ICAR- Krishi Vigyan Kendra
Hirehalli, Tumakuru, Karnataka

Annual Review Workshop: 2019

20th – 21st, May, 2020
GKVK, UAS, Bengaluru

General Information of KVK

Year of establishment	:	2009-10
Address	:	NH-48, Hirehalli, Tumakuru-572168 Karnataka
Host Institute	:	ICAR-Indian Institute of Horticultural Research, Bengaluru
Phone No./ Fax No. E-mail Website	: : :	0816-2243175/ 2243177 kvk.tumakuru2@icar.gov.in www.iihrkvk.org
Total no. of staff	:	12
Area	:	16.8 Ha (Office- 1.7 Ha, Farm -15.1 Ha)

Particulars	Head	SMS	P.A's	Admin	Drivers	Supporting	Total
Sanctioned	01	06	03	02	02	02	16
Filled	01	05	03	02	01	00	12

KVK Team

N.Loganandhan, Head

12 Staff

Jagadish,SMS(Extn)

B.H.Gowda,SMS(PP)

Radha,SMS(HS)

Prasanth,SMS(Horti)

Ramesh,SMS(Soil)

Shashidhar,PA

Jayasankar,PA

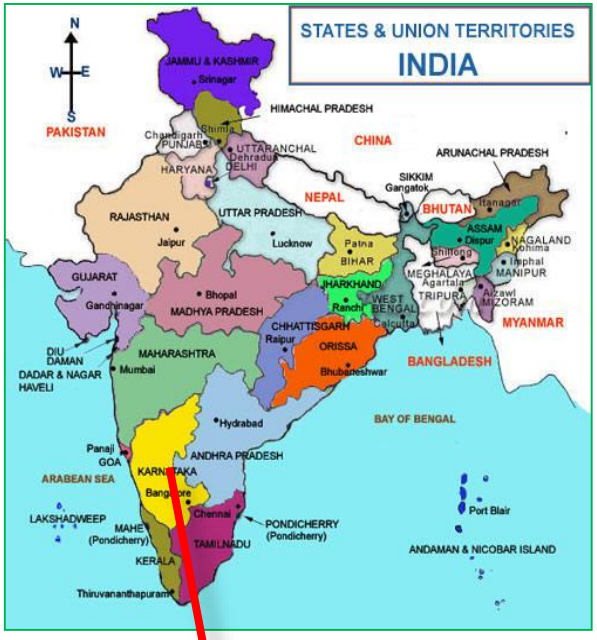
Muralidhara, PA

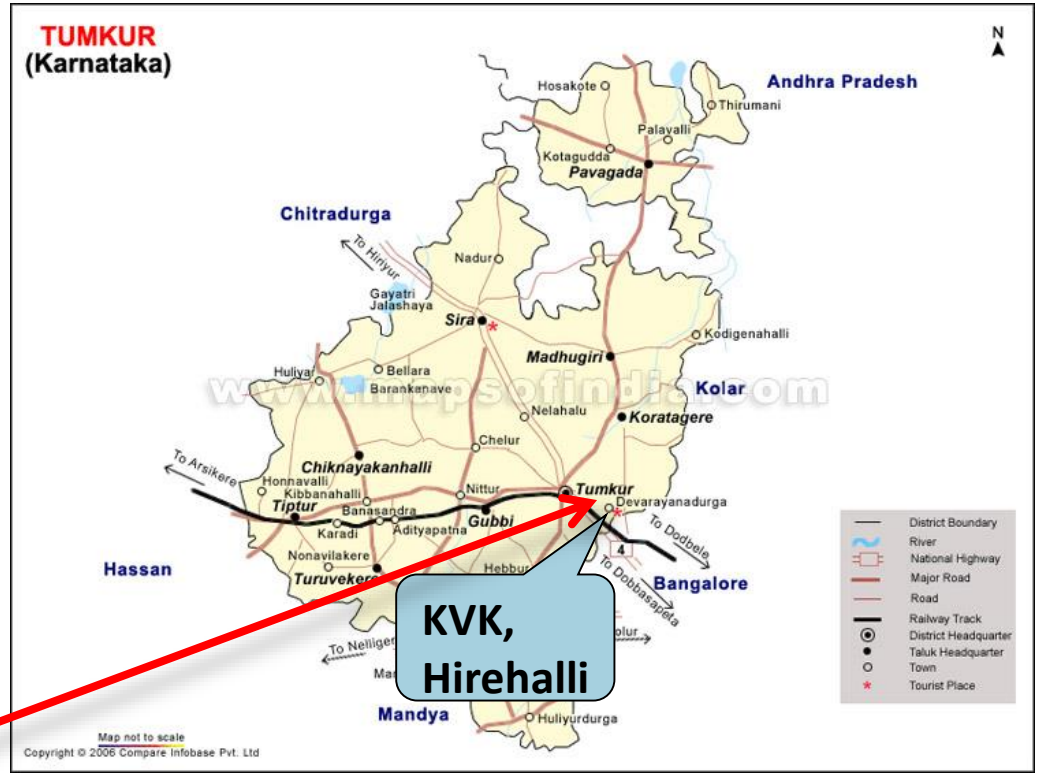
Ramakrishna,Asst

Veda,Steno

Ningappa,Driver

Location



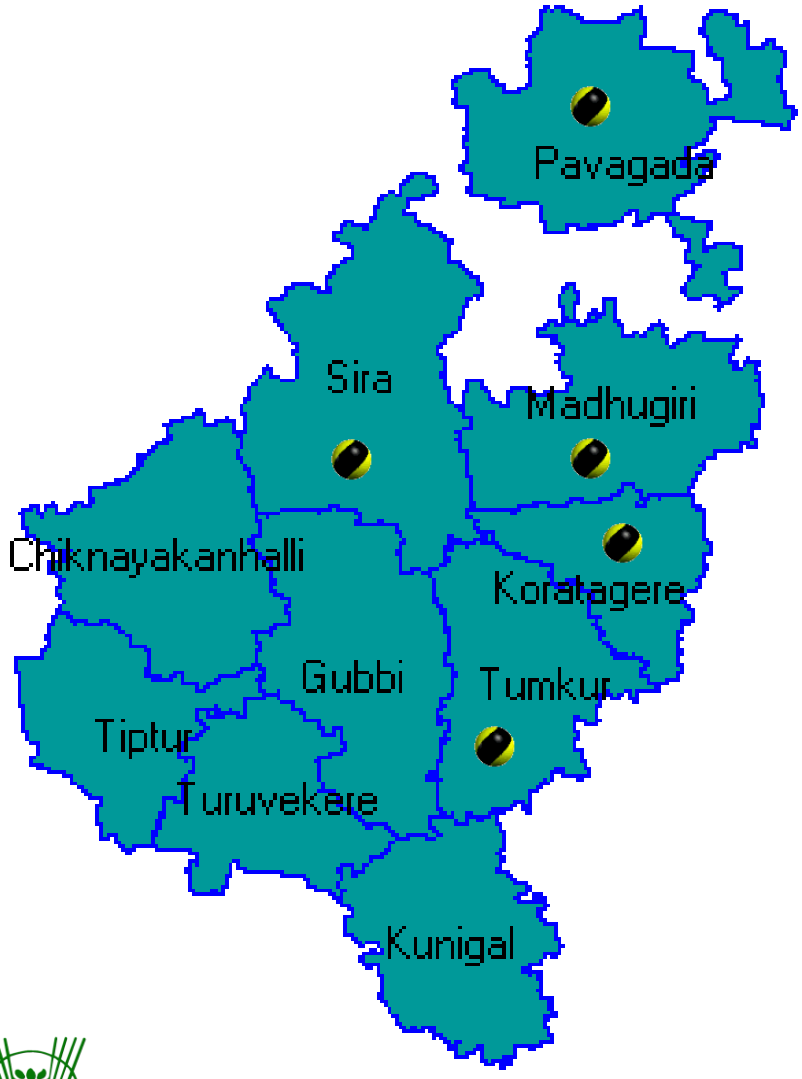


KVK, Hirehalli

Google Map


Jumma masjid
ಜುಮ್ಮಾ
ಮಸೀದಿ
Mumbai Hwy
Siddaganga High School
KVK
Hirehalli
ಹಿರೇಹಳ್ಳಿ
3D
Google

Jurisdiction of KVK and AE Zones



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

District- At a glance

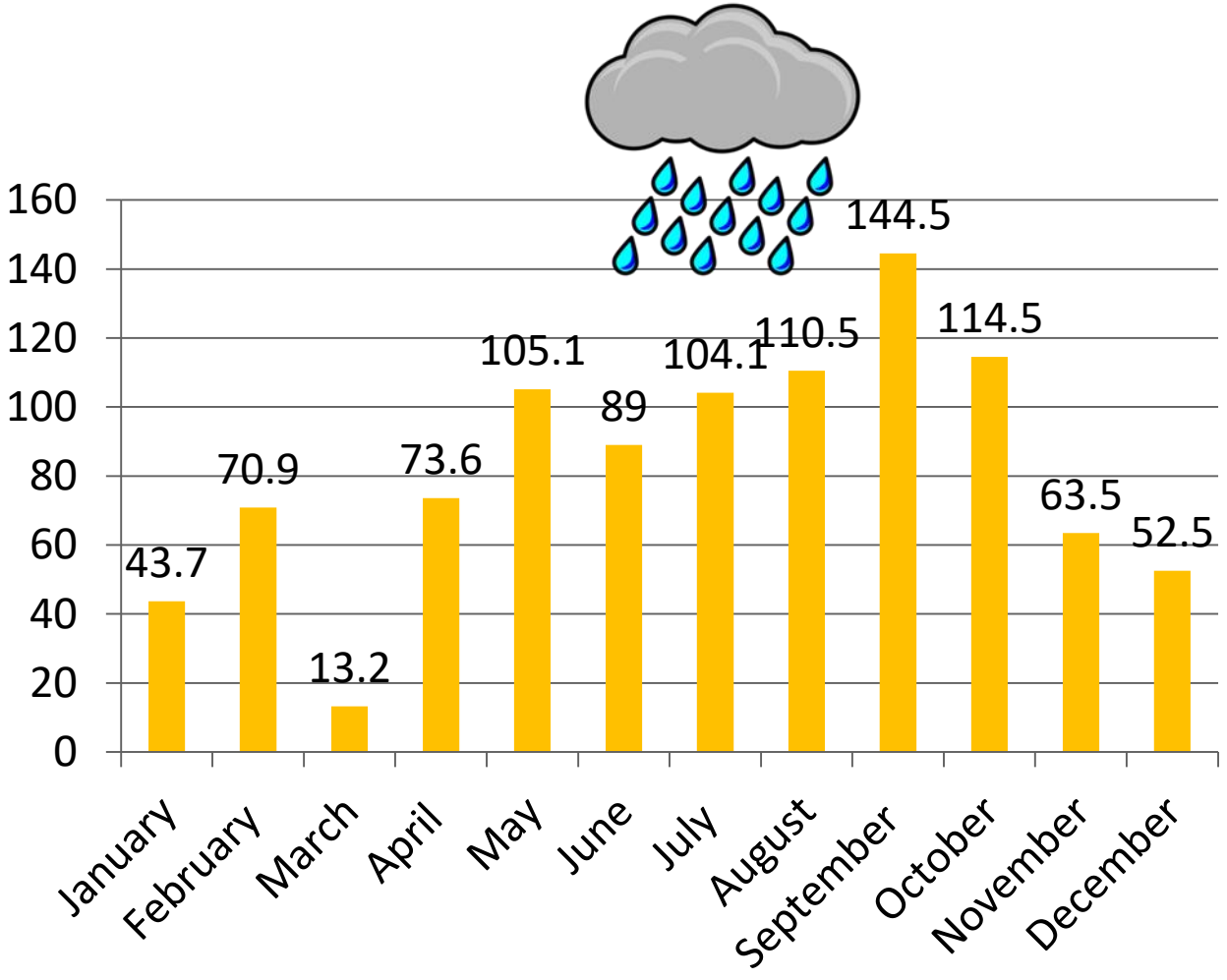
Soil type	Red sandy and Red Loamy Soils
Annual rainfall (mm)	697 mm
Total Geog Area	10,64,755 ha
Population (2011)	26,78,980
Total Gram Panchayats	331
Total villages	2,715
Major farming systems/enterprises	Dry Land Agriculture, Horticulture & Dairy
Major crops	Ragi, Groundnut, Red gram, Paddy, Coconut, Arecanut, Fruits and Vegetables
Major irrigation source	Bore well, Tank, Canal, Open well

Major crops of District -details

Crop	Area (Ha)	Production (t)	Average Yield of the District	Potential Yield	Yield gap %
Ragi	1,71,527	2,29,290	1,594 kg/ha	2000 kg/ha	25.47
Paddy	9,502	77,165	2,856 kg/ha	5000 kg/ha	75.07
Redgram	9,819	4,868	354 kg/ha	1250 kg/ha	253.1
Groundnut	88,011	22,503	268 kg/ha	750 kg/ha	179.85
Mango	15,152	1,51,520	10 t/ha	20 t /ha	100
Banana	5,174	1,27,346	24.61 t/ha	37.50 t/ha	52.40
Coconut	1,45,660	12,885	0.09 t/ha	0.14 t/ha	55.55
Areca nut	32,341	43,691	1.35 t/ha	2.0 t/ha	48.10
Tomato	1385	74,202	53.58 t/ha	75 t/ha	40.00
Chilli	912	13,204	14.48 t/ha	25 t/ha	72.65
Onion	600	11,881	19.80 t/ha	25 t/ha	26.30

Tumakuru Rainfall Data-2019

Month	Rainfall (mm)
January	43.7
February	70.9
March	13.2
April	73.6
May	105.1
June	89.0
July	104.1
August	110.5
September	144.5
October	114.5
November	63.5
December	52.5



Source: KSNDMC, Bengaluru

Tumakuru Weather Data-2019

Month	Temperature ^{0} C		Relative Humidity (%)
	Maximum	Minimum	
January	35.5	-	55.78
February	39.6	10.3	58.74
March	42.0	11.3	56.16
April	46.6	16.6	56.77
May	42.3	-	56.18
June	46.2	4.6	65.88
July	36.4	13.1	69.80
August	35.3	4.2	72.11
September	36.3	-	66.41
October	40.0	17.0	71.78
November	34.9	11.4	69.60
December	34.9	10.0	69.55

Source: KSNDMC, Bengaluru

Demonstration Units at KVK office and 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	Areca nut Plate Making Unit
7	Avocado Demo Plot
8	Fruit Crops Varietal Demonstration Cum Mother Block
9	Multipurpose Tree Collection Block
10	Areca nut Nursery Unit
11	Medicinal Plant Demonstration Plot
12	Integrated Farming System Block

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13	Mist House Unit
14	Farm pond with plastic lining
15	Threshing Yard
16	Farm Machinery Unit
17	Fruit Crop Nursery Unit
18	Shredding Cum Chipping Unit
19	Automatic Weather Station Unit
20	Areca nut Based Model Cropping System Unit
21	Water Harvesting Cum Fish Pond Unit
22	Maduvana Block
23	Graviola Block
24	Drum Stick Seed Production Demo Unit

25	Centralized Irrigation System
26	Betel vine Varietal Collection Unit
27	Areca nut Varietal Collection
28	Coconut Varietal Collection Unit
29	Bio-digester Unit
30	Mushroom Demo Unit
31	Animal Shed – Hallikar breed

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Laboratories Details	
1.	Leaf Tissue Analysis Lab
2.	Plant Health Clinic Lab
Production Units	
1.	Micronutrient Production Unit
2.	AMC Production Unit
3.	Processing & Value addition Unit
4.	Neem Soap and Pongamia production unit
5.	Vermi- Compost Production Unit
6.	Compost Production Unit
7.	Vegetable Seed Production Unit
8.	Mushroom Spawn Production Unit
9.	Fish pond Unit
10.	Fruit fly Pheromone traps Production Unit

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9th Scientific Advisory Committee -11th Feb, 2019

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Operational Areas

Taluks	DFI Cluster Villages	FPO in-charge
Tumakuru	Anupanahalli, kodegenahalli,Seethakallu	Marikamba FPO
Koratagere	D. Nagenahalli Vaddarahalli, Tanganahalli Chikkadoddavadi, Anupanahalli	Grama Chetana FPO
Madhugiri	Rangapura, Badavanahalli, K .P Halli	Suvarnamukhi FPO
Sira	Kumbarahalli, Bukkapattana.	Swawalambi Krishi Abivruddi FPO,
Pavagada	Neralakunte, Madavarayanapalya, Venkatapura	Nidugal FPO, Pavagada FPO (DoH)

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Thrust Areas

No.	Thrust Areas
1	High Yielding varieties / Hybrids
2	Seed treatment with Bio fertilizers and fungicides
3	Soil test based fertilizer application
4	Integrated Crop Management
5	Integrated Nutrient Management
6	Integrated Pest & Disease Management
7	Intercropping / Mixed / Multistoried cropping system
8	Seed Production Techniques in Vegetables and field crops
9	Post harvest technology in Vegetables and Fruits
10	Soil and Water Conservation
11	Drudgery Reduction among women
12	Income Generating Activities and Value Addition
13	Child and Women Care and balanced nutrition

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Details of target and achievements of mandatory activities of KVK: 2019

Particulars	Target	Achievement
OFT- Numbers	05	05
OFT- No. of farmers	15	15
FLD- Numbers	19	19
FLD- No. of farmers	135	127
Trainings - Numbers	63	45
Trainings – Number of farmers	1895	1591
Extension Programmes: Numbers	258	182
Extension Programmes: Number of farmers	108780	50773

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Details of target and achievements: 2019

Seeds and Planting Materials	Target	Achievement
Seed Production (Qtl)	13.20	14.90
Planting Materials (No. in Lakhs)	0.70	0.80
Other KVK Products		
Neem and Pongamia Soap (Kg)	4000	5977
Sealer cum Healer (Kg)	500	551
AMC Powder (Kg)	1000	1087
AMC Liquid (Lit)	2000	5064
Fruit fly traps / Lures (No.s)	2500	16396
Micro nutrients: Banana Special (Kg)	3000	10337
Vegetable Special (Kg)	3000	6812
Mango Special (Kg)	2500	7375
Citrus Special (Kg)	1000	3434
Amla Candies (Kg)	100	44
Amla Squash (Lit)	500	120
Ragi Malt (Kg)	100	78
Mushroom Spawn (Kg)	500	860

Abstract of Interventions during 2019

Sl.No.	Interventions
1	On Farm Testing
2	Front Line Demonstrations and Entrepreneurship Development Programme including CFLDs
3	Training of farmers and extension personnel
4	Extension Activities for Awareness creation
5	HRD, Awards and Recognition
6	Production of Seeds, Planting materials and other Products
7	Activities as Resource and Knowledge Centre
8	New initiatives, FPO support and visitors
9	Impact of KVK and success stories
10	RFS and Budget utilized

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On Farm Testing

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On Farm Testing

Abstract of OFTs during 2019

Sl.No.	Title	SMS
1	Assessment of Mustard varieties as alternative oilseed crop	SMS (SS)
2	Assessment of onion varieties for Rabi season	SMS (HO)
3	Assessment on Management of Downy mildew in Cucumber	SMS (PP)
4	*Assessment of Groundnut varieties for drought resistance	
5	Assessment of different compost cultures in composting Areca husk	SMS (EX)
6	Assessment of different storage methods to extend shelf life of Jasmine (Kakada)	SMS (HS)

* Additional OFT, sponsored by ICAR-Directorate of Groundnut Research, Junagadh, Gujarat

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1.Mustard varieties as oil seed crops

Title of Technology	:	Assessment of Mustard varieties as alternative oil seed crops
Problem Definition	:	Lack of suitable oilseed crop during Rabi season, high pungency in oil

No. of Trials : 3 Area : 0.3 ha Soil type : Red sandy loam
Farming Situation : Irrigated Season & Year : Rabi, 2019-20

SMS (Soil Science)

Technology Options	Details of technology	Source of Technology	Justification
T1: RP	PUSA 25	IARI, New Delhi	Yield : 1.5t/ha, seeds contain 39.6% oil, short duration(107days)
T2 :AP	PUSA 28	IARI, New Delhi	Yield: 2 t/ha, seeds contain 41.5% oil, short duration(115days)
T3 : AP	PUSA 30	IARI, New Delhi	Yield: 2.2 t/ha, seeds contain 37.7% oil, short duration(137 days)
T4 : AP	PUSA 31	IARI, New Delhi	Yield : 2.37 t/ha, seeds contain 40.56% oil, long duration(144 days)

Assessment of Mustard varieties for Rabi

PUSA 31

PUSA 28

PUSA 25

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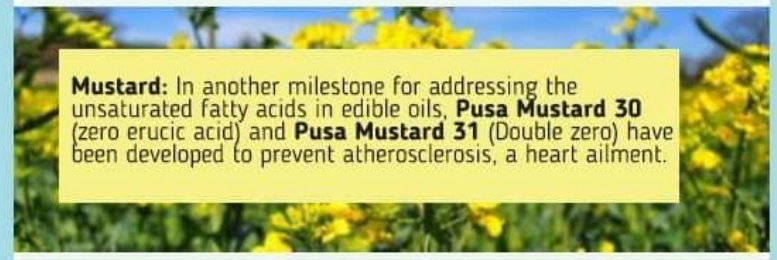
Demonstration at NHF-2020 at IIHR

ICAR landmarks (2014-19)

Wheat: In order to economize input and water usage in wheat production, the wheat variety **HD CSW18** has been released for less water and input requirements. About 4.5 to 5 million ha area under wheat is late sown. The wheat variety **HD 3117** has been developed for late sowing conditions and conservation agriculture system.

