**ICAR ZONAL PROJECT DIRECTORATE - ZONE VIII**

**ICAR, HEBBAL, BENGALURU**

**ACTION PLAN 2017-18**

###### 1. General information about the Krishi Vigyan Kendra

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| --- | --- | --- | --- |
| 1.1 | Name and address of KVK with Phone, Fax and e-mail | : | **ICAR - Krishi Vigyan Kendra,**Bapooji Sevak Samaj,Pethotty P.O, Santhanpara, Idukki (Dt.), Kerala, PIN-685619. Email: *kvksanthanpara@gmail.com*Web URL: *www.kvkidukki.org* |
| 1.2 | Name and address of host organization  | : | **Bapooji Sevak Samaj,**Kakkattu House, Meenadom P.O.,Pampady, Kottayam (Dt.), Pin-686 516, Kerala.Phone: 0481-2506271, Mob: 9656711554Email: *bkvkchairperson@gmail.com* |
| 1.3 | Year of sanction | : | 1994 |
| 1.4 | Website address of KVK and date of last update |  | [*www.kvkidukki.org*](http://www.kvkidukki.org)(08/03/2017) |

**2. Details of staff as on 01-02-2017**

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| **Sl.****No.** | **Sanctioned post** | **Name of the incumbent** | **Discipline** | **Existing Pay band** | **Grade Pay** | **Date of joining** | **Permanent / Temporary** |
| 2.1 | **Programme Coordinator** | **Vacant** | **-** | **-** | **-** | **-** | **-** |
| 2.2 | Subject Matter Specialist  | Dr. S. Jayababu | S.M.S. (Animal Science) | 15600-39100 | 5400 | 19-06-1995 | Permanent |
| 2.3 | Subject Matter Specialist  | Manju Jincy Varghese | S.M.S. (Soil Science) | 15600-39100 | 5400 | 10-01-2011 | Permanent |
| 2.4 | **Subject Matter Specialist**  | **Vacant** | **Agricultural Extension** | **-** | **-** | **-** | **-** |
| 2.5 | **Subject Matter Specialist**  | **Vacant** | **Agronomy** | **-** | **-** | **-** | **-** |
| 2.6 | Subject Matter Specialist  | Dr. Binu John Sam | S.M.S. (Horticulture) | 15600-39100 | 5400 | 17-01-2011 | Permanent |
| 2.7 | Subject Matter Specialist  | Sudhakar Soundarajan | S.M.S. (Plant Protection) | 15600-39100 | 5400 | 27-01-2011 | Permanent |
| 2.8 | Programme Assistant | Jayisy Joseph | Programme Assistant (Home Science) | 9300-34800 | 4200 | 20-06-1995 | Permanent |
| 2.9 | Computer Programmer | Biju Narayanan | Programme Assistant (Computer) | 9300-34800 | 4200 | 01-10-2007 | Permanent |
| 2.10 | Programme Assistant | Rachel Skariakutty | Programme Assistant (Rural Craft) | 9300-34800 | 4200 | 05-06-1995 | Permanent |
| 2.11 | Accountant/Superintendent | Shaji K. Kakkattu | - | 9300-34800 | 4200 | 05-06-1995 | Permanent |
| 2.12 | Stenographer | Daisy Daniel | - | 5200-20200 | 1900 | 05-06-1995 | Permanent |
| 2.13 | Driver 1 | P. Nandagopal | - | 5200-20200 | 2000 | 05-06-1995 | Permanent |
| 2.14 | Peon/Messenger | K.T. Mathew | - | 5200-20200 | 1800 | 05-06-1995 | Permanent |
| 2.15 | Supporting staff 1 | K.O. Jose | - | 5200-20200 | 1800 | 05-06-1995 | Permanent |
| 2.16 | Supporting staff 2 | P. Sabu | - | 5200-20200 | 1800 | 05-06-1995 | Permanent |

**3. Details of SAC meeting conducted during 2016-17**

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| --- | --- | --- | --- | --- |
| **S. No.** | **Recommendation**  | **Proposed by**  | **Action Taken (to be quantified)** | **Specific constraints in taking action / for not taking action**  |
| 1. | * More concentration on Soil Testing, and Skill Development
 | Dr. B.T. Rayudu, Principal Scientist, Zonal Project Directorate, Zone-VIII, Bengaluru | * More emphasis was given to soil testing. Soil Health Campaigns were conducted. World Soil Day was observed. A special drive with the support of Radio Tracer Lab, KAU and ICRI, Myladumpara could result in issuing soil health cards for 147 samples
* Exposure visits to KVK Kannur and Malappuram were organized as a part of cross learning
 | * We lack facilities for testing micro-nutrients, which is the need of the hour

  |
| 2. | * Make sure the progressive farmers to adopt soil testing, soil conservation measures and also soil tested based recommendations
* Select the need based technology which is suitable for concerned district
* OFT/FLD should be firstly tested in KVK,then go to field.
* Start SMS service to farmers.
 | **Dr. S Helen,** Associate Professor, CTI, KAU, Mannuthy, Thrissur representing The Director of Extension, KAU, Thrissur | * Same as detailed above
* Awareness programmes on soil and water conservation has been taken up by our KVK and the same has been well documented in the newspaper and TV
* FLDs and OFTs for the year 2016-17 were meticulously planned taking into account of the need based technology and the same are being implemented
* Every OFT/FLD is being tested in KVK now
* Farmers are resorting to much advanced social media like Whatsapp for addressing their problems
 |  |
| 3. | * Requested KVK to promote all available newer technologies for promoting organic vegetable production in the district
 | **Ms. Ushakumari P.G.,** Principal Agricultural Officer i/c. | * Different collaborative programmes have been carried out by KVK and the department of agriculture for promoting organic vegetable production in the district
* A Bio-Hub has been started in KVK where mass production of 34 bio agents are planned
* A Karshaka Seva Kendram has been started with the financial support of the State Department of Agriculture and Farmers’ Welfare, where low cost on farm production of bio inputs are being done
 | - |
| 4 | * Prevention and control of Mastitis Disease should be conducted as OFT by using different medicines.
 | **Dr. P.V. Narendran,** Deputy Project Director, ATMA, Idukki | * OFT was presented, approved by ATARI and implemented involving four different treatments
1. Chalk powder mixed with Lemon juice
2. Redovet powder mixed with egg white
3. Premast powder 50 g daily for 20 days before and after calving
4. 20 ml of Dipol Solution mixed with 1 litre of water by using Teat Cup for teat dipping
 | **-** |
| 5 | * Package of Practices for Organic Agriculture should be prepared based on agro climatic conditions.
 | **Smt. Bindu Chandran,** Deputy Manager, VFPCK, Adimali | * KVK is in the pursuit of developing Package of Practices for Organic Agriculture for different crops of the region. Taking into account of the fact that shifting to organic agriculture can result into a reduction in initial yield, we can conclude the results only after 3-4 years of continuous observations
 | **-** |
| 6 | * KVK should tie up with Nehru Yuva Kendra for conducting training to youth
 | **Mr. Harilal,** District Coordinator, Nehru Yuva Kendra, Idukki | * Different training programmes are being conducted for rural youth Nehru Yuva Kendra can make use of the expertise of KVK team for any such trainings related to agriculture and allied fields.
 | Lack of experts in some vocations |
| 7 | * Vacant posts of Programme Coordinator and Subject Matter Specialist (Agronomy) to be filled immediately
 | **Mr. P R Thomas,** Vice Chairman, BSS | * Applications received has been forwarded to ATARI, Bengaluru for further action
 | - |
| 8 | * Make more awareness and publicity while conducting training programme in collaboration with Spices Board.
* Make sure the farmers for necessary and importance of soil testing
* Awareness on food safety.
 | **Dr. Johncy Manithottam,** Assistant Director, Spices Board, Nedumkandam | * Spices Board as a collateral institution working for the benefit of farmers in Idukki has been supported by KVK Idukki for the yester years and shall be for many years to come. This year, five trainings have been chalked out on-field based on their request on different topics relevant to that area.
* Placing our gratitude for the suggestion and the same has been addressed before
* Food processing cannot be in our main front as of now, but general food safety measures are being inculcated in all the training programmes conducted by the Processing Unit of KVK, including measures for obtaining FSSAI license and other food safety related issues
 |  |
| 9 | * Commercialize Nutmeg and Thulasi value added products with the help of KVK.
 | **Mr. Baby Mathew,** Farmer, Thodupuzha | * Nutmeg rind which was erstwhile being wasted is now being commercially promoted as value added products by the interventions of KVK. Products like Nutmeg rind Jelly, pickle, jam, extracts and candies are now being marketed.
* Thulasi extract has been the master head of the Processing Unit of KVK, Idukki, but it has its limitations for commercial promotion.
 | - |
| 10 | * Promote Organic Agriculture Package of Practice should be created
 | **Mr. Baby Theverkattu,**Theverkattu,Farmer & Board Member (BSS), Rajakumary | * Addressed before
 |  |
| 11 | * For giving technical advice to farmers KVK should establish Agro Meteorological Service centre.
* Conduct soil health survey and make the farmers to do soil testing for promoting the importance of micro nutrient in soil health.
* KVK Home Science Scientist to be depute HRD Training Programme to IICPT, Thanjavur.
 | **Mr. Senthil Kumaran,** Field Officer, Spices Board, Santhanpara | * KVK Idukki do not have meteorological equipments as of now, though we had knocked many doors. This data is very much essential for any crop related forecasting particularly in conditions of Idukki district. We request ATARI to favour us on this as this is of utmost importance.
* Addressed before
* Shall depute the person as and when the relevant training is scheduled by IICPT, Thanjavur.
 | **-** |
| 12 | * More number of training programmes to be conducted jointly with Dept of Agriculture for the farming community.
* Promote Organic Agriculture
* Bring back Rural Youth to Agriculture.
 | **Mr. T.D. Varkey,** Best IPDM Farmer | * The number of training programmes collaborating with the state department of agriculture have been increased to several times as of yester years in spite of our busy schedule. trainings have been conducted off campus as a result of this
* Addressed before
* Addressed before. KVK Idukki is into smart agriculture with the same motive
 | **-** |

