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| C:\Users\Dr Palanimuthu\Documents\University Logo Black(1).jpg |  | http://3.bp.blogspot.com/-Aui_5lNJsoQ/Tm7xKFOUqgI/AAAAAAAAAis/7pvXshp0Ruc/s1600/icar+logo.jpg |

###### ACTION PLAN 2014-15

**Krishi Vigyan Kendra**

Hadonhalli-561 205, Tubagere Hobli

Doddaballapura Taluk

Bangalore Rural District

###### 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 | **:** | **Krishi Vigyan Kendra**  Hadonhalli-561 205, Tubagere Hobli, Doddaballapura Taluk  Bangalore Rural District  Phone: 080-27652082, Fax: 080-27652093  E mail: kvkbrd@gmail.com |
| 1.2 | Name and address of host organization | **:** | University of Agricultural Sciences  Gandhi Krishi Vigyan Kendra, Bangalore – 560 065  Karnataka, India |
| 1.3 | Year of sanction | **:** | 2006 |
| 1.4 | Website address of KVK and date of last update | **:** | www.kvkbrd.org and last updated on 17-02-2014 |

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

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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 | Dr.K.N.Srinivasappa | Horticulture | 15600-39100 | 8000 | 09.12.2011 | Permanent |
| 2.2 | Subject Matter Specialist | Dr.Savita S.Manganavar | Home Science | 15600-39100 | 6000 | 28.02.2007 | Permanent |
| 2.3 | Subject Matter Specialist | Dr.Ananda G.Manegar | Animal Science | 15600-39100 | 6000 | 13.03. 2007 | Permanent |
| 2.4 | Subject Matter Specialist | Mrs.B.G.Vasanthi | Soil Science | 15600-39100 | 6000 | 28.03. 2007 | Permanent |
| 2.5 | Subject Matter Specialist | Dr.M.Padmavathi | Agricultural Extension | 15600-39100 | 6000 | 23.11.2012 | Permanent |
| 2.6 | Subject Matter Specialist | Dr.B.Manjunath | Plant Protection | 15600-39100 | 6000 | 27.09.2013 | Permanent |
| 2.7 | Subject Matter Specialist | Dr.N.E.Naveen | Agronomy | 15600-39100 | 6000 | 01.10.2013 | Permanent |
| 2.8 | Programme Assistant | Mr.N.Jagadish | Farm Manager | 9300-34800 | 4200 | 20.12. 2010 | Permanent |
| 2.9 | Programme Assistant | Mr.N.Papanna | Computer & Accts. | 9300-34800 | 4200 | 19.01. 2011 | Permanent |
| 2.10 | Programme Assistant | Mrs. B.V.Manjula | Training Assistant | 9300-34800 | 4200 | 03.12.2013 | Permanent |
| 2.11 | Assistant | Mrs. M.K.Meenakshi | Accountants | 16000-29600 | - | 03.07.2013 | Permanent |
| 2.12 | Stenographer | Mrs.Rukmini, S. | Steno | 14550 | - | 01.12. 2009 | Temporary |
| 2.13 | Driver 1 | Mr.M.Nagaraja | Tractor Driver | 11600-21000 | - | 16.06. 2011 | Permanent |
| 2.14 | Driver 2 | Mr.H.R.Venu Gopal | Jeep Driver | 11000 | - | 26.06. 2007 | Temporary |
| 2.15 | Supporting staff 1 | Mr.N.Murali | Asst. Cook cum Caretaker | 9600-14550 | - | 17.10. 2008 | Permanent |
| 2.16 | Supporting staff 2 | Mr.A.R. Channakeshava Gowda | Messenger | 9600-14550 | - | 27.01. 2011 | Permanent |

**3. Details of SAC meeting conducted during 2013-14**

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| --- | --- | --- | --- | --- |
| **Sl.**  **No** | **Date** | **Major recommendations** | **Status of action taken in brief** | **Tentative date of SAC meeting proposed during**  **2014-15** |
| 3.1 | 14.08.2013 | Explore the possibilities of using ‘Maize Maxima’ through fertigation | As per the interaction with the Scientists of TNAU, the use of ‘Maize Maxima’ through fertigation is not appropriate, hence it has to be used only through foliar nutrition | April 2014 |
| Study soil nutrient uptake in OFTs especially nutrition related programmes | The uptake studies for the nutrient related problems has been taken up during 2013-14 |
| Calculate and present the extent of labour requirement and acceptability of new technologies | The cost of cultivation including labour requirement for all the demonstrations and feedback from the farmers of the new technologies demonstrated in 2013-14 on field is being recorded |
| Include the blight tolerant tomato hybrid Arka Rakshak and IIHR package of blight management | Farmers Field School on Integrated Crop Management in Tomato was taken up during the year 2013-14 with Arka Rakshak variety and suitable information was provided. |
| Collaborate with specialist from GKVK, Bangalore for conduct of demonstration on stem borer in mango. | Training programmes for farmers and farmwomen was organized on January 20th 2014 along with method demonstration |
| Use Arka Microbial Consortium developed by Indian Institute of Horticultural Research, Bangalore for management of panama wilt of banana | During 2013-14, the role of Arka Microbial Consortium in management of panama wilt of Banana was addressed through On-campus training programmes (3 Nos.) for Banana Growers in the district |
| Conduct seed treatment demonstration and training on production technologies for potato during October-November. | Two training programmes and method demonstration on seed treatment and production technologies of Potato were carried out. |
| Provide timely training on plant protection in mango | On 03-2-2014 on-campus training programme was conducted about plant protection in mango |
| Give preference for addressing problems of periurban agriculture | The information on the activities like Terrace Gardening is being provided to the visitors who are coming to KVK from peri urban areas and FLD has been proposed for 2014-15 |
| Prepare Do’s and Don’ts for safe vegetable production for farmers knowledge | In all the on-campus training programmes (Horticulture) the list of Do’s and Don’ts for safe vegetable production has been emphasized and educated |
| Programmes may be planned on Protected cultivation and precision farming of horticulture crops | Conducted two on-campus training programmes on precision farming of horticulture crops |
| Explore the possibilities of linking / providing latest mulberry varieties for sericulturists | The information regarding latest mulberry varieties is being given to the sericulture farmers visiting KVK and through field visits. |
| To develop Videos on success stories of the farmers in collaboration with RKVY Multimedia Project at Hebbal | The success stories of farmers who have adopted improved technologies on farm will be documented in collaboration with RKVY for the year 2014-15. |
| Explore the impact from bio-digestor on nutrients and pest / disease management | Bio digester slurry is being used as a nutrient source for KVK fields and is being studied for pest and disease management |
| Collect literature on application of fertilizers on soil test based recommendations and record the success stories | Database about the farmers who are applying fertilizers based on soil test recommendations is being maintained |
| Preference should be given to latest technologies (within five years) for conduct of On Farm Testings and Front Line Demonstrations | The FLD & OFT for the year 2014-15 are planned based on recent technologies |
| While addressing Natural Resource Management, due importance should be given to ground water problems. | One on-campus training programme on Natural Resource Management was conducted to farmers/farmwomen and more emphasis was given to ground water recharge |
| Include all the five principles of Integrated Crop Management while conducting integrated management programmes | The principles of ICM has been adopted in all the demonstrations and training programmes carried out by KVK |
| Conduct need assessment with department personnel for institutional training for extension personnel and to ensure programmes especially during off-season | Training Need Assessment has been conducted for extension functionaries and training programmes are being conducted as per needs and during off-season |
| Explore to conduct bimonthly meeting of extension personnel with farmers | The proposal of inviting farmers to bi-monthly workshop has been discussed with JDA, Bangalore Rural and will be executed during 2014-15 |
| In INM practices, compulsorily recommend application of both organic and inorganic sources of nutrients | Two on-campus training programmes for farmers & farmwomen and one training programme for extension functionaries on INM practices were carried out in 2013-14 |
| Prepare the success stories and share with other KVKs in the form of videos | Documentation of success stories has been discussed with RKVY Project Coordinator and will be implemented during 2014-15 |
| Procure and demonstrate ‘Saame’ (Little millet) threshing machine | Area under saame is highly negligible, hence KVK is emphasizing in creating awareness among farmers on production of minor millets. |
| Advocate the protocol for branding of value added products like the one followed in KVK, Pathanamthitta | As per discussion with specialist of Pathanamthitta, KVK, the branding/labeling / licensing has been followed in 2013-14 |

