ICAR- Krishi Vigyan Kendra
Hirehalli, Tumakuru

Action Plan Meeting:2017-18

2-4, March, 2017


Krishi Vigyan Kendra(IIHR),Hirehalli,Tumkur - FARM
Krishi Vigyan Kendra (IIHR),Hirehalli,Tumkur
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Google earth
Imagery Date: 3/30/2011
2011
13°16'40.58" N 77°11'12.67" E elev 2790 ft
Eye alt 6945 ft

District Features

TUMAKURU DISTRICT	
Total Geographical area (Ha)	10,34,755
No. of Taluks	10 (05 under Tumakuru -A)
No. of Villages	2574 (1272 under Tumakuru-A)
No. of Households	6,40,081 (Rural 77.7%)
Gross sown area (Ha)	5,75,961
Net irrigated area (Ha)	1,59,802 (27%)
Sources of irrigation	Canals, Tanks, Wells and Tube Wells
Major Soil Types	Red sandy and Black soils
Major crops in Kharif	Ragi, Paddy, Maize, Groundnut, Redgram
Major crops in Rabi	Ragi, Groundnut
Major perennial crops	Arecanut, Coconut, Mango, Banana, Sapota, Pomegranate &Tamarind
Major Livestock details	Cattle, Buffalo, Sheep, Goat, Pigs, Poultry

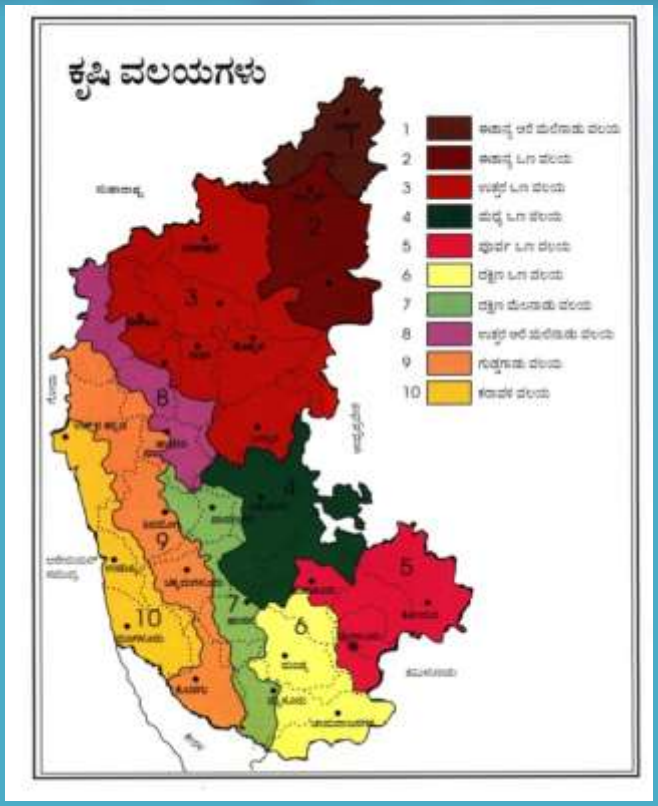
KVK Manpower and Facilities

No. of SMS in position	**6**
No. of Prog. Assistants in position	**3**
KVK Farm details **Total Area (Ha)** **Cultivated area (Ha)**	 **27.2** **16.2**

Plan of Work

Operational Area Details

Jurisdiction of KVK , Hirehalli

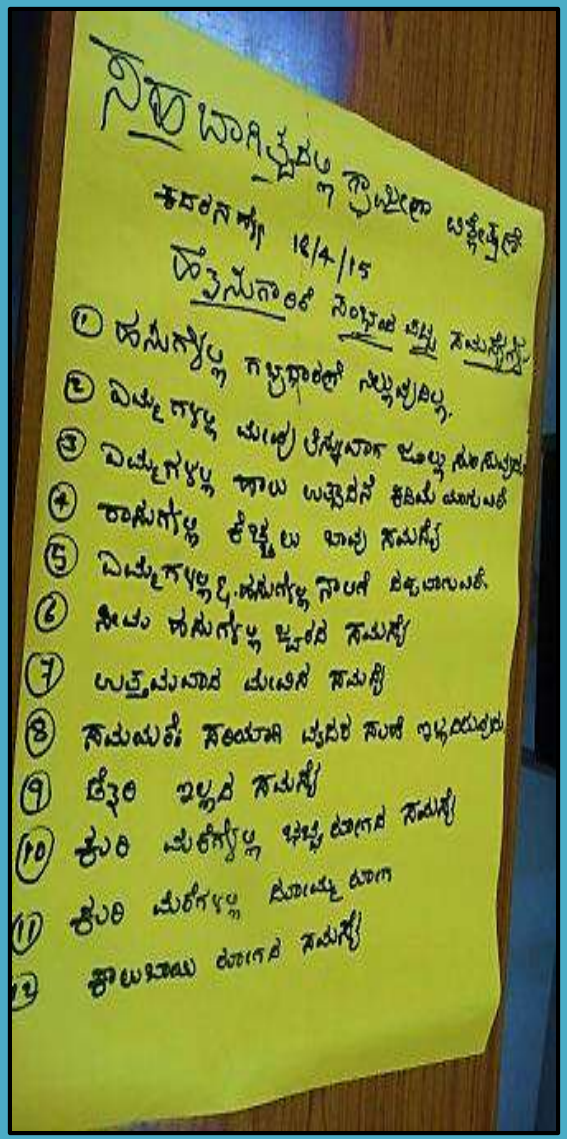


AE Zone – 4 (Eastern dry)	AE Zone – 5 (Central dry)
Koratagere	Tumakuru
Madhugiri	
Pavagada	
Sira	

Operational Area

Name of Taluks	Cluster Villages selected
Tumakuru	Kadaranahalli, Durgadahalli, Janapanahalli
Koratagere	Tanganahalli,D.Nagenahalli, Vadderahalli, Anupanahalli
Madhugiri	Muthyalammanahalli, Kodigenahalli,
Pavagada	Kariyammanapalya, K.T.Halli, Rangasamudara
Sira	Balenahalli, Tippenahalli,Kalammbella

PRA activities in different taluks



Sira

Madhugiri

Pavagada

Koratagere

Major Problems Identified

- Button Shedding in Coconut
- Drying of Coconut gardens
- Red gram – Sterility Mosaic
- Pomegranate – Bacterial blight

- Multiple issues in Mango
- Low yield in vegetable and flower crops
- Lack of improved varieties
- Wild boar problem
- Anemia among adolescent rural girls

OFTs and FLDs are based on the above mentioned issues and suggestions from SAC and feedback from visiting farmers

Demo Units at Instructional Farm

Sl. No.	Demo Units Details at instructional Farm
1	Modern Water Storage Tank (German Technology)
2	Bore Well recharge Unit
3	Minor Fruits Collection Block
4	Areca nut Plantation Unit
5	Flowering & Foliage Tree Demonstration Plot
6	Ornamental Nursery Demo Unit
7	Small Equipments Demo Unit
8	Areca nut Plate Making Unit
9	Avocado Demo Plot
10	Fruit Crops Varietal Demonstration Cum Mother Block
11	Multipurpose Tree Collection Block
12	Areca nut Nursery Unit
13	Medicinal Plant Demonstration Plot
14	Integrated Farming System Block

Sl. No.	Demo Units Details
15	Medicinal Crop Seedlings Production Nursery
16	Mist House Unit
17	Farm pond with plastic lining
18	Threshing Yard
19	Farm Machinery Unit
20	Fruit Crop Nursery Unit
21	Shredding Cum Chipping Unit
22	Automatic Weather Station Unit
23	Areca nut Based Model Cropping System Unit
24	Water Harvesting Cum Fish Pond Unit
25	Protected Vegetable Production Demo Unit
26	Protected Floriculture Demo Unit
27	Tuberose Varietal Collection Cum Bulb Production Unit

Sl. No.	Demo Units Details
28	Drum Stick Seed Production Demo Unit
29	Precision Farming Demo Unit
30	Centralized Irrigation System
31	Betel vine Varietal Collection Unit
32	Areca nut Varietal Collection
33	Coconut Varietal Collection Unit
34	Hirehalli Dwarf Areca nut Demo Block
35	Mushroom Demo Unit

Laboratories Details

1.	Leaf Tissue Analysis Lab
2.	Plant Health Clinic Lab

Production Units

1.	Micronutrients Production Unit
2.	Bio fertilizers Production Unit
3.	Food Processing & Value addition Unit
4.	Fruit Fly traps Production Unit
5.	Vermi- Compost Production Unit
6.	Compost Production Unit
7.	Vegetable Seed Production Unit
8.	Mushroom Spawn Production Unit
9.	Papaya Seed Production Unit

Sl. No.	Recently developed Demo Units Details at instructional Farm
1	Graviola Block
2	AMC improved Unit
3	Bio-digester
4	Coconut Germplasm (Dwarf) collection
5	Bio liquid formulations
6	Livestock (Hallikar)
7	Farm pond with Plastic lining and Fishery
8	Biogas Production from Kitchen Waste
9	Sheep and Goat rearing Unit
10	Conservation Agriculture
11	Farm Machinery Custom Hiring Center

New Developments

Mulching

Anona Muricata

Application of Compost/FYM

Sunhemp- Green Manuring

Animal components

Prioritized Problems and Thrust Areas

Prioritized Problems and Thrust Areas

Sl. No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Major Thrust Areas
1.	Ragi	Drought, Use of local varieties and low yield. Lack of knowledge on Processing, value addition and branding of ragi products	Drought management, Processing and Value addition , Soil Management
2.	Pigeonpea	Delayed Monsoon and Pod borer and sterile mosaic disease in red gram.	New variety, Water Management and IPM
3.	Groundnut	Tikka Disease , leaf minor, low income	New variety, IDM
4.	Tomato	Poor Soil and Nutrient Management, Water scarcity, Low keeping quality, Pest and Diseases, Weed Menace	ICM
5.	Onion	Use of local varieties, Non availability of Rabi varieties, low yield.	ICM

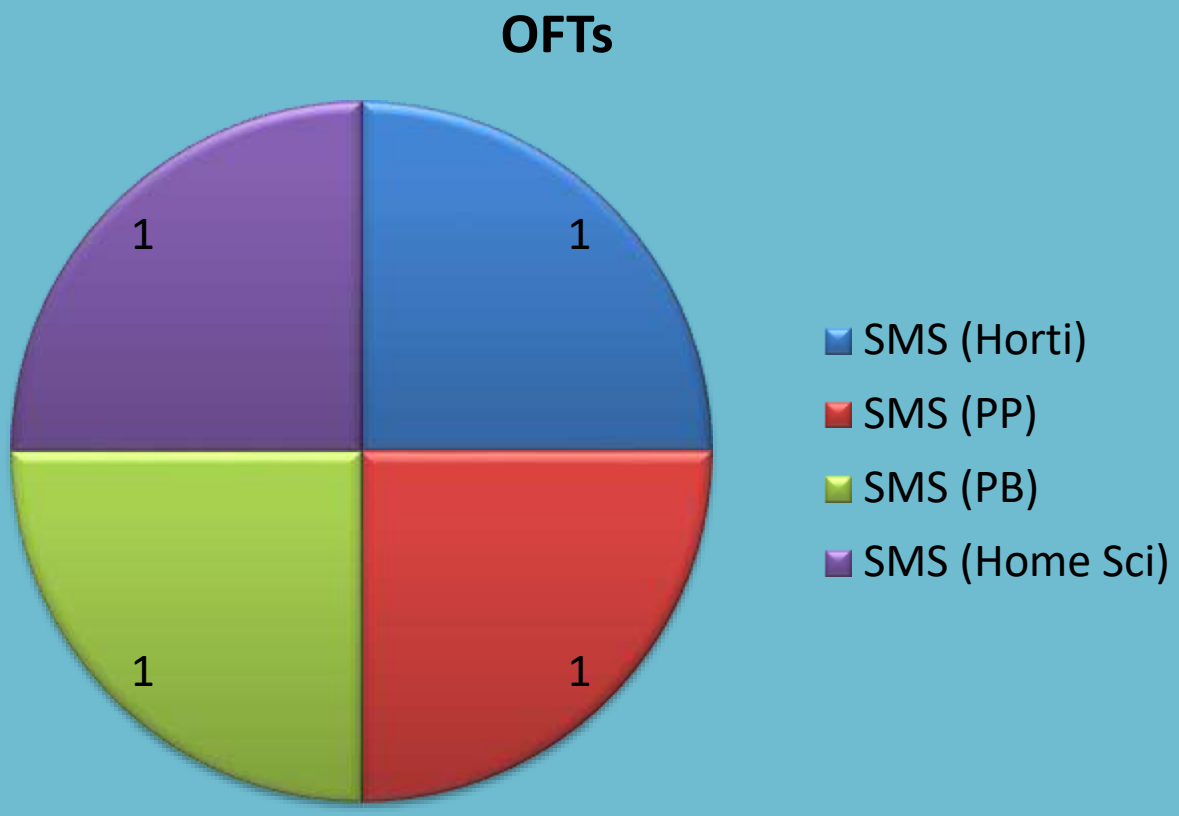
Continued

Prioritized Problems and Thrust Areas

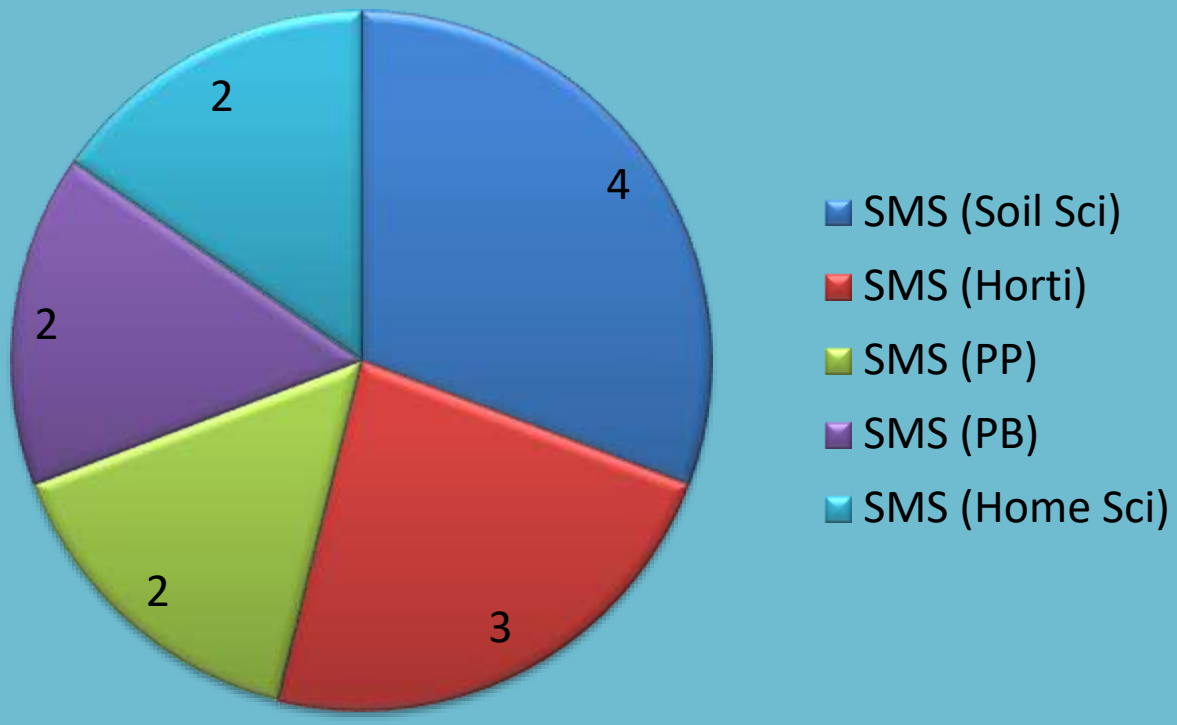
6.	Mango	Monocropping, Stem Borer Powdery mildew, Fruit fly and hoppers in Mango, lack of knowledge on PHT in mango.	PHT, IDM
7.	Coconut	Monocropping, Low soil fertility, Stem bleeding, button shedding, Low income	Intercropping, ICM
8.	Pomegranate	Indiscriminate use of Fertilizers, Wilt & Bacterial Blight, Low yield	INM & IPDM
9.	China Aster	Small size flowers, less shelf life and low yield	ICM
10.	Betelvine	Poor Soil aeration and nutrient Management, Low quality & yield	INM
11.	Arecanut	Monocropping, Low soil fertility, Anabe Roga, Nut splitting, Low income	ICM, Intercropping
12.	Agriculture and Horticulture Crops	Loss by Wildboar, Low income	IPM
13.	Fruits and Vegetable Crops	Malnutrition, Non availability of Vegetables, Fruits, Higher Cost	Food Security
14.	Drudgery	Labour Scarcity, More drudgery in weeding	Drudgery
15.	EDP-Dry Flowers	Lack of Knowledge on PHT of dry flowers Branding and Marketing.	PHT