**4. Capacity Building of KVK Staff**

**4.1. Plan of Human Resource Development of KVK personnel during 2017-18**

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| --- | --- | --- | --- |
| **S. No** | **New Areas of Training** | **Institution proposed to attend** | **Justification** |
| 4.1.1 | IPDM in Cardamom and Black pepper | IISR-Calicut | To update knowledge on IPDM in Cardamom and Black pepper |
| 4.1.2 | IPDM in Cool season vegetables |  IIHR-Bangalore  | Advances in IPDM of cool season vegetables |
| 4.1.3 | Recent Advances in Bio-fertilizersand Bio-fungicides for Sustainable Agriculture | NCIPM-New Delhi | Advances in Bio-fertilizers and Bio-fungicides  |
| 4.1.4 |  |  |  |

**4.2. Cross-learning across KVKs during 2017-18**

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| --- | --- | --- |
| **S. No.** | **Name of the KVK proposed**  | **Specific learning areas** |
| **4.2.1** | **Within ring –** KVK Thrissur & Ernakulam | Vegetable seed production |
| **4.2.2** | **Within the zone –** KVK, Namakkal & Erode | New trends in livestock and fodder production |
| **4.2.3** | **Outside zone –** KVK Srinagar, Pondicherry, Goa & Guwahati | Temperate fruits, hi-tech horticulture, piggery production technologies |

**5. Proposed cluster of KVKs (3 to 5 neighboring KVKs) to be formed for sharing knowledge/expertise, resources and activities during 2017-18**

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No.** | **Name of the KVKs included in the cluster** | **What do you intend to share with Cluster KVKs** | **What do you expect from Cluster KVKs** |
| 5.1 | KVK Thrissur | Advanced information on spice crops & its value addition | Vegetable seed production |
| 5.2 | KVK Ernakulam | Advanced information on spice crops & its value addition | Vegetable top up technology, technology transfer on fisheries |
| 5.3 | KVK Alappuzha | Advanced information on spice crops & its value addition | NICRA project |

**6. Operational areas details proposed during 2017-18**

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| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Major crops & enterprises being practiced in cluster villages** | **Prioritized problems in these crops/ enterprise** | **Extent of area (Ha/No.) affected by the problem in the district** | **Names of Cluster Villages identified for intervention** | **Proposed Intervention (OFT, FLD, Training, extension activity etc.)\*** |
| 6.1 | Cardamom | Indiscriminate use of PPC | 100 ha | Udumbanchola | OFT |
| 6.2 | Cardamom | Indiscriminate use of PPC | 200 ha | Santhanpara | Training & extension activity |
| 6.3 | Black pepper | Heavy dosage of fungicides are applied for the control of quick wilt | 60 ha | Santhanpara | FLD Training & extension activity |
| 6.4 | Cowpea  | Indiscriminate use of PPC | 70 ha | Rajakumary | OFT |
| 6.5 | Cowpea | Severe incidence of sucking pests. | 45 ha | Rajakumary | OFT |
| 6.6 | Bitter gourd  | Heavy dosage of fungicides are applied for the control of downy mildew | 200 ha | Kattappana, Idukki and Adimali | OFT |
| 6.7 | Vegetables | Famers unawareness of ecological engineering for pest management | 50 ha | Devikulam and Peermade | FLD |
| 6.8 | Cardamom | Crop loss due to wild animal attack | 300 ha | Santhanpara, Udumbanchola,Devikulam and Peermade | FLD |
| 6.9 | Banana | Severe incidence of Panama wilt in banana | 150 ha | Rajakumary | FLD |
| 6.10 | Mushroom | Low availability of paddy straw | 0.01 ha | Rajakumary | FLD |
| 6.11 | Cowpea | Good varieties | 0.02 ha | Santhanpara | OFT |
| 6.12 | Jack fruit | Jack wastage in season | 3 units | Kattappana | EDP trainings |
| 6.13 | Strawberry | 1) Fruits are perishable 2) Fruit damage | 5 units | Chinnakkanal, Sooryanelli, Munnar | FLD, Field visit, Trainings  |
| 6.14 | Bitter Gourd | 1) Low market rate2) Spoilage in season | 3 units | Kozhimala, Santhanpara  | EDP Trainings, field visit |
| 6.15 | Dairy cattle, goat , poultry & Mixed Fodder | 1) Poor growth performance2) Low body weight3) Unaware of new technologies4) Low milk, Egg & meat production | Above 300 nos. | Rajakumary | OFT,FLD, Training & extension activities |