**4. Capacity Building of KVK Staff**

**4.1. Plan of Human Resource Development of KVK personnel during 2014-15**

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| --- | --- | --- | --- |
| **S. No** | **New Areas of Training** | **Institution proposed to attend** | **Justification** |
| 4.1.1 | Climate resilient and Agriculture | CRIDA, Hyderabad | Knowledge on weather aberrations and real time contingent planning |
| 4.1.2 | Integrated Farming System | TNAU, Coimbatore | Integration of farming systems in Rainfed, Wetland and upland agriculture |
| 4.1.3 | Hi-tech Horticulture | IIHR / MANAGE | The district has been covered more of Horticultural crops specially hi-tech horticulture |
| 4.1.4 | Nutrient management / cropping systems | IARI, New Delhi | Crop planning and integrated farming system aspects helps to raise the farm income |
| 4.1.5 | Characterization and mapping of soils using GIS techniques | NBSS & LUP, Bangalore | Soil fertility mapping for different cropping system |
| 4.1.6 | Value Addition | CFTRI, Mysore | To introduce new technologies for farmwomen to raise their income levels |
| 4.1.7 | Health and Nutrition | ANGRU, Hyderabad | Upliftment of health and nutritional status among farm families |
| 4.1.8 | Mushroom cultivation | IIHR, Bangalore | Scientific methods of mushroom cultivation and spawn production techniques |
| 4.1.9 | Bio agents | NIPHM, Hyderabad | Production protocol for bio agents and analysis of microbial bio-pesticides |
| 4.1.10 | Phytopathogens | IIHR, Hesarghatta | Genomics and diagnosis of emerging phytopathogens in Horticulture crops |
| 4.1.11 | Dairy nutrition | NAINP, Bangalore | To update the knowledge on the latest technology and disseminate the appropriate technology to the farming community |
| 4.1.12 | Poultry production | Namakkal, Tamilnadu |
| 4.1.13 | Photoshop, CorelDraw and Animation | NIIT / APTECH / KEONICS | Development and conducting the programmes in a befitting manner |
| 4.1.14 | Farm Mechanization | UAS, Bangalore | Reduce the labour and to carry out the farm activity by timely usage of farm machineries |
| 4.1.15 | Office management in Accounts & Administration with computer application | UAS, Bangalore | Effective management of Office administration and accounts |

**4.2. Cross-learning across KVKs during 2014-15**

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| **S. No** | **Name of the KVK proposed** | **Specific learning areas** |
| **4.2.1** | **Within ring –**   1. KVK, Kolar 2. KVK, Ramanagara 3. KVK, Chikkaballapur 4. KVK , Tumkur | Mango grading, branding and marketing  Improved Sericulture and Mango practices  Improved Sericulture practices and Village Development Concept  Millet processing, Micronutrients, Planting material |
| **4.2.2** | **Outside zone –**   1. KVK, Baramati, Maharashtra 2. KVK, Parabhani, Maharashtra 3. KVK, Karnal | Modern farm technologies and Micro irrigation  Market Linkages  Scientific technologies for farm animal components |

**5. Proposed cluster of KVKs (3 to 5 neighboring KVKs) to be formed for sharing knowledge/expertise, resources and activities during 2014-15**

|  |  |  |  |
| --- | --- | --- | --- |
| **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, Kolar | Improved horticulture, commodity groups and market linkages, quality seeds and planting materials  Integrated farming system module | Quality seeds and planting materials. Nutrient mixture, Exposure visits, farmers interaction |
| 5.2 | KVK, Ramanagara | Human resources, Exposure visits, farmers interaction |
| 5.3 | KVK, Chikkaballapur | Improved Sericulture practices and village development concept, Exposure visits, farmers interaction |
| 5.4 | KVK, Tumkur | Millet processing, Micronutrients, Planting material |

**6. Operational areas details proposed during 2014-15**

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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 | Cereals-finger millet, maize  Pulses- Field bean, redgram, bengal gram  Vegetables- potato, tomato, beans, capsicum, cabbage, cauliflower, Knolkhol, carrot, chilli, pole bean  Fruit crops - grapes, mango, jack  Plantation crops - Arecanut  Flower crops – gerbera, carnation  Animal husbandry- cows, buffaloes, sheep, goat and backyard poultry  Others - sericulture | * Lack of soil testing * Low yields in cereals and pulses * Lack of knowledge on improved varieties/hybrids in field and horticultural crops * Lack of knowledge on integrated pest, disease and nutrient management * Lack of knowledge on seed treatment * Lack of knowledge on use of bio pesticide * Less knowledge about rain water harvest and ground water recharge * Lack of awareness on biofertilizers and scientific composting techniques * Lack of knowledge on market information channels * Lack of knowledge on balanced nutrition among school children * Minimal use of E-Extension services * Problem of threshing in finger millet * Lack of knowledge on terrace gardening * Lack of knowledge on improved storage techniques * No awareness on intercropping * Fertility problems in cross breeds and desi cows * Lack of awareness on importance of soil and water conservation practices | * 95 per cent farmers have not got soil tested * More than 80 per cent borewells are dried up * About 75 per cent of the famers are indiscriminately using plant protection chemicals * 75 per cent famers are not managing the dairy scientifically * Post harvest losses in fruits and vegetables is over 30 per cent due to lack of knowledge on storage techniques * > 40% blast incidence in finger millet * 40% infestation of mango hoppers, stem borer and powdery mildew * 70% of anemia in rural adolescent girls * 60 per cent famers are not managing the dairy scientifically | Karepura,  Gulya,  Iyanahalli,  Doddahejjaji,  -**Doddabelavangala Hobli**  –**Doddaballapur taluk** | OFT, FLD, Training for farmers and Extension functionaries & other extension activities |
| 6.2 | Cereals- finger millet, maize  Pulses- redgram, bengal gram  Vegetables- cabbage, tomato, cauliflower, beetroot, carrot, solanaceous crops, bhendi  Fruit crops - grapes, mango, sapota  Animal husbandry- cows, buffaloes, sheep, goat and backyard poultry  Others- flower crops, fodder crops, sericulture  Fodder crops-African tall and napier grass | * Lack of soil testing * Lack of knowledge on improved varieties/hybrids in horticultural crops * Lack of knowledge on integrated pest & disease management * Imbalanced and insufficient use of fertilizers in field and horticultural crops * Non availability of nutritious green fodder * Indiscriminate use of plant protection chemicals * Dry fodder is not being utilized properly * Marketing of high value fruit crops is not channelized * Lack of knowledge on market information channels * Lack of knowledge on use of underutilized greens in daily diet. | * 90 per cent farmers have not got soil tested * About 65 per cent of the famers are indiscriminately using plant protection chemicals (traders recommendation) * 70 percent farmers are not following balanced plant nutrition * 42% DBM and Black rot infestation in cauliflower * 20% area of beetroot cultivation is affected by malformation and variation in root size and splitting problem. | Akkupet,  Bommavara  Savakkanahalli,  Shettarahalli,  **-Kasaba Hobli**  **-Devanahalli taluk** | OFT, FLD, Training for farmers and Extension functionaries & other extension activities |
| 6.3 | Cereals- finger millet, maize  Pulses- Field bean, redgram,  Vegetables- cole crops, solanaceous crops, gourds, coriander, carrot, chilli, potato, tomato  Fruit crops - mango, grapes  flower crops –marigold  Animal husbandry- cows, buffaloes, sheep, goat and backyard poultry  Fodder crops- African tall, Napier grass  Others - sericulture, lemon grass | * Lack of knowledge on soil testing * Low yields in cereals and pulses * Lack of knowledge on improved varieties/hybrids in field and horticultural crops * Lack of knowledge on integrated pest & disease management * Soils are becoming sick due to continuous and indiscriminate use of pesticides and fertilizers * Lack of awareness on vermi composting techniques * Lack of knowledge on market information channels | * 49 per cent farmers are not following soil test * 80 famers are growing old varieties of field bean * About 40 per cent of the famers are indiscriminately using plant protection chemicals * 70 percent farmers are not following balanced soil & plant nutrition * 90 per cent famers are not managing the dairy scientifically * 95 per cent bore wells are dried up and only 5 per cent bore wells are functioning * > 65% of malnutrition in goat due to unbalanced diet. * > 48% of incidence of late blight in tomato | Sulibele,  Arasanahalli  Ankonahalli  Rampura  **-Sulibele Hobli**  **-Hosakote taluk** | OFT, FLD, Training for farmers and Extension functionaries & other extension activities |
| 6.4 | Cereals- finger millet, maize  Pulses- Field bean, redgram, cowpea  Vegetables- cole crops, carrot, chilli, drumstick, Potato and Ridge gourd  Fruit crops – Banana, grapes, mango, jack,  Plantation- coconut, Arecanut  Animal husbandry- cows, buffaloes, sheep, goat and backyard poultry | * No soil testing practices * Low yields in cereals and pulses * Improper use of fertilizers and plant protection chemicals * Lack of knowledge on use of bio pesticide * Lack of knowledge on seed treatment * Lack of awareness on vermi composting and bio fertilizer * Lack of knowledge on ICM in Banana * Lack of knowledge on scientific dairy management * Lack of awareness on late blight management in tomato * Lack of knowledge on value addition in maize * Lack of knowledge on branding and market linkage | * 70 per cent farmers are not following soil & water conservation practices. * 60 per cent farmers are not aware of improved varieties on field and horticulture crops * 70 per cent farmers are not managing dairy scientifically * 85 per cent farmers are using fertilizers and pesticides indiscriminately * About 60 per cent of the bore well are dried up and looking for low water requirement crops * > 20% wilt incidence in Redgram * 20% yield loss in banana due to panama wilt | Hasiruvalli,  Jakkanahalli,  Chikkanahalli,  Byranayakanahalli  **-Thyamagondlu Hobli**  **-Nelamangala taluk** | OFT, FLD, Training for farmers and Extension functionaries & other extension activities |

