###### Action Plan (2021-22)

###### Summary of Technical Activities

###### ICAR – Krishi Vigyan Kendra, Idukki

1. Address of KVK with Phone, Fax, e-mail and Website (Furnish district map and indicate the location of the KVK)

**ICAR – Krishi Vigyan Kendra,**

Bapooji Sevak Samaj,

Pethotty P.O, Santhanpara, Idukki (Dt.), Kerala, PIN-685619.

Email: [*kvksanthanpara@gmail.com*](mailto:kvksanthanpara@gmail.com)

Web URL: [*www.kvkidukki.org*](http://www.kvkidukki.org)



(2) Details of operational area/Cluster villages

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Taluk/ Block** | **Name of cluster villages** | **Major crops & enterprises** | **Major problems identified in each crop / enterprise** | **Proposed**  **type of interventions** |
| Devikulam | Vattavada | Potato | * Late blight caused significant loss in production | OFT, Training, Extension activities |
| Big onion | * Lack of high yielding varieties * Incidence of more pest and diseases * Premature bolting * Bulb splitting | OFT, Training, Extension activities |
| Strawberry | * Fruit distortion/Malformed, Shriveled fruits * Snail and Slug damaged fruits | FLD, Training, Extension activities |
| Carrot | * Severely affected by root knot nematodes | FLD, Training, Extension activities |
| Garlic | * Rubberisation and high incidence of pest and disease due to application of high dose of nitrogen fertilizer | FLD, Training, Extension activities |
| Poultry | * Low of protein source * Inadequate composition of feed * Poor growth performance * Low egg production | FLD, Training, Extension activities |
| Udumbanchola | Udumbanchola | Black Pepper | * Low recovery of planting material due to disease in nursery. * Quick wilt disease infestation in the field * Inadequate knowledge on soil test based nutrient management * Secondary and micronutrient deficiency disorder * Poor berry settings and less yield | OFT, FLD, Training, Extension activities |
| Paddy | * Phosphate induced Zinc deficiency * Sterile spikelet’s * Low yield | FLD, Training, Extension activities |
| Small cardamom | * Withering of plants * Lodging symptoms * Toxicity of Fe and Al * Severely affected by root grub | FLD, Training, Extension activities |
| Duck | * Shortage of broiler duck meat in festival season | OFT, Training, Extension activities |
| Dairy cattle | * Low milk yield * Low composition in milk | FLD, Training, Extension activities |
| Fish | * Non availability of fresh fish * Availability of Chemically preserved fish | FLD, Training, Extension activities |

**(3) Details of technological interventions**

## 3.1 Technology assessment

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sl.**  **No.** | **Crop/ enterprise** | **Title of intervention** | **Technological options** | **No. of trials** | **Total cost involved (Rs.)** | **Team members involved** |
| 1 | Potato | Assessment of late blight tolerant potato varieties in Vattavada | **TO 1**  Local variety- Mettupalayam local  **TO 2**  Kufri Neelkanth  (CPCRI 2018)  **TO 3**  Kufri Karan  (CPCRI 2018) | 5 | 43500.00 | SMS – Plant Protection  SMS- Agronomy  SMS- Agricultural Extension,  Sr. Sci. and Head |
| 2 | Big Onion | Assessment of Big onion varieties in high ranges | **TO-1**  farmers practice  **TO-2**  Bhima super  (DOGR,2016)  **TO-3**  Agrifound dark red  (NHRDF,2015) | 5 | 40400.00 | SMS- Agricultural Extension, SMS (SS)  SMS (PP) Senior Scientist and Head |
| 3 | Black pepper | Assessment of different potting mixture to produce healthy planting material of Black pepper | **TO-1**  Arka Fermented Cocopeat + Soil + Cowdung  (IIHR,2016)  **TO-2** Cocopeat + Soil + Cowdung  (KAU,2016)  **TO-3**  Coirpith compost + Soil + Trichoderma  (KAU,2016)  **TO-4**  Coirpith compost and Vermi compost (75:25) + soil+ Trichoderma+ VAM + PGPR  (KAU,2017) | 5 | 43875.00 | SMS (SS)  SMS (PP)  SMS (Agron.)  Senior Scientist and Head |
| 4 | Duck | Assessment of different broiler duck varieties for meat production  \*(**Approved for KVK, Kollam)** | **TO-1**  farmers practice- Kuttanad Ducks  **TO-2**:  White Pekin ducks  (KVASU,2014)  **TO-3:**  Vigova super M ducks  (KVASU,2015) | 4 | 30000.00 | SMS (Animal Husbandry)  SMS (Agricultural Extension)  Sr. Sci. & Head |
| **Total** | | | | **19** | **157775.00** |  |