\* Support with problem-cause and interventions diagram

**7. Technology Assessment during 2017-18**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Crop/ enterprise** | **Prioritized problem** | **Title of intervention** | **Technology options** | **Source of Technology** | **Name of critical input** | **Qty per trial** | **Cost per trial** | **No. of trials** | **Total cost for the** **intervention (Rs.)** | **Parameters to be studied** | **Team members**  |
| 7.1 | Cardamom | Heavy infestation of stem and capsule borer leading to heavy usage of PPC | Assessment of different bio-pesticides and parasites against cardamom stem and capsule borer , *Conogethes punctiferalis* | 1. Farmers practice (Recommended Insecticides ) | - | - | - | - | 5 | - | - | Mr. SudhakarSoundarajan (SMS-Plant Protection) & Dr. Binu John Sam (SMS-Horticulture) |
| 2. Spray of *Bacillus thuringiensis @* 2g/lit | ICRI | *Bacillus thuringiensis* | 2 kg | 700.00 | 3500.00 | 1.Per cent reduction over control 2.Per cent parasitism 3.Yield |
| 3. Spray of *Beauveria bassiana @* 5g/lit | *Beauveria bassiana* | 4 kg  | 400.00 | 2000.00 |
| 4. Release of *Apanteles sp @* 20,000/ha | *Apanteles* | 4000 nos. | 750.00 | 3750.00 |
| 5. Release of *Friona sp @* 20,000/ha | *Friona* | 4000 nos. | 800.00 | 4000.00 |
|  |  |  |  |  |  |  |  |  | **Total**  | **13,250.00** |  |  |
| 7.2 | Cowpea | Heavy dosage of fungicides are applied for the control of cowpea anthracnose  | Biological control of cowpea anthracnose disease, *Colletotrichum destructivum*  | 1. Farmers practice (Recommended Fungicides) | - | - | - | - | 5 | - | - | Mr. SudhakarSoundarajan (SMS-Plant Protection) & Dr. Binu John Sam (SMS-Horticulture) |
| *2. Pichia guilliermondii*(NBAIR Strains)@10ml/lit | ICAR-NBAIR | *Pichia guilliermondii* | 2.5L | 750.00 | 3750.00 | 1.Disease intensity  2.Yield |
| *3. Hanseniaspora uvarum*(NBAIR Strains) @10ml/lit | *Hanseniaspora uvarum* | 2.5L | 750.00 | 3750.00 |
| *4. Trichoderma harzianum*(NBAIR Strains) @10g/lit | *Trichoderma harzianum* | 2.5 kg | 300.00 | 1500.00 |
|  |  |  |  |  |  |  |  |  | **Total**  | **9,000.00** |  |  |
| 7.3 | Cowpea | Severe incidence of sucking pests | Assessment of different biological control agents for the management of sucking pests in cowpea | 1. Farmers practice (Recommended Insecticides) | - | - | - | - | 5 | **-** | - | Mr. SudhakarSoundarajan (SMS-Plant Protection) |
| 2. Spraying of *Lecanicillium saksenae @* 15g/lit | KAU,2015 | *Lecanicillium saksenae* | 1.5 kg | 120.00 | 600.00 | 1. Per cent reduction over control2. Yield |
| 3. Spraying of Nanma @ 7-10ml/lit 3 times | ICAR- CTCRI | Nanma | 1 L | 300.00 | 1500.00 |
| 4. Spraying of IIHR neem soap @ 10 g/lit | ICAR-IIHR | IIHR neem soap | 2 kg | 150.00 |  | 750.00 |  |  |
|  |  |  |  |  |  |  |  |  | **Total**  | **2,850.00** |  |  |
| 7.4 | Cucurbits | Heavy dosage of fungicides are applied for the control of downy mildew | Assessment of different biological control agents for the management of downy mildew (*Pseudoperonospora cubensis*) on cucurbits | 1.Farmers practice (Spray Mancozeb or Chlorothalonil 2g/lit twice at 10 days interval) | - | - | - | - | 5 | - | - | Mr. SudhakarSoundarajan (SMS-Plant Protection) |
| 2.Spray extract of licorice @/20ml/lit of water from 10-day intervals between each spray | JKI, Institute of Biological Control, Darmstadt, Germany.2010 | Licorice Extract | 10 L | 1600.00 | 8,000.00 | 1. Disease intensity2. Yield |
| 3. Spray *Bacillus subtilis* @15g/lit of water from 10-day intervals between each spray | TNAU - 2015 | *Bacillus subtilis* | 15 Kg | 1000.00 | 5,000.00 |
| 4. Spray Pseudomonas @ 5ml/lit of water from 10-day intervals between each spray | KAU-2013 | Pseudomonas  | 5kg | 2000.00 |  | 10,000.00 |  |  |
|  |  |  |  |  |  |  |  |  | **Total** | **23,000.00** |  |  |
| 7.5 | Yard long bean | Lack of high yielding variety | Assessment of high yielding yard long bean varieties for Idukki district | 1. Farmers practice (Local variety) | - | - | - | - | - | - | - | Dr. Binu John Sam (SMS-Horticulture) |
| 2. Vellayani Jyothika | KAU-2006 | 1) Seeds2) Fertilizers3) Bio-control agents4) PP chemicals | 300g10 kg 3 litres0.5kg | 500.00400.00400.00200.00 | 5 | 2500.002000.002000.001000.00 | 1) Yield 2) BCR 3) No. of pods/plant4) Pod weight5) Pest and disease incidence |
| 3. Githika | KAU- 2015 |
| 4. Arka Mangala | IIHR-2015 |
|  |  |  |  |  |  |  |  |  | **Total** | **7,500.00** |  |  |
| 7.6 | Livestock - Dairy cattle | Scarcity of green grasses | Assessing the performance of Hybrid Napier varieties in High Ranges of Idukki district  | 1. 1. Farmers practice
* (Hybrid Napier Variety Co-3)
 | - | - | - | - | 5 (40 cents) | - | - | Dr. S. Jayababu, (SMS-Animal Husbandry) |
| 2. Hybrid Napier Variety - Supriya | KAU | Fodder Slips(Supriya and CO5) | 1000 nos. | 1000.00 | 5000.00 | 1) Cutting interval 2) Number of harvests per year 3) Yield /cutting |
| 3. Hybrid Napier variety- Co 5 | TNAU | Fertilizers  | Urea –30 Kg @Rs. 12/KgRock phosphate – 30 Kg@ Rs.6/KgMOP –10Kg @Rs. 20/Kg | 740.00  | 3700.00 |
|  |  |  |  |  |  |  |  |  | **Total** | **8,700.00** |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