Abstract of programmes planned for the year 2017-18

Technical Interventions	Numbers
New OFTs	1
Continuing OFTS	3
New FLDS	3
Continuing FLDs	10
EDP	1


OFTs
1
1
1
1
SMS (Horti)
SMS (PP)
SMS (PB)
SMS (Home Sci)

FLDs

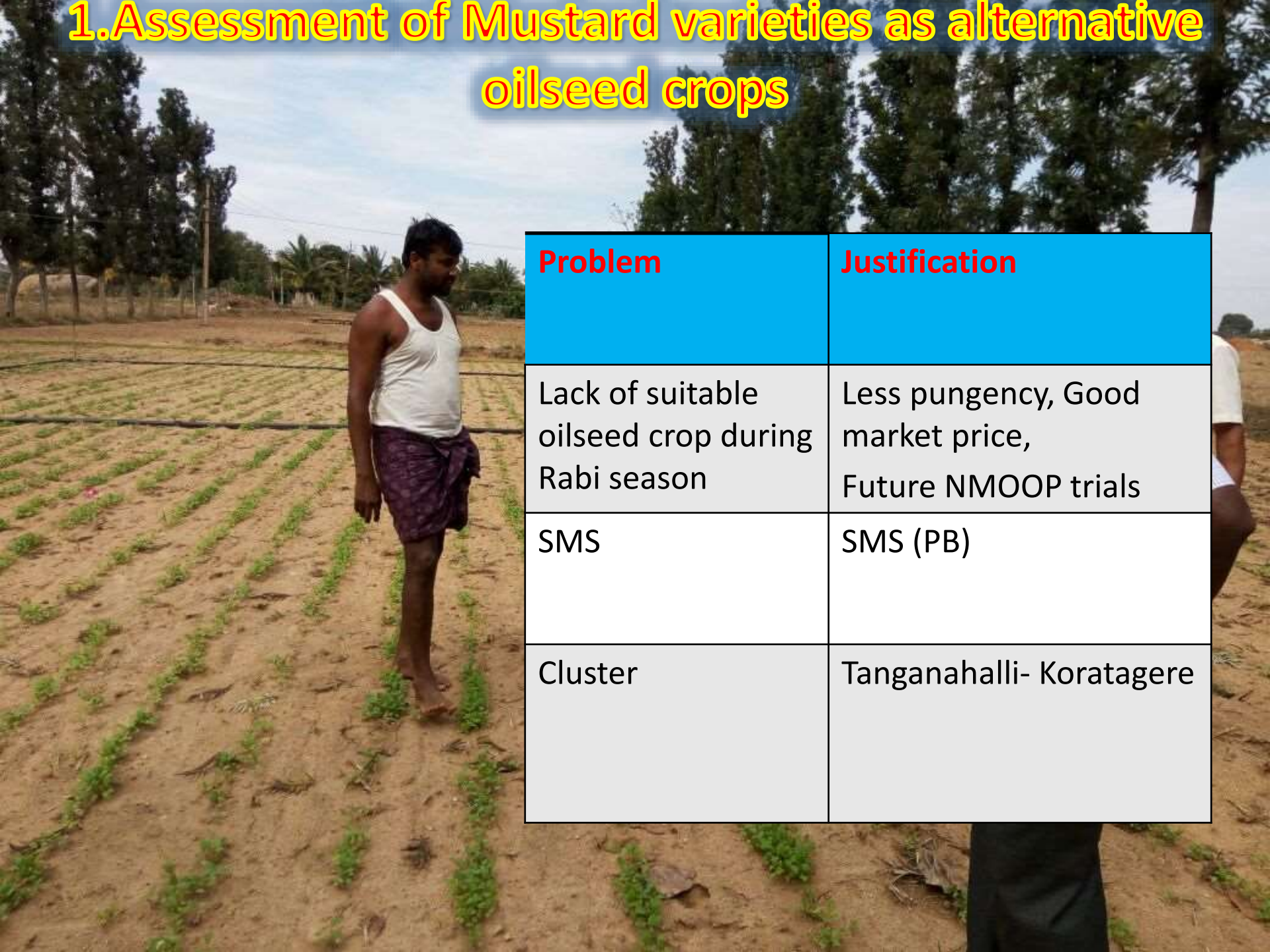


Summary of OFTs

Title	No. of Trials	Treatments	Budget (Rs.)
1. Assessment of Mustard varieties as alternative oilseed crops	3	T1: Ground nut/Sunflower T2:Pusa -31 T3: Pusa -28 T4: Pusa -25	4,050
2.Assessment of Red gram varieties for disease tolerance and Higher yield (2nd year)	3	T1: Local Variety T2: BRG-5 T3: GRG-811	36,600
3.Assessment of weeders as drudgery reducing equipments in Groundnut and horticultural crops (2nd year)	3	T1:Hand weeding T2: Cycle Weeder T3:Twin Wheel Hoe hand Weeder T4: Balaram Weeder	15,000
4. Assessment of Onion varieties for Rabi (2nd year)	3	T1:Arka Kalyan T2:Bhima Super T3:Bhima Shakti	12,600


On Farm Testing

1.Assessment of Mustard varieties as alternative oilseed crops



Problem	Justification
Lack of suitable oilseed crop during Rabi season	Less pungency, Good market price, Future NMOOP trials
SMS	SMS (PB)
Cluster	Tanganahalli- Koratagere

Technology Options	Details of technology	Source of Technology	Justification
TO 1 : FP	Ground nut/Sunflo wer	UAS, Bengaluru	-
TO 2:	Pusa -31	IARI, New Delhi	Erucic acid<2% and glucosinolates <30 ppm,It is a yellow seeded variety with 40.56% oil content, It matures in 144 days Average yield : 2.37 t/ha , Production conditions : Timely sown rainfed
TO 3 :	Pusa -28	IARI, New Delhi	Yield: 2 q/ha It's per day productivity is very high (18.63 kg/day/ha) in comparison to all released varieties. Its seeds contain 41.5% oil.
TO 4 :	Pusa -25	IARI, New Delhi	Yield : 1.5t/ha.It is an early maturing -matures in 107 days. It is suitable for multiple cropping. Seeds contain 39.6% oil.

Critical Inputs for Technology Option 2				Critical inputs for other technology Options 3 & 4			
Name	**Qty. / unit**	**Unit Cost (Rs.)**	**Total Cost (Rs.)**	**Name**	**Qty. / unit**	**Unit Cost (Rs.)**	**Total Cost (Rs.)**
Pusa 31 Seeds	2 Kg	225	450	Pusa 28 & 25 Seeds	2 Kgs each	225	900

Total Budget / unit(Rs.)	Area (ha)	Season	No. of Trials	Parameters to be recorded
4,050	1.2	Rabi 2017-18	3	Growth parameters, Test weight, Yield , Oil Content(%)

2. Assessment of Red gram varieties for disease tolerance & Higher yield (2nd year)

Problem	Higher disease incidence and reduced yield
SMS	SMS (PP)
Cluster	Balenahalli - Sira and K.T.Halli -Pavagada

Technology Options	Details of Technology	Source of Technology	Justification
TO 1 : FP	Local variety	_	Highly susceptible to Sterility mosaic and wilt disease and reduced yield.
TO 2: RPP	BRG-5	UAS, Bengaluru	Tolerant to wilt and long duration.
TO 3 : Alternate Practice	GRG -811	UAS , Raichur	Tolerant to Sterility mosaic and wilt and medium duration and higher yield

Sl. No.	Critical Inputs for Technology Option 2 (Recommended Practice)				Critical inputs for other technology Options 3			
	Name	Qty. / unit-Kg	Unit Cost (Rs.)	Total Cost (Rs.)	Name	Qty. / unit-Kg	Unit Cost (Rs.)	Total Cost (Rs.)
1.	BRG-5 Seeds	5	100	500	GRG-811 Seeds	5	100	500
2.	Neem cake	250	20	5,000	Neem cake	250	20	5,000
3.	AMC	5	120	600	AMC	5	120	600
Total				6,100	Total			6,100

Budget / unit(Rs.)	Area (ha)	Season	No. of Trials	Parameters to be recorded
12,200	0.4	Kharif 2017	3	Per cent disease and per cent wilt incidence, Growth & yield parameters

Total Budget: 36,600

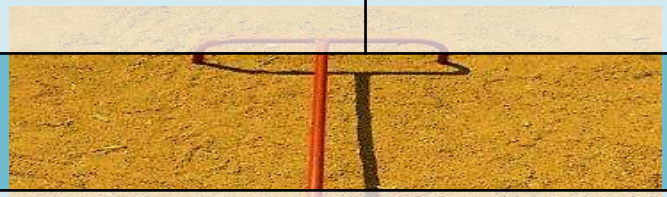
Results – 2016-17

Details of technology	Disease incidence		Height of the Plant in cms	Test weight In gms	Yield Per ha In Qtls	Gross Cost In Rs.	Gross Returns In Rs.	Net Returns In Rs.	B:C ratio
	Sterility Mosaic (%)	Wilt Incidence (%)							
T1: Local variety	5.68	10.46	152.4	11.80	8.64	27,586	51,840	24,254	1.88
T2: BRG-5	2.98	4.68	173.6	14.50	12.1	26,780	72,840	46,060	2.72
T3: GRG 811	2.16	5.01	130.6	12.10	12.9	24,369	77,160	52,791	3.17

3. Assessment of weeders as drudgery reducing equipments in Groundnut and Horticultural crops (2nd year)

Problem	Labour problem and drudgery involved in weeding among women
SMS	SMS (HS)
Cluster	Kadaranahalli-Tumakuru, Kunvenhalli, Kariyammanapalya-Pavagada

Technology Options	Details of technology	Source of Technology	Justification
TO 1 : Farmers Practice	Hand weeding	-	-
TO 2: RPP	Cycle Weeder	ZARS, Hiriyur	Drudgery Reduction
TO 3: Alternate Practice	Twin Wheel Hoe hand Weeder.	CIAE, Bhopal	Drudgery Reduction
TO 4: Alternate Practice	Balaram Weeder	TNAU, Coimbatore	Drudgery Reduction
Season	Kharif, Rabi 2017-18		



Critical inputs	No of demo	Total cost (Rs)	Parameters to be studied
Cycle Weeder, Twin Wheel hoe hand Weeder, Balaram weeder	3	15,000	Cost of operation (Rs/Acre), weeding efficiency (%), plant damage (Nos), REBA (Rapid Entire Body Assessment) score

Results – 2016-17

Parameters	Hand Weeding (Check)	Cycle weeder	Twin wheel weeder	Balaram Weeder
Weeding Efficiency (%)	91	75	82	85
Plant Damage (Nos./0.4acre)	4	12	10	8
*REBA Score (Average)	12.44	5.11	5.89	8.25
Cost of Operation (Rs. /Acre)	4,500 (100%)	1,500 (33.3%)	1,800 (40%)	2,250 (50%)
No of Labours required for 1 ac Area	15	5	6	7.5

*REBA- Rapid Entire Body Assessment

REBA Score	Risk Level
1	Negligible
2-3	Low
4-7	Medium
8-10	High
11-15	Very High

4. Assessment of Onion varieties for Rabi (2nd year)

Arka Kalyan

Problem	Climate change, Delayed rainfall, Non availability of Rabi varieties and Poor storability
SMS	SMS (Horti)
Cluster	Balenahalli

Bheema Super

Bheema Shakti

Technology Options	Details of technology	Source of Technology	Justification
T1: RPP	Arka Kalyan	IIHR, Bengaluru	•Recommended for Kharif and Rabi •Bulb shape –Globsoe •130 days to Maturity with dark red color •Average bulb storage (< 1 month).
T2 :AP	Bhima Super	DOG, Pune	•Recommended for late Kharif and Rabi •Bulb shape –Round •115-120 days to Maturity with Medium red •Better storage (up to 4 months)
T3 : AP	Bhima Shakti	DOG, Pune	•Recommended for late Kharif and Rabi •Bulb shape –Round •110-115 days to Maturity with Medium red •Better storage

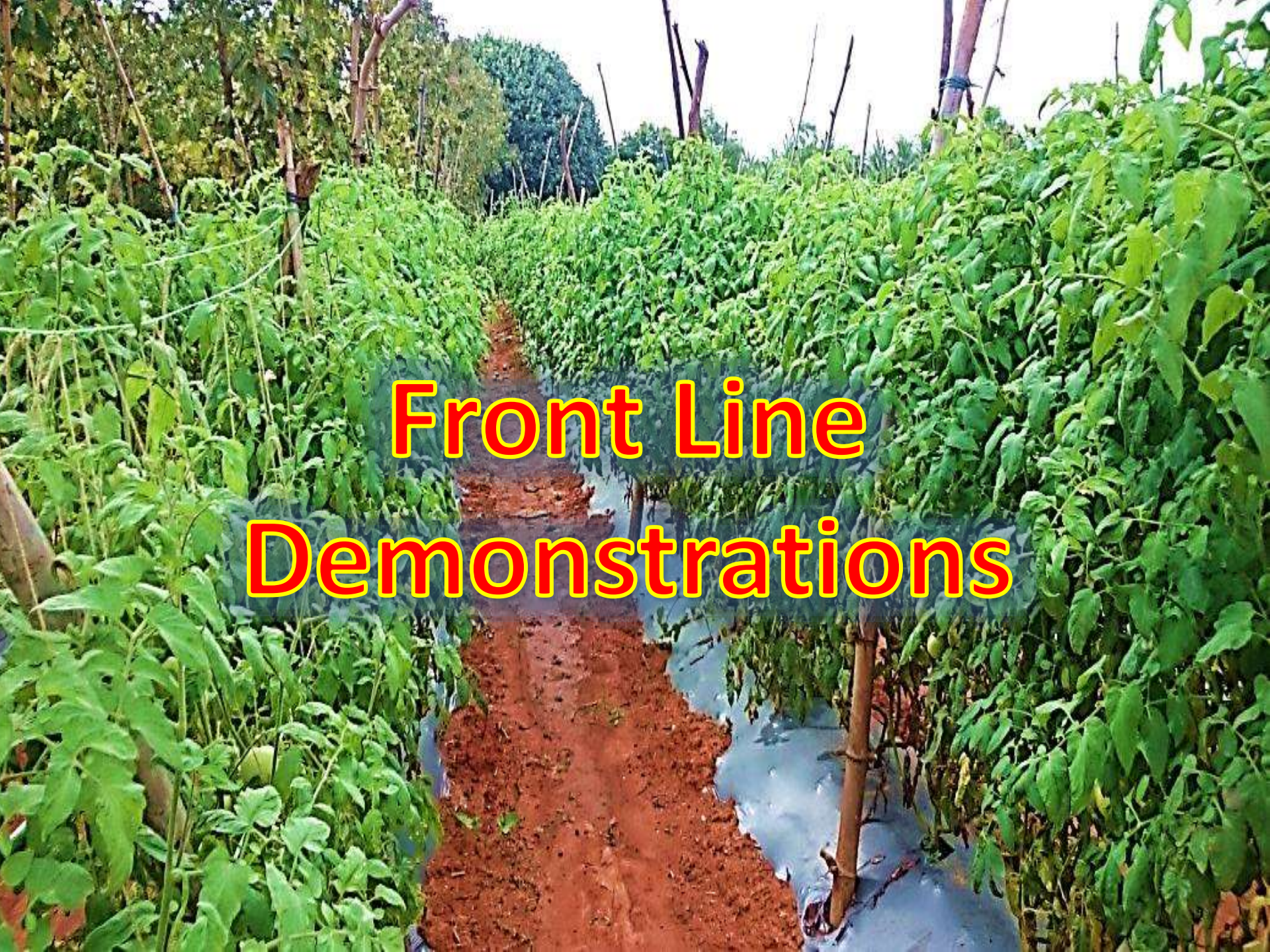
	Budget and Parameters to be studied		
Options	**Critical Inputs**	**Qty/trial**	**Cost / trial (Rs.)**
T 1: RPP	Seeds: Arka Kalyan	1.0 kg	1,200/-
T 2: AP1	Seeds: Bhima Super	1.0 kg	1,500/-
T3: AP2	Seeds: Bhima Shakti	1.0 kg	1,500/-
Total			**4,200/-**
	Grand Total for 3 trials		**12,600/-**
	Area		0.4 ha
	Season		Rabi 2017-18

