###### ICAR-Agricultural Technology Application Research Institute (ATARI)

###### ZONE VIII, BANGALORE

###### ACTION PLAN FOR 2017-18

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

|  |  |  |  |
| --- | --- | --- | --- |
| 1.1 | Name and address of KVK with Phone, Fax and e-mail | : | ICAR-Krishi Vigyan Kendra,  Savalanga Road, Navile,  SHIVAMOGGA-577 204. Karnataka  Tel.:08182-295516, 267017  E-mail : shimogakvk@gmail.com |
| 1.2 | Name and address of host organization | : | University of Agricultural and Horticultural Sciences,  Savalanga Road, Shivamogga-577 204. Karnataka  Phone : 08182-267001  Fax : 08182-298008  E-mail : [vcuahss2014@gmail.com](mailto:vcuahss2014@gmail.com)  Website : www.uahs.in |
| 1.3 | Year of sanction | : | 1999 |
| 1.4 | Website address of KVK and date of last update | : | Website is under progress |

**2. Details of staff as on date 28.02.2017**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl.**  **No.** | **Sanctioned post** | **Name of the incumbent** | **Discipline** | **Existing Pay band** | **Grade Pay** | **Date of joining** | **Permanent / Temporary** |
| 2.1 | Senior Scientist and Head | Dr. B.C. Hanumanthaswamy | Agril. Entomology | 37400-67000 | 9000 | 22-12-2011 | Permanent |
| 2.2 | Scientist | Mrs. Jyoti M. Rathod | Home Science | 15600-39100 | 7000 | 12-03-2007 | Permanent |
| 2.3 | Scientist | Dr. M. Ashok1 | Animal Science | 15600-39100 | 7000 | 18-05-2007 | Permanent |
| 2.4 | Scientist | Miss M. V. Rekha2 | Soil Science & Agril. Chemistry | 30000 | - | 19-08-2015 | Temporary |
| 2.5 | Scientist | Miss G. B. Smitha2 | Horticulture | 30000 | - | 24-08-2015 | Temporary |
| 2.6 | Scientist | Dr. Arun Kumar2 | Agril. Extension | 35000 | - | 09-23-2016 | Temporary |
| 2.7 | Scientist | Imran Khan H. S.2 | Plant Pathology | 30000 | - | 09-27-2016 | Temporary |
| 2.8 | Programme Assistant | Mr. Nagaraja R. | Programme Assistant (Lab Technician) | 9300-34800 | 4200 | 23-10-2010 | Permanent |
| 2.9 | Programme Assistant | Mrs. B. S. Geetha | Programme Assistant (Computer) | 9300-34800 | 4200 | 22-01-2011 | Permanent |
| 2.10 | Programme Assistant | Dr. P.R. Somashekharappa | Farm Manager | 9300-34800 | 4200 | 23-12-2013 | Permanent |
| 2.11 | Accountant-cum-Office Superintendent |  | Assistant | VACANT | | | |
| 2.12 | Stenographer | Mrs. K. Usha2 | Typist cum computer operator | 12000 | - | 13-08-2007 | Temporary |
| 2.13 | Driver (Jeep) | Mr. N. Gopala | Driver (Jeep) | 11600-21000 | - | 16-08-2012 | Permanent |
| 2.14 | Driver (Tractor) | Mr. K. H. Mohan | Driver (Tractor) | 14550-26700 | - | 20-10-2008 | Permanent |
| 2.15 | Supporting staff 1 | Mr. L. Santhosh2 | Messenger | 8400 | - | 01-08-2015 | Temporary |
| 2.16 | Supporting staff 2 | Mr. T. Chikkaiah | Cook cum caretaker | 10400-16400 | - | 22-11-2008 | Permanent |

1. Deputed for Ph.D. for three years (From 09.02.2015 to 10.02.2018)

2. On consolidated salary

**3. Details of SAC meeting conducted during 2016-17 : Tentatively during May-2017**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl.**  **No** | **Date** | **Major recommendations** | **Status of action taken in brief** | **Tentative date of SAC meeting proposed during 2014-15** |
| 3.1 |  |  |  |  |

**4. Capacity Building of KVK Staff**

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

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **New Areas of Training** | **Institution proposed to attend** | **Justification** |
| 4.1.1 | Management of websites, DTP, Designing, data processing, ICT in agriculture, advanced technology in agriculture and information system, | APTECH Computer training centre, Bengaluru OR MANAGE, Hyderabad, | Documentation and Database management of KVK activities. To know Advanced technologies in computer and utilize the same for agriculture field. |
| 4.1.2 | Advanced integrated pest management | NCIPM, New Delhi | Up-gradation of knowledge |
| 4.1.3 | Farm development strategies | MANAGE, Hyderabad | Improve the farm activities |
| 4.1.4 | Advanced mushroom production technology | IIHR, Bengaluru | Upgradation of the knowledge |

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

|  |  |  |
| --- | --- | --- |
| **S. No** | **Name of the KVK proposed** | **Specific learning areas** |
| **4.2.1** | **Within ring -** |  |
| KVK, Udupi | Activities related to pepper and other spice crops |
| KVK, Chikkamagaluru | Activities related to fruits and plantation crops |
| **4.2.2** | **Within the Zone -** |  |
| KVK, Bengaluru Rural | Better implementation of activities related to fodder cultivation and bio-fuel plants |
| KVK, Davanagere | Activities related to dyrland agriculture / horticulture |
| **4.2.3** | **Outside Zone -** |  |
| KVK, Baramati | Soil and water management practices |
| KVK, Namakkal | Activities related to livestock production |

**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, Udupi | Management of pest and diseases in ginger and turmeric | Improved production technology of pepper |
| 5.2 | KVK, Chikkamagaluru | Production technology of ginger and turmeric | Improved production technology of cardamom |
| 5.3 | KVK, Chitradurga | Value addition in miner millets | Production technology of miner millets |
| 5.4 | KVK, Uttar Kannada | Value addition in fruit crops | Production technology in fruit crops |
| 5.5 | KVK, Hassan | Dairy technology | Production technology in fodder crops |

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

| **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 | Paddy | Nutrient deficiency, stem borer, leaf roller | 200 | Anavatti | OFT, FLD, Training, Method demonstration |
| 6.2 | Chilli | Use of low yielding varieties, lack of awareness on new hybrids | 100 | Harnahalli | FLD, training |
| 6.3 | Tomato | Lack of knowledge on improved and disease resistant hybrids | 100 | Harnahalli | FLD, training |
| 6.4 | Sunflower | Boron and zinc deficiency, pest and diseases | 100 | Hittala | FLD, Training |
| 6.5 | Groundnut | Nutrient deficiency, pest and disease s | 100 | Anavatti | FLD, Training |
| 6.6 | Blackgram | Lack of awareness on short duration varieties for rice fallows | 50 | Hittala | FLD, Training |
| 6.7 | Ginger | High seed rate, lack of awareness on newly released high yielding varieties, Rhizome rot, shoot borer | 2000 | Mandagadde | OFT, FLD, Training |
| 6.8 | Fodder | Non availability of multi-cut fodder crops | 50 | Kudligere | FLD, Training |
| 6.9 | Arecanut | Nutrient deficiency, Die back and inflorescence caterpillar | 150 | Kudligere | FLD, Training |
| 6.10 | Food science and nutrition | Lack of awareness on nutrition and nutritional deficiency | 50 % | Humcha | FLD, Training |
| 6.11 | Food science and nutrition | Non utilization of roof of the house | - | Shivamogga | FLD, Training |
| 6.12 | Black pepper | Foot rot / quick wilt | 100 | Humcha | OFT, Training |
| 6.13 | Banana | Pseudostem Weevil and Sigatoka | 100 | Holehonnur | FLD, Training |
| 6.14 | Maize | Nutrient deficiency, pest and diseases | 200 | Kumsi | FLD, Training |
| 6.15 | Flower crops | Lack of awareness on improved varieties | 30 | Holehonnur | FLD, Training |