## 8. Technology Refinement during 2017-18: Nil.

**9. Frontline Demonstrations during 2017-18**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Category** | **Crop/ enterprise** | **Prioritized problem** | **Technology to be demonstrated** | **Specify Hybrid or Variety** | **Name of the Hybrid or Variety** | **Source of Technology** | **Name of critical input** | **Qty per Demo** | **Cost per Demo** | **No. of Demo** | **Total cost for the****Demo (Rs.)** | **Parameters to be studied** | **Team members** |
| 9.1 | Cereals |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.2 | Millets |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.3 | Oilseeds |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.4 | Pulses |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.5 | Commercial crops |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.6 | Horticultural crops | Small cardamom & Black pepper | Reduce production and productivity in all crops | Integrated Crop Management and Popularization of Pink Pigmented Facultative Methylotrophs (PPFMs) for Small cardamom from heat and drought conditions | Variety | Njallani  | ICRI& TNAU-2012 | LimeAzospirillumVAMCANM:N MixtureBlue sticky trapNeem oilEPNTrichodermaPseudomonasMethylobacterium | 40 kg2 kg4 kg2 kg 0.5 kg5 nos1.5L1500 nos5 L5 L2 L | 600120160140175 2505501500600600700 | 5 | 27000.00 | Yield | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  |  |  |  |  |  |  |  |  |  5400 | **Total** | **27,000.00** |  |  |
|  |  | Vegetables  | Famers unawareness of ecological engineering for pest management | Ecological engineering methods for the management of pests of vegetables | - | - | NIPHM-2014 | Radish , Sunflower , marigold, maize, mustard, zinnia, thulsi seeds, Beet root  | LS | 2000.00 | 5 | 10000.00 | Pest Defender ratio | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  |  |  |  |  |  |  |  |  |  | **Total** | **10,000.00** |  |  |
|  |  | Banana | Severe incidence of Panama wilt in banana | Integrated Disease Management of Panama wilt of banana in Idukki district | - | - | KAU | PseudomonasHexaconazole | 20 kg1.5 L | 1600.001300.00 | 5 | 14500.00 | Disease incidence | Mr. SudhakarSoundarajan(SMS-Plant Protection |
|  |  |  |  |  |  |  |  |  |  |  | **Total** | **14,500.00** |  |  |
|  |  | Mushroom | Less availability of paddy straw | Oyster mushroom production using banana pseudostem waste and value addition | - | - | KAU | Mushroom spawn (CO-2)  Disinfectants | 302 L | 1400.00600 | 5 | 10000.00 | 1) Percentage of contamination 2) Yield3) Pest incidence 4) BC Ratio | Dr. Binu John Sam (SMS-Horticulture) |
|  |  |  |  |  |  |  |  |  |  |  | **Total** | **10,000.00** |  |  |
|  |  | Big onion | Lack of onion in homestead vegetable cultivation | Demonstration of Arka Kalyan variety of onion suitable for Idukki conditions | Variety- Arka Kalyan | - | IIHR | Seeds Bio-agents Foliar nutrients | 150 g5 L3 kg | 300.00500.00750.00 | 5 | 1500.002500.003750.00 | 1) Visual stand of the crop 2) Yield | Dr. Binu John Sam (SMS-Horticulture) |
|  |  |  |  |  |  |  |  |  |  |  | **Total** | **7,750.00** |  |  |
|  |  | Bitter gourd | Water scarcity and inefficient fertilizer use schedules | Demonstration of open precision farming in bitter gourd | Variety | - | KAU | Filter, drip line, pump main, sub main Mulching sheetFertilizers & Bioagents | 50 m2 | 20000.002500.005000.00 | 3 | 60000.007500.0015000.00 | 1) Pest and disease incidence (%)2) Fruit weight (g)3) Yield (kg/ha)4) BC ratio | Dr. Binu John Sam (SMS-Horticulture) |
|  |  |  |  |  |  |  |  |  |  |  | **Total** | **82,500.00** |  |  |
|  |  | Solanaceous vegetables | High incidence of wilt disease in Solanaceous crops | Demonstration on the Performance of Grafted Seedlings of Solanaceous Crops (Brinjal) | Variety | - | KAU | 1) Grafted Seedlings of Brinjal & Tomato2) Mulching sheet3) Fertilizers & Bio-agents | 10025 m2 | 500.00250.001000.00 | 3 | 1500.00750.003000.00 | 1) Wilt disease incidence (%)2) Fruit weight (g)3) Yield (kg/ha)4) BC ratio | Dr. Binu John Sam (SMS-Horticulture) |
|  |  |  |  |  |  |  |  |  |  |  | **Total** | **5,250.00** |  |  |
|  |  | Vegetables | Non availability of proper kitchen waste management | Low cost Bio compost bin for kitchen waste management | - | - | Innovative technology by Mr. V P Davis, Chalakudy | Bio compost binE M Solution | 12 lit | 2850.00800.00 | 3 | 8550.002400.00 | Plant growth | Ms. Jayisy Joseph (Programme Assistant-Home Science) |
|  |  |  |  |  |  |  |  |  |  |  | **Total** | **10,950.00** |  |  |
| 9.7 | Livestock | Dairy cattle | Low milk production  | Incorporation of Azolla feed for improving milk production in dairy cattle | Cross breeds | Jersey & HF cross | KVASU | 1) Azolla seed2) Gunny bags ,etc | 250 g10 no. | 30.00400.00 | 10 | 300.004000.00 | 1) Quality & quantity of milk production | Dr. S. Jayababu, (SMS-Animal Husbandry) |
|  |  |  |  |  |  |  |  |  |  |  | **Total** | **4,300.00** |  |  |
|  | Livestock | Poultry | Low meat & egg production | Demonstration of Scientific rearing of Dual purpose Vigova super m duck in Idukki district | Vigova Super M duck | Vigova Super M duck | CPDO, Hessaraghatta | 1. Two Week old ducklings | 10 birds / demo | 1200.00 | 10 | 12000.00 | 1) Average weight / bird (weekly interval2) Egg production3) Disease incidence | Dr. S. Jayababu, (SMS-Animal Husbandry) |
| 2. Supplements | 1 litre | 300.00 | 3000.00 |
| 3. Feed | 22.5 kg | 675.00 | 6750.00 |
|  |  |  |  |  |  |  |  |  |  |  | **Total** | **21,750.00** |  |  |
|  | Livestock | Dairy cattle | Higher incidence of Milk fever in Milch cows, low milk yield, infertility and long inter calving interval | Demonstration on feeding Anionic Mixture to prevent Milk Fever in dairy cows | Cross breeds | Jersey & HF cross | TANUVAS | 1. Magnesium Sulphate | 5 kg | 300.00 | 20 | 6000.00 | 1) Disease incidence2) Milk yield | Dr. S. Jayababu, (SMS-Animal Husbandry) |
| 2. Ammonium Chloride | 3 kg | 255.00 | 5100.00 |
| 3. Calcium chloride | 3 kg | 375.00 | 7500.00 |
|  |  |  |  |  |  |  |  |  |  |  | **Total** | **18,600.00** |  |  |
| 9.8 | Fisheries |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.9 | Others (EDP) | Jack | Fruit wastage | Diversified jack products | - | - | KAU | PreservativesIngredients for value added product preparation, branding & marketingPackaging materialsBranding, and Licensing | 1unit1unit1unit1unit | 800.009000.003000.0019000.00 | 1 | 31800.00 | Quality produce andShelf life | Ms. Jayisy Joseph (Programme Assistant-Home Science) |
|  |  |  |  |  |  |  |  |  |  |  | **Total** | **31,800.00** |  |  |
| 9.10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**10 Training for Farmers/ Farm Women during 2017-18**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Thematic area** | **Crop / Enterprise** | **Major problem** | **Linked field intervention (Assessment/Refinement/FLD)\*** | **Training Course Title\*\*** | **No. of Courses** | **Expected No. of participants** | **Names of the team members involved** |
| **10.1** | Crop Production  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **10.2** | Horticulture Production  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **10.3** | Livestock Production  | Dairy cattle | Unaware of mixed fodder system & low milk production | FLD | Fodder management & hygienic milk production | 3 | 90 | Dr. S. Jayababu, SMS (Animal Husbandry) |
|  |  | Poultry – Duck | Low meat &Egg production | FLD | Demonstration of new poultry breeds in backyard | 5 | 125 | Dr. S. Jayababu, SMS (Animal Husbandry) |
|  |  | Poultry – Chicken | Occurrence of Ranikhet disease | FLD | Poultry disease management techniques | 4 | 120 | Dr. S. Jayababu, SMS (Animal Husbandry) |
|  |  | Dairy cattle | Occurrence of Mastitis Disease | OFT | Prevention and control of Mastitis Disease | 3 | 90 | Dr. S. Jayababu, SMS (Animal Husbandry |
|  |  |  |  |  |  |  |  |  |
| **10.4** | Home Science  | Fruit and vegetable  | Low market rate, wastage of fruits in season | FLD, Training | Diversified products from fruits, vegetables | 4 | 70 | Ms. Jayisy Joseph (Programme Assistant-Home Science) |
|  |  |  |  |  |  |  |  |  |
| **10.5** | Plant Protection | Cardamom | Heavy infestation of stem borer | OFT | Stem borermanagement in Cardamom | 5 | 150 | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  | Cardamom | Cardamom stem rot management | Training | Integrated disease management in Cardamom | 5 | 100 | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  | BlackPepper  | Lack of knowledge in identification of pest and disease | Training | IPDM on Black Pepper | 5 | 75 | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  | Banana | Indiscriminate use of PP chemicals | FLD | IDM in banana | 5 | 100 | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  | Rice | Unscientific Pest and Disease Management  | Training | IPM in Rice | 5 | 80 | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  |  |  |  |  |  |  |  |
| **10.6** | Production of Inputs at Site | Bitter gourd  | Indiscriminate use of PP chemicals | OFT | Bio-intensive Disease Management | 5 | 100 | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  | Cowpea | Indiscriminate use of PP chemicals | OFT | Bio-intensive Disease Management  | 5 | 50 | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  | Cowpea | Indiscriminate use of PP chemicals | OFT | Bio-intensive Pest Management | 5 | 80 | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  |  |  |  |  |  |  |  |
| **10.7** | Soil Health and Fertility  | Small cardamom | Crop loss due to wild animal attack | FLD | Eco-friendly Innovative Scare Device for management of monkeys and squirrels in Small cardamom plantation area | 5 | 100 | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  | Vegetables  | Famers unawareness of ecological engineering for pest management | FLD | Ecological engineering methods for the management of pests of vegetables | 5 | 200 | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  | - | Reduce production and productivity in all crops | FLD | Popularization of Pink Pigmented Facultative Methylotrophs (PPFMs) , to protect crops Small cardamom, Black pepper and vegetables from heat and drought conditions | 10 | 150 | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  |  |  |  |  |  |  |  |
| **10.8** | PHT and value addition | Dairy  | Unawareness of milk product preparation | Training  | Value added milk products  | 2 | 35 | Ms. Jayisy Joseph, Programme Assistant (Home Science) |
|  |  |  |  |  |  |  |  |  |
| **10.9** | Capacity Building Group Dynamics | Jack  | Fruit wastage, Low market rate  | Training, Demonstration | Diversified products from jack  | 3 | 40 | Ms. Jayisy Joseph, Programme Assistant (Home Science) |
|  |  |  |  |  |  |  |  |  |
| **10.10** | Farm Mechanization  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **10.11** | Fisheries Production Technologies |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **10.12** | Mushroom production |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **10.13** | Agro forestry |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **10.14** | Bee Keeping |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **10.15** | Sericulture |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **10.16** |  |  |  |  |  |  |  |  |
|  | **Others, pl. specify** |  |  |  |  |  |  |  |
|  | **Total** |  |  |  |  | **84** | **1755** |  |