\* Support with problem-cause and interventions diagram

**7. Technology Assessment during 2014-15**

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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 | Bengal gram | -Low yield due to wilt incidence  -Moisture stress during crop growth period | Assessment of Bengal gram variety for wilt and drought resistance | T1- JG-11  T2- JG-14  T3- JAKI 9218 | JNKVV & ICRISAT – 2009 | Seeds  Rhizobium  PSB  Board + Field Day | 20kg  100g  100g | 2180  20  20  2220 | 05  (1 ha) | **11100-00**  **5000-00**  **16100-00** | Soil fertility status (pre & post)  Germination & establishment  Day to 50% flowering,  % wilt incidence,  Yield, B:C ratio | SMS-Agron  SMS-PP |
| 7.2 | Fodder | -Low productivity, more pubescent  -Less palatability | Assessment of multi cut Fodders for yield and quality | T1-Napier grass (NB-21)  T2-Hybrid Bajra Napier(Co-3)  T3-BH 18  T4-Dharwad Hybrid Napier (DHN-6) | IGFRI – Dharwad 2011 | BH-18  Dharwad Hybrid Napier (DHN-6)  Board + Field Day | 2000  2000 | 2000  2000  **4000** | 05  (0.40 ha) | **20000-00**  **5000-00**  **25000-00** | Soil fertility status (pre & post)  Palatability  Yield (t/cut)  Cumulative yield (t/yr)  B:C ratio | SMS-Agron  SMS-AS |
| 7.3 | Potato | Severe incidence of late blight in Potato | Assessment on management of late blight in Potato | T1-Mancozeb (0.2%), Dimethomorph (0.1%) + Mancozeb (0.2%), CoC (0.3%), Fenamidone + Mancozeb Metalaxyl + Mancozeb (0.2%), Cymoxanil + Mancozeb (0.3%)  Copper Hydroxide (0.2%), Propineb (0.2%), Chlorothalonil (0.2%)  T2-Prophylactic Mancozeb (0.2%) 2 times  Dimethomorph + Mancozeb (0.2%)  Cymoxanil + Mancozeb (0.3%))  T3-Soil application of *Trichoderma* and *Pseudomonas*  Prophylactic–Mancozeb (0.2%)  Fenamidone+mancozeb(0.3%)  Cymoxanil + Mancozeb (0.3%) | CPRI 2011 | Fenamidon + Mancozeb  Trichoderma Pseudomonas  Board + Field day | 0.6 kg  10 kg  10 kg | 1700  1500  1500  **4700** | 05  (2 ha) | **23500-00**  **5000-00**  **28500-00** | Soil fertility status (pre & post)  % Late blight incidence, No. of Fungicide sprays, Cost of sprays, Yield, B:C ratio | SMS-PP  SMS-HS |
| 7.4 | Banana | Severe yield loss due to panama wilt (5-8 t/ha yield loss) | Effective management practices of panama wilt in Banana | T1-Soil drenching with carbendazim@1g/lt  T2-Rhizome injection with 2% carbendazim @ 10ml/plant (bimonthly)  T3-Soil drenching with 0.2% carbendazim during 2nd and 5th month after planting followed by  Application of *Trichoderma viridae* or *Pseudomonas fluroscense* @30g plant during 4nd and 6th month | NRC on Banana 2010 | Carbendazim  Trichoderma  Pseudomonas  Board + Field Day | 2 kg  10 kg  10 kg | 1300  1500  1500  **4300** | 05  (1 ha) | **21500-00**  **5000-00**  **26500-00** | Soil fertility status (pre & post)  -% damage of plants  -Yield  -B:C Ratio | SMS-PP  SMS-SS |
| 7.5 | Arecanut-French bean | Inefficient use of land, weed menace, low soil fertility, lower income | Arecanut intercropping systems for improved soil fertility and better remuneration | T1-Mono cropping  T2-Arecanut + Cowpea  T3-Arecanut + French bean (Arka Suvidha) | CPCRI 2010 | Cowpea seeds  French bean seeds  Soil sample analysis (Pre & Post)  Board + Field Day | 4 kg  6 kg  30 samples | 600  1200  **1800** | 05  (1 ha) | **9000-00**  **900-00**  **5000-00**  **14900-00** | Soil fertility status (pre & Post), Germination & establishment, yield (intercrop)  B:C ratio | SMS-SS  SMS-Agron |
| 7.6 | Others | Anemia in adolescents | Efficacy of different education methods to combat Anemia among adolescent girls | T1-Midday meal + Iron and Folic acid Tablets (given in School)  T2-T1+Additional teaching and extension materials  T3-T1+ Method demonstration on preparation of enriched foods using local resources  T4-T1 + family counseling (mother and adolescent girl) | UAS(D) 2006  (Edn. Method followed for Diabetics women) | Blood analysis  Ingredients for method demonstration  Preparation of teaching aids  Measuring instruments  Board + Field Day | 40 sam x 2 tim x 50  -  -  - | 4000  2000  5000  3000  **14000** | 01  (40 adolescents) | **14000-00**  **5000-00**  **19000-00** | Bio chemical (Hb), Anthropometric (Ht), Weight (Wt), MUAC, FFT, Clinical symptoms, Dietary information, KAP through structure schedule | SMS-HS  PC-Hort  SMS-AG. Extn. |

## 8. Technology Refinement during 2014-15 - NIL

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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** |
| 8.1 |  |  |  |  |  |  |  |  |  |  |  |  |

