



**Welcome**  
**Team KVK**

**Dr. S. PRABHU KUMAR**

**Former Director, ICAR ATARI**  
**Indian Council of Agricultural Research**  
**Zone I (Ludhiana, Punjab) and**  
**Zone VIII (Bangalore, Karnataka)**  
E mail: [prabhukumar@gmail.com](mailto:prabhukumar@gmail.com)



# **Few thoughts for Cross Learning**

## Presentation should highlight on ....

*The purpose of each activity is to address the problems being faced by farmers in the cluster villages in a problem-solving mode, through an integrated/multidisciplinary approach.*

### The KVKs should specifically answer

- how much time the KVK Team spends in the cluster villages, and the workload for each specialist*
- extent to which problems of the cluster villages are talked in terms of data,*
- the extent to which the problems could be redressed through KVK interventions and*
- what innovative approaches and strategies KVK plans to adopt to up-scale/out-scale its successful interventions in the past 2-3 years.*

## **Domain of Activities**

- **Data Generation**
- **Need Assessment and Prioritization**
- **Technological Interventions**
- **On-farm activities at Instructional Farm**
- **Outreach Activities**

## **Domain of Activities - Data Generation**

- *Creation of database on the district profile based on the secondary data.*
- *Base-line data of the cluster villages need to be collected through PRA and other participatory methods and it should specifically reflect on problems related to agriculture and allied sectors.*
- *Work in a cluster approach with 4-5 villages covering farm families of small and marginal farmers selected preferably from different agro-ecosystems and continue to work for 3 years with phased out strategy to implement similar activities across the district by moving to new cluster of villages for another 3 year cycle.*
- *The progress made be documented every year and be compared with the base-line data for assessing the impact of KVK interventions.*

## **Domain of Activities - Need Assessment and Prioritization**

- *Address district-specific needs in agriculture, horticulture, fisheries, livestock, poultry and agro-forestry, by identifying and prioritizing problems.*
- *Extent, severity, importance and frequency of the problems in the existing farming conditions should be considered as main criteria for identification and prioritization.*
- *Identify primary and secondary factors / biotic and abiotic causes of each prioritized problem and plan for appropriate interventions.*
- *Each Scientist (SMS) in KVK should address at least one most relevant issue of the area.*

# **Domain of Activities - Technological Interventions**

- *Prepare work plan for cluster of villages with well-defined outputs/deliverables. The yearly action plan should aim at tackling each prioritized problem through selecting suitable technologies and technological interventions.*
- *Identify, document and validate important farmer led innovations.*
- *Conduct need-based capacity development related activities through specific technology modules and methods/techniques and bring out training manuals in local language.*
- *Create technology agents through vocational programmes so as to serve as service providers to farmers at the grass-root level.*
- *Emphasize on activities related to value-chain concept –from producer to consumer.*
- *Organize skill and entrepreneurship training to rural youth / farmwomen / progressive farmers for higher production of technological products.*

## **Domain of Activities - *On-farm activities at Instructional Farm***

- **Develop quality mother orchard of major fruit crops in the district.**
- **Establish permanent Technology Demonstration Units, Integrated Farming System models and Technology Cafeteria.**
- **Produce technological inputs and products like seeds/ planting materials/livestock/bio-products etc., using Revolving Fund, in order to ensure their availability to farmers and other stakeholders.**



# **Domain of Activities - Outreach Activities**

- Plan and execute appropriate off-campus programmes on capacity development.*
- Design and implement innovative extension strategies about technology related to prioritized problems.*
- Use ICT tools and techniques like e-extension, web-based technology content including modules and capsules, e-farmers, v-KVK and KVK-net for reaching the unreached for knowledge empowerment and technology dissemination.*
- Aim for specific targeted programmes like soil, water and plant testing and issuance of soil health cards to farmers in cluster villages.*
- Encourage participatory approach for production of seeds and planting materials by farmers at the village level.*
- Document significant achievements in the form of case studies / success stories as per the merits of the technology.*

# **MODEL FOR PRESENTATION**

## Abstract on Technology Assessment

#	Technologies assessed	Amount (Rs.)
1	Assessment of adoptable groundnut varieties for higher yields	30,000
2	Enrichment of rooting media with bio-agents to reduce seedling mortality in tomato nurseries	2,250
3	Standardization of fertilizer requirement for balanced nutrition in pole bean for higher yields	6,290
4	Assessing sulphur application schedule for mulberry	4,350
5	Assessment on Management strategies for late blight in Potato	36,790
6	Efficacy of Different education methods to combat Anemia among adolescent girls	9,000
7	Efficacy of underutilized greens for nutrition security	13,000
8	Effective utilization of household biodegradable waste as nutri compost	8,000
9	Assessment of irrigation systems for better WUE in Mulberry	35,000
	Total	1,44,680

## Abstract of Technology Demonstration

#	Technologies Demonstrated	Amount (Rs.)
1	Introduction of <i>KMR-301</i> in finger millet for early sowing	20,640
2	Introduction of <i>BRG-5</i> in Redgram for varietal choice	20,880
3	Horsegram var. <i>PHG-9</i> as a potential pulse in non cropped area	8,000
4	Promotion of fodder cafeteria to mitigate drought by introducing annual and perennial fodder crops	27,250
5	Use of plastic mulch in tomato production to reduce water consumption and weed growth	36,000
6	Use of Ethrel for uniform ripening of Mango fruits	20,500
7	Yield maximization in bottlegourd through potash and boron application	6,250
8	Enhancement of Curd quality in Cauliflower by foliar nutrition of boron and molybdenum	6,100
9	Improving shelf life of Potato through Nutritional and Storage techniques	32,500

#	Title of the FLD	Amount (Rs.)
10	Enhancement of berry size and quality through foliar application of Grape special	6,000
11	A comprehensive approach for pest management in Mango	21,425
12	Cost effective method to combat Late blight of tomato	32,600
13	Integrated Pest and Disease Management strategies in Cabbage	35,750
14	Branding and market linkage for value added Finger millet products	14,000
15	Groundnut Decorticator as a effective tool to reduce drudgery and combat labour demand	12,500
16	Money from honey – through branding and market linkage	16,000
17	Entrepreneurship development in handicrafts using pierced cocoons	7,000
18	Use of improved fruits and vegetable preservator in schools/households	20,000
19	Ecofriendly practices for management of mulberry leaf roller	3,650
20	IFS for sustainable farming	50,000
21	Technology Demonstration- Module I,II & III under NFTD scheme	27,500
	Total	4,24,545

## Activities calendar for cluster - 1: Julapalya, Budidagaddapalli, Achaganapalli (Bagepalli Taluk)

<b>Crop/ enterprise</b>	<b>Area (ha)</b>	<b>Baseline yield (q/ha)</b>	<b>Potential yield (q/ha)</b>	<b>Problem (Quantify)</b>	<b>Nature /mode of intervention</b>
Groundnut	24	8	12.5	Low yielding varieties Imbalanced nutrition and low seed replacement, Labour intensive operation, low productivity of human labour, lack of availability of labour for work	OFT, FLD & Training
IFS	-	-	-	Lack of sustainable income, poor resource recycling and nutritional deficiency	FLD & Training
Potato	16	180	250	25-35 per cent loss of potato in farmer's traditional storage method in 3 months of storage, Severe incidence of late blight of potato leads to very low yield	FLD, OFT & Training
Mulberry	14	55	70	Decline in ground water resources in the district, <i>In-situ</i> water losses in mulberry gardens	OFT & Training
Home Science	-	-	-	Indiscriminate throwing of kitchen and household waste to the roadside, Nonseparation of degradable and non degradable waste	OFT & Training