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

**7.1 Assessment of Nitrogen use efficiency in paddy**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. 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 | Paddy | Leaching and volatilization losses of  ‘N' at critical growth stages | Assessment of Nitrogen use efficiency in paddy | **Tech.Option-1:** Basal application of N & P only followed by N & K top dressing. | Farmers' Practice |  |  |  | **5** |  | * Nutrient status, * Productive   tillers / m2   * Nitrogen use efficiency * Grain yield (q/ha) * B:C | Scientist  (Soil Science), Scientist  (Plant Pathology) |
| **Tech.Option-2:** Recommended dose of fertilizers (RDF): Basal application of 50% N & K and 100% P. 50% N as top dressing in two equal splits at 25 and 55 DAP and 50% K at 55 DAP. | UAS, Bengaluru | DAP | 12 kg | 180 | 900 |
| Urea | 20 kg | 160 | 800 |
| MOP | 10 kg | 80 | 400 |
| ZnSO4 | 2 kg | 100 | 500 |
| **TOTAL** | | **520** | **2600** |
| **Tech.Option-3:**  Recommended NPK + foliar application of 1% 19:19:19 NPK at maximum tillering stage + foliar application of 1% 13:0:46 NPK at grain filling stage**.** | UAS, Bengaluru, DRR Hyderabad | DAP | 12 kg | 180 | 900 |
| Urea | 20 kg | 160 | 800 |
| MOP | 10 kg | 80 | 400 |
| ZnSO4 | 2 kg | 100 | 500 |
| Polyfeed | 0.75 kg | 130 | 650 |
| Multi K | 0.75 kg | 120 | 600 |
| **TOTAL** | | **770** | **3850** |
| **Tech.Option-4:** RDF:RD Nitrogen through slow release urea (Neem coated urea) | IARI, New Delhi | DAP | 12 kg | 180 | 900 |
| Urea (NCU) | 20 kg | 200 | 1000 |
| MOP | 10 kg | 80 | 400 |
| ZnSO4 | 2 kg | 100 | 500 |
|  | **TOTAL** | **560** | **2800** |
| Soil analysis charges | 1 + 4 | **500** | **2500** |
| **GRAND TOTAL** | | **2350** | **11750** |

**OFT-2 : Assessment of ginger varieties for higher yield**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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** |
| 7.2 | Ginger | High seed rate, lack of awareness on newly released high yielding varieties | Assessment of ginger varieties for higher yield | **Tech.Option-1:**  Himachal | Farmers’ Practice |  |  |  |  |  | * Plant height (cm) * Rhizome rot incidence (%) * Fresh weight (q/ha) * Dry weight (q/ha) * B:C | Scientist (Horticulture), SS&H, Scientist (Plant Pathology) |
| **Tech.Option-2:**  Varada | IISR, Calicut | Rhizomes | 30 kg | 3000 | **4** | 12000 |
| **TOTAL** | | **3000** | **12000** |
| **Tech.Option-3:**  Mahima | IISR, Calicut | Rhizomes | 30 kg | 2400 | 9600 |
| **TOTAL** | | **2400** | **9600** |
| Soil analysis charges | 1 + 3 samples | 400 | 1600 |
| **GRAND TOTAL** | | **5800** | **23200** |

**OFT-3 : Management of foot rot in pepper**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. 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** |
| 7.3 | Black pepper | Foot rot disease, low yield | Management of foot rot in pepper | **Tech.Option-1:**  Application of Bordeaux mixture | Farmers’ Practice |  |  |  |  |  | * Disease incidence (%) * Spikes / vine (Nos.) * Spike weight (g) * Yield (q/ha) * B:C Ratio | Scientist (Plant Pathology), SS&H, Scientist (Horticulture) |
| **Tech.Option-2:** Drenching of Metalaxyl 8% + Mancozeb 64% WP @ 2 g/*l*  (5-10 *l* / vine) and soil application of *Trichoderma* 50 g / vine. | UAS, Bengaluru | Metalaxyl + Mancozeb | 1 kg | 1400 | **4** | 5600 |
| *Trichoderma* | 2 kg | 300 | 1200 |
| **TOTAL** | | **1700** | **6800** |
| **Tech.Option-3:** Soil application of Compost 20 kg. + Neem cake 1 kg. + Microbial consortia 50 g / vine and covering with 200 gauge UV resistant polythene sheet @ 1.25 sqm. / vine. | UAS, Dharwad | Neem cake | 20 kg | 400 | 1600 |
| Microbial consortia | 2 kg | 500 | 2000 |
| Polythene sheet @ 1.25 sqm. / vine | 7 kg | 1200 | 4800 |
| **TOTAL** | | **2100** | **8400** |
| **GRAND TOTAL** | | **3800** | **15200** |

## 8. Technology Refinement during 2017-18

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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** |
| 8.1 |  |  |  | 1 |  |  |  |  |  |  |  |  |
|  |  |  |  | 2 |  |  |  |  |  |  |  |  |
| 8.2 |  |  |  | 1 |  |  |  |  |  |  |  |  |
|  |  |  |  | 2 |  |  |  |  |  |  |  |  |
| 8.3 |  |  |  | 1 |  |  |  |  |  |  |  |  |
|  |  |  |  | 2 |  |  |  |  |  |  |  |  |