·To augment the pulses production and farmers income with a catch crop in between wheat and rice, the mungbean variety **IPM 205-7 (Virat)** has been developed with 52-55 days maturity with high protein content. The iron rich masoor variety **Pusa Ageti Masoor (L4717)** of 100 days duration has also been developed..



Mustard: In another milestone for addressing the unsaturated fatty acids in edible oils, **Pusa Mustard 30** (zero erucic acid) and **Pusa Mustard 31** (Double zero) have been developed to prevent atherosclerosis, a heart ailment.

Arka Rakshak and Arka Samrat: To prevent the chronic problem of leaf curl virus disease banctrial wilt and early blight in tomato, the high yielding tomato F1 Hybrids with triple disease resistance to Tomato Leaf Curl Virus + Bacterial Wilt + Early Blight have been developed for fresh market and processing. These varieties are suitable for summer, kharif and rabi seasons

Results 2019-20

Particulars	Yield (ton/ha)	Economics			
		COC (Rs./ha)	Gross Income (Rs/ha)	Net Income (Rs/ha)	B:C Ratio
PUSA -25	0.81	24,625	64,800	40,175	2.63
PUSA -28	0.97	24,625	77,600	52,975	3.15
PUSA -30	1.15	24,625	92,000	67,375	3.73
PUSA -31	1.28	24,625	1,02,400	77,775	4.15

Price: Rs.8,000/ qtl

2. Onion Rabi varieties

Title of Technology	:	Assessment of Onion varieties for Rabi season
Problem Definition	:	Non availability of Rabi varieties and Poor storability of bulbs in Kharif

No. of Trials : 3 Area : 0.4 ha Soil type : Red sandy loam
Farming Situation: Irrigated Season & Year : Rabi, 2019-20

SMS (Horticulture)

Technology Options`	Details of technology	Source of Technology	Justification
T1: RP	Arka Niketan	IIHR, Bengaluru	•Bulbs globular with thin neck, attractive colour, 46 cm in size. Good keeping quality. Plant matures in 145 days after transplanting.
T2 :AP	Bhima Shakti	DOG, Pune	•Recommended for late *Kharif* and Rabi •Bulb shape –Round •110-115 days to Maturity with Medium red •Better storage
T3 : AP	NHRDF L-3 Red	NHRDF Hubli	Bulbs are attractive dark red in colour. Better storage performance. Mature in 110-120 days.

T3: NHRDF L-3 red

T2: Bhima Shakti

T1: Arka Niketan

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OFT Plot Field observation

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Results–2019-20

Particulars	Crop Particulars			Economics				
	Bulb width (cm)	Avg. Bulb Weight (gm)	Purple blotch disease incidence (%)	Yield (q/ha)	COC (Rs.)	Gross Income (Rs/ha)	Net Income (Rs/ha)	B:C Ratio
Arka Niketan	3.42	54.28	12.36	226.26	41,212	1,5,3857	1,12,645	2.73
Bhima Shakti	5.24	60.62	17.45	213.11	41,212	1,44,915	1,03,703	2.51
NHRDF 3 Red	5.58	70.36	15.83	231.33	39,408	1,57,305	1,17,897	2.99

Price: Rs.680 / qtl

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Conclusion

- Farmers' Feedback: NHRDF 3 red and Arka Niketan were found to be more profitable for Rabi season as compared to Bhima Shakti. Purple blotch incidence is less in Arka Niketan.
- This OFT will be continued during 2020-21 in Rabi.

3.Downy mildew in Cucumber

Title of Technology	:	Assessment on Management of Downy mildew in Cucumber
Problem Definition	:	Incidence of Downy mildew–448ha affected in the district

No. of Trials : 3 Area : 1.2 ha Soil Type : Red sandy soil
Farming Situation : Irrigated Season & Year : Kharif 2019

SMS (Pl. Protection)

Technology Options	Details of Technology	Source of Technology	Justification
T 1 : FP	Spray the crop with Metalaxyl + Mancozeb (0.2%) and Cymoxanil+ Mancozeb (0.2%)	UAS (B) & UHS, Bagalkot	Control of downy mildew is moderate and more residue content
T 2: RP	Seed treatment with Captan (2g/kg seeds) Spray of Mancozeb (0.2%) & Cymoxanil+Mancozeb (0.2%)	IIHR, Bengaluru	High Frequent sprays causes more residue and high COC.
T 3 : AP	1. Seed treatment with Metalaxyl (2g/kg seeds) 2. *Trichoderma harzianum* enriched Farm Yard Manure (@ 1 kg / 100 kg FYM) application 3.Prophylactic Spray with Mancozeb (0.25%) followed by Spraying of Metalaxyl+ Mancozeb (0.25%) and Dimethomorph (0.1%)+ Mancozeb (0.2%)	IIVR, Varanasi	Integration of all the methods helps to reduce the disease incidence.

Results:2019-20

Technology Practices	Observations on Per cent Disease severity					Avg. disease severity
	20 DAS	30 DAS	40 DAS	50 DAS	60 DAS	
T- 1: Local Practice	18.82	36.33	30.36	27.66	21.44	26.92
T-2: Recommended practice	15.56	31.82	30.46	23.33	24.64	25.16
T-3: Alternate practice	7.66	14.80	2.64	7.14	4.86	7.42

Technology Practices	Yield (qtls/ha)	% increase in yield	Cost of cultivation in Rs.	Total gross returns (Rs./ha)	Total Net returns (Rs./ha)	B:C ratio
T- 1: Local Practice	54.80		32300	82200	49900	2.54
T2:Recommended practice	60.66	10.69	30600	90990	60390	2.97
T3: Alternate practice	66.54	21.42	28600	99810	71210	3.48

Conclusion

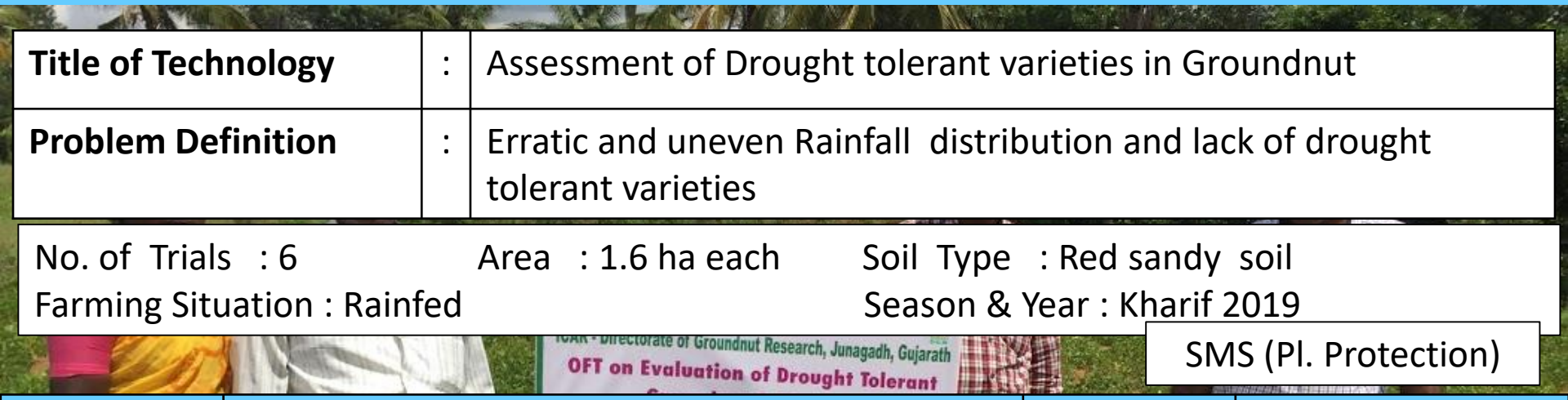
Farmers' Feedback:

- Application of *Trichoderma harzianum* enriched Farm Yard Manure, Seed treatment and Prophylactic Spray with chemicals found very useful in control of disease as well as less residue content.

4. Drought tolerant varieties in Groundnut

Title of Technology	:	Assessment of Drought tolerant varieties in Groundnut
Problem Definition	:	Erratic and uneven Rainfall distribution and lack of drought tolerant varieties

No. of Trials : 6 Area : 1.6 ha each Soil Type : Red sandy soil
Farming Situation : Rainfed Season & Year : Kharif 2019



SMS (Pl. Protection)

Technology Options	Details of Technology	Source of Technology	Justification
T 1 : FP & RP	**K-6:** 110 days duration, Uniform maturity, suitable for low to medium rainfall areas, tolerant to drought, high frequency of mature kernels (95%).	ARS,Kadri	suitable for low to medium rainfall areas, tolerant to drought
T 2: AP	**DGRMB-24:** 105-110 days, suitable for low to medium rainfall areas, tolerant to drought,	DOGR, Junagarh	tolerant to drought,
T 3 : AP	**DGRMB-32:** 105-110 days, suitable for low to medium rainfall areas, tolerant to drought,	DOGR, Junagarh	tolerant to drought,
T4: AP	**TG37A:**100-105 days, suitable for low to medium rainfall areas, tolerant to drought,	DOGR, Junagarh	tolerant to drought,

RESULTS: 2019-20

Technology options	Germination (%)	Days to Flowering	Number of Pegs/plant	Stem rot(%)	No.of Days taken for harvesting
T- 1: K-6	91.64	78 DAS	24.64	13.60	115
T-2: DGRMB-24	92.86	82 DAS	32.38	18.64	105
T-3: DGRMB-32	93.44	83 DAS	29.64	15.61	105
T4-TG37A	91.52	78DAS	23.46	12.64	100

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Results:2019-20

Technological options	Yield in Qtls/ha	% increase in yield	Straw yield Qtls/ha	Cost of cultivation(Rs.)	Gross Returns (Rs.)	Net returns (Rs.)	B C ratio
T- 1: K-6	11.20		39.44	25964	57008	31044	2.20
T-2: DGRMB-24	13.65	21.87	40.86	24658	69478.5	44820	2.82
T-3: DGRMB-32	13.00	16.07	38.44	24698	66170	41472	2.68
T4: TG-37A	12.79	14.19	39.96	25987	65101.1	39114	2.51

Conclusion

Farmers' Feedback:

DGRMB-24 and DGRMB-32 performed very well under severely prolonged moisture stress and recovered after long dry spell and provided better yield than ruling varieties.

4. Different storage methods for Jasmine (Kakada)

Title of Technology	:	Assessment of different storage methods to extend shelf life of Jasmine (Kakada)
Problem Definition	:	Highly perishable flowers, Low price during glut and Lack of knowledge on storage

No. of Trials : 3 Season & Year : Kharif, 2019-20

SMS (Home Science)

Technology Options	Details of technology	Source of Technology	Justification
T1: FP	Farmers practice	-	Storage in wet gunny bags
T2 :AP	200 µ Polythene bags	TNAU	Storage in Polythene bags(200µ)
T3 : AP	300 µ Polythene bags	TNAU	Storage in Polythene bags(300µ)
T4 : AP	4% Boric acid treatment	UAS, Raichur	Storage in Polythene bags (200µ) with 4% Boric acid treatment

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Results 2019-20

Particulars	Shelf Life (Hrs)	Physiological loss in Weight (%)			Freshness Index (%)			Colour retention Index(%)		
		24 hrs	48 hrs	72 hrs	24 hrs	48 hrs	72 hrs	24 hrs	48 hrs	72 hrs
Control	28	32.89	50.50	58.60	71.00	0.00	0.00	60.20	32.00	0.00
200 Gauge	80	6.30	10.40	16.60	100	96.20	91.20	96.20	86.80	78.60
300 Gauge	85	4.32	7.30	13.48	100	97.20	92.86	98.20	92.80	87.20
4% Boric Acid	76	2.48	6.28	10.62	98.80	87.00	78.80	89.30	80.00	75.20

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Conclusion

- Farmers' Feedback: Flowers packed in 300µ were found to be more suitable for packing followed by 200µ compared to farmer's practice and 4 % Boric acid treatment.

5.Assessment of different compost cultures in composting Areca husk

Problem: **Delay in decomposing for use in Agriculture and Horticulture Crops**

No. of Demos: 03
Village: Hirehalli, Kodigenahalli

Team : Agril.Extn & PC

Technological Options

Treatments	Technology option	Source of technology
TO1	Arka Decomposer	IIHR, Bengaluru
TO2	Compositing Culture	UAS, Dharwad
TO3	Organic Decomposer	NCOF,UP

ಪ್ರಜಾ ಪ್ರಗತಿ

ಕೃಷಿ ತ್ಯಾಜ್ಯವನ್ನು ಗೊಬ್ಬರವಾಗಿ ಪರಿವರ್ತಿಸಿಕೊಳ್ಳಿ

ಕೊಡಿಗೇಹಳ್ಳಿ

ಮಣ್ಣಿನ ಫಲವತ್ತತೆ ತೀರಾ ಕೆಳಮಟ್ಟದಲ್ಲಿ ಇರುವುದರಿಂದ ಕೃಷಿಯಲ್ಲಿನ ತ್ಯಾಜ್ಯವು ಗೊಬ್ಬರವಾಗಿ ಪರಿವರ್ತನೆ ಆಗದೆ ಹಾಗೇಉಳಿಯುತ್ತಿದೆ ಹಾಗೂ ಇದ್ದನ್ನು ರೈತರು ಬೆಂಕಿಹಾಕಿ ಸುಟ್ಟು ಪುನ: ಮಣ್ಣಿನಲ್ಲಿರುವ ಸೂಕ್ಷ್ಮಾಣು ಜೀವಿಗಳು ಮತ್ತು ರೈತ ಮಿತ್ರ ಎರೆಹುಳುಗಳನ್ನು ಬಲಿಕೊಡುತ್ತಿರುವುದು ನೋವಿನ ಸಂಗತಿ ಎಂದು ಕೃಷಿ ವಿಜ್ಞಾನಕೇಂದ್ರ ಹಿರೇಹಳ್ಳಿಯ ಕೃಷಿ ವಿಸ್ತರಣಾಧಿಕಾರಿ ಕೆ ಎನ್, ಜಗದೀಶ್ ಹೇಳಿದರು.

ನಮ್ಮದಿಶ ಟ್ರಸ್ಟ್ ಸುಗ್ರಾಮಯೋಜನೆ, ಗ್ರಾಮೀಣಕೂಟ,ಹಾಗೂ ಕೃಷಿ ವಿಜ್ಞಾನಕೇಂದ್ರ ಹಿರೇಹಳ್ಳಿ ಇವರ ಸಹಯೋಗದಲ್ಲಿ ಊರ್ಡಿಗೆರೆಗ್ರಾಮ ಪಂಚಾಯಿತಿ ವ್ಯಾಪ್ತಿಯ ಕೊಡಿಗೇಹಳ್ಳಿ ಗ್ರಾಮದ ಸಾವಯವ ಕೃಷಿಕ ವೀರಭದ್ರಯ್ಯಅವರ ಜಮೀನಿನಲ್ಲಿ ಜರುಗಿದ ವೇಸ್ಟ್‌ಡಿ ಕಂಪೋಜರ್ ಪ್ರಾತ್ಯಕ್ಷಿಕೆ ಕಾರ್ಯಕ್ರಮವನ್ನು ಉದ್ಘಾಟಿಸಿ ಮಾತನಾಡಿದರು.

ಕೃಷಿ ತ್ಯಾಜ್ಯಗಳಾದ ಅಡಿಕೆ ಸಿಪ್ಪೆ, ತೆಂಗಿನಗರಿ, ಇತರೆ ಯಾವುದೆ ಕಳೆಯನ್ನು ಒಂದೆಡೆ ನೆರಳಿನಲ್ಲಿ ಹಾಕಿ, ನಂತರ 200 ಲೀಟರ್ ನೀರಿಗೆವೇಸ್ಟ್‌ಡಿ ಕಂಪೋಜರ್ ದ್ರಾವಣ, ಬೆಲ್ಲ, ದ್ವಿದಳ ಧಾನ್ಯದ ಹಿಟ್ಟು ಹಾಕಿ ಏಳರಿಂದ ಹತ್ತು ದಿನಗಳ ಕಾಲ ಬಿಟ್ಟು ಅದನ್ನು ಎಲ್ಲಾ ರೀತಿಯ ಬೆಳೆಗಳಿಗೆ ಮತ್ತು ಕೃಷಿ ತ್ಯಾಜ್ಯವನ್ನು ಗೊಬ್ಬರವಾಗಿ ಪರಿವರ್ತಿಸಲು ಬಳಕೆ ಮಾಡಬಹುದು ಇದರಿಂದ ಒಳ್ಳೆಯ ಇಳುವರಿ ಪಡೆಯಬಹುದು ಎಂದು ತಿಳಿಸಿದರು.

ನಂತರ ಮಾತಾನಾಡಿದ ವಿಷಯತಜ್ಞ ರಮೇಶ್ ಇಂದು ಸರ್ಕಾರ ಸಾವಯವ ಕೃಷಿಗೆ ಉತ್ತೇಜನ ನೀಡುತ್ತಿದ್ದು ಇರುವ ಯೋಜನೆಗಳ ಪ್ರಯೋಜನವನ್ನು ರೈತರು ಪಡೆಯಬೇಕು,ಮತ್ತು ಕೃಷಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಕೃಷಿ ವಿಜ್ಞಾನ ಕೇಂದ್ರದಲ್ಲಿ ಹಲವಾರು ತರಬೇತಿಗಳು ಜರುಗುತ್ತಿದ್ದು ಭಾಗವಹಿಸಿ ಮಾಹಿತಿಗಳನ್ನು ತಿಳಿದುಕೊಳ್ಳಿ ಎಂದು ಮನವಿ ಮಾಡಿದರು.

