sulphur oxidizing bacteria 1kg/ha +Soil application of Sulphur oxydising bacteria 5kg/ha on 45 th DAS+ Soil application of gypsum at 400kg/ha | | 83.3 | Yield (kg/q) | 70000 | 2.1 |

| | | | | | | | | | | | |
|---------------------|--|---|---|--|--|---------------------|-------------------------------|---------------------|--|---------------------|--|
| 1. | Title of Technology Assessed | : | Assessment of Sulphur Oxidizing Bacterial Inoculants in Groundnut | | | | | | | | |
| 2. | Problem Definition | : | Lack of awareness in adoption of bacterial inoculants Low yield due to S deficiency Low soil fertility and improper nutrient management | | | | | | | | |
| 3. | Details of technologies selected for assessment | : | <table border="1"> <tbody> <tr> <td>Technology option 1</td> <td>Seed treatment with Rhizobium</td> </tr> <tr> <td>Technology option 2</td> <td>T₂. RDF of NPK + seed treatment with <i>Rhizobium</i> and + Sulphur oxidizing bacteria 1kg/ha +Soil application of Sulphur oxidizing bacteria 5kg/ha on 45th DAS + Soil application of gypsum at 200kg/ha</td> </tr> <tr> <td>Technology option 3</td> <td>T₃. RDF of NPK + seed treatment with Rhizobium and + Sulphur oxidizing bacteria 1kg/ha +Soil application of Sulphur oxydising bacteria 5kg/ha on 45th DAS+ Soil application of gypsum at 400kg/ha</td> </tr> </tbody> </table> | | | Technology option 1 | Seed treatment with Rhizobium | Technology option 2 | T ₂ . RDF of NPK + seed treatment with <i>Rhizobium</i> and + Sulphur oxidizing bacteria 1kg/ha +Soil application of Sulphur oxidizing bacteria 5kg/ha on 45 th DAS + Soil application of gypsum at 200kg/ha | Technology option 3 | T ₃ . RDF of NPK + seed treatment with Rhizobium and + Sulphur oxidizing bacteria 1kg/ha +Soil application of Sulphur oxydising bacteria 5kg/ha on 45 th DAS+ Soil application of gypsum at 400kg/ha |
| Technology option 1 | Seed treatment with Rhizobium | | | | | | | | | | |
| Technology option 2 | T ₂ . RDF of NPK + seed treatment with <i>Rhizobium</i> and + Sulphur oxidizing bacteria 1kg/ha +Soil application of Sulphur oxidizing bacteria 5kg/ha on 45 th DAS + Soil application of gypsum at 200kg/ha | | | | | | | | | | |
| Technology option 3 | T ₃ . RDF of NPK + seed treatment with Rhizobium and + Sulphur oxidizing bacteria 1kg/ha +Soil application of Sulphur oxydising bacteria 5kg/ha on 45 th DAS+ Soil application of gypsum at 400kg/ha | | | | | | | | | | |

4. Source of technology : TNAU, Coimbatore
5. Production system and thematic area : Irrigated and Crop management
6. Performance of the Technology with performance indicators : No. of pods per plant, and pod yield were higher in the SOB applied plots
7. Feedback, matrix scoring of various technology parameters done through : Farmers were impressed with the SOB application in Groundnut. However the higher yield was observed in SOB Application

farmer's participation / other scoring techniques in combined with gypsum application fields and there is no mosaic incidence.

| Seed treatment | Sowing | INM | IPM | PHT |
|-----------------------|---------------|------------|------------|------------|
| 24 | 13 | 23 | 25 | 15 |

8. Final recommendation for micro level situation : Seed treatment with SOB and gypsum application resulted more yield. More no. of pods per plants were also observed.
9. Constraints identified and feedback for research : -
10. Process of farmers participation and their reaction : • Farmers were actively participated in these techniques.

4. C1. 5. Assessment of the varietal performance of Annual Moringa PKM-1

Results of On Farm Trial

| Crop/ enterprise | Farming situation | Problem definition | Title of OFT | No. of trials | Technology Assessed | Parameters of assessment | Data on the parameter | Results of assessment t | Feedback from the farmer | Any refinemen t needed | Justificati on for refineme nt |
|---------------------|----------------------|---|--|------------------|---|--|--------------------------|--|--|------------------------------|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Morin ga | Rainfed | Scope for increasing pod yield and marketing | Assessment of the varietal performance of Annual Moringa PKM-1 | 10 | T1: Baghya variety | Germination, Growth and yield attributes and their economics | Yield and economics | Baghya variety performed better than PKM 1 var | The farmers are highly impressed with Bagya variety | - | - |
| | | | | | T2: Farmers practice (PKM1 variety) | | | | | | |
| | | | | | | | | | | | |

Contd..

| Technology Assessed | Source of Technology | Production | Yield (kg/ha) | Net Return (Profit) in Rs. / unit | BC Ratio |
|--|----------------------|------------|-----------------------|--------------------------------------|----------|
| 13 | 14 | 15 | 16 | 17 | 18 |
| Technology option 1 - (Farmers practice) –Bagya variety, 100:100: 50g NPK/tree, 3-4 sprays of NAA | GKVK, Bangalore | 54.0 | Tonnes of pods /ha | 60205 | 3.40 |
| Technology option 2- PKM1 variety ,100:100: 50g NPK/tree, 3-4 sprays of NAA | TNAU 1989 | 48.0 | Tonnes of pods /ha | 41020 | 2.41 |

C 2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details

1. Title of Technology Assessed : Assessment of the varietal performance of Annual Moringa PKM-1
2. Problem Definition : .Variety for high density planting is not available
3. Details of technologies selected for assessment :

| | |
|-------------------|----------------------------|
| Farmers practice | PKM1(Already used) |
| Technology option | Bagya from GKVK, Bangalore |
4. Source of technology : TNAU, Coimbatore & GKVK, Bangalore
5. Production system and thematic area : Testing of variety for high density planting
6. Performance of the Technology with performance indicators : The growth and yield attributes recorded in the moringa revealed that the Bagya performed better than PKM 1. The highest yield of 54 tonnes pods/ha recorded in Bagya as compared to PKM 1 (48 tonnes pods /ha). Bagya recorded an increased yield of 12.5 over PKM 1 respectively. Similar trend was also observed in economics.
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques :

| Seed treatment | Agonomic practices | INM | IPM | PHT |
|----------------|--------------------|-----|------|------|
| 50% | 80 % | 80% | 50 % | 45 % |

8. Final recommendation for micro level situation : Bhagya variety is performed better in high density situation.
9. Constraints identified and feedback for research : -
10. Process of farmers participation and their reaction : Farmers were realized the performance of Bhagya due to its profuse growth and yield parameters.

4. C1. 6. Assessment of TANUVAS grand supplement in dairy cows.

| Crop/ enterprise | Farming situation | Problem definition | Title of OFT | No. of trials | Technology refined | Parameters of refined t | Data on the paramete r | Results of refinement | Feed back from the farmer | Any refin eme nt need ed | Justificati on for refineme nt |
|---------------------|----------------------|--|---|------------------|--|----------------------------------|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Dairy | Dairy farming | Poor milk yield, unhealthy and poor consumption rate. | Assessment of TANUVAS grand supplements in dairy cows | 20 Nos | 1.Technology option-1 (Farmer's practice) 2.Technology option -2 (TANUVAS grand supplements) | Percenta ge of milk yield, | Quantity of milk yield increased from 2 liter to 2-3 liters, fat content increased from 3.5 to 4.5 percent | Yield of milk Increased at two time | Increase the yield of milk. The external appearance of animals active and healthy. Periodically conceive the appropriate time. Consumption rate increased when compared to without supplementati on of TANUVAS Supplementati on | - | - |

| Technology Refined | Source of Technology for Technology Option1 / Justification for modification of assessed Technology Option 1 | Production | kg/ha | Net Return (Profit) in Rs. / unit | BC Ratio |
|--|--|---|--|--|----------|
| 13 | 14 | 15 | 16 | 17 | 18 |
| Technology option 1 (Farmer's practice) Without TANUVAS grand supplements | - | 2 - 3 liters/ time/ animal | 5 liters/animal /day (5x30=Rs.150) 30x5 = 150 liters/ animal/ month 150 x 6 = 900 liters / animal 1 liter =Rs.30 , 900x30 = Rs. 27,000 (Actual feed cost Rs.30 /day Rs. 30X 30=Rs. 900/month) | Rs.120/day/ animal (Rs.150-30= 120) (Rs.27,000-900 = Rs.26,100/animal/6 month) | - |
| Technology option 2 (TANUVAS grand supplements) | TANUVAS, Chennai | Average of milk yield 2.5- 3.5 liters / time/animal | 6 liters/animal /day (6x30=Rs.180) 30x6 = 180 liters/ animal/ month 180 x 6 = 1080 liters / animal 1 liter =Rs.30 , 1080 x30 = Rs. 32,400 (Actual feed cost Rs.30.5 per day Rs.30 X 30.5=Rs. 915/month) | Rs.149.5/day/animal (Rs.180-30.50= 149.50) (Rs.32,400-915 = Rs.31,485/animal) | 1: 59.8 |
| *TANUVAS grand supplements – cost of 1 packet is Rs.50/-. Grand supplements – 10 ml / day /animal (feed cost 50 paise/day) | | | | | |

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 |
|---------|----------|-------------------|-----------------|-----------|-----------------|--------|-------------------------|---|-----------|-------------------------------|--------|-------|--------|-----------------------|
| | | | | | | | | | | Proposed | Actual | SC/ST | Others | |
| 1. | Pulses | Irrigated | Rabi 2012 | Blackgram | VBN 6 | - | Crop Management | Integrated Crop Management in blackgram var VBN 6 | 2 ha | 5 | 2 | 3 | 5 | - |
| 2. | Pulses | Irrigated | Rabi 2012 | Blackgram | LBG 531 | - | Crop Management | Improving productivity in rice fallow blackgram | 5 ha | 5 | 3 | 2 | 5 | - |
| 3. | Cereals | Irrigated | Rabi 2012 | Paddy | ADT 49 | - | Varietal popularization | Paddy ADT (R) 49 seed production through farmers participatory approach | 10 ha | 29 | 3 | 26 | 29 | - |

| | | | | | | | | | | | | | | |
|----|------------------|---------------|---------------|------------|--|------------|----------------------|---|------|----|---|----|----|---|
| 4 | Millets | Non irrigated | Rabi 2012 | Cumbu | -- | Hybrid CO9 | Crop management | Popularization of ICM in CO9 Hybrid Cumbu | 10 | 20 | 2 | 18 | 20 | - |
| 5 | Millets | Irrigated | Rabi, 2012 | Maize | -- | Co6 | Crop Management | Integrated Crop Management of Maize hybrid Co6 | 5 | 5 | 2 | 3 | 5 | |
| 6 | Vegetables | Irrigated | June, 2012 | Onion | -- | Co (On) 5 | Crop Management | Popularization of hybrid | 5 | 5 | 3 | 2 | 5 | - |
| 7 | Vegetables | Irrigated | June, 2012 | Tapioca | Mulluvadi | -- | Crop improvement | Supply of virus free plantlets and reduction of viral incidence | 2ha | 4 | 2 | 2 | 4 | - |
| 8 | Fruits | Irrigated | June, 2012 | Watermelon | Farmers choice for watermelon and Annual moringa | -- | Crop protection | To minimize the pest incidence | 2ha | 5 | 3 | 2 | 5 | - |
| 9 | Plantation crop | Rainfed | June, 2012 | Cashew | Use of machinery for digging hole | -- | Resource utilization | To minimise the labour cost for digging of hole | 2 ha | 5 | 3 | 2 | 5 | - |
| 10 | Commercial crops | Irrigated | December 2013 | Sugarcane | SI 7 | - | Weed management | Integrated Weed management practices for controlling twining weeds in sugarcane | 5 | 5 | 2 | 3 | 5 | - |

| | | | | | | | | | | | | | | |
|----|--------------------------------|------------------------------|----|----------------------------------|---------------------------------------|----|-----------------------------|--|--------|----|---|---|----|--|
| 11 | Commercial crops | Irrigated | - | Sugarcane | SI 7 | - | Crop improvement | Sustainable Sugarcane Initiatives | 2 ha | 2 | 1 | 1 | 2 | New technology, the involvement will be slow |
| 12 | Biscuit preparation and others | Entrepreneurship Development | - | Ragi | Ragi based vermicelli preparation | - | Ragi vermicelli preparation | Popularization of Extrusion cooking of minor millets (Ragi) | 10 SHG | 2 | 1 | 1 | 2 | - |
| 13 | Fish farming | Carp farming | - | Fish culture | Cutla, Rogu, Mirgal,CC, Silver gentai | - | Carp farming | Popularization of Fish culture in village ponds. | 10 | 10 | 3 | 7 | 10 | - |
| 14 | Sustainable farming system | Irrigated/Rainfed | -- | Crop, animals, poultry and verms | -- | -- | - | Popularization of sustainable Integrated Farming System with Crops and Fodder crop-Goat- Poultry- Vermi unit | 3 | 3 | 2 | 1 | 3 | - |
| 15 | Integrated Farming System | Irrigated | -- | All components of IFS | -- | - | -- | Integrated Farming Systems (Two units) | 2 | 2 | 1 | 1 | 2 | - |

5.A. 1. Soil fertility status of FLDs plots during 2012-13

| Sl. No. | Category | Farming Situation | Season and Year | Crop | Variety/ breed | Hybrid | Thematic area | Technology Demonstrated | Status of soil | | | Previous crop grown |
|---------|------------------|-------------------|---------------------------|------------|--|-----------|----------------------|---|----------------|----|----|---------------------|
| | | | | | | | | | N | P | K | |
| 1 | Pulses | Irrigated | Rabi 2012 | Blackgram | VBN 6 | | Crop improvement | Integrated Crop Management in blackgram var VBN 6 | L | L | M | Blackgram |
| 2 | Pulses | Irrigated | Rice fallow pulses , 2013 | Blackgram | LBG 531 | | Crop improvement | Improving productivity in rice fallow blackgram | M | M | H | Blackgram |
| 3 | Cereals | Irrigated | Rabi 2012 | Paddy | ADT 49 | - | Crop improvement | Paddy ADT (R) 49 seed production through farmers participatory approach | M | M | H | Black gram |
| 4 | Vegetables | Irrigated | June, 2012 | Onion | -- | Co (On) 5 | Crop improvement | Crop cultivation of Co (On)5 | L | M | M | Paddy |
| 5 | Vegetables | Irrigated | June, 2012 | Tapioca | Mulluvadi | -- | Crop improvement | Raising of seedlings in protray | -- | -- | -- | Sugarcane |
| 6 | Fruits | Irrigated | June, 2012 | Watermelon | Farmers choice for watermelon and Annual moringa | -- | Crop protection | Seed treatment and integrated pest management practices | M | M | M | Paddy |
| 7 | Plantation crop | Rainfed | June, 2012 | Cashew | Use of machinery for digging hole | -- | Resource utilization | Demonstration of Post hole digger machine | M | M | M | Cashew |
| 8 | Commercial crops | Irrigated | Jan 2012 | Sugarcane | SI 7 | - | Weed management | Integrated Weed management practices for controlling twining weeds in sugarcane | L | L | M | Paddy |

| | | | | | | | | | | | | |
|----|------------------|-----------|------|-----------|------|-----|------------------|--|---|---|---|-----------|
| 9 | Commercial crops | Irrigated | 2012 | Sugarcane | SI 7 | | Crop improvement | Sustainable Sugarcane Initiatives | M | M | H | Sugarcane |
| 10 | Millets | Irrigated | 2012 | Maize | --- | Co6 | Crop management | Integrated Crop Management of Maize hybrid Co6 | M | M | M | Pulses |
| 11 | Millets | Irrigated | 2012 | Cumbu | -- | Co9 | Crop management | Popularization of Integrated Crop Management in Hybrid CO9 Cumbu | L | M | H | Pulses |