OFT 1

## Assessment of adoptable groundnut varieties for higher yields

2<sup>nd</sup> year

Crop	Prioritized Problem	Details of technology	Source
Groundnut	Low yielding varieties Imbalanced nutrition and low seed replacement	TO1: Farmers practice TMV-2	UAS (B)
		TO2: KCG– 6	UAS (B)
		TO3: Kadri – 6	ANGRAU
		TO4: ICGV-91114	ICRISAT

Critical Inputs		
Name	Qty/demo	Input cost (Rs.)
Seed material	150 kg pods	15000
Micronutrients		
Gypsum	500 kg	15000
ZnSo4	10 kg	
Biofertilizer	5 Kg	

## Observations:

Height of plant, no. of branches, pods/plant, yield and

Proposed Village:  
Kencharlahally

## Scientists

SMS- Agronomy

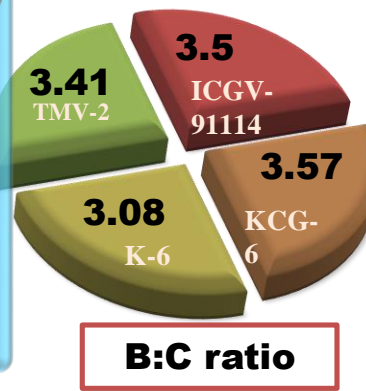
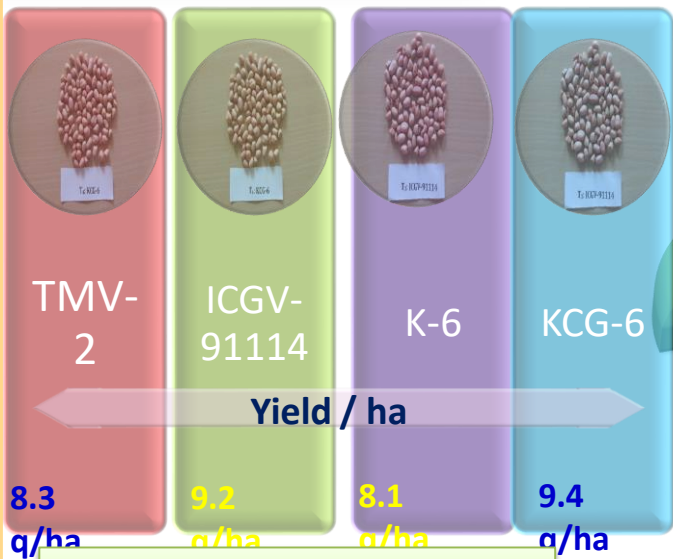
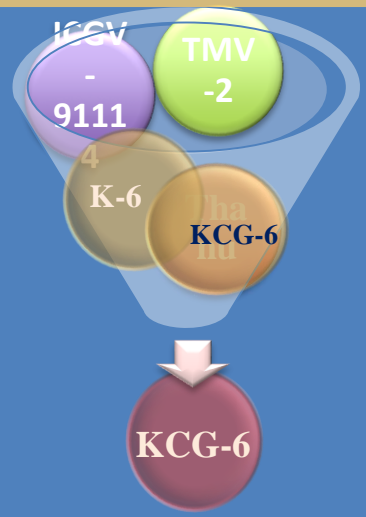
SMS- SS&amp;AC

SMS- PP

SMS- H.Sc.



Area	1 ha
Replications	5
Cost per Trial	Rs. 6000/-
Total Cost	Rs. 30,000/-



% increase over check : 14 %

**Farmers' feed back**

- High yielding
- Kernal size is bold
- Shelling percentage and taste is good
- LLS incidence is less





## Technology demonstration from 'Soil to Oil'



Organoleptic evaluation revealed that KCG-6 ranked first in all the sensory characters followed by K6, ICGV-91114 and TMV 2

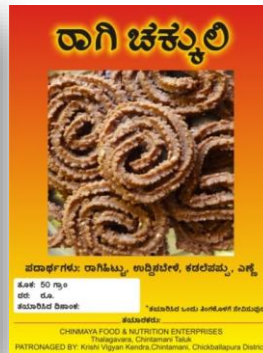
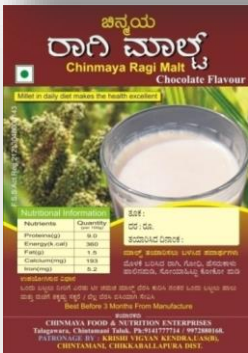
FLD-14

## Branding and market linkage for value added Finger millet products

2<sup>nd</sup> year

Problem: Low income realization due to lack of knowledge on processing, value addition, labeling , packaging and branding

Source: Food Safety Standards Act-2006



Details of critical Inputs		
Name	Qty.	Cost (Rs.)
Packaging materials	2 products	2000
Labels	2 products	5000
Electronic weighing scale	1	4000
Sealing machine	1	3000
Cost of the demo		14000

**Results**

## Branding and market linkage for value added Finger millet products

**2<sup>nd</sup> year**



Income generated from the unit

Ragi Products	Production /sale/month	Profit/earnings/month	Earning/month
Ragi Malt	100-120kg	Rs. 10000-12000	Rs.20500-25000
Ragi Chakkuli	40-50kg	Rs. 4000-5000	
Ragi Ladoo	40-50kg	Rs. 4000-5000	
Ragi Hurihittu	25-30kg	Rs.2500-3000	

Parameters: Price, trading net profit and BC ratio and Consumer preference

SMS- Home Science  
SMS- Horticulture  
SMS- Agronomy

## Standardization of fertilizer requirement for balanced nutrition in pole bean for higher yields

## Problem : Indiscriminate use of fertilizers

Technology option	Recc.dose/acre	Name of critical input	Cost (Rs)	Total
Farmer practice	120:86:00:30/acre Farmer	Urea-100 kg DAP-150 kg Mop-50 kg	640 4200 350	5540
French bean 62.5:100:75 150%NK & 125% P	37.5:50:45/acre UAS,B	factompos:50 kg Seeds-1kg	350 750	750
French bean 60:80:60 150%NK & 125% P	36:40:30/acre IIHR			Total= 6290

Team members :

SMS- SS&amp;AC

SMS- Horticulture &amp; Pc

## Standardization of fertilizer requirement for balanced nutrition in pole bean for higher yields



2013-  
14



Fertilizer  
application



General view



Observation

<b>T3</b>	<b>T2</b>	<b>T1</b>
T1	T3	T2
T2	T1	T3
T3	T2	T1
T1	T3	T2
T2	T1	T3
T3	T2	T1

N ←

Layout at KVK Farm

2013-  
14

Yield, plant height and Periodic changes in soil chemical characteristics at pole bean experimental site

<i>Treatments</i>	Yield (q/ha)	Plant Height (cm)	pH			EC (ds/m)		
			30 day s	60 day s	Harvest	30 days	60 days	Harvest
<b>T1 (Urea-375 kg DAP-250kg 20:20:0:15-500kg)</b>	<b>35.54</b>	<b>181.57</b>	6.00	5.81	6.00	0.08	0.077	0.047
<b>T2 (French bean 62.5:100:75 kg)</b>	22.81	162.86	5.96	6.05	5.96	0.07	0.074	0.051
<b>T3 (French bean 60:80:60Kg)</b>	20.61	162.63	6.20	6.12	6.03	0.08	0.084	0.049
<i>SE.m</i>	1.06	1.39	0.05	0.06	0.05	0.01	0.010	0.008
<i>CD</i>	3.25	4.27	0.14	0.17	0.14	0.03	0.031	0.023
	<b>S</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>
<i>Initial values</i>			6.03			0.04		