Major Parameters to be studied

- Growth parameters at different stages
- Grading of bulbs and shelf life

Field photographs

Results – yet to obtain


Front Line
Demonstrations

Summary of FLDs - New

Title	Area (ha)	No. of Trials	Budget (Rs.)
1.Conservation Furrow (CF) as an *in-situ* Moisture conservation to combat mid season drought in Maize	5	10	12,000
2. Demonstration of Arka Actino-Plus (ACP) on Growth and Yield of Brinjal	2	10	12,000
3. Demonstration of Liquid Organic Farming practices in French bean	2	5	20,000

Summary of FLDs - Continuing

Title	Area (ha)	No. of Trials	Budget (Rs.)
4.Enhancement of Pigeon pea yield under NFSM	20	50	1,50,000
5.Enhancement of Groundnut yield under NMOOP	20	50	2,00,000
6.ICM in Tomato	1	5	25,000
7.ICM in Coconut	2	10	30,000
8.ICM in China Aster– Arka Kamini	1	5	9,500
9.Demonstration of French Bean as a intercrop in Areca nut garden for additional income	1	5	11,000
10.ICM in Pomegranate	2	5	45,000
11.Management of Wild Boar in Farming system	2	5	32,000
12.Nutrition garden in Schools		5	15,000
13.Improved Production practices and Post Harvest Management in Mango	10	10	40,000

1.Conservation Furrow (CF) as an *in-situ* Moisture conservation to combat mid season drought in Maize -New

Crop	:	Maize
Variety	:	Hema NAH -1137
Yield & Area of District	:	40 qt/ha, 28,204 ha
Problem	:	Mid season drought, long dry spells and lower yield
Solution	:	Soil and Water conservation
Technology components to be included in the FLD	:	CF is opened at every alternate row by using ridger
Source of Technology	:	UAS, Bengaluru
Season & Year		Kharif, 2017
Parameters to be taken	:	Growth parameters, Cob size, Yield and economics
SMS	:	SMS (SS)
Cluster	:	Tanganahalli-Koratagere & Kadranahalli -Tumakuru

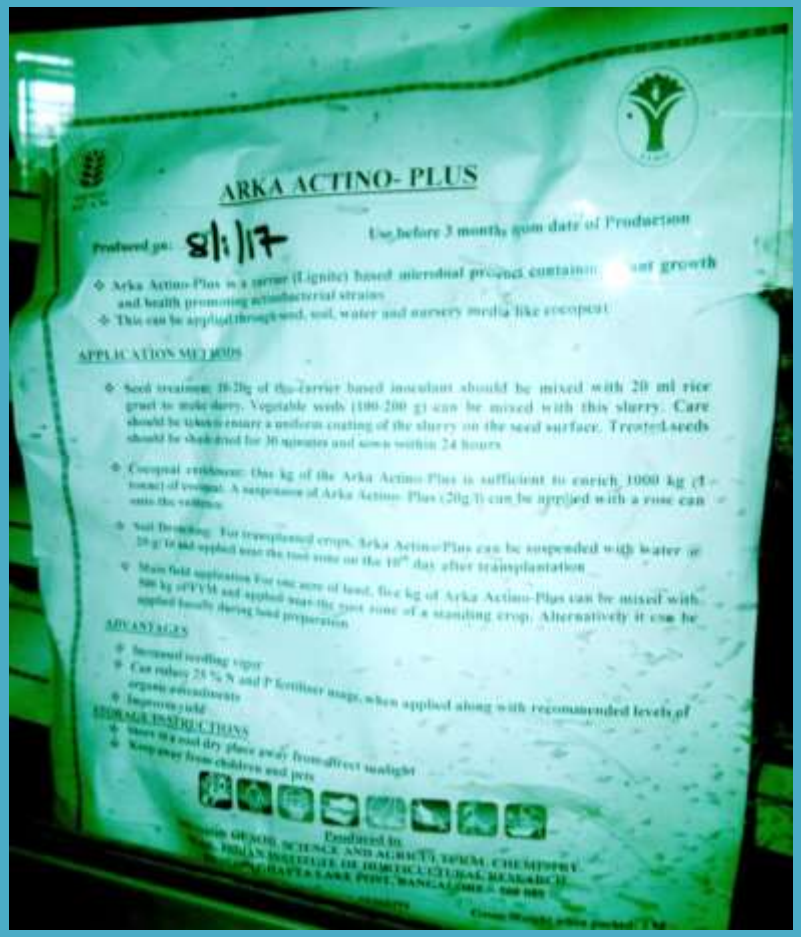
Maize without conservation furrow

Maize with conservation furrow

Critical inputs to be provided	Area (ha)	No. of Farmers	Total Budget (Rs.)
Maize Seeds -60kg, Hiring of ridger-1200/ha	5	10	12,000

2. Demonstration of Arka Actino-Plus (ACP) on Growth and Yield of Brinjal - New

Crop	:	Brinjal
Variety	:	Hybrid
Yield & Area of District	:	28 t /ha, 418 ha
Problem	:	Poor decomposed litters, Low nutrient use efficiency & soil fertility, Severe incidence of wilt and lower yield
Solution	:	Soil health and Nutrient management
Technology components to be included in the FLD	:	Seed treatment with ACP- 10g/ 100g of seeds ACP- 20g/ litre of water and applied near root zone on 10th DAT.
Source of Technology	:	IIHR, Bengaluru
Season & Year		Kharif, 2017
Parameters to be taken	:	Growth parameters, % disease incidence , Yield & economics
SMS	:	SMS (SS)
Cluster	:	Tanganahalli-Koratagere, Kadrenahalli, Duragadahalli -Tmk

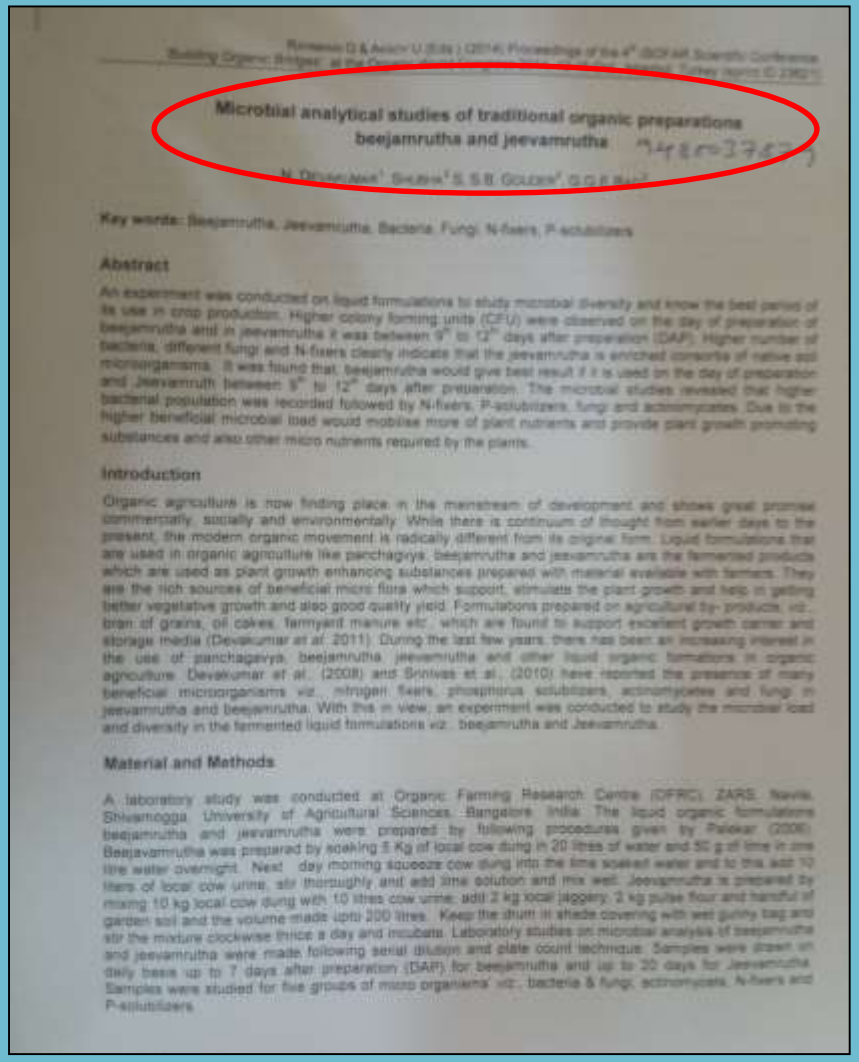


Critical inputs to be provided	Area (ha)	No. of Farmers	Total Budget (Rs.)
Arka Actino plus- 100 kg (Actinomycetes and Bacteria)	2	10	12,000

3.Demonstration of Liquid Organic farming practices in French bean -New

Crop	:	Frenchbean
Variety	:	Arka Suvidha
Yield & Area of District	:	11.4 ton/ha, 250 ha
Problem	:	Soil & PP related issues in Chemical farming
Solution	:	Liquid Organic Farming
Technology components to be included in the FLD	:	Seed treatment with Beejaamrutha, FYM-25 t/ha , N equivalent Compost- 6t/ha, Jeevamrutha- 2000 liter/ha.
Source of Technology	:	UAS, Bengaluru
Season & Year		Rabi,2017
Parameters to be taken	:	Growth parameters, Microbial studies, Pest and Disease Incidence, Yield and economics
SMS	:	SMS (SS)
Cluster	:	Kadaranahalli, Durgadahalli-Tuamakuru and Anupanahalli-Koratagere

Justification



Microbial analytical studies of traditional organic preparations beejamrutha and jeevamrutha

Key words: Beejamrutha, Jeevamrutha, Bacteria, Fungi, N-fixers, P-solubilizers

Abstract

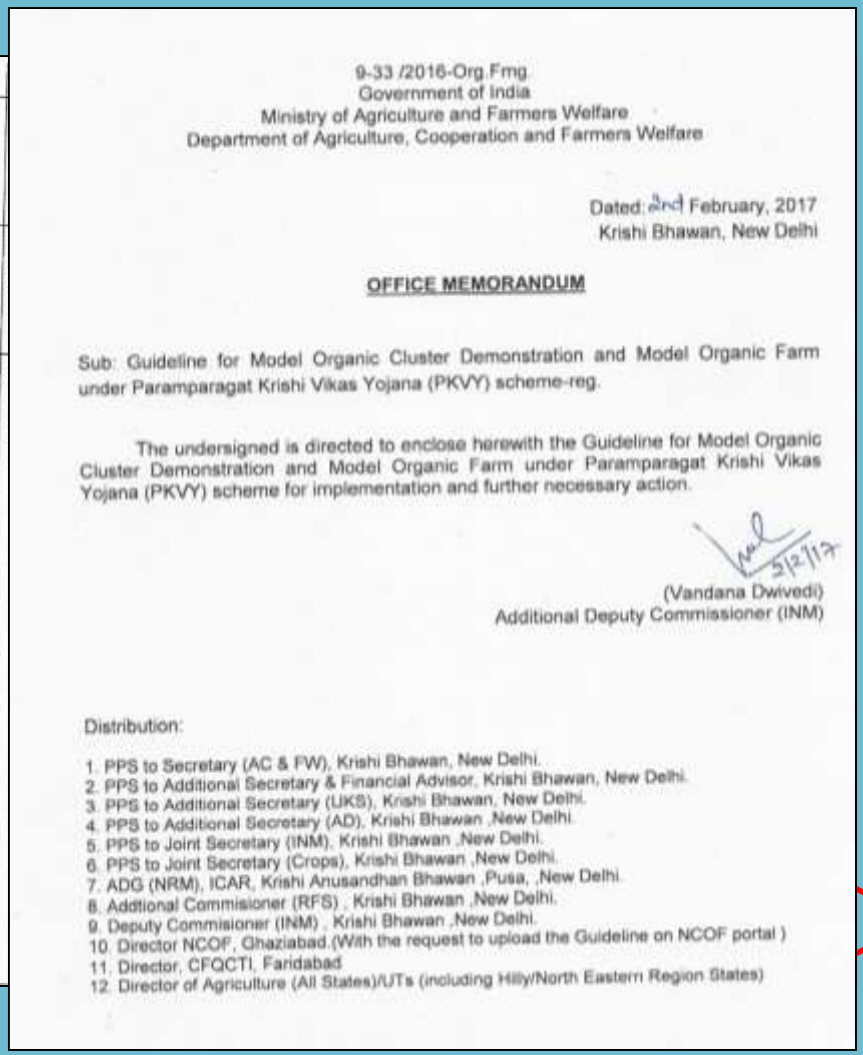
An experiment was conducted on liquid formulations to study microbial diversity and know the best period of its use in crop production. Higher colony forming units (CFU) were observed on the day of preparation of beejamrutha and in jeevamrutha it was between 9th to 12th days after preparation (DAP). Higher number of bacteria, different fungi and N-fixers clearly indicate that the jeevamrutha is enriched consortia of native soil microorganisms. It was found that, beejamrutha would give best result if it is used on the day of preparation and Jeevamruth between 9th to 12th days after preparation. The microbial studies revealed that higher bacterial population was recorded followed by N-fixers, P-solubilizers, fungi and actinomycetes. Due to the higher beneficial microbial load would mobilise more of plant nutrients and provide plant growth promoting substances and also other micro nutrients required by the plants.

Introduction

Organic agriculture is now finding place in the mainstream of development and shows great promise commercially, socially and environmentally. While there is continuum of thought from earlier days to the present, the modern organic movement is radically different from its original form. Liquid formulations that are used in organic agriculture like panchagvya, beejamrutha and jeevamrutha are the fermented products which are used as plant growth enhancing substances prepared with material available with farmers. They are the rich sources of beneficial micro flora which support, stimulate the plant growth and help in getting better vegetative growth and also good quality yield. Formulations prepared on agricultural by- products, viz., bran of grains, oil cakes, farmyard manure etc., which are found to support excellent growth carrier and storage media (Devakumar et al. 2011). During the last few years, there has been an increasing interest in the use of panchagavya, beejamrutha, jeevamrutha and other liquid organic formulations in organic agriculture. Devakumar et al., (2008) and Srinivas et al., (2010) have reported the presence of many beneficial microorganisms viz., nitrogen fixers, phosphorus solubilizers, actinomycetes and fungi in jeevamrutha and beejamrutha. With this in view, an experiment was conducted to study the microbial load and diversity in the fermented liquid formulations viz., beejamrutha and Jeevamrutha.

Material and Methods

A laboratory study was conducted at Organic Farming Research Centre (OFRC), ZARS, Navile, Shivamogga, University of Agricultural Sciences, Bangalore, India. The liquid organic formulations beejamrutha and jeevamrutha were prepared by following procedures given by Palekar (2006). Beejavamrutha was prepared by soaking 5 Kg of local cow dung in 20 litres of water and 50 g of lime in one litre water overnight. Next day morning squeeze cow dung into the lime soaked water and to this add 10 liters of local cow urine, stir thoroughly and add lime solution and mix well. Jeevamrutha is prepared by mixing 10 kg local cow dung with 10 litres cow urine, add 2 kg local jaggery, 2 kg pulse flour and handful of garden soil and the volume made upto 200 litres. Keep the drum in shade covering with wet gunny bag and stir the mixture clockwise thrice a day and incubate. Laboratory studies on microbial analysis of beejamrutha and jeevamrutha were made following serial dilution and plate count technique. Samples were drawn on daily basis up to 7 days after preparation (DAP) for beejamrutha and up to 20 days for Jeevamrutha. Samples were studied for five groups of micro organisms viz., bacteria & fungi, actinomycets, N-fixers and P-solubilizers.