5. B. Results of Frontline Demonstrations

5.B.1. Crops

| Crop | Name of the technology demonstrated | Variety | Hybrid | Farmin g 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 | | | | | | | | | | | |
| Paddy | Paddy ADT (R) 49 seed production through farmers participatory approach | Paddy ADT (R) 49 | - | Irrigated | 29 | 2 ha | 43 | 25 | 35 | 28 | 25.00 | 18153 | 52500 | 34347 | 2.8 | 18250 | 40600 | 22350 | 2.2 | |
| Blackgram | Integrated Crop Management in blackgram var VBN 6 | VBN6 | | Irrigated | 5 | 2 | 4.5 | 2.8 | 3.7 | 2.3 | 60.87 | 6230 | 22200 | 15970 | 3.56 | 5230 | 13800 | 8570 | 2.6 | |
| Blackgram | Improving productivity in rice fallow blackgram | LBG 532 | | Irrigated | 5 | 2 | 5.4 | 3.8 | 4.6 | 3.2 | 43.75 | 14382 | 27600 | 18218 | 1.94 | 4360 | 19200 | 14840 | 1.3 | |
| Onion | Integrated crop management for Co (On)5 Onion | -- | Co (On)5 | Irrigated | 5 | 2 | 106 | 92 | 97 | 83 | 16.87 | 18450 | 56485 | 38035 | 3.6 | 17540 | 46450 | 28910 | 2.6 | |
| Tapioca | Protray raised single budded Tapioca setts | Mulluvadi | -- | Irrigated | 4 | 2 | 46 | 41.2 | 44.5 | 37.25 | 19.46 | 22450 | 63452 | 41002 | 2.82 | 26375 | 48657 | 21718 | 1.7 | |

| | | | | | | | | | | | | | | | | | | | |
|----------------------------|--|---|--------|--------------------|----------|---|---|--------|--------|--------|-------|------------------------------|--------|--------|------|-------|-------|-------|------|
| Watermelon | Introduction of watermelon as intercrop in Moringa | Farmers choice for watermelon | -- | Irrigated | 10 | 2 | 22 | 16.45 | 19.75 | 15.05 | 30.9 | 11460 | 46458 | 34998 | 4.05 | 9452 | 30753 | 21301 | 3.25 |
| Cashew | Demonstration of post hole digger for planting cashew grafts | Post hole digger with a cost Rs 78000/- | -- | -- | 5 | 2 | 80 pits | 80pits | 80pits | 7 pits | 91.25 | The machine was demonstrated | | | | | | | |
| Sugarcane | Integrated Weed management practices for controlling twining weeds in sugarcane | SI 7 | - | Irrigated | 5 | 5 ha | Planting was taken up during November 2012 and now the crop is 6 month. | | | | | | | | | | | | |
| Sugarcane | Sustainable Sugarcane Initiatives | SI 7 | Drip | Irrigated | 2 | Planting was completed on 17.9.12 .Now the crop is at nine month old stage. Trial is under progress | | | | | | | | | | | | | |
| Hybrid CO9 Cumbu | Popularization of Integrated Crop Management in Hybrid CO9 Cumbu | CO9 Hybrid | Hybrid | Rainfed/ Irrigated | 20 | 5 | 3.5 | 2.5 | 3.0 | 2.5 | 16.6 | 18750 | 61250 | 42500 | 3.2 | 18750 | 38750 | 20000 | 2.0 |
| Maize | Integrated Crop Management of Maize hybrid Co6 | Co 6 hybrid | Hybrid | Irrigated | 5 | 2 | 12.2 | 9.2 | 11.5 | 8.6 | 25.2 | 8502 | 16524 | 8022 | 1.94 | 7936 | 12354 | 4418 | 1.5 |
| Carp farming | Popularization of Fish culture in village ponds | Cutla, Rogu, Mirgal, CC, Silver gentai | - | - | 10 | 600 m ² | 450 | 250 | 350 | 125 kg | 64.2 | 10,750 | 27,000 | 16,250 | 2.51 | 8,500 | 15000 | 65000 | 1.76 |
| Sustainable farming system | Popularization of sustainable Integrated Farming System with Crops and Fodder crop-Goat- Poultry- Vermi unit | Crops and Fodder crop-Goat- Poultry- Vermi unit | -- | -- | 2 | The experiment is under progress | | | | | | | | | | | | | |
| Integrated Farming System | Integrated Farming Systems (Two units) | All units | -- | -- | 2 | Trial is under progress | | | | | | | | | | | | | |
| Extrusion | Extrusion of vermicelli preparation | Ragi | - | - | 2 groups | 10 SHG | - | - | - | - | - | 81 | 300 | 219 | 3.7 | 41 | 100 | 59 | 2.4 |

* 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

1 Kg of Ragi vermicelli preparation

| *Economics of demonstration Ragi vermicelli preparation | *Economics of check Maida vermicelli preparation |
|---|---|
| Ragi flour- 1 kg Rs . 40.00 Maida flour – kg Rs. 40.00 Salt -20 gm Rs. 1.00 | Maida flour – kg Rs. 40.00 Salt -20 gm Rs. 1.00 |
| Rs.81.00 Total products 2 kg | Rs.41.00 Total products 1 kg |
| Ragi vermicelli Market rate Rs. 1 kg Rs. 150 | Market rate vermicelli Rs. 1 kg Rs. 100 |

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

| Data on other parameters in relation to technology demonstrated | | |
|---|---|---|
| Parameter with unit | Demo | Check if any |
| Integrated crop management of Bajra Co9 hybrid | | |
| • Length of ear head (cm) | 34.8cm | 18.25 cm |
| Integrated crop management practices for Onion Co (On)5 | | |
| • Bulbs/kg of weight | 32.0 | 110.00 |
| • Colour of the bulbs | High colour with high market preference | Normal and low market preference |
| Demonstration of post hole digger for planting cashew grafts in cashew plantation | | |
| • No of pits/hour | The machine dug out 80 pits/hour | Laborers dug out only 7 pits/hour/two labourers |

5.B.2. Livestock and related enterprises (experiment continued from 2011-12)

| 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 | | | | | | | | | | |
| Poultry | Poultry farming | Namakkal-1 chicks | 12 | 120 unit | Trial under progress (The Namakkal 1 has been distributed during the month of January -2012) | | | | | | | | | | | | |
| | Backyard poultry | Nanthanam turkey | 10 | 10+1 | 7.1 | 4.2 | 5.86 | 3.2 | 45.39 | 4955 | 11245 | 6290 | 2.21 | 4955 | 9025 | 4070 | 1.42 |

* 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.)

Backyard poultry-Nandhanam Turkey

| S.No. | Particulars | *Economics of demonstration | *Economics of check |
|-------|-----------------------------|-----------------------------|---------------------|
| 1. | Cost of the chick | Rs.150/chick | Rs.150/chick |
| 2. | Cost of the feed | Rs.300/chick | Rs.300/chick |
| 3. | Over head expenditure | Rs.10/chick | Rs.10/chick |
| 4. | Sale of bird (Live weight) | Rs.200/ kg | Rs.200/ kg |
| 5. | Sale of eggs | Rs. 15/egg (66 eggs) | Rs.15/egg (30 eggs) |

5.B.3. Fisheries - Nil

5.B.4. Other enterprises - Nil

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

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

| Sl.No. | Activity | No. of activities organized | Number of participants | Remarks |
|--------|--------------------------------------|-----------------------------|------------------------|---------|
| 1 | Field days | 25 | 610 | - |
| 2 | Farmers Training | 175 | 1152 | - |
| 3 | Media coverage | 18 | - | - |
| 4 | Training for extension functionaries | 15 | 478 | - |
| 5 | Demonstration | 30 | 756 | - |

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 | | | | | | | | | |
| Onion | Integrated crop management for Co (On)5 Onion | Co (On)5 | 2 | 2 | 106 | 92 | 97 | 17.5 | 18450 | 56485 | 38035 | 3.4 | 17540 | 46450 | 28910 | 1.7 |
| Hybrid CO9 Cumbu | Popularization of Integrated Crop Management in Hybrid CO9 Cumbu | Hybrid CO 9 Cumbu | 10 | 5 | 3.5 | 2.5 | 2.5 | 16.6 | 18750 | 61250 | 42500 | 3.2 | 18750 | 38750 | 20000 | 2.0 |
| Total | | | 12 | | | | | | | | | | | | | |

H-High L-Low, A-Average

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

Farmer's field school (FFS) on "Sustainable Sugarcane Initiatives"

| Name of the crops | Title / Topic | Location | Number of Farmer's | Duration (days) | Details of activities | Salient findings/Results |
|--------------------------|-----------------------------|----------------------------|---------------------------|-------------------------|---|--|
| Sugarcane | SSI technology in sugarcane | Ponneri, Vridhachalam (TK) | 30 sugarcane growers | 120 days 15 sessions | <p>The following syllabus has been framed and covered according to each stage of crop growth in sugarcane,</p> <ol style="list-style-type: none"> 1.Importance of soil and water testing 2.Soil test based fertilizer recommendation in sugarcane cultivation 3.Use of VDKS software in nutrient deficiency management in sugarcane 4.Importance of SSI technology in sugarcane 5. Selection of sugarcane setts for sugarcane seedling production 6. Demonstration on use of Budchipper 7.Demonstration on Setts treatment with bio-fertilizer 8.Demonstration on planting of single budded setts in portray 9.Importance of vermicompost and composted coir pith in portray seedling production 10.Planting of portray raised seedling in main field | <p>Through SSI technology the tillows in sugarcane were increased (18-20 Nos.)</p> <p>Through intercropping with pulses the framers can get additional income (Rs.20,000 to 25,000)</p> <p>By adopting this technology farmers can get more income compared to conventional method</p> |

| | | | | | | |
|--|--|--|--|--|---|--|
| | | | | | <p>11.Importance of drip irrigation in sugarcane cultivation.</p> <p>12.Use of water soluble fertilizer in sugarcane and its importance</p> <p>13.Cultivation of intercrop in sugarcane field</p> <p>14.Sowing of pulses as intercrop in sugarcane</p> <p>15.Demonstration on nipping in sugarcane and its importance in sugarcane production and filed visit</p> | |
|--|--|--|--|--|---|--|

| | | | | | | | | | | |
|---|----|-----|----|-----|----|----|----|-----|----|-----|
| Cultivation of Fruit | 1 | 42 | 10 | 52 | 7 | 8 | 15 | 49 | 17 | 66 |
| Rejuvenation of old orchards | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Plant propagation techniques | 2 | 24 | 19 | 43 | 10 | 2 | 12 | 34 | 21 | 55 |
| c) Ornamental Plants | | | | | | | | | | |
| Nursery Management | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| d) Plantation crops | | | | | | | | | | |
| Production and Management technology | 1 | - | 21 | 21 | - | 4 | 4 | - | 25 | 25 |
| Processing and value addition | 5 | 72 | 40 | 112 | 28 | 15 | 43 | 100 | 55 | 155 |
| e) Tuber crops | | | | | | | | | | |
| Production and Management technology | 2 | 37 | 10 | 47 | 23 | 2 | 25 | 60 | 12 | 72 |
| f) Spices | | | | | | | | | | |
| Production and Management technology | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Soil Health and Fertility Management | | | | | | | | | | |
| Soil fertility management | 1 | 30 | 2 | 32 | 4 | - | 4 | 34 | 2 | 36 |
| Integrated water management | 2 | 42 | 10 | 52 | 10 | 1 | 11 | 50 | 11 | 61 |
| Integrated nutrient management | 5 | 163 | 25 | 188 | 21 | 7 | 28 | 84 | 32 | 216 |
| Production and use of organic inputs | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Management of Problematic soils | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Micro nutrient deficiency in crops | 1 | 10 | - | - | 1 | - | 1 | 11 | - | 11 |
| Soil and water testing | 2 | 36 | 7 | 43 | 10 | 2 | 12 | 46 | 9 | 54 |
| Livestock Production and Management | | | | | | | | | | |
| Dairy Management | 2 | 5 | 2 | 7 | 1 | - | 1 | 6 | 2 | 8 |
| Poultry Management | 1 | 5 | 1 | 6 | - | - | - | 5 | 1 | 6 |
| Animal Nutrition Management | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Animal Disease Management | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Feed and Fodder technology | 1 | 20 | 2 | 22 | 5 | - | 5 | 25 | 2 | 27 |
| Home Science/Women empowerment | | | | | | | | | | |
| Minimization of nutrient loss in processing | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Processing and cooking | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Gender mainstreaming through SHGs | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Storage loss minimization techniques | 1 | 12 | 2 | 14 | 2 | -- | 2 | 14 | 4 | 18 |
| Value addition | 3 | 12 | 23 | 35 | 32 | - | 32 | 44 | 23 | 66 |
| Women empowerment | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Women and child care | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Agril. Engineering | | | | | | | | | | |
| Farm machinery and its maintenance | 1 | 5 | - | 5 | 2 | - | 2 | 7 | - | 7 |

| | | | | | | | | | | |
|--|----|-----|-----|-----|-----|----|-----|-----|-----|------|
| Installation and maintenance of micro irrigation systems | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Use of Plastics in farming practices | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Post Harvest Technology | 1 | 10 | 1 | 11 | 2 | - | 2 | 12 | 1 | 13 |
| Plant Protection | | | | | | | | | | |
| Integrated Pest Management | 2 | 24 | 3 | 27 | 5 | - | 5 | 29 | 3 | 32 |
| Integrated Disease Management | 2 | | | | | | | | | |
| Fisheries | | | | | | | | | | |
| Integrated fish farming | 2 | | | | | | | | | |
| Breeding and culture of ornamental fishes | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Fish processing and value addition | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Production of Inputs at site | | | | | | | | | | |
| Seed Production | 5 | 143 | 10 | 153 | 5 | 1 | 6 | 148 | 11 | 159 |
| Bio-fertilizer production | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Vermi-compost production | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Mushroom production | 1 | 20 | -- | 20 | 7 | -- | 7 | 27 | -- | 27 |
| Apiculture | 1 | 13 | 2 | 15 | 4 | -- | 4 | 17 | 6 | 23 |
| Capacity Building and Group Dynamics | | | | | | | | | | |
| Leadership development | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Entrepreneurial development of farmers/youths | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Agro-forestry | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| TOTAL | | | | 109 | | | | 103 | | |
| | 61 | 886 | 223 | 9 | 252 | 66 | 318 | 1 | 299 | 1428 |