ನಮ್ಮದಿಶ ಟ್ರಸ್ಟ್‌ಯೋಜನ ಸಂಯೋಜಕರಾದ ಲಿಂಗದೇವರು ಮಾತಾನಾಡುತ್ತ ಸಂಸ್ಥೆಯು ಕಳೆದ ಐದು ವರ್ಷಗಳಿಂದ ಊರ್ಡಿಗೆರೆ ಗ್ರಾಮ ಪಂಚಾಯಿತಿಯಲ್ಲಿ ಕೃಷಿ, ಆರೋಗ್ಯ, ಶಿಕ್ಷಣ, ಮಹಿಳಾ ಸಬಲೀಕರಣಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಕಾರ್ಯನಿರ್ವಹಿಸಿ ಜನರ ಜೀವನ ಮಟ್ಟವನ್ನು ಸುಧಾರಿಸುವಲ್ಲಿ ಶ್ರಮಿಸುತ್ತಿದೆ.ಈ ಎಲ್ಲಾ ಕಾರ್ಯಕ್ರಮಗಳಿಗೆ ಕಾರ್ಪೋರೇಟ್ ಸಂಸ್ಥೆಯ ಸಾಮಾಜಿಕ ಹೊಣೆಗಾರಿಕೆ ಯೋಜನೆಯಡಿ ಹಣಕಾಸು ನೆರವು ನೀಡುತ್ತಿರುವ ಗ್ರಾಮೀಣಕೂಟ ಸಂಸ್ಥೆಯ ಸಾಮಾಜಿಕ ಕಳಕಳಿಯ ಬದ್ದತೆಯನ್ನು ತೋರುತ್ತದ್ದೆ ಎಂದು ಪ್ರಶಂಶಿಸಿದರು.

ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಗ್ರಾಮೀಣಕೂಟದ ಪ್ರಾದೇಶಿಕ ವ್ಯವಸ್ಥಾಪಕ ಶಿವಲಿಂಗಯ್ಯ, ನಮ್ಮದಿಶ ಅಭಿವೃದ್ಧಿ ಅಧಿಕಾರಿಗಳಾದ ರಾಜಶೇಖರ, ಈರನಗೌಡ ಮತ್ತು ಪಂಚಾಯಿತಿ ವ್ಯಾಪ್ತಿಯ ರೈತರು ಭಾಗವಹಿಸಿದ್ದರು.

ಕೃಷಿ ವಿಜ್ಞಾನಕೇಂದ್ರ ಹಿರೇಹಳ್ಳಿಯ ಕೃಷಿ ವಿಸ್ತರಣಾಧಿಕಾರಿ ಕೆ.ಎನ್.ಜಗದೀಶ್ ಅವರು ವೇಸ್ಟ್‌ಡಿ ಕಂಪೋಜರ್‌ನ ಪ್ರಾತ್ಯಕ್ಷಿಕೆಯನ್ನು ವಿವರಿಸುತ್ತಿರುವುದು.

Edition

Samples are being drawn for analysis 100th, 125th & 150th Day

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Results - 100 days

Treatments	Technology option	N(%)	C(%)	H(%)	S (%)	C:N Ratio	C:H Ratio
TO1	Arka Decomposer IIHR, Bengaluru	1.18	27.30	3.52	0.20	23.21	7.75
TO2	Compositing Culture UAS, Dharwad	1.03	33.51	4.16	0.12	30.30	7.48
TO3	Organic Decomposer NCOF,UP	1.16	31.16	4.42	0.15	28.76	7.58

FLDs and EDP

Front Line Demonstrations, EDP and CFLD

Abstract during 2019

No.	Title	SMS
1	Enhancement of Productivity of Finger millet by drought tolerant variety ML 365	SMS (SS)
2	Demonstration of water saving Aerobic Paddy Paustic-9	
3	Integrated Crop Management in Arecanut	
4	Demonstration of Organic farming practices in French bean	
5	Demonstration of AMC liquid and Arka Actino Plus on growth, quality and yield of Pomegranate	
6	Integrated Pest and Disease Management in Maize	SMS (PP)
7	Integrated Pest and Disease Management in Bhendi	
8	Integrated Crop Management in French Bean – Arka Arjun	SMS (Hort)
9	Integrated Crop Management in Chilli - Arka Harita	
10	Integrated Crop Management in China Aster – Arka Archana	
11	Demonstration of Aromatic crop- Lemon grass – Krishna	
12	Demonstration of Aromatic crop- Palmarosa- PRC 1	

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Front Line Demonstrations, EDP and CFLD

Abstract during 2019

13	Demonstration of Fodder sorghum CoFS 29	SMS (Ext)
14	Demonstration of Marvel Grass -Perennial Fodder *Dicanthium annulatum*	
15	Demonstration of Fodder -Hybrid Napier	
16	Demonstration of Finger millet Variety KMR 340 for Value Addition	SMS (HS)
17	Demonstration of Foxtail millet Variety DHFt 109-3 for Value Addition	
1	EDP: Tamarind : Value Addition, Branding and Market linkage	
1	CFLD: Enhancement of Pigeon pea yield through introduction of BRG – 5 (NFSM)	SMS (PP)
2	CFLD: Enhancement of Groundnut (K-6) yield (NMOOP)	

भाकृअनुप
ICAR

ICAR-IIHR

1.Enhancement of Productivity of *Finger millet* by drought tolerant variety ML 365

Crop	Finger millet
Thrust area	High yielding variety
District Area / Avg. Yield	1,71,527 ha / 16 q/ha
Problems	Poor soil health and low soil fertility and low yield
Technology demonstrated	Red gram seeds (intercrop) – 5 kg/ha, FYM - 10 ton/ha, Biofertilizer - 1 kg/ha, RDF - 50 kg/ ha – 50:37:40 NPK kg/ha, Borax - 10 kg/ha, Zinc sulphate – 12.5 kg/ha
Source	UAS, Bengaluru
Parameters studied	Plant height (cm), Root length (cm), Yield (t/ha)
Cluster Villages	Tanganhalli (K), D.Nagenahalli (K), Rangapura (M)
Season	Kharif, 2019
SMS	Soil Science

Critical inputs provided	Area (ha)	No. of Farmers
Ragi ML-365 seeds, Red gram seeds	2	10

Results 2019-20

Particulars	Avg. Plant height (cm)	Root lenght (cm)	Avg. Yield (q/ha)	% Increase	Gross Cost (Rs./ha)	Gross Returns (Rs./ha)	Net Returns (Rs./ha)	B:C ratio
Demonstration	143	17.2	27.4	34.9	22,430	61,650	39,220	2.75
Check	114	15.8	20.3		21,950	45,675	23,725	2.08

Price: Rs.22.5/kg

Conclusion

- Farmers' Feedback: The new variety withstood the dry spells
- Cooked grain is very tasty
- Increased the Finger millet yield by 34.9 % compared to farmers practices

Control

Treated

2.Demonstration of Aerobic Paddy Paustic-9

Crop	Paddy
Thrust area	Water scarcity
District Area / Avg. Yield	9502 ha / 30 q/ha
Problems	Poor soil health and low soil fertility and low yield
Technology demonstrated	Paustic var seeds – 10 kg, FYM - 10 ton/ha, Biofertilizer – 0.5 kg/ha, RDF - 50 kg/ ha – 100:50:50 NPK kg/ha, Borax - 8 kg/ha,Zinc sulphate – 20 kg/ha
Source	UAS, Bengaluru
Parameters studied	Plant height (cm), Yield (t/ha)
Cluster Villages	Tanganhalli (K), D.Nagenahalli (K), Rangapura (M)
Season	Kharif, 2019
SMS	Soil Science

Critical inputs provided	Area (ha)	No. of Farmers
Paustic var seeds -10 kg to each farmer	2	10

Results 2019-20

Particulars	Avg. Plant height (cm)	Root lenght (cm)	Avg. Yield (q/ha)	% Increase	Gross Cost (Rs./ha)	Gross Returns (Rs./ha)	Net Returns (Rs./ha)	B:C ratio
Demonstration	137	27.3	34.1	23.5	25,850	52,173	26,323	2.07
Check	121	22.9	27.6		25,850	42,228	16,378	1.63

Price: Rs.15.3/kg

Conclusion

- Farmers' Feedback: The new variety required 40% less water compared to flooding
- Increased the Aerobic Paddy yield by 23.5 % compared to farmers practices

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3.ICM in Arecanut

Crop	Arecanut
Thrust Area	ICM
District Area / Avg.Yield	34,182 ha / 0.8 ton per ha
Problems	Monocropping, low nutrient status and low yield, button shedding, mites, stem bleeding, Ganoderma wilt, pests
Technology demonstrated	FYM-20 kg per tree, Neem cake-2 kg per tree, French bean seeds-10 kg/ acre, RDF-100:40:140 per tree, Borax-30 g per tree, COC- 10 g per lit water and Hexaconazole -3 ml per 125 ml water
Source	CPCRI, Bengaluru
Parameters studied	Yield and economics
Season	Kharif, 2019
Cluster	Thanganhalli, Vaddarahalli, Chikkadoddawadi
SMS	Soil Science

Critical inputs provided	Area (ha)	No. of Farmers
Neem cake-2 kg per tree, French bean seeds-10 kg/ acre, Borax-30 g per tree, COC- 10g per lit water, Hexaconazole -3 ml per 125 ml water	1	5

Results 2019-20

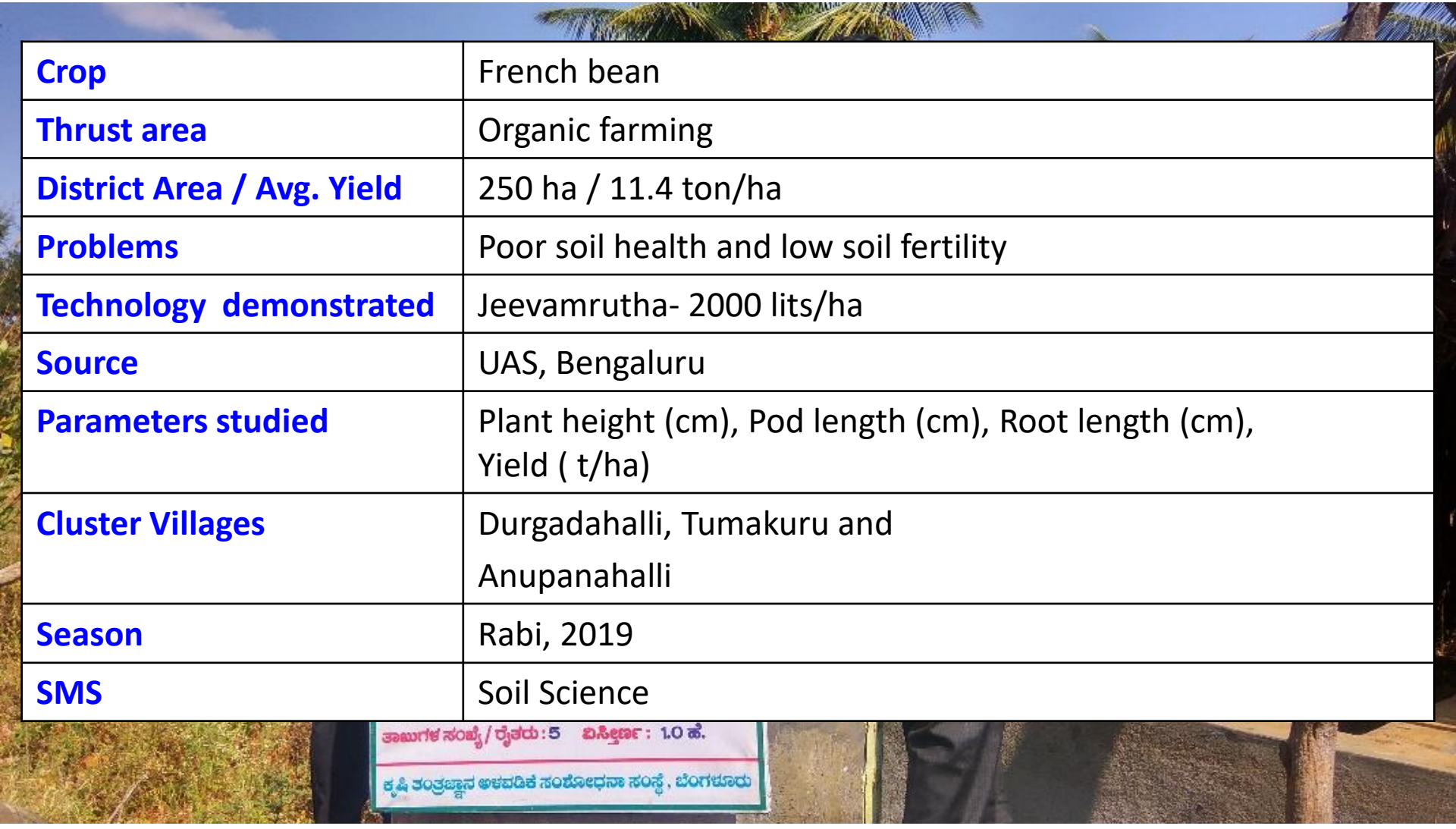
Particulars	Avg. Yield (Arecanut) (ton/ha)	Intercrop Avg. Yield (ton/ha)	Ganoderma wilt (%)	Gross Cost (Rs./ha)	Gross Returns (Rs./ha)	Net Returns (Rs./ha)	B:C ratio
Demonstration	1.09	2.9	2	82,350	2,50,600	1,68,250	3.04
Check	0.94	-	4	73,750	1,97,850	1,24,100	2.68

Conclusion

- Farmers' Feedback: French bean Intercropping has resulted in additional income of Rs. 52,750/ha.
- ICM in Arecanut increased the income up to 35.5% as compared to check

4. Demonstration of Bio-rationals in French bean

Crop	French bean
Thrust area	Organic farming
District Area / Avg. Yield	250 ha / 11.4 ton/ha
Problems	Poor soil health and low soil fertility
Technology demonstrated	Jeevamrutha- 2000 lits/ha
Source	UAS, Bengaluru
Parameters studied	Plant height (cm), Pod length (cm), Root length (cm), Yield (t/ha)
Cluster Villages	Durgadahalli, Tumakuru and Anupanahalli
Season	Rabi, 2019
SMS	Soil Science



Critical inputs provided	Area (ha)	No. of Farmers
Jeevamrutha- 2000 lits /ha	1	5

Results 2019-20

Particulars	Avg. Plant height (cm)	Root lenght (cm)	Pod lenght (cm)	Avg. Yield (t/ha)	% Increase	Gross Cost (Rs./ha)	Gross Returns (Rs./ha)	Net Returns (Rs./ha)	B:C ratio
Demonstration	63.7	16.1	14.9	11.22	22.1	33,131	1,68,300	1,35,169	5.07
Check	42.9	12.2	12.3	9.19		36,253	1,37,850	1,01,597	3.80

Price: Rs.15/kg

Conclusion

- Farmers' Feedback: Application of Jeevamrutha increased the plant growth and reduced the cost of cultivation and improved the pod quality.
- Increased the activity of earthworms in the demo plots.
- Increased the French bean yield by 22.1 % compared to farmers practices

5.Demonstration of AMC liquid and Arka Actino Plus on growth, quality and yield of Pomegranate

Crop	Pomegranate
Thrust area	INM
District Area / Avg. Yield	3800 ha / 7.6 ton/ha
Problems	Low nutrient use efficiency, low soil fertility, Severe incidence of blight, wilt and low yield
Technology demonstrated	FYM – 40 kg /tree, RDF : 400:200:200 g/tree NPK, AMC liquid: 10 ml / 1 lit, ACT : 20 g / lit, Neem soap: 7 g/ lit, Micronutrient special: 3 g / lit, Pheromone traps : 8 Nos. /acre for fruit flies
Source	IIHR, Bengaluru
Parameters studied	Growth parameters, Disease Incidence, Yield and Economics
Cluster Villages	Venkatapura (P), Kumbarahalli (S)
Season	Rabi, 2019

Critical inputs provided	Area (ha)	No. of Farmers
AMC liquid, ACT, Neem soap and Pheromone traps	2	3

Results 2019-20

Particulars	Blight incidence of leaf(%)	Wilt incidence (%)	Avg. Yield (t/ha)	% Increase	Gross Cost (Rs./ha)	Gross Returns (Rs./ha)	Net Returns (Rs./ha)	B:C ratio
Demonstration	17.7	1.6	9.6	18.5	93,150	6,72,000	5,78,850	7.2
Check	61.2	7.3	8.1		1,46,400	5,26,500	3,80,100	3.4

Price: AMC treated fruits: Rs.70/kg, Farmers practice: Rs.65/kg

Conclusion

- Farmers' Feedback: Application of liquid AMC and ACT have increased the fruit yield, reduced the disease incidence and improved the fruit quality.
- Reduced the cost of cultivation by Rs.53,250/- per ha
- Increased the Pomegranate yield by 18.5 % compared to farmers practices

Pesticide residue analysis of Pomegranate

UID of Format: 7.8.2

Food Safety Referral Laboratory
ICAR-Indian Institute Horticultural Research
Hessaraghatta Lake Post, Bengaluru-560089
Email: iihrfsrl@gmail.com
Phone No: 080-23086100 extn: 480/485

TEST REPORT

Report No : FSRL2020-036 Date: 14-02-2020
Customer address : Dr. Yoganand
KVK Extention
Name of the sample : Pomegranate
Date of sample receipt : 25.11.2019
Condition of sample received : Acceptable
Lab ID : FSRL20191125 - 229
Date(s) of analysis : 26.12.2019
Location : FSRL
Method of analysis : AOAC 2007.01
Sample description : Pomegranate Sample
Sample Analysis results
(Pesticide residue)
1.Pomegranate Arial

Sl. No	Test Parameter	Results in (mg/kg)	LOD (mg/kg)	Specifications/MRL (mg/kg)	Techniques used
1.	Acephate	ND	0.002	NA	LC-MS/MS
2.	Acetamiprid	ND	0.005	NA	LC-MS/MS
3.	Atrazine	ND	0.002	NA	LC-MS/MS
4.	Azoxystrobin	ND	0.001	NA	LC-MS/MS
5.	Bifenazate	ND	0.005	NA	LC-MS/MS
6.	Bitertanol	ND	0.002	NA	LC-MS/MS
7.	Boscalid	ND	0.002	NA	LC-MS/MS
8.	Buprofezin	ND	0.002	NA	LC-MS/MS
9.	Carbaryl	ND	0.002	NA	LC-MS/MS
10.	Carbofuran	ND	0.001	NA	LC-MS/MS
11.	Chlorantraniliprole	ND	0.005	NA	LC-MS/MS
12.	Clothianidin	ND	0.005	NA	LC-MS/MS
13.	Diafenthiuron	ND	0.001	NA	LC-MS/MS
14.	Difenconazole	ND	0.005	NA	LC-MS/MS
15.	Dimethoate	ND	0.002	NA	LC-MS/MS