9-33 /2016-Org.Fmg
Government of India
Ministry of Agriculture and Farmers Welfare
Department of Agriculture, Cooperation and Farmers Welfare

Dated: 2nd February, 2017
Krishi Bhawan, New Delhi

OFFICE MEMORANDUM

Sub: Guideline for Model Organic Cluster Demonstration and Model Organic Farm under Paramparagat Krishi Vikas Yojana (PKVY) scheme-reg.

The undersigned is directed to enclose herewith the Guideline for Model Organic Cluster Demonstration and Model Organic Farm under Paramparagat Krishi Vikas Yojana (PKVY) scheme for implementation and further necessary action.

2/2/17

(Vandana Dwivedi)
Additional Deputy Commissioner (INM)

Distribution:

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3. PPS to Additional Secretary (UKS), Krishi Bhawan, New Delhi.
4. PPS to Additional Secretary (AD), Krishi Bhawan ,New Delhi.
5. PPS to Joint Secretary (INM), Krishi Bhawan ,New Delhi.
6. PPS to Joint Secretary (Crops), Krishi Bhawan ,New Delhi.
7. ADG (NRM), ICAR, Krishi Anusandhan Bhawan ,Pusa, ,New Delhi.
8. Addtional Commisioner (RFS) , Krishi Bhawan ,New Delhi.
9. Deputy Commisioner (INM) , Krishi Bhawan ,New Delhi.
10. Director NCOF, Ghaziabad.(With the request to upload the Guideline on NCOF portal)
11. Director, CFQCTI, Faridabad
12. Director of Agriculture (All States)/UTs (including Hilly/North Eastern Region States)

ಜೀವಾಮೃತ

- ದೇಶಿ ಹಸುವಿನ ಸಗಣಿ 10 ಕೆಜಿ
- ದೇಶಿ ಹಸುವಿನ ಗಂಜಲ 10 ಲೀಟರ್
- ದೇಶಿ ಬೆಲ್ಲ 2 ಕೆಜಿ
- ದ್ವಿದಳ ಧಾನ್ಯದ ಹಿಟ್ಟು 2 ಕೆಜಿ
- ಒಂದು ಬೊಗಸೆ ಜಮಿನಿನ ಮಣ್ಣು
- ನೀರು 200 ಲೀಟರ್

ಬಳಸುವ ಪ್ರಮಾಣ

ಎಕರೆಗೆ 200 ಲೀಟರ್ ಜೀವಾಮೃತವನ್ನು ಭೂಮಿ ತೇವವಿರುವಾಗ ಕೊಡಬೇಕು

ಬೀಜಾಮೃತ

- ದೇಶಿ ಹಸುವಿನ ಸಗಣಿ 5 ಕೆಜಿ
- ದೇಶಿ ಹಸುವಿನ ಗಂಜಲ 5 ಲೀಟರ್
- ಸುಣ್ಣ 50 ಗ್ರಾಂ
- ಒಂದು ಬೊಗಸೆ ಜಮೀನಿನ ಮಣ್ಣು
- ನೀರು 20 ಲೀಟರ್

ಬಳಸುವ ಪ್ರಮಾಣ

ಬಿತ್ತನೆ ಬೀಜವನ್ನು ಬೀಜಾಮೃತದಲ್ಲಿ 15-20 ನಿಮಿಷಗಳ ಕಾಲ ನೆನೆಸಿ ಬಳಸುವುದು

Critical inputs to be provided	Area (ha)	No. of Farmers	Total Budget (Rs.)
French bean-50kg, Jaggery- 60 kg, Dal powder- 60kg, lime -20kg	2	5	20,000

3.Demonstration of Organic farming practices in French bean -New

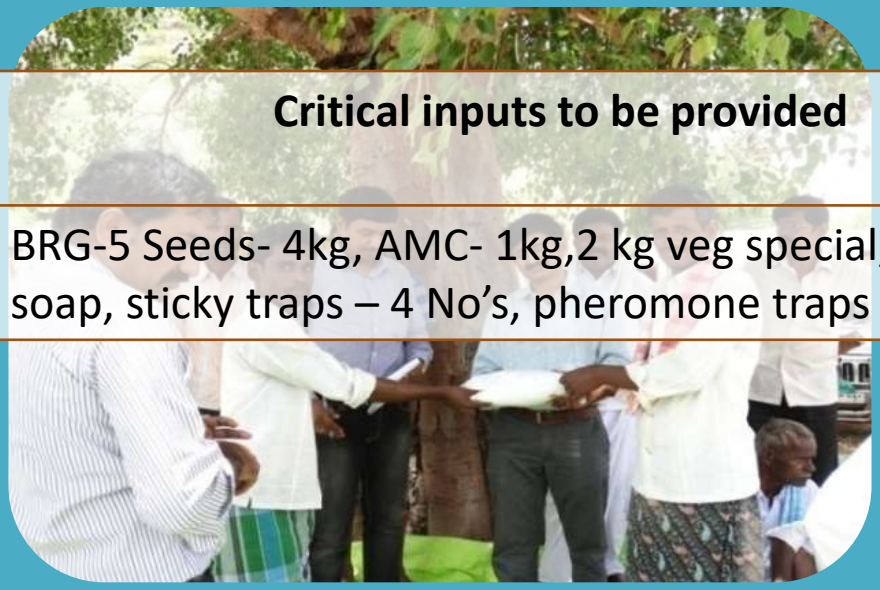
Crop	:	French bean
Variety	:	Arka Suvidha
Yield & Area of District	:	11.4 ton/ha, 250 ha
Problem	:	Soil & PP related issues in Chemical farming
Solution	:	Organic Farming
Technology components to be included in the FLD	:	Frenchbean-50kg, Trichoderma-30kg, PSB-30kg, Azatobactor-30kg, Rhizobium- 2kg Neem cake-250 kg, Neem soap- 20 kg
Source of Technology	:	UAS, Bengaluru
Season & Year		Rabi,2017
Parameters to be taken	:	Growth parameters, Microbial studies, Pest and Disease Incidence, Yield and economics
SMS	:	SMS (SS)
Cluster	:	Kadaranahalli, Durgadahalli-Tumakuru and Anupanahalli-Koratagere

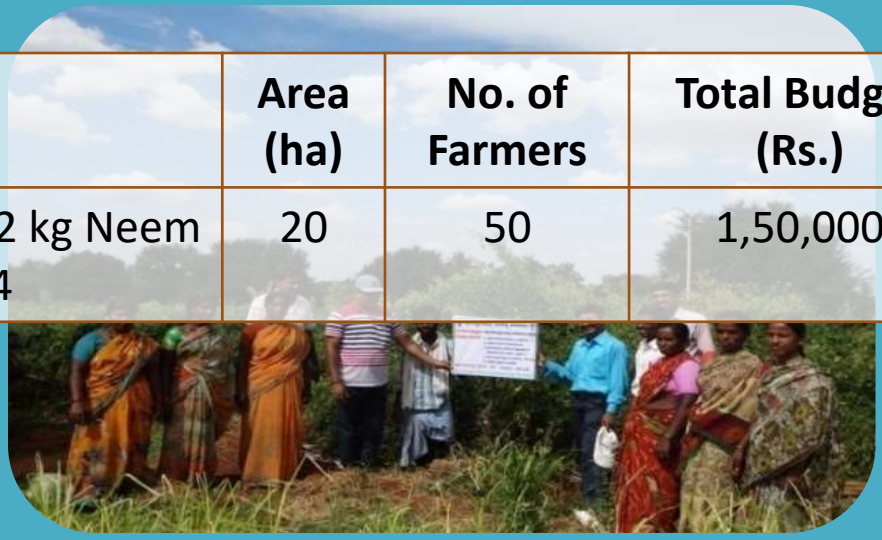
Critical inputs to be provided	Area (ha)	No. of Farmers	Total Budget (Rs.)
Frenchbean-50kg, Trichoderma-30 Kg, PSB-30kg, Azatobactor-30 Kg, Rhizobium- 2Kg, Neem cake-250 Kg, Neem soap- 20 Kg, Beveria basiana-10 Kg	2	5	25,000

4. Enhancement of Pigeon pea yield through introduction of BRG – 5 NFSM

Crop	Pigeon pea
Variety	BRG-5
Yield & Area of District	7-9 qt/ha, 25000 ha
Problem	Use of local low yielding varieties.
Solution	High yielding variety
Technology components to be included in the FLD	Demonstration of BRG-5 Variety, use of foliar micronutrient, use of pheromone traps, use of neem soap, Use of sticky traps
Source of Technology	UAS, Bengaluru
Season & Year	Kharif, 2017
Parameters to be taken	Growth parameters, Test weight, Yield and economics
SMS	SMS (PB)
Cluster	Thippanahalli Sira, Thanganahalli, Koratagere, Kariayammanapallya, Pavagada

Critical inputs to be provided	Area (ha)	No. of Farmers	Total Budget (Rs.)
BRG-5 Seeds- 4kg, AMC- 1kg,2 kg veg special, 2 kg Neem soap, sticky traps – 4 No's, pheromone traps -4	20	50	1,50,000





Results of 2016-17

Particulars	Parameters		Economics				
	No of Pods/ plant	Avg Yield (Qt/ha)	% increased yield	Gross cost (Rs/ha)	Gross Income (Rs/ha)	Net Income (Rs/ha)	B:C Ratio
Demo	23	2.04	31.61	8,400	10,200	1,800	1.21
Control	14	1.55		9,200	7,750	-1,450	0.84

5.Enhancement of Groundnut yield under NMOOP

Crop	:	Groundnut
Variety	:	KCG-6/K-6
Yield & Area of District	:	7-8 qt/ha, 1.20 lakh ha
Problem	:	Use of local low yielding varieties.
Solution	:	High yielding variety
Technology components to be included in the FLD	:	Demonstration of KCG-6 and K-6 Varieties
Source of Technology	:	UAS, Bengaluru
Season & Year		Kharif, 2017
Parameters to be taken	:	Growth parameters, Test weight, Yield and economics
SMS	:	SMS (PB)
Cluster	:	Kanvenahalli, Pavagada, Kadaranhalli ,Tumakuru

Critical inputs to be provided	Area (ha)	No. of Farmers	Total Budget (Rs.)
KCG-6/K-6 Seeds- 30 kg, zinc sulphate – 4 kg, Borax-4 kg	20	50	2,00,000

Results of 2016-17

Cluster name	Check variety	Demo variety	Yield (q/ha)		Gross cost (Rs./ha)		Gross income (Rs./ha)		Net returns (Rs./ha)		Check B:C Ratio	Demo B:C Ratio
			Check	Demo	Check	Demo	Check	Demo	Check	Demo		
Tippanahalli (Tq:Sira	TMV-2	K-6	2.83	3.04	15000	15000	14,500	15,200	-850	200	0.94	1.01
K.Palya (Tq:Pvg)	TMV-2	K-6	1.89	2.15	15000	15000	9473	10731	-5527	-4269	0.63	0.72

Cluster name	Check variety	Demo variety	Yield (q/ha)		Gross cost (Rs./ha)		Gross income (Rs./ha)		Net returns (Rs./ha)		Check B:C Ratio	Demo B:C Ratio
			Check	Demo	Check	Demo	Check	Demo	Check	Demo		
Kadaranhalli (Tq:Tmk)	TMV-2	KCG-6	3.28	3.46	15000	15000	16400	17300	1400	2300	1.09	1.15
Kanvenhalli Tq:Pvg)	TMV-2	KCG-6	1.86	1.96	15000	15000	9321	9821	-5679	-5179	0.62	0.65

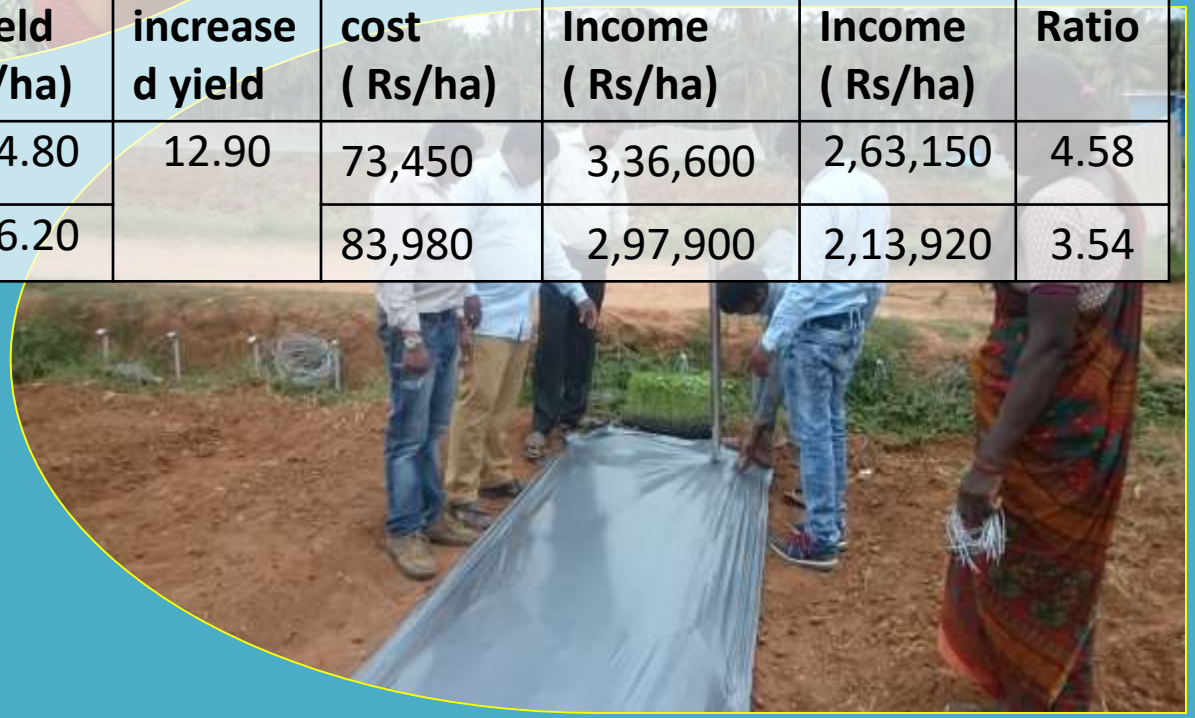
6. ICM in Tomato- 2nd year

Crop	:	Tomato
Variety	:	Arka Samrat
Yield & Area of District	:	36.09 t/ha, 832 ha
Problem	:	Weed menace, Low nutrient use efficiency and low yield, Water scarcity in vegetables cultivation
Solution	:	High yielding variety
Technology components to be included in the FLD	:	Arka Samarat, AMC, Vegetable Special, PP Chemicals and use of polythene mulch in tomato production
Source of Technology	:	IIHR, Bengaluru
Season & Year		Rabi/Summer, 2017-18
Parameters to be taken	:	Growth parameters, No.of Fruits, Yield & Economics
SMS	:	SMS (Horti)
Cluster	:	Tanganahalli, Koratagere, Kadranahalli, Duragadahalli - Tumakuru

Critical inputs to be provided	Area (ha)	No. of Farmers	Total Budget (Rs.)
Seeds -100 gm, AMC-15 Kg, Vegetable Special-6 Kg, Neem Soap -2 Kg, Chlrothanil -1 Kg, Polythene mulch (80 micron)	1	5	25,000

Results of 2016-17

Particulars	Parameters			Economics				
	No of fruits /plant	Fruit weight (g)	Avg Yield (t/ha)	% increased yield	Gross cost (Rs/ha)	Gross Income (Rs/ha)	Net Income (Rs/ha)	B:C Ratio
Demo	43	88.4	74.80	12.90	73,450	3,36,600	2,63,150	4.58
Control	32	56.5	66.20		83,980	2,97,900	2,13,920	3.54



7. ICM in Coconut – 2nd year

Crop	:	Coconut
Variety	:	Arsikere tall
Yield & Area of District	:	0.16 lakh nuts/ha, 1,32,587 ha
Problem	:	Monocropping, low nutrient status and low yield, button shedding, mites, stem bleeding, ganoderma wilt
Solution	:	ICM
Technology components to be included in the FLD	:	Neem cake-5kg per tree, French bean seeds-10kg/ acre, RDF-Gypsum-1kg/ tree, COC- 10g per lit water, Hexoconazole -3 ml per 100ml water and Pheromone traps
Source of Technology	:	UAS , Bengaluru
Season & Year		Kharif, 2017
Parameters to be taken	:	Nutrient status, Coconut yield, Percent recovery of stem bleeding and Inter crop yield
SMS	:	SMS (SS)
Cluster	:	Tanganahalli,Koratagere & Duragadahalli, Tumakuru