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

| **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 | Paddy | Stem borer, leaf roller, blast, sheath blight and Udbatta | **Integrated pest and disease management in paddy**   * IPM-Cultural and mechanical methods * Spraying of Neem oil 2000 PPM @ 2.5 ml/*l* * Application of Fipronil 0.3 G @ 10 kg/ac * Seed treatment with Carbendazim 50 WP @ 4 g/kg of seeds * Release of Trichogramma @ 1.20 lakh / ac * Spraying of Propiconazole 25 EC @ 1 ml/*l* | Variety | JGL 1798 | UAHS, Shivamogga | Trichogramma | 1.20 lakhs | | 600 | **10** | 6000 | * Pest and disease incidence (%) * Yield (q/ha) * B:C | SS&H, Scientist (Plant Pathology) |
| Neem oil | 2 ***l*** | | 800 | 8000 |
| Carbendazim | 500 g | | 300 | 3000 |
| Fipronil | 10 kg | | 1000 | 10000 |
| Propiconazole | 500 ml | | 750 | 7500 |
| **TOTAL** | | | **3450** | **34500** |
|  | Cereals | Maize | Zinc deficiency, stem borer, TLB and low yield | **Integrated Crop Management in Maize**   * Bio-fertilizer (*Azospirillum and* PSB) and *Trichoderma* enriched FYM application  (1:20) @ 8 t/ha * RDF : 100:50:25 kg. NPK / ha * Zinc Sulphate @ 10 kg/ha * Profenophos 20 EC @ 2 ml/*l* * Propiconazole 25 EC @ 1.0 ml /*l* | Hybrid | - | UAHS, Shivamogga | Zinc sulphate | | 4 kg | 480 | **8** | 3840 | * Grains per cob row (Nos.) * Cob weight (g) * Pest and Disease incidence (%) * Yield (q/ha) * B:C | Scientist (SS&AC),  Scientist (Agril. Extension),  SS&H,  Scientist (Plant Pathology),  FM |
| Bio-fertilizers (*Azospirillum* &PSB) and *Trichoderma* | | 9 kg | 1250 | 10000 |
| Propiconazole | | 500 ml | 750 | 6000 |
| Profenophos | | 1 *l* | 600 | 4800 |
| Soil analysis charge | | 1 + 2 | 300 | 2400 |
| **TOTAL** | | | **3380** | **27040** |
| 9.2 | Millets |  |  |  |  |  |  |  |  | |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| 9.3 | Oilseeds | Sunflower | Boron and zinc deficiency, powdery mildew, leaf spot, bud necrosis, low yield | **Integrated Crop Management in Sunflower**   * Bio-fertilizer (*Azospirillum &* PSB) and *Trichoderma* enriched FYM application (1:20) @ 8 t/ha * RDF : 90:90:50 kg. NPK / ha * Zinc Sulphate @ 10 kg / ha * 0.2 % Borax Spray at button opening stage * Spraying of Imidachloprid 200 SL  (1 ml/ *l*) for bud necrosis * Hexaconazole 5 EC @ 1  ml /*l* | Hybrid | - | UAHS, Shivamogga | Zinc sulphate | 4 kg | | 480 | **8** | 3840 | * Seed weight / head (g) * Pest and disease incidence (%) * Yield (q/ha) * B:C | Scientist (Agril. Extension), Scientist (SS&AC), SS&H, Scientist (Plant Pathology) |
| Bio-fertilizers (*Azospirillum &* PSB) and *Trichoderma* | 9 kg | | 1250 | 10000 |
| Borax | 1 kg | | 120 | 960 |
| Imidachloprid | 125 ml | | 350 | 2800 |
| Hexaconazole | 1 *l* | | 400 | 3200 |
| Soil analysis charge | 1 + 2 samples | | 300 | 2400 |
| **TOTAL** | | | **2900** | **23200** |
|  |  |  |  |  |  |  |  |  | | |  |  |  |  |  |
|  | Oilseeds | Groundnut | Zinc & Boron Deficiency, Low shelling percentage, Incidence of leaf minor, Leaf spot disease | **ICM in groundnut**   * Variety G-2-52 * Lime application based on soil test * Seed treatment with *Rhizobium*, PSB & *Trichoderma* * Gypsum application @ 500 kg / ha * Foliar application of borax @ 0.2 % * Profenophos 20 EC @ 2.0 ml/*l* | Variety | G-2-52 | UAS, Dharwad | Groundnut Pods | 80 kg | | 6000 | **5** | 30000 | * Nutrient status * Pest & disease incidence (%) * Shelling % * Pod yield (q/ha) * B:C | Scientist (SS&AC), Scientist (Agril. Extension), SS&H, Scientist (Plant Pathology), FM |
| *Rhizobium +* PSB + *Trichoderma* | 500 g each | | 150 | 750 |
| Gypsum | 200 kg | | 600 | 3000 |
| Borax | 600 g | | 100 | 500 |
| Soil analysis charge | 1 + 2 samples | | 300 | 1500 |
| **TOTAL** | | | **7150** | **35750** |
| 9.4 | Pulses | Blackgram | Non adoption of short duration pulse varieties for paddy fallows | **Demonstration on Black Gram variety Rashmi (LBG – 625)**   * Short duration black gram variety LBG – 625 in rice fallows * Seed treatment with bio-fertilizers | Variety | Rashmi (LBG-625) | UAHS, Shivamogga | Seeds | 8 kg | | 800 | **10** | 8000 | * Nutrient status * Pods / plant (No.) * Seed yield (q/ha) * Pest and disease incidence (%) * B:C | Scientist (SS &AC), SS&H, Scientist (Plant Pathology), Scientist (Agril. Extension), FM |
| Biofertilizers (PSB + *Rhizobium*) | 200 g each | | 100 | 1000 |
| Soil analysis charge | 1+2  samples | | 300 | 3000 |
| **TOTAL** | | | **1200** | **12000** |
| 9.5 | Commercial crops |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| 9.6 | Horticultural crops | Chilli | Non adoption of disease resistant and high yielding hybrids | **Integrated Crop Management in Chilli**   * Introduction of chilli hybrid – Arka Meghana * Marigold as trap crop (20:1) * Vegetable special – micro nutrient mixture * Neem Oil 20000 ppm @ 2.5 ml/*l* for fruit borer * Imadichloprid 17.8 SL @ 0.5 ml/*l* for Thrips * Propargite 57 EC @ 1.6 ml/*l* for mites | Hybrid | Arka Meghana | IIHR, Bengaluru | Chilli seedlings | 9900 Nos. | | 6200 | **4** | 24800 | * Plant Height (cm) * Branches per plant (No.) * Fruits per plant (No.) * Pest and disease incidence (%) * Yield (t/ha) * B:C | Scientist (Horticulture), Scientist (Plant Pathology), SS&H |
| Vegetable special | 2 kg | | 500 | 2000 |
| Neem oil | 1 *l* | | 400 | 1600 |
| Imadichloprid | 125 ml | | 350 | 1400 |
| Propargite | 500 ml | | 500 | 2000 |
| Soil analysis charge | 1 + 2 samples | | 300 | 1200 |
| **TOTAL** | | | **8250** | **33000** |
|  |  |  |  |  |  |  |  |  | | |  |  |  |  |  |
| 9.6 | Horticultural crops | Tomato | Non adoption of disease resistant and  high yielding hybrids | **Integrated Crop Management in Tomato**   * Demonstration of high yielding, triple disease resistant tomato hybrid – ‘Arka Samrat’ * Vegetable special – micro-nutrient mixture * Neem Oil @ 2.5 ml/*l* * Profenophos 20 EC @ 2.0 ml/*l* | Hybrid | Arka Samrat | IIHR, Bengaluru | Tomato seedlings | 12000 Nos. | | 8100 | **3** | 24300 | * No. days for 50% flowering * Fruits per cluster (No.) * Fruits per plant (No.) * Average fruit weight (g) * Pest and disease incidence (%) * Yield (t/ha) * B:C | Scientist (Horticulture) Scientist (Plant Pathology), SS&H |
| Vegetable special | 2 kg | | 500 | 1500 |
| Neem oil | 1 *l* | | 400 | 1200 |
| Profenophos | 1 *l* | | 600 | 1800 |
| Soil analysis charge | 1 + 2 samples | | 300 | 900 |
| **TOTAL** | | | **9900** | **29700** |
| 9.6 | Horticultural crops | China Aster | Non adoption of new flower crops | **Introduction of *China aster* variety ‘Kamini’** | Variety | Kamini | IIHR, Bengaluru | Seeds | 300 g | | 1500 | **6** | 9000 | * Flowers per plant (No.) * Yield (q/ha) * B:C | Scientist (Horticulture), Scientist (SS&AC), Scientist (Agril. Extension) |
| Soil analysis charge | 1 + 2 samples | | 300 | 1800 |
| **TOTAL** | | | **1800** | **10800** |
| 9.6 | Horticultural crops | Arecanut | Nutrient deficiency, Nut splitting, inflorescence die-back, inflorescence caterpillar | **Integrated nutrient and pest management in arecanut of Maidan area**     * Application of FYM @ 20 kg/plant * 100g + 40g + 140 g NPK + 20g Borax / plant * Spraying with Carbendazim 12% +  Mancozeb 63 % WP @ 2.0 g/*l* +  Chlorpyriphos 20 EC @ 2.0 ml /*l* | Variety | Tarikere local | CPCRI, Kasaragod  UAHS, Shivamogga | Borax | 5.5 kg | | 550 | **10** | 5500 | * Soil nutrient status * No. of split nuts dropped / plant * Pest and disease incidence (%) * Yield (q/ha) * B:C | Scientist (SS&AC),  Scientist (Horticulture),  Scientist (Plant Pathology),  Scientist (Agril. Extension) |
| Carbendazim + Mancozeb | 1 kg | | 600 | 6000 |
| Chlorpyriphos | 1 *l* | | 300 | 3000 |
| Soil analysis charge | 1+2 samples | | 300 | 3000 |
| **TOTAL** | | | **1750** | **17500** |
|  |  |  |  |  |  |  |  |  | | |  |  |  |  |  |
| 9.6 | Horticultural crops | Banana | Pseudostem Weevil,Rhizomeweevil, sigatoka leafspot and panama wilt | **Integrated pest and disease management in banana**   * Injection with Dimethoate 30 EC @ 5 ml in 5 ml of water * Spraying with Propiconazole  25 EC @ 1.0 ml/*l* (3 times at  15 days intervals) * Application of microbial consortia (*Trichoderma* and *pseudomonas*) @ 50 gm/plant * Drenching with Carbendazim 50 WP @ 2 g/*l* | Variety | Local | UAHS, Shivamogga | Propiconazole | 1 *l* | | 1600 | **8** | 12800 | * Pest and disease incidence (%) * Yield (t/ha) * B:C | SS & H, Scientist (Plant Pathology), Scientist (Horticulture) |
| Dimethoate | 1 *l* | | 600 | 4800 |
| Carbendazim | 1 kg | | 600 | 4800 |
| Microbial consortia | 2 kg | | 500 | 4000 |
| Injector | 1 No. | | 700 | 5600 |
| **TOTAL** | | | **4000** | **32000** |
| 9.7 | Livestock | Fodder crop | Fodder scarcity, unaware of fodder crops, dependency on hybrid Napier | **Demonstration of Fodder Bank Unit** | Variety | Lucerne seeds, Cowpea seeds, CoFS-31 | IGFRI, Dharwad, TNAU, Coimbatore | Lucerne seeds | 250 g | | 150 | **6** | 1500 | * Yield (t/ha) * B:C | Scientist (SS&AC), Scientist (Horticulture), Scientist (Agril. Extension) |
| Cowpea seeds | 1.5 kg | | 150 | 1500 |
| CoFS-31 | 250 g | | 100 | 1000 |
| Soil analysis charge | 1 + 2 samples | | 300 | 3000 |
| **TOTAL** | | | **700** | **4200** |
| 9.8 | Fisheries |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| 9.9 | Others |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| 9.9 | Food science and nutrition | Fruits and vegetable | Nutritional deficiency | **Demonstration on Nutritional Gardens to ensure nutritional security** | - | - | UAS Bengaluru | Vegetable seed kit | 2 Nos. | | 3600 | **5** | 18000 | * Pre & Post evaluation on Nutritional knowledge | Scientist (Home Science), Scientist (Horticulture) |
| Perennial crops | 6 Nos. | |
| Vermi-compost | 40 kg | |
| Neem oil | 1 *l* | |
| Vegetable special | 2 kg | |
| Garden tools (Ganesha Sprayer, Spade, Soil Raker) | 1 set | |
| **TOTAL** | | | **3600** | **18000** |
| 9.9 | Food science and nutrition | Terrace garden | Non utilization of roof of the house | **Promotion of Vegetable Terrace Garden** | - | - | UAS, Bangalore | Vegetable seed kit | 3 No. | | 750 | **5** | 3750 | * Pre & Post evaluation on Nutritional knowledge * B:C | Scientist (Home Science), Scientist (Horticulture) |
| Grow bags | 30 No. | | 500 | 2500 |
| Vermi compost | 25 kg. | | 250 | 1250 |
| Neem Oil | 1 *l* | | 400 | 2000 |
| Neem Cake | 40 kg. | | 800 | 4000 |
| Trichoderma | 1 kg. | | 100 | 500 |
| Vegetable special | 1 kg. | | 250 | 1250 |
| Small Sprayer | 1 No. | | 250 | 1250 |
| **TOTAL** | | | **3300** | **16500** |