Periodic nutrient changes in soils at pole bean experimental site

<i>Treatments</i>	<i>%OC</i>			<i>N (Kg/ha)</i>		
	<i>30 days</i>	<i>60 days</i>	<i>Harvest</i>	<i>30 days</i>	<i>60 days</i>	<i>Harvest</i>
<b>T1</b>	0.223	0.243	0.267	110.0	91.3	79.3
<b>T2</b>	0.234	0.247	0.249	95.6	74.2	66.3
<b>T3</b>	0.246	0.244	0.259	88.4	70.2	62.5
<i>SE.m</i>	0.023	0.017	0.013	4.3	3.3	2.7
<i>CD</i>	0.072	0.052	0.039	13.2	10.1	8.2
	NS	NS	S	NS	NS	S
	0.25%			61.2 kg		

<i>Treatment</i> <i>s</i>	<i>P2O5 (Kg/ha)</i>			<i>K2O (Kg/ha)</i>		
	<i>30 days</i>	<i>60 days</i>	<i>Harvest</i>	<i>30 days</i>	<i>60 days</i>	<i>Harvest</i>
<b>T1</b>	25.50	23.31	18.44	323.21	320.11	316.00
<b>T2</b>	22.31	19.44	16.00	380.33	340.33	322.13
<b>T3</b>	22.33	18.84	15.79	385.13	339.50	321.83
<i>SE.m</i>	0.61	1.19	1.00	3.36	2.44	2.14
<i>CD</i>	1.88	3.67	3.07	10.36	7.51	6.59
	S	NS	NS	S	S	S
	16.1 kg			322.6 kg		



### Major nutrient content in pole bean plant at harvest

	Plant nutrient content at harvest (%)		
	N	P	K
T1	3.10	0.34	2.19
T2	2.42	0.25	1.90
T3	2.36	0.23	1.86
SE.m	0.16	0.01	0.05
CD	0.50	0.04	0.16
	NS	NS	S

#### Observation

- ❖ Pole bean requires high amount of fertilizers unlike French bean
- ❖ The pole bean may fix nitrogen in the soil, since there is increase in N content of soil
- ❖ The crop respond well for continues application of fertilizer (even weekly) with more yield and plant height
- ❖ The crop duration increases with continues application of fertilizer and irrigation with multiple pickings
- ❖ Crop responded well for the farmer practices, however scientific recommendation is needed
- ❖ The nutrient content of pole bean plant vary with fertilizer dose. However higher amount of NPK content are more in high dose of fertilizers applied.

## Activities calendar of SMS (Agronomy)

<i>Village</i>	<i>Crop/ enterprise</i>	<i>Activity as leader</i>	<i>Other members of the team</i>	<i>Budget proposed (Rs.)</i>
Budidagaddapalli	Groundnut	OFT on Screening of doptable groundnut varieties for higher yields	SMS-SS & AC, PP, H.Sc	30,500
Nayanahalli	Ragi	FLD on Introduction of KMR-301 in finger millet for early sowing	SMS-SS & AC, PP, H.Sc	23,140
Nayanahalli	Redgram	FLD on Introduction of BRG-5 in Redgram for varietal choice	SMS-SS & AC, PP, H.Sc	50,880
Nayanahalli	Horsegram	Non availability of high yielding varieties and non remunerative & fallowing in case of delay rains	SMS-SS & AC, PP, H.Sc	10,500
Tummanahalli	Fodder cafeteria	FLD on Popularization of fodder cafeteria to mitigate drought condition by introducing annual and perennial fodder crops	SMS-SS & AC, Agril. Extn.	27,250
Budidagaddapalli	IFS	FLD on IFS Demonstration	SMS-SS & AC, Agril. Extn.	50,000

## Activities calendar of SMS (Horticulture)

<i>Village</i>	<i>Crop/ enterprise</i>	<i>Activity as leader</i>	<i>Other members of the team</i>	<i>Budget proposed(Rs.)</i>
Shidlaghatta	Nurseries	OFT on Enrichment of rooting media with bio-agents to reduce seedling mortality in tomato nurseries	SMS-PP	2,250
Tummanahalli	Tomato	FLD on Use of plastic mulch in Tomato production to reduce water Consumption and weed growth	SMS-PP, Agron.	36,000
Tummanahalli	Mango	FLD on Use of Ethrel for uniform ripening of Mango fruits	SMS-H.Sc.	14,500
Nayanahalli	Bottle gourd	FLD on Application of potash and Boron to enhance yield in bottlegourd	SMS-SS & AC	6,250

### Activities calendar of SMS (SS & AC)

<i>Village</i>	<i>Crop/ enterprise</i>	<i>Activity as leader</i>	<i>Other members of the team</i>	<i>Budget proposed (Rs.)</i>
Tummanahlli	Pole bean	OFT on Standardization of fertilizer requirement for balanced nutrition in pole bean for higher yields	SMS-Hort. Pco	6,290
Nayanahalli	Cauliflower	FLD on Enhancement of Curd quality in Cauliflower by foliar nutrition of boron and molybdenum	SMS-Hort., PP	6,100
Budidagadda palli	Potato	FLD on Improving shelf life of Potato through Nutritional and Storage techniques	SMS-Hort. Pco	18,500
Tummanahalli	Grapes	FLD on Use of Grape special to achieve better berry size and quality	SMS- H.Sc. SMS-Hort.	6,000

### Activities calendar of SMS (Plant Protection)

<i>Village</i>	<i>Crop/ enterprise</i>	<i>Activity as leader</i>	<i>Other members of the team</i>	<i>Budget proposed (Rs.)</i>
Budidagadda palli	Potato	OFT - Assessment on management of late blight in potato	SMS-Hort., PCo	36,790
Tummanahal li	Mango	FLD on Integrated pest and disease management in mango	SMS-Hort., PCo	21,425
Nayanahalli	Tomato	FLD on Integrated Management of late blight of tomato	SMS-Hort., PCo	32,600
Nayanahalli	Cabbage	FLD on Integrated pest and disease management in cabbage	SMS-Hort., PCo	35,750

### Activities calendar of SMS (Sericulture)

<i>Village</i>	<i>Crop/ enterprise</i>	<i>Activity as leader</i>	<i>Other members of the team</i>	<i>Budget proposed (Rs.)</i>
<b>Budidagaddapalli</b>	<b>Mulberry</b>	<b>OFT on Assessment of irrigation systems for better WUE in Mulberry</b>	<b>SMS-Agron., SS&amp;AC</b>	<b>35,000</b>
<b>Tummanahalli</b>	<b>Mulberry</b>	<b>FLD on Ecofriendly practices for management of mulberry leaf roller</b>	<b>SMS-Agron, PP</b>	<b>3,650</b>

### Activities calendar of SMS (Home Science)

<i>Village</i>	<i>Crop/ enterprise</i>	<i>Activity as leader</i>	<i>Other members of the team</i>	<i>Budget proposed (Rs.)</i>
Nayanahalli	Home Science	OFT on Efficacy of Different education methods to combat Anemia among adolescent girls	SMS-Hort, Agril. Extn.	9,000
Nayanahalli	Home Science	OFT on Efficacy of underutilized greens for nutrition security	SMS-Hort, Agril. Extn.	13,000
Budidagadda palli	Home Science	OFT on Effective utilization of household biodegradable waste as nutri compost	SMS-Agron, SS&AC	8,000
Nayanahalli	Finger millet	FLD on Branding and market linkage for value added Finger millet products	SMS-Hort, Agron, Agril. Extn.	14,000
Budidagadda palli	Groundnut	FLD on Groundnut Decorticator as a effective tool to reduce drudgery and combat labour demand	SMS-Agron, Hort.	12,500
Doddabommahalli	Bee keeping	FLD on Money from honey – through branding and market linkage	SMS-Hort, Agril. Extn.	16,000
Nayanahalli	Bio crafts	FLD on Entrepreneurship development in bio crafts using pierced cocoons	SMS- Ag. Extn, PCO	7,000
Tummanahalli	PHT	FLD on Use of improved fruits and vegetable preservator in school / households	SMS-Hort, Agril. Extn.	20,000