7.C. Training for Rural Youths 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 |
| Nursery Management of Horticulture crops | 1 | 14 | 2 | 16 | 3 | -- | 3 | 17 | 2 | 19 |
| Training and pruning of orchards | - | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Protected cultivation of vegetable crops | 2 | 25 | 10 | 35 | 4 | -- | 4 | 29 | 10 | 39 |
| Commercial fruit production | 1 | 12 | 3 | 15 | 6 | 1 | 7 | 18 | 4 | 22 |
| Integrated farming | 3 | 37 | 5 | 42 | 4 | 2 | 6 | 41 | 7 | 48 |
| Production of organic inputs | 2 | 21 | 12 | 33 | 7 | 2 | 9 | 28 | 14 | 42 |
| Vermi-culture | 1 | 10 | 2 | 12 | 2 | -- | 2 | 12 | 2 | 14 |
| Mushroom production | 1 | 16 | 5 | 21 | 6 | -- | 6 | 22 | 5 | 27 |
| Bee-keeping | 1 | 17 | 3 | 20 | 5 | 2 | 7 | 22 | 3 | 25 |
| Value addition | 4 | 52 | 8 | 60 | - | -- | -- | 52 | 8 | 60 |
| Post Harvest Technology | 2 | 36 | 2 | 38 | 3 | 1 | 4 | 39 | 3 | 42 |
| Dairying | 1 | 8 | 1 | 9 | 2 | 2 | 4 | 10 | 3 | 13 |
| Sheep and goat rearing | 1 | 5 | 2 | 7 | 2 | 2 | 4 | 7 | 4 | 11 |

| | | | | | | | | | | |
|--|-----------|------------|-----------|------------|-----------|-----------|-----------|------------|-----------|------------|
| Ornamental fisheries | - | - | -- | -- | -- | -- | -- | -- | -- | -- |
| Fish harvest and processing technology | - | - | -- | -- | -- | -- | -- | -- | -- | -- |
| TOTAL | 20 | 248 | 53 | 301 | 42 | 10 | 52 | 290 | 61 | 351 |

7.D. Training for Rural Youths 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 |
| Nursery Management of Horticulture crops | 2 | 34 | 5 | 39 | 12 | 3 | 15 | 46 | 8 | 54 |
| Training and pruning of orchards | -- | -- | -- | 0 | -- | -- | 0 | -- | -- | 0 |
| Protected cultivation of vegetable crops | 1 | 15 | 2 | 17 | 3 | 1 | 4 | 18 | 3 | 21 |
| Integrated farming | 2 | 20 | 3 | 23 | 8 | --- | 8 | 28 | 3 | 31 |
| Seed production | 1 | 20 | 6 | 26 | -- | -- | 0 | 20 | 6 | 26 |
| Production of organic inputs | 1 | 12 | 1 | 13 | 2 | -- | 2 | 14 | 12 | 26 |
| Vermi-culture | -- | -- | -- | 0 | -- | -- | 0 | -- | -- | 0 |
| Mushroom Production | 1 | 15 | 4 | 19 | -- | -- | 0 | 15 | 4 | 19 |
| Bee-keeping | 2 | 20 | -- | 20 | 6 | 1 | 7 | 26 | 1 | 27 |
| Sericulture | -- | -- | -- | 0 | -- | -- | 0 | -- | --- | 0 |
| Repair and maintenance of farm machinery and implements | 1 | 12 | -- | 12 | -- | --- | 0 | 12 | -- | 12 |
| Value addition | 3 | 43 | 12 | 55 | 12 | -- | 12 | 55 | 12 | 67 |
| Post Harvest Technology | 2 | 24 | 21 | 45 | -- | -- | 0 | 24 | 21 | 45 |
| Tailoring and Stitching | -- | -- | -- | 0 | -- | -- | 0 | -- | -- | 0 |
| Dairying | 1 | 15 | 3 | 18 | 3 | 1 | 4 | 18 | 4 | 22 |
| Sheep and goat rearing | 1 | 5 | 5 | 10 | 1 | -- | 1 | 6 | 5 | 11 |
| Poultry production | 1 | 12 | 3 | 15 | -- | -- | 0 | 12 | 3 | 15 |
| Ornamental fisheries | -- | -- | -- | 0 | --- | -- | 0 | -- | -- | 0 |
| Fish harvest and processing technology | -- | -- | -- | 0 | -- | -- | 0 | -- | -- | 0 |
| SSI | 5 | 76 | 42 | 118 | 26 | 10 | 36 | 102 | 52 | 154 |
| TOTAL | 24 | 323 | 107 | 430 | 73 | 16 | 89 | 396 | 134 | 530 |

7.E. Training programmes for Extension Personnel 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 |
| Productivity enhancement in field crops | 5 | 85 | 21 | 106 | 11 | 7 | 18 | 96 | 28 | 124 |
| Integrated Pest Management | 2 | 42 | 17 | 59 | 8 | 3 | 11 | 50 | 20 | 70 |
| Integrated Nutrient management | 2 | 36 | 19 | 55 | 3 | -- | 3 | 39 | 19 | 58 |
| Protected cultivation technology | 6 | 86 | 10 | 96 | 16 | 2 | 18 | 102 | 12 | 114 |

| | | | | | | | | | | |
|---|-----------|------------|------------|------------|-----------|-----------|------------|------------|------------|------------|
| Production and use of organic inputs | 3 | 62 | 20 | 82 | 8 | -- | 8 | 70 | 20 | 90 |
| Care and maintenance of farm machinery and implements | 1 | 12 | 8 | 20 | 2 | 1 | 3 | 14 | 9 | 23 |
| Gender mainstreaming through SHGs | -- | -- | -- | 0 | -- | --- | 0 | -- | -- | 0 |
| Formation and Management of SHGs | -- | -- | -- | 0 | -- | -- | 0 | -- | -- | 0 |
| Women and Child care | -- | -- | -- | 0 | -- | -- | 0 | -- | -- | 0 |
| Management in farm animals | 2 | 26 | 11 | 37 | 5 | 3 | 8 | 31 | 42 | 73 |
| Drip system and maintenance | 3 | 31 | 16 | 47 | 5 | -- | 5 | 36 | 16 | 52 |
| SSI | 5 | 126 | 42 | 168 | 14 | 12 | 26 | 140 | 54 | 194 |
| Total | 29 | 506 | 164 | 670 | 72 | 28 | 100 | 578 | 220 | 798 |

7.F. Training programmes for Extension Personnel 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 |
| Productivity enhancement in field crops | 3 | 10 | 12 | 22 | 2 | 1 | 3 | 12 | 13 | 25 |
| Integrated Pest Management | 1 | 24 | 21 | 45 | 3 | 2 | 5 | 27 | 23 | 50 |
| Integrated Nutrient management | 1 | 18 | 8 | 26 | 2 | -- | 2 | 20 | 8 | 28 |
| Protected cultivation technology | 2 | 32 | 6 | 38 | 10 | 1 | 11 | 42 | 7 | 49 |
| Production and use of organic inputs | 2 | 26 | 7 | 33 | 9 | 2 | 11 | 35 | 9 | 44 |
| Care and maintenance of farm machinery and implements | 1 | 16 | 10 | 26 | 2 | -- | 2 | 18 | 10 | 28 |
| Women and Child care | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Management in farm animals | 1 | 23 | 2 | 25 | 2 | 1 | 3 | 25 | 3 | 28 |
| Livestock feed and fodder production | 1 | 17 | 3 | 20 | 3 | 1 | 4 | 20 | 4 | 24 |
| Drip system and maintenance | 1 | 12 | 5 | 17 | 1 | -- | 1 | 13 | 5 | 18 |
| SSI | 2 | 45 | 21 | 66 | 5 | -- | 5 | 50 | 21 | 71 |
| Total | 15 | 223 | 95 | 318 | 39 | 8 | 47 | 262 | 103 | 365 |

7. G. Sponsored training programmes conducted

| 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 | | | | | | | | | | |
| 1.a. | Increasing production and productivity of crops | 10 | 145 | 21 | 166 | 42 | 10 | 52 | 155 | 31 | 186 |
| | SSI | 7 | 30 | 2 | 32 | 12 | 2 | 14 | 42 | 4 | 46 |

| | | | | | | | | | | | |
|----|--------------------------------------|----|-----|----|-----|----|----|----|-----|----|-----|
| 3. | Soil health and fertility management | - | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 4 | Production of Inputs at site | 3 | 20 | 15 | 35 | 4 | 2 | 6 | 24 | 17 | 41 |
| | Total | 20 | 195 | 38 | 233 | 58 | 14 | 72 | 221 | 52 | 273 |

Details of sponsoring agencies involved

1. NADP (RKVY)- state governments sponsored- precision farming training for Agricultural and Horticultural crops sponsored.
2. NADP
3. TN-IAMWARM

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 | | | | | | | | | | |
| 1.a. | Commercial floriculture | 1 | 10 | 21 | 31 | 2 | 5 | 7 | 12 | 28 | 40 |
| 2.a. | Value addition | 2 | 32 | 8 | 40 | 10 | -- | 10 | 42 | 8 | 50 |
| 2.b. | Others (pl.specify) (banana fiber extraction) | 1 | 14 | 2 | 16 | - | - | - | 14 | 2 | 16 |
| 4. | Income generation activities | | | | | | | | | | |
| 4.a. | Vermi-composting | 1 | 21 | 3 | 24 | 1 | - | 1 | 22 | 3 | 25 |
| 4.e. | Seed production | 2 | 52 | 21 | 73 | 2 | 1 | 3 | 54 | 22 | 76 |
| 4.k. | Mushroom production | 1 | 20 | -- | 20 | 5 | - | 5 | 25 | -- | 25 |
| 5 | Agricultural Extension | | | | | | | | | | |
| | Grand Total | 8 | 149 | 55 | 204 | 20 | 6 | 26 | 169 | 63 | 232 |

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 | 32 | 281 | 236 | 517 | 217 | 183 | 400 | 112 | 62 | 174 |
| Kisan Mela | 2 | 123 | 92 | 215 | 70 | 32 | 102 | 108 | 107 | 215 |
| Kisan Ghosthi | | - | - | - | - | - | - | - | - | - |
| Exhibition | 23 | 512 | 208 | 720 | 402 | 280 | 682 | 180 | 147 | 327 |
| Film Show | 17 | 215 | 110 | 325 | 40 | 12 | 52 | 255 | 122 | 377 |
| Method Demonstrations | 171 | 2113 | 1010 | 3123 | 810 | 713 | 1523 | 182 | 38 | 220 |
| Farmers Seminar | 5 | 242 | 102 | 346 | 136 | 80 | 216 | 30 | 15 | 45 |
| Workshop | 10 | 75 | 30 | 105 | 36 | 55 | 111 | 47 | 25 | 72 |
| Group meetings | 27 | 1156 | 765 | 1921 | 497 | 328 | 825 | 215 | 152 | 367 |
| Lectures delivered as resource | 37 | 1120 | 850 | 1970 | 254 | 270 | 524 | 112 | 85 | 197 |

| | | | | | | | | | | |
|---|-------------|---------------|-------------|--------------|-------------|-------------|-------------|-------------|------------|-------------|
| persons | | | | | | | | | | |
| Newspaper coverage | 42 | - | - | - | - | - | - | - | - | 24 |
| Radio talks | 12 | - | - | - | - | - | - | - | - | 10 |
| TV talks | 3 | - | - | - | - | - | - | - | - | - |
| Popular articles | 16 | - | - | - | - | - | - | - | - | - |
| Extension Literature | 38 | - | - | - | - | - | - | - | - | 10 |
| Advisory Services | 149 | 4140 | 2915 | 7139 | 1204 | 246 | 1450 | 210 | 85 | 295 |
| Scientific visit to farmers field | 138 | 425 | 112 | 537 | 125 | 45 | 170 | 40 | 22 | 62 |
| Farmers visit to KVK | - | 757 | 93 | 850 | 183 | 55 | 238 | 46 | 38 | 84 |
| Diagnostic visits | 202 | 1023 | 189 | 1212 | 135 | 48 | 183 | 15 | 10 | 25 |
| Exposure visits | 30 | 720 | 28 | 748 | 45 | 7 | 52 | 12 | 7 | 19 |
| Ex-trainees Sammelan | - | - | - | - | - | - | - | - | - | - |
| Soil health Camp | 22 | 750 | 125 | 875 | 125 | 47 | 172 | 120 | 42 | 162 |
| Animal Health Camp | 1 | 25 | 3 | 28 | 2 | 4 | 6 | 2 | - | 2 |
| Soil test campaigns | 13 | 450 | 240 | 690 | 180 | 126 | 206 | 42 | 27 | 69 |
| Farm Science Club Conveners meet | 14 | 112 | 52 | 164 | 75 | 34 | 109 | - | -- | - |
| Self Help Group Conveners - meetings | 23 | 652 | 423 | 1075 | 247 | 120 | 367 | -- | -- | -- |
| Mahila Mandals Conveners meetings | - | - | - | - | - | - | - | - | - | - |
| Celebration of important days (specify) | 2 | mass audience | | | | | | | | |
| Total | 1027 | 14891 | 7583 | 22560 | 4783 | 2685 | 7388 | 1728 | 984 | 2756 |

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS

VI. PRODUCTION OF SEED/PLANTING MATERIAL

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 |
|-------------------|------------------|---------|--------|------------------------|------------|------------------------------------|
| Fodder crop seeds | Cumbu Napier | Co 4 | - | 20000 Nos | 10000 | 55 |
| Total | | | | | 10000 | 55 |

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 |
|----------------------|--------------------|---------------|--------|--------|--------------|------------------------------------|
| Commercial | Cashew grafts | VRI 3 | - | 2905 | 52290 | 150 |
| | Sugar cane setts | SI 7 | - | 7 tons | 17500.00 | 50 |
| Vegetables | Brinjal | Palur 2 | - | 2200 | 1100 | 100 |
| Fruits | Jack grafts | Palur 1 | - | 24 | 1200 | 14 |
| Fodder crop saplings | Cumbu napier grass | Co 4 | - | 20000 | 10000 | 55 |
| Others(specify) | Red gram seedling | Co (Rg) 7 | - | 6000 | 9000 | 35 |
| Total | | | | | 91090 | 452 |

9. c. Production of Bio-Products

| Bio Products | Name of the bio-product | Quantity Kg | Value (Rs.) | Number of farmers to whom provided |
|------------------|-------------------------|---------------|-------------|------------------------------------|
| Others (specify) | Vermicompost | 580 Kg | 2900 | 55 |
| Total | | 580 Kg | 2900 | 55 |