**9. Frontline Demonstrations during 2014-15**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl. 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 | Finger millet | Yield reduction due to intermittent drought, blast incidence | Addressing drought and blast vulnerability through Finger millet variety ML-365 | Variety | ML-365 | UAS(B) 2009 | Seeds  Azospirllum  Board + Field Day | 4.8kg  200g | 160  40  **200** | 25  (10 ha) | **5000**  **5000**  **10000** | Soil fertility status (pre & post), Germination& establishment, Days to 50% flowering, No. of spikelets, No. of tillers, No. of Panicle/plant, % blast incidence yield, straw yield ,  B:C ratio | SMS-Agron  SMS-HS  SMS-PP |
| 9.3 | Oilseeds |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.4 | Pulses | Redgram | >20% wilt incidence | Demonstration of Redgram variety BRG-5 for wilt resistance | Variety | BRG-5 | UAS(B) 2013 | Seeds  Rhizobium  PSB  Board + Field Day | 4.8kg  0.15kg  0.15kg | 420  90  90  **600** | 10  (3 ha) | **6000**  **5000**  **11000** | Soil fertility status (pre & post), Germination & establishment, Days to 50% flowering, No. of pods/plant % incidence of wilt, yield,  B:C ratio | SMS-Agron  SMS-SS  SMS-PP |
| 9.5 |  | Field bean | Low yield due to local varieties (Dabbe Field bean) | Photoperiod insensitive Field bean variety HA-4 for enhanced returns | Variety | HA-4 | UAS(B) 2009 | Seeds  PSB  Rhizobium  Board + Field Day | 6 kg  100g  100g | 840  30  30  **900** | 10  (2 ha) | **9000**  **5000**  **14000** | Soil fertility status (pre & post), Germination& establishment, Days to 50% flowering, Yield,  B:C ratio | SMS-Agron  PC-Hort  SMS-Ag.Extn |
| 9.6 | Commercial crops | |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.7 | Horticultural crops | Cauliflower | DBM and black rot infestation by more than 42% | Eco-friendly management of diamond back moth and black rot in Cauliflower | - | - | IIHR 2010 | Mustard seed  DBM traps  Neem & pongamia soap  Bt  Amamectin benzoate  Pesticide residue analysis  Copper hydroxide  Streptocycline  Board + Field day | ½ kg  1 No  2 kg  200g  100ml  -  500g  100g | 150  100  600  800  1000  200  700  800  **4350** | 05  (1 ha) | 21750  5000  **26750** | Soil fertility status (pre & post), %DBM & Black rot incidence,  Yield,  B:C Ratio | SMS-PP  SMS-Agron |
| 9.8 |  | Mango | 40% infestation of mango hoppers, stem borer, fruit fly, powdery mildew and anthracnose | Effective management of pests & diseases in Mango | - | - | IIHR 2011 | Healer & Sealer  Fruit fly traps  Imidacloprid  Lambda cylothrin  Dichlorovos  CoC  Board + Field Day | 1 kg  10Nos  500ml  500ml  500ml  500gm | 200  1300  900  400  400  300  **3500** | 05  (1 ha) | **17500**  **5000**  **22500** | Soil fertility status (pre & post), % Pest & disease incidence, yield,  B:C Ratio | SMS-PP  PC-Hort  SMS-Ag Extn. |
| 9.9 |  | Tomato | > 48% incidence of late blight in tomato  -15 t/ha loss in yield | Management of late blight in Tomato | Hybrid | NS 501 | UAS(B) 2014 | Metalaxyl+ Mancozeb  Fosetyl Al  Dimethomorph  Mancozeb  Trichoderma  Pseudomonas  Board + Field Day | 0.5 kg  0.5 kg  0.5 kg  2 kg  10 kg  10 kg | 800  1020  800  700  1500  1500  **6320** | 05  (2 ha) | **31600**  **5000**  **36600** | Soil fertility status (pre & post), %Pest & disease incidence, Yield  BC ratio | SMS-PP  SMS-SS |
| 9.8 |  | Tomato | Water scarcity and problem of weeds | Moisture conservation and weed management through plastic mulching in Tomato | - | - | IIHR 2010 | Plastic mulch film  Board + Field Day | - | 5100 | 05  (1 ha) | **25500**  **5000**  **30500** | Soil fertility status (pre & post), Plant height, No. of branches, No. of fruits/plant weight of fruit, %water saving, Yield,  B:C Ratio | PC-Hort.  SMS-SS |
| 9.9 |  | Beetroot | Poor quality due to boron deficiency  >20% variation in root size and cracking of roots | Enhancing Beetroot quality through use of Boron | - | - | IIHR 2013 | Boron  Board + Field Day | 0.6 kg | 180 | 10  (2 ha) | **1800**  **4000**  **5800** | Soil fertility status (pre & post), % fruit damage, nutrient uptake, yield,  B:C Ratio | SMS-SS  PC-Hort |

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| 9.10 |  | Grapes | >20% Uneven berry size, non-uniform maturity, non-uniformity in colour and loose bunches lead to due to of micro nutrient deficiency | Improvement of berry size and quality through Grape Special | - | - | IIHR 2013 | Grape Special  Board + Field Day | 3.6kg | 500 | 10  (2 ha) | **5000**  **5000**  **10000** | Soil fertility status (pre & post), % fruit damage, yield  B:C Ratio | SMS-SS  PC-Hort |
| 9.11 |  | Ridge gourd | Variation in fruit sizes  -Wilt incidence  -Reduced flower and fruit setting | Quality enhancement in Ridge gourd through AMC & Vegetable Special | - | - | IIHR 2013 | Arka Microbial Consortia  Vegetable spl  Board + Field Day | 12kg  1.6 kg | 805  300  **1105** | 10  (2 ha) | **11050**  **5000**  **16050** | Soil fertility status (pre & post), %fruit malformation,  wilt incidence, Yield,  B:C Ratio | SMS-SS  PC-Hort  SMS-PP |
| 9.12 | **Livestock** | Dairy-Calves | -Improper growth  -Mortality  -Calf diarrhoea  -Delayed onset of heat | Integrated dairy calf management | Hybrid | HF-cross | KVAFSU 2009 | Doramectin injection  Vitamins & minerals Vaccines  Board + Field Day | -  -  - | 1050  1800  -  **2850** | 30 calves | **8550**  **5000**  **13550** | -Body weight  -Age at sexual maturity | SMS-AS  SMS-Agron |
| 9.13 |  | Dairy-Cross Bred Animals | -Failure in conception rate  -Increased inter calving period | Infertility management in cross bred dairy animals | Hybrid | HF-cross | KVAFSU 2008 | Doramectin injection  Vitamin A  Vitamin E with selenium  Board + Field Day | 20 ml  6 inj  1 vials | 400  200  200  **800** | 15 animals | **12000**  **5000**  **17000** | No. of AI / conception, Conception rate | SMS-AS  SMS-Agron |