### Activities calendar of SMS (Agril. Extension)

<i>Village</i>	<i>Crop/ enterprise</i>	<i>Activity as leader</i>	<i>Other members of the team</i>	<i>Budget proposed (Rs.)</i>
Nayanahalli	Sericulture	CBA of sericulture farmers	SMS-Agron, Pco	25,000
Tummanahalli	Vegetables	CBA of vegetable growers	SMS-Hort. PCo	25,000

#### Four CBAs are already formed

- 1.Mango Growers Association - Madanahalli village
- 2.Vegetable Growers Association - Madanahalli village
- 3.Sericulture Farmers Association – Kuruburu village
- 4.Vegetable Growers Association – Kuruburu village



## Activity calendar for Farm Manager- 2014-15

<b>Blocks /Production units/ Demo Units in the Farm</b>	<b>Crop/ activity in Kharif</b>	<b>Crop/ activity in Rabi/ Summer</b>	<b>Cropping intensity</b>	<b>Approx. Expenditure (Rs.)</b>	<b>Approx. Revenue (Rs.)</b>
<b>Block 1: 0.9 ha</b>	<b>KVK, building, Farmers Hostel, piggery unit, Vermicompost unit</b>				
<b>Block 2: 5.24 ha</b>	<b>Coconut Sapota Guava/ pruning, Ploughing, green manuring/compost application, fertilizer application</b>	<b>Coconut Sapota Guava/ Plant protection and harvesting</b>	<b>100 %</b>	<b>30,000</b>	<b>50,000</b>
<b>Block 2: 7.192 ha</b>	<b>Mango / ploughing, pruning, green manuring, fertilizer application</b>	<b>Plant protection and harvesting</b>	<b>100%</b>	<b>50,000</b>	<b>1,00,000</b>
<b>Block 3: 4.78 ha</b>	<b>Tamarind/ ploughing</b>	<b>Harvesting</b>	<b>100 %</b>	<b>20,000</b>	<b>60,000</b>
<b>Block 4: 3.39ha</b>	<b>Mango and mixed orchard/ ploughing</b>	<b>Plant protection and harvesting</b>	<b>100 %</b>	<b>15,000</b>	<b>20,000</b>
<b>TOTAL</b>				<b>1,15,000</b>	<b>2,30,000</b>

## Activity calendar for Farm Manager-2014-15

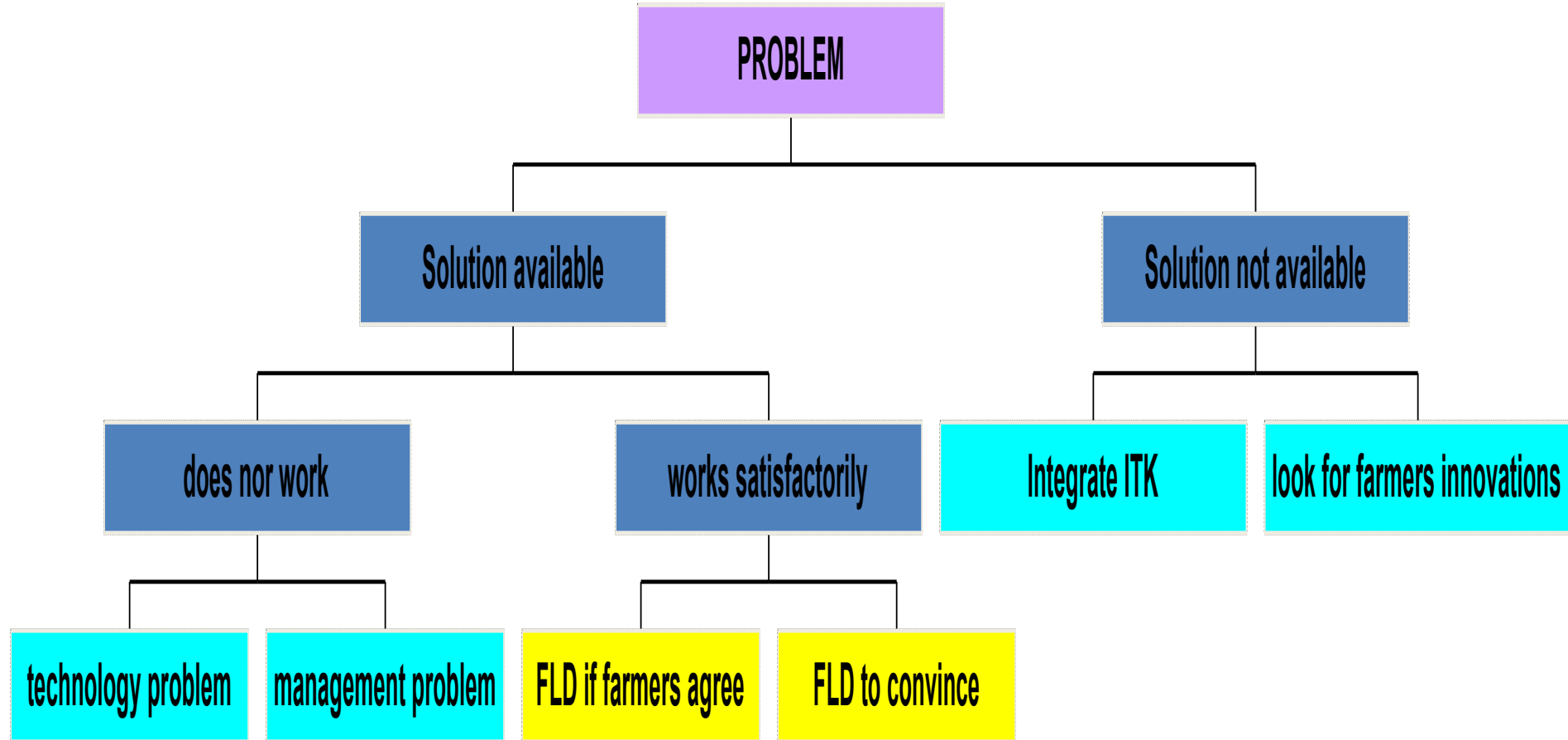
<i>Demo/ production Units/ labs</i>	<i>Crop/ enterprise</i>	<i>Target for the year</i>	<i>Approximat e Expenditure (Rs.)</i>	<i>Approximat e Revenue (Rs.)</i>	<i>Members of KVK Team involved</i>
IFSD	Ragi/Red gram/ Mulberry/ Vegetable/ fodder	0.8 ha	30,000	60,000	All SMS
Piggery unit	-	10 nos.	30,000	75,000	SMS- SS&AC and PP
Vermi compost	-	2 ton	2,000	10,000	SMS- SS&AC and Agronomy
Sheep rearing	-	10	35,000	20,000	SMS- SS&AC and Agronomy
Nursery	Tomato/ Drumstick/ mulberry	20,000 No	600	2,000-2,500	SMS- HS and Horticulture
Seed Production	Ragi	10 q	8,000	28,000	SMS-Agronomy and PP

## Details of budget utilization (2013-14) upto 31 January 2014

(in ₹ )

#	Particulars	Sanctioned	Released	Expenditure
24.1	Recurring Contingencies			
24.1.1	Pay & Allowances	49,00,000	49,00,000	50,44,000
24.1.2	Traveling allowances	95,000	95,000	78,000
24.1.3	Contingencies			
24.1.4.1	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance	2,00,000	2,00,000	1,97,000
B	POL, repair of vehicles, tractor and equipments	1,90,000	1,90,000	1,85,000
C	Meals/refreshment for trainees	70,000	70,000	58,000
D	Training material	50,000	50,000	30,000
E	Frontline demonstration except oilseeds and pulses	4,20,000	4,20,000	2,43,000
F	On farm testing	40,000	40,000	36,000
G	Training of extension functionaries	15,000	15,000	20,000
H	Maintenance of buildings	-	-	-
I	Extension activities	40,000	40,000	34,000
J	Farmers Field School	20,000	20,000	18,500
K	Establishment of Soil, Plant & Water Testing Laboratory	-	-	-
L	Library	5000	5000	4,000
24.1	<b>Total Recurring (A)</b>	<b>10,50,000</b>	<b>10,50,000</b>	<b>8,25,500</b>
24.2	Non-Recurring Contingencies			
24.2.1	Works			
24.2.2	Equipments including SWTL & Furniture			
24.2.3	Vehicle (Four wheeler/Two wheeler, please specify)			
24.2.4	Library			
24.2	<b>Total Non Recurring (B)</b>			
24.3	REVOLVING FUND			
24.4	<b>GRAND TOTAL (A+B)</b>	<b>60,45,000</b>	<b>60,45,000</b>	<b>52,04,550</b>

# When and Why FLD / OFT



**Dimensions to ponder.....**

Productivity, production and income of the farmers must be considered in totality for pursuing sustainable agriculture

## ***STRATEGIES***

### **Remunerative agriculture**

Increasing productivity & production, management of post harvest losses, value chain for increasing farmer's income and ultimately system sustainability.