9. d. Production of livestock materials

| Particulars of Live stock | Name of the breed | Number | Value (Rs.) | Number of farmers to whom provided |
|---------------------------|-------------------|----------|--------------|------------------------------------|
| Others (Pl. specify) | Thalacherry goat | 4 | 26200 | 4 |
| Total | | 4 | 26200 | 4 |

**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.)

Date of start: April,2005

Periodicity (Quarterly)

Jan-Mar , Apr –Jun, Jul-Sep and Oct-Dec

(B) Literature developed/published

| Item | Title | Authors name | Number |
|----------------------|-------------------------|--------------|-----------|
| Research papers | Details furnished below | | 10 |
| Technical reports | | | 9 |
| News letters | | | 4 |
| Technical bulletins | | | 08 |
| Popular articles | | | 10 |
| Extension literature | | | 10 |
| Others (Pl. specify) | | | - |
| TOTAL | | | 51 |

Booklet

1. Dhanushkodi, V., K. Subrahmaniyan., P. Kalaiselvan., P. Arutchenthil., S. Kannan and V. Vijaya Geetha. 2010. Soil and water testing. Krishi Vigyan Kendra, Tamil Nadu Agricultural University, Vriddhachalam, 44 p.
2. Haripriya, S., A. Vijaya lakshmi., K. Subrahmaniyan and P. Kalaiselvan. 2010. SRI technology. Krishi Vigyan Kendra, Tamil Nadu Agricultural University, Vriddhachalam, 16 p.
3. Kannan, S., K.Subrahmaniyan., M. Raju., P. Arutchenthil., V. Dhanushkodi S. Haripariya and V. Vijaya Geetha. 2010. Fruits and vegetables preservation methods. Krishi Vigyan Kendra, Tamil Nadu Agricultural University, Vriddhachalam, 50 p.
4. Kannan, S., K.Subrahmaniyan., M. Raju., P. Arutchenthil., V. Vijaya Geetha., V. Dhanushkodi and S. Haripariya. 2010. Cashew apple value added products for entrepreneurs. Krishi Vigyan Kendra, Tamil Nadu Agricultural University, Vriddhachalam, 16 p.
5. Vijaya Geetha, V., K.Subrahmaniyan., P. Kalaiselvan., M. Raju., S. Kannan.,P. Arutchenthil., V. Dhanushkodi and S. Haripariya. 2010. Quality seed production in groundnut. Krishi Vigyan Kendra, Tamil Nadu Agricultural University, Vriddhachalam, 22 p.
6. Raju, M., S. Kannan., K. Subrahmaniyan and P. Kalaiselvan. 2010. Mushroom production technology. Krishi Vigyan Kendra, Tamil Nadu Agricultural University, Vriddhachalam, 83 p.
7. Raju, M., K. Subrahmaniyan and P. Kalaiselvan. 2010. SRI technology. Krishi Vigyan Kendra, Tamil Nadu Agricultural University, Vriddhachalam, 16 p.

8. Kannan, S., K.Subrahmaniyan., M. Raju., P. Arutchenthil., V. Dhanushkodi., S. Haripariya and V. Vijaya Geetha. 2010. Fish value addition. Krishi Vigyan Kendra, Tamil Nadu Agricultural University, Vriddhachalam, 32 p.

Research Articles

1. Dhanushkodi, V. and M.Kannathasan.2012. Importance of industrial waste in maximizing the yield of rice and its effect of soil fertility in coastal region. International Journal of Research In Chemistry and Environment, 2(3) : pp.21-25.
2. Dhanushkodi, V. and M.Kannathasan.2012. Soil Management to Increase Rice Yield in Salt affected Coastal Soil - A Review. International Journal of Research In Chemistry and Environment, 2(4):.1-5
3. Dhanushkodi, V., K.Subrahmaniyan and V.Vaithiyanathan. 2012. Importance of Pulse wonder in Blackgram, Ulavarin Valarum Velanmai, Febraury, 2012 Published by The DEE,TNAU. Coimbatore, PP No. 54-55
4. Dhanushkodi. V, and M. Kannathasan. 2011. “Effect of integrated application of nutrients on soil microbiological properties and yield of rice on coastal saline soils of Ramanathapuram district in Tamil Nadu”, In proceeding of National seminar on Soil health improvement for enhancing crop productivity during 17-18th March 2011at TNAU, Coimbatore, Page No.30
5. Dhanushkodi. V, S.Kannan, V.Vijayageetha and K. Subrahmaniyan. 2011. Supplementation of are specific mineral mixture –A case study, In Compendium on National seminar on “Innovations in farming systems research and extension for inclusive development held at TANUVAS, Chennai on 24-24th, Pp.203-204.
6. Vijayageetha, V.,V.Dhanushkodi,, S.Kannan and K. Subrahmaniyan. 2011. Suitability of Nanthanam 1 turkey for backyard poultry in Cuddalore district, In Compendium on National seminar on “Innovations in farming systems research and extension for inclusive development held at TANUVAS, Chennai on 24-24th, November 2011. Pp.204
7. Kannan,S., V.Vijayageetha V.Dhanushkodi, and K. Subrahmaniyan. 2011. Increasing the socio economics status of farming community through rhodo white chicken, In Compendium on National seminar on “Innovations in farming systems research and extension for inclusive development held at TANUVAS, Chennai on 24-24th, November 2011. Pp.203

8. Dhanushkodi. V and K. Subrahmaniyan. 2012. Vermicomposting is an alternate source of income-A success story, National seminar on recycling of solid waste through composting, March 8-9, 2012 Held at AC&RI, Madurai. Pp.106
9. Dhanushkodi. V and K. Subrahmaniyan. 2012. An easy way to compost coirpith-A demonstration, National seminar on recycling of solid waste through composting, March 8-9, 2012 Held at AC&RI, Madurai.pp.107
10. Dhanushkodi. V.,C.Rajababu and K. Subrahmaniyan. 2012. Jatropha curcas-A multipurpose tree. In. proceeding of the national seminar on Production, utilization and marketing of tree born oil seeds held at AC&RI, Madurai, 4&5th, 2012 (Volume 2), P25.

Technical reports

1. Action plan for KVK 2011-12.
2. Action plan for KVK 2012-13.
3. Annual report – 2011-12
4. Seed Village completion report
5. Joint field inspection report on paddy (14), cashew (1), groundnut (2), sesamum (1)
6. NADP- Precision Farming review report, progress reports (3)
7. 16 th Scientific Advisory Committee Meeting report
8. Flood assessment report – Cuddalore District
9. TN IAMWARM Report

Popular articles /Leaflets

1. V.Dhanushkodi, and K. Subrahmaniyan. 2011. .Nitrogen management in rice, Thinathanthi - 21.04.2011 Page No. 12
2. V.Dhanushkodi, and K. Subrahmaniyan. 2011. Azolla –supplementary food for cattle and poultry, Thinamani – 02.06.2011 Page No. 10
3. V.Dhanushkodi, and K. Subrahmaniyan. 2011. Importance of soil and water testing in crop yield and integrated nutrient management, Thinathanthi -23.06.2011 Page No. 14
4. A Successes story on Vermicomposting technology. A.Sekar. 2012., Youth in Second green revolution, Meeting, Published by DEE, TNAU. pp No.85

5. V.Dhanaushkodi, K.Subrahmaniyan and V.Vaithiyanathan. 2012. Importance of Pulse wonder in Blackgram, Ulavarin Valarum Velanmai, February, 2012 Published by DEE,TNAU. PP No. 54-55

Extension Literature Published

- ◆ SSI and their benefits in sugarcane
- ◆ Protray seedlings of tapioca
- ◆ Mushroom production
- ◆ Polythene film mulching in groundnut
- ◆ INM in groundnut crop
- ◆ Methods of soil and water sample collection
- ◆ Tractor drawn groundnut seed drill
- ◆ Post hole digger in cashew
- ◆ Sunflower thresher
- ◆ Guava RTS preparation and value addition in cashew apple

10.B. Details of Electronic Media Produced

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

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).

1. Success Stories on Higher Yield Achievement in Rice Variety Anna-4

The Cuddalore district has considerable area under rainfed rice especially Nallur, Mangalore blocks and also part of Bhuvanagiri and Vriddhchalam block during samba season. Generally, the farmers gets very low yield mainly under rainfed situation due to use of local varieties and poor maintenance. The locally available kar (Red) rice variety fetches low market value.

KVK , Vriddhachalam intervention

During Samba 2012-13, this KVK has introduced new drought tolerant variety short duration variety ANNA 4 to this rainfed area under OFT programme. The farmers were trained well in improved production technologies for this rainfed rice and also they were explained about the performance of ANNA 4 paddy variety. The OFT programme was conducted in Sathiyam, Vaiyankudi and Thatchukadu areas.. The farmers have realized a increase of 23.81% yield over ruling Kar variety. The net return from the ANNA 4 variety given Rs 11485 per ha than of Rs 7557 from Kar rice variety. Besides, the farmers were also impressed with the performance of ANNA 4 in

terms of establishment, tiller production and non lodging characteristic until harvest etc. ANNA 4 variety has slender white rice compared local kar (red bold) and fetches more market value than local kar (red bold).

Due to the intervention, a farmer named Mr. Ram Jegathesh from Thatchukadu village of Parangipettai block cultivated ANNA 4 rice variety in his field at OFT trial in 2 ha. He had followed all agronomic and plant protection practices for the paddy crop. He showed excellent yield performance in his field eventhough the entire cauvery delta zone suffered out of severe water scarcity during this samba season. More over as the crop stand was good in his field, during a field assessment made by the Director of Extension Education and the Programme Co-ordinator of this KVK it has been decided to procure TFL seed from this farmer for distribution to the local farmers. Accordingly we procured 1535 Kgs of TFL seed from this farmer with the approval of the honourable Vice Chancellor of Tamil Nadu Agricultural University. The farmer received “ Best farmer ‘ Award from the Honourable Minister for Agriculture, Tamil Nadu for the year 2013

2. Transplanted Redgram for high yielding

Redgram is one of the widely cultivated pulse crops in cuddalore district. The farmers from this district mainly using local variety and consequently getting low yield. Besides, the pest and disease incidence are more during pod development and maturity stage (November –December). Generally the farmers have not followed any of the improved methods of cultivating redgram.

OFT on Transplanted redgram technology was conducted during 2012 -13 for assessing the yield performance of the BSMR 736 , Co (Rg) 7 and LRG 41 and the field day was organized in the field of Th P. Velmurugan’s at Thoravalur on 11.12.2012, where 50 farmers and Assistant Director of Agriculture (i/c), Vriddhachalam have participated and interacted with the scientists about the technology. The OFT farmer Th. P. Velmurugan explained the advantage of the technology to the farmers; however he felt that performance of redgram Co (Rg) 7 was not satisfactory (Adi pattam) for the Cuddalore district from monsoon point of view which coincides with flowering and pod formation.

Farmers were impressed with the Transplanting methods in redgram using BSMR 736 as higher yield was observed in BSMR 736 fields and there was no mosaic incidence. Seeds requirement is low. No. of branches and No. of pods per plants were higher in transplanting techniques. Through integrated pest management (placing pheremone traps for Spodoptera and Helicoverpa), it can reduce the pest incidence during pod development stage and thereby increase the grain yield.

The farmers' feedback indicated that flower dropping was reduced due to pulse wonder spray and subsequently pod setting increased, seed size, number of pods / plant and number of seeds / pod were also increased. Farmers were happy with new variety in redgram (BSMR 736) which gave higher yield(1125 kg/ha) and also resistant to mosai virus.

The transplanted redgram was tolerant to drought when there was a dry spell of 2 days. The establishment of crop indirect sown redgram was very poor. The wider spacing in redgram resulted in more number of branches / plant & pods / plant which eventually resulted in higher yield (1088 kg/ha) as compared to farmers practice (650 kg/ha) and recommended practice (750 kg /ha). The alternate practice recorded the increased yield (52.5 %) compared to the farmers practice.

3. Precision Farming (PF)

The Tamil Nadu Agricultural University has taken a lead role in implementation of Precision Farming systems. Since 2007 this KVK is implementing the project in 8 blocks of the district. The main objective of the scheme is to provide hands-on experience to precision farmers on precision mode of cultivation, enhancing productivity by 80 to 100 per cent and also to provide market exposure to farmers for better realization of their produce. In order to implement this programme, awareness programmes, training programmes, field visits, melas, interface with drip companies and farmers, interface meeting with bank officials, exposure visit to precision farming sites were organized.

Precision farming training

This year 2012- 13 we have offered training to 500 farmers (12.5 batches) from Cuddaloer, Perambalur and Ariyalur districts. In the training programme on PF pre-evaluation was done to assess their knowledge/ awareness level on concepts of Precision Farming Technology viz., use of chisel plough, drip irrigation, fertigation, community nursery, cluster formation, marketing strategies etc. Post evaluation was done on the above aspects at the end of training. The results of the pre and post evaluation of the trainees revealed that about 40.29% of the farmers were found aware on the concepts of Precision Farming Technology and 98.24% farmers were found to gain knowledge on the concepts of Precision Farming. Consequently the farmers had made their mindset to practice Precision Farming Technology with full confidence in adopting the modern technology.