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| 9.14 |  | Dairy | -Foot rot  –Lameness  - Low productivity, -Secondary bacterial infections | Management of foot-rot/soft hoof in dairy animals | Cross bred animal | Cross bred animal | TANUVAS  2009 | Zinc sulphate  Isofled injection  OTC injection  B-complex  Doromectin  Herbal spray  Board + Field Day | 5kgs  900ml  1800ml  200ml  100ml  10Nos | 1000  1800  7200  1000  4000  2000  **17000** | 30 animals | **17000**  **5000**  **22000** | -% of Recovery  -Milk yield, | SMS-AS  SMS-PP |
| 9.15 |  | Goats | Poor weight gain | Nutritional intervention with urea molasses mineral block (UMMB lick) in Goats | - | Local breed | KVAFSU 2009 | UMMB  Board + Field Day | 20 No | 150 | 20 goat kids | **3000**  **5000**  **8000** | -Body weight,  -Mortality rate | SMS-AS  SMS-HS |
| 9.16 |  | Poultry | -Mortality due to Ranikhet  -Stress due to handling | Oral Pellet Vaccine against Ranikhet disease in backyard poultry | Hybrid | Backyard poultry | TANUVAS  2009 | Day old chicks  Vaccination  Deworming /Growth promoters  Board + Field Day | 50 chicks  1pellet  10 ml | 1000  200  1200 | 250 birds/5 demo | **6000**  **5000**  **11000** | -Mortality rate  -Antibody titre | SMS-AS  SMS-PP  SMS-Ag Extn. |
| 9.17 | Fisheries |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.18 |  | Roof gardening | -Nutrition deficiency symptoms in the families  -Less consumption of vegetables in daily diet | Vegetable roof gardening for nutrition security | - | - | UAS(B) 2013 | Veg seed kit  Plastic crates  Vermi compost  Veg, Spl  Neem oil  Neem cake  Cocopeat  Board + Field Day |  | 120  1500  400  150  230  350  250  **3000** | 04 | **12000**  **5000**  **17000** | Nutritional deficiency symptoms before & after intervention | SMS-HS  PC-Hort  All SMSs |
| 9.19 |  | Fruits & vegetable Preservator | 30% spoilage of fruits & vegetables due to improper storage | Promotion of fruits & vegetable preservator in Schools | - | - | CRIDA 2005 | Fruits & vegetable preservator (50kg capacity) including transportation  Board + Field Day | - | 4000 | 04 | **16000**  **5000**  **21000** | % spoilage, shelf life, savings | SMS-HS  PC-Hort |
| 9.20 |  | Finger millet | Problem of threshing | Thresher cum pearler in finger millets for resource poor farmers | - | - | VPKAS, Almora  2009 | Thresher cum pearler  Board + Field Day | 01 | 15000 | **02 SHGs** | **30000**  **5000**  **35000** | Threshing yield, Time, Cost & labour, microbial load | SMS-HS  SMS-Agron |
| 9.21 |  | Fodder | Non availability of nutritive fodder and scarcity during drought.  Lower milk quality (SNF and fat) | Promotion of fodder cafeteria to mitigate drought by introducing annual and perennial fodder crops | - | - | UAS(B) | Fodder sorghum var. COFS-29 seeds  Fodder cowpea  M.dubia seedling  Board+ Field day | 2kg  20 kg  25 Nos. | 1200  1000  1250  3450 | **05**  **(1 ha)** | **17250**  **5000**  22250 | Soil fertility status (pre & Post)  Plant height  Yield t/cut  Cumulative yield t/hr  Quantity of fodder left over  Milk yield | SMS-Agron  SMS-AS |

**10 Training for Farmers/ Farm Women during 2014-15**

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| **Sl.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 | Finger millet, Maize, Redgram | Lack of awareness about water management practices | OFT/FLD | Integrated Water Management practices for field crops | 1 | 25 | SMS-Agril. Extension  SMS-Agronomy |
| Requirement of latest varieties and production technology in Redgram | FLD | Selection of suitable varieties and agronomic practices for Redgram | 1 | 25 | SMS-Agronomy  SMS-Soil Science |
| Bengal gram | Lack of knowledge about improved practices in Bengal gram | OFT | Production technology in Bengal gram | 1 | 25 | SMS-Agronomy  SMS-Plant Protection |
| Fodder | Unawareness about scientific cultivation practices of fodder crops | OFT | Scientific cultivation of fodder crops | 1 | 25 | SMS-Agronomy  SMS-Animal Sci. |
| FLD | Scientific cultivation of fodder SORGHUM | 1 | 25 | SMS-Agronomy  SMS-Animal Sci. |
| Redgram & Finger millet | Lack of awareness in advance production technology aspects | FLD | Advances in production technology for Redgram and Finger millet | 1 | 25 | SMS-Agronomy  SMS-HS |
| Field bean | Lack of awareness in advance production technology aspects | FLD | Selection of suitable varieties and advances in agronomic practices for different season in field bean and its production | 1 | 25 | SMS-Agronomy  PC-Hort.  SMS-Agri.Extn. |

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| **10.2** | Horticulture Production | Mango, Banana | Lack of awareness about IPM practices | FLD | Integrated Crop Management of fruit crops | 1 | 25 | SMS-Agril. Extension  PC-Horticulture  SMS-Plant Protection  SMS-Agronomy  SMS-Soil Science |
| Tomato, Cauliflower Beet root, Potato, Ridge gourd | Lack of awareness on balance nutrition.  Lack of awareness about pests & disease management | OFT/FLD | Integrated Crop Management of vegetable crops | 1 | 25 | SMS-Agril. Extension  PC-Horticulture  SMS-Plant Protection  SMS-Agronomy  SMS-Soil Science |
| Lack of awareness on mulching techniques | FLD | Management of water and weeds through plastic mulching in Tomato | 1 | 25 | PC-Horticulture  SMS-Soil Science  SMS-Agri.Extn. |
|  | Horticulture Production | Tomato | Lack of awareness on mulching techniques | FLD | Mulching techniques in Tomato | 1 | 25 | PC-Horticulture  SMS-Soil Science  SMS-Agri.Extn. |
| Beetroot | Imbalanced nutrition | FLD | Role of micronutrients (Boron) in Beetroot | 1 | 25 | SMS-Soil Science  PC-Horticulture  SMS-Plant Protection |
| Pole bean | Lack of knowledge on balance nutrition | OFT/FLD | Role of nutrients in vegetable crop production | 1 | 25 | SMS-Soil Science  PC-Horticulture  SMS-Plant Protection |
| Vegetables | Lack of awareness on urban farming techniques | FLD | Ensuring availability of vegetables through terrace garden for health benefits | 1 | 25 | SMS-Home Science  PC-Horticulture  SMS-Soil Science |
| Grapes | Low quality  Lack of awareness on micro nutrients | FLD | Role of macro and micro nutrients for enhanced quality and yield in Grapes | 1 | 25 | SMS-Soil Science  PC-Horticulture  SMS-Plant Protection |
| **10.3** | Livestock Production | Dairy | Lack of awareness on scientific dairy management | FLD | Scientific dairy cattle management | 2 | 50 | SMS-Agril. Extension  SMS-Animal Science  SMS-Agronomy |
| Dairy | Lack of awareness about management | FLD | Scientific calves management | 1 | 25 | SMS-Animal Science  SMS-Agronomy  SMS-Plant Protection |
| Dairy | Lack of awareness about management | FLD | Disease management in calves | 1 | 25 | SMS-Animal Science  SMS-Agronomy  PC-Horticulture |
| Sheep & Goat | Increase incidence of infectious diseases, imbalanced feeding | FLD | Scientific sheep and goat management practices | 1 | 25 | SMS-Agril. Extension  SMS-Animal Science  SMS-Agronomy |
| Goat | Improper management and imbalanced feeding practices | FLD | Goat rearing and poultry for livelihood improvement | 1 | 25 | SMS-Animal Science  SMS-Soil Science  PC-Horticulture  SMS-Plant Protn |
| Poultry | Lack of awareness on scientific backyard poultry | FLD | Management of backyard poultry rearing | 1 | 25 | SMS-Animal Science  SMS-Agronomy  PC-Horticulture |
| Poultry | Lack of awareness on disease management in livestock | FLD | Disease management in poultry and livestock | 1 | 25 | SMS-Animal Science  SMS-Agronomy |
| **10.4** | Home Science | Thresher | Unhygienic threshing practices, Non availability of manpower | FLD | Integrated farming systems for enhancing resource-use efficiency and livelihood security of small and marginal farmers | 1 | 25 | SMS-Agril. Extension  SMS-Home Science  SMS-Agronomy |
| Nutrition | Lack of awareness on balance diet technique | FLD | Health and nutrition among adolescent girls | 1 | 25 | SMS-Home Science  SMS-Agril. Extension  PC-Horticulture  SMS-Soil Science |
| Finger millet | Unhygienic threshing and value addition | FLD | Scientific threshing techniques in Finger millet & value addition | 1 | 25 | SMS-Home Science  SMS-Agronomy |
| Fruits & vegetable | Lack of awareness on low cost storage techniques | OFT/FLD | Enhancement of shelf life of Fruits & Vegetable through storage techniques | 1 | 25 | SMS-Home Science  PC-Horticulture  SMS-Agril. Extension |
| **10.5** | Plant Protection | Tomato | Indiscriminate use of pesticides | FLD | Integrated Pest Management and Safe & judicious use of pesticides | 1 | 25 | SMS-Agril. Extension  SMS-Plant Protection |
| Tomato | Lack of awareness about management of late blight | FLD | Monitoring pest & disease surveillance in tomato | 1 | 25 | SMS-Plant Protection  SMS-Soil Science |
| Cauliflower | Lack of awareness about IPM techniques | FLD | IDM in Cauliflower | 1 | 25 | SMS-Plant Protection  SMS-Agronomy |
| Mango | Lack of knowledge about IPM techniques | FLD | Plant protection in mango | 1 | 25 | SMS-Plant Protection  PC-Horticulture |
| Banana | Lack of knowledge ICM techniques | OFT | Diseases and INM in banana | 1 | 25 | SMS-Plant Protection  SMS-Soil Science |
| Redgram | Lack of awareness on pod borer management | Training | Cultural and biological control for pod borer management in Redgram | 2 | 25 | SMS-Plant Protection  SMS-Agronomy  SMS-Agril. Extension |
| Potato | Lack of awareness on scientific management | FLD | Monitoring pest & disease surveillance in Potato and value addition | 1 | 25 | SMS-Plant Protection  SMS- Home science |
| **10.6** | Production of Inputs at Site | - | - | - | - | - | - | - |
| **10.7** | Soil Health and Fertility | Vermi compost | Lack of awareness on organic manures | OFT / FLD | Vermicompost and scientific compost making | 1 | 25 | SMS-Agril. Extension  SMS-Soil Science  SMS-Agronomy |
| INM | Lack of awareness on INM | OFT / FLD | INM in agriculture crops | 1 | 25 | SMS-Soil Science  SMS-Agronomy  SMS-Agril. Extension |
| Arecanut | Lack of awareness on intercropping system | OFT | Role of different intercrops in management of soil fertility status | 1 | 25 | SMS-Soil Science  SMS-Agronomy |
| Ridge gourd | Lack awareness on use of bio fertilizers | FLD | Role of biofertilizers and foliar nutrition in maintaining soil health and fertility | 1 | 25 | SMS-Soil Science  PC-Horticulture  SMS-Agronomy |
| Ridge gourd | Imbalanced nutrition | FLD | Importance of soil testing and balance nutrient application in vegetable crop production | 1 | 25 | SMS-Soil Science  SMS-Agronomy  PC-Horticulture |
| Grapes | Imbalanced nutrition | FLD | Nutrient scheduling based on soil test values in Grapes | 1 | 25 | SMS-Soil Science  PC-Horticulture  SMS-Plant Protection |
| **10.8** | PHT and value addition | Fruits & Vegetable | Lack of awareness on post harvest techniques | OFT / FLD | Post Harvest Technology in Fruits & Vegetables | 1 | 25 | SMS-Agril. Extension  SMS-Home Science |
| **10.9** | Capacity Building Group Dynamics | Agriculture | Lack of awareness on income generating activities | FLD | Entrepreneurship development among SHGs | 1 | 25 | SMS-Agril. Extension  SMS-Home Science |
| Agriculture | FLD | Empowerment of women through income generating activities in agriculture | 1 | 25 | SMS-Agril. Extension  SMS-Home Science  PC-Horticulture |
| **10.10** | Farm Mechanization | **-** | **-** | **-** | - | **-** | **-** | **-** |
| **10.11** | Fisheries Production Technologies | **-** | **-** | **-** | - | **-** | **-** | **-** |
| **10.12** | Mushroom production | **-** | **-** | **-** | - | **-** | **-** | **-** |