Productivity, production and income of the farmers must be considered in totality for pursuing sustainable agriculture

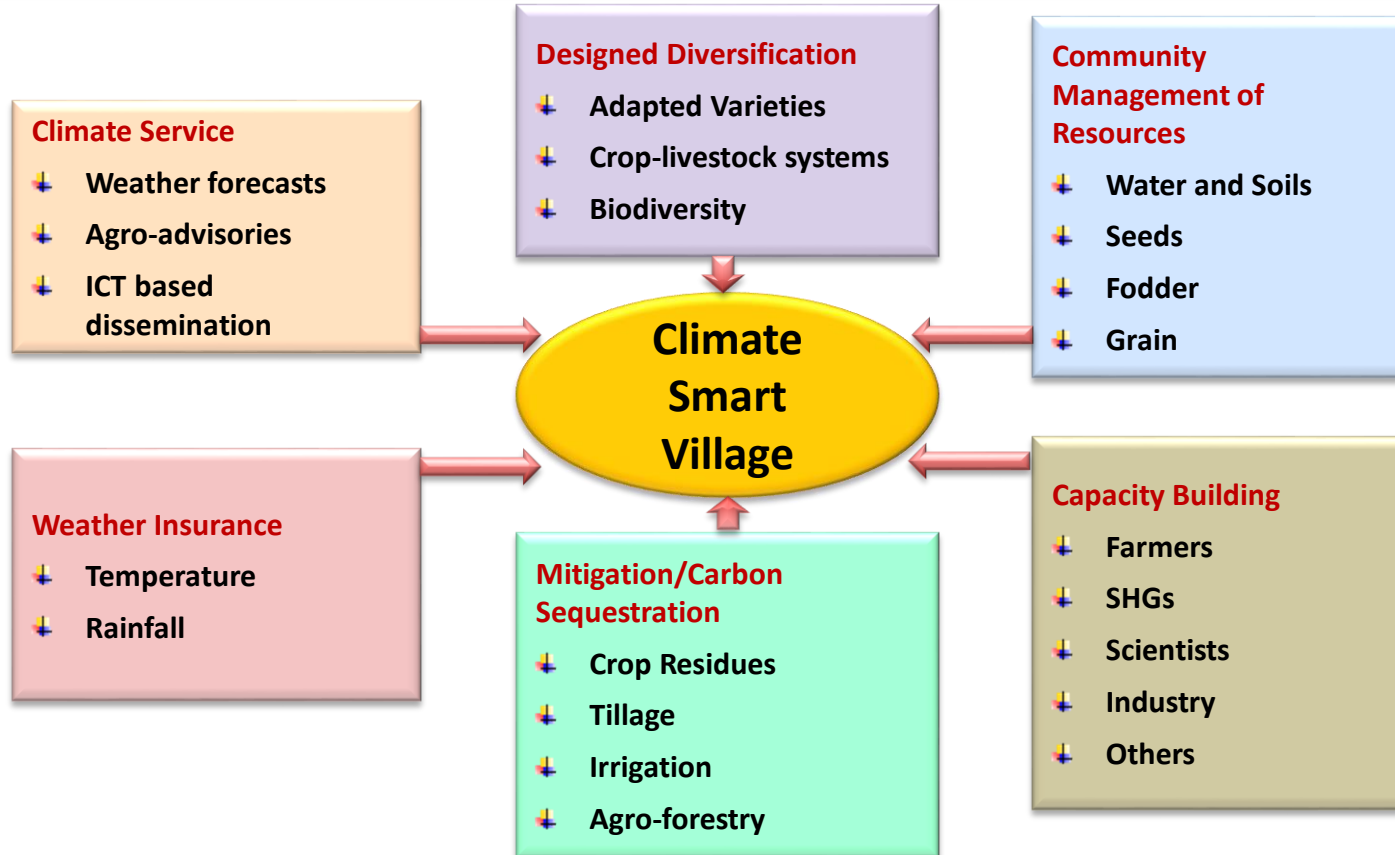
## ***STRATEGIES***

### **Climate smart agriculture**

Conservation of soil & water, bio-conservation, reducing environmental pollution, climate resilience, and increasing productivity and production of green house/protected cultivation.

# Climate smart agricultural communities

Develop, in partnership with rural communities and other stakeholders, a climate-smart model for agricultural development that includes a range of innovative agricultural risk management strategies





Productivity, production and income of the farmers must be considered in totality for pursuing sustainable agriculture

## ***STRATEGIES***

### **Food and dietary diversification agriculture**

Removing malnutrition, nutritional disorders, year round house hold food security, stable and sustainable food supplies, improving livelihood at grass root level through convergence of all schemes for eliminating hunger and poverty.