Critical inputs to be provided	Area - ha	No. of Farmers	Total Budget (Rs.)
Neem cake-5kg per tree, French bean seeds-10kg/ acre,Gypsum-1kg/ tree, COC- 10g per lit water, Hexoconazole - 3 ml per 100 ml water and Pheromone traps	2	10	30,000

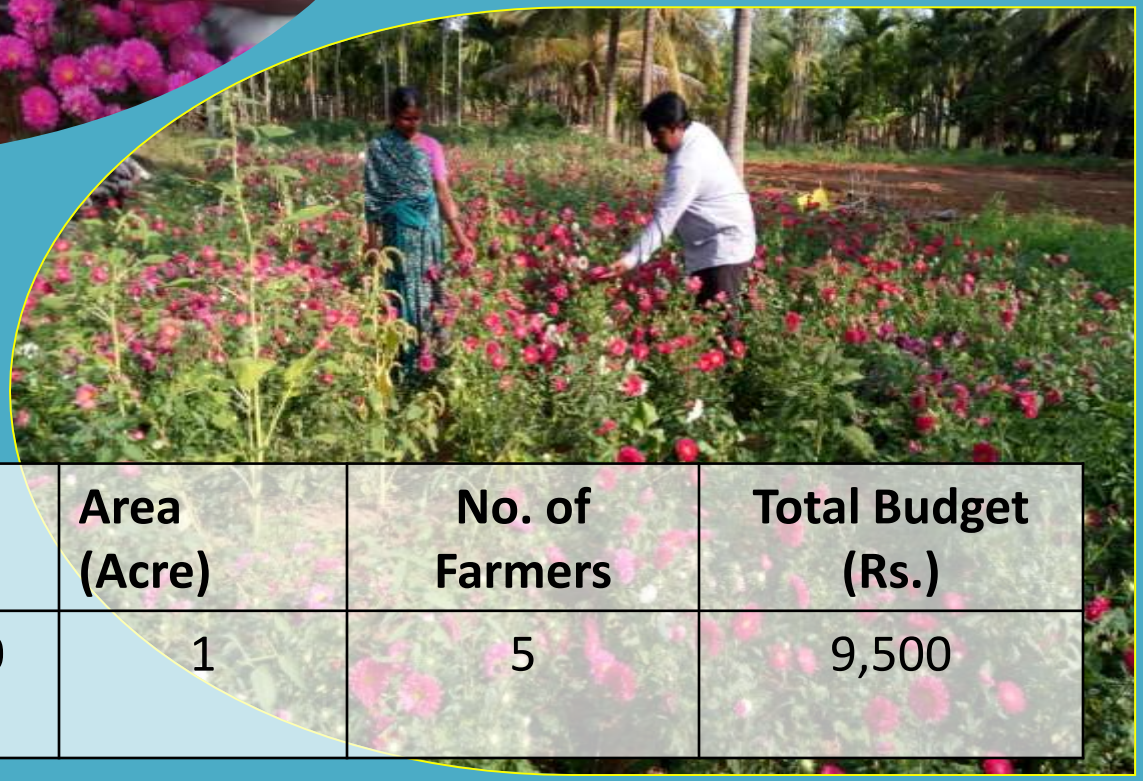
Results of 2016-17

Partiulars	Parameters of intercrops in Coconut		Economics				
	No of pods/ plant	Length of Pods (cm)	Avg Yield (t/ha)	Gross cost (Rs/ha)	Gross return (Rs/ha)	Net incomce (Rs/ha)	B:C ratio
French Bean	36.9	13.7	3.2	16,500	48,000	31,500	2.90

Chemical analysis	pH	Soil Bulk Density	OC	N	P	K	Ca	Mg	S	Fe	Mn	Zn	Cu
Unit		g/cc	%	kg/acre			ppm						
Optimum range	6.5-7.5	< 1	0.75-1	112-224	9-22	50-120	800-1,500	150-250	10 - 15	5 - 10	3 - 8	0.75-1	0.5-1
Before	6.8	1.69	0.47	97	15.4	66.5	495	165	8.4	19.1	11.5	0.5	0.6
After	7.2	1.58	0.53	117	21.4	74.2	984	194	14	22.4	10.8	0.7	0.5

8.ICM in China Aster- 2nd Year

Crop	:	China Aster
Variety	:	Arka Kamini
Yield & Area of District	:	8 t/ha, 1200 ha
Problem	:	Small size flowers and diameter, less shelf life, less attractive colour and low yield
Solution	:	Early flowering and more shelf life, attractive colour, large sized and more numbers of flowers per plant and fetches higher price in the market.
Technology components to be included in the FLD	:	ARKA Kamini & Biofertilizers -AMC
Source of Technology	:	IIHR, Bengaluru
Season & Year		Rabi, 2017
Parameters to be taken	:	Size, No. of Flowers/plant, Yield and economics
SMS	:	SMS (Horti)
Cluster	:	Tanganahalli,D.Nagenahalli,Koratagere,Duragadahalli, Tumakuru



Critical inputs to be provided	Area (Acre)	No. of Farmers	Total Budget (Rs.)
Aster – Arka Kamini Seeds – 750 g/ha, Biofertilizers- 5 Kg AMC	1	5	9,500

Results of 2016-17

Particulars	Parameters			Economics				
	No of Flowers/plant	Flower Diameter (cm)	Yield (t/ha)	% Increase	Gross cost (Rs/ha)	Gross Return (Rs/ha)	Net Income (Rs/ha)	B:C Ratio
Demo	42.2	4.50	4.45	26.42	35,250	1,33,500	98,250	3.79
Control	32.50	4.20	3.52		37,900	1,05,600	67,700	3.11

9.Demonstration of French Bean as a intercrop in Areca nut garden for additional income – 2nd Year

Crop	:	French bean
Variety	:	Arka Suvidha
Yield & Area of District	:	12 t/ha, 250 ha
Problem	:	Inefficient use of land, weed menace, low soil fertility, lower income
Solution	:	Intercropping system
Technology components to be included in the FLD	:	Areca nut + French bean intercropping system
Source of Technology	:	IIHR Bengaluru
Season & Year		Rabi, 2017
Parameters to be taken	:	No of pods /plant, Green Pod yield/plant , Yield (t/ha) of main and intercrop
SMS	:	SMS (Horti)
Cluster	:	Tanganahalli, Vaddarahalli-Koratagere, Duragadahalli-Tumakuru

Areca nut Mono crop

Arecanut + French bean

Critical inputs to be provided	Area (Acre)	No. of Farmers	Total Budget (Rs.)
Arka Suvidha seeds -40 kg Soil sample Analysis – 10 Nos	1	5	11,000

Results of 2016-17

Partiulars	Parameters of intercrops				Economics				
	Plant Height (cm)	No. of branches	No. of pods / plant	Length of Pods (cm)	Avg Yield (t/ha)	Gross cost (Rs/ha)	Gross return (Rs/ha)	Net incomce (Rs/ha)	B:C ratio
Arecanut monocrop	-	-	-	-	1.07	72,950	2,14,000	1,41,050	2.93
Arecanut +					1.12	72,950	2,24,000	1,51,050	3.32
French Bean	42.5	12	36.2	13.2	3.6	16,250	54,000	37,750	

10.ICM in Pomegranate- 2nd year

Crop	:	Pomegranate
Variety	:	Bhaguva
Yield & Area of District	:	10 t/ha, 1,829 ha
Problem	:	Lack of awareness on application of nutrients Higher incidence of wilt and BLB, Reduced yield up to 30-50 %.
Solution	:	1. Application of correct RDF and Micronutrients based on soil and leaf test analysis. 2. IPDM measures
Technology components to be included in the FLD	:	INM and IPDM Package
Source of Technology	:	NRCP, IIHR and UAS, Dharwad
Season & Year		Kharif & Rabi, 2017-18
Parameters to be taken	:	Growth parameters, % disease incidence Yield and economics
SMS	:	SMS (PP)
Cluster	:	Madde and Ponnasamudra of Pavagada taluk

Critical inputs to be provided	Area (ha)	No. of Farmers	Rs./Acre	Total Budget (Rs.)
1. Neemcake -250 kg 2. Arka Microbial consortium – 10 kg 3. Streptocycline- 375 g 4. Blitox- 2.5 kg 5. Carbendazim – 1 kg	2	5	9,000	45,000

Results 2016-17

Details of technology	Disease				Yield Per ha In Qtls	Gross Cost In Rs.	Gross Returns In Rs.	Net Returns In Rs.	B:C ratio
	Wilt Incidence (%)	% Leaf blight	% Stem blight	% Fruit blight					
Demo plot	1.62	26.99	22.34	8.30	8.92	1,29,800	5,35,200	4,05,400	4.12
Control	8.64	64.28	52.82	28.61	6.88	1,46,000	4,12,800	2,66,800	2.83

11.Management of Wild Boar in Farming system – 2nd year

Problem	:	Heavy damage due to wild boar Disturbing and uprooting of Groundnut plants
Solution	:	IPM
Technology components to be included in the FLD	:	1.Tying of old coloured cloth pieces around the field. 2. Installation modified Nylon net 3. Installation of Borep-Wild bore repellent
Source of Technology	:	KAU, Thrissur
Season & Year		*Kharif*, 2017
Parameters to be taken	:	Percentage of damage, Yield loss
SMS	:	SMS (PP)
Cluster	:	Duragdahalli- Tumakuru, Tipenahalli- Sira, Ponnasamudra-Pavgada

Critical inputs to be provided	Area (ha)	No. of Farmers	Rs./unit	Total Budget (Rs.)
1. Nylon net- 8 Kgs 2. Borep-Wild boar repellent	2	5	5,400 1,000	32,000

Results 2016-17

Details of technology	% Damage in Early stage immediatly after sowing	% Damage in Pod filling stage	Yield Per ha In qts	% increase in yield	Gross Cost In Rs.	Gross Returns In Rs.	Net Returns In Rs.	B:C ratio
Demo plot	Nil	Nil	3.84	28.85	14,456	19,968	5,512	1.38
Control	69.53	26.90	2.98		12,952	15,496	2,544	1.19

Installation of Borep

12.Nutrition garden in Schools – 2nd year

Crop	:	Vegetables
Variety	:	Arka varieties
Yield	:	-
Problem	:	Lack of knowledge on cultivation of vegetables crops in small area and high cost of vegetables and fruits.
Solution	:	Nutrition garden
Technology components to be included in the FLD	:	Demonstration on Establishment of Nutrition Garden in Schools
Source of Technology	:	UAS ,Bengaluru
Season & Year		Kharif & Rabi, 2017
Parameters to be taken	:	Yield, Average Vegetable production per day, Cost of savings through nutritional garden.
SMS	:	SMS (HS)
Cluster	:	Sira and Tumakuru Taluk

Critical inputs to be provided	No. of Schools	Total Budget (Rs.)
Vegetable seed kits (4 No,s), seedlings of Papaya (5 No,s), drumstick(5 No,s) for each schools, Polyethene bags(4 kg), AMC- 2 kg, Veg. special- 2 kg, Neem soap-2 kg, sprayer – 2 No,s,	5	15,000

List of Schools and Results 2016-17

Sl. NO.	School Name	Area approximate	Status	% of Vegetable met from Nutrition garden and amount saved
1	Govt Lower Primary School, Aralakatte,Tq:Tumakuru(Student Strength- 70)	2,400 Square feet	Total Vegetables harvested for one season-180 kg (Leafy veg, tomato, chilli, pumkin, French bean, Ridge gourd)	42% vegetable requirement met from garden and saved Rs.3600
2	Govt Higher primary School, Byalya,Tq: Madhugiri (Student Strength- 220)	1,400 Square feet	Leafy vegetables harvested-60 kg. Tomato, Chilli, other Veg-Fruiting stage.	9.4 % vegetable requirement met from garden and saved Rs.1200
3	Govt Lower Primary School, Sigalahalli, Tq:Sira	4,000 Square feet	Leafy vegetables harvested-40kg. Tomato, Chilli, other Veg-Seedling and Flowering stage	-
4	TVS School, Tumakuru	1,800 Square feet	Sowing of all veg done, because of monkey menace less quantity of vegetables were harvested.	-

13.Improved Production practices and Post harvest management in mango – 3rd Year

Crop	:	Mango
Variety	:	Alphanso
Yield & Area of District	:	8 t/ha, 11929 ha
Problem	:	Lack of knowledge on production and post harvest technology
Solution	:	ICM and PHT in mango
Technology components to be included in the FLD	:	Mango special, Fruitfly traps, Healer cum Sealer, Neem soap, Mango harvester, Ripening chamber
Source of Technology	:	IIHR, Bengaluru
Season & Year		Rabi & Summer, 2017-18
Parameters to be taken	:	Yield and economics
SMS	:	SMS (HS)
Cluster	:	Mavukere, Tumakaru taluk

Critical inputs to be provided	Area (Acre)	No. of Farmers	Total Budget (Rs.)
Mango special- 5 kg, Sealer cum Healer- 1 kg, Fruitfly traps-8 No,s,, Neem soap-3 kg, Mango harvester,-1 No,s , Ripening chamber- 1 No,s (for group)	10	10	40,000

Results 2015-16

***Demo plot (6 yrs old) Mango Fruits selling rate-40/kg and in check – 30 /kg**

Check Plot Details					Demonstration Details				
Average yield / ha (Tons)	Gross cost/ha (Rs. In lakhs)	Gross Income /ha (Rs. In lakhs)	Net income /ha (Rs. In lakhs)	BC Ratio	Average yield / ha (Tons)	Gross cost/ha (Rs. In lakhs)	Gross Income /ha (Rs. In lakhs)	Net income/ ha (Rs. In lakhs)	BC Ratio
6	0.8	1.8	1	2.25	8	0.9	3.2	2.30	3.55

Entrepreneurship Development Programme (EDP)

Demonstration on dried flowers as an Income Generation Activity-EDP

Crop	:	Flowers
Variety	:	-
Yield	:	-
Problem	:	Lack of knowledge on dried flowers and Income generation activity.
Solution	:	PHT
Technology components to be included in the FLD	:	Preparation of dried flower products
Source of Technology	:	IIHR, Bengaluru
Season & Year		Kharif & Rabi, 2017
Parameters to be taken	:	Cost of production, Income
Place	:	Tumakuru & Madhugiri Taluk

Critical inputs	No. of Demons	Total cost (Rs.)
Silica gel, other items (craft papers, Needles, glue stick, blotting sheet, forceps	02 SHG's	20,000

Activities-
Cluster Village wise

Activities calendar for cluster village 1 . Kadaranahalli –Tumakuru Tq
Major crops/enterprises of the village: Arecanut, Coconut, Frenchbean Onion, Tomato, Maize, Brinjal, Redgram, China Aster

Crop/ enterprise	Problem (Quantify)	Availability of Technologies and the Sources	Nature /mode of intervention
Maize	Soil erosion, Early and mid season drought	Conservation Furrow (CF) as an in-situ Moisture conservation to combat mid season drought in Maize ,UAS, Bengaluru	FLD, Trainings, Field day
Arecanut –French Bean	Monocropping, Inefficient use of land, weed menace, low soil fertility, lower income	Demonstration of French Bean as a intercrop in Areca nut garden for additional income . CPCRI, Kasargod	FLD Trainings, Field day
Brinjal	Poor decomposed litters, Low nutrient use efficiency & soil fertility, Severe incidence of wilt and lower yield	Demonstration of Arka Actino-Plus (ACP) on Growth and Yield of Brinjal, IIHR, Bengaluru	FLD Trainings, Field day
China Aster	Small size flowers, less shelf life and low yield	ICM in China Aster -Arka Kamini . IIHR bengaluru	FLD Trainings, Field day

Contd...