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16.	Dimethomorph	ND	0.005	NA	LC-MS/MS
17.	Dinotefuran	ND	0.005	NA	LC-MS/MS
18.	Ethion	ND	0.001	NA	LC-MS/MS
19.	Fenamidone	ND	0.005	NA	LC-MS/MS
20.	Fenamiphos	ND	0.001	NA	LC-MS/MS
21.	Fenamiphos sulfone	ND	0.002	NA	LC-MS/MS
22.	Fenamiphos sulfoxide	ND	0.002	NA	LC-MS/MS
23.	Fenazaquin	ND	0.005	NA	LC-MS/MS
24.	Fenobucarb	ND	0.005	NA	LC-MS/MS
25.	Fenpyroximate	ND	0.005	NA	LC-MS/MS
26.	Fipronil	ND	0.005	NA	LC-MS/MS
27.	Fipronil sulfone	ND	0.005	NA	LC-MS/MS
28.	Flonicamid	ND	0.001	NA	LC-MS/MS
29.	Floupicolide	ND	0.005	NA	LC-MS/MS
30.	Floupyram	ND	0.001	NA	LC-MS/MS
31.	Flufenoxuron	ND	0.005	NA	LC-MS/MS
32.	Imidacloprid	ND	0.002	NA	LC-MS/MS
33.	Indoxacarb	ND	0.002	NA	LC-MS/MS
34.	Iprovalicarb	ND	0.001	NA	LC-MS/MS
35.	Kresoxim Methyl	ND	0.005	NA	LC-MS/MS
36.	Malathion	ND	0.002	NA	LC-MS/MS
37.	Mandipropamid	ND	0.001	NA	LC-MS/MS
38.	Metalaxyl	ND	0.001	NA	LC-MS/MS
39.	Metribuzin	ND	0.005	NA	LC-MS/MS
40.	Myclobutanil	ND	0.005	NA	LC-MS/MS
41.	Oxycarboxin	ND	0.005	NA	LC-MS/MS
42.	Phosalone	ND	0.005	NA	LC-MS/MS
43.	Phosphamidon	ND	0.005	NA	LC-MS/MS
44.	Pretilachlor	ND	0.002	NA	LC-MS/MS
45.	Primiphos Methyl	ND	0.002	NA	LC-MS/MS
46.	Profenophos	ND	0.001	NA	LC-MS/MS
47.	Propanil	ND	0.005	NA	LC-MS/MS
48.	Propiconazole	ND	0.005	NA	LC-MS/MS
49.	Propuxur	ND	0.001	NA	LC-MS/MS
50.	Pyraclostrobin	ND	0.002	NA	LC-MS/MS
51.	Quinalophos	ND	0.005	NA	LC-MS/MS
52.	Spiromesifen	ND	0.005	NA	LC-MS/MS

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Phone No: 080-23086100 extn: 480/485

53.	Tebuconazole	ND	0.001	NA	LC-MS/MS
54.	Thiabendazole	ND	0.005	NA	LC-MS/MS
55.	Thiacloprid	ND	0.002	NA	LC-MS/MS
56.	Thiamethoxam	ND	0.002	NA	LC-MS/MS
57.	Thiodicarb	ND	0.005	NA	LC-MS/MS
58.	Thiophanate Methyl	ND	0.002	NA	LC-MS/MS
59.	Triadimifen	ND	0.005	NA	LC-MS/MS
60.	Triazophos	ND	0.002	NA	LC-MS/MS
61.	Trichlorofon	ND	0.005	NA	LC-MS/MS
62.	Tricyclazole	ND	0.001	NA	LC-MS/MS
63.	Trifloxystrobin	ND	0.001	NA	LC-MS/MS

2.Pomegranate Whole Fruit

Sl. No	Test Parameter	Results in (mg/kg)	LOD (mg/cg)	Specifications/MRL (mg/kg)	Techniques used
1.	Acephate	ND	0.002	NA	LC-MS/MS
2.	Acetamiprid	ND	0.005	NA	LC-MS/MS
3.	Atrazine	ND	0.002	NA	LC-MS/MS
4.	Azoxystrobin	ND	0.001	NA	LC-MS/MS
5.	Bifenazate	ND	0.005	NA	LC-MS/MS
6.	Bitertanol	ND	0.002	NA	LC-MS/MS
7.	Boscalid	ND	0.002	NA	LC-MS/MS
8.	Buprofezin	ND	0.002	NA	LC-MS/MS
9.	Carbaryl	ND	0.002	NA	LC-MS/MS
10.	Carbofuran	ND	0.001	NA	LC-MS/MS
11.	Chlorantraniliprole	ND	0.005	NA	LC-MS/MS
12.	Clothianidin	ND	0.005	NA	LC-MS/MS
13.	Diafenthiuron	ND	0.001	NA	LC-MS/MS
14.	Difenconazole	ND	0.005	NA	LC-MS/MS
15.	Dimethoate	ND	0.002	NA	LC-MS/MS
16.	Dimethomorph	ND	0.005	NA	LC-MS/MS
17.	Dinotefuran	ND	0.005	NA	LC-MS/MS
18.	Ethion	ND	0.001	NA	LC-MS/MS
19.	Fenamidone	ND	0.005	NA	LC-MS/MS
20.	Fenamiphos	ND	0.001	NA	LC-MS/MS
21.	Fenamiphos sulfone	ND	0.002	NA	LC-MS/MS

UID of Format: 7.8.2

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22.	Fenamiphos sulfoxide	ND	0.002	NA	LC-MS/MS
23.	Fenazaquin	ND	0.005	NA	LC-MS/MS
24.	Fenobucarb	ND	0.005	NA	LC-MS/MS
25.	Fenpyroximate	ND	0.005	NA	LC-MS/MS
26.	Fipronil	ND	0.005	NA	LC-MS/MS
27.	Fipronil sulfone	ND	0.005	NA	LC-MS/MS
28.	Flonicamid	ND	0.001	NA	LC-MS/MS
29.	Floupicolide	ND	0.005	NA	LC-MS/MS
30.	Floupyram	ND	0.001	NA	LC-MS/MS
31.	Flufenoxuron	ND	0.005	NA	LC-MS/MS
32.	Imidacloprid	ND	0.002	NA	LC-MS/MS
33.	Indoxacarb	ND	0.002	NA	LC-MS/MS
34.	Iprovalicarb	ND	0.001	NA	LC-MS/MS
35.	Kresoxim Methyl	ND	0.005	NA	LC-MS/MS
36.	Malathion	ND	0.002	NA	LC-MS/MS
37.	Mandipropamid	ND	0.001	NA	LC-MS/MS
38.	Metalaxyl	ND	0.001	NA	LC-MS/MS
39.	Metribuzin	ND	0.005	NA	LC-MS/MS
40.	Myclobutanil	ND	0.005	NA	LC-MS/MS
41.	Oxycarboxin	ND	0.005	NA	LC-MS/MS
42.	Phosalone	ND	0.005	NA	LC-MS/MS
43.	Phosphamidon	ND	0.005	NA	LC-MS/MS
44.	Pretilachlor	ND	0.002	NA	LC-MS/MS
45.	Primiphos Methyl	ND	0.002	NA	LC-MS/MS
46.	Profenophos	ND	0.001	NA	LC-MS/MS
47.	Propanil	ND	0.005	NA	LC-MS/MS
48.	Propiconazole	ND	0.005	NA	LC-MS/MS
49.	Propuxur	ND	0.001	NA	LC-MS/MS
50.	Pyraclostrobin	ND	0.002	NA	LC-MS/MS
51.	Quinalophos	ND	0.005	NA	LC-MS/MS
52.	Spiromesifen	ND	0.005	NA	LC-MS/MS
53.	Tebuconazole	ND	0.001	NA	LC-MS/MS
54.	Thiabendazole	ND	0.005	NA	LC-MS/MS
55.	Thiacloprid	ND	0.002	NA	LC-MS/MS
56.	Thiamethoxam	ND	0.002	NA	LC-MS/MS
57.	Thiodicarb	ND	0.005	NA	LC-MS/MS
58.	Thiophanate Methyl	ND	0.002	NA	LC-MS/MS

UID of Format: 7.8.2

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Phone No: 080-23086100 extn: 480/485

59.	Triadimifon	ND	0.005	NA	LC-MS/MS
60.	Triazophos	ND	0.002	NA	LC-MS/MS
61.	Trichlorofon	ND	0.005	NA	LC-MS/MS
62.	Tricyclazole	ND	0.001	NA	LC-MS/MS
63.	Trifloxystrobin	ND	0.001	NA	LC-MS/MS

Above results relate only to the items/sample tested.
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(Dr. Debi Sharma)
Principal Scientist
Division of Plant Physiology and Biochemistry

----------End of Test Report----------

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6.Integrated Pest and Disease Management in Maize

Crop	Maize
Thrust Area	Pest and disease incidence
District Area / Avg. Yield	12580 ha / 52 q/ha
Problems	Downy mildew and *Turcicum* leaf blight Stem borer incidence
Technology demonstrated	Demonstration *Turcicum* leaf blight and *Fusarium* Stalk rot tolerant hybrid: MAH-14-5 Seed treatment with Metalaxil M + Mancozeb (4g/kg of seeds) for Downy mildew Spraying of Chlropyriphos (2ml/ltr) for stem borer.
Source	UAS, Bengaluru
Parameters studied	Plant height, Cob size, Cob length, % Stem borer, Downy mildew and *Turcicum* leaf blight incidence, Yield, B:C ratio
Cluster Villages	Lingadahalli(P) and Seethakallu(T)
Season	Kharif, 2019
SMS	Plant protection

Critical inputs provided	Area (ha)	No. of Farmers
Seeds-5 kg, Bio fertilizer-AMC 2.50kg, Metalaxyl+ Mancozeb-250g Chlropyriophos-250ml	2	5

Results 2019-20

Technology Practices	Per cent Disease Incidence		Plant ht. in cms	Avg.cob Length in cms	Test weight in gms	Seeds colour
	TLB (%)	DM (%)				
Demonstration	2.89	5.66	229.40	25.36	36.46	Orange Yellow
Check	18.89	28.79	211.65	21.46	34.56	Orange Yellow

Technology Practices	Yield (qtls/ha)	% increase in yield	Cost of cultivation in Rs.	Total gross returns (Rs./ha)	Total Net returns (Rs./ha)	B:C ratio
Demonstration	82.46	15.13	62100	145129	83029	2.33
Check	71.62		63440	126051	62611	1.98

Price: Rs.1,750/qtl

Conclusion

- **Farmers' Feedback:** MAH-14-5 hybrid performed very well in case of yield parameters.
- TLB and Downy mildew Disease incidence was also observed to be very low.

7.Integrated Pest and Disease Management in Bhendi

Crop	Bhendi
Thrust Area	Pest and disease incidence
District Area / Avg. Yield	175 ha / 16.5 t/ha
Problems	Higher incidence of Bhendi yellow vein Mosaic, Low yield
Technology demonstrated	Arka Nikitha -F1 hybrid (125 -130 days duration, tolerant to Bhendi yellow vein Mosaic and Yields 21-24 t/ha ,) AMC : Drenching @ 10ml /lit Vegetable Special- 2gm /lit at starts at flower initiation stage and regular 15 days interval
Source	IIHR, Bengaluru
Parameters studied	Plant height, No. of flowers, No. of fruits, Fruit length, BYVM %, Yield and B:C Ratio
Cluster Villages	Chikkadoddawadi and Nagenahalli(T)
Season	Summer, 2019
SMS	Plant protection

Critical inputs provided	Area (ha)	No. of Farmers
Seeds-2.5kg, Organic Manure-250kg, AMC-10kg, Vegetable special-1kg	2	5

Technology Practices	Per cent Disease Incidence		Plant ht. in cms	Days to 50% flowering	Length of the fruit (cm)
	Fusarium wilt (%)	Yellow vein mosaic (%)			
Demonstration	3.66	4.66	132.2	48 DAS	14.60
Check	14.66	27.84	146.6	55 DAS	12.36

Technology Practices	Yield (qtls/ha)	% increase in yield	Cost of cultivation in Rs.	Total gross returns (Rs./ha)	Total Net returns (Rs./ha)	B:C ratio
Demonstration	212.6	13.93	58350	170080	111730	2.91
Check	186.6		62360	149280	86920	2.39

Conclusion

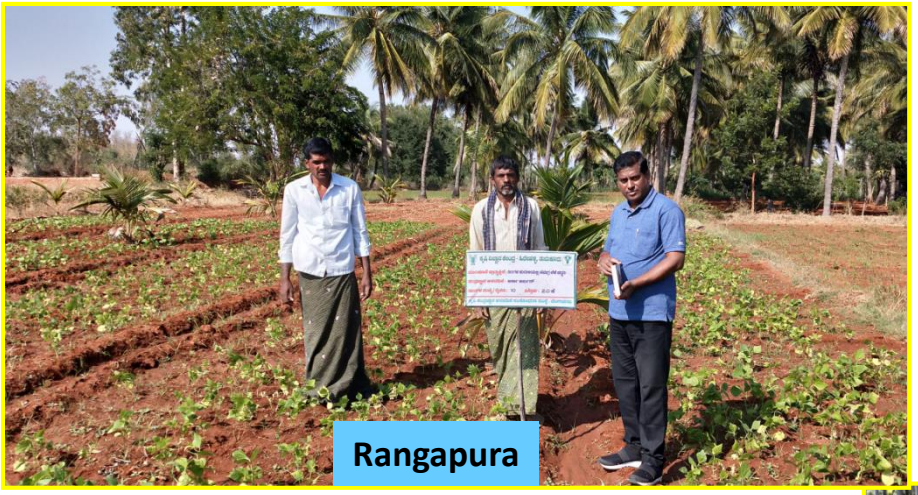
- **Farmers' Feedback:** Arka Nikitha hybrid performed very well and recorded higher yield(13.93%) than local variety.
- Low incidence of Fusarium wilt and Bhendi yellow vein mosaic.

8. Integrated Crop Management in French Bean - Arka Arjun

Crop	French Bean
Thrust Area	ICM
District Area / Avge.Yield	491 ha / 12 t/ha
Problems	Low yield, Use of local varieties, Non use of disease resistance varieties, Improper Nutrient Management
Technology demonstrated	Arka Arjun (YMV resistant, bush type, pods round and stringless), AMC : Drenching @ 20g /lit (10 DAS) - Vegetable Special- 2gm /lit & Neem soap : @ 7 g/lit
Source	IIHR Bengaluru
Parameters studied	Pod length (cm), Weight (g), No. of pods /plant, Yield (t /ha) and Mosaic Diseases incidence (%)
Season	*Rabi/Summer* 2019-20
Cluster	Tanganahalli, Rangapura & Badavanahalli
SMS	Horticulture

Critical inputs provided	Area (ha)	No. of Farmers
Arka Arjun seeds -40 kg **AMC- 5 kg**	**1.0**	**05**

Tanganahalli



Rangapura

Badavanahalli

Results 2019-20

Particulars	Parameters			Economics				
	No of pods /plant	Length of pods (cm)	Yield (t/ha)	% Increase	Gross Cost (Rs	Gross Return (Rs/ha)	Net Income (Rs/ha)	B:C Ratio
Demo	34.30	14.48	7.65	21.04	36,450	1,53,000	1,16,550	3.20
Local	27.40	13.02	6.32		37,980	1,26,400	88,420	2.33

Price: : Rs.20 /kg

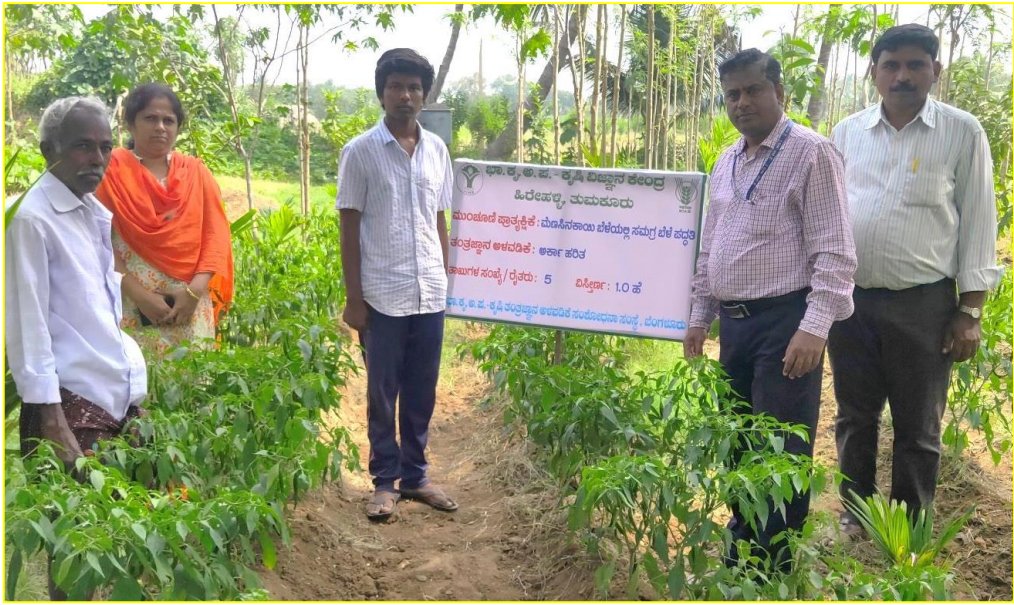
Conclusion

French Bean Arka Arjun was found to be more profitable with an additional income of Rs. 27,498 per ha as compared to Local during summer.

9. Integrated Crop Management in Chilli

Crop	Chilli
Thrust Area	ICM
District Area / Avge.Yield	1393 ha / 14.01 t/ha
Problems	Low yield, Local varieties, Imbalanced nutrition, Disease incidence – Mosaic virus susceptible
Technology demonstrated	Arka Harita -F1 hybrid- Green and turn red on maturity, tolerant to powdery mildew and CMV duration 180 days. AMC: Drenching and Spraying, Vegetable Special- 3gm /lit and Neem Soap @7 gm /lit
Source	IIHR, Bengaluru
Parameters studied	Plant height (cm), No of fruits /plant, Fruit weight (g), Mosaic Incidence, Yield (t/ha)
Cluster Villages	Neralakunte, Rangapura, Tanganahalli and Kumabarahalli
Season	Late Kharif 2019
SMS	Horticulture

Critical inputs provided	Area (ha)	No. of Farmers
Seeds-30 gm, Bio fertilizer AMC- 1 lit, Vegetable special -2 kg, Neem Soap-2 kg	01	05



Demonstration plot –Kumabarahalli and Rangapura

Tanaganahalli

Green Chilli

Red Chilli

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Results 2019-20

Particulars		Parameters				Economics				
	Days taken to 50% flowering	No of fruits /plant	Fruit weight (g)	Disease Incidence(%)	Avg Yield (t/ha)	% increased yield	Gross cost (Rs/ha)	Gross Income (Rs/ha)	Net Income (Rs/ha)	B:C Ratio
Demo	42.24	188.70	4.45	16.24	22.49	26.70	57940	269880	211940	4.65
Control	49.40	168.72	3.92	34.28	17.75		55920	213000	157080	3.80

Price Green chilli - Rs. 12 /kg

Conclusion

- Addl. yield of 5.22 t/ha, i.e. Rs. 56,000/- income (Green chilli)
- Farmers' Feedback: Arka Harita hybrid gives high yield and pungency, Less leaf curl incidence and fetches good price in the market compared to local.
- Harvested good quality fruits.