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

| **S. No.** | **Thematic area** | **Crop / Enterprise** | **Major problem** | **Related field intervention (OFT/FLD)\*** | **Training Course Title\*\*** | **No. of Courses** | **Expected No. of participants** | **Names of the team members involved** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10.1 | Crop Production | Maize | Nutrient deficiency | ICM in maize | INM in maize | 1 | 30 | Scientist (SS&AC), SS&H, Scientist (Plant Pathology), FM |
| Maize | Lack of awareness on seed treatment with bio-fertilizers | ICM in maize | Method of seed treatment with bio-fertilizer and its importance | 1 | 30 | Scientist (SS&AC), SS&H, Scientist (Plant Pathology), FM |
| Paddy | Nutrient deficiency | Assessment of Nitrogen use efficiency in paddy | INM in paddy | 1 | 30 | Scientist (SS&AC), SS&H, Scientist (Plant Pathology), FM |
| Groundnut | Zinc & Boron Deficiency | ICM in groundnut | INM in groundnut | 1 | 30 | Scientist (SS&AC), SS&H, Scientist (Plant Pathology), FM |
| Groundnut | Leaf spot and leaf minor incidence | ICM in groundnut | IPDM in groundnut | 1 | 30 | Scientist (SS&AC), SS&H, Scientist (Plant Pathology), FM |
| Sunflower | No awareness on role of micro-nutrients | ICM in sunflower | Soil sampling and importance of micro nutrients in crop production | 1 | 30 | Scientist (SS&AC), Scientist (Agril. Extension), FM |
| Sunflower | Lack of awareness on seed treatment with bio-fertilizers | ICM in sunflower | Method of seed treatment with bio-fertilizer and its importance | 1 | 30 | Scientist (SS&AC), Scientist (Agril. Extension), FM |
| Black gram | No awareness of legume crops in improving soil fertility | Demonstration on  BLACK GRAM variety Rashmi (LBG – 625) | Soil sampling and importance of legume crops in soil fertility | 1 | 30 | Scientist (SS&AC), Scientist (Agril. Extension), FM |
| Black gram | Lack of awareness on seed treatment with bio-fertilizers | Demonstration on  BLACK GRAM variety Rashmi (LBG – 625) | Methods and role of seed treatment with bio-fertilizers | 1 | 30 | Scientist (SS&AC), Scientist (Agril. Extension), FM |
| 10.2 | Horticulture Production | Chilli | Inadequate use of fertilizers | ICM in chilli | Importance of soil test based fertilizer application | 1 | 30 | Scientist (horticulture), SS & H, Scientist (Plant Pathology), Scientist (Agril. Extension), |
| Chilli | Low yield and low quality chillies | ICM in chilli | INM in chilli | 1 | 30 | Scientist (horticulture), SS & H, Scientist (Plant Pathology), Scientist (Agril. Extension), |
| Tomato | Nutrient deficiency | ICM in tomato | Nutrient management in tomato | 1 | 30 | Scientist (horticulture), SS & H, Scientist (Plant Pathology), Scientist (Agril. Extension), |
| Tomato | Fruit borer and Early leaf spot incidence | ICM in tomato | Management of Fruit borer and Early leaf spot in tomato | 1 | 30 | Scientist horticulture), SS & H, Scientist (Plant Pathology), Scientist (Agril. Extension), |
| China aster | Lack of knowledge on China aster cultivation | Demonstration of China aster variety ‘Kamini’ | China aster cultivation | 1 | 30 | Scientist horticulture), SS & AC, Scientist (Agril. Extension), |
| China aster | Pest and disease incidence | Demonstration of China aster variety ‘Kamini’ | IPDM in China aster | 1 | 30 | Scientist (Horticulture), SS & H, Scientist (Plant Pathology) |
| Ginger | High seed rate, low yield | Assessment of ginger varieties for higher yield | Ginger seedling production through pro-trays | 1 | 30 | Scientist (Horticulture), Scientist (Agril. Extension), Scientist (SS & AC) |
| Ginger | Poor soil fertility, nutrient deficiency | Assessment of ginger varieties for higher yield | INM in ginger | 1 | 30 | Scientist (Horticulture), Scientist (Agril. Extension), Scientist (SS & AC) |
| Ginger | Lack of knowledge on post harvest technology | Assessment of ginger varieties for higher yield | Post harvest technology in ginger | 1 | 30 | Scientist (Horticulture), Scientist (Agril. Extension), Scientist (Home science) |
| Arecanut | Non application of micro-nutrients | Nut splitting management in Arecanut | Soil sampling and importance of micro-nutrients in arecanut | 1 | 30 | Scientist (SS & AC), Scientist (Horticulture), Scientist (Agril. Extension) |
| Arecanut | Nutrient deficiency | Nut splitting management in Arecanut | INM in arecanut | 1 | 30 | Scientist (SS & AC), Scientist (Horticulture), Scientist (Agril. Extension) |
| 10.3 | Livestock Production | Fodder | Fodder scarcity, unaware of fodder crops, dependency on hybrid Napier | Demonstration of fodder bank unit | Cultivation of different Fodder crops | 1 | 30 | Scientist (SS &AC),  Scientist (Horticulture) |
| 10.4 | Home Science | Millets | Lack of knowledge on value addition in millet crops | Other | Method demonstration on value addition in millet crops | 2 | 60 | Scientist (Home Scientist) |
| Milk | Lack of knowledge on milk products preparation | Other | Method demonstration on value addition in milk | 1 | 30 | Scientist (Home Scientist) |
| Fruits | Lack of knowledge on processing of fruits | Other | Method demonstration on processing and preservation of fruits | 1 | 30 | Scientist (Home Scientist) |
| Food science and nutrition | Nutrition deficiency | Demonstration on Nutritional Gardens to ensure nutritional security | Establishment and maintenance of nutritional gardens | 2 | 60 | Scientist (Home Scientist), Scientist (Horticulture) |
| Terrace garden | Non utilization of roof of the house | Promotion of Vegetable Terrace Gardening | Establishment and maintenance of terrace garden | 2 | 60 | Scientist (Home Scientist), Scientist (Horticulture) |
| Horticulture crops | Lack of knowledge on value addition in Horticultural crops | Other | Technology on value addition in Horticultural crops | 2 | 60 | Scientist (Home Science) |
| 10.5 | Plant Protection | Paddy | Stem borer, leaf roller, blast,  sheath blight and Udbatta | Integrated pest and  disease management in Paddy | IPDM in paddy | 1 | 30 | SS & H, Scientist (Plant Pathology), Scientist (Horticulture) |
| Tomato | Pest and diseases | ICM in tomato | Plant protection in tomato | 1 | 30 | SS & H, Scientist (Plant Pathology), Scientist (Horticulture) |
| Banana | Pseudostem Weevil, *s*igatoka leafspot and  panama wilt | Integrated pest and  disease management in banana | IPDM in banana | 1 | 30 | SS & H, Scientist (Plant Pathology), Scientist (Horticulture) |
| Arecanut | Nutrient deficiency, Nut splitting, inflorescence die-back, inflorescence caterpillar | Integrated nutrient and pest management in arecanut in Maidan area | Integrated Pest and disease management in arecanut | 1 | 30 | SS & H, Scientist (Plant Pathology), Scientist (Horticulture) |