Immediate outcome of Precision Farming

Farmers practicing the PF system have reported the following

| | | |
|----------------|---|-----|
| Water saving | : | 35% |
| Yield increase | : | 46% |
| Weight gain | : | 18% |

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

NIL

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 | Paddy | <i>Vasambu (Acotus calamus)</i> powder and cow urine are mixed in the water that has been boiled and cooled over night and the seeds are soaked in the solution. The floating seeds are removed. The remaining seeds are used for sowing. | This serves the dual purpose of seed selection and treatment of seed borne disease |
| 2 | | The place with higher elevation in the field is selected for raising paddy nursery | Water flooding is avoided |
| 3 | | Ash is dusted on the germinated paddy nursery before the occurrence of heavy rain. | This practice prevents toppling of seedlings and also accumulation of seedlings on one side |
| 4 | | Farm waste and trash are burnt on the nursery beds. The heat that is generated by burning, sterilizes the soil and some nutrients like potash is added | For effective nutrient management |
| 5 | | A mixture of coconut water and buttermilk is used to increase the number of flowers in paddy. A mixture of 5 liters of coconut water and 5 liters of buttermilk is kept in a mud pot. This pot is buried in the soil for 5-7 days, after that one liter of solution is mixed with 10 liters water to spray on the crop, | For increase number of flowers in the crop. |
| 6 | | Nochi leafs along with stored paddy grain. News paper clippings and herbal leaf mixture. | To repel stored product pests |
| 7 | Pulses | Use of neem oil / red earth | To repel stored product pests in Pulses |
| 8 | | Coating the pulse seeds with arappu leaf powder | To protect the seeds from ants and birds |
| 9 | | Drying of blackgram seeds during new moon time | To protect from pulse beetle infestation |
| 10 | Vegetables | Neem extract/ Pungam Oil/ Panchaghavya | To control sucking pests and borers in vegetables |
| 11 | Animal husbandry | Oral administration Aloe vera & Aanai nerunji leaves | To induce heat in cows |
| 12 | | Oral administration of Betelvines, omam | To solve indigestion problem in goats |
| 13 | | Equal quantity of Napthalene balls and camphor were mixed with water into paste and apply on the body of cattles for 2 hours | To control parasites |

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

- Farm science club conveners meeting
- Identification of target groups was done based on their needs
- Monthly zonal work shop
- SAC meetings
- Conducting off campus training / demonstration
- Questionnaire method / Contact letter
- Village meetings
- Personal contact / Field visits
- Discussion with farmers and farm advisory visit

Rural youth

- Personal contact
- Identification of target groups was done based on their needs
- Contact letters
- Progressive farmers
- FSC conveners meetings

In service personnel

- Collaborative meeting with line departments
- Discussion with extension functionaries during the monthly zonal workshop

Collaborative meeting with line departments

10.G. Field activities

| | | |
|-------|----------------------------------|-----|
| (i) | Number of villages adopted | 18 |
| (ii) | Number of farm families selected | 360 |
| (iii) | Number of survey / PRA conducted | 52 |

10.H. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : Yes

1. Year of establishment : 17.6.2005

2. List of equipments purchased with amount :

| S. No. | Name of the Equipment | Qty. | Cost (Rs.) |
|--------|-----------------------|------|------------|
| 1. | Spectrophotometer | 1 | 75,072 |
| 2. | Flame Photometer | 1 | 36,720 |
| 3. | P ^H Meter | 1 | 7,344 |
| 4. | EC Meter | 1 | 7,344 |
| 5. | Physical balance | 1 | 28,080 |

| | | | |
|-----|-------------------------------------|-----------|---------------|
| 6. | Chemical balance | 1 | 1,01,770 |
| 7. | Water distillation still | 1 | 26,118 |
| 8. | Nitrogen digestion and distillation | 1 set | 1,72,675 |
| 9. | Shaker | 1 set | 44,077 |
| 10. | Refrigerator | 1 | 19,500 |
| 11. | Hot plate | 1 | 1,875 |
| 12. | Grinder | 1 | 11,582 |
| | Total | 12 | 532157 |

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 | 2707 | 2577 | 728 | 67675 |
| Water Samples | 2537 | 2537 | 917 | 24180 |
| Plant samples | - | - | - | - |
| Manure samples | - | - | - | - |
| Others (specify) | - | - | - | - |
| Total | 5244 | 5114 | 1645 | 91855 |

Details of samples analyzed during 2012-13

| Details | No. of Samples analyzed | No. of Farmers benefited | No. of Villages | Amount realized (Rs.) |
|------------------|-------------------------|--------------------------|-----------------|-----------------------|
| Soil Samples | 550 | 425 | 48 | 13750 |
| Water Samples | 465 | 442 | 42 | 4650 |
| Plant samples | - | - | - | - |
| Manure samples | - | - | - | - |
| Others (specify) | - | - | - | - |
| Total | 1015 | 867 | 90 | 18400 |

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

| Types of Activities | No. of Activities | Number of Farmers | Related crop/livestock technology |
|---|-------------------|-------------------|-----------------------------------|
| 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) - (Chief minister's Special programme of drought Mitigation was attended by the SMS of this KVK actively and special report has been furnished under the column 16 .)

B. Major area coverage under alternate crops/varieties - Nil

C. Farmers-scientists interaction on livestock management - Nil

D. Animal health camps organized – Nil

E. Seed distribution in drought hit states – Nil

F. Large scale adoption of resource conservation technologies – Nil

G. Awareness campaign – Nil

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) |
| 32 technologies (2011 to till date | 12978 | 64 %` | Yet to be quantified | |

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) - Nil

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

The impact of KVK interventions were assessed by employing the Participatory evaluation and impact assessment methods. In few cases simple questionnaires and interview schedules were employed to get meaningful understanding

PART XII – LINKAGES

12 A. FUNCTIONAL LINKAGES

This Kendra has developed a strong functional linkage with Govt. and Non-Govt. organizations for conducting training programmes, demonstrations, seminar, campaigns, farm advisory service, farmers study tour and other extension activities to achieve the Krishi Vigyan Kendra mandates. The details of the collaborative activities carried out are furnished below:

| Name of Organization | Nature of linkage |
|--|---|
| Dept. of Agriculture | <ul style="list-style-type: none"> ◆ Assessing the training needs of farmers in areas of Crop improvement, production, protection and mechanization ◆ Mid monthly and Monthly Zonal Workshop ◆ FLD – Field day ◆ Participated in the training programme ◆ Watershed & Waste land development programme ◆ Seedling supply ◆ District level farm improvement committee ◆ In service training to AOs /AAOs ◆ Off campus training programme ◆ Farm advisory services ◆ Seed farm- seed production meeting ◆ ATMA implementation ◆ Precision farming project ◆ Uzhavar peruvizha |
| Dept. of Horticulture | <ul style="list-style-type: none"> ◆ Assessing the training needs of farmers in areas of Crop improvement, production, protection and mechanization ◆ Off campus training programme ◆ Collaborative training programme ◆ Seedlings supply ◆ Demonstration ◆ NHM training on cashew, mango, banana, chillies and loose flowers ◆ Precision farming project |
| Annamalai University, Chidambaram | <ul style="list-style-type: none"> ◆ Rural agricultural work experience programme ◆ U.G. and P.G. students visit to KVK ◆ Training to VVV clubs |
| TANUVAS, UTRC, Cuddalore | <ul style="list-style-type: none"> ◆ Resource persons for training |
| Agricultural Extension Wing, Department of agriculture (TANCOF) | <ul style="list-style-type: none"> ◆ Off campus training ◆ Seed supply & Watershed development ◆ Training on oil seed production technology ◆ Training on oilpalm cultivation ◆ Training on polythene film mulching |
| Department of Animal husbandry | <ul style="list-style-type: none"> ◆ Advisory service |
| Collectorate, Cuddalore | <ul style="list-style-type: none"> ◆ Grievance day meeting ◆ NLC expansion programme-alternate employment for displaced riots ◆ Agricultural production council meeting ◆ Special team constituted by District collector to evaluate the sugar factory effluent treatment and gravel quarry of plantations |

| | |
|--|--|
| | ◆ Periodical technical / consultative meeting |
| Mahalir Thittam / DRDA Cuddalore | ◆ Sponsored training ◆ SGSY – SHG training ◆ Skill up-gradation programme ◆ Vazhalnthukattuvom project |
| Higher Secondary Schools | ◆ Awareness campaign ◆ NSS campaign |
| NGOs | ◆ Awareness campaign ◆ Training programme ◆ Demonstration |
| NABARD, Cuddalore | ◆ Farmers group discussion ◆ TTC meetings ◆ Trainings to farmers |
| Agriculture Engineering Dept. Govt. of Tamil Nadu | ◆ Rain water harvesting programme ◆ Seedlings supply ◆ Training on agricultural implements and river basin development |
| ZRC, Coimbatore | ◆ Training on power tiller operation, maintenance and its attachments ◆ Implements supply |
| FC & RI, Mettupalayam | ◆ Students RAWI programme |
| Dept. of Millets, TNAU, Coimbatore | ◆ FLD in kodomillet and maize ◆ Seed supply |
| Dept. of Forage crops, TNAU, CBE | ◆ FLD and OFT on forage crops |
| NGO- KVKs | ◆ Training and exposure visit ◆ Seed materials supply & FLD / OFT discussion |
| WTC, Tamil Nadu Agricultural University, Coimbatore | ◆ Drip and sprinkler unit supply ◆ Technical support ◆ Training on micro irrigation |
| Indian Bank, Vriddhachalam | ◆ Training programmes |
| Government of Pondicherry | ◆ Precision farming project – Consultancy |

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.) |
|---------------------------|----------------------------------|-----------------------|---------------------|
| TN- IAMWARM | 2011-12 | World Bank | 48.55 lakhs |
| SSI - NADP | 2011-12 | State Government | 3.77 lakhs |
| INSIMP | 2012 | State Government | 4.00 lakhs |
| NADP – PF Training | | | |
| Agriculture | 2011-12 | State Government | 3.924 lakhs |
| Horticulture | 2011-12 | State Government | 8.284 lakhs |

12.C. Details of linkage with ATMA

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

ATMA was implemented in Cuddalore district from the financial year (2007-08). The orientation workshop for newly ATMA implemented district was conducted by Directorate of Agriculture, Government of Tamil Nadu during 22-23rd, August, 2007 at Vellore. SREP training was conducted to trainers during 22.10.07 to 27.10.07. ATMA implementing team meeting was conducted to prepare the action plan for the year 2008-09 at Joint Director of Agriculture office, Cuddalore. Agro Ecological Situation for Cuddalore district was also formed. During the period under report the following activities were taken up.

1. Monthly meeting of ATMA Block level technology team: All the thirteen block level officers conducted the monthly meetings in which KVK scientists participated. Totally 39 meetings were conducted.
2. District Advisory and Governing Board Meetings: Five meetings were conducted in which the Programme Coordinator participated as member
3. Completion of SREP: The KVK assisted in completion of SREP and document was submitted to State Level Committee.
4. Empowerment programmes under ATMA: The scientists of KVK in each Block level technology team participated in technology transfer programmes.
5. Facilitation of Exposure Visits: Exposure visits were arranged by the KVK for 4 Block farmers to State and National Level institutes, besides exposure visits to 11 KVKs in Tamil Nadu, Karnataka and Kerala.
6. AES delineation: As per request of the District machinery, separate meeting was conducted for AES delineation in which scientists of KVK, Regional Research Station, Vriddhachalam participated.

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 | Block Level Management Committee meeting | 13 | - | - |
| 02 | Research projects | - | - | - | - |
| 03 | Training programmes | - | - | - | - |
| 04 | Demonstrations | - | - | - | - |
| 05 | Extension Programmes | - | - | - | - |
| | Kisan Mela | | | | |
| | Technology Week | | | | |
| | Exposure visit | | | | |
| | Exhibition | | | | |

| | | | | | |
|-----------|---------------------------------------|-------------------|----|---|---|
| | Soil health camps | | | | |
| | Animal Health Campaigns | | | | |
| | Others (Pl. specify) | | | | |
| 06 | Publications | - | - | - | - |
| | Video Films | | | | |
| | Books | | | | |
| | Extension Literature | | | | |
| | Pamphlets | | | | |
| | Others (Pl. specify) | | | | |
| 07 | Other Activities (Pl. specify) | - | - | - | - |
| | Watershed approach | | | | |
| | Integrated Farm Development | | | | |
| | Agri-preneurs development | | | | |
| | Uzhavar peruvizha | Training cum demo | 78 | | |

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

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

12.F. Details of linkage with RKVY - Nil

12. G Kisan Mobile Advisory Services April 2012 to March 2013

| Month | No. of SMS sent | No. of farmers to which SMS was sent | No. of feedback / query on SMS sent |
|-------------------|-----------------|--------------------------------------|-------------------------------------|
| April 2012 | | -NIL- | |
| May | | | |
| June | | | |
| July | | | |
| August | | | |
| September | | | |
| October | | | |

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 | Hi-Tech Nursery | 2009 | - | 1.Brinjal PLR-2 | Protray seedlings | 2200 | 5027 | 5027 | Distributed to OFT/FLD (2012-13) beneficiary farmers |
| | | | | 2.Water melon seedlings | Protray seedlings | 13500 | 4500 | 8100 | |
| 2 | Poultry Demo unit | 2009 | - | Nammakkal 1 Chicks | Nammakkal 1 Chicks | 13 Nos | -- | -- | Nammakkal 1 chicks for demo purpose only |
| 3 | Goat shed | 2009 | - | Tellicherry Goat | Tellicherry Goat | 4 Nos | -- | 10000 | |
| 4 | Vermicompost | 2009 | - | Vermicompost | Vermicompost | 580 Kg | | | |

13.B. Performance of instructional farm (Crops) including seed production - NIL**13.C. Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.) - NIL****13.D. Performance of instructional farm (livestock and fisheries production) - Nil****13.E. Utilization of hostel facilities**

Accommodation available (No. of beds)

| Months | No. of trainees stayed | Trainee days (days stayed) | Reason for short fall (if any) |
|----------------|------------------------|----------------------------|--------------------------------|
| August 2012 | 75 | 2 | - |
| September 2012 | 45 | 2 | - |
| October 2012 | 150 | 5 | - |
| November 2012 | 276 | 5 | - |
| March 2013 | 310 | 4 | - |
| Total | 856 | 18 | |

3.F. Database management

| S. No | Database target | Database created |
|-------|---|------------------|
| 1 | Resource inventory of the district 1. Nine fold classification of land 2. Number and size of operational holdings 3. Weather parameters of the district (for minimum 10 years) | Completed |

| | | |
|----|---|-------------|
| | <p>4. Details of soil profile</p> <p>5. Detailed cropping pattern (for minimum 10 years)</p> <p>6. Area, production and productivity of major crops</p> <p>7. Details of livestock wealth of district</p> <p>8. Production and productivity of livestock produces</p> <p>9. Area under irrigation from different sources</p> <p>10. Seasonal availability of labour</p> <p>11. Trend in wholesale price of major crop and livestock products(for minimum 10 years)</p> <p>12. Details of input agencies</p> <p>13. Details of infrastructural facilities available for production, post harvest and marketing</p> <p>14. Details of institutional credit facilities</p> <p>15. Any other relevant to district</p> | |
| 2 | <p>Farmers database</p> <p>Details of farmers</p> | Completed |
| 3 | <p>Technology inventory for the district</p> <p>Details of suitable technologies for a district with their details</p> | Completed |
| 4 | <p>Database for technologies assessed and refined Technologies taken up for assessment and refinement with their attributes</p> | In progress |
| 5 | <p>Frontline demonstrations database</p> <p>Details of crops and enterprises along with technologies identified for demonstration</p> | In progress |
| 6 | <p>Training database</p> <p>Details of training programmes across all categories and types of participants</p> | In progress |
| 7 | <p>Database of extension programmes</p> <p>Details of extension activities conducted with types of participants</p> | In progress |
| 8 | <p>Seeds and Planting material database</p> <p>Details of crops along with varieties produced and sold</p> | In progress |
| 9 | <p>KVK inventory of assets</p> <p>Details of inventions including all assets explaining year of purchase, present condition etc</p> | Completed |
| 10 | <p>KVK account database</p> <p>Various accounts along with their sanction, expenditure etc</p> | In progress |

13.G. Details on Rain Water Harvesting Structure and micro-irrigation system – Nil

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 Host Institute | State Bank of India | | | | | | |
| With KVK | State Bank of India | Vriddhachalam | 00954 | | 11074361787 | 000240 | SBIN0000954 |
| | State Bank of India | Vriddhachalam | 00954 | | 11074361743 | 000662 | SBIN0000954 |
| | State Bank of India | Vriddhachalam | 00954 | | 11074361754 | - | SBIN0000954 |