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10. Integrated Crop Management in China Aster

Crop	China Aster
Thrust Area	ICM
District Area / Avg.Yield	1400 ha / 4 t/ha
Problems	Small size flowers, less shelf life and low yield
Technology demonstrated	ARKA Archana : White colored flowers, more attractive than the local variety, each plant produces about 40 flowers. RDF : 63:100:75 NPK kg/ha, AMC : Drenching @ 20gm /lit (25 DAT), Neem soap : @ 7 g/lit
Source	IIHR Bengaluru
Parameters studied	No of flowers, Flower weight (gm), Yield (t/ha)
Cluster Villages	Badavanahalli, Rangapura, Chikkahalli
Season	Rabi/Summer, 2019-20
SMS	Horticulture

Critical inputs provided	Area (ha)	No. of Farmers
Aster – Arka Archana Seeds – 750 g/ha Bio fertilizers- AMC -5 kg	01	05

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Demonstration plot at Chikkahalli Tumkur

Results 2019-20

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	35.12	4.57	7.26	10.33	34,320	1,30,680	96360	3.80
Local	32.88	4.24	6.58		36,850	1,18,440	81590	3.21

Price Rs. 18 /kg

Conclusion

- Farmers' Feedback: Early flowering (38-40 days), Medium sized and more numbers of flowers per plant, suited for loose flowers, garland and bedding
- Medium shelf life (4.6 days)

11. Demonstration of Aromatic crop- Lemon grass – Krishna

Crop	Lemon Grass
Thrust Area	HYV
Problems	Erratic rainfall and delayed monsoon, high temperature and reducing ground nut area
Technology demonstrated	Krishna variety: Medium tall , high tiller and herb with high oil yielding Citral type High yield of bio mass (25-28 Mt/ha) with high oil yield (230-250 kg/ha). Suitable for plains. FYM : 10 ton / ha, No. of Slips : 25000 /ha, RDF: 250:100:60 NPK kg /ha.
Source	CIMAP Bengaluru
Parameters studied	Growth parameters, herbage and oil yield
Cluster Villages	Neralakunte Pavagada
Season	Rabi/Summer, 2019-20
SMS	Horticulture

Critical inputs provided	Area (ha)	No. of Farmers
Lemon grass Slips – Krishna (CIMAP)-25000 Nos	01	05

Results 2019-20

Particulars	Parameters			Economics			
	No of tillers /plant	Herbage yield (t/ha)	Lemon grass oil yield (kg)	Gross Cost (Rs/ha)	Gross Return (Rs/ha)	Net Income (Rs/ha)	B:C Ratio
Krishna	27.44	13.93	115.40	47573	115400	67827	2.42

Demonstration plot at Neralakunte

Price Rs. 1000 /kg

Distillation unit

12. Demonstration of Aromatic crop- Palmarosa– PRC1

Crop	Palmarosa
Thrust Area	HYV
Problems	Erratic rainfall and delayed monsoon, high temperature and reducing ground nut area
Technology demonstrated	PRC-1: High tall , high tiller and herb with high oil yielding Oil yield - 400 q/ha; Oil yield -225 kg/ha, geraniol 75-80%. Suitable for plains. FYM : 10 ton / ha, Seeds: 2.5 kg/ha, RDF: 60:50:40 NPK kg /ha.
Source	CIMAP Bengaluru
Parameters studied	Growth parameters, herbage and oil yield
Cluster Villages	Neralakunte Pavagada
Season	Rabi/Summer, 2019-20
SMS	Horticulture

Critical inputs provided	Area (ha)	No. of Farmers
Palmarosa seeds – PRC-1 (CIMAP) 2.5 kg /ha	01	05

Results 2019-20

Particulars	Parameters			Economics			
	No of tillers /plant	Herbage yield (t/ha)	Palmrosa oil yield (kg)	Gross Cost (Rs/ha)	Gross Return (Rs/ha)	Net Income (Rs/ha)	B:C Ratio
PRC-1	12.23	32.4	132.50	52838	185500	132662	3.51

Demonstration plot at Neralakunte

Price Rs. 1400 /kg

13.Demonstration of Fodder Sorghum CoFS 29

Season: Kharif, 2019

Cluster: Tanganahalli,Koratagere & Kodigenahalli, Tumakuru

No. of Demonstrations: 5
Area : 2.5ha

Parameters: Fodder Yield, No. of Tillers, Milk Yield (Before & After)

14.Demonstration of Marvel grass *(Dichanthium annulatum)*

Season: Rabi, 2019

No. of Demonstrations: 5
Area : 2.5ha

Cluster: Tanganahalli,Koratagere & Kodigenahalli, Tumakuru

15.Demonstration of Hybrid Napier

Season: Kharif, 2019

Cluster: Tanganahalli,Koratagere & Kodigenahalli, Tumakuru

No. of Demonstrations: 5
Area : 2.5ha

Parameters: Fodder Yield, No. of Tillers, Milk Yield (Before & After)

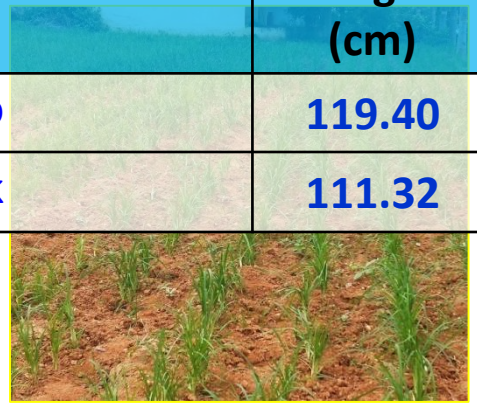
16.Demonstration of Finger millet Variety KMR 340 for Value Addition

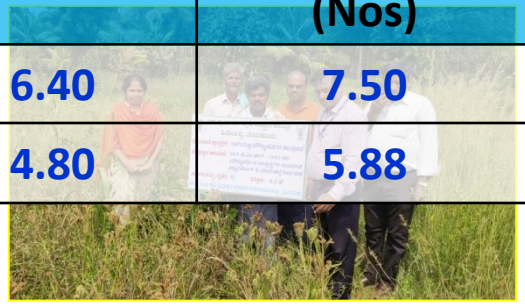
Crop	Ragi
Thrust Area	Value addition
District Area	1.87 lakh, ha
Problems	Less acceptability of value added products from existing varieties due to brown colour
Technology Demonstrated	KMR-340: white Ragi variety Value addition: Ragi Malt, Ragi hurihittu, Ragi chakli, Ragi laddu and Ragi Biscuit
Source	UAS, Bengaluru
Parameters studied	Yield parameters, economics , BCR, Consumer Acceptability & Market linkage
DFI Villages	Kumbarahalli(sira), Tanganahalli (Koratagere) and Rangapura (Madugiri)
Season	Late Kharif 2019
SMS	Home Science

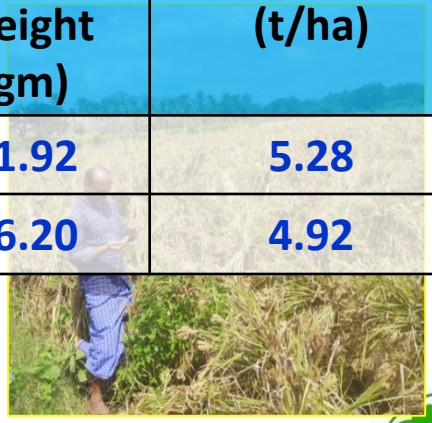
Critical inputs provided	Area (ha)	No. of Farmers
KMR-340 seeds-5kg, Packing materials-5kg and Labels-400nos. per demo	4	10

Results 2019-20

Particulars	Plant Height (cm)	No of Ear heads(Nos)	Fingers/ear head (Nos)	Test Weight (gm)	Straw Yield (t/ha)
Demo	119.40	6.40	7.50	21.92	5.28
Check	111.32	4.80	5.88	16.20	4.92







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Particulars	Yield (q/ha)	% Increase	Gross cost (Rs/ha)	Gross Return (Rs/ha)	Net Return (Rs/ha)	BCR
Demo	24.20	23.46	35,680	88,600	50,920	2.48
Check	19.60		33,480	53,980	20,500	1.61

Particulars	Ragi Malt (Rs/kg)	Ragi laddu (Rs/kg)	Ragi Papad (Rs/kg)	Ragi Mixture (Rs/kg)	Ragi Biscuit (Rs/kg)
Demo (White Ragi)	200	300	250	250	350
Check (Brown Ragl)	160	250	200	220	300

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Conclusion

- Farmers' Feedback: Yield of KMR-340 variety was 23.46 % more compared to check.
- Value added products prepared from KMR-340 white ragi variety fetched more value (20-25%) compared to brown ragi.
- Best suited for bakery products preparation.

17.Demonstration of Foxtail millet Variety DHFt109-3 for Value Addition

Crop	Foxtail millet
Thrust Area	Value addition
Problems	Reduction in area under minor millets due to lack of knowledge on nutritional value and non availability of processing units
Technology Demonstrated	DHFt 109-3: Foxtail millet variety Value addition:Cleaned Foxtail, Diabitic mix and Upama mix
Source	UAS, Dharwad
Parameters studied	Yield parameters, economics , BCR, Consumer Acceptability & Market linkage
DFI Villages	Kumbarahalli(sira), Tanganahalli (Koratagere) and Rangapura (Madugiri)
Season	Late Kharif 2019
SMS	Home Science

Critical inputs provided	Area (ha)	No. of Farmers
DHFt 109-3 foxtail variety seeds-5kg, Packing materials-5kg and Labels-400nos. per demo	4	10

Results 2019-20

Particulars	Plant Height (cm)	No of Ear heads(Nos)	Straw Yield (t/ha)
Demo	124.20	5.90	2.68
Check	119.80	5.08	2.14

Particulars	Yield (q/ha)	% Increase	Gross cost (Rs/ha)	Gross Return (Rs/ha)	Net Return (Rs/ha)	BCR
Demo	15.60	20.93	27,300	51,340	24,040	1.88
Check	12.90		25,800	42,280	16,480	1.63

On-going….

Conclusion

- Farmers' Feedback: Yield of DHFt109-3 variety was 20.93 % more compared to check.
- Value addition to DHFt 109-3 variety will be done during 2020

EDP: Tamarind: Value Addition, Branding and Market linkage

Problem:

- Lack of knowledge on processing and value addition, low income

Dist. Area	Dist. Avg. Yield	Potential Yield
3310 ha	4.4 t/ha	5.34 t/ha

DFI Strategy: Value chain development and market linkage

Technology: IIHR (B)

Demonstration on preparation of value added products (tamarind powder, tamarind thokku and tamarind Lollipop

Parameters

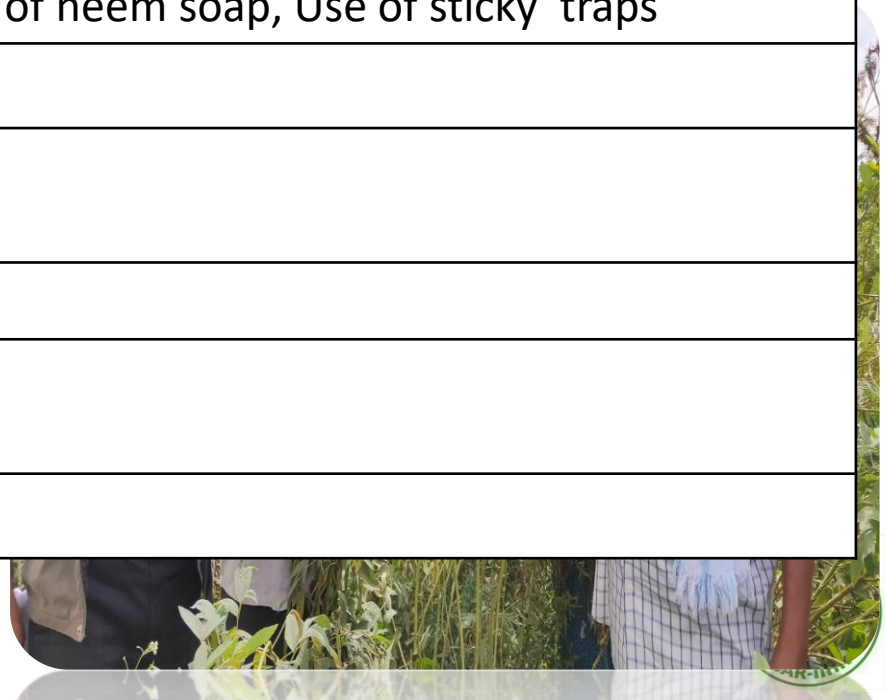
Demos: 03
Villages: Kumbarahalli (S), Tanganahalli(K)
Kodigenahalli (T)
Scientists – HS, Horti & SS

- Quantity of different value added products
- BCR
- consumer acceptability
- Income

CFLDs under NFSM & NMOOP

1 .Enhancement of Pigeon pea yield through introduction of BRG – 5 (NFSM)

Crop	Pigeon pea
Thrust area	HYV
Variety	BRG-5
Area & Yield of District	25820 ha,7-9 qt/ha
Problem	Use of local low yielding varieties.
Technology to be demonstrated	Demonstration of BRG-5 Variety, Neem cake application, use of foliar micronutrient, use of neem soap, Use of sticky traps
Source of Technology	UAS, Bengaluru
Parameters to be taken	Yield and Economics
Season	Kharif, 2019-20
Area and No. of Demonstrations	30 ha and 75 Nos.
SMS	Plant Protection



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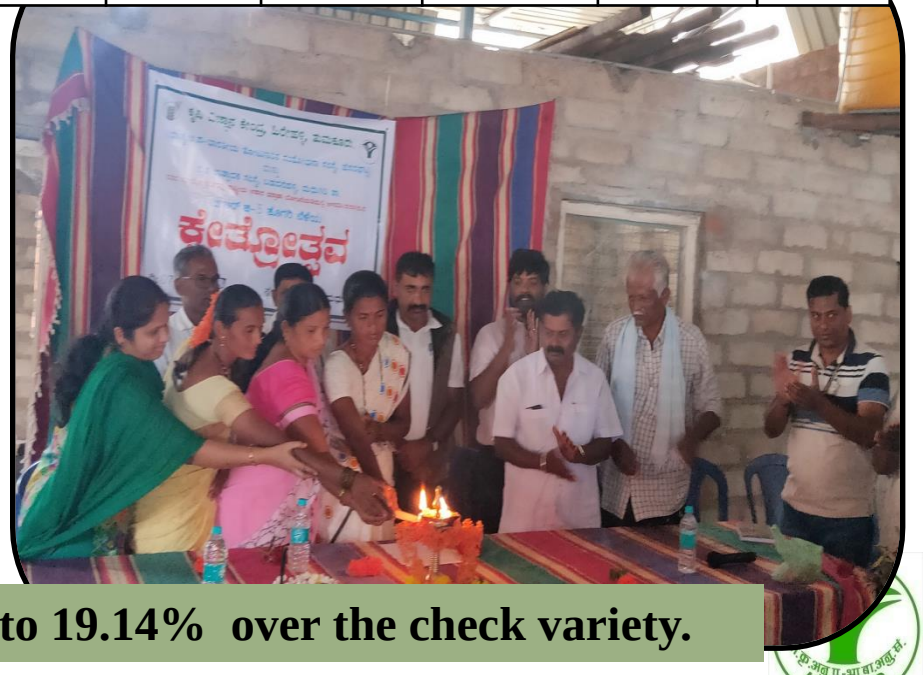
Results of 2018-19

Details of technology	Height of the Plant in cms	Avg. No. of pods per plant	Avg. No. of seeds per pod	Test weight In gms	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	164.6	141	5.56	13.40	10.68	19.14	25510	61944	36434	2.43
Control	151.7	128	4.88	10.80	8.64		26611	50112	23501	1.88



Conclusion:

BRG-5 was recorded higher yield up to 19.14% over the check variety.

2. Enhancement of Groundnut yield (K-6) under NMOOP

Crop	Groundnut
Thrust area	HYV
Variety	K-6
Area & Yield of District	1.20 lakh ha, 7-8 qt/ha,
Problem	➢ Use of old Local variety ➢ High incidence of pests and diseases ➢ Less yield
Technology to be demonstrated	Demonstration of K-6 Variety
Source of Technology	UAS, Bengaluru
Parameters to be taken	Yield and Economics
Season	Kharif, 2019-20
Area and No. of Demonstrations	20ha and 50 No,s
SMS	Plant Protection

Results of 2017-18

Details of technology	Stem rot incidence in %	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	6.66	10.71	23.95	23309	54513.9	31204.9	2.33
Control	12.34	8.64		22228	43977.6	21749.6	1.97

Conclusion:

Groundnut price: Rs 5000/qt

K-6 was found to have better yield than TMV-2 (control)

Training of farmers and Extension Personnel

Training programmes conducted

Category	Subjects	Number	No. of participants
Farmers and Farm women	Crop Production	03	90
	Production technologies in Horticulture	07	194
	Plant protection	4	130
	Soil and nutrient management	21	731
	Value Addition	1	20
	Animal Husbandry	1	102
Rural Youth	Mushroom Cultivation	2	31
	Beekeeping	2	67
Extension functionaries	Nutritional Garden / Production Technique	2	60
	Dry land Horticulture	1	126
	Drought Proof Technology	1	40
	Total	**45**	**1591**

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Training Activities (2019)

Advance Production Technologies in Horticulture, 2nd Aug, 2019, at Midatarahalli, Madhugiri

Work shop on "Nutri - Garden " for Krishi Vigyan Kendras' Scientists on 5th Aug 2019.

Training programme on beekeeping, Aug 31st, 2019

Training programme on Drought proofing technologies, June 11th , 2019

Training Activities (2019)

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Extension Activities for Awareness Creation

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Extension Programmes

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No.of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	3	700	150	850	210	120	330	35	12	47
Kisan Mela	8	24549	9038	33587	2000	200	2200	1292	155	1447
Kisan Ghosthi	3	487	142	629	0	0	0	27	4	31
Exhibition	5	1598	447	2045	6	8	14	51	20	71
Film Show										
Method Demonstrations	3	6	3	9	1	1	2	0	0	0
Farmers Seminar	4	152	43	195	0	0	0	7	14	21
Workshop										
Group meetings	3	45	5	50	5	1	6	7	2	9
Lectures delivered as resource persons	13	2966	996	3962	25	33	58	130	63	193

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Extension Programmes

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No.of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Advisory Services	**53**	**2794**	**530**	**3324**	**186**	**134**	**320**	**285**	**155**	**440**
Scientific visit to farmers field	42	156	31	187	55	24	79	7	4	**11**
Farmers visit to KVK										
Diagnostic visits	36	110	19	129	12	3	15	13	5	**18**
Celebration of important days (specify)	7	246	65	311	0	0	0	55	13	**68**
Any Other (Specify)										
Bimonthly Meeting	2	0	0	0	0	0	0	75	40	**115**
Total	**182**	**33809**	**11469**	**45278**	**2500**	**524**	**3024**	**1984**	**487**	**2471**

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Special Extension Programmes

Nature of Extension Programme	Date(s) conducted	No. of farmers (General)			No. of farmers SC / ST			No.of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	**Total**
Jal Shakti Abhiyan	24.08.2019	600	150	750	0	0	0	10	6	16
	28.08.2019	600	200	800	0	0	0	10	4	14
Fertilizer Use Awareness Campaign	22.10.2019	102	38	140	0	0	0	0	0	0
National Animal Disease Control Programme	11.09.2019	78	20	98	0	0	0	15	5	20
Tree Plantation Campaign	17.09.2019	27	0	0	0	0	0	4	0	0

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Extension Activities (2019)

PM Programme telecast

Method demonstration

JSA Programme, Madhugiri

JSA Progeamme, Koratagere

Extension Activities (2019)

Environmental Day

Field visit

Field Day

Diagnostic field visit

Extension Activities (2019)

Hindi Workshop

Yoga Day

Krishi Abhiyana

TN farmers' visit (ATMA)

Extension Activities (2019)

Awareness programme for farmers on proper use of fertilizer, 22nd October 2019

Mass Tree Planting and Kisan Goshti on 17th September 2019 (Birthday of PM)

Workshop on Permaculture at KVK Hirehalli from 23-26 Sept., 2019

Other Extension Activities

Sl. No.	Nature of literature/publications/ Activities	No. of Copies/Programmes
1	Technical bulletins	1
2	Popular articles – Local language	2
3	Extension literatures	4
4	Book	1
5	Research Abstracts	7
	TOTAL	**15**