\* Title of intervention/title of technology, \*\* Training title should specify the major technology/skill to be transferred.

**11. Training for Rural Youth during 2017-18**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Thematic area** | **Crop / Enterprise** | **Major problem** | **Linked field intervention (Assessment/Refinement/FLD)\*** | **Training Course Title\*\*** | **No. of Courses** | **Expected No. of participants** | **Names of the team members involved** |
| **11.1** | Crop Production  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **11.2** | Horticulture Production  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **11.3** | Livestock Production  | Dairy cattle | Low body weight, growth performance & milk production | Popularization of mixed fodder system | Livestock production and management | 4 | 120 | Dr. S. Jayababu, SMS (Animal Husbandry) |
|  |  | Poultry | Poor growth performance | Popularization of new poultry breeds  | Scientific poultry management | 4 | 80 | Dr. S. Jayababu, SMS (Animal Husbandry) |
|  |  |  |  |  |  |  |  |  |
| **11.4** | Home Science  | Rose apple  | Fruit wastage in season | Training, demonstrations  | Diversified rose apple products.  | 2 | 50 | Ms. Jayisy Joseph, Programme Assistant (Home Science) |
|  |  |  |  |  |  |  |  |  |
| **11.5** | Plant Protection | Enterprise | Entrepreneurship Development Programme | Farm based low cost mass production technology of bio-products | Organic Pest & Disease Management  | 5 | 100 | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  |  |  |  |  |  |  |  |
| **11.6** | Production of Inputs at Site |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **11.7** | Soil Health and Fertility  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **11.8** | PHT and value addition | Vegetables  | Low market rate, lack of value addition  | Popularization of solar dryer for dehydration of vegetables  | Solar dryer- Energy saving device for dehydration, recipes  | 2 | 34 | Ms. Jayisy Joseph, Programme Assistant (Home Science) |
|  |  |  |  |  |  |  |  |  |
| **11.9** | Capacity Building Group Dynamics | Mushroom  | Mushrooms are perishable  | Training, demonstration on value added products in mushroom  | Mushroom diversified products  | 1 | 25  | Ms. Jayisy Joseph, Programme Assistant (Home Science) |
|  |  |  |  |  |  |  |  |  |
| **11.10** | Farm Mechanization  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **11.11** | Fisheries Production Technologies |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **11.12** | Mushroom production |  |  |  |  |  |  |  |
| **11.13** | Agro forestry |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **11.14** | Bee Keeping | Cardamom | Poor pollination | - | Apiculture | 1 | 50 | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  |  |  |  |  |  |  |  |
| **11.15** | Sericulture |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **11.16** |  |  |  |  |  |  |  |  |
|  | **Others, pl. specify** |  |  |  |  |  |  |  |
|  | **Total** |  |  |  |  | **19** | **459** |  |

\* Title of intervention/title of technology, \*\* Training title should specify the major technology/skill to be transferred.

### 12 Trainings for Extension Personnel during 2017-18

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Thematic area** | **Training Course Title\*\*** | **No. of Courses** | **Expected No. of participants** | **Names of the team members involved** |
| **12.1** | Crop Production |  |  |  |  |
|  |  |  |  |  |  |
| **12.2** | Home Science | Diversified products from fruits  | 1 | 18 | Ms. Jayisy Joseph, Programme Assistant (Home Science) |
|  |  |  |  |  |  |
| **12.3** | Capacity Building and Group Dynamics |  |  |  |  |
|  |  |  |  |  |  |
| **12.4** | Horticulture | Scientific mushroom cultivation and post harvest handling | 1 | 22 | Dr. Binu John Sam (SMS-Horticulture) & Ms. Jayisy Joseph (Technical Assistant – Home Science) |
|  |  |  |  |  |  |
| **12.5** | Livestock Production & Management |  |  |  |  |
|  | Feed and fodder technology | Importance of mineral supplementation in cattle feed | 1 | 20 | Dr. S. Jayababu, SMS (Animal Husbandry) |
|  | Feed and fodder technology | Importance of mixed fodder system in dairy cattle ration | 1 | 20 | Dr. S. Jayababu, SMS (Animal Husbandry) |
|  | Poultry disease management | Control of Ranikhet disease by oral pellet vaccine | 1 | 30 | Dr. S. Jayababu, SMS (Animal Husbandry) |
|  |  |  |  |  |  |
| **12.6** | Plant Protection | IPDM in cardamom, black pepper & vegetables | 3 | 60 | Mr. Sudhakar Soundarajan (SMS-Plant Protection) |
|  |  |  |  |  |  |
| **12.7** | Farm Mechanization |  |  |  |  |
|  |  |  |  |  |  |
| **12.8** | PHT and value addition | Diversified milk products | 1 | 20 | Ms. Jayisy Joseph, Programme Assistant (Home Science) |
|  |  |  |  |  |  |
| **12.9** | Production of Inputs at Site |  |  |  |  |
|  |  |  |  |  |  |
| **12.10** | Sericulture |  |  |  |  |
|  |  |  |  |  |  |
| **12.11** | Fisheries |  |  |  |  |
|  | **Total** |  | **9** | **190** |  |

\* Title of intervention/title of technology, \*\* Training title should specify the major technology/skill to be transferred.