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| **10.13** | Agro forestry | **-** | **-** | **-** | - | **-** | **-** | **-** |
| **10.14** | Bee Keeping | **-** | **-** | **-** | - | **-** | **-** | **-** |
| **10.15** | Sericulture | **-** | **-** | **-** | - | **-** | **-** | **-** |
| **10.16** | Water Conservation | Tomato | Moisture stress during crop growth periods | FLD | Moisture Conservation Techniques through Plastic Mulching | 1 | **25** | PC-Horticulture  SMS-Soil Science |

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

**11. Training for Rural Youth during 2014-15**

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| **Sl.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 | Poultry | Lack of awareness about scientific backyard poultry management | **FLD** | Entrepreneur Development Programme (EDP) on "Backyard Poultry" | 1 | 25 | SMS-Agil. Extension  SMS-Animal Science  Farm Manager |
|  |  | Goat | Improper management | **FLD** | EDP on “Sheep and Goat Rearing” | 1 | 25 | SMS-Agil. Extension  SMS-Animal Science |
| **11.4** | Home Science | Bakery | Lack of knowledge on value addition and backing technology | FLD | Bakery and Confectionery Technology | 1 | 25 | SMS-Agil. Extension  SMS-Home Science  PC-Horticulture  Farm Manager |
| **11.5** | Plant Protection | - |  | - | - | - | - | - |
| **11.6** | Production of Inputs at Site | Horticulture | Lack of awareness on propagation techniques | FLD | EDP on “Propagation of quality planting material” | 1 | 25 | SMS-Agril. Extn.  PC-Horticulture  Farm Manager |
| **11.7** | Soil Health and Fertility | - |  | - | - | - | - | - |
| **11.8** | PHT and value addition | - |  | - | - | - | - | - |
| **11.9** | Capacity Building Group Dynamics | Agriculture | Lack of awareness | **FLD** | Skill Development & Employment through Value addition and Secondary Agriculture | 1 | 25 | SMS-Agril. Extension  SMS-Home Science  PC-Horticulture |

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| **11.10** | Farm Mechanization | Mechanization | Lack of knowledge on technique | **FLD** | Electric Motor Rewinding and Pumpset Maintenance (In collaboration with RUDSET, Nelamangala) | 1 | 25 | SMS-Agil. Extension  PC-Horticulture  SMS-Agronomy |
| Mechanization | Lack of technology on equipments | **FLD** | Tillage Equipments | 1 | 25 | SMS-Agil. Extension  PC-Horticulture  SMS-Agronomy  Farm Manager |
| **11.11** | Fisheries Production Technologies | - |  | - | - | - | - | - |
| **11.12** | Mushroom production | - |  | - | - | - | - | - |
| **11.13** | Agro forestry | - |  | - | - | - | - | - |
| **11.14** | Bee Keeping |  | Lack of income generating activity | **FLD** | EDP on “Bee keeping for income generation” | 1 | 25 | SMS-Agil. Extension  PC-Horticulture |
| **11.15** | Sericulture | - |  | - | - | - | - | - |
| **11.16** | Natural resource management | - |  | - | - | - | - | - |

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

### 12 Trainings for Extension Personnel during 2014-15

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| **Sl.No.** | **Thematic area** | **Training Course Title\*\*** | **No. of Courses** | **Expected No. of participants** | **Names of the team members involved** |
| **12.1** | Crop Production | Climate change and its impact on crop production | 1 | 25 | SMS-Agril. Extension  SMS-Agronomy |
| **12.2** | Home Science | - | **-** | **-** | **-** |
| **12.3** | Capacity Building and Group Dynamics | Innovative Extension Approaches | 1 | 25 | SMS-Agril. Extension  PC-Horticulture |
| Effective Communication and Stress Management | 1 | 25 | SMS-Agril. Extension  PC-Horticulture |
| Professional skills for Trainers of Extension Institutes of line departments | 1 | 25 | SMS-Agril. Extension  PC-Horticulture |
| Gender Sensitization for the Extension Functionaries | 1 | 25 | SMS-Agril. Extension  SMS-Home Science |
| Development and sustainability of Farmer Producer Organizations | 1 | 25 | SMS-Agril. Extension  PC-Horticulture & SMS-Home Science |
| Linking farmers to Markets | 1 | 25 | SMS-Agril. Extension  SMS-Home Science |
| **12.4** | Horticulture | - | **-** | **-** | **-** |
| **12.5** | Livestock Production & Management | Scientific Animal husbandry practices | 1 | 25 | SMS-Agril. Extension  SMS-Animal Science |
| **12.6** | Plant Protection | Diagnosis of field problems, INM and IPM techniques in Agriculture | 1 | 25 | SMS-Agril. Extension  SMS-Plant Protection  SMS-Soil Science |
| **12.7** | Farm Mechanization | - | **-** | **-** | **-** |
| **12.8** | PHT and value addition | Promotion of Post Harvest Technology and Value Addition in Horticulture crops | 1 | 25 | SMS-Agril. Extension  SMS-Home Science |
| **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 2014-15