Crop/ enterprise	Problem (Quantify)	Availability of Technologies and the Sources	Nature /mode of intervention
Coconut	Monocropping, no appropriate use of space and Cropping system in flowers crops as intercrop, low income	Assessment of commercial flower crops in coconut based cropping system CPCRI, Kasargod ICM in Coconut- UAS, Bengaluru	OFT, FLD, Trainings, Field day
Pomegranate	Indiscriminate use of Fertilizers, Wilt & Bacterial Blight, Low yield	ICM in Pomegranate IIHR, Bengaluru	FLD Trainings , Field day
Groundnut & Horticultural Crops	Labour problem and drudgery involved in weeding among women	Assessment of weeders as drudgery reducing equipments in Groundnut and Horticultural crops	OFT
Mustard	Lack of suitable oilseed crop during Rabi season	Assessment of Mustard varieties as alternative oilseed crops	OFT

Contd...

Crop/ enterprise	Problem (Quantify)	Availability of Technologies and the Sources	Nature /mode of intervention
Frenchbean	Soil & PP related issues in Chemical farming	Demonstration of Organic Farming practices in French bean	FLD , Method demonstration, Trainings and Field day
Pigeonpea	Use of local varieties	Enhancement of Pigeonpea yield through introduction of BRG-5 variety UAS, Bengaluru	FLD, Group discussion, Field day & Trainings
Tomato	Poor Soil and Nutrient Management, Water scarcity, Low keeping quality	ICM in Tomato IIHR, Bengaluru	FLD, Group discussion, Field day & Trainings
Mango	Pre & Post harvest loss High cost involved in ripening	Demonstration of Improved practices of production and post – harvest in Mango : IIHR, Bengaluru	FLD Trainings & Method Demonstration

Activities calendar for cluster village 2. Tanganahalli-Koratagere Tq

Major crops of the village: Maize, Brinjal ,Tomato, French bean, Pigeonpea, Banana, China Aster, Coconut, Areca nut , Groundnut

Crop/ enterprise	Problem (Quantify)	Availability of Technologies and the Sources	Nature /mode of intervention
Maize	Soil erosion, Early and mid season drought	Conservation Furrow (CF) as an in-situ Moisture conservation to combat mid season drought in Maize UAS, Bengaluru	FLD Trainings. Field day
Arecanut – French Bean	Monocropping, Inefficient use of land, weed menace, low soil fertility, lower income	Demonstration of French Bean as a intercrop in Areca nut garden for additional income . CPCRI, Kasargod	FLD Trainings, Field day
Brinjal	Poor decomposed litters, Low nutrient use efficiency & soil fertility, Severe incidence of wilt and lower yield	Demonstration of Arka Actino-Plus (ACP) on Growth and Yield of Brinjal, IIHR, Bengaluru	FLD Trainings. Field day

Contd...

Activities calendar for cluster village 2. Tanganahalli-Koratagere Tq

Major crops of the village: Maize, Brinjal ,Tomato, French bean, Pigeonpea, Banana, China Aster, Coconut, Areca nut , Groundnut

Crop/ enterprise	Problem (Quantify)	Availability of Technologies and the Sources	Nature /mode of intervention
Maize	Soil erosion, Early and mid season drought	Conservation Furrow (CF) as an in-situ Moisture conservation to combat mid season drought in Maize UAS, Bengaluru	FLD Trainings. Field day
Arecanut – French Bean	Monocropping, Inefficient use of land, weed menace, low soil fertility, lower income	Demonstration of French Bean as a intercrop in Areca nut garden for additional income . CPCRI, Kasargod	FLD Trainings, Field day
Brinjal	Poor decomposed litters, Low nutrient use efficiency & soil fertility, Severe incidence of wilt and lower yield	Demonstration of Arka Actino-Plus (ACP) on Growth and Yield of Brinjal, IIHR, Bengaluru	FLD Trainings. Field day

Crop/ enterprise	Problem (Quantify)	Availability of Technologies and the Sources	Nature /mode of intervention
Pigeonpea	Use of local varieties	Enhancement of Pigeonpea yield through introduction of BRG-5 variety UAS, Bengaluru	FLD, Group discussion, Field day & Trainings
Tomato	Poor Soil and Nutrient Management, Water scarcity, Low keeping quality	ICM in Tomato IIHR, Bengaluru	FLD, Group discussion, Field day & Trainings
Groundnut	Tikka Disease , leaf minor, low income	Demonstration of KCG-6 Groundnut Variety	FLD, Trainings and Method Demonstration
Coconut	Monocropping, no appropriate use of space and Cropping system in flowers crops as intercrop, low income	Assessment of commercial flower crops in coconut based cropping system CPCRI, Kasargod ICM in Coconut- UAS, Bengaluru	OFT, FLD, Trainings, Field day

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Crop/ enterprise	Problem (Quantify)	Availability of Technologies and the Sources	Nature /mode of intervention
Nutrition Garden	Malnutrition, Non availability of Vegetables, Fruits, Higher Cost	Nutrition garden in Schools -UAS, Bengaluru	FLD, Trainings
Pomegranate	Indiscriminate use of Fertilizers, Wilt & Bacterial Blight, Low yield	ICM in Pomegranate-IIHR, Bengaluru	FLD , Trainings , Field day
Frenchbean	Soil & PP related issues in Chemical farming	Demonstration of Organic Farming practices in French bean	FLD , Method demonstration, Trainings and Field day
Mustard	Lack of suitable oilseed crop during Rabi season	Assessment of Mustard varieties as alternative oilseed crops	OFT

Activities calendar for cluster village 3. Balenahlli-Sira Tq

Major crops of the village: Arecanut, Mango, Banana, French bean, Ragi, Maize, Onion, Redgram, China Aster

Crop/ enterprise	Problem (Quantify)	Availability of Technologies and the Sources	Nature /mode of intervention
Arecanut – French Bean	Monocropping, Inefficient use of land, weed menace, low soil fertility, lower income	Demonstration of French Bean as a intercrop in Areca nut garden for additional income . CPCRI, Kasargod	FLD, Trainings, Field day
Onion	Climate change, Delayed rainfall, Non availability of Rabi variety, Poor storability	Assessment of Onion varieties for Rabi. DOG, PUNE	OFT
China Aster	Small size flowers, less shelf life and low yield	ICM in China Aster -Arka Kamini IIHR, Bengaluru	FLD, Trainings, Field day
Tomato	Poor Soil and Nutrient Management, Water scarcity, Low keeping quality	ICM in Tomato IIHR, Bengaluru	FLD, Group discussion, Field day & Trainings

Crop/ enterprise	Problem (Quantify)	Availability of Technologies and the Sources	Nature /mode of intervention
Pomegranate	Indiscriminate use of Fertilizers, Wilt & Bacterial Blight, Low yield	ICM in Pomegranate I IHR, Bengaluru	FLD Trainings , Field day
Groundnut	Tikka Disease , leaf minor, low income, drudgery in Weeding	Demonstration of KCG-6 Groundnut Variety Assessment of weeders as drudgery reducing equipments in Groundnut	FLD, OFT, Trainings and Method Demonstration
Flowers	Lack of knowledge on dried flowers and Income generation activity	Demonstration on dried flowers as an Income Generation Activity- IIHR, Bengaluru	EDP, Trainings
Pigeonpea	Use of local varieties High rate of Sterility Mosaic Disease (SMD) and wilt disease incidences resulted in reduced yield	Enhancement of Pigeonpea yield through introduction of BRG-5 variety UAS, Bengaluru Assessment of Red gram varieties for disease tolerance and Higher yield-UAS, Raichur	FLD, OFT, Group discussion, Field day & Trainings

Activities calendar for cluster village 4. Muthyalammanahalli-Madhugiri Tq
Major crops/enterprises of the village: Pigeonpea, Groundnut , Ragi, Banana, Pomegranate, Mango, Tamarind, China aster

Crop/ enterprise	Problem (Quantify)	Availability of Technologies and the Sources	Nature /mode of intervention
China Aster	Small size flowers, less shelf life and low yield	ICM in China Aster -Arka Kamini . IIHR, Bengaluru	FLD Trainings, Field day
Groundnut	Tikka Disease , leaf minor, low income, drudgery in Weeding	Demonstration of KCG-6 Groundnut Variety: Assessment of weeders as drudgery reducing equipments in Groundnut	FLD, OFT, Trainings and Method Demonstration
Pigeon pea	Use of local varieties	Enhancement of Pigeon pea yield through introduction of BRG-5 variety . UAS, Bengaluru	FLD, Group discussion, Field day & Trainings
Pomegranate	Indiscriminate use of Fertilizers, Wilt & Bacterial Blight, Low yield	ICM in Pomegranate IIHR, Bengaluru	FLD Trainings , Field day
Flowers	Lack of knowledge on dried flowers and Income generation activity	Demonstration on dried flowers as an Income Generation Activity- IIHR, Bengaluru	EDP, Trainings

Activities calendar for cluster village : 5. Kariyammanapalya, Madde, K.T.Halli -Pavagada Tq

Major crops/enterprises of the village: Pomegranate, Groundnut, Ragi, Mango, Tamarind, Tomato

Crop/ enterprise	Problem (Quantify)	Availability of Technologies and the Sources	Nature /mode of intervention
Tomato	Poor Soil and Nutrient Management, Water scarcity, Low keeping quality	ICM in Tomato	FLD, Group discussion, Field day & Trainings
Pigeon pea	Use of local varieties High rate of Sterility Mosaic Disease (SMD) and wilt disease incidences resulted in reduced yield	Enhancement of Pigeonpea yield through introduction of BRG-5 variety UAS, Bengaluru Assessment of Red gram varieties for disease tolerance and Higher yield-UAS, Raichur	FLD, OFT, Group discussion, Field day & Trainings
Groundnut	Tikka Disease , leaf minor, low income, drudgery in Weeding	Demonstration of KCG-6 Groundnut Variety, Assessment of weeders as drudgery reducing equipments in Groundnut and horticultural crops	FLD, OFT, Trainings and Method Demonstration

Crop/ enterprise	Problem (Quantify)	Availability of Technologies and the Sources	Nature /mode of intervention
Pomegranate	Indiscriminate use of Fertilizers, Wilt & Bacterial Blight, Low yield , High disease incidence and reduced yield	ICM in Pomegranate IIHR, Bengaluru	FLD, Trainings, Field day
Agriculture and Horticulture Crops	Crop damage by wild boar, Low income	Management of Wild Boar in Farming system:- KAU, Thrissur	FLD, Trainings

SMS wise Activities

Activities Calendar of SMS(Plant Breeding)

Village	Crop/ enterprise	Activity as leader (Title of OFT, technology in FLD, training title, specify any other activity)	Other members of the team	Budget Proposed (Rs.)
OFT				
D Nagenahalli	Mustard	Assessment of Mustard varieties as alternative oilseed crops	Radha Banakar P.R.Ramesh	4,050
FLD				
Balenahalli, Kariyammana palya, Tanganahalli	Ground nut	Demonstration f Ground nut varieties KCG -6 :NFSM	Radha Banakar Jagadish K N	2,00,000
Balenahalli, Kariyammana palya, Muthyalamm anahalli,	Red gram	Enhancement of Pigeon pea yield through introduction of BRG-5 variety	Radha Banakar P.R.Ramesh	1,50,000

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Village-	Crop/ enterprise	Activity as leader (Title of OFT, technology in FLD, training title , specify any other activity)	Other members of the team	Budget proposed (Rs.)
Training programmes for Farmers/ Farm Women				
Balenahalli,	Pigeon pea	Improved production practices post harvest technology in Pigeonpea.	Radha Banakar	3,000
Kadaranahalli	Onion	ICM in Onion	Radha Banakar Prashant J M	3,000
Kariyammanapalya	Ground nut	Integrated Crop Management in Ground nut	Radha Banakar P R Ramesh	3,000
Balenahalli	Fodder Crops	Recent technologies in forage crops	Radha Banakar P R Ramesh	10,000
Training Programmes for Extension persons				
Hirehalli	Vegetables	Seed Production in Vegetables	Radha Banakar Prashant J M	5,000
Sponsored Training Programmes				
Urkere	Vegetable crops	Nutrition garden	Radha Banakar Prashant J M	30,000

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KVK Farm and Revolving Fund utilization by the SMS (Plant Breeding)

Demo/ Production Units	Crop/ enterprise/ activity	Physical Target for the year-Kg	Approximate Expenditure (Rs. in Lakhs)	Approximate Revenue (Rs. in Lakhs)
Seed Production unit	Vegetable CROPS	792	4,70,000	7,88,000
	Field Crops	900	30,000	60,000
	Vegetable Seed Kits	5,000	1,50,000	5,00,000
Total			**6,50,000**	**13,48,000**

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Activities calendar of SMS (Soil Science)

Village	Crop/ enterprise	Activity as leader (Title of OFT, technology in FLD, training title , specify any other activity)	Other members of the team	Budget proposed (Rs.)
Tanganahalli, Kadaranahalli	Maize-FLD	Conservation Furrow (CF) as an *in-situ* Moisture conservation to combat mid season drought in Maize	K.N.Jagadish	12,000
Tanganahalli, Kadaranahalli	Frenchbean-FLD	Demonstration of Liquid Organic Farming practices in French bean	KN Jagadish, J.M.Prashanth, B.H.Gowda	20,000
Tanganahalli, Kadaranahalli	Brinjal-FLD	Demonstration of Arka Actino-Plus (ACP) on Growth and Yield of Brinjal	J.M.Prashanth, B.H.Gowda	12,000
Tanganahalli, Kadaranahalli	Coconut-FLD	ICM in Coconut	J.M.Prashanth, KN Jagadish, B.H.Gowda	30,000

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Village	Crop/ enterprise	Activity as leader (Title of OFT, technology in FLD, training title , specify any other activity)	Other members of the team	Budget proposed (Rs.)
Trainings for farmers/Farm women/Rural youth				
Kadaranahalli	Soil health Management	Importance of Organic Farming in Horticultural and Agricultural Systems	Jagadish.K.N Shashidhar.K.N	3,000
Kadaranahalli,	Coconut-FLD	Soil and water conservation.	Jagadish.K.N Shashidhar.K.N	3,000
Kadaranahalli, Tanaganahalli	Maize - FLD	Soil Conservation	Jagadish.K.N, B.H.Gowda	3,000
Durgadahalli	Brinjal-FLD	Use of Arka actino plus	Jagadish.K.N, J.M.Prashanth, Shashidhar.K.N	3,000
Anupanahalli	Frenchbean-FLD	Importance of Organic Farming and Soil Testing	J.M.Prashanth	3,000

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Village	Crop/ enterprise	Activity as leader (Title of OFT, technology in FLD, training title , specify any other activity)	Other members of the team	Budget proposed (Rs.)
Trainings for Extension Personnel				
Tumakuru	Tomato, Brinjal	Use of Arka Actino Plus	Prashanth.J.M	5,000
Tumakuru	Banana, Mango, Vegetables	Micronutrient management in Horticulture crops	Jagadish.K.N Shashidhar.K.N	5,000
Vocational Training				
Selected Rural youths from all clusters	Vegetable crops	Production technology of Vermi Compost	Jagadish.K.N Shashidhar.K.N	8,000
KVK, Hirehalli	Honey bee	Honey bee keeping	Jagadish.K.N	8,000
Sponsored Programmes				
KVK, Hirehalli	Agri & Hort crops	Organic farming practices	Jagadish.K.N Shashidhar.K.N	

KVK Farm and Revolving Fund utilization by the SMS (Soil Science)

Demo/ Production Units/ Labs	Crop/ enterprise/ activity	Physical Target for the year in Kg	Approximate Expenditure (Rs.)	Approximate Revenue (Rs.)
Banana Special	Production of Banana Special	3,000	2,80,000	4,50,000
Mango Special	Production of Mango Special	2,000	1,90,000	3,00,000
Citrus special	Production of Citrus Special	1,000	95,000	1,50,000
Vegetable Special	Vegetable Special	3,000	1,20,000	4,50,000
Arka microbial consortium	Mass production	2,000	50,000	2,00.000
Fruit Fly Traps	Mango, Gauva, Annona	5,000 Nos.	4,00,000	5,00,000
Soil, water and leaf test	All horticulture and Agriculture crops	3,500 samples	2,50,000	3,00,000
	Total		**13,55,000**	**23,50,000**

Activities calendar of SMS (Horticulture)

Village	Crop/ enterprise	Activity as leader (Title of OFT, technology in FLD, training title , specify any other activity)	Other members of the team	Budget proposed (Rs.)
OFT				
Tippanahalli	Onion	Assessment of Onion varieties for Rabi	K.N. Jagadish Somashekar, P.R. Ramesh	12,600
FLD's				
Tanganahalli, Kadaranahalli, Durgadahalli, K.T.Halli	Tomato	ICM in Tomato	K.N. Jagadish P.R. Ramesh	25,000
Tanganahalli, Durgadahalli,	China Aster	ICM in China Aster	K.N. Jagadish Somashekhar	9,500
Tanganahalli, Kadaranahalli, Balenahalli	Arecanut	Demonstration of French Bean as a intercrop in Areca nut garden for additional income	K.N. Jagadish Somashekar, P.R. Ramesh	11,000

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Village	Crop/ enterprise	Activity as leader (training title)	Other members of the team	Budget proposed (Rs.)
Trainings -Farmers/Farm women				
Kadaranahalli, Balenahalli	Tomato	Precision Farming in Tomato	K.N. Jagadish P.R. Ramesh	3000
Kadaranahalli, Durgadahalli	Commercial flowers	Production practices in Commercial flowers	P.R. Ramesh K.N. Jagadish	3000
Muthyalamma nahalli	Dry land horticulture	Importance of dry land horticulture crops and their production practices	P.R. Ramesh K.N. Jagadish	3000
Kariyammanapalya, Muthyalamma nahalli	IFS	Importance of Horticulture in IFS	Ramesh, K.N. Jagadish	3000
Balenahalli, Durgadahalli	Arecanut	Production practices in Arecanut	Ramesh, K.N. Jagadish	3000

Contd...