| Ginger | Rhizome rot and Shoot borer | Management of rhizome rot and shoot borer in Ginger | IPM in ginger | 1 | 30 | SS & H, Scientist (Plant Pathology), Scientist (Horticulture) |
| Pepper | Foot rot / wilt | Management of foot rot in pepper | Disease management in pepper | 1 | 30 | SS & H, Scientist (Plant Pathology), Scientist (Horticulture) |
| 10.6 | Production of Inputs at Site |  |  |  |  |  |  |  |
| 10.7 | Soil Health and Fertility | All crops | Improper soil health management | Other | Soil sampling, testing and importance | 2 | 60 | SS & AC, Scientist (Horticulture), Scientist (Agril. Extension) |
| Green manure crops | No awareness of different green manure crops | Other | Role of green manure crops in soil fertility | 1 | 30 | Scientist (SS & AC), Scientist (Horticulture), Scientist (Agril. Extension), FM |
| 10.8 | PHT and value addition |  |  |  |  |  |  |  |
| 10.9 | Capacity Building Group Dynamics | ICT | Lack of knowledge regarding E-extension | Other | Importance of  E-extension | 1 | 30 | Scientist (Agril. Extension), Scientist (horticulture), Scientist (Plant Pathology), FM |
| 10.10 | Farm Mechanization | Paddy | Lack of knowledge on mechanization | Other | Mechanization | 1 | 30 | Scientist (Agril. Extension), SS & H, Scientist (Plant Pathology) |
| 10.11 | Fisheries Production Technologies |  |  |  |  |  |  |  |
| **10.12** | Mushroom production | Mushroom | Lack of knowledge on mushroom cultivation | Other | Mushroom cultivation | 2 | 60 | Scientist (Home Science), PA |
| **10.13** | Agro forestry |  |  |  |  |  |  |  |
| **10.14** | Bee Keeping | Apiculture | Pest and diseases | Others | Management of natural enemies of honey bees | 1 | 30 | SS & H, Scientist (Plant Pathology) |
| **10.15** | Sericulture |  |  |  |  |  |  |  |

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

| **S. No.** | **Thematic area** | **Crop / Enterprise** | **Major problem** | **Related field intervention (OFT/FLD)\*** | **Training Course Title\*\*** | **No. of Courses** | **Expected No. of participants** | **Names of the team members involved** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **11.1** | Crop Production | Maize | Zinc and boron deficiency | ICM in maize | INM in maize | 1 | 30 | Scientist (SS & AC), Scientist (Agril. Extension), FM |
| Maize | Pest and diseases | ICM in maize | IPDM in maize | 1 | 30 | Scientist (SS & AC), SS & H, Scientist (Plant Pathology), Scientist (Agril. Extension) |
| Groundnut | Zinc and boron deficiency | ICM in groundnut | INM in groundnut | 1 | 30 | Scientist (SS & AC), Scientist (Agril. Extension), FM |
| Pest and diseases | ICM in groundnut | IPDM in groundnut | 1 | 30 | Scientist (SS & AC), SS & H, Scientist (Plant Pathology), Scientist (Agril. Extension) |
| Sunflower | Zinc and boron deficiency | ICM in sunflower | INM in sunflower | 1 | 30 | Scientist (SS & AC), SS & H, Scientist (Plant Pathology), Scientist (Agril. Extension) |
|  | Pest and diseases | ICM in sunflower | IPDM in sunflower | 1 | 30 | Scientist (SS & AC), SS & H, Scientist (Plant Pathology), Scientist (Agril. Extension) |
| Blackgram | Non adoption of short duration  pulse varieties for paddy fallows | Demonstration on  BLACK GRAM variety Rashmi (LBG – 625) | ICM in Blackgram | 1 | 30 | Scientist (Agril. Extension), Scientist (SS & AC), SS & H, Scientist (Plant Pathology), FM |
| **11.2** | Horticulture Production | Nursery techniques | Lack of knowledge on nursery techniques | Other | Nursery techniques in horticulture crops | 2 | 60 | Scientist (Horticulture), Scientist (Agril. Extension), Scientist (SS & AC) |
| Flower crops | Lack of knowledge on commercial cultivation | Other | Commercial cultivation of flower crops | 2 | 60 | Scientist (Horticulture), Scientist (SS & AC), Scientist (Plant Pathology), Scientist (Agril. Extension) |
| Tomato | Micro nutrient deficiency | ICM in tomato | Use of vegetable special in tomato to boost the yield | 1 | 30 | Scientist (Horticulture), Scientist (SS & AC), Scientist (Agril. Extension) |
|  |  | Chilli | Bacterial wilt, fruit borer, white fly, mites | ICM in Chilli | IPDM in Chilli | 1 | 30 | Scientist (Horticulture), Scientist (Plant Pathology), SS&H, Scientist (Agril. Extension) |
| Arecanut | Nutrient deficiency, Nut splitting | Integrated nutrient and pest management in arecanut in Maidan area | Integrated nutrient management in arecanut | 1 | 30 | Scientist (SS & AC), Scientist (Horticulture), Scientist (Agril. Extension) |
| Terrace garden | Lack of knowledge on establishing the terrace garden | Other | Establishment and maintenance of terrace garden | 2 | 60 | Scientist (Home Science), Scientist (Agril. Extension) |
| **11.3** | Livestock Production | Sheep rearing | Diseases | Other | Management of diseases in Sheep | 1 | 30 | SS & H |
| **11.4** | Home Science | Spices and oil seeds | Unaware of different Chutney powder preparation | Other | Instant chutney powder preparation | 1 | 30 | Scientist (Home science) |
| Fruits | Lack of knowledge on post harvest technology | Other | Method demonstration on processing and preservation of fruits | 1 | 30 | Scientist (Home science) |
| **11.5** | Plant Protection | Bio-agents | Lack of knowledge on production and usage of bio-agents | Other | Production, multiplication and usage of bio-agents in agriculture | 1 | 30 | Scientist (Plant Pathology), SS & H |
| **11.6** | Production of Inputs at Site |  |  |  |  |  |  |  |
| **11.7** | Soil Health and Fertility | Compost | Improper method of preparation | Other | Improved composting methodologies | 1 | 30 | Scientist (SS & AC), PA, Scientist (Plant Pathology) |
| **11.8** | PHT and value addition |  |  |  |  |  |  |  |
| **11.9** | Capacity Building Group Dynamics | Farm science club | No awareness regarding farm science club | Other | Farm science club for enhance knowledge and increase income | 1 | 30 | Scientist (Agril. Extension), SS & H, FM |
| **11.10** | Farm Mechanization | Paddy | No awareness on mechanization | Other | Mechanization in paddy | 1 | 30 | SS & H |
| **11.11** | Fisheries Production Technologies |  |  |  |  |  |  |  |
| **11.12** | Mushroom production | Mushroom | Lack of knowledge on spawn and mushroom cultivation | Other | Spawn production and mushroom cultivation | 2 | 60 | Scientist (Home Science), PA |
| **11.13** | Agro forestry |  |  |  |  |  |  |  |
| **11.14** | Bee Keeping | Apiculture | Improper management of bee colonies | Other | Seasonal management of bee colonies | 1 | 30 | SS & H |
| **11.15** | Sericulture |  |  |  |  |  |  |  |