14.B. Utilization of KVK funds during the year 2012-13

| S. No. | Particulars | Sanctioned | Released | Expenditure |
|---------------------------------------|--|----------------|----------------|-----------------|
| A. Recurring Contingencies | | | | |
| 1 | Pay & Allowances | 7000000 | 7868622 | 8934337 |
| 2 | Traveling allowances | 160000 | 160000 | 159919 |
| 3 | | | | |
| <i>A</i> | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines) | 200000 | 200000 | 254648 |
| <i>B</i> | POL, repair of vehicles, tractor and equipments | 150000 | 150000 | 151162 |
| <i>C</i> | Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained) | 60000 | 60000 | 60000 |
| <i>D</i> | Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training) | 60000 | 60000 | 60000 |
| <i>E</i> | Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year) | 400000 | 400000 | 400000 |
| <i>F</i> | On farm testing (on need based, location specific and newly generated information in the major production systems of the area) | 45000 | 45000 | 45000 |
| <i>G</i> | Training of extension functionaries | 20000 | 20000 | 25000 |
| <i>H</i> | Maintenance of buildings | 20000 | 20000 | 23036 |
| <i>I</i> | Establishment of Soil, Plant & Water Testing Laboratory(Extension Activities) | 20000 | 20000 | 20000 |
| <i>J</i> | Farmers Field School | 25000 | 25000 | 25000 |
| <i>K</i> | Library (Purchase of Journal, News paper & Magazines) | - | - | - |
| | Total (Contingencies) | | | |
| TOTAL (A) | | 8160000 | 8160000 | 10158102 |
| B. Non-Recurring Contingencies | | | | |
| 1 | Furniture and furnishing | | | |
| a. | Plant Health Diagnostic Facility | | | |
| b. | Laser Guided Land | | | |
| TOTAL (B) | | | | |
| GRAND TOTAL (A+B) | | 8160000 | 8160000 | 10158102 |

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 2009 to March 2010 | 453133 | 83903 | 18426 | 518610 |
| April 2010 to March 2011 | 339008 | 452316 | 291441 | 499883 |
| April 2011 to March 2012 | 385069 | 1008667 | 594790 | 446711 |
| April 2012 to March, 2013 | 446711 | 433597 | 388548 | 491760 |

16. 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. K. Subramanian, | Then Programme Coordinator | Annual Review Workshop of KVKs of Zone VIII - 2011-12 | TANUVAS, Chennai | 07.06.12 to 10.06.12 |
| Dr.R.Arunachalam | Programme Coordinator | Orientation Programme of Technology Assessment and refinement and demonstrations | KVK, Hassan | 2.4.2013 to 5.4.2013 |
| Dr.V.Dhanushkodi | Assistant Professor (Soil Science and Agricultural Chemistry) | Orientation Programme of Technology Assessment and refinement and demonstrations | KVK, Hassan | 2.4.2013 to 5.4.2013 |
| Dr.V.Dhanushkodi | Assistant Professor (Soil Science and Agricultural Chemistry) | National seminar on TBOs | TNAU, Coimbatore | 4.10.12-5.10.12 |
| Dr. S. Haripriya | Assistant Professor (Horticulture) | Workshop on KVK – Net and VKVK at | ICRISAT, Hyderabad | 13.06.12 to 17.06.12 |
| Dr. S. Haripriya | Assistant Professor (Horticulture) | Communicating Science through Main stream Media Training | NAARM Hyderabad | 4 th Dec to 11 th Dec 2012. |
| Dr.V.Dhanushkodi | Assistant Professor (Soil Science and Agricultural Chemistry) | Training on Application of RS&GIS in agriculture | TNAU, Coimbatore | 8.10.12-12.10.12 |

| | | | | |
|--------------------|--|---|--|-----------------------------|
| Dr.S. Kannan | Assistant Professor (Home Science) | District level workshop by NABARD | Cuddalore | 6.11.2012 |
| Dr.M.Raju | Assistant Professor (Agronomy) | Orientation program on TARS & FLD | KVK, Mysore | 06.02.2012 to 12.02.2012 |
| Dr.V.Vijaya Geetha | Assistant Professor (Seed Science and technology) | Orientation program on TARS & FLD | KVK, Mysore | 06.02.2012 to 12.02.2012 |
| Dr.V.Dhanushkodi | Assistant Professor (Soil Science and Agricultural Chemistry) | National Seminar on “Eco-friendly recycling of solid wastes through composting” | Agricultural College & Research Institute, Madurai | MARCH 8-9, 2012 |

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

DROUGHT MITIGATION ACTIVITIES OF KVK, VRIDDHACHALAM
**Implementation of Chief Minister’s Special Package
to mitigate drought stress to save samba paddy in
Cuddalore District.**

The Cuddalore district is prone to frequent occurrence of natural calamities. Last year Thane Cyclone hit the Cuddalore district and devastated the entire green fields of Cuddalore district and this year the entire district is affected by severe drought. The Subject Matter Specialists of this Cuddalore KVK attend to the stress relief work every time during such circumstances.

This year in Cuddalore district samba paddy cultivation was in 52120 ha covering 5 blocks. BPT 5204, White Ponni, CR 1009, ADT 38, ADT 39 and CO 43 were the predominant paddy varieties and due to failure of monsoon and non availability of water in Veeranam lake nearly 10000 ha of Samba crop was affected.

The team of staff members of this KVK, comprising of , Dr. R. Arunachalam, Professor and Head, Dr. M. Raju, Dr. S. Kannan, Dr. V. Dhanushkodi, in hands with the team of scientists, of Regional Research Station, Vriddhachalam, Dr. R.S.Purushothaman, Professor and Head, Dr.C.Rajababu, Dr.A.Mothilal, Dr.V.Ambedkar commenced the implementation of drought mitigation strategies announced by the Hon’ble Chief Minister of Tamil Nadu. Different drought mitigation strategies were adopted. PPFM spray (Pink Pigmented Facultative Methylo-troph @ 200 ml/200 lit water/ac) and 1% KCL (MOP) foliar spray were given in the drought affected areas using boom sprayers and mini mobile sprinklers.

In few locations which were severely affected by drought, boom sprayers and mini mobile sprinklers were activity engaged in a war footing manner to spray water in the entire cropping area to save the crop. Totally this Vriddhachalam Sub center saved the Samba crop in an area of 5575 ac covering 1600 farmer beneficiaries. The entire work was carried out in close guidance and supervision of the Director (TRRI) and Director of Extension Education.

Sensitizing Scientists of Block level task force – Rabi compaign 2012 at KVK, Virdhachalam

The KVK, Vriddhachalam conducted one day programme on “Sensitizing Scientists of Block level task force Rabi Campaign 2012” for the scientists and department officials working in North Eastern districts on 16.11.2012. The programme was conducted to sensitize the recent technologies for rabi season crop cultivation in the state. The programme was inaugurated by Dr. P. Kalaiselvan, Director of Extension Education and the district Joint Director of Agriculture given the role of scientists in enriching the rabi compaign.

The lecture on rice and their latest crop cultivation technologies was delivered by the Dr. T. Jayaraj, Director of TRRI, Aduthurai and Dr. V. Ravi, TRRI, Aduthurai. The lecture on Pulses and their production technologies was given by Dr. S. Geetha, Professor and head, National Research Pulses Centre, Vamban and Oilseeds and latest technologies by Dr. R.Vaidyanathan, Professor and Head, RRS, Vridhachalam.

Besides, Horticultural interventions were given by Dr. T. Kalaimani, Professor and Head, Vegetable Research Station, Palur and management of pest and disease during Rabi season by Dr. T. Manoharan, Professor (Entomology). The lecture on natural resource management and custom hiring of farm machinery during rabi were also delivered to the participants.

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 |
|----------------------------------|-------------------------------------|--|---------------|
| Varietal popularisation | Rice | Paddy ADT(R) 49 seed production through farmers participatory approach | 10 |
| | Rice | Assessment of high yielding rice variety for rainfed ecosystem | 5 |
| | Onion | Integrated Crop Management for Co5 Onion | 5 |
| Crop improvement | Cumbu | Integrated Crop Management of Bajra (Cumbu) hybrid Co9 | 10 |
| | Red gram | Assessment of suitable varieties for transplated redgram | 5 |
| | Moringa | Assessment of the varietal performance of Annual Moringa PKM1 | 10 |
| | Maize | Integrated crop management practices for Maize Co 6 | 5 |
| Integrated Nutrient Management | Rice fallow blackgram | Improving productivity in rice fallow blackgram | 5 |
| | Ground nut | Assessment of sulphur oxidizing bacterial inoculants in groundnut | 2 |
| Integrated Pest Management | Cotton | Assessment of different approaches for the control of reddening in cotton | 5 |
| | Sugarcane | Integrated Weed management practices for controlling twining weeds in sugarcane | 5 |
| | Sugarcane | Sustainable Sugarcane Initiatives | 2 |
| Integrated Disease Management | Black gram | Integrated Crop Management in blackgram var VBN 6 | 5 |
| Resource Conservation Technology | Tapioca | Protray raised single budded Tapioca setts | 4 |
| | Cashew | Demonstration of Post-hole digger for planting cashew grafts in cashew plantation. | 2 |
| Seed / Plant production | Water melon | Introduction of watermelon as intercrop in moringa with IPM components | 5 |
| | Fish culture | Popularization of Carp farming in village ponds | 10 |
| Dairy farming | Dairy cows | Assessment of GRAND supplement in cross bred dairy cows | 20 cows |
| Integrated farming system | Crops, Goat, Poultry and Vermi unit | Popularization of suitable Integrated Farming System with crops and Fodder crop-Goat-Poultry-Vermiunit | 3 |
| Integrated farming system | Crop- Fish-Poultry | Integrated farming system | 2 units |

Summary of technologies assessed under livestock- Nil

Summary of technologies assessed under various enterprises- Nil

Summary of technologies assessed under home science- Nil

II. TECHNOLOGY REFINEMENT – Nil

Summary of technologies refined under various crops

Summary of technologies assessed under refinement of various livestock – Nil

Summary of technologies refined under various enterprises – Nil

Summary of technologies refined under home science - Nil

III. FRONTLINE DEMONSTRATION

5. B. Results of Frontline Demonstrations

5.B.1. Crops

| Crop | Name of the technology demonstrated | Variety | Hybrid | Farmin g situatio n | No. of De mo . | Area (ha) | Yield (q/ha) | | | | % Increas e | *Economics of demonstration (Rs./ha) | | | | *Economics of check (Rs./ha) | | | |
|----------------|---|---|-------------|------------------------------|----------------------------|--|---|------------|------------|-----------|-------------------|---|-----------------|-------------------|-----------|---------------------------------|-----------------|-------------------|---------------|
| | | | | | | | Demo | | | Chec k | | Gross Cost | Gross Return | Net Retu rn | ** BCR | Gross Cost | Gross Return | Net Retur n | ** BC R |
| | | | | | | | H | L | A | | | | | | | | | | |
| Paddy | Paddy ADT (R) 49 seed production through farmers participatory approach | Paddy ADT (R) 49 | - | Irrigate d | 29 | 2 ha | 43 | 25 | 35 | 28 | 25.00 | 18153 | 52500 | 34347 | 2.8 | 18250 | 40600 | 22350 | 2.2 |
| Blackgra m | Integrated Crop Management in blackgram var VBN 6 | VBN6 | | Irrigate d | 5 | 2 | 4.5 | 2.8 | 3.7 | 2.3 | 60.87 | 6230 | 22200 | 15970 | 3.56 | 5230 | 13800 | 8570 | 2.6 |
| Blackgra m | Improving productivity in rice fallow blackgram | LBG 532 | | Irrigate d | 5 | 2 | 5.4 | 3.8 | 4.6 | 3.2 | 43.75 | 14382 | 27600 | 18218 | 1.94 | 4360 | 19200 | 14840 | 1.3 |
| Onion | Integrated crop management for Co (On)5 Onion | -- | Co (On)5 | Irrigate d | 5 | 2 | 106 | 92 | 97 | 83 | 16.87 | 18450 | 56485 | 38035 | 3.6 | 17540 | 46450 | 28910 | 2.6 |
| Tapioca | Protray raised single budded Tapioca setts | Mulluvadi | -- | Irrigate d | 4 | 2 | 46 | 41.2 | 44.5 | 37.2 5 | 19.46 | 22450 | 63452 | 41002 | 2.82 | 26375 | 48657 | 21718 | 1.7 |
| Watermel on | Introduction of watermelon as intercrop in Moringa | Farmers choice for watermelon | -- | Irrigate d | 10 | 2 | 22 | 16.4 5 | 19.7 5 | 15.0 5 | 30.9 | 11460 | 46458 | 3499 8 | 4.05 | 9452 | 30753 | 21301 | 3.25 |
| Cashew | Demonstration of post hole digger for planting cashew grafts | Post hole digger with a cost Rs 78000/- | -- | -- | 5 | 2 | 80 pits | 80pit s | 80pit s | 7 pits | 91.25 | The machine was demonstrated | | | | | | | |
| Sugarcane | Integrated Weed management practices for controlling twining weeds in sugarcane | SI 7 | - | Irrig ated | 5 | 5 ha | Planting was taken up during November 2012 and now the crop is 6 month. | | | | | | | | | | | | |
| Sugarcane | Sustainable Sugarcane Initiatives | SI 7 | Drip | Irrigate d | 2 | Planting was completed on 17.9.12 .Now the crop is at nine month old stage. Trial is under progress | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | |
|----------------------------|--|---|--------|-------------------|----------|----------------------------------|------|-----|------|--------|------|--------|--------|--------|------|-------|-------|-------|------|
| Hybrid CO9 Cumbu | Popularization of Integrated Crop Management in Hybrid CO9 Cumbu | CO9 Hybrid | Hybrid | Rainfed/Irrigated | 20 | 5 | 3.5 | 2.5 | 3.0 | 2.5 | 16.6 | 18750 | 61250 | 42500 | 3.2 | 18750 | 38750 | 20000 | 2.0 |
| Maize | Integrated Crop Management of Maize hybrid Co6 | Co 6 hybrid | Hybrid | Irrigated | 5 | 2 | 12.2 | 9.2 | 11.5 | 8.6 | 25.2 | 8502 | 16524 | 8022 | 1.94 | 7936 | 12354 | 4418 | 1.5 |
| Carp farming | Popularization of Fish culture in village ponds | Cutla, Rogu, Mirgal, CC, Silver gentai | - | - | 10 | 600 m ² | 450 | 250 | 350 | 125 kg | 64.2 | 10,750 | 27,000 | 16,250 | 2.51 | 8,500 | 15000 | 65000 | 1.76 |
| Sustainable farming system | Popularization of sustainable Integrated Farming System with Crops and Fodder crop-Goat- Poultry- Vermi unit | Crops and Fodder crop-Goat- Poultry- Vermi unit | -- | -- | 2 | The experiment is under progress | | | | | | | | | | | | | |
| Integrated Farming System | Integrated Farming Systems (Two units) | All units | -- | -- | 2 | Trial is under progress | | | | | | | | | | | | | |
| Extrusion | Extrusion of vermicelli preparation | Ragi | - | - | 2 groups | 10 SHG | - | - | - | - | - | 81 | 300 | 219 | 3.7 | 41 | 100 | 59 | 2.4 |