S. No.	Type of media	Title
1	CD / DVD	ICAR-KVK Hirehalli : A glance
2	Social media groups with KVK as Admin	eHorticulture Whatsapp Group
3	Facebook account name	iihrkvk https://www.facebook.com/iihr.kvk
4	Twitter	https://twitter.com/iihrkvk
5	Instagram account name	kvkiihr

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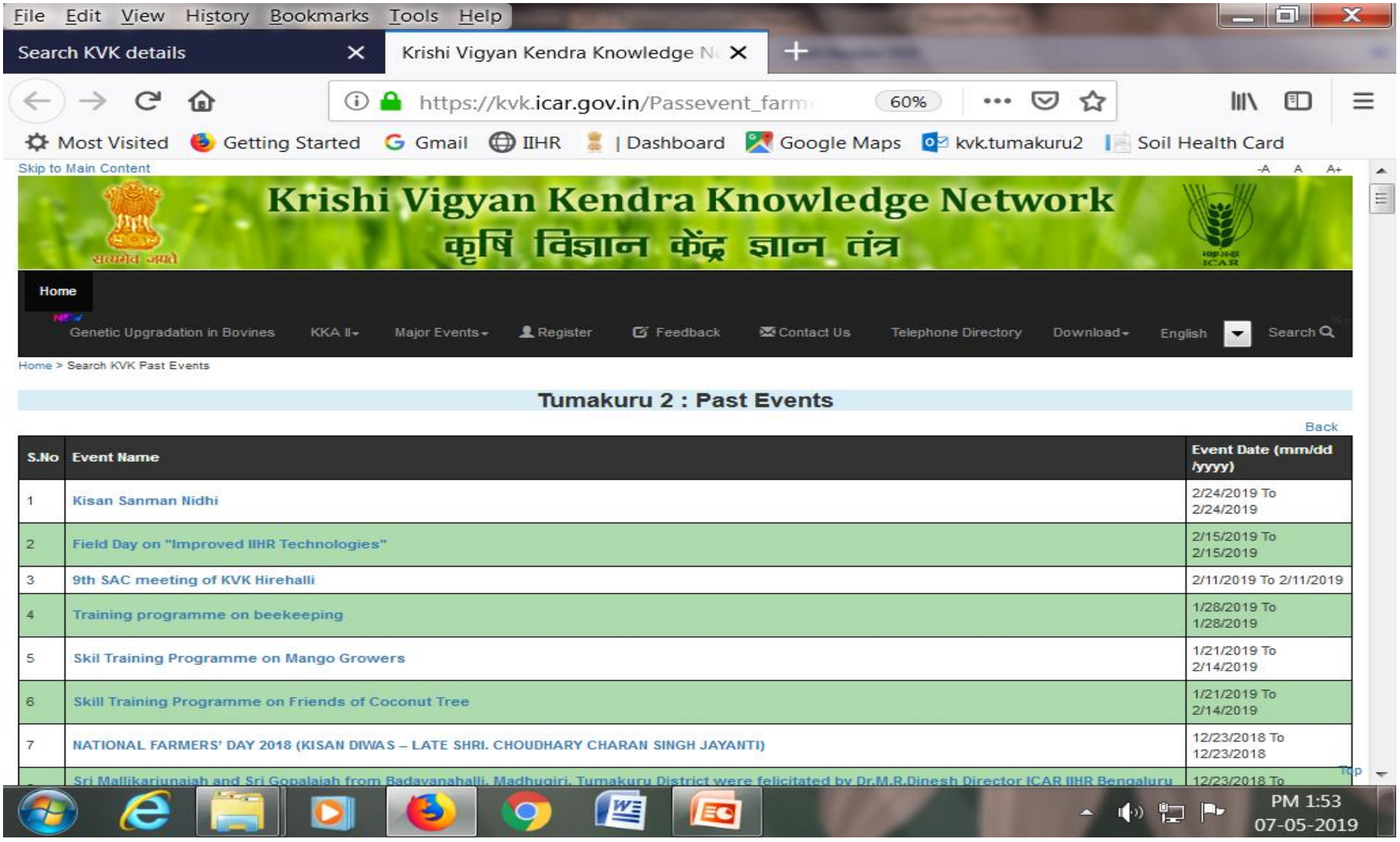
KVK-Network Portal



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41 events covered so far

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Kisan Mobile Advisory Services

Topics	Numbers
Crops	41
Awareness	31
Marketing	2
Total SMS sent	74
No. of farmers covered	22820

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News paper Coverage

ಕಣ್ಮರೆಯಾಗುತ್ತಿರುವ ಕಲ್ಲು ಬಾವಿಗಳು

ಬತ್ತಿದ ಆಂತರ್ಜಲದಿಂದ ಬಾವಿಗಳು ಮಾಯ । ಪಾಲಿಥೀನ್ ಹೊದಿಕೆಯ ಕೃಷಿ ಹೊಂಡಗಳೇ ಈಗ ಆಧಾರ

ಮಾವುಹಣ್ಣಿನ ನೊಣದ ಸಮಗ್ರ ಹತೋಟಿ ಕ್ರಮಗಳು

ಕೃಷಿ ಅಭಿವೃದ್ಧಿಗೆ ಹೊಸ ತಂತ್ರಜ್ಞಾನ ಅಗತ್ಯ

ಕೋಲಾ ಗ್ರಾಮದಲ್ಲಿ ಇಲಾಖೆಗಳ ನಡಿಗೆ ರೈತರ ಮನೆ ಬಾಗಿಲಿಗೆ ಮತ್ತು ಸಮಗ್ರ ಕೃಷಿ ಅಭಿಯಾನ

ಮೆಣಸಿನಕಾಯಿ ಬೆಳೆ ಕ್ಷೇತ್ರೋತ್ಸವ

ಮಾಗಿ ಉಳುಮೆ–ಒಂದು ವಿಶೇಷತೆ

ತುಮಕೂರಿನಲ್ಲಿ ನಡೆದ ಅಡಕೆ ಸಮಾವೇಶದಲ್ಲಿ ಹಕ್ಕೊತ್ತಾಯ । ವಿದೇಶಿ ಆಮದಿಗೆ ವಿರೋಧ

ಅಡಕೆ ಬೆಳೆಗಾರರ ಮೇಲಿನ ಪ್ರಹಾರ ನಿಲ್ಲಲಿ

ಕಡಿಮೆ ನೀರಿಗೆ ಸಹಜ ಬೇಸಾಯ ಅನುಸರಣೆ ಸೂಕ್ತ

ಸಹಜ ಬೇಸಾಯ ವೀಕ್ಷಿಸಿದ ತಮಿಳುನಾಡಿನ ಸಾವಯವ ರೈತರು

ಕೃಷಿ ಪ್ರಗತಿ

ಕಲ್ಪತರು ತೆಂಗಿಗೆ ಆವರಿಸಿದೆ ಬರ ಸಿಡಿಲು । ಬೆಳೆಯಿಂದ ವಿಮುಖನಾಗುತ್ತಿರುವ ಅನ್ನದಾತ

ಅತಂತ್ರ ಸ್ಥಿತಿಯಲ್ಲಿ ತೆಂಗು ಬೆಳೆಗಾರ

ಕೃಷಿ ಪ್ರಗತಿ

ತೆಂಗಿನ ಬೆಳೆಗೆ ಬಾಧಿಸುವ ಪ್ರಮುಖ ಕೀಟ ಏಳ್ ಮೊಣ

ತುಮಕೂರಿನಲ್ಲಿ ಅಡಕೆ ಬೆಳೆಗಾರರ ಹಕ್ಕೊತ್ತಾಯ ಸಮಾವೇಶ। ಕೇಂದ್ರ ಸರಕಾರ ಕಡಿವಾಣ ಹಾಕಲೆಂದು ಸಂಸದ ಬಸವರಾಜು ಒತ್ತಾಯ

ಕಳ್ಳಮಾರ್ಗದ ಅಡಕೆಗೆ ಕಡಿವಾಣ ಹಾಕಿ

ಮಣ್ಣಿನ ಆರೋಗ್ಯದ ಕಾಳಜಿ ಅಗತ್ಯ

HRD & Awards

Human Resource Development – 2019

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr.B.Hanumanthe Gowda	SMS (Plant Protection)	TOT training programme - ASCI	GKVK, Bangalore	Nov., 20-22, 2019
Smt. Radha R.Banakar	SMS (Home Science)	TOT training programme - ASCI	GKVK, Bangalore	Nov., 20-22, 2019
Shri.P.R.Ramesh	SMS (Soil Science)	Bio Fertilizer related aspects in FCO	ICAR-IIHR, Hesaraghatta	01.11.2019

Awards & Recognition

Best NICRA KVK Award, 2019 by ICAR- CRIDA, Hyderabad on 04.06.2019.

VAMSHI PURSKAAR award 2019, by Vamshi Academy of Music Trust, Rajajinagar, Bengaluru on 10.11.2019.

Best oral presentation by Mr KN Jagadish, eSARD Conference, KVK, Mysore, 16-12-19

Sri Srinivas Reddy, Pavagada farmer received Best Pomegranate farmer award at Horti Mela

Production of Seeds, Planting materials and other Products

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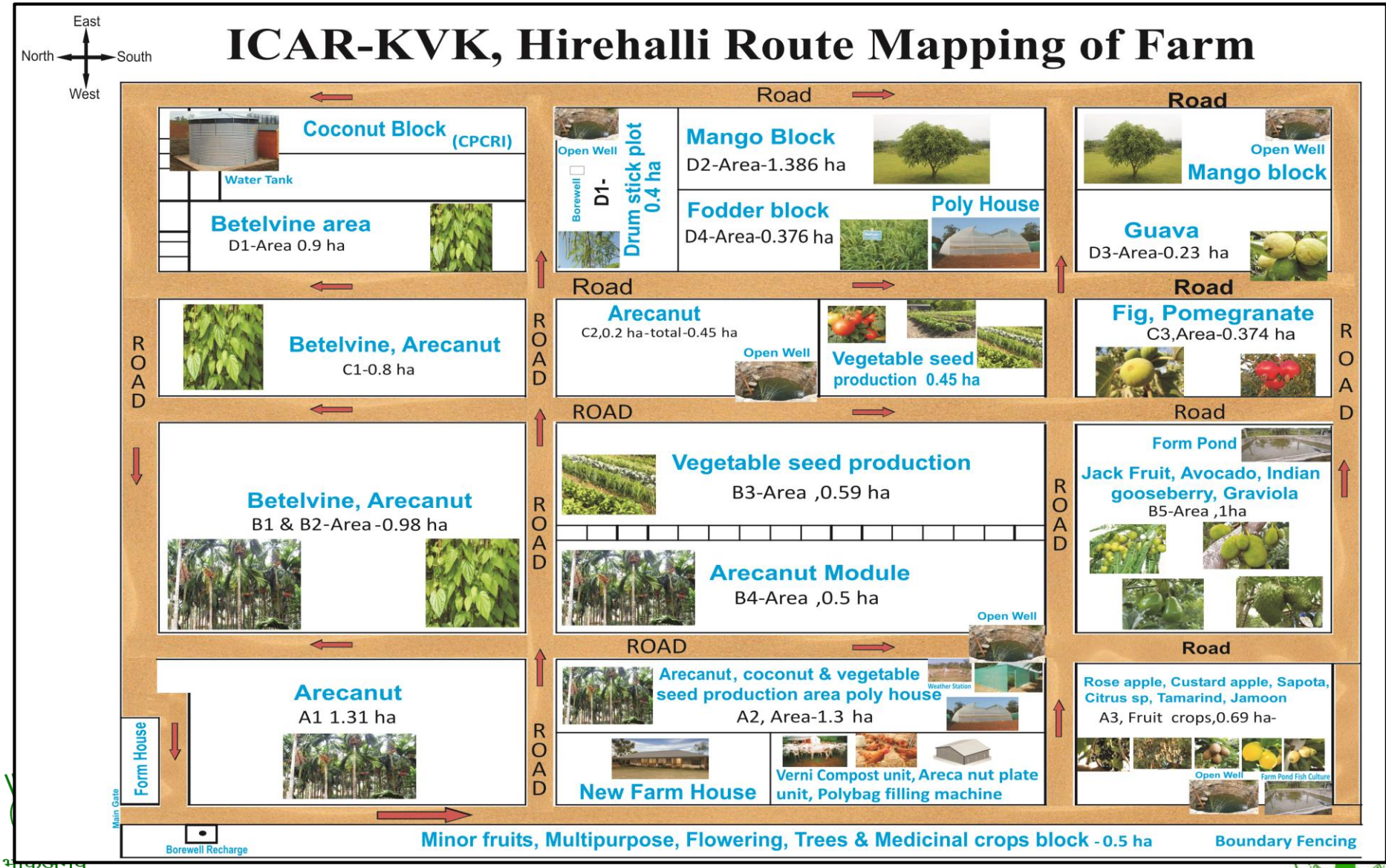
KVK Farm Map


East
North
South
West
ICAR-KVK, Hirehalli Route Mapping of Farm
Road
Coconut Block (CPCRI)
Water Tank
Betelvine area
D1-Area 0.9 ha
Open Well
Borewell
D1-
Drum stick plot 0.4 ha
Mango Block
D2-Area-1.386 ha
Fodder block
D4-Area-0.376 ha
Poly House
Open Well
Mango block
Guava
D3-Area-0.23 ha
ROAD
Betelvine, Arecanut
C1-0.8 ha
Arecanut
C2,0.2 ha-total-0.45 ha
Open Well
Vegetable seed production 0.45 ha
Fig, Pomegranate
C3,Area-0.374 ha
Betelvine, Arecanut
B1 & B2-Area -0.98 ha
Vegetable seed production
B3-Area ,0.59 ha
Arecanut Module
B4-Area ,0.5 ha
Open Well
Form Pond
Jack Fruit, Avocado, Indian gooseberry, Graviola
B5-Area ,1ha
Arecanut
A1 1.31 ha
Form House
Main Gate
Arecanut, coconut & vegetable seed production area poly house
A2, Area-1.3 ha
Weather Station
New Farm House
Verni Compost unit, Areca nut plate unit, Polybag filling machine
Rose apple, Custard apple, Sapota, Citrus sp, Tamarind, Jamoon
A3, Fruit crops,0.69 ha-
Open Well
Farm Pond Fish Culture
Borewell Recharge
Minor fruits, Multipurpose, Flowering, Trees & Medicinal crops block - 0.5 ha
Boundary Fencing

Total Area: 15.1 ha
Cultivable Area: 12.15 ha

No	Details	Area (Ha)
1	Arecanut	3.75
2	Coconut	1
3	Mango	2
4	Custard Apple	0.1
5	Sapota	0.2
6	Citrus	0.3
7	Tamarind	0.2
8	Jamoon	0.1
9	Amla	1.5

No	Details	Area (Ha)
10	Guava	0.5
11	Vegetables (Seed Production)	2.0
12	Fodder	0.3
13	Minor fruits	0.2
14	Poly house, Shade net (Nursery)	0.2
15	Other Demo units, Buildings	2.75

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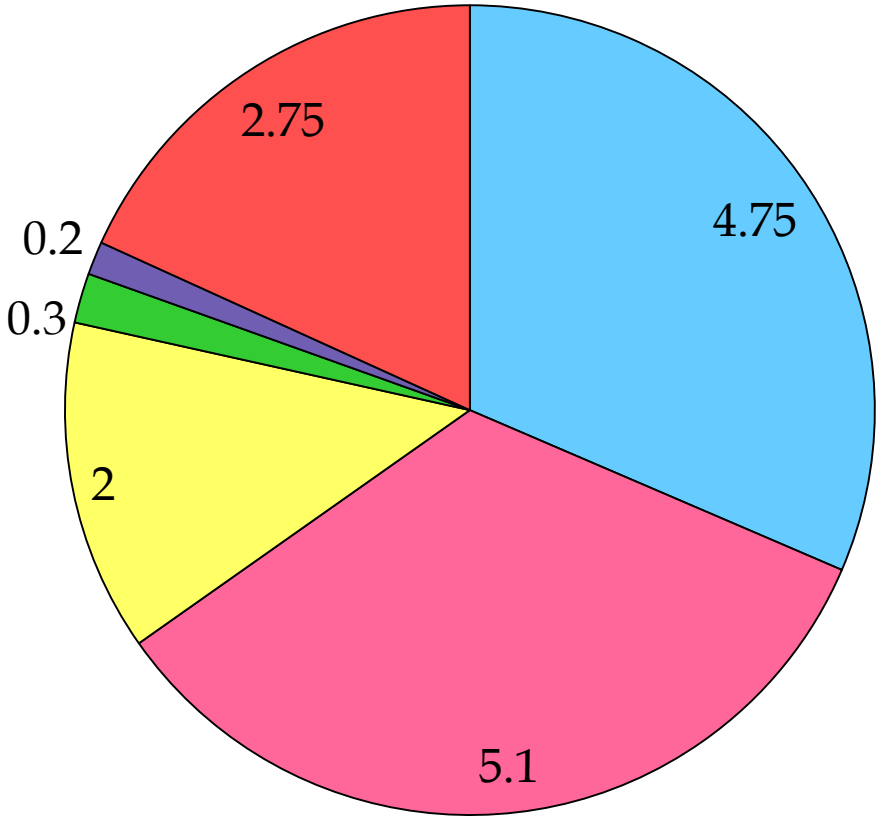
KVK Farm – Diversification (Ha)



Seed Production Details

Arka Kalyan – Onion

Arka Prasan – Ridge Gourd

Arka Shirish –Brinjal

Arka Isha – Coriander

Production and Sale of Seeds of Cereals and Pulses (SMS-Horti)

Crop category	Name of the crop	Name of the Variety	Quantity of seed (q)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)					
	Ragi	KMR-340	0.60	360	12
	Ragi	Indaf-7	9.0	36000	180
	Ragi	ML-365	4.79	19160	145
Millets	Brown top millet (Korale)	Local	1.83	10980	36
	Little Millet (Same)	Local	0.14	1120	3
Oilseeds					
	Mustard	Pusa-3	0.30	24	3
Pulses					
	Red gram	BRG-5	4.30	32475	91

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Production and Sale of Vegetable Seeds (SMS-Horti)

Name of the crop	Name of the Variety	Quantity of seed (q)	Value (Rs)	Number of farmers to whom provided
Amaranthus	Arka Suguna	0.016	800	5
Bottlegourd	Arka Bahar	0.22	22000	6
Brinjal	Arka Sirish	0.028	3708	10
Chilli	Arka Suphal	0.050	990	3
Tomato	Arka Meghali	0.065	1300	5
Coriander	Arka Isha	0.25	10000	30
French Bean	Arka Suvidha	0.485	12125	50
Okra	Arka Anamika	0.11	5380	25
Onion	Arka Kalyan	0.88	105421	50
Palak	Arka Anupama	0.695	27800	20
Pumpkin	Arka Suryamukhi	0.0645	6450	10
Radish	Arka Nishanth	0.080	400	2
Ridge gourd	Arka prasanna	0.32	32200	15
Cow Pea	Arka Garima	0.48	12000	10
Vegetable Seed Kit (Nos.)	Mixed	3823	573450	1911

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Production and Sale of other crop seeds (SMS-Horti)

Crop category	Name of the crop	Name of the Variety	Quantity of seed (q)	Value (Rs)	Number of farmers to whom provided
Fodder crop seeds					
	Fodder Cowpea	COFC-8	0.17	4250	17
	Fodder Sorghum	COFS-29	0.11	5750	12
Fiber crops					
Forest Species					
Others (specify)					
	Sunhemp (Kg.)	Local	0.024	168	2
	Mucuna (Kg.)	Arka Ashwini	0.01	80	1
	Arecanut Seed Nuts (Loose) – Nos.	Hirehalli Tall	39520	197600	28
	Arecanut Seed Nuts (Degraded)	Hirehalli Tall	21.12	42240	1
	Arecanut Seed Nuts (Auction)	Hirehalli Tall	-	440050	1
	Coconut (Auction)	Tiptur Tall	-	65000	1