### 12. Training 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 | Improper paddy cultivation | 1 | 30 | SS & H, Scientist (Agril. Extension) |
| 12.2 | Home Science | Instant ragi malt preparation | 1 | 30 | Scientist (Home Science) |
| 12.3 | Capacity Building and Group Dynamics | Sustainable agriculture and rural development | 1 | 30 | Scientist (Agril. Extension), Scientist (Horticulture), Scientist (Plant Pathology) |
| 12.4 | Horticulture | Grafting techniques in major horticulture crops | 2 | 60 | Scientist (Horticulture), Scientist (Agrl. Extension), Scientist (SS &AC) |
| Protected cultivation of vegetable crops | 2 | 60 | Scientist (Horticulture), SS & H, Scientist (Plant Pathology), Scientist (Agril. Extension) |
| Commercial cultivation of major flower crops | 2 | 60 | Scientist (Horticulture), SS & H, Scientist (Plant Pathology), Scientist (Agril. Extension) |
| 12.5 | Livestock Production & Management |  |  |  |  |
| 12.6 | Plant Protection | IPM in plantation crops | 1 | 30 | SS & H, Scientist (Plant Pathology) |
| IPM in vegetables | 1 | 30 | SS & H, Scientist (Plant Pathology) |
| 12.7 | Farm Mechanization | Mechanization in ginger production | 1 | 30 | Scientist (Agril. Extension), SS & H, FM |
| 12.8 | PHT and value addition |  |  |  |  |
| 12.9 | Production of Inputs at Site |  |  |  |  |
| 12.10 | Sericulture |  |  |  |  |
| 12.11 | Fisheries |  |  |  |  |

\* 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 | Mushroom cultivation | 1 (3 days) | SHGs | 30 | - | Scientist (Home Science), PA |
|  |  | Bakery product preparation | 1 (3 days) | SHGs | 30 | - | Scientist (Home Science) |
| 13.3 | Capacity Building and Group Dynamics | Co-operative marketing and Human resource development | 1 (3 days) | Youth | 30 | - | Scientist (Agril. Extension),SS & H, Scientist (Plant Pathology) |
| 13.4 | Horticulture | Preparation of eco-friendly value added products from areca leaf sheath | 1(3 days) | SHGs | 30 | - | Scientist (Horticulture), Scientist (Home Science), Scientist (Agril. Exension), PA |
|  |  | Establishment and maintenance of terrace garden | 1(3 days) | Women | 30 | - | Scientist (Horticulture), Scientist (SS & AC), Scientist (Agril. Extension) |
|  |  | Nursery techniques in horticultural crops | 1(3 days) | Youths | 30 | - | Scientist (Horticulture), Scientist (Agril. Extension), Scientist (SS&AC), PA |
| 13.5 | Livestock Production & Management |  |  |  |  |  |  |
| 13.6 | Plant Protection | Bee keeping | 1(3 days) | Youths | 30 | - | SS & H, Scientist (Plant Pathology), PA |
| 13.7 | Farm Mechanization |  |  |  |  |  |  |
| 13.8 | PHT and value addition |  |  |  |  |  |  |
| 13.9 | Production of Inputs at Site |  |  |  |  |  |  |
| 13.10 | Sericulture |  |  |  |  |  |  |
| 13.11 | Fisheries |  |  |  |  |  |  |

## 14. Sponsored trainings during 2017-18

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Thematic area and the Crop / Enterprise** | **Training title\*** | **No. of programmes and Duration (days)** | **Type of Participants**  **(SHGs, NYKs, School students, Women, Youth etc.)** | **Expected number of participants** | **Sponsoring agency** | **Names of the team members involved** |
| 14.1 | Crop Production | Improper paddy cultivation | 1 (3 days) | Youth | 30 | ATMA | SS & H, Scientist (Plant Pathology), Scientist (SS & AC) |
| 14.2 | Home Science |  |  |  |  |  |  |
| 14.3 | Capacity Building and Group Dynamics | Sustainable development for farmers | 1 (3 days) | Youth | 30 | - | Scientist (Agril. Extension), SS & H, FM |
| 14.4 | Horticulture | Nursery techniques in horticulture crops | 1 (5 days) | Youths | 30 | State Government | Scientist (Horticulture), Scientist (Agril. Extension), Scientist (SS&AC) |
| 14.5 | Livestock Production & Management |  |  |  |  |  |  |
| 14.6 | Plant Protection | Bio-agents – their production and utilization | 1 (2 days) | Youths | 30 | State Government | SS & H, Scientist (Plant Pathology), PA |
| 14.7 | Farm Mechanization | Coconut palm climbing | 1 (5 days) | Youths | 30 | Coconut board | Scientist (Agril. Extension), SS & H, Scientist (Horticulture) |
| 14.8 | PHT and value addition |  |  |  |  |  |  |
| 14.9 | Production of Inputs at Site |  |  |  |  |  |  |
| 14.10 | Sericulture |  |  |  |  |  |  |
| 14.11 | Fisheries |  |  |  |  |  |  |