* 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

Livestock - Nil

Fisheries - Nil

Other enterprises - Nil

Women empowerment – Nil

Farm implements and machinery - Nil

Other enterprises

| | | | | | | | | | | |
|---|-----|------|-----|------|-----|-----|------|------|-----|------|
| Breeding and culture of ornamental fishes | -- | -- | -- | -- | -- | -- | -- | -- | - | -- |
| Fish processing and value addition | -- | -- | -- | -- | -- | -- | -- | -- | - | -- |
| Production of Inputs at site | | | | | | | | | | |
| Seed Production | 1 | 44 | - | 44 | 6 | - | 6 | 44 | 6 | 50 |
| Planting material production | 2 | 2 | 30 | 10 | 40 | 12 | 30 | 42 | 40 | 82 |
| Vermi-compost production | 1 | 10 | - | 10 | 5 | -- | 5 | 15 | -- | 15 |
| Organic manures production | | | | | | | | | | |
| Mushroom production | 1 | 20 | - | 20 | 5 | - | 5 | 25 | - | 25 |
| Apiculture | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Capacity Building and Group Dynamics | | | | | | | | | | |
| Leadership development | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Entrepreneurial development of farmers/youths | 1 | 22 | - | 22 | 11 | - | 11 | 33 | - | 33 |
| TOTAL | 116 | 4373 | 576 | 4924 | 726 | 318 | 1017 | 5093 | 962 | 6005 |

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 | | | | | | | | | | |
| Weed Management | | | | | | | | | | |
| Resource Conservation Technologies | | | | | | | | | | |
| Cropping Systems | 1 | 5 | - | 5 | 5 | - | 5 | 10 | - | 10 |
| Crop Diversification | | | | | | | | | | |
| Integrated Farming | 2 | 5 | - | 5 | 2 | -- | 2 | 7 | - | 7 |
| Micro Irrigation/Irrigation | 2 | 10 | 5 | 15 | 2 | 3 | 5 | 12 | 8 | 20 |
| Seed production | 1 | 20 | - | 20 | 4 | - | 4 | 24 | - | 24 |
| Nursery management | | | | | | | | | | |
| Integrated Crop Management | 5 | 75 | 10 | 85 | 42 | 10 | 52 | 112 | 20 | 132 |
| Soil and Water Conservation | | | | | | | | | | |
| Integrated Nutrient Management | 2 | 12 | 8 | 20 | 5 | 4 | 9 | 17 | 17 | 34 |

| | | | | | | | | | | |
|--|----|-----|----|-----|----|----|----|-----|----|-----|
| Dairy Management | 2 | 5 | 2 | 7 | 1 | - | 1 | 6 | 2 | 8 |
| Poultry Management | 1 | 5 | 1 | 6 | - | - | - | 5 | 1 | 6 |
| Animal Nutrition Management | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Animal Disease Management | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Feed and Fodder technology | 1 | 20 | 2 | 22 | 5 | - | 5 | 25 | 2 | 27 |
| Home Science/Women empowerment | | | | | | | | | | |
| Minimization of nutrient loss in processing | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Processing and cooking | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Gender mainstreaming through SHGs | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Storage loss minimization techniques | 1 | 12 | 2 | 14 | 2 | -- | 2 | 14 | 4 | 18 |
| Value addition | 3 | 12 | 23 | 35 | 32 | - | 32 | 44 | 23 | 66 |
| Women empowerment | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Women and child care | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Agril. Engineering | | | | | | | | | | |
| Farm machinery and its maintenance | 1 | 5 | - | 5 | 2 | - | 2 | 7 | - | 7 |
| Installation and maintenance of micro irrigation systems | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Use of Plastics in farming practices | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Post Harvest Technology | 1 | 10 | 1 | 11 | 2 | - | 2 | 12 | 1 | 13 |
| Plant Protection | | | | | | | | | | |
| Integrated Pest Management | 2 | 24 | 3 | 27 | 5 | - | 5 | 29 | 3 | 32 |
| Integrated Disease Management | 2 | | | | | | | | | |
| Fisheries | | | | | | | | | | |
| Integrated fish farming | 2 | | | | | | | | | |
| Breeding and culture of ornamental fishes | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Fish processing and value addition | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Production of Inputs at site | | | | | | | | | | |
| Seed Production | 5 | 143 | 10 | 153 | 5 | 1 | 6 | 148 | 11 | 159 |
| Bio-fertilizer production | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Vermi-compost production | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |

| | | | | | | | | | | |
|---|----|-----|-----|------|-----|----|-----|------|-----|------|
| Mushroom production | 1 | 20 | -- | 20 | 7 | -- | 7 | 27 | -- | 27 |
| Apiculture | 1 | 13 | 2 | 15 | 4 | -- | 4 | 17 | 6 | 23 |
| Capacity Building and Group Dynamics | | | | | | | | | | |
| Leadership development | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Entrepreneurial development of farmers/youths | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| Agro-forestry | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
| TOTAL | 61 | 886 | 223 | 1099 | 252 | 66 | 318 | 1031 | 299 | 1428 |

Training for Rural Youths 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 |
| Nursery Management of Horticulture crops | 1 | 14 | 2 | 16 | 3 | -- | 3 | 17 | 2 | 19 |
| Training and pruning of orchards | - | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Protected cultivation of vegetable crops | 2 | 25 | 10 | 35 | 4 | -- | 4 | 29 | 10 | 39 |
| Commercial fruit production | 1 | 12 | 3 | 15 | 6 | 1 | 7 | 18 | 4 | 22 |
| Integrated farming | 3 | 37 | 5 | 42 | 4 | 2 | 6 | 41 | 7 | 48 |
| Production of organic inputs | 2 | 21 | 12 | 33 | 7 | 2 | 9 | 28 | 14 | 42 |
| Vermi-culture | 1 | 10 | 2 | 12 | 2 | -- | 2 | 12 | 2 | 14 |
| Mushroom production | 1 | 16 | 5 | 21 | 6 | -- | 6 | 22 | 5 | 27 |
| Bee-keeping | 1 | 17 | 3 | 20 | 5 | 2 | 7 | 22 | 3 | 25 |
| Value addition | 4 | 52 | 8 | 60 | - | -- | -- | 52 | 8 | 60 |
| Post Harvest Technology | 2 | 36 | 2 | 38 | 3 | 1 | 4 | 39 | 3 | 42 |
| Dairying | 1 | 8 | 1 | 9 | 2 | 2 | 4 | 10 | 3 | 13 |
| Sheep and goat rearing | 1 | 5 | 2 | 7 | 2 | 2 | 4 | 7 | 4 | 11 |
| Ornamental fisheries | - | - | -- | -- | -- | -- | -- | -- | -- | -- |
| Fish harvest and processing technology | - | - | -- | -- | -- | -- | -- | -- | -- | -- |
| TOTAL | 20 | 248 | 53 | 301 | 42 | 10 | 52 | 290 | 61 | 351 |

Training for Rural Youths 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 |
| Nursery Management of Horticulture crops | 2 | 34 | 5 | 39 | 12 | 3 | 15 | 46 | 8 | 54 |
| Training and pruning of orchards | -- | | -- | 0 | -- | -- | 0 | -- | -- | 0 |
| Protected cultivation of vegetable crops | 1 | 15 | 2 | 17 | 3 | 1 | 4 | 18 | 3 | 21 |
| Integrated farming | 2 | 20 | 3 | 23 | 8 | --- | 8 | 28 | 3 | 31 |
| Seed production | 1 | 20 | 6 | 26 | -- | -- | 0 | 20 | 6 | 26 |
| Production of organic inputs | 1 | 12 | 1 | 13 | 2 | -- | 2 | 14 | 12 | 26 |
| Vermi-culture | -- | -- | -- | 0 | -- | -- | 0 | -- | -- | 0 |
| Mushroom Production | 1 | 15 | 4 | 19 | -- | -- | 0 | 15 | 4 | 19 |
| Bee-keeping | 2 | 20 | -- | 20 | 6 | 1 | 7 | 26 | 1 | 27 |
| Sericulture | -- | -- | -- | 0 | -- | -- | 0 | -- | --- | 0 |
| Repair and maintenance of farm machinery and implements | 1 | 12 | -- | 12 | -- | --- | 0 | 12 | -- | 12 |
| Value addition | 3 | 43 | 12 | 55 | 12 | -- | 12 | 55 | 12 | 67 |
| Post Harvest Technology | 2 | 24 | 21 | 45 | -- | -- | 0 | 24 | 21 | 45 |
| Tailoring and Stitching | -- | -- | -- | 0 | -- | -- | 0 | -- | -- | 0 |
| Dairying | 1 | 15 | 3 | 18 | 3 | 1 | 4 | 18 | 4 | 22 |
| Sheep and goat rearing | 1 | 5 | 5 | 10 | 1 | -- | 1 | 6 | 5 | 11 |
| Poultry production | 1 | 12 | 3 | 15 | -- | -- | 0 | 12 | 3 | 15 |
| Ornamental fisheries | -- | -- | -- | 0 | --- | -- | 0 | -- | -- | 0 |
| Fish harvest and processing technology | -- | -- | -- | 0 | -- | -- | 0 | -- | -- | 0 |
| SSI | 5 | 76 | 42 | 118 | 26 | 10 | 36 | 102 | 52 | 154 |
| TOTAL | 24 | 323 | 107 | 430 | 73 | 16 | 89 | 396 | 134 | 530 |

Training programmes for Extension Personnel 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 |
| Productivity enhancement in field crops | 5 | 85 | 21 | 106 | 11 | 7 | 18 | 96 | 28 | 124 |
| Integrated Pest Management | 2 | 42 | 17 | 59 | 8 | 3 | 11 | 50 | 20 | 70 |
| Integrated Nutrient management | 2 | 36 | 19 | 55 | 3 | -- | 3 | 39 | 19 | 58 |
| Protected cultivation technology | 6 | 86 | 10 | 96 | 16 | 2 | 18 | 102 | 12 | 114 |
| Production and use of organic inputs | 3 | 62 | 20 | 82 | 8 | -- | 8 | 70 | 20 | 90 |
| Care and maintenance of farm machinery and implements | 1 | 12 | 8 | 20 | 2 | 1 | 3 | 14 | 9 | 23 |
| Gender mainstreaming through SHGs | -- | -- | -- | 0 | -- | --- | 0 | -- | -- | 0 |
| Formation and Management of SHGs | -- | -- | -- | 0 | -- | -- | 0 | -- | -- | 0 |
| Women and Child care | -- | -- | -- | 0 | -- | -- | 0 | -- | -- | 0 |
| Management in farm animals | 2 | 26 | 11 | 37 | 5 | 3 | 8 | 31 | 42 | 73 |
| Drip system and maintenance | 3 | 31 | 16 | 47 | 5 | -- | 5 | 36 | 16 | 52 |
| SSI | 5 | 126 | 42 | 168 | 14 | 12 | 26 | 140 | 54 | 194 |
| Total | 29 | 506 | 164 | 670 | 72 | 28 | 100 | 578 | 220 | 798 |

Training programmes for Extension Personnel 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 |
| Productivity enhancement in field crops | 3 | 10 | 12 | 22 | 2 | 1 | 3 | 12 | 13 | 25 |
| Integrated Pest Management | 1 | 24 | 21 | 45 | 3 | 2 | 5 | 27 | 23 | 50 |
| Integrated Nutrient management | 1 | 18 | 8 | 26 | 2 | -- | 2 | 20 | 8 | 28 |
| Protected cultivation technology | 2 | 32 | 6 | 38 | 10 | 1 | 11 | 42 | 7 | 49 |
| Production and use of organic inputs | 2 | 26 | 7 | 33 | 9 | 2 | 11 | 35 | 9 | 44 |
| Care and maintenance of farm machinery and implements | 1 | 16 | 10 | 26 | 2 | -- | 2 | 18 | 10 | 28 |
| Women and Child care | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Management in farm animals | 1 | 23 | 2 | 25 | 2 | 1 | 3 | 25 | 3 | 28 |
| Livestock feed and fodder production | 1 | 17 | 3 | 20 | 3 | 1 | 4 | 20 | 4 | 24 |

| | | | | | | | | | | |
|-----------------------------|----|-----|----|-----|----|----|----|-----|-----|-----|
| Drip system and maintenance | 1 | 12 | 5 | 17 | 1 | -- | 1 | 13 | 5 | 18 |
| SSI | 2 | 45 | 21 | 66 | 5 | -- | 5 | 50 | 21 | 71 |
| Total | 15 | 223 | 95 | 318 | 39 | 8 | 47 | 262 | 103 | 365 |

Sponsored training programmes conducted

| 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 | | | | | | | | | | |
| 1.a. | Increasing production and productivity of crops | 10 | 145 | 21 | 166 | 42 | 10 | 52 | 155 | 31 | 186 |
| | SSI | 7 | 30 | 2 | 32 | 12 | 2 | 14 | 42 | 4 | 46 |
| 3. | Soil health and fertility management | - | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 4 | Production of Inputs at site | 3 | 20 | 15 | 35 | 4 | 2 | 6 | 24 | 17 | 41 |
| | Total | 20 | 195 | 38 | 233 | 58 | 14 | 72 | 221 | 52 | 273 |

Details of sponsoring agencies involved

4. NADP (RKVY)- state governments sponsored- precision farming training for Agricultural and Horticultural crops sponsored.
5. NADP
6. TN-IAMWARM

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 | | | | | | | | | | |
| 1.a. | Commercial floriculture | 1 | 10 | 21 | 31 | 2 | 5 | 7 | 12 | 28 | 40 |
| 2.a. | Value addition | 2 | 32 | 8 | 40 | 10 | -- | 10 | 42 | 8 | 50 |
| 2.b. | Others (pl.specify) (banana fiber extraction) | 1 | 14 | 2 | 16 | - | - | - | 14 | 2 | 16 |
| 4. | Income generation activities | | | | | | | | | | |
| 4.a. | Vermi-composting | 1 | 21 | 3 | 24 | 1 | - | 1 | 22 | 3 | 25 |
| 4.e. | Seed production | 2 | 52 | 21 | 73 | 2 | 1 | 3 | 54 | 22 | 76 |
| 4.k. | Mushroom production | 1 | 20 | -- | 20 | 5 | - | 5 | 25 | -- | 25 |
| 5 | Agricultural Extension | | | | | | | | | | |
| | Grand Total | 8 | 149 | 55 | 204 | 20 | 6 | 26 | 169 | 63 | 232 |