Village	Crop/ enterprise	Activity as leader (training title)	Other members of the team	Budget proposed (Rs.)
Trainings –Rural youth				
KVK Hirehalli	Vegetables	Precision farming in Horticulture crops	Jagadish K.N. Somashekar	3,000
Vocational trainings				
KVK Hirehalli	Fruit Crops	Propagation Techniques in Fruit Crops	Jagadish K.N. Somashekar	6,300

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KVK Farm and Revolving Fund utilization by the SMS (Horticulture)

Demo/ Production Units	Crop/ enterprise/ activity	Physical Target for the year	Approximate Expenditure (Rs. in Lakhs)	Approximate Revenue (Rs. in Lakhs)
Model Nursery unit	Areca nut Coconut	0.60 Lakh seedlings 5000 seedlings	5	17
	Fruit crop seedlings	0.36 Lakh seedlings	3	6.3
Total			**8**	**23.3**

Activities calendar of SMS (Plant Protection)

Village	Crop/ enterprise	Activity as leader (Title of OFT, technology in FLD, training title , specify any other activity)	Other members of the team	Budget proposed (Rs.)
OFT				
Balenahalli & K.T.halli	Red gram	Assessment of Red gram varieties for disease tolerance and Higher yield	P.R.Ramesh Jagadish.K.N	36600.00
FLD				
Kariyamman apalya, Balenahalli	Agriculture and Horticulture - FLD	Management of Wild Boar in Farming system	P.R.Ramesh Somashekhar	32000.00
Madde	Pomegranate	ICM in Pomegranate	P.R.Ramesh Prashanth.J.M	45000.00

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Village	Crop/ enterprise	Activity as leader (Title of trainings)	Other members of the team	Budget proposed (Rs.)
Trainings for farmers/Farm women/Rural youth				
Balenahalli & K.T.halli	Red gram-OFT	IPDM in Redgram	P.R.Ramesh Jagadish.K.N Shashidhar.K.N	3,000
Madde	Pomegranate-OFT	Pest and Disease management in Pomegranate	P.R.Ramesh Prashanth.J.M	3,000
Kadarenahalli	Coconut-FLD	IPDM in Coconut	P.R.Ramesh Prashanth.J.M	3,000
-	Mango	IPDM in Mango	P.R.Ramesh Prashanth.J.M	3,000
Kariyammanapalya ,	Agriculture-FLD	Management of Wild Boar in Farming system	P.R.Ramesh Prashanth.J.M	3,000
K.T.halli	Groundnut-FLD	IPDM in Groundnut	P.R.Ramesh Prashanth.J.M	3,000

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Village	Crop/ enterprise	Activity as leader (Title of OFT, technology in FLD, training title , specify any other activity)	Other members of the team	Budget proposed
Trainings for Extension Personnel				
Tumakuru District Horticulture Dept. officials	Plantation Crops	IPDM in Coconut	P.R.Ramesh Prashanth.J.M Shashidhar.K.N	6000
Tumakuru District Agriculture Dept. officials	Paddy	IPDM in Paddy	P.R.Ramesh Jagadish.K.N Shashidhar.K.N	6000
Vocational Training				
Selected Rural youths from all clusters	Bio control agents	Mass production of *Trichderma harizianum*	J.M.Prashanth Jagadish.K.N Shashidhara K.N	6000

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KVK Farm and Revolving Fund utilization by the SMS (Pl. Protection)

Demo/ Production Units/ Labs	Crop/ enterprise/ activity	Physical Target for the year (in Kg)	Approximate Expenditure (Rs.)	Approximate Revenue (Rs.)
Neem soap	Production of Neem soap	2,000	200,000	4,00,000
Pongamia soap	Production of Pongamia Soap	1,000	60,000	1,00,000
Mango Healer cum Sealer	Production	1,000	60,000	2,00,000
Total			**3,20,000**	**7,00,000**

Activities calendar of SMS (Home Science)

Village	Crop/ enterprise	Activity as leader (Title of OFT, technology in FLD, training title , specify any other activity)	Other members of the team	Budget proposed (Rs.)
OFT				
Kadaraenahalli Balenahalli, Kariyammanapalya	Groundnut & Horticultural Crops	Assessment of weeders as drudgery reducing equipments in Groundnut & Horticultural Crops	Somashekhar	15,000
FLD				
Mavukere-Tumakuru	Mango	Demonstration of Improved practices of production and post – harvest in Mango	Somashekhar Prashanth JM, BHGowda, P.R.Ramesh	40,000
Kadaranahalli, Tanganahalli, Balenahalli	Nutritional garden	Nutritional garden in Schools-UAS, Bengaluru	Somashekhar	15,000
EDP				
Tumakuru & Madhugiri Taluk	Flower Crops	Demonstration on dried flowers as an Income Generation Activity and Market Linkage	Somashekhar	20,000

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Village	Crop/ enterprise	Activity as leader (Title of OFT, technology in FLD, training title , specify any other activity)	Other members of the team	Budg prop (Rs.)
Training programmes for Farmers/ Farm Women				
Tumakuru Taluk	Minor millets	Processing and value addition in minor millets	Somashekhar	
Balenahalli	Vegetables	Nutrition garden in Schools	Somashekhar Prashanth JM	
Mavukere	Mango	Demonstration on Mango harvester, low cost ripening chamber and packing	Somashekhar Prashanth JM	
Thovinakere	Horticultural crops	Processing and value addition in Horticultural Crops	Somashekhar Prashanth JM	
Training Programmes for Rural Youth				
Tumakuru Rural	Ragi	Processing & value addition to Ragi	Somashekhar Prashanth JM	
KVK Hirehalli	Mushroom	Mushroom cultivation	Somashekhar	1

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Village	Crop/ enterprise	Activity as leader (Title of OFT, technology in FLD, training title , specify any other activity)	Other members of the team	Budget proposed (Rs.)
Training Programmes for Extension persons				
Kadaranahalli		Health & Nutrition	Somashekhar	3000
Muthyalammanahalli	IGA	IGA for SHG groups	Somashekhar	3000
Vocational Training Programmes				
KVK , Hirehalli	Hort. Crops	PHT in horticultural crops	Somashekhar	7000
KVK, Hirehalli	Mushroom	Mushroom Cultivation and Value addition	Somashekhar	8000
Sponsored Training Programmes				
Hort. Dept.	Hort. Crops	Processing and Value addition of Horticultural crops	Somashekhar	-
Agri. dept	Minor Millets	Value addition to minor millets	Somashekhar	-

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KVK Farm and Revolving Fund utilization by the SMS (Home Science)

Demo/ Production Units/ Labs	Crop/ enterprise/ activity	Physical Target for the year	Approximate Expenditure (Rs.)	Approximate Revenue (Rs.)
Amla Candy	Value addition	200 Kg	45,000	60,000
Amla squash	Value addition	1000 ltr	50,000	1,30,000
Ragi Malt	Value addition	100 Kg	8,000	20,000
		TOTAL	**1,03,000**	**2,10,000**

Activities calendar of SMS (Extension)

Village	Crop/ enterprise	Activity as leader (Title of OFT, technology in FLD, training title , specify any other activity)	Other members of the team	Budget proposed (Rs.)
Training Programmes for Extension persons				
Hirehalli, Tumakuru	-	ICT for farm entrepreneur	Jagadish K.N	5000

NABARD Farmers Clubs			
Tumakuru	Agri-Horticulture	ALL SMS	10,000

Activities calendar of Farm Manager

Seeds and Seedling Production

Demo/ Production Units	Crop/ enterprise/ activity	Physical Target for the year
Nursery unit	Fruit & Plantation Crops	1.01 Lakhs Seedlings
Seed Production Unit	Vegetable & Fodder Crops	1692 Kg
Farm Development activities	Horticulture & Agriculture Crops	-

Activity calendar for Programme assistant (L.T)

Name of Laboratory	Target for no. of samples for testing/ analysis	Approx. Exp. (Rs.)	Approx Revenue (Rs.)	Expected output / outcome (Eg. Soil fertility map, advisories, contingency plans etc.)	Members associated
Soil Science	3,500 samples	2.50 Lakh	3 Lakh	Advisories-Soil Health Management, Water Quality for irrigation & potable	Shashidhar.K. N P.R.Ramesh B.H.Gowda

Activities other than the above:

1. Involved in assisting for conducting the training Programmes/FLD/OFTs.
2. Attending the day to day farmers/Extension functionaries visits to KVK.
3. Maintenance of KVK library
4. Reports preparation and other routine works

Activity calendar for Programme Assistant (Computer)

Name of Database/ Website/ KMAS etc.	Frequency of data input and updating	Other members of the team	Reports to be generated	Frequency of report generation
Farmers Database	Regularly	All SMS	-	-
OFT	Once in a week	All SMS	OFT Report	Monthly
FLD	Once in a week	All SMS	FLD Report	Monthly
OLRS Updating	Regularly	All SMS	-	-
Network Portal	Regularly	All SMS	-	-
MKisan	Twice a Week	All SMS	SMS Report	Monthly
Soil & Water Testing Database	Twice a Week	SMS-Soil Science	Soil Tested Report	Monthly
Website	Regularly	All SMS	-	-
Social Media	Regularly	All SMS	-	-
News Letter	Quarterly	All SMS		

Other Activities

- Compilation and Preparation of all reports (SAC, Action plan, MPR, DARE Report , Cabinet Report, Annual Report) and power point presentation .
- Entering of Monthly and Annual Report data to Online Reporting System .
- Checking mails regularly and correspondence of Official letters through Email.
- Assisting in conduction of Trainings, Meetings, Extension activities, Special Days etc.
- Any other work entrusted by the Programme Coordinator and all Subject Matter Specialists.
- Maintenance of the Computers and accessories at KVK
- Assisting in Office Administration and Accounts.

Trainings

Abstract of Training programmes planned for the year 2017-18

Particulars	Numbers
Training for Farmers/ Farm Women	24
Training for Rural Youth	04
Trainings for Extension Personnel	07
Vocational trainings	06
Sponsored trainings	04
Total	45

Training for Farmers/ Farm Women during 2017-18

Sl.No.	Linked field intervention (Assessment/Refinement/FLD)	Training Course Title	No. of Courses	Expected No. of participants
1	Soil health Management	Importance of Organic Farming in Horticultural and Agricultural Systems	2	60 30
2	Coconut-FLD	Soil and water conservation.	1	30
3	Maize - FLD	Soil Conservation	1	30
4	Brinjal-FLD	Use of Arka actino plus	1	30
5	Frenchbean-FLD	Importance of Organic Farming and Soil Testing	1	30
6	FLD	Improved production practices post harvest technology in Pigeonpea.	2	60
7	-	ICM in Onion	1	30
8	FLD	Integrated Crop Management in Ground nut	1	30
9	-	Recent technologies in forage crops	1	25

Sl.No.	Linked field intervention (Assessment/Refinement/FLD)	Training Course Title	No. of Courses	Expected No. of participants
10	FLD	Precision Farming in Tomato	1	30
11	-	Production practices in Commercial flowers	1	30
12	-	Importance of dry land horticulture crops and their production practices	1	30
13	IFS	Importance of Horticulture in IFS	1	30
14	-	Production practices in Arecanut	1	30
15	-	IPDM in Redgram	1	30
16	FLD	Pest and Disease management in Pomegranate		
17	FLD	IPDM in Coconut	1	30
18	FLD	Management of Wild Boar in Farming system	1	30
19	FLD	IPDM in Groundnut	1	30

Contd...

Sl.No.	Linked field intervention (Assessment/Refinement /FLD)	Training Course Title	No. of Courses	Expected No. of participants
20	-	Processing and value addition in minor millets	1	30
21	OFT	Nutrition garden in Schools	1	30
22	FLD	Demonstration on Mango harvester, low cost ripening chamber and packing	1	30
23	-	Processing and value addition in Horticultural Crops	1	30
24.	FLD	IPDM in Mango	1	30

Training for Rural Youth during 2017-18

Sl.No.	Related field intervention (OFT/FLD)*	Training Course Title	No. of Courses	Expected No. of participants	Names of the team members involved
1	-	Method of vermicompost production	1	30	Prashanth J.M. P R Ramesh & K.N.Jagadish
2	-	Precision farming in Horticulture crops	1	30	Prashanth J.M.
3	-	Processing & value addition to Ragi	1	50	Radha R.Banakar, Somashekhar
4	-	Mushroom cultivation	1	30	Radha R.Banakar, Somashekhar

Training for Extension Personnel during 2017-18

Sl. No.	Training Course Title	No. of Courses	Expected No. of participants
1.	Use of Arka Actino Plus	1	20
2.	Micronutrient management in Horticulture crops	1	20
3.	Seed Production in Vegetables	1	20
4.	IPDM in Coconut	1	20
5.	IPDM in Paddy	1	20
6.	Health & Nutrition	1	25
7.	IGA for SHG groups	1	25

Vocational Trainings during 2017-18

Sl.No.	Training title	No. of programmes and Duration (days)	Expected No. of participants
1	Production technology of Vermi Compost	1(3)	20
2	Honey bee keeping	1(3)	20
3	Propagation Techniques in Fruit Crops	1(3)	20
4	Mass production of *Trichderma harizianum*	1(3)	20
5	PHT in horticultural crops	1(3)	20
6	Mushroom Cultivation and Value addition	1(3)	20

Sponsored Trainings during 2017-18

Sl. No.	Training title	No. of programmes and Duration (days)	Expected No. of participants
1	Organic farming practices	1	30
2	Nutrition garden	1	30
3	Processing and Value addition of Horticultural crops	1	30
4	Value addition to minor millets	1	30