## 15. Extension programmes during 2017-18

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl. No.** | **Extension Programme / Activity\*** | **No. of programmes or activities** | **Expected number of participants** | **Names of the team members involved** |
| 15.1 | Advisory Services | 240 | 4300 | SS&H, Scientists, PAs and FM |
| 15.2 | Diagnostic Visits | 05 | 35 | SS&H, Scientists and Line Dept. officials |
| 15.3 | Field Day | 08 | 450 | SS&H, Scientists, PAs and FM |
| 15.4 | Group Discussions | 12 | 300 | SS&H, Scientists, PAs and FM |
| 15.5 | Kisan Gosthi | 2 | 250 | SS&H and All Scientists, PAs, FM |
| 15.6 | Film Show | 305 | 1650 | SS&H and All Scientists |
| 15.7 | Self -Help Groups | 8 | 300 | SS&H and All Scientists |
| 15.8 | Kisan Mela | 05 | 1500 | SS&H, Scientists, PAs and FM |
| 15.9 | Exhibition | 05 | 3000 | SS&H, Scientists, PAs and FM |
| 15.10 | Scientists' Visit to Farmers Field | 45 | 660 | SS&H and All Scientists |
| 15.11 | Plant/Soil Health/Animal Health Camps | 02 | 150 | SS&H, Scientists, PAs and FM |
| 15.12 | Farm Science Club | - | - | SS&H and All Scientists |
| 15.13 | Ex-Trainees Sammelan | 2 | 125 | SS&H and All Scientists |
| 15.14 | Farmers' Seminar/Workshop | 6 | 280 | SS&H, Scientists, PAs and FM |
| 15.15 | Method Demonstrations | 10 | 600 | SS&H, Scientists, PAs and FM |
| 15.16 | Celebration of Important Days | 4 | 400 | SS&H, Scientists, PAs and FM |
| 15.17 | Special Day Celebration | 4 | 350 | SS&H and All Scientists |
| 15.18 | Exposure Visits | 1 | 100 | SS&H, Scientists, PAs and FM |
| 15.19 | Technology Week, | 1 | 350 | SS&H, Scientists, PAs and FM |
| 15.20 | Farmers Field School (FFS) | 1 | 30 | SS&H and All Scientists |
| 15.21 | Farm Innovators Meet | 2 | 150 | SS&H, Scientists and PA |
| 15.22 | Awareness Programs | 2 | 220 | SS&H, Scientists and PA |

## 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 | * Groundnut seed production * Demonstration on improved ragi varieties * Demonstration on improved varieties of oil seeds and pulses * Demonstration on high yielding, disease resistant vegetable crops (Beans, Brinjal, Chilli, tomato) * Demonstration on drumstick, ginger, turmeric. * Demonstration on intercropping system * Demonstration on fodder bank * Demonstration on model Kitchen Garden * Demonstration of Tube rose & rose * Demonstration on roof top garden | 3.0 | SS&H, Scientists, FM |
| 16.1.2 | Demonstration Units | * Protected structure | - | SS&H, Scientist (Horticulture),  Farm Manager |
| * Demonstration on fish production | 0.15 ha. | Farm Manager |
| * University released crop varieties viz., Cereals, pulses, oilseeds, etc. | 0.20 | SS&H, Scientists, FM |
| 16.1.3 | Lab Analytical Services | * Testing of soil, water and manure samples | 3300 Nos. | SS&H, PA,  Scientist (Soil Science) |
| 16.1.4 | Technology Week | * Farmers-Scientists interaction meet * Integrated production technologies in field crops * Protected cultivation of vegetables and flowers * Value addition * Marketing of agricultural produce and formation of farmers group | 1 | All KVK staff |

**16.2 Technological Products**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Category** | **Name of the Production**  **Partner Agency, if any** | **Name of the product** | **Quantity (q)/ Number planned to be produced during 2017-18** | **Names of the team members involved** |
| 16.2.1 | Seeds | UAHS, Shivamogga | Groundnut breeder seed | 15 q | SS&H, Farm Manager, Scientist (Agronomy) |
| Ragi | 12 q |
| Red gram, black gram, green gram, cowpea, horse gram | 10 q |
| Daiancha / Sunhemp | 1 q |
| 16.2.2 | Planting materials | UAHS, Shivamogga | Papaya – Taiwan-786\* | 15000 Nos. | SS&H, Farm Manager,  Scientist (Horticulture) |
| Drumstick – Bhagya/PKM-1\* | 10000 Nos. |
| Curry leaf-Suvasini\* | 1500 Nos. |
| Sapota – Cricket Ball / Kalipatti\* | 500 Nos. |
| Mango – Alphonso\* | 500 Nos. |
| Vegetable seedlings\* | 50000 Nos. |
| 16.2.3 | Bio-products | UAHS, Shivamogga | Vermicompost | 2 t | SS&H, Farm Manager, PA |
| *Trichoderma*-Bio-control agent | 5 q | SS&H, PA (Lab), Farm Manager |
| *Pleurotous* – decomposing organism and as a spawn | 2.5 q | SS&H, PA (Lab), Farm Manager |
| 16.2.4 | Fish fingerlings | UAHS, Shivamogga | Fish | 500 kg | SS&H, Farm Manage |

**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 | 1. Technical input to bi-monthly workshop 2. Resource persons during training programme organized by KSDA 3. Diagnostic visit to problematic fields 4. Technical backstopping to Bhoo-chethana / NFSM/ATMA | SS&H,  All Scientists, Programme Assistant  & Farm Manager |
| Horticulture | * + 1. Resource persons during training programme organized by KSDH     2. Diagnostic visit to problematic fields | SS&H  & All Scientists |
| Agricultural Engineering | Training on use of coconut climber and palm cleaning, paddy mechanization | Scientist (Agril. Extension)  Scientist (Hort), PA |
| 16.3.2 | Literature/ publication | Extension bulletin on IPM in chilli, banana and aecanut, vermicompost production technology, Protected cultivation, Improved production technology of oil seed crops | SS&H, All Scientists, Programme Assistant (Lab Technician) & Farm Manager |
| Formation of Commodity Groups, | SS&H & Scientist (Agril. Extension) |
| Publication of success stories,  Information on schemes of the line departments | SS&H and All Scientists |
| Forage crops | SS&H and All Scientists |
| 16.3.4 | Electronic Media | Radio programme, TV programme, forecasting, Short messages, Mobile advisories, CD/DVDs | SS&H, All Scientists, Programme Assistant (Computer) & Farm Manager |
| 16.3.5 | Kisan Mobile Advisory Services | Information on outbreak of pest and disease and advisory services | SS&H, All Scientists, Programme Assistant (Lab Technician) & Farm Manager |
| 16.3.6 | Information on centre/state sector schemes and service providers in the district. | Information on schemes of line departments will be collected and documented | SS&H, All Scientists, Programme Assistant (Computer), Programme Assistant (Lab Technician) & Farm Manager |

## 17. Additional Activities Planned during 2017-18

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Name of the agency / scheme** | **Name of activity** | **Technical programme with quantification** | **Financial outlay (Rs.)** | **Names of the team members involved** |
| 17.1 | GoK | Progressive farmers to farmer training | 10 programmes | 1.25 | SS&H, All Scientists |
| 17.2 | MANAGE, GoI | Diploma in Agricultural Extension Services for Input Dealers (DAESI) | 1 programme (1 year duration) | 8.00 | SS&H, All Scientists |

**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/ likely to be produced)** |
| **5,97,408** | **7,78,125** | **8,51,953** | **6,71,236** | **8,00,000** |

**18.2 Plan of activities under Revolving Fund**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl. No.** | **Proposed activities** | **Expected output** | **Anticipated income (Rs.)** | **Names of the team members involved** |
| 18.2.1 | Horticulture Nursery production | - | 5,00,000 | SS & H, FM & Scientist (Horticulture) |
| 18.2.2 | Pulses seed production | - | 50,000 | SS & H, FM |
| 18.2.3 | Ragi seed production | - | 50,000 | SS & H, FM |
| 18.2.4 | Groundnut seed production | - | 1,00,000 | SS & H, FM |
| 18.2.5 | Fish production | - | 50,000 | SS & H, FM |
| 18.2.6 | Fodder seed production | - | 10,000 | SS & H, FM |