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| **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 | - | - | - | - | - | - |
| 13.3 | Capacity Building and Group Dynamics | Skill Development & Employment through Value addition and Secondary Agriculture | 1(5 days) | Youth | 25 | - | SMS-Agril. Extension  SMS-Home Science  PC-Horticulture |
| 13.4 | Horticulture |  |  |  |  |  |  |
| 13.5 | Livestock Production & Management | Entrepreneur Development Programme (EDP) on "Backyard Poultry" | 1(5 days) | Youth | 25 | - | SMS-Agril. Extension  SMS-Animal Science |
| EDP on “Sheep and Goat Rearing” | 1(5 days) | Youth | 25 | - | SMS-Agril. Extension  SMS-Animal Science |
| 13.6 | Plant Protection | - | - | - | - | - | - |
| 13.7 | Farm Mechanization | Tillage Equipments | 1(5 days) | Youth | 25 |  | SMS-Agril. Extension  SMS-Agronomy |
| 13.8 | PHT and value addition | Bakery and Confectionery Technology | 1(5 days) | Youth | 25 | - | - SMS-Agril. Extension  SMS-Home Science  PC-Horticulture |
| 13.9 | Production of Inputs at Site  (quality planting material) | EDP on “Propagation of quality planting material” | 1(5 days) | Youth | 25 | - | SMS-Agril. Extension  PC-Horticulture |
| 13.10 | Sericulture | - | - | - | - | - | - |
| 13.11 | Fisheries | - | - | - | - | - | - |
| 13.12 | Resource Management | EDP on “Bee keeping for income generation” | 1(5 days) | Youth | 25 | - | SMS-Agril. Extension  SMS-Animal Science  SMS-Home Science |
| Electric Motor Rewinding and Pumpset Maintenance (In collaboration with RUDSET, Nelamangala) | 1(5 days) | Youth | 25 | - | SMS-Agril. Extension  SMS-Agronomy  PC-Horticulture |

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

## 14. Sponsored trainings during 2014-15

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| **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 | - | **-** | **-** | **-** | **-** | **-** |
| 14.3 | Capacity Building and Group Dynamics | - | **-** | **-** | **-** | **-** | **-** |
| 14.4 | Horticulture | Friends of Coconut tree | 02 (6 days) | Youth | 25 | GOK | SMS-Agril. Extension  PC-Horticulture  All SMSs |
| 14.5 | Livestock Production & Management | - | **-** | **-** | **-** | **-** | **-** |
| 14.6 | Plant Protection | - | **-** | **-** | **-** | **-** | **-** |
| 14.7 | Soil Science | - | **-** | **-** | **-** | **-** | **-** |
| 14.8 | Farm Mechanization | - | **-** | **-** | **-** | **-** | **-** |
| 14.9 | PHT and value addition | - | **-** | **-** | **-** | **-** | **-** |
| 14.10 | Production of Inputs at Site | Usefulness of Biofuel plants, nursery techniques, cultivation, harvesting, oil extraction, filtration, esterification, value addition to by-products. | 10 (one day) | Students Farmers/Women, Youth, Farmers, etc | 300 | Karnataka State Biofuel Development Board (KSBDB) | PC  SMS-Agronomy  SMS-Plant Protection  SMS-Agril Extension  I&DC Staff |
| 14.11 | Sericulture | - | **-** | **-** | **-** | **-** | **-** |
| 14.12 | Fisheries | - | **-** | **-** | **-** | **-** | **-** |
| 14.13 | Natural Resource Management | - | **-** | **-** | **-** | **-** | **-** |

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

## 15. Extension programmes during 2014-15

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl.No.** | **Extension programme\*** | **No. of programmes or activities** | **Expected No. of participants** | **Names of the team members involved** |
| 15.1 | Advisory Services | 210 | 270 | PC & All SMSs |
| 15.2 | Diagnostic visits | Whenever necessary | - | Concerned subject |
| 15.3 | Field Day | 27 | 810 | PC & All SMSs |
| 15.4 | Group discussions | 15 | 375 | PC & All SMSs |
| 15.5 | Kisan Ghosthi | 06 | 210 | PC & All SMSs |
| 15.6 | Film Show | 50 | 1250 | PC & All SMSs |
| 15.7 | Self -help groups | 02 | 40 | SMS(HSc), SMS(Ag.Extn) |
| 15.8 | Kisan Mela | 01 | 100 | PC & All SMSs |
| 15.9 | Exhibition | 05 | 4750 | PC & All SMSs |
| 15.10 | Scientists' visit to farmers field | 180 | 180 | PC & All SMSs |
| 15.11 | Plant/Soil health/Animal health camps | 05 | 250 | SMS(Crop Protn.), SMS(Soil Sc.), SMS(Agri.Extn) |
| 15.12 | Farm Science Club | 10 | 200 | SMS(HSc), SMS(Ag.Extn) |
| 15.13 | Ex-trainees Sammelan | 01 | 50 | PC & All SMSs |
| 15.14 | Farmers' seminar/workshop | 01 | 50 | PC & All SMSs |
| 15.15 | Method Demonstrations | 28 | 840 | PC & All SMSs |
| 15.16 | Celebration of important days | 06 | 600 | PC & All SMSs |
| 15.17 | Special day celebration | 02 | 80 | PC & All SMSs |
| 15.18 | Exposure visits \* | - | - | - |
| 15.19 | Technology week \* | 01 | 150 | PC & All SMSs |
| 15.20 | FFS | 02 | 60 | PC & SMSs |
| 15.21 | Farm innovators meet | - | - | - |
| 15.22 | Awareness programs | 10 | 400 | PC & All SMSs |
|  | Others, pl. specify |  |  |  |

*\* Organize the programmes if funds are provided*

## 16. Activities proposed as Knowledge and Resource Centre during 2014-15

**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 | Nutrition garden, Crop museum - Fodder, Finger millet, Redgram, Field bean, etc | 01 ha | PC & All SMSs |
| 16.1.2 | Lab Analytical services | Soil testing and fertilizer recommendation based on STV  Testing the quality of irrigation water | 1200 Nos.  800 Nos. | SMS(SS&AC)  SMS(SS&AC) |
| 16.1.3 | Technology Week | IFS, Value Addition and Market linkage | 01 No. | PC & All SMSs |

**16.2 Technological Products**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl.No.** | **Category** | **Name of the product** | **Quantity (Qtl.)/ Number planned to be produced during 2014-15** | **Names of the team members involved** |
| 16.2.1 | Seeds | Finger millet (ML 365 & KMR 301) | 45 q | Farm Manager, SMS(Agronomy) |
| Redgram (BRG 5) | 20 q | Farm Manager, SMS(Agronomy) |
| 16.2.2 | Planting materials | Jack, Mango, Papaya, Guava, Lime, Jamun, drumstick, curry leaf, pomegranate, Amla, Amruthaballi, Tulasi, Doddapatre, Fodder slips, etc. | 18000 Nos. | PC, Farm Manager |
| 16.2.3 | Bio-products | Trichoderma | 100 kg | SMS(Crop Protection) |
| Vermi compost | 06 tons | SMS-Agron, SMS (SS&AC)& Farm Manager |
| Vegetable special – nutrient mixture | 01 ton | SMS(SS&AC) |
| 16.2.4 | Livestock strains | Calves | 04 Nos. | SMS (Agril. Extension), Farm Manager |
| Piglets | 20 Nos. | SMS (Agril. Extension), Farm Manager |
| 16.2.5 | Fish fingerlings | - | - | - |
| 16.2.6 | Value added millet products | Cleaning and milling | 600 kg | SMS – Home Science &  Training Assistant |
| Finger millet malt | 20 kg |
| Finger millet Papad | 20 kg |
| Finger millet Mixture | 20 kg |