PART VIII – EXTENSION ACTIVITIES**Extension Programmes (including extension activities undertaken in FLD programmes)**

| Nature of Extension Programme | No. of Programme | No. of Participants (General) | | | No. of Participants SC / ST | | | No. of extension personnel | | |
|--|------------------|-------------------------------|--------|-------|-----------------------------|--------|-------|----------------------------|--------|-------|
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Field Day | 32 | 281 | 236 | 517 | 217 | 183 | 400 | 112 | 62 | 174 |
| Kisan Mela | 2 | 123 | 92 | 215 | 70 | 32 | 102 | 108 | 107 | 215 |
| Kisan Ghosthi | | - | - | - | - | - | - | - | - | - |
| Exhibition | 23 | 512 | 208 | 720 | 402 | 280 | 682 | 180 | 147 | 327 |
| Film Show | 17 | 215 | 110 | 325 | 40 | 12 | 52 | 255 | 122 | 317 |
| Method Demonstrations | 171 | 2113 | 1010 | 3123 | 810 | 713 | 1523 | 182 | 38 | 220 |
| Farmers Seminar | 5 | 242 | 102 | 346 | 136 | 80 | 216 | 30 | 15 | 45 |
| Workshop | 10 | 75 | 30 | 105 | 36 | 55 | 111 | 47 | 25 | 72 |
| Group meetings | 27 | 1156 | 765 | 1921 | 497 | 328 | 825 | 215 | 152 | 367 |
| Lectures delivered as resource persons | 37 | 1120 | 850 | 1970 | 254 | 270 | 524 | 112 | 85 | 197 |
| Newspaper coverage | 42 | - | - | - | - | - | - | - | - | 24 |
| Radio talks | 12 | - | - | - | - | - | - | - | - | 10 |
| TV talks | 3 | - | - | - | - | - | - | - | - | - |
| Popular articles | 16 | - | - | - | - | - | - | - | - | - |
| Extension Literature | 38 | - | - | - | - | - | - | - | - | 10 |
| Advisory Services | 149 | 4140 | 2915 | 7139 | 1204 | 246 | 1450 | 210 | 85 | 295 |
| Scientific visit to farmers field | 138 | 425 | 112 | 537 | 125 | 45 | 170 | 40 | 22 | 62 |
| Farmers visit to KVK | - | 757 | 93 | 850 | 183 | 55 | 238 | 46 | 38 | 84 |
| Diagnostic visits | 202 | 1023 | 189 | 1212 | 135 | 48 | 183 | 15 | 10 | 25 |
| Exposure visits | 30 | 720 | 28 | 748 | 45 | 7 | 52 | 12 | 7 | 19 |
| Ex-trainees Sammelan | - | - | - | - | - | - | - | - | - | - |
| Soil health Camp | 22 | 750 | 125 | 875 | 125 | 47 | 172 | 120 | 42 | 162 |
| Animal Health Camp | 1 | 25 | 3 | 28 | 2 | 4 | 6 | 2 | - | 2 |
| Soil test campaigns | 13 | 450 | 240 | 690 | 180 | 126 | 206 | 42 | 27 | 69 |
| Farm Science Club Conveners meet | 14 | 112 | 52 | 164 | 75 | 34 | 109 | - | -- | - |
| Self Help | 23 | 652 | 423 | 1075 | 247 | 120 | 367 | -- | -- | -- |

| | | | | | | | | | | |
|---|------|---------------|------|-------|------|------|------|------|-----|------|
| Group Conveners - meetings | | | | | | | | | | |
| Mahila Mandals Conveners meetings | - | - | - | - | - | - | - | - | - | - |
| Celebration of important days (specify) | 2 | mass audience | | | | | | | | |
| Total | 1027 | 14891 | 7583 | 22560 | 4783 | 2685 | 7388 | 1728 | 984 | 2756 |

Details of sponsoring agencies involved

1. NADP (RKVY)- state governments sponsored- precision farming training for Agricultural and Horticultural crops sponsored.
2. NADP
3. ATMA
4. TN-IAMWARM

1. NADP-Precision Farming

The training programme on precision farming technology for Agriculture and horticultural crops were organized to Cuddalore and Villupuram district farmers. In this programme 510 Agricultural farmers and 742 horticultural farmers were participated and benefitted during this programme. Field visits/Exposure visits also arranged during the training programme.

2. Agricultural Technology Management

ATMA was implemented in Cuddalore district from the financial year (2007-08). The orientation workshop for newly ATMA implemented district was conducted by Directorate of Agriculture, Government of Tamil Nadu during 22-23rd, August, 2007 at Vellore. SREP training was conducted to trainers during 22.10.07 to 27.10.07. ATMA implementing team meeting was conducted to prepare the action plan for the year 2008-09 at Joint Director of Agriculture office, Cuddalore. Agro Ecological Situation for Cuddalore district was also formed. During the period under report the following activities were taken up.

1. Monthly meeting of ATMA Block level technology team: All the thirteen block level officers conducted the monthly meetings in which KVK scientists participated. Totally **39** meetings were conducted.
2. District Advisory and Governing Board Meetings: Five meetings were conducted in which the Programme Coordinator participated as member
3. Completion of SREP: The KVK assisted in completion of SREP and document was submitted to State Level Committee.

4. Empowerment programmes under ATMA: The scientists of KVK in each Block level technology team participated in technology transfer programmes.

5. Facilitation of Exposure Visits: Exposure visits were arranged by the KVK for 4 Block farmers to State and National Level institutes, besides exposure visits to 11 KVKs in Tamil Nadu, Karnataka and Kerala.

6. AES delineation: As per request of the District machinery, separate meeting was conducted for AES delineation in which scientists of KVK, Regional Research Station, Vriddhachalam participated.

3. TN - IAMWARM

III phase IAMWARM project is being implemented by this kendra in the Gomukhinadhi sub basin which covers both Cuddalore and Villupam Districts. The total ayacut area is about 570 .83 and 7197.95 ha in Cuddalore and Villupam District respectively. The walk through survey and DPR preparation was completed.

Project Report prepared for Gomukhinadhi sub basin is submitted to Project Director (TN-IAMWARM), MDPU, Chennai has been approved by the World Bank and purchase is in progress.

Progress of TN – IAMWARM scheme

| S. No | Name of the component | Subsidy per ha | Physical Unit (ha) | Target | | Achievement | | Remark |
|---|------------------------------|----------------|--------------------|---------------|-----------|---------------|-----------|---|
| | | | | Physical (ha) | Financial | Physical (ha) | Financial | |
| A. Technology mode | | | | | | | | |
| 1 | IPT in GL pulses | 2500 | 55 | 55 | 1.38 | 55 | 1.38 | Demonstration was completed. The documentation is under progress. |
| 2 | IPT in cotton | 6750 | 30 | 30 | 2.03 | 30 | 2.03 | |
| 3 | IPT in groundnut | 4000 | 20 | 20 | 0.80 | 20 | 0.80 | |
| B. Mission Mode | | | | | | | | |
| 1 | Green manure-SRI - RF pulses | 9000 | 12 | 12 | 1.08 | 12 | 1.08 | Demonstration was completed. The documentation is under progress. |
| 2 | SRI- RF pulses | 7500 | 45 | 45 | 3.38 | 45 | 3.38 | |
| 3 | PF in turmeric | 35750 | 8 | 8 | 5.70 | 8 | - | Drip installation was completed |
| 4 | PF in banana | 32370 | 5 | 5 | 5.99 | 5 | 5.99 | Crop at establishment stage |
| 5 | PF in sugarcane | 37440 | 15 | 15 | 10.55 | 15 | 10.55 | Crop tillering stage (4 - 6 months old) |
| 6 | Soil testing charges | | | | 0.10 | | | |
| C. Implements for farm mechanization | | | | | | | | |

| | | | | | | | | |
|-----------|--|--|-----|-----|--------------|---|-------|-----------------------------------|
| 1 | Weeder Demo | | 114 | 114 | 0.97 | - | - | |
| 2 | SRI marker | | 12 | 12 | 0.07 | - | - | |
| D. | Information, Education and Communication measures | | | | | | | |
| 1 | Field days | | 10 | 10 | 0.30 | 4 | 0.12 | - |
| 2 | Awareness creation | | | | 0.50 | | 0.27 | - |
| 3 | Training | | | | 0.60 | | 0.515 | -- |
| 4 | Outsourcing charges on vehicles | | | | 0.60 | 1 | 0.536 | - |
| E. | Capacity building | | | | 1.00 | 1 | 1.00 | Exposure visit to TNAU Coimbatore |
| F. | Management cost | | | | 3.51 | | 3.51 | |
| | Total | | | | 38.55 | | | |

Details of other extension programmes

| Particulars | Number |
|---|-----------|
| Electronic Media | 6 |
| Extension Literature | 4 |
| News Letter | - |
| News paper coverage | 41 |
| Technical Articles | 8 |
| Technical Bulletins | - |
| Technical Reports | 6 |
| Radio Talks | 13 |
| TV Talks | 2 |
| Animal health camps (Number of animals treated) | 1 |
| Others (pl.specify) | - |
| Total | 81 |

VII. PRODUCTION OF SEED/PLANTING MATERIAL

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 |
|-------------------|------------------|---------|--------|------------------------|------------|------------------------------------|
| Fodder crop seeds | Cumbu Napier | Co 4 | - | 20000 Nos | 10000 | 55 |
| Total | | | | | 10000 | 55 |

Production of planting materials by the KVKs

| Crop category | Name of the crop | Variety | Hybrid | Number | Value (Rs.) | Number of farmers to whom provided |
|----------------------|--------------------|-----------|--------|--------|--------------|------------------------------------|
| Commercial | Cashew grafts | VRI 3 | - | 2905 | 52290 | 150 |
| | Sugar cane setts | SI 7 | - | 7 tons | 17500.00 | 50 |
| Vegetables | Brinjal | Palur 2 | - | 2200 | 1100 | 100 |
| Fruits | Jack grafts | Palur 1 | - | 24 | 1200 | 104 |
| Fodder crop saplings | Cumbu napier grass | Co 4 | - | 20000 | 10000 | 55 |
| Others(specify) | Red gram seedling | Co (Rg) 7 | - | 6000 | 9000 | 35 |
| Total | | | | | 91090 | 452 |

c. Production of Bio-Products

| Bio Products | Name of the bio-product | Quantity Kg | Value (Rs.) | Number of farmers to whom provided |
|------------------|-------------------------|---------------|-------------|------------------------------------|
| Others (specify) | Vermicompost | 580 Kg | 2900 | 55 |
| Total | | 580 Kg | 2900 | 55 |

d. Production of livestock materials

| Particulars of Live stock | Name of the breed | Number | Value (Rs.) | Number of farmers to whom provided |
|---------------------------|-------------------|----------|--------------|------------------------------------|
| Others (Pl. specify) | Thalacherry goat | 4 | 26200 | 4 |
| Total | | 4 | 26200 | 4 |

VIII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS 2012-13

| Samples | No. of Samples | No. of Farmers | No. of Villages | Amount realized (Rs.) |
|---------------------|----------------|----------------|-----------------|-----------------------|
| Soil | 550 | 425 | 48 | 13750 |
| Water | 465 | 442 | 42 | 4650 |
| Plant | -- | -- | -- | -- |
| Manure | --- | ---- | --- | --- |
| Others (pl.specify) | --- | --- | --- | --- |
| Total | 1015 | 867 | 90 | 18400 |

VIII. SCIENTIFIC ADVISORY COMMITTEE

| |
|---------------------------------|
| Number of SACs conducted |
| 1 SAC (12.04.2012) |

IX. NEWSLETTER

| |
|---|
| Number of issues of newsletter published |
| News letters 4 issues |

X. RESEARCH PAPER PUBLISHED

Number of research paper published - 10 (Details furnished below)

Research Articles

1. Dhanushkodi, V. and M.Kannathasan.2012. Importance of industrial waste in maximizing the yield of rice and its effect of soil fertility in coastal region. International Journal of Research In Chemistry and Environment, 2(3) : pp.21-25.
2. Dhanushkodi, V. and M.Kannathasan.2012. Soil Management to Increase Rice Yield in Salt affected Coastal Soil - A Review. International Journal of Research In Chemistry and Environment, 2(4):.1-5
3. Dhanushkodi, V., K.Subrahmaniyan and V.Vaithiyanathan. 2012. Importance of Pulse wonder in Blackgram, Ulavarin Valarum Velanmai, Febraury, 2012 Published by The DEE,TNAU. Coimbatore, PP No. 54-55
4. Dhanushkodi. V, and M. Kannathasan. 2011. “Effect of integrated application of nutrients on soil microbiological properties and yield of rice on coastal saline soils of Ramanathapuram district in Tamil Nadu”, In proceeding of National seminar on Soil health improvement for enhancing crop productivity during 17-18th March 2011at TNAU, Coimbatore, Page No.30
5. Dhanushkodi. V, S.Kannan, V.Vijayageetha and K. Subrahmaniyan. 2011. Supplementation of are specific mineral mixture –A case study, In Compendium on National seminar on “Innovations in farming systems research and extension for inclusive development held at TANUVAS, Chennai on 24-24th, Pp.203-204.
6. Vijayageetha, V.,V.Dhanushkodi,, S.Kannan and K. Subrahmaniyan. 2011. Suitability of Nanthanam 1 turkey for backyard poultry in Cuddalore district, In Compendium on National seminar on “Innovations in farming systems research and extension for inclusive development held at TANUVAS, Chennai on 24-24th, November 2011. Pp.204
7. Kannan,S., V.Vijayageetha V.Dhanushkodi, and K. Subrahmaniyan. 2011. Increasing the socio economics status of farming community through rhodo white chicken, In Compendium on National seminar on “Innovations in farming systems research and extension for inclusive development held at TANUVAS, Chennai on 24-24th, November 2011. Pp.203

8. Dhanushkodi. V and K. Subrahmaniyan. 2012. Vermicomposting is an alternate source of income-A success story, National seminar on recycling of solid waste through composting, March 8-9, 2012 Held at AC&RI, Madurai. Pp.106
9. Dhanushkodi. V and K. Subrahmaniyan. 2012. An easy way to compost coirpith-A demonstration, National seminar on recycling of solid waste through composting, March 8-9, 2012 Held at AC&RI, Madurai.pp.107
10. Dhanushkodi. V.,C.Rajababu and K. Subrahmaniyan. 2012. Jatropha curcas-A multipurpose tree. In. proceeding of the national seminar on Production, utilization and marketing of tree born oil seeds held at AC&RI, Madurai, 4&5th, 2012 (Volume 2), P25.

XI. DETAILS ON RAIN WATER HARVESTING STRUCTURE AND MICRO-IRRIGATION SYSTEM (Trials are being continued from 2011-12)

Micro irrigation system under Precision Farming in TN-IAMWARM Scheme (2012-13)

| Activities conducted | | | | |
|-----------------------------------|-----------------------------------|--|-------------------------------|---------------------------------|
| No. of Training programmes | No. of Demonstrations (ha) | No. of plant materials produced | Visit by farmers (No.) | Visit by officials (No.) |
| Sugarcane | 40 | - | 55 | 12 |
| Banana | 5 | - | 42 | 10 |
| Turmeric | 13 | - | 27 | 5 |
| Tapioca | 5 | - | 62 | 10 |
| Total | 63 | - | 186 | 37 |

-----XXXXXXXX-----