## 13 Vocational trainings during 2017-18

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Thematic area and the Crop/Enterprise** | **Training title\*** | **No. of programmes and Duration (days)** | **Type of Clientele****(SHGs, NYKs, School students, Women, Youth etc.)** | **Expected No. of participants** | **Sponsoring agency if any** | **Names of the team members involved** |
| 13.1 | Crop Production |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 13.2 | Home Science | Skill development training on preservation  | 1(5 days) | Farm Women and Rural Youth  | 20 | DIC | Ms. Jayisy Joseph, Programme Assistant (Home Science) |
|  |  |  |  |  |  |  |  |
| 13.3 | Capacity Building and Group Dynamics | Diversified products from fruits  | 1 (5 days) | Farm Women and Rural Youth  | 20 | - | Ms. Jayisy Joseph, Programme Assistant (Home Science) |
|  |  |  |  |  |  |  |  |
| 13.4 | Horticulture |  |  |  |  |  |  |
|  |  | Mushroom processing  | 1 (3 days) | Farm Women and Rural Youth  | 15 | - | Ms. Jayisy Joseph, Programme Assistant (Home Science) |
|  |  |  |  |  |  |  |  |
| 13.5 | Livestock Production & Management |  |  |  |  |  |  |
| Scientific goat management | Scientific goat production and management | 3 (3 days) | Rural youth and school students | 60 | - | Dr. S. Jayababu, SMS (Animal Husbandry) |
|  | Poultry production | Scientific poultry management | 2 (3 days) | Rural youth and school students | 70 | - | Dr. S. Jayababu, SMS (Animal Husbandry) |
|  |  |  |  |  |  |  |  |
| 13.6 | Plant Protection | Farm based low cost mass production technology | 3 (5 days) | Rural youth & School students | 60 | - | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  |  |  |  |  |  |  |
| 13.7 | Farm Mechanization |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 13.8 | PHT and value addition | EDP on processing  | 1 (5 days) | Rural Youth  | 20 | - | Ms. Jayisy Joseph, Programme Assistant (Home Science) |
|  |  |  |  |  |  |  |  |
| 13.9 | Production of Inputs at Site |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 13.10 | Sericulture |  |  |  |  |  |  |
|  | Rural Craft | Flower making | 10 (5 days/each programme) | SHGs, School students, Women, Youth | 200 | SHGs, Schools, Kudumbasree | Ms. Rachel Skariakutty, Programme Assistant (Rural Craft) |
|  |  | Eco-friendly carry bag making  | 12 (4 days/each programme) | SHGs, School students, Women, Youth | 240 | NYK, SHG, Kudumbasree | Ms. Rachel Skariakutty, Programme Assistant (Rural Craft) |
|  |  | Flower arrangements | 6 (3 days/each programme) | SHGs, Women, Youth, NYKs | 120 | SHGs, Schools, Kudumbasree | Ms. Rachel Skariakutty, Programme Assistant (Rural Craft) |
|  |  | Jewellery making | 3 (3 days/each programme) | SHGs, School students, Women, Youth, NYKs | 60 | SHGs, Schools, Kudumbasree, NYK | Ms. Rachel Skariakutty, Programme Assistant (Rural Craft) |
|  |  | Fabric designing | 10 (15 days/each programme) | SHGs, Women | 200 | SHGs, Kudumbasree | Ms. Rachel Skariakutty, Programme Assistant (Rural Craft) |
|  |  | Decorative articles preparation (Soft toys making, paintings, art work etc.) | 5 (5 days/each programme) | SHGs, School students, Women, Youth, NYKs | 150 | SHGs, Schools, Kudumbasree, NYK | Ms. Rachel Skariakutty, Programme Assistant (Rural Craft) |
|  |  | Home care products preparation | 5 (3 days/each programme) | SHGs, School students, Women, Youth, NYKs | 160 | SHGs, Schools, Kudumbasree, NYK | Ms. Rachel Skariakutty, Programme Assistant (Rural Craft) |
| 13.11 | Fisheries |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 13.12 | Others  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | **Total** |  |  |  | **1395** |  |  |

\* Training title should specify the major technology/skill to be transferred.

## 14 Sponsored trainings during 2017-18

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Thematic area and the Crop/Enterprise** | **Training title\*** | **No. of programmes and Duration (days)** | **Type of Clientele****(SHGs, NYKs, School students, Women, Youth etc.)** | **Expected No. of participants** | **Sponsoring agency** | **Names of the team members involved** |
| 14.1 | Crop Production |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 14.2 | Home Science | Value added products from fruits  | 2 (1 day) | Farm Women and SHG members  | 45 | Coffee Board  | Ms. Jayisy Joseph, Programme Assistant (Home Science) |
|  |  | Skill development  | 1 (2 days) | Farm Women  | 30 | - |
|  |  |  |  |  |  |  |  |
| 14.3 | Capacity Building and Group Dynamics | Industry training on processing  | 1 (2 days)  | Farm Women and SHG’s  | 20 | DIC | Ms. Jayisy Joseph, Programme Assistant (Home Science) |
|  |  | EDP on Jack products | 1(2 days) | Farm Women and SHG’s  | 25 | Coffee Board | Ms. Jayisy Joseph, Programme Assistant (Home Science) |
|  |  |  |  |  |  |  |  |
| 14.4 | Horticulture |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 14.5 | Livestock Production & Management |  |  |  |  |  |  |
|  | Livestock production and management | Scientific dairy cattle management | 2 (1day) | SHGS, Rural youth and Farmers | 80 | Lead bank | Dr. S. Jayababu, SMS (Animal Husbandry) |
|  | Goat production | Scientific goat management | 3 (1 day) | SHGs, Rural youth  | 90 | Grama Panchayat | Dr. S. Jayababu, SMS (Animal Husbandry) |
|  | Fodder management  | Mixed fodder cultivation techniques | 2 (1 day) | SHGS, Rural youth and Farmers  | 60 | Dept. of Dairy | Dr. S. Jayababu, SMS (Animal Husbandry) |
|  | Poultry production | Scientific management of broiler and layer poultry | 4 (1 day) | SHGS, Rural youth  | 120 | HDS & Block Panchayat | Dr. S. Jayababu, SMS (Animal Husbandry) |
|  |  |  |  |  |  |  |  |
| 14.6 | Plant Protection | Organic Pest & Disease Management in Cardamom | 3 (1 day) | SHGs, Women, Youth | 150 | ATMA | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  | Organic Pest and Disease management in Black pepper | 3 (1 day) | SHGs, Women, Youth | 90 | ATMA | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  | Organic Crop Management in Bitter gourd  | 3 (1 day) | SHGs, Women, Youth | 150 | ATMA andSpices Board  | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  |  |  |  |  |  |  |
| 14.7 | Farm Mechanization | Organic Crop Management in Cowpea  | 3 (1 day) | SHGs, Women, Youth | 90 | VFPCK | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  | Organic Crop Management in Banana | 5 (1 day) | SHGs, Women, Youth | 150 | VFPCK and ATMA | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
|  |  | Farm based low cost mass production technology | 24 (2days) | Vegetable cluster | 1250 | DOA | Mr. SudhakarSoundarajan(SMS-Plant Protection) |
| 14.8 | PHT and value addition | Value added mushroom products  | 1 (1 day) | Farm women and SHG’s  | 20 | UBI | Ms. Jayisy Joseph, Programme Assistant (Home Science) |
|  |  |  |  |  |  |  |  |
| 14.9 | Production of Inputs at Site |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 14.10 | Sericulture |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 14.11 | Fisheries |  |  |  |  |  |  |
|  | **Total** |  |  |  | **2370** |  |  |

\* Programme title should specify the major technologies/skills to be transferred /refreshed.