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No.** | **Type** | **No. of samples to be analyzed** | **Names of the team members involved** |
| 19.1 | Soil | 2300 | SS & H, Scientist (SS &AC), PA (Lab Tech) |
| 19.2 | Water | 1000 | SS & H, Scientist (SS &AC), PA (Lab Tech) |
| 19.3 | Plant | - |  |
| 19.4 | Others | - |  |

## 20. E-linkage during 2017-18

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. 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 | In progress | Maintaining in Software developed by ATARI, Bengaluru. |
| 20.3 | Any other |  |  |

**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. Innovator Farmer’s Meet**

|  |  |  |
| --- | --- | --- |
| **Sl.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 | September-2017 |
| 22.3 | Brief action plan in this regard | Interaction of progressive farmers, awardee farmers with farmers and popularize the innovative techniques |

**23. Farmers Field School (FFS) planned**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No.** | **Thematic area** | **Title of the FFS** | **Budget proposed in Rs.** |
| 23.1 | Horticulture production | ICM in French bean | 30,000 |

**24. Budget - Details of budget utilization (2016-17) upto 31 January 2017 (Rs.)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl**  **No** | **Particulars** | **Allotment** | **Expenditure** | **Balance** |
| 1. **RECURRING CONTINGENCIES** | | | | |
| 1. | **Pay and Allowance** | 8049000.00 | 5764287.00 | 2284713.00 |
| 2. | **Travelling Allowance** | 70000.00 | 42369.00 | 27631.00 |
| 3. | **Contingencies** |  |  |  |
| a. | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance | 400000.00 | 468204.00 | - 68204.00 |
| b. | POL, repair of vehicles, tractor and equipments | 175000.00 | 157983.00 | 17017.00 |
| c. | Meals/refreshment for trainees | 75000.00 | 64721.00 | 10279.00 |
| d. | Training material | 100000.00 | 67372.00 | 32628.00 |
| e. | Frontline demonstration except oil seeds and pulses | 333000.00 | 310680.00 | 22320.00 |
| f. | On farm testing | 30000.00 | 9843.00 | 20157.00 |
| g. | Training of extension functionaries | 15000.00 | 2850.00 | 12150.00 |
| h. | Extension Activities | 50000.00 | 45000.00 | 5000.00 |
| i. | Farmers' Field School | 30000.00 | 29539.00 | 461.00 |
| j. | EDP / Innovative activities | 30000.00 | 23208.00 | 6792.00 |
| k. | Soil & Water Testing & Issue of Soil Health Cards | 50000.00 | 49886.00 | 114.00 |
| L. | Display Boards | 10000.00 | 9965.00 | 35.00 |
| m. | Maintenance of building | 50000.00 | 49130.00 | 870.00 |
| n. | Library (Purchase of Journal, Periodicals, News Paper & Magazines) | 5000.00 | 3860.00 | 1140.00 |
|  | **TOTAL** | **9472000.00** | **7098897.00** | **2373103.00** |
| **B** | **NON RECURRING CONTINGENCIES** |  |  |  |
| 1. | Equipments and Furniture |  |  |  |
| a. | Office Automation | 300000.00 | 280300.00 | 19700.00 |
| b. | Furniture & Fixtures | 100000.00 | 99843.00 | 157.00 |
| 4. | Vehicle – 4 wheeler (replacement) | 800000.00 | - | 800000.00 |
|  | **TOTAL** | **1200000.00** | **380143.00** | **819857.00** |
|  | **GRAND TOTAL (A+B+C)** | **10672000.00** | **7479040.00** | **3192960.00** |

**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** | 80,00,000 |
| 25.1.2 | **Traveling allowances** | 1,00,000 |
| 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) | 3,00,000 |
| *B* | POL, repair of vehicles, tractor and equipments | 2,50,000 |
| *C* | Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained) | 1,00,000 |
| *D* | Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training) | 1,00,000 |
| *E* | Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year) | 2,94,190 |
| *F* | On farm testing (on need based, location specific and newly generated information in the major production systems of the area) | 50,150 |
| *G* | Training of extension functionaries | 25,000 |
| *H* | Maintenance of buildings | 50,000 |
| *I* | Establishment of Soil, Plant & Water Testing Laboratory | 1,00,000 |
| *J* | Library | 10,000 |
| *25.1* | **TOTAL Recurring Contingencies** | **93,79,340** |
| **25.2** | **Non-Recurring Contingencies** |  |
| 25.2.1 | **Works** |  |
| 25.2.2 | **Equipments including SWTL & Furniture** |  |
| 25.2.3 | **Vehicle** (Four wheeler/Two wheeler, please specify) |  |
| 25.2.4 | **Library** (Purchase of assets like books & journals) |  |
| **25.2** | **TOTAL Non-Recurring Contingencies** |  |
| **25.3** | **REVOLVING FUND** |  |
| **25.4** | **GRAND TOTAL** | **93,79,340** |

**------ X X X X ------**

OFTs and FLDs for the year 2017-18

**Technology Assessment during 2017-18**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl.#** | **Crop** | **Title of OFT** | **No. of Trials** | **Total Amount** |
| 1. | Paddy | Assessment of Nitrogen use efficiency in paddy | 5 | 11750 |
| 2. | Ginger | Assessment of ginger varieties for higher yield | 4 | 23200 |
| 3. | Black pepper | Management of foot rot in pepper | 4 | 15200 |
| **TOTAL** | | | | **50150** |

**Frontline Demonstrations during 2017-18**

| **Sl.#** | **Crop** | **Title of FLD** | **No. of Demos** | **Total Amount** |
| --- | --- | --- | --- | --- |
|  | Paddy | Integrated pest and disease management in paddy | 10 | 34,500 |
|  | Maize | Integrated Crop Management in Maize | 8 | 27,040 |
|  | Sunflower | Integrated Crop Management in Sunflower | 8 | 23,200 |
|  | Groundnut | ICM in groundnut | 5 | 35,750 |
|  | Blackgram | Demonstration on Black Gram variety Rashmi (LBG – 625) | 10 | 12,000 |
|  | Chilli | Integrated Crop Management in Chilli | 4 | 33,000 |
|  | Tomato | Integrated Crop Management in Tomato | 3 | 29,700 |
|  | China Aster | Introduction of *China aster* variety ‘Kamini’ | 6 | 10,800 |
|  | Arecanut | Integrated nutrient and pest management in arecanut of Maidan area | 10 | 17,500 |
|  | Banana | Integrated pest and disease management in banana | 8 | 32,000 |
|  | Fodder crop | Demonstration of Fodder Bank Unit | 6 | 4,200 |
|  | Fruits and vegetable | Demonstration on Nutritional Gardens to ensure nutritional security | 5 | 18,000 |
|  | Terrace garden | Promotion of Vegetable Terrace Garden | 5 | 16,500 |
| **TOTAL** | | | | **2,94,190** |

**Cluster FLD for pulses under NFSM during 2017-18**

| **Sl.#** | **Crop** | **Title of OFT** | **No. of Demos** | **Total Amount** |
| --- | --- | --- | --- | --- |
| 1. | Green gram | Cluster front line demonstration for Green Gram – KKM-3 under NFSM – 2017-18 | 50 | 1,50,000 |

**Farmers Field School during 2017-18**

| **Sl.#** | **Crop** | **Title of OFT** | **No. of Demos** | **Total Amount** |
| --- | --- | --- | --- | --- |
| 1. | French bean | Production Technology of French bean | 1 | 30,000 |