Planting Materials Production

GUAVA

1. ALLAHABAD SAFEDA
2. LUCKNOW - 49
3. MRIDULA
4. PINK FLESH

CITRUS CROPS
1. KINNOW MANDARIN
2. PUMELO
3. ROUGH LEMON
4. SATHGUDI
5. NAGPUR ORANGE
6. COORG MANDARIN
7. SEEDLESS LEMON
8. KAGAZI LIME

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TAMARIND

1. PKM - 1
2. SWEET TAMARIND
3. VANTOOR
4. ORIGUM

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Production and sale of planting materials (SMS-Horti)

Crop category	Name of the crop	Variety	Number	Value (Rs.)	Number of farmers to whom provided
Vegetable seedlings					
	Drumstick Seedlings	PKM-1	2642	39630	8
Fruits					
	Papaya Seedlings	Arka Prabhath	2942	35304	6
	Acidlime Seedlings	Local	113	4520	15
	Tamarind Seedlings	PKM-1	494	34580	28
	Amla Grafts	NA7	642	44940	27
	Guava Grafts	Allahabad Safed, Arka Mridula and Arka Kiran	3083	215810	34

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Production and sale of planting materials (SMS-Horti)

Crop category	Name of the crop	Variety	Number	Value (Rs.)	Number of farmers to whom provided
Fruits	Jamun Seedlings	Dhupadal	5	350	2
	Jackfruit Seedlings	Chandra Halsu	17	680	8
	Lime Seedlings	Balaji	1309	52360	33
	Mango Grafts	Alphanso, Mallika& Dashahari	3590	251300	28
	Pomello Seedlings	Devanahalli Local	369	14760	42
	Custard Apple Seedlings	Balnagar	37	2590	12
	Lakshmana Phala Seedlings	Local	119	4760	41
	Rose Apple Seedlings	Local	64	1280	22
	Sapota Grafts	Cricket Ball	164	11480	13
	Fig Seedlings	Poona	5	100	2
	Cherry Seedlings	Local	5	100	2
	Guava Root Stock	Local	40	1600	5
	Jackfruit Root Stock	Local	800	32000	2

Production and sale of planting materials (SMS-Horti)

Crop category	Name of the crop	Variety	Number	Value (Rs.)	Number of farmers
Medicinal and Aromatic					
	Betelvine Cuttings	Hirehalli Local	476	7140	3
Plantation					
	Coconut Seedlings	Tiptur Tall	125	10000	4
	Arecanut Seedlings	Hirehalli Tall	5281	211240	18
	Arecanut Sprouts	Hirehalli Tall	18870	188700	26
Fodder crop saplings					
	Napier Grass Cuttings	Napier	200	200	4
	Guinea Grass Cuttings	Guinea	100	100	2
Others(specify)					
	Jamoon Scions	Dhupadala	10	20	1
	Guava Scions	Allahabad Safed	120	240	2
	Amla Scions	NA-5	10	20	1
Total			**41632**	**1165804**	**391**

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Sale of Animal components 2019 (SMS-SS)

Others	Qty	Cost (Rs.)	Amount (Rs.)
Bannur Sheep – 3 Nos. (Kg)	119	300	35,700
Hallikar Bull (No)	1	30,000	30,000
Total			**65,700**

Technological Products from KVK

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Technological Products from KVK

I. Bio-fertilizer

1. Arka Microbial Consortium (AMC) – Powder
2. AMC - Liquid

II. Micro-nutrient formulations

3. Banana Special
4. Mango Special
5. Vegetable Special
6. Citrus Special

III. Bio-pesticides/repellents/traps

7. Neem Soap
8. Pongamia Soap
9. Sealer cum Healer
10. Pheromone traps and Lures

IV. Home Science Products

11. Amla Squash
12. Amla Candies
13. Ragi Malt
14. Mushroom Spawn

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Production of KVK-Products

SMS	Bio Products	Name of the bio-product	Qty (q)	Value (Rs.)	No. of Farmers covered
SMS (Soil Sci)	Micro Nutrient Fertilizers	Banana Special	103.37	1550550	1292
		Vegetable Special	68.12	1021800	1135
		Mango Special	73.75	1106250	1229
		Citrus Special	34.34	515100	858
	Bio-Fertilizers	Arka Microbial consortium-Powder	10.80	152180	270
		Liquid (Lit)	50.64	126600	844
	Pheromone Traps/Lures (No.)	Fruit Fly Traps (Nos.)	4633	92660	722
		Fruit Fly Lures (Nos.)	11518	230360	798
		Fruit Fly Trap Set (Nos.)	49	4900	11

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Production of KVK-Products

SMS	Bio Products	Name of the bio-product	Qty (q)	Value (Rs.)	No. of Farmers covered
SMS (PP)	Bio-pesticides	Neem Soap	41.52	1079520	1250
		Pongamia Soap	18.25	383250	360
		Sealer cum Healer	5.51	99180	13
SMS-(Home Sci)	Home Science Products (Kg.)	Amla Squash (Lit)	114	14820	80
		Amla Candy (No. of 200 g packs)	221	13260	125
		Mushroom Spawn	6.80	51000	25
		Ragi Malt (No of 250 g packs)	271	13550	120

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Soil, Water and Plant Analysis (SMS –Soil Sci)

Particulars	No. of samples	No of farmers	Amount (Rs)
Soil	1,853	1,312	
Water	695	628	
Plant	63	51	
Total	**2,611**	**1,991**	**5.64 Lakhs**

Activities as Resource and Knowledge Centre

Demonstration on Nutri gardens for Nutrition security to the farm families

Crop	:	Vegetables and fruits
Variety	:	Arka varieties
Problem	:	Lack of knowledge on establishment of nutrition garden,lack of awareness about nutritious food, non-utilization of resources-Water, Space & organic waste
Technology to be Demonstrated	:	Demonstration on Establishment of scientific Nutrition Garden
Source of Technology	:	UAS ,Bengaluru
Parameters to be taken	:	Yield, Average Vegetable production per month, Cost of savings through nutritional garden,, vegetables adequacy and Daily Intake
DFI village	:	Kumbarahalli:Sira Tq and Rangapura:Madugiri Tq
Season & Year	:	Kharif & Rabi, 2019-20
SMS	:	SMS (HS)

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Critical Inputs distributed to farm women

Sl. No.	Critical Inputs	Quantity
1	Vegetable seed kit	1 No
2	Vegetable special	0.5 kg
3	AMC liquid	1 lt
4	Neem soap	0.5 kg
5	Saplings(Drumstick,papaya,Lime,Chakramuni, Curry leaf, Banana)	Each one

Group Discussion on Nutri garden

Training on Nutri garden

Demonstration on bed preparation

Distribution of critical inputs

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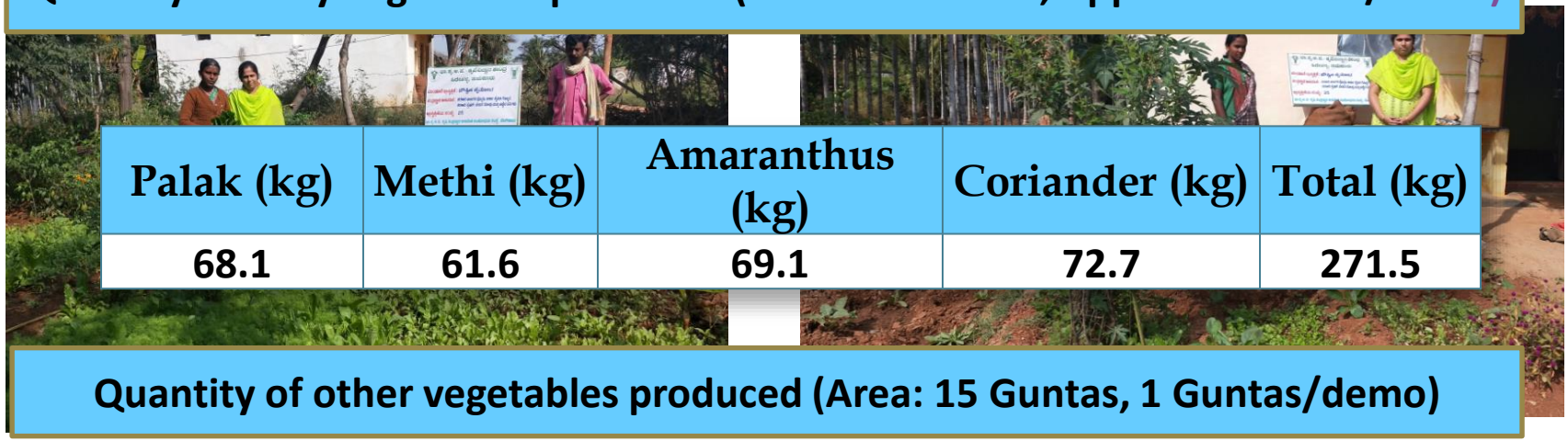
Quantity of leafy vegetables produced (Area: 15 Guntas, Approx 1 Guntas/demo)

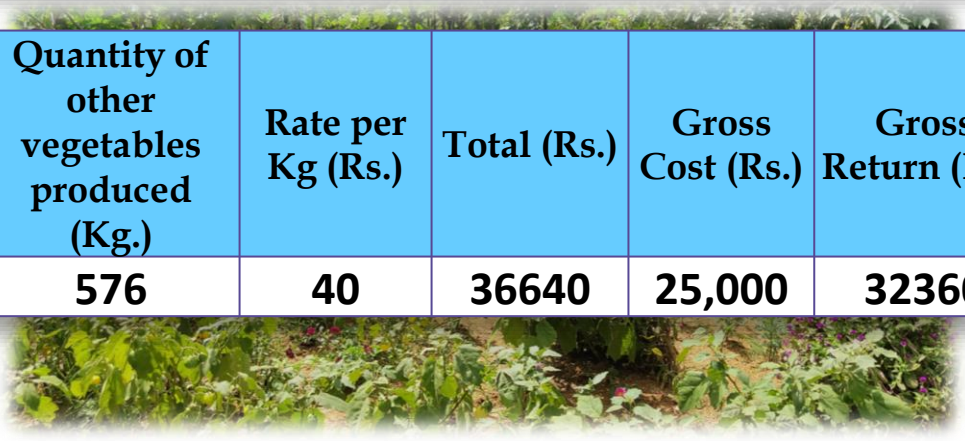


Palak (kg)	Methi (kg)	Amaranthus (kg)	Coriander (kg)	Total (kg)
68.1	61.6	69.1	72.7	271.5

Quantity of other vegetables produced (Area: 15 Guntas, 1 Guntas/demo)

Radish(Kg)	Tomato (Kg)	Chilli (Kg)	Brinjal (Kg)	French bean (Kg)	Okra (Kg)	Onion (kg)	Total
55.4	111.4	118	103	65.8	76.2	47	575.8

Quantity of leafy vegetable produced	Rate per Kg (Rs.)	Quantity of other vegetables produced (Kg.)	Rate per Kg (Rs.)	Total (Rs.)	Gross Cost (Rs.)	Gross Return (Rs.)	Net Return (Rs.)	B:C Ratio
272	50	576	40	36640	25,000	32360	7360	1.50



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Additional parameters	Demo	Check	% Change
Production of vegetables (Kg/ month/ Family)	19.2	Nil	100
Vegetables Availability (gms/Person/day)	160	75	46.87
Vegetable consumption Adequecy (%)	45.71	18.75	41.01

Conclusion

- Feedback of farmers and farm women: Cost incurred towards purchase of vegetables has reduced from Rs.200/- to Rs.50/week
- Consumption of leafy vegetables has increased from twice a week to 4-5 times / week

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NICRA – TDC Project

Natural Resource Management

Sl. No.	Intervention	Area (ha)/Nos.	No of Stakeholders
1	Trench cum bunding	1	4
2	Bunding across farm	3.5	16
3	Tank silt application	3.5	18
4	Levelling	4	13
5	New farm pond	2 Nos.	2
6	Renovation of farm pond	1 No.	1
7	Renovation of check dam	2 No.	2
8	Water storage structure	1 Nos.	1
9	Tamarind PKM-1	1	52
10	Jamun	0.2	15

Crop Interventions

Sl. No.	Seed Type	Variety	Area (ha)	No. of stakeholders
1	Ragi	ML-365	46	91
2	Red gram (Intercrop)	BRG-2	15	64
3	Aerobic paddy	Paustic-9	7	18
4	Aerobic paddy	Tripura Dhan-1	0.1	1
5	Foxtail millet	DHFT-109-3	0.4	4
6	Dolichos (Intercrop)	HA-4	4	28
7	Cowpea (Intercrop)	IT-3896-1	5	32
8	French bean	Arka Suvidha	1	10
9	Fodder sorghum	CoFS-29/31	8.6	59

Skill Training Programme (ASCI)

S. No.	Name of Job Role	Date of Start	Date of Close	Total Participants	No. of Participants									Date of Assessment	No of Participants passed assessment
					General			SC/ST			Grand Total				
					Male	Female	Total	Male	Female	Total	Male	Female	Total		
1	Mango grower	21.01.2019	14.02.2019	20	13	02	15	05	0	05	18	02	20	27.03.2019	16
2.	Friends of Coconut tree (FOCT)	21.01.2019	14.02.2019	20	17	0	17	03	0	03	20	0	20	26.03.2019	20

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Sujala Watershed Capacity Building

Sl. No.	Date	Number	Village Name	Sub water Shed	Micro Water shed	Resource Persons	Subjects covered
1	06.03.2019	32	Tavarakere	Lingapura	Bidanagere	Ramesh P R Scientist – Soil Science Prasanth JM Scientist – Horticulture	a)Information on Sujala III phase b) Scientific information on Soil and Site characteristics, Hydrology, Digital LRI maps c) Thematic maps d) Land suitability of Major crops covered e) Proposed crops and crop production technology f) Interaction with participants
2	22.03.2019	32	Chikkasarangi	Adaguru	Yallapura		
3	20.03.2019	33	Mallasandra	Heddathanahalli	Adaguru		
4	11.04.2019	31	Halanuru	Adaguru	Adaguru		
5	12.4.2019	43	Banavara	Virupasandra	Banavara		
6	15.4.2019	38	Chikkamalavadi	Lingapura	Kalkere		
7	16.4.2019	32	Buchanahalli	Virupansandra	Buchanahalli		
8	23.04.2019	32	Honnudike	Virupansandra	Honnudike		
9	24.04.2019	31	Holakallu	Virupansandra	Holakallu		
10	08.05.2019	32	Hullenahalli	Virupasandra	Neralapura		
11	15.05.2019	37	Mulakunte	Virupasandra	Neralapura		
12	04.06.2019	30	Doddegoudanapalya	Virupasandra	Neralapura		
13	06.06.2019	31	Inapura	Virupasandra	Neralapura		
14	10.06.2019	30	Naruganahalli	Virupasandra	Naruganahalli		
15	11.06.2019	30	Virupasandra	Virupasandra	Virupasandra		
16	26.06.2019	33	Halanuru	Virupansandra	Buchanahalli		
17	27.06.2019	32	Hettenahalli	Adaguru	Yallapura		
18	28.06.2019	31	Haluhosahalli	Adaguru	Yallapura		
19	29.06.2019	43	Banavara	Virupasandra	Banavara		
20	03.08.2019	40	Kolihalli	Gouripura	Gollarahatti		
		673					

Sujala Watershed Capacity Building

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DAESI course for Input dealers

Inauguration of III Batch of programme “Diploma in Agricultural Extension Services for Input dealers (DAESI)” - 18th Jan 2019

Graduation day of II Batch of programme “Diploma in Agricultural Extension Services for Input dealers (DAESI)” on 21st May 2019

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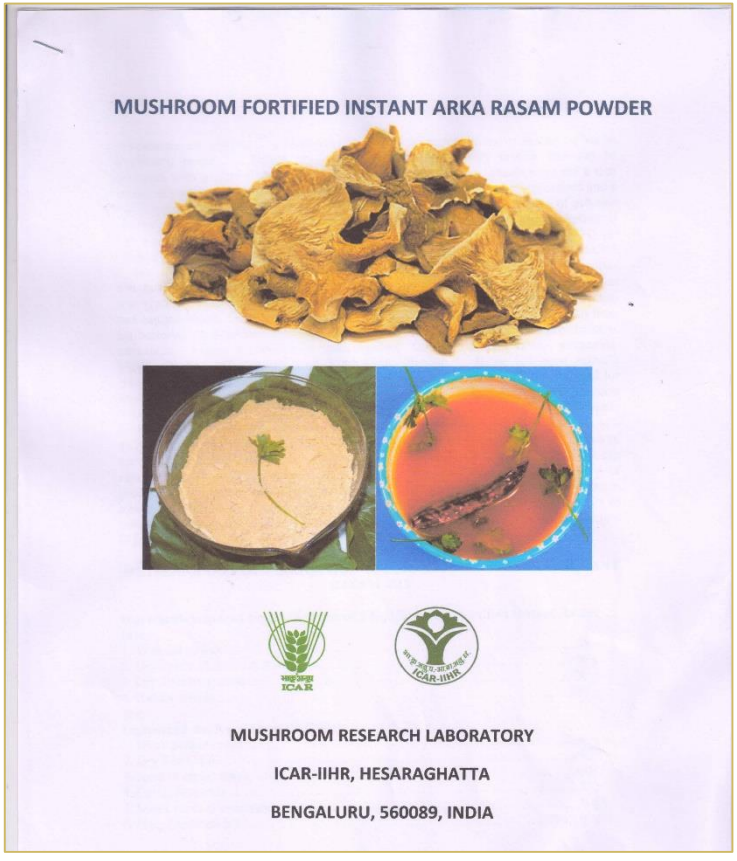
New initiatives, FPO support & Visitors

New products - License

Arka Mushroom Rasam Powder



Arka Borer control Formulation

Support to FPOs

KVK is instrumental in provision of machineries to given below FPOs

No	FPO	Place	Machinery
1	Swavalambi utpadakara samsthe	Sira, Tumakuru	Millet Processing Unit
2	Madakari Souharda Co-operative Limited	Pavagada, Tumakuru	Groundnut Oil Mill
3	Suvarnamukhi Souharda Co-operative Limited	Madhugiri, Tumakuru	Tamrind Pounding machine (for Lollypop making)
4	Gramachetana FPO	Koratagere, Tumakuru	Ragi processing unit

Pavagada FPO, Managlvada, Pavagada, sponsored by Karnataka Department of Horticulture

Training programmes Conducted:

Date	Venue	No. of farmers attended	Topic covered
21-10-2019	Managalavada	30	Improved Practices in Pomegranate cultivation
22-10-2019	H.B.halli	30	Banana cultivation practices

Front line demonstrations organised:

Crop	Technology	Name of the Farmer	Technology interventions
Tomato	ICM	Sri Gopal , Magalawada	Introduction of Arka Rakshak hybrid, IPDM practices
Pomegranate	IPDM	Sri Bheemannna, Mangalawada	IPDM practices as per NRCP and IIHR
Banana	ICM	Sri Sathish, Arsikere	Sucker treatment, Banana special application, IPDM practices

Exposure Visit to Maharashtra

Interstate Exposure visit to Farmers: An exposure visit was organised for 50 farmers of Pavagada FPO to Nasik and Ahmednagar Districts of Maharashtra from 6th to 11th, Novemeber, 2019.