**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 | 06 | PC & All SMSs |
|  | Horticulture | 01 | PC& SMSs |
|  | Animal Husbandry | - | - |
|  | Fisheries | - |  |
|  | Agricultural Engineering | - |  |
|  | Sericulture | - |  |
|  | Others, pl. specify | - |  |
| 16.3.2 | Literature/publication | 10 | PC & All SMSs |
| 16.3.4 | Electronic Media | 05 | PC & All SMSs |
| 16.3.5 | Kisan Mobile Advisory Services | 192 | Programme Asst. (Computer) & All SMSs |
| 16.3.6 | Information on centre/state sector schemes and service providers in the district. | 01 | PC & All SMSs |

## 7. Additional Activities Planned during 2014-15

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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 | Karnataka State Biofuel Development Board, GOK | Information & Demonstration Centre on Biofuel | Biofuel seed procurement, storage and extraction of bio diesel, cake, etc | 8,50,000/- | PC and SMS(Agronomy), I&D Centre Staff |
| 17.2 | GOK / UAS (B) | IFSD | Promotion and integration of various agricultural and allied activities to improve the livelihood security | 20,00,000/- | All the technical staff of the KVK, IFSD staff |

**18. Revolving Fund**

**18.1 Financial status**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Opening balance as on 01.04.2013**  **(Rs.in Lakh)** | **Expenditure incurred during 2014-15**  **(Rs.in Lakh)** | **Receipts during**  **2014-15**  **(Rs.in Lakh)** | **Closing balance as on 31.01.2014**  **(Rs.in Lakh)** | **Expected closing balance by 31.12.2014 (Including value of material in stock)** |
| 7.61 | 9.29 | 9.19 | 7.51 | 8.34 |

**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 | Seed Production | 65 qtl | 2,26,000/- | SMS(Agronomy), Farm Manager |
| 18.2.2 | Production of planting material | 18000 No. | 3,55,000/- | PC, Farm Manager |
| 18.2.3 | Heifer production | 4 No. | 60,000/- | SMS(Animal Science), Farm Manager |
| 18.2.4 | Piggery | 20 piglets | 40,000/- | SMS(Animal Science), Farm Manager |
| 18.2.5 | Production of Vegetable special | 1000 kg | 1,50,000/- | SMS(SS&AC) |

## 19. Activities of soil, water and plant testing laboratory during 2014-15

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl.No.** | **Type** | **No. of samples to be analyzed** | **Names of the team members involved** |
| 19.1 | Soil | 1200 | SMS(Soil Science) |
| 19.2 | Water | 800 | SMS(Soil Science) |

## 20. E-linkage during 2014-15

|  |  |  |  |
| --- | --- | --- | --- |
| **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 | - | - |
| 20.3 | Any other (Please specify) | - | - |

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

|  |  |  |
| --- | --- | --- |
| **Sl. No** | **Activities planned** | **Remarks if any** |
| 21.1 | - | - No such scheme - |

**22. Innovative Farmer’s Meet**

|  |  |  |
| --- | --- | --- |
| **Sl.No.** | **Particulars** | **Details** |
| 22.1 | Are you planning for conducing Farm Innovators meet in your district? | No |
| 22.2 | If Yes likely month of the meet | - |
| 22.3 | Brief action plan in this regard | - |

**23. Farmers School planned**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No** | **Thematic area** | **Title of the FFS** | **Budget proposed in Rs.** |
| 23.1 | Cabbage | Integrated Crop Management in Cabbage | 30,000/- |

**24. Innovative activity**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No** | **Thematic area** | **Title of the FFS** | **Budget proposed in Rs.** |
| 24.1 | Market led extension | Innovative approach for marketing of Grapes | 70,000/- |

**25. Budget - Details of budget utilization (2013-14) up to 31 January 2014**

**(Figures in Rs.)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl.**  **No.** | **Particulars** | **Sanctioned** | **Released** | **Expenditure** |
| **25.1** | **Recurring Contingencies** |  |  |  |
| 25.1.1 | **Pay & Allowances** | 5300000 | 5300000 | 4941592 |
| 25.1.2 | **Traveling allowances** | 160000 | 160000 | 88936 |
| 25.1.3 | **Contingencies** |  |  |  |
| *A* | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance | 245000 | 245000 | 213575 |
| *B* | POL, repair of vehicles, tractor and equipments | 210000 | 210000 | 146197 |
| *C* | Meals/refreshment for trainees | 90000 | 90000 | 89896 |
| *D* | Training material | 70000 | 70000 | 79940 |
| *E* | Frontline demonstration except oilseeds and pulses | 400000 | 400000 | 272325 |
| *F* | On farm testing | 75000 | 75000 | 68114 |
| *G* | Training of extension functionaries | 25000 | 25000 | 17721 |
| *H* | Maintenance of buildings | 50000 | 50000 | 42500 |
| *I* | Farmers’ Field School | 50000 | 50000 | 49979 |
| *j* | Extension Activities | 30000 | 30000 | 29624 |
| *J* | Library | 5000 | 5000 | 4960 |
| **25.1** | **Total Recurring (A)** | **6710000** | **6710000** | **6045359** |
| **25.2** | **Non-Recurring Contingencies** | 0 | 0 | 0 |
| 25.2.1 | **Works** | 0 | 0 | 0 |
| 25.2.2 | **Equipments including SWTL & Furniture** | 0 | 0 | 0 |
| 25.2.3 | **Vehicle** (Four wheeler/Two wheeler, please specify) | 0 | 0 | 0 |
| 25.2.4 | **Library** | 0 | 0 | 0 |
| **25.2** | **Total Non Recurring (B)** | **0** | **0** | **0** |
| **25.3** | **REVOLVING FUND (C)** | 0 | 0 | 0 |
| **25.4** | **GRAND TOTAL (A+B+C)** | **6710000** | **6710000** | **654641** |

**26. Details of Budget Estimate (2014-15) based on proposed action plan**

|  |  |  |
| --- | --- | --- |
| **Sl.**  **No.** | **Particulars** | **BE 2014-15 proposed (Rs.)** |
| **26.1** | **Recurring Contingencies** |  |
| 26.1.1 | **Pay & Allowances** | 8100000 |
| 26.1.2 | **Traveling allowances** | 180000 |
| 26.1.3 | **Contingencies** |  |
| *A* | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines) | 300000 |
| *B* | POL, repair of vehicles, tractor and equipments | 300000 |
| *C* | Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained) | 100000 |
| *D* | Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training) | 100000 |
| *E* | Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)  (including IFS-Rs.50000+ Innovative approach-Rs.50000) | 455950 |
| *F* | On farm testing (on need based, location specific and newly generated information in the major production systems of the area) | 130100 |
| *G* | Training of extension functionaries | 40000 |
| *H* | Maintenance of buildings | 80000 |
| *I* | Extension activities | 50000 |
| *J* | Farmers Field School | 30000 |
| *K* | Library | 10000 |
| *L* | National initiative on Fodder technology demonstration – 3 models | 51000 |
| *26.1* | **TOTAL Recurring Contingencies** | **99,27,050** |
| **26.2** | **Non-Recurring Contingencies** |  |
| 26.2.1 | **Works**   1. Road Formation 2. Micro Irrigation systems | 1000000  200000 |
| 26.2.2 | **Equipments including SWTL & Furniture**   1. Farm Implements 2. Computers with Accessories 3. Generator | 500000  200000  500000 |
| 26.2.3 | **Vehicle** (Four wheeler) - **Jeep** | 1000000 |
| 26.2.4 | **Library** (Purchase of assets like books & journals) | 25000 |
| **26.2** | **TOTAL Non-Recurring Contingencies** | **34,25,000** |
| **26.3** | **REVOLVING FUND** | **-** |
| **26.4** | **GRAND TOTAL** | **133,52,050** |