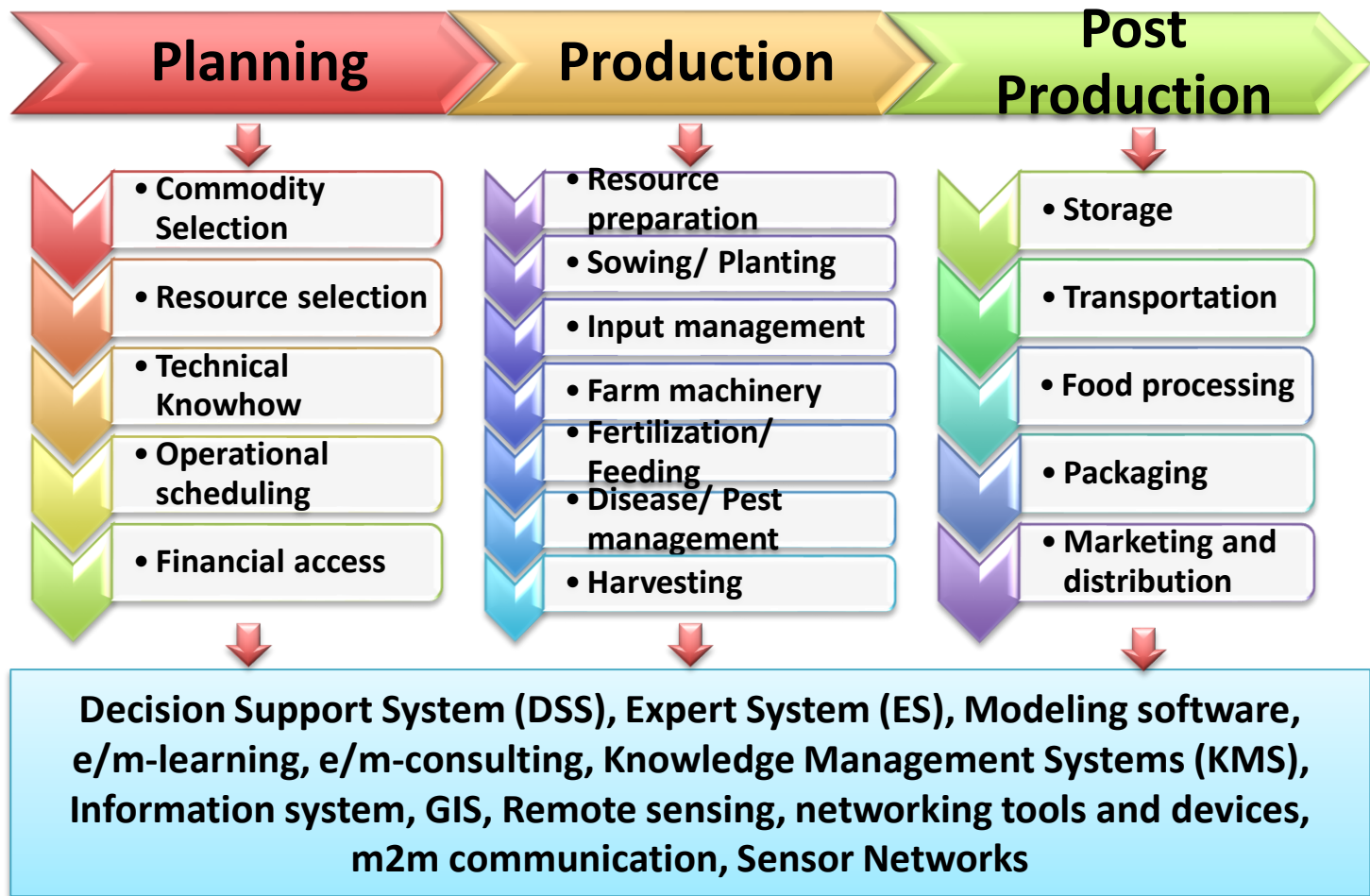


# OUT OF BOX THINKING IN HOME SCIENCE

## *New Concepts and Approach*

- *Farming System for Nutrition*
- *Nutrition Agriculture*
- *Nutri Farms*

# ICT Interventions in Agriculture



**Some New Dimensions for trying.....**

# Para-technicians in agriculture for combating farm labour shortage

Mechanisation Made Possible

**Paddy Task Force - A Success Model**

Workers' Problems Addressed

Thrust Area: Overcoming Labour Shortage

**Major Problems Addressed**

- > Labour shortage
- > Declining Area under Paddy

**The Process**

Stakeholder discussion

Panchayath consent

Legitimation

Initial selection

Final selection

Action

PTF - Professional Workers with High Sense of Self Esteem

Then saith he unto his disciples, The harvest truly is plenteous, but the labourers are few. Pray ye, therefore, the Lord of the harvest, that he will send forth labourers into his harvest. Source(Bible); Matthew (ch. IX, v. 37-38)

**Problem-cause**

Farmers: Lack of social acceptance, Low self esteem, Abandoning, High cost of paddy

Workers: Lack of social acceptance, Low self esteem, Drudgery, Not a target of work, Non access to Mch

Social: Unemployment, Lack of food security, Disease Problems

Transplanter

Reaper

PTF

Thresher

Power tiller

A solution to labour shortage

**Paddy Task Force**

Professional Paddy Workers

THE HINDU

Self employment to 16 youths Ensures timely labour

14 % higher productivity Saves Labour cost ( Rs 6670/Ha)

Output = Mechanisation = PTF

DoA RKVY

Training

Planning board recommends state wide adoption

6 Gramapanchayaths 370 ha Fallows 1478 Tonnes

Self employment to 41 rural youth

Outcome: PTF Multiplies 9 more

Cultivated 90 ha in one season

## COCONUT TECHNICIAN TEAM

കോക്കനെട്ട് ടെക്നീഷ്യൻ ടീം

A KVK Kannur concept to combat labour shortage



### സേവനങ്ങൾ

- വിളവെടുപ്പ്
- രോഗ കീട നിയന്ത്രണം
- വളപ്രയോഗം
- ഇടവിള കൃഷി
- തടമെടുക്കൽ
- നടീൽ

തെങ്ങിന്റെ ശാസ്ത്രീയ പരിപാലനം കരാറടിസ്ഥാനത്തിൽ

# WOMEN EMPOWERMENT THROUGH MECHANISATION FOR ACHIEVING FOOD SECURITY



Established a work force 'KRISHI SAHAYI'  
with 10 women

KVK Malappuram achieved this  
in collaboration with

- Govt. Food security programme
- KAU Rice Mission Programme
- ATMA
- Kudumbasree Mission
- District Panchayath
- Block Panchayaths
- Grama Panchayaths
- State Planning Board
- Agricultural Engineering College, Tavanur

**FLD on Establishment of a full-fledged machinery bank cum custom hiring unit of machinery for paddy sanctioned by State Planning Board, Govt. of Kerala**

This project, as model project is now implementing for 35 panchayats by the Agril. Department through District Panchayat

**Outlay of the project Rs.18,86,000/**



## KRISHI SAHAYI

Registered Society under  
KVK guidance



12.01.2008 02:03

# Bio-Pharmacy

*A KVK Kannur Concept  
to Promote Organics in Agriculture*



S.No.	Product	Quantity (Kg/No.)	Amount (Rs.)
1	Pseudomonas	10112	808960
2	Trichoderma	2037	142590
3	Vermicompost	589	4123
4	Coir pith Compost	925	5550
5	Pheromone trap (Mango)	338 No.	33800
6	Pheromone trap (Vegetable)	1263 No.	189450
7	Tobacco decotion materials	39.4	9850
8	Fish Amino Acid	11.1	5550
9	Egg Amino Acid	0.6	300
10	Panchagavyam	13	1950
11	Neem Soap	76.08	19020
<b>TOTAL</b>			<b>12,21,143</b>

The Bio Pharmacy concept of one KVK in Kerala is promoting organics in agriculture with an annual turn over of Rs. 12 lakh plus in providing inputs for organic cultivation can be tried for each taluk under Rytha Samparka Kendra(RSK) in Karnataka

# PPP Mode for Fodder Promotion in Tamil Nadu

## – an Innovative Approach by KVK, Namakkal

### PPP Mode for Fodder Promotion in Tamil Nadu

- Public Private Partnership in Fodder Seed Production

Started on 02-12-2010 with signing of MoU – Farmers – KVK - Dept. of Animal Husbandry, Tamil Nadu

- Role of Partners

*Farmers (Fodder Seeds Producers)*

*Krishi Vigyan Kendra, Namakkal (Co-ordinator)*

*Dept. of Animal Husbandry, Tamil Nadu (Purchaser)*

- Objective

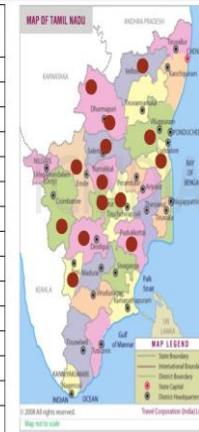
To develop a standard for fodder seeds production for livestock and to increase the economic standard of the farmers through production and supply of fodder seeds.

### PROCESS INVOLVED IN PROMOTION



### Coverage of farmers signed MOU for Fodder Seed/ Setts production in Tamil Nadu

Sl. No.	District	No. of farmers
1	Namakkal	51
2	Salem	09
3	Trichy	06
4	Dharmapuri	05
5	Erode	04
6	Vellore	04
7	Dindigul	02
8	Krishnagiri	02
9	Cuddalore	02
10	Karur	01
11	Tiruppur	01
12	Theni	01
13	Villupuram	01
14	Pudukottai	01
<b>TOTAL</b>		<b>90</b>



- Ninety farmers from 14 districts have signed MoU for fodder seed production.
- Thirty tons of fodder seeds worth Rs.1.3 crores covering 11088 acres of fodder area has been supplied.
- On an average farmers earns Rs.1.0 lakh/acre from fodder seed production excluding the fodder.
- High incidence of seed shattering in COFS -29 reported by KVK, Namakkal to TNAU breeders and a non-shattering type evolved for seed production



# PROCESSING AND VALUE ADDITION - UNDER UTILIZED FRUITS



- ❑ Absence of unique -locally adoptable processing & preservation technologies
- ❑ Inaccessibility of quality production, packaging and labeling techniques
- ❑ Absence of organized market channel



**CARD-KRISHI VIGYAN KENDRA**

Farm Science Centre, ICAR, Govt. of India  
Kolabhagom P. O., Pathanamthitta District, Kerala.