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IIHR-SCSP project support

No	Name of PI	Materials/Capacity building supported	FPO/NGO/Taluk
1	Dr Laxman	AMC powder	Pavagada
2	Dr Selvakumar	AMC Powder	Salugatte FPO, Sira
3	Dr Anil Kumar	Drip lines	Grama Chetana FPO, Koratagere
4	Dr Krishna Reddy	Mushroom training	Bhusakti Kendra, Tumakuru

Important Visitors

Dr. V.P.Chahal, Honorable ADG (Agril, Extn.), ICAR visited KVK, Hirehalli on 21st August 2019

QRT team of ATARI Zone XI visited KVK Hirehalli on 4th October 2019

Shri G.B.Jyothi Ganesh MLA Tumakuru visited ICAR KVK Hirehalli on 14th June 2019

Addnl. Chief Secretary, Agrl. Commissioner visit 24th Sept. 2019

Impact of KVK activities & Success stories

Shri.Rudraiah

- He is a 75 years old person involved in farming since 50 years.
- He resides in Chikkahalli village of Korategere taluk in Tumakuru District. He used to own 2 acre farm, in which he used to cultivate Arecanut, Coconut and Ragi (MR-6 variety).
- In the year 2017, the KVK staff advised him to go for Integrated Farming System (IFS).
- Based on their advise has taken another 1.5 acre land on lease. Presently, in the total area of 3.5 acres, he cultivates Arecanut and Coconut (1.5 acre) with banana as intercrop, China Aster (0.5 acre), Kakada Jasmine (0.25 acre), Ragi (1 acre) and Rose (0.25 acre).

Details	Gross Cost (Rs.)	Gross Income (Rs.)	Net Income (Rs.)	BCR
Before Intervention	1,55,000	2,88,000	1,25,000	1.81
After Intervention	2,30,000	4,40,000	2,10,000	1.91

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Shri.Thipperangappa

- He is from Karikyathanahalli village, Nidagallu hobli, Pavgada taluk,
- He has grown one acre of groundnut K-6 variety and got 5.3 qtls yield in the year 2016-17.
- He was very much impressed about the crop stand even during the drought hit vulnerable situation.
- He used the same seeds during the summer-2017 and produced 24 qtls seeds.
- He had given these seeds to 24 farmers during Kharif-2018.
- Likewise, he is producing the seeds every year and supplying to the farmers.
- So far, he supplied the seeds to 89 farmers during the year 2019-20.

Shri. Raveesh

- He is a 45 years old farmer from Hosuru village, Guluru hobli, Tumakuru taluk, purchasing spawn from our KVK and producing oyster mushroom.
- He is producing nearly 150 to 200 kg oyster mushroom per batch (6-7 batch per year) and on an average he is getting additional income of Rs 8,000-10,000/-
- Along with this, he is practicing organic farming and earning about 2-3 lakshs/year.
- Other source of income for his family is Bee keeping (Rs 35000-40,000/year) and from dairy sector (Rs 15,000-20,000/year).

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Organic Pomegranate – Direct sale

- Shri. Srinivas Reddy is a farmer from Madavarayanapalya village in Pavagada taluk, Tumakuru. He has been cultivating pomegranate in an area of 1 ha since 3 years.
- Last year KVK staff have advised him to take up organic farming methodologies that include application of Arka Microbial Consortium (AMC), Arka Actino plus, neem soap, etc.
- By following these practices, he was able to harvest about 35 tonnes of fruits in his field.
- Sample of fruits from the farmers field were sent to pesticide referral lab of IIHR and the results of residue level of objectionable chemicals were almost nil
- Director of IIHR suggested to use the special vehicle designed exclusively for this purpose to sell his produces.
- It is a vehicle with facilities like provision for keeping fruit crates, controlled humidity chambers, AV aids, etc.
- By this process, the farmer was able sell 700 kg. of fruits @Rs.100/kg., getting a profit of Rs.70,000/-. Where in he sold the remaining fruits @Rs.60/Kg. in the local market.

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Organic Pomegranate – Direct sale

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e-Horticulture – WhatsApp Group

- E-Horticulture WA group has become another name for ‘ready solution to the horticulture related problems faced by the farmers in contact with IIHR as well as State Agricultural Universities (SAUs) and NGOs/FPOs.

Problem Addressed by “e-Horticulture” Group

Sl.No.	Item	Percentage	Ranking
1.	New crop production & nursery techniques	69.2	4
2.	Quality Inputs availability	62.5	5
3.	Water management	34.2	8
4.	Pest and disease management	100	1
5.	Soil and Nutrient management	80	2
6.	Weather information	78.3	3
7.	Mechanization in agriculture	46.7	7
8.	Marketing information	59.16	6

Areca leaf based Products

- During the year 2016-17, about 4 training programmes were organized at KVK, covering 121 participants.
- Among them 90 participants took up the trainings seriously, enquiring for further assistance to start the business.
- Further follow-up and guidance were given to them in terms of DPR (Detailed Project Report), guidance to reach banks and District Industries Centre for availing subsidy.
- Among them, 21 participants utilized these services and started their units.
- Among them, ten have emerged as successful entrepreneurs.

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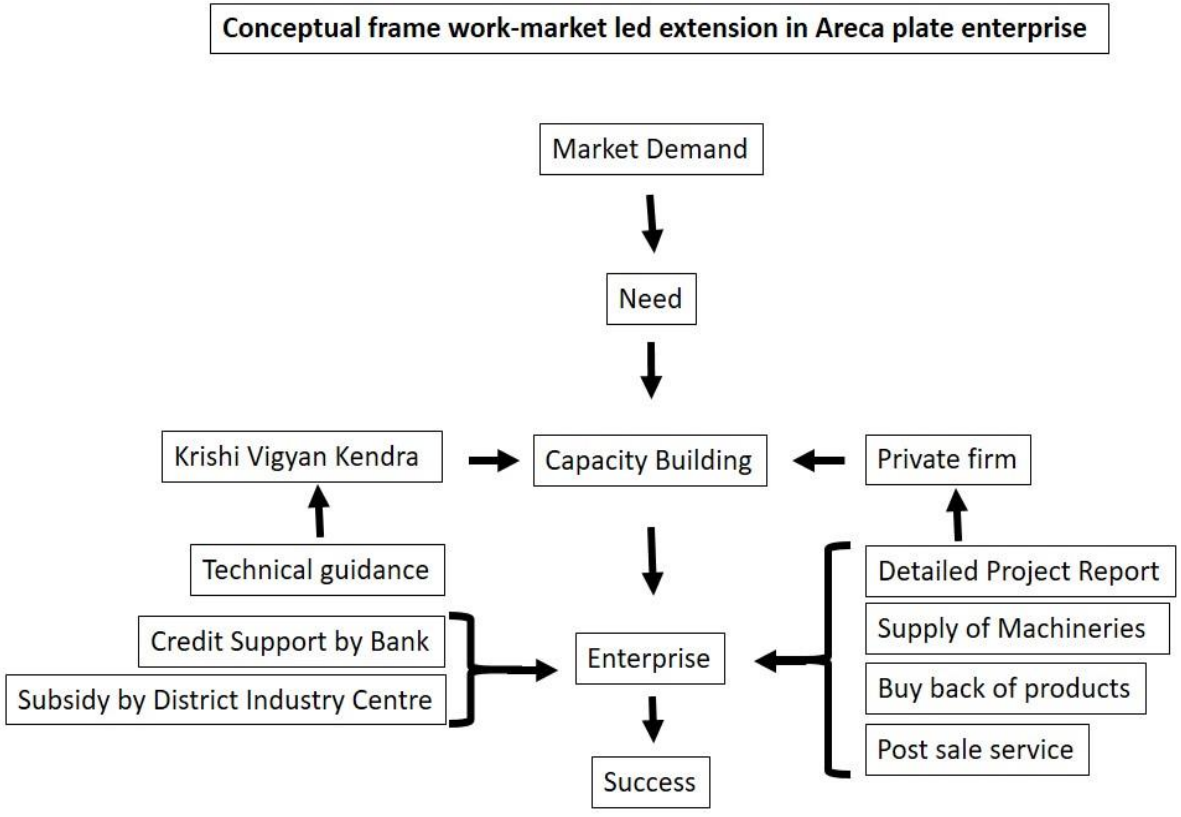
Areca leaf based Products



Post training analysis

Particulars	Numbers	Percentage
Bank support received		
Private Banks	3	14.2
Nationalized Banks	13	61.9
Own fund	5	23.8
Employment Generation		
Self + Up to 5 Nos. employees	18	85.7
More than 6 employees	03	14.2
Problems being faced		
Non-availability of raw materials	13	61.9
Labor shortage	18	85.7
High rental charges	7	33.3
Loan related formalities	7	33.3
Use of Areca plate waste		
Burning	2	9.5
Compost	8	38.1
Fodder Purpose	7	33.3
Mulching	6	28.5
Role played by KVK		
Training	14	66.6
Guidance	1	4.7
Training and Handholding (Guidance)	6	28.5

Shri Suresh N Gowda

Name of the company	Shishir Agrotech
Date of opening the company	17/04/2018
Cost of Project	Amount (Rs.)
Shed	Own
Machinery Cost	5,25,000
Equipment	13,000
Working Capital	50,000
Power Sanction	60,000
Miscellaneous	50,000
Total	6,98,000

Production Details

Daily Production (One day - Single Shift)

Size	12 Inch Plate	10 Inch Plate	6 Inch Bowl	5 Inch Bowl	Total
Rate per unit (Rs.)	3.2	2.2	0.9	0.75	
Total Unit (No.)	500	500	250	250	1,500
Total money earned (Rs.)	1,600	1,100	225	188	3,113

Monthly Production (26 days - Single Shift)

Size	12 Inch Plate	10 Inch Plate	6 Inch Bowl	5 Inch Bowl	Total
Rate per unit (Rs.)	3.2	2.2	0.9	0.75	
Total Unit (No.)	13,000	13,000	6,500	6,500	39,000
Total money earned (Rs.)	41,600	28,600	5,850	4,875	80,925

Profit Analysis

Yearly Production (312 days - Single Shift)					
Size	12 Inch Plate	10 Inch Plate	6 Inch Bowl	5 Inch Bowl	Total
Rate per unit (Rs.)	3.2	2.2	0.9	0.75	
Total Unit (No.)	1,56,000	1,56,000	78,000	78,000	4,68,000
Total money earned (Rs.)	4,99,200	3,43,200	70,200	58,500	9,71,100

Sale Details		
Monthly Sales (12 hour per day)	Units (No.)	Total Revenue (Rs.)
	78,000	1,61,850
Yearly Sales (12 hour per day)	Units (No.)	Total Revenue (Rs.)
	9,36,000	19,42,200
Profit Analysis	Amount (Rs.)	
Total Monthly Expenditure	1,06,276	
Total Monthly Sales Revenue	1,61,850	
Profit - Monthly	55,574	
Profit - Yearly	6,66,888	

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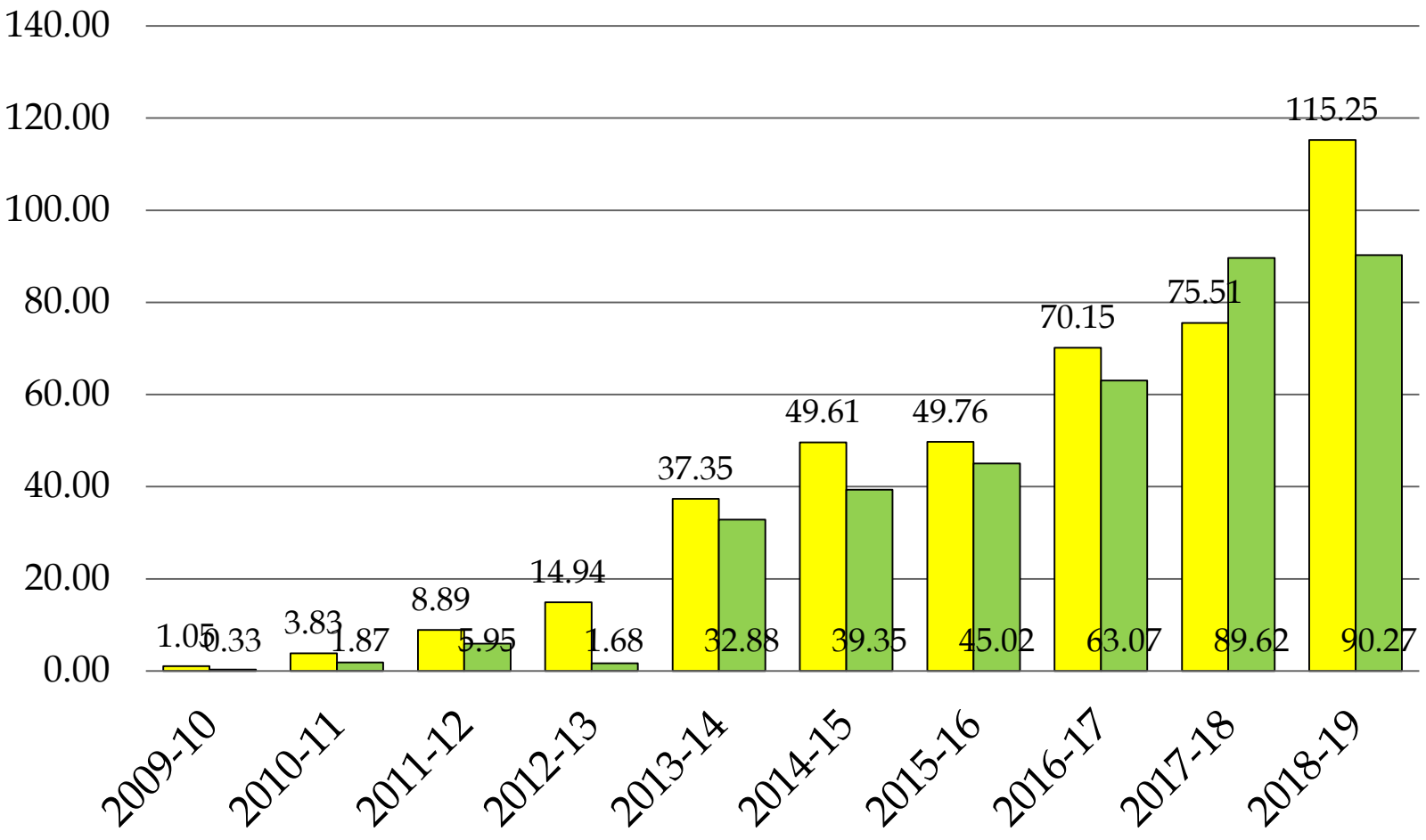
Budget and RFS Details

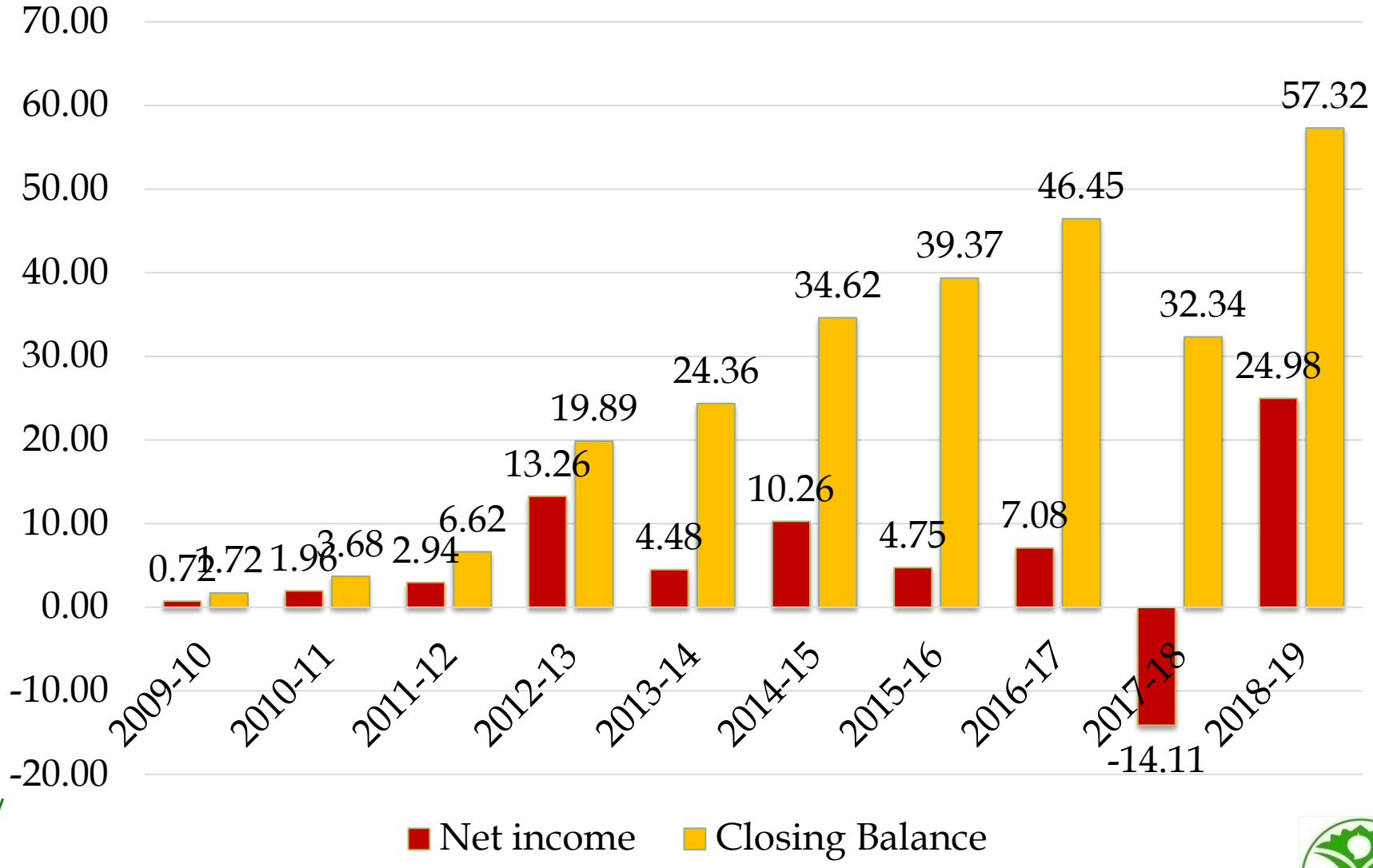
Utilization of Budget (in Rs.) (2019)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	16196000	8331067	
2	Traveling allowances	95000		91310
3	Contingencies		791125	
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	250000		421545
B	POL, repair of vehicles, tractor and equipments	150000		223585
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	100000		71509
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	25000		0
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	265000		113603
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	40000		25065
G	Training of extension functionaries	25000		21546
	Extension Activities	25000		0
	EDP – Entrepreneurship Development Programme	30000		0
	Nutri Garden	25000		24760
H	Maintenance of buildings	0		0
I	Establishment of Soil, Plant & Water Testing Laboratory	25000		25000
J	Library	5000		0
	TOTAL (A)			
B. Non-Recurring Contingencies				
1	Works			
2	Equipment including SWTL & Furniture			
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
TOTAL (B)				
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)				

Status of Revolving Fund (Rs. In Lakhs)



Status of Closing Balance(Rs. In Lakhs)



Status of Revolving Fund (Rs.)

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 31st March
April 2016 to March 2017	39,36,888	70,14,523	63,06,760	46,44,651
April 2017 to March 2018	46,44,651	75,51,234	89,62,321	32,33,564
April 2018 to March 2019	32,33,564	1,15,25,942	90,27,856	57,31,650
January 2019 to December 2019	*50,51,344	1,11,05,301	1,00,44,163	*61,12,482

* Opening Balance as on Jan 1st and Net Balance as on Dec 31st

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Thanks a lot!