**3.2 Frontline demonstrations**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Category/**  **Crop or enterprise** | **Title of Technology** | **No. of Demos** | **Area (ha)/ Units** | **Total cost involved (Rs.)** | **Team members involved** |
| **1** | Paddy | Demonstration of zinc bio fortification in Rice | 10 | 2 ha | 41900.00 | SMS (SS), SMS (Agro)  SMS (PP), Senior Scientist and Head |
| **2** | Strawberry | Demonstration of calcium and Boron application in strawberry | 5 | 1 ha | 25250.00 | SMS (SS), SMS (Agro)  SMS (PP),Senior Scientist and Head |
| **3** | Strawberry | snail and slug management in strawberry | 25 | 5 ha | 16500.00 | SMS Plant Protection  SMS Agronomy,  Senior Scientist and Head |
| **4** | Carrot | Bio-intensive Pest Management of root knot nematode in carrot | 10 | 1 ha | 16500.00 | SMS Plant Protection  SMS Agronomy,  Senior Scientist and Head |
| **5** | Black pepper | Best Management Practices(BMP) for Black Pepper | 5 | 1 ha | 29050.00 | SMS (Agro), SMS (SS)  SMS (PP),Senior Scientist and Head |
| **6** | Garlic | Demonstration of nutrient management in hill garlic | 5 | 1 ha | 26750.00 | SMS (Agro), SMS (SS)  SMS (PP), Senior Scientist and Head |
| **7** | Small cardamom | Demonstration of silicon nutrition in small cardamom | 10 | 2 ha | 47500.00 | SMS (SS), SMS- Agronomy  SMS-Plant Protection  Senior Scientist and Head |
| **8** | small cardamom | Bio-intensive Pest Management of root grub in small cardamom | 10 | 5ha | 20700.00 | SMS Plant Protection  SMS Agronomy  Sr. Sci. & Head |
| **9** | Dairy cattle | Feed additives to improve milk quantity and composition in dairy cattle | 5 | 5  units | 27800.00 | SMS Animal Husbandry  SMS Agrl. Extn.  Senior Scientist and Head |
| **10** | Poultry | Black soldier fly(*Hermatia illucens*) larvae as protein source in poultry feed | 20 | 200 birds | 23600.00 | SMS Animal Husbandry  SMS Agrl. Extn.  Senior Scientist and Head |
| **11** | Poultry | Pro Beads-EC on growth performance of Desi chicken in rural households | 10 | 50 birds | 10000.00 | SMS Animal Husbandry  SMS Agrl. Extn.  Senior Scientist and Head |
| **12** | others | Integrating fish and duck for the utilization of homestead pond for doubling farmers income | 8 | 8 units | 50700.00 | SMS Animal Husbandry, SMS Agronomy  SMS Agrl. Extn.  Senior Scientist and Head |
| **12** | Fish | Monoculture of Gift Tilapia for doubling farmers income | 5 | 5 unit | 43750.00 | SMS- Agricultural Extension,  SMS Animal Husbandry Senior Scientist and Head |
| **Total** | | | 128 |  | **380000.00** |  |

**(4) Target for mandated activities**

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **Activities** | **Target**  **(2021-22)** |
| 1. | Technologies selected for assessment (Number.) | 13 |
| 2. | On- farm trials (OFTs in number) | 4 |
| 3. | Frontline demonstrations (FLD farmers in number) | 128 |
| 4. | Training of farmers and farm women (Participants in number) | 2287 |
| 5. | Training of extension personnel (Participants in number) | 270 |
| 6. | Production of seeds (Quintal) | - |
| 7. | Production of planting materials (Number) | 7000 |
| 8. | Production of live-stock strains/ fingerlings (Number) | 17600 |
| 9. | Farmers provided mobile agro-advisory(Number) | 6500 |
| 10. | Soil and water samples tested (Number) | 500 |
| 11. | Soil health cards issued by using Mini Soil Testing Kit (Number) | 500 |
| 12. | Soil health cards issued by using traditional laboratory (Number) | - |
| 13. | Awareness/services through various extension activities (Participant farmers and other stakeholders number) | 7092 |

**(5) Special activities (EDP, FFS, IFS, Skill Development, NMOOP, NFSM, etc.)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Activity or Programme** | **Physical details**  **(no. of programmes, participants, area etc.)** | **Financial outlay (Rs.in lakh)** | **Team members involved** |
| EDP- Employment generation through stingless bees culture(meliponiculture) for rural youth | 1 unit  15 SHG group members | 60000.00 | SMS- Agricultural Extension,  SMS (PP)  Senior Scientist and Head |
| FFS in Good agricultural Practices in cabbage | 1 unit  25 farmers | 35000.00 | SMS (Plant Protection)  SMS (Agronomy)  Sr. Sci. & Head |

**(6) Externally funded activities (continuing / expected during 2021-22)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Activity or Programme** | **Program duration**  **(Days)** | **Funding agency** | **Physical details** | | **Financial outlay**  **(Rs. in lakh)** | **Team members involved** |
| **No. of programmes** | **No. of Participants** |
| DAESI (Continuing) | 1 year | MANAGE, Hyderabad | 1 | 80 | 14.0 | SMS(Soil Science) & SMS (Agril Extn), Senior Scientist and Head |
| NIPHM  (Continuing) | 12 Days | NIPHM, Hyderabad | 1 | 50 | 3.80 | SMS (PP), Senior Scientist and Head |
| Tribal Sub Plan | 1 year | ICAR-NBAIR, Bangalore | 1 | 100 | 4.00 | SMS (PP), Senior Scientist and Head |
| Tribal Sub Plan | 1 year | ICAR IIRR, Hyderabad | 1 | 150 | 6.00 | SMS Agronomy, Soil Science, Plant Protection, Senior Scientist and Head |

**(7) SAC meeting month:** December - 2021