# TRANSFORMING JACK “THE MOST WASTE FRUIT” TO MONEY SPINNING “WONDER FRUIT”



**District area:** 2359 ha  
-16 million fruits

## **Varieties-**

**Koozha:** (Bulbs are fibrous, soft textured and highly perishable, less consumer acceptance)

**Varikka:** ( Bulbs are less fibrous and firm textured. Larger consumer acceptance as fresh fruit)

**Post Harvest Status**  
**REMAINS UNDER**  
**UTILIZED AND MOSTLY**  
**WASTED**



**CARD-KRISHI VIGYAN KENDRA**

Farm Science Centre, ICAR, Govt. of India  
Kolabhagom P. O., Pathanamthitta District, Kerala.





# HATCHING "EGGRIPRENEURS" THROUGH POULTRY FARMING- A CARD-KVK APPROACH

Pathanamthitta Dist - 2005



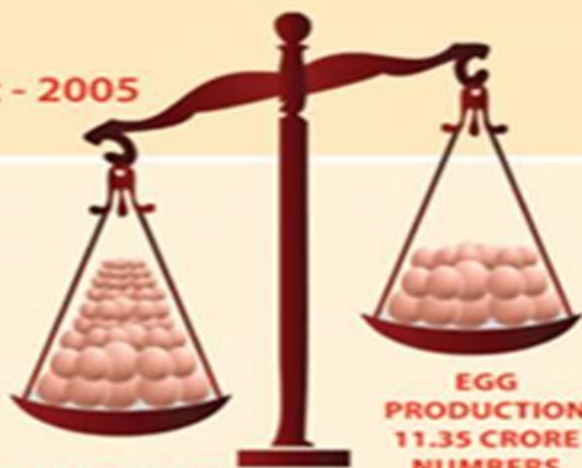
**TOTAL POPULATION - 3,59,185**



**DESI VARIETY - 185858**



**IMPROVED VARIETIES - 173327**



**EGG DEMAND  
22 CRORE  
NUMBERS**

**EGG  
PRODUCTION  
11.35 CRORE  
NUMBERS**

**DEFICIT - 10.65  
CRORE NUMBERS**

**TECHNOLOGIES  
PROMOTED**



**CARD-KRISHI VIGYAN KENDRA**

Farm Science Centre, ICAR, Govt. of India  
Kolabhagom P. O., Pathanamthitta District, Kerala.



# FARMERS' MALL

കർഷക വിപണന മാളിക

MANGALORE  
THE HINDU • MONDAY, DECEMBER 19, 2011

THE HINDU

## KVK's novel value-added initiative

Farmers' Mall to sell quality products sourced from local entrepreneurs

Mohamed Nazeer

**KANNUR:** It is conceived as a model initiative to sell value-added farm products from an array of local entrepreneurs, and can be emulated in urban centres for marketing a range of items made from agricultural produce.

The 'Farmers' Mall' set up by the Krishi Vigyan Kendra (KVK) on its premises at Panniyur here is a novel idea to sell the products of enterprises functioning under its patronage after ensuring quality.

Established with the support of the Agricultural Technology Management Agency (ATMA), the mall has all the looks of a modern shop, to display and sell branded value-added food products in attractive labelled containers

Funded by:  
**ATMA**



Value Addition Enterprises With KVK Patronage

- |                                  |                                       |   |   |         |  |                    |                                     |            |                          |                                       |                  |
|----------------------------------|---------------------------------------|---|---|---------|--|--------------------|-------------------------------------|------------|--------------------------|---------------------------------------|------------------|
|                                  |                                       |   |   |         |  |                    |                                     |            |                          |                                       |                  |
| go Squash<br>go Jam<br>go Pickle | Virgin Coconut Oil<br>Coconut Chutney | Banana Halwa<br>Banana Flower Pickle<br>Banana Relish<br>Banana Fig | Cashew Apple Syrup<br>White Pepper<br>White Pepper Powder | Pickles | Cashew Apple Syrup<br>Cashew Apple Drink | Cashew Apple Candy | White Pepper<br>White Pepper Powder | Pure Honey | Banana Fibre Handicrafts | Virgin Coconut Oil<br>Coconut Chutney | Jack Fruit Chips |

preserve, banana leaf pickle, banana flower pickle, cashew apple syrup, cashew apple candy, honey gel, and, fla-

*Tannayal in Kannur on Monday.*

dul Kareem, head and Professor of the KVK of Kerala, said the mall was set up to help local entrepreneurs to carry out value-addition of farm products. The KVK's initiatives aramba (banana products); K.V. Fruits, Vanivappara and Food Products, Mattannur, (cashew apple candy); and

KVK  
KANNUR  
Est: 2004

# New Major Enterprises

## FRESH

### Farming and Rural Employment for Social Harmony

A Trustworthy Handhold to Those Who Till and Toil on the Land

[www.freshkerala.in](http://www.freshkerala.in)



Patronage  
Krishi Vigyan Kendra Kannur, Kerala Agricultural University

Value Added Products of Rice  
FRESH Njavara Rice Flakes, FRESH Nutrich (Njavara Based Health Drink)

Value Added Products of Banana  
FRESH Banana Halwa, FRESH Udavazhakka, FRESH Banana Pith Preserve, FRESH Banana Flower Pickle & FRESH Banana Leaf Pickle

Value Added Products of Cashew Apple  
FRESH Cashew Apple Candy, FRESH Cashew Apple Syrup, FRESH Cashew Apple Juice

Value Added Products of Coconut  
FRESH Virgin Coconut Oil, FRESH Coconut Chips, Fresh Bendiya

Value Added Products of Jack Fruit  
FRESH Jack Fruit Chips, FRESH Chakka Varatti

Ongoing Projects  
Value Chain Model for Product Diversification of Banana  
Establishment of Food Processing Unit

#### H.R.D

Training for Farmers for Increasing Production and Productivity

Vocational Training for Self Employment Pursuers in Agriculture and Allied Fields

The tool employed by the FRESH in bringing about the personality transformation of a trainee into an entrepreneur is Transactional Analysis by Eric Berne

#### REVIVAL & PROMOTION OF FARMING

FRESH addresses the problem of declining area under paddy by purchasing paddy fallows and cultivating it with the help of Paddy Task Force (PTF)

#### PROMOTION OF MICRO-ENTERPRISES

Mushroom Production, Mushroom Spawn Production, Bee Keeping, Ornamental Fish Rearing, Quail Rearing, Poultry, Rabbitry etc

#### FEDERATING SHGs

Self Help Groups are formed in different locations involving 10-20 farmers with the main objective of providing raw materials such as banana to the Food Processing Unit run by FRESH. The SHGs, thus provided are federated at the district level.

Facilities provided by FRESH to the SHGs

Registration & arranging credit facilities  
Training  
Supply of bio-pesticides on payment basis  
Arranging insurance coverage  
Harvesting, procurement & payment at field level

#### PROMOTING FARMERS' EXPERIMENTATIONS & INNOVATIONS

- Scouting
- Arranging patent registration
- Publicity
- Arranging validation
- Enabling up scaling

#### TECHNOLOGY DEMONSTRATIONS

FRESH is there in the forefront of agricultural development process with farmers with the latest proven technologies and conducts front line demonstration of such technologies for their swift spread.