## 15. Extension programmes during 2017-18

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl. No.** | **Extension programme\*** | **No. of programmes or activities** | **Expected No. of participants** | **Names of the team members involved** |
| 15.1 | Advisory Services  | 263 | 392 | All tech staff |
| 15.2 | Diagnostic visits  | 18 | 18 |
| 15.3 | Field Day | 13 | 65 |
| 15.4 | Group discussions | 23 | 252 |
| 15.5 | Kisan Ghosthi  | 0 | 0 |
| 15.6 | Film Show  | 15 | 450 |
| 15.7 | Self -help groups  | 35 | 650 |
| 15.8 | Kisan Mela | 0 | 0 | All staff |
| 15.9 | Exhibition  | 3 | 2500 |
| 15.10 | Scientists' visit to farmers field  | 10 | 45 | All tech staff |
| 15.11 | Plant/Soil health/Animal health camps | 3 | 50 | Dr. S. Jayababu (SMS-Animal Husbandry) & Ms. Manju Jincy Varghese (SMS-Soil Science) |
| 15.12 | Farm Science Club | 0 | 0 |  |
| 15.13 | Ex-trainees Sammelan  | 1 | 30 | All tech staff |
| 15.14 | Farmers' seminar/workshop  | 2 | 112 |
| 15.15 | Method Demonstrations  | 23 | 325 |
| 15.16 | Celebration of important days  | 3 | 150 |
| 15.17 | Special day celebration (World Food Day) | 1 | 50 | Ms. Jayisy Joseph, Programme Assistant (Home Science) |
| 15.18 | Exposure visits  | 1 | 35 | All tech staff |
| 15.19 | Technology week | 1 | 650 |
| 15.20 | FFS | 1 | 20 |
| 15.21 | Farm innovators meet | 1 | 20 |
| 15.22 | Awareness programs | 8 | 163 |
|  | Others, pl. specify ( Radio Talks ) | 4 | - |  |
|  | Others, pl. specify |  |  |  |
|  | **Total** | **429** | **5977** |  |

## 16. Activities proposed as Knowledge and Resource Centre during 2017-18

**16.1 Technological knowledge**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl. No.** | **Category** | **Details of technologies** | **Area (ha)/****Number** | **Names of the team members involved** |
| 16.1.1 | Technology Park/ Crop cafeteria | Vegetable Seed Production Unit | 0.1 ha | All Staff |
| Medicinal plant | 0.04 ha |
| Fodder crops | 0.025 ha |
| 16.1.2 | Demonstration Units | Pepper mother nursery | 0.012 | All Staff |
| Pepper poly bag nursery | 0.012 |
| Farm machineries | - |
| Vermicomposting unit | 1 no. |
| Azolla unit | 1 no. |
| Mushroom Production Unit | 1 no. |
| Beekeeping | 0.1 ha |
| Poultry | 1 unit |
| Bio-control lab | 1 unit |
| Bio-hub | 1 unit |
| Karshaka Seva Kendram | 1 unit |
| Processing unit | 1 unit |
| EPN | 1 unit |
| Pheromone trap | 1 unit |
| Poultry rearing unit | 1 no. |
| Slated Goat Rearing Unit | 1 no. |
| Vigova Duck Rearing Unit | 1 no. |
| 16.1.3 | Lab Analytical services  | Soil  | 1 unit | Ms. Manju Jincy Varghese, SMS (Soil Science) |
| Water | 1 unit |
| 16.1.4 | Technology Week  | Livestock production & management | - | All Staff |
|  |  | Mushroom production & value addition | - |
|  |  | Organic farming technologies | - |
|  |  | IPDM in Cardamom & Pepper | - |

**16.2 Technological Products**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Category**  | **Name of the Production** **Partner Agency, if any** | **Name of the product** | **Quantity (Qtl.)/ Number planned to be produced during 2014-15** | **Names of the team members involved** |
| 16.2.1 | Seeds  |  | Bitter gourd | 25 kg | Dr. Binu John Sam (SMS-Horticulture), Mr. Sudhakar Soundarajan, SMS (Plant Protection) |
|  |  |  | Snack gourd | 10 kg |
|  |  |  | Amaranths -Red | 2.5 kg |
|  |  |  | Tomato | 2.5 kg |
|  |  |  | Cowpea | 2.5 kg |
|  |  |  | Beans | 1 kg |
|  |  |  | Chili  | 1 kg |
|  |  |  | Yard long bean | 1 kg |
|  |  |  |  |  |  |
| 16.2.2 | Planting materials  |  | Rooted Pepper cuttings | 10000 nos. | Mr. Sudhakar Soundarajan, SMS (Plant Protection) |
|  |  |  | Spices | 500 nos. |
|  |  |  | Vegetable seedlings | 3000 nos. |
|  |  |  |  |  |  |
| 16.2.3 | Bio-products  |  |  |  | Mr. Sudhakar Soundarajan, SMS (Plant Protection) |
|  |  |  | Trichoderma | 4000 L |
|  |  |  | Pheromone Trap | 1000 nos. |
|  |  |  | Beauveria | 4500 L |
|  |  |  | Metarhizium | 5000 L |
|  |  |  | EPN | 50000 cadavers |
|  |  |  | Lecanicillum | 1000 L |
|  |  |  | PK-Plus | 600 L |
|  |  |  | J-Plus | 500 L |
|  |  |  | Nature Plus | 500 L |
|  |  |  | EM-FMPE | 250 L |
|  |  |  | Water Soluble Calcium | 200L |
|  |  |  | Yellow sticky trapBlue sticky trap & White trap | 5000 nos. |
| 16.2.4 | Livestock strains |  | Ducks | 100 nos. | Dr. S. Jayababu, SMS (Animal Husbandry) |
|  |  |  | Poultry birds | 200 nos. |
|  |  |  |  |  |  |
| 16.2.5 | Fish fingerlings |  |  |  |  |

**16.3 Technological Information**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No.** | **Category** | **Technological capsules / Number** | **Names of the team members involved** |
| 16.3.1 | Technology backstopping to line departments |  |  |
|  | Agriculture | 15 | All tech staff |
|  | Horticulture  | 3 | Dr. Binu John Sam (SMS-Horticulture) |
|  | Animal Husbandry  | 2 | Dr. S. Jayababu, SMS (Animal Husbandry) |
|  | Fisheries  | - | - |
|  | Agricultural Engineering | - | - |
|  | Sericulture  | - | - |
|  | Others, pl. specify | - | - |
| 16.3.2 | Literature/publication  | 5 | All tech staff |
| 16.3.4 | Electronic Media | 10 | All tech staff |
| 16.3.5 | Kisan Mobile Advisory Services  | 150 | All tech staff |
| 16.3.6 | Information on centre/state sector schemes and service providers in the district.  | MTA capsule of ATMA, prepared, scrutinized and disseminated on a monthly basis | All tech staff |

## 17. Additional Activities Planned during 2017-18: Nil.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Name of the agency / scheme** | **Name of activity** | **Technical programme with quantification** | **Financial outlay (Rs.)** | **Names of the team members involved** |
| 17.1 |  |  |  |  |  |

**18. Revolving Fund**

**18.1 Financial status**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Opening balance as on 01.04.2016****(Rs. in Lakh)** | **Expenditure incurred during 2016-17****(Rs. in Lakh)** | **Receipts during****2016-17****(Rs. in Lakh)** | **Closing balance as on 31.01.2017****(Rs. in Lakh)** | **Expected closing balance by 31.03.2017 (Including value of material in stock)** |
| 1,33,333.00 | 7,87,593.00 | 8,10,952.00 | 1,09,974.00 | 7,00,000.00 |