On Campus -Training for Farmers

Sl. No.	Title of the Training
1.	ಮರಳಿ ಬಾ ಮಣ್ಣಿಗೆ–ಮಣ್ಣಿನ ಪರೀಕ್ಷೆ ಹಾಗೂ ಮಹತ್ವ
2.	ಬಹು ಬಗೆಯ ಲಾಭ –ಸಮಗ್ರ ಕೃಷಿ ಪದ್ಧತಿ
3.	ಬತ್ತದಿರಲಿ ಭತ್ತದ ಕಣಜ –ಕಡಿಮೆ ನೀರು ಬಳಸಿ ಹೆಚ್ಚಿನ ಆದಾಯ ಗಳಿಸಿ
4.	ಕೃಷಿ ಉದ್ಯೋಗ ಅಭಿವೃದ್ಧಿಗೆ ಕೌಶಲ್ಯ ಬೆಳವಣಿಗೆ
5.	ಸಾವಯವ ಕೃಷಿ ಆದಾಯ ಕೃಷಿ
6.	ಆರ್ಥಿಕ ಸಾಕ್ಷರತೆ ಮತ್ತು ಕೃಷಿ ಅಭಿವೃದ್ಧಿ–ಅನ್ನದಾತನಿಗಿರಬೇಕು ಒಂದು ಬಜೆಟ್
7.	ಬೆಳೆಯುವ ಸಿರಿ ಮೊಳಕೆಯಲ್ಲಿ –ಹೆಚ್ಚಿನ ಇಳುವರಿಗೆ ಉತ್ತಮ ಬೀಜಗಳ ಆಯ್ಕೆ ಹಾಗೂ ಬೀಜೋಪಚಾರ
8.	ಮಣ್ಣು ರೈತರ ಕಣ್ಣು
9.	ರಾಷ್ಟ್ರೀಯ ಅಂತರ್ಜಾಲ ಮಾರುಕಟ್ಟೆ ಒಂದು ಗ್ರೇಟ್ ಐಡಿಯಾ
10.	ಲಾಭದಾಯಕ ಜೆಂಡು ಹೂ ಕೃಷಿ
11.	ಪೌಷ್ಟಿಕ ಭದ್ರತೆಗಾಗಿ ಮನೆಯಲ್ಲೊಂದು ಕೈ ತೋಟ
12.	ಆರೋಗ್ಯ ಮತ್ತು ಆದಾಯಕ್ಕೆ ಅಣಬೆ ಕೃಷಿ

Training for Farmers / Farmwomen – Off Campus

Sl. No.	Title of the Training
1.	ಮಾಹಿತಿ ತಂತ್ರಜ್ಞಾನ –ಓ.ಎಲ್.ಎಕ್ಷನಲ್ಲಿ ಕುರಿ ಮಾರಾಟ ಸಾಧ್ಯ
2.	ಸಮಗ್ರ ಕೃಷಿ ಪದ್ಧತಿಯಿಂದ ತುಂಡು ಜಮೀನಿನಲ್ಲಿ ಹಿಂಡು ಬೆಳೆ
3.	ಸಾವಯವ ಕೃಷಿ ತಂದ ಖುಷಿ– ಮಳೆಯಾಶ್ರಯದಲ್ಲಿ ಮಿಶ್ರ ಬೆಳೆ ಪದ್ಧತಿ
4.	ನೆಲ, ಜಲ ಸಂರಕ್ಷಣೆಯಿಂದ ಹಸನಾಗುವ ಕೃಷಿ ಬದುಕು
5.	ಹೈನುಗಾರಿಕೆ– ಇಂದಿನ ಕರು ನಾಳಿನ ಹಸು
6.	ಕೌಶಲ್ಯದಿಂದ ಕೃಷಿ ವಿಕಾಸ
7.	ನಿಮ್ಮ ಹೊಲದಲ್ಲಿ ನೀವೇ ಅರಸರಾಗಿ
8.	ಸೌರಶಕ್ತಿ ಅಳವಡಿಕೆ ನೈಸರ್ಗಿಕ ಸಂಪನ್ಮೂಲದ ಸದ್ಬಳಕೆ
9.	ನಿರುದ್ಯೋಗ ನಿವಾರಣೆಗೆ ಅಣಬೆ ಕೃಷಿ
10.	ಜೇನು ಕೃಷಿ ಜೀವನಾಡಿ

Extension Activities

Extension programme*	No. of programmes or activities	Expected No. of participants	Names of the team members involved
Advisory Services	140	800	All SMS
Diagnostic visits	35	185	B.H Gowda, Prashanth JM P R. Ramesh K.N.Jagadish & Somashekar
Field Day	10	850	All SMS
Group discussions	8	140	All SMS
Kisan Ghosthi	01	400	All SMS
Film Show	06	200	All SMS
Self -help groups	10	150	K.N.Jagadish & Radha R Banakar
Kisan Mela	01	500	All SMS
Exhibition	10	2000	K.N.Jagadish
Scientists' visit to farmers field	20	120	All SMS
Plant/Soil health/Animal health camps	05	1000	Prashanth JM P R. Ramesh B. H Gowda , K.N.Jagadish & Somashekar

Ex-trainees Sammelan	-	-	-
Farm Science Club	-	-	-
Farmers' seminar/workshop	1	100	All SMS
Method Demonstrations	10	200	All SMS
Celebration of important days	3	200	All SMS
Special day celebration	5	150	All SMS
Exposure visits	4	100	K.N.Jagadish
Technology week	1	500	K.N.Jagadish
FFS	1	30	K.N.Jagadish
Farm innovators meet	1	100	All SMS
Awareness programs	2	100	All SMS
Others, pl. specify Lectures delivered	60	2400	All SMS

Plan for up-scaling/ out-scaling of the recent successful interventions of the KVK

Names of successful interventions of the KVK during the last 3 years	Approaches to up-scale (within the system)	Approaches to out-scale (outside the system)
1.Micro nutrient management in Vegetables with an emphasis on Vegetable special technology	• Vegetable Special–2000 Kg • Pamphlets • Training for farmer techno-agents	• Mass media • Community Based Organization
2. ICM in Mango with an emphasis on Mango Special technology	• Mango Special-1000 Kg • Pamphlets	• Mass media • Farmer to farmer spread • Collaboration with HOPCOMS and State Horticulture Department, Tumakuru
3.Arka microbial consortium in vegetable production with a special emphasis on Arka microbial consortium	• Workshop for extension personnel • Folder	• Mass media • Convergence with line department and collaboration with ATMA

Names of successful interventions of the KVK during the last 3 years	Approaches to up-scale (within the system)	Approaches to out-scale (outside the system)
• Sealer Cum Healer demonstrated in Mango FLD	• Sealer Cum Healer-500 Kg • Pamphlets	• Mass media • Farmer to farmer spread • Collaboration with State Horticulture Department, Tumakuru
• French bean Arka Suvidha demonstrated in FLD with Selection-9	• To meet the demand of the seed Arka Suvidha an exclusive FLD on seed production is being proposed	• Under NHM & RKVY scheme French bean seed production is being taken up for large quantity production
• Mango Fruit Fly Traps	• Fruit Fly Traps-2,00,000 Nos. • Pamphlets	• Mass media • Farmer to farmer spread • Collaboration with State Horticulture Department, Tumakuru
• Onion Arka Kalyan demonstrated local variety	• To meet the demand of the Onion seed Arka Kalyan an exclusively on seed production activity under Seed Village Concept	• Under Seed Village Concept Onion seed production is being taken up for large quantity production

Production of Seed/ Planting material /Animals / Bio-control agents / botanicals

Seed Production

Sl. No.	Crop	Quantity (Kg)
1.	Ragi- ML-365	500
2.	Fox tail millet	200
3.	Redgram –BRG5	200
4.	Brinjal – A Shirish	20
5.	Chilli – A Suphal	30
6.	French Bean – Arka Suvidha	200
7.	Bhendi – A Anamika	200
8.	Pumpkin – A Chandan	20
9.	Ridge gourd –A. Sumeet	50
10.	Onion – A.Kalyan	200
11.	Radish –A. Nishant	50
12.	Amaranthus- A.Suguna	20
13.	Papaya – A.Prabhath	2
14.	Vegetable Seed kits	5,000
15.	Mushroom Spawn	1,000

Planting material

Sl. No.	Crop	Variety	Type - Seedling / Grafts	Quantity
1.	Arecanut	Hirehalli tall	Seedling	0.60 lakh
2.	Coconut	Tiptur tall	Seedling	5,000
3.	Mango	Alphanso, Mallika	Graft	10,000
4	Guava	L49, Pink flesh	Graft	10,000
5.	Tamarind	PKM-1	Graft	1,000
6.	Amla	NA5 , NA7	Graft	1,500
7.	Jamoon	Gokak	Graft	500
8.	Lime	Kagzi	Seedlings	1,400
9.	Seedless lime	-	Layering	700
10.	Pomello	White	Seedlings	1,000
11.	Rose apple	-	Seedlings	500
12.	Custard Apple	Balnagar, Arka Sahan	Graft	10,000

Bio-control agents / botanicals / Micronutrient fertilizer

Sl. No.	Name	Quantity (Kg)
1.	Banana Special	3,000
2.	Mango Special	2,000
3	Citrus Special	1,000
4	Vegetable Special	3,000
5	Arka microbial consortium	2,000
7	Fruit Fly Traps (Nos.)	5,000

Soil, Leaf and Water Analysis

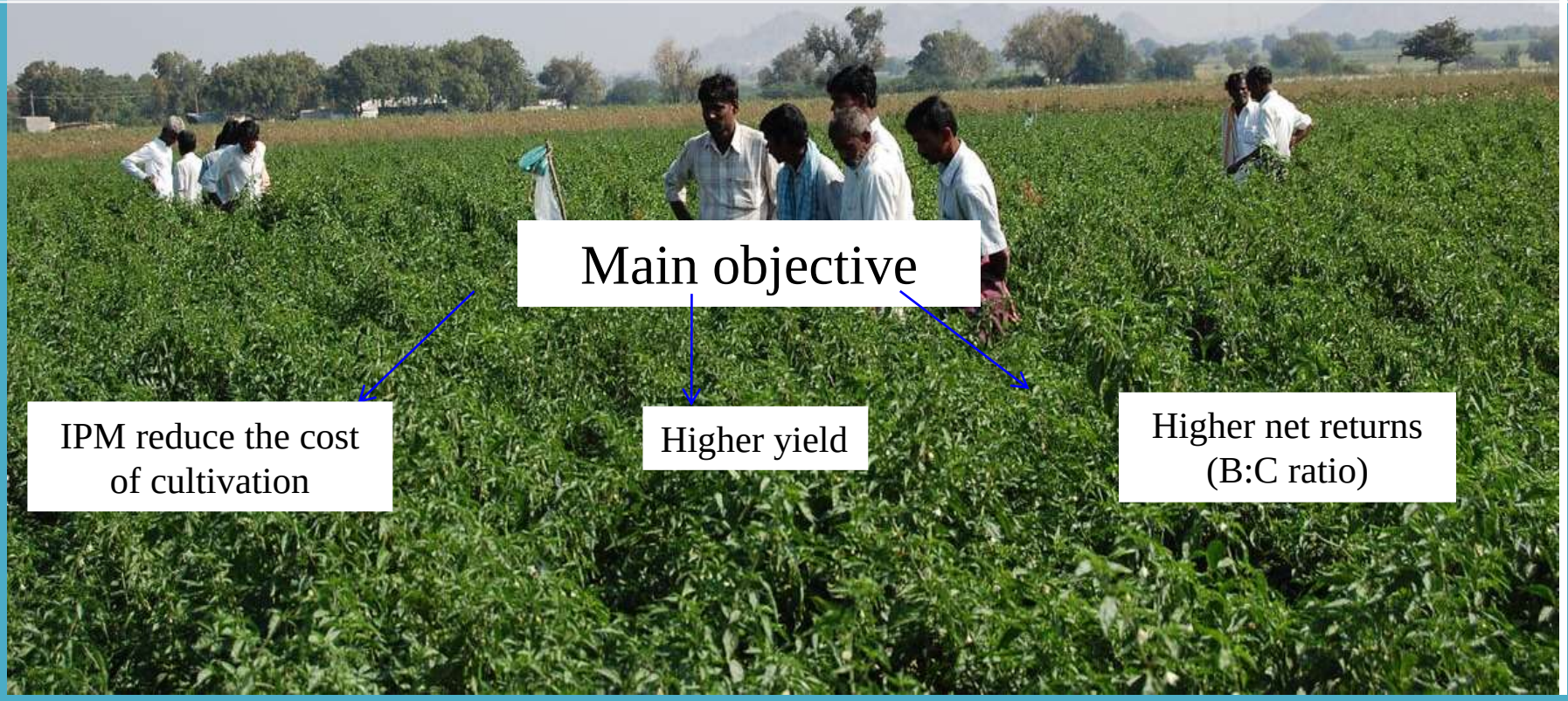
Sl. No.	Analysis	Quantity(Nos.)
1.	Soil	1,500
2.	Leaf Analysis	500
3.	Water	1,500

Additional Activities-External Projects during 2017-18

Name of the Project	Source of Fund	Amount (2017-18)(Rs.)	Total Amount (Rs.)
Technology demonstration component of NICRA	CRIDA, ICAR, GOI	15 Lakhs (On going)	98.79 Lakhs
Establishment of Arka Microbial Consortium Production Unit	NABARD, Tumakuru	4.8 Lakhs	4.8 Lakhs
Empowerment of Rural Women Groups through Nutrition Gardening	ZP, Tumakuru	10 Lakhs	10 Lakhs
Conservation Agriculture	CRIDA, ICAR, GOI	0.5 Lakhs	0.5 Lakhs
DAESI Programme	MANAGE	8.0 Lakhs	8.0 Lakhs
Total			

FFS: Integrated Pest & Disease Management (IPDM) in Chilli

Problem Definition: Chilli is the most important remunerative crop of the district. The reduction in the income is mainly due to lack of knowledge on pest and disease management, time of transplanting, poor agronomic practices (Weeding, water management , earthing up).



- **Scientific rationale** : Farmers are switching over to the other vegetables mainly due to pest and diseases and fluctuation of price during peak harvesting time. Through FFS the identified problems will be tackled to effect the net returns.

- **Learning process:**

- Chilli growers/farmers will learn about the IPM approaches by actively involving from Plough to Plate.
- The participants will be divided into 4-5 groups. Each group will take IPM technology, conduct Agro Ecological Situation of the Area (AESA), to take up measurement/observation of plant height, No. of fruits/plant, incidence of pest and disease in IPM plots and farmers practice plots

Budget

Particulars	Amount (Rs.)
1. Seeds	1,000
2. IPM measures	
Marigold Seeds – 100 gm Trap crop	1,000
Imidacloprid (0.4 ml/l) – 200 ml	350
Neem cake – 50 kg	500
Acephate (2g/l)	250
Mancozeb (2.5 gm/l)	600
Pheromone Trap – 5 Nos.	700
Yellow Sticky Trap – 6 Nos.	600
AMC -10 kg	1,000
Vegetable Special - 16 kg	2,400
3. FFS kit	2,700
4. Stationeries	900
5. Refreshment	4,000
6. Field day	1,000
7. Publication	5,000
8. POL	5,000
9. Exposure visit for FFS farmers	3,000
Total	**30,000**

Expected Budget for the year 2017-18

Sl.No.	Details	Budget Estimate (Rs.)
A.	**Recurring Contingencies**	
1	Pay & Allowances	1,50,00,000
2	Travelling Allowances	1,50,000
3	**Contingencies**	
a	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter	5,00,000
b	POL, repair of vehicles, tractor and equipments	4,00,000
c	Meals/refreshment for trainees (@Rs.75/day/trainee for residential and @ Rs.40/day/trainee for non-residential trainings)	1,50,000
d	Training material (need based materials and equipments for conducting the training)	1,00,000
e	Frontline demonstration (excluding NFSM & NMOOP)	2,51,500
f	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	82,500
g	Integrated Farming System (IFS)	50,000
h	Training of extension functionaries	50,000
i	Extension Activities	50,000
j	Farmers' Field School	30,000

Expected Budget for the year 2017-18

Sl.No.	Details	Budget Estimate (Rs.)
k	EDP/ Innovative Activities	30,000
l	Soil & Water Testing & Issue of Soil Health Cards	1,00,000
m	Display Boards	1,00,000
n	Maintenance of building	5,00,000
o	Library (Purchase of Journal, Periodicals, News Paper and Magazines)	10,000
p	FLDs under NFSM & NMOOP	3,50,000
	TOTAL (A)	**1,79,04,000**
B.	**Non-recurring contingencies**	
1	**Equipments and Furniture**	
a	Office Automation	5,00,000
b	Furniture	6,00,000
2	**Works**	1,00,00,000
3	Library (Purchase of assets like books and journals back volume)	50,000
4	Vehicle (Mini Tractor)	5,00,000
	TOTAL (B)	**1,16,50,000**
	GRAND TOTAL (A+B)	**2,95,54,000**

Revolving Fund Status (Rs.)

Opening balance as on 01.04.2016 (Rs.)	Expenditure incurred during 2016-17 (Rs.) as on 31.01.2016	Receipts during 2016-17 (Rs.)	Closing balance as on 31.01.2017 (Rs.)	Expected closing balance by 31.03.2017 (Including value of material in stock) (Rs.)
41,04,887	48,06,230	54,67,147	47,65,804	50,00,000

Thank You!!