**18.2 Plan of activities under Revolving Fund**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. No.** | **Proposed activities** | **Expected output** | **Anticipated income (Rs.)** | **Names of the team members involved** |
| 18.2.1 | Duck unit  | Ducklings – 50 nos.  | 6000.00 | Dr. S. Jayababu, SMS (Animal Husbandry) |
| 18.2.2 | Poultry hatchery unit | Birds – 600 nos. | 108000.00 | Dr. S. Jayababu, SMS (Animal Husbandry) |
| 18.2.3 | Vegetable seeds | 500 kg | 30000.00 | Dr. Binu John Sam (SMS-Horticulture), Mr. Sudhakar Soundarajan (SMS-Plant Protection)  |
| Nursery plants | 1000 nos. | 25000.00 |
| Vegetable seedlings | 3000 nos. | 12000.00 |
| Rooted Pepper cuttings | 10000 nos. | 100000.00 |
| Spices | 500 nos. | 5000.00 |
| Pseudomonas  | 2500 L | 250000.00 |
| Trichoderma | 1000 L | 100000.00 |
| Pheromone Trap | 1000 nos. | 160000.00 |
| Beauveria | 1500L | 150000.00 |
| Metarhizium | 1500 L | 150000.00 |
| EPN | 50000 cadavers | 50000.00 |
| Lecanicillum | 1000L | 100000.00 |
| Fish Amino acids | 100L | 100000.00 |
| PK-Plus | 500L | 50000.00 |
| MEM Solution | 500 L | 50000.00 |
| J-Plus | 500 L | 50000.00 |
| Nature Plus | 500 L | 50000.00 |
| Bio-Nutri Gold  | 500 L | 50000.00 |
| Mushroom Spawn | 1000 pkts. | 40000.00 |
| Vermicompost | 100 kg | 1000.00 |
| Azolla | 50 kg | 2500.00 |
| Value added products | 50 kg | 12000.00 |
| Rural craft products | 150 nos. | 13000.00 |
|  |  | **Total** | **16,64500.00** |  |

## 19. Activities of soil, water and plant testing laboratory during 2017-18

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No.** | **Type** | **No. of samples to be analyzed** | **Names of the team members involved** |
| 19.1 | Soil  | - | **-** |
| 19.2 | Water  | **-** | **-** |
| 19.3 | Plant | **-** | **-** |
| 19.4 | Others  | **-** | **-** |

## 20. E-linkage during 2017-18

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Nature of activities** | **Likely period of completion (please set the time frame)** | **Remarks if any** |
| 20.1 | Title of the technology module to be prepared  |  |  |
| 20.2 | Creation and maintenance of relevant database system for KVK | Farmers database creation & updation – year-around | - |
| 20.3 | Any other (Please specify) | - | - |
| 20.4 |  |  |  |

**21. Activities planned under Rainwater Harvesting Scheme (only to those KVKs which are already having scheme under Rain Water Harvesting):** Nil.

|  |  |  |
| --- | --- | --- |
| **S. No** | **Activities planned** | **Remarks if any** |
| 21.1 |  |  |

**22. Innovative Farmer’s Meet**

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Particulars** | **Details** |
| 22.1 | Are you planning for conducing Farm Innovators meet in your district? | Yes |
| 22.2 | If Yes likely month of the meet | November |
| 22.3 | Brief action plan in this regard | We are planning to organize a meet & exhibition of Farmer Innovators from Idukki district |

**23. Farmer’s Field School planned**

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Thematic area**  | **Title of the FFS** | **Budget proposed in Rs.** |
| 23.1 |  |  |  |
| 23.2 |  |  |  |

**23.A Innovative Extension Methodology / Technology Delivery Mechanism proposed**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. No** | **Problem to be intervened**  | **Thematic area**  | **Major technological interventions / methodology to be adopted**  | **Budget proposed in Rs.\*** |
| 23.A1 |  |  |  |  |

***\*Maximum of Rs. One lakh***

**24.Budget - Details of budget utilization (2014-15) up to 31 January 2017**

**(Rs.)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.****No.** | **Particulars** | **Sanctioned** | **Released** | **Expenditure** |
| **24.1**  | **Recurring Contingencies** |  |  |  |
| 24.1.1 | **Pay & Allowances** | 94.41 |  | 6765740 |
| 24.1.2 | **Traveling allowances** | 1.50 |  | 14911 |
| 24.1.3 | **Contingencies** |  |  |  |
| *24.1.4.1* | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance  | 2.00 |  | 193653 |
| *B* | POL, repair of vehicles, tractor and equipments | 1.50 |  | 83705 |
| *C* | Meals/refreshment for trainees  | 0.75 |  | 5034 |
| *D* | Training material  | 0.30 |  | 29966 |
| *E* | Frontline demonstration except oilseeds and pulses  | 2.60 |  | 88754 |
| *F* | On farm testing  | 0.51 |  | 28665 |
| *G* | Training of extension functionaries | 0.25 |  | 0.00 |
| *H* | Maintenance of buildings | 0.00 |  | 0.00 |
| *I* | Establishment of Soil, Plant & Water Testing Laboratory  | 0.50 |  | 33691 |
| *J* | Library  | 0.20 |  | 3550 |
| *K* | Extension activities | 0.50 |  | 21689 |
| *M* | Display board | 0.39 |  | 0.00 |
| *N* | Integrated Farming System (IFS) | 0.50 |  | 0.00 |
| **24.1**  | **Total Recurring** | **105.91** |  | **7269358.00** |
| **24.2** | **Non-Recurring Contingencies** |  |  |  |
| 24.2.1 | **Works** |  |  |  |
|  | a) Demonstration units - 2 Nos. | 8.00 |  | 216064.00 |
| 24.2.2 | **Equipments including SWTL & Furniture** |  |  |  |
|  | a) Office automation | 3.00 |  | 23770.00 |
|  | b) Furniture and fixtures | 1.00 |  | 0.00 |
| 24.2.3 | **Vehicle** (Four wheeler/Two wheeler, please specify) | 0.00 |  | 0.00 |
| 24.2.4 | **Library**  | 0.00 |  | 0.00 |
| **24.2** | **Total Non Recurring** | **12.00** |  | **239834.00** |
| **24.3** | **REVOLVING FUND** | 0.00 |  | 0.00 |
| **24.4** | **GRAND TOTAL (A+B+C)** | **117.91** | **100.10931** | **75,09,192.00** |

**25.Details of Budget Estimate (2017-18) based on proposed action plan**

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Particulars** | **BE 2017-18 proposed (Rs.)** |
| **25.1** | **Recurring Contingencies** |  |
| 25.1.1 | **Pay & Allowances** | 142.286 |
| 25.1.2 | **Traveling allowances** | 1.50 |
| 25.1.3 | **Contingencies** |  |
| *A* | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines) | 2.00 |
| *B* | POL, repair of vehicles, tractor and equipments | 1.50 |
| *C* | Meals/refreshment for trainees (ceiling up to Rs.40/day/trainee be maintained) | 0.75 |
| *D* | Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training) | 0.30 |
| *E* | Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year) | 2.60 |
| *F* | On farm testing (on need based, location specific and newly generated information in the major production systems of the area) | 0.51 |
| *G* | Training of extension functionaries | 0.50 |
| *H* | Maintenance of buildings | 10.00 |
| *I* | Establishment of Soil, Plant & Water Testing Laboratory  | 0.50 |
| *J* | Library  | 0.20 |
| *K* | Farmers Field School (FFS) | 0.50 |
| *L* | Extension activities | 1.00 |
| *M* | Integrated Farming System (IFS) | 1.00 |
| *N* | Display Board | 0.39 |
| *25.1* | **TOTAL Recurring Contingencies** | **165.536** |
| **25.2** | **Non-Recurring Contingencies** |  |
| 25.2.1 | **Works** |  |
|  | a) Staff quarters | 80.00 |
|  | b) Vehicle shed | 10.00 |
|  | c) Farmers hostel | 60.00 |
|  | d) Farm development | 20.00 |
| 25.2.2 | **Equipments including SWTL & Furniture** |  |
|  | a) Office automation | 3.00 |
|  | b) Furniture and fixtures | 3.00 |
|  | c) Demonstration units (2 nos.) | 5.00 |
| 25.2.3 | **Vehicle** (Four wheeler/Two wheeler, please specify) | 0.00 |
| 25.2.4 | **Library** (Purchase of assets like books & journals) | 0.30 |
| **25.2** | **TOTAL Non-Recurring Contingencies** | **181.30** |
| **25.3** | **REVOLVING FUND** | **0.00** |
| **25.4** | **GRAND TOTAL** | **346.836** |

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