#### COUNSELLING & CONSULTANCY SERVICES

- Psychological counselling for adjustment problems
- Project consultancy for starting new enterprises



**FRESH**  
Farming and Rural  
Employment for Social Harmony

[www.freshkerala.in](http://www.freshkerala.in)



# New Major Enterprise

KVK Kannur

Estd

2004





ملال

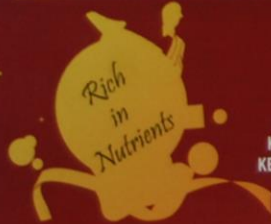


**KVK's**

# Nutrich

COMPLETE HEALTH FOOD IN A DRINK

NJAVARA BASED



Manufactured and Marketed by:  
KRISHI VIGYAN KENDRA, KANNUR  
KERALA AGRICULTURAL UNIVERSITY

[www.kvkkannur.com](http://www.kvkkannur.com)

MADE IN INDIA  
صنع في الهند

ملال

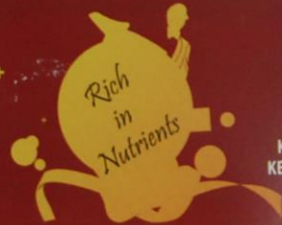


**KVK's**

# Nutrich

COMPLETE HEALTH FOOD IN A DRINK

NJAVARA BASED



Manufactured and Marketed by:  
KRISHI VIGYAN KENDRA, KANNUR  
KERALA AGRICULTURAL UNIVERSITY

[www.kvkkannur.com](http://www.kvkkannur.com)

MADE IN INDIA  
صنع في الهند

ملال



**KVK's**

# Nutrich

COMPLETE HEALTH FOOD IN A DRINK

NJAVARA BASED



Manufactured and Marketed by:  
KRISHI VIGYAN KENDRA, KANNUR  
KERALA AGRICULTURAL UNIVERSITY

[www.kvkkannur.com](http://www.kvkkannur.com)

MADE IN INDIA  
صنع في الهند



# KVK Products Crosses Arabian Sea



# EFFECTIVENESS

**ACTIVITY**

**VS**

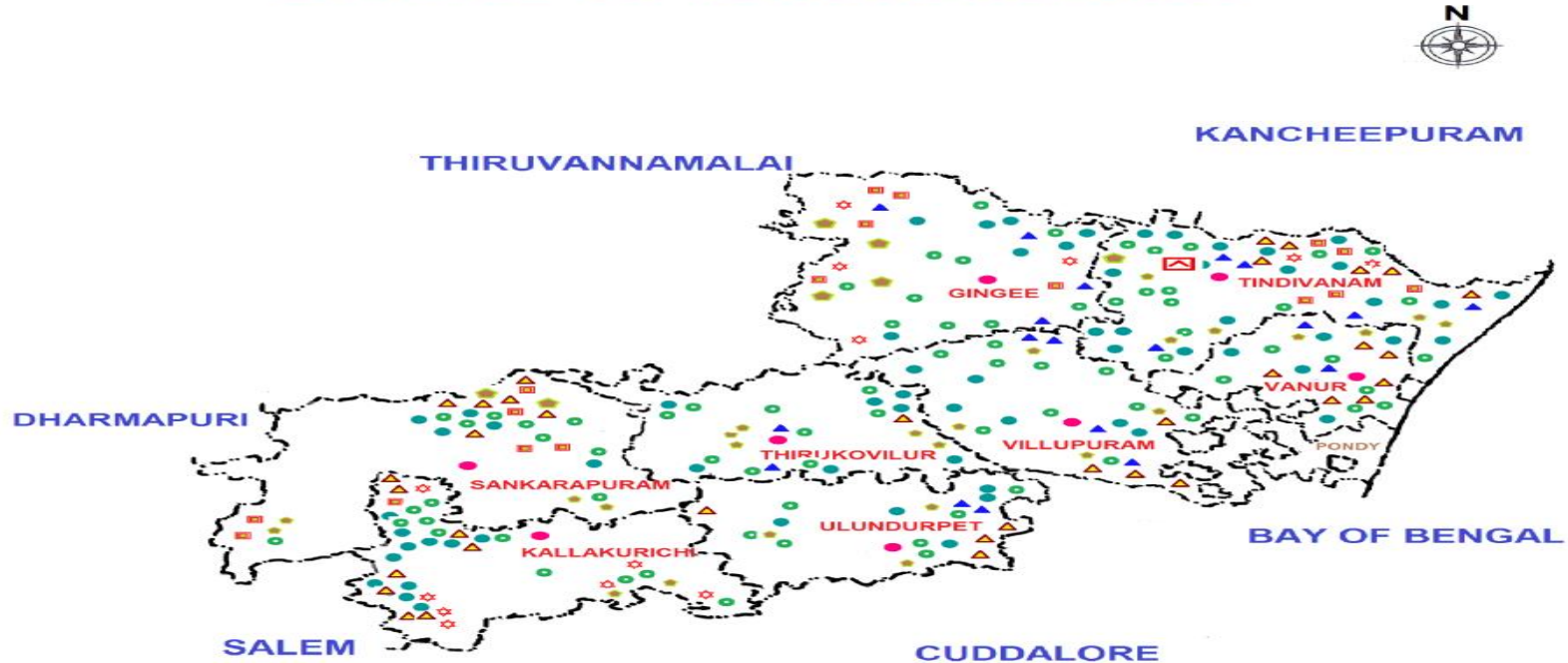
**ACHIEVEMENT**

# Activity vs Achievement

- Merely projecting the Activity is not the Achievement
- Any Activity should result in Achievement
- Achievement should be Quantified and Qualified.
- Achievement should be in terms of - *Outcome, Output and Impact*
- For achieving this analysing and synthesizing ability to be given utmost importance

# To begin with.....

## SPREAD OF KVK ACTIVITIES



**REFERENCE**

-----	STATE BOUNDARY
-----	DISTRICT BOUNDARY
-----	TALUK BOUNDARY
-----	COASTAL BOUNDARY

### LEGEND

●	FRONTLINE DEMONSTRATIONS
▲	ON FARM TESTING
▲	TRAINING ACTIVITIES
■	ENTREPRENEURSHIP DEVELOPMENT PROGRAMMES
★	LINKAGE PROGRAMMES
▲	OTHER EXTENSION ACTIVITIES
▲	PRECISION FARMING ACTIVITIES
■	VILLAGE ADOPTION

# To be more precise ...

## *Technology - Transplanting in Redgram*

- Standardized package for transplanted redgram

- Varieties suitable for transplanting (BSMR-736 and Asha (ICPL-87119))

INPUT



# To be more precise ...

## *Technology - Transplanting in Redgram*

- Nursery of 21 days old seedlings of redgram varieties viz., BSMR-736 and Asha (ICPL-87119) produced to cover 30 ha (2 lakh seedlings)
- Organized 52 demonstrations, 85 training programmes, 24 field days, 23 exhibitions

OUTPUT

# To be more precise ...

## *Technology - Transplanting in Redgram*

- Average yield 34.80 q/ha against 15.50 q/ha in farmers practice
  - 125% yield increased as compared to farmers practice
- 30 days advanced sowing that avoided pod borer occurrence
  - Saved 10 kg seeds per ha
- Enhanced deep rooting thereby withstanding drought
- Supplied 200 q of seeds of redgram varieties BSMR-736 and Asha (ICPL-87119)
  - BCR ranged between 5.21 to 7.43
- Solution for alternate crop for distressed sugarcane growers (net profit Rs.1.14 lakh/ha as compared to Rs.0.60 lakh /ha in sugarcane)

← OUTCOME

# To be more precise ...

## *Technology - Transplanting in Redgram*

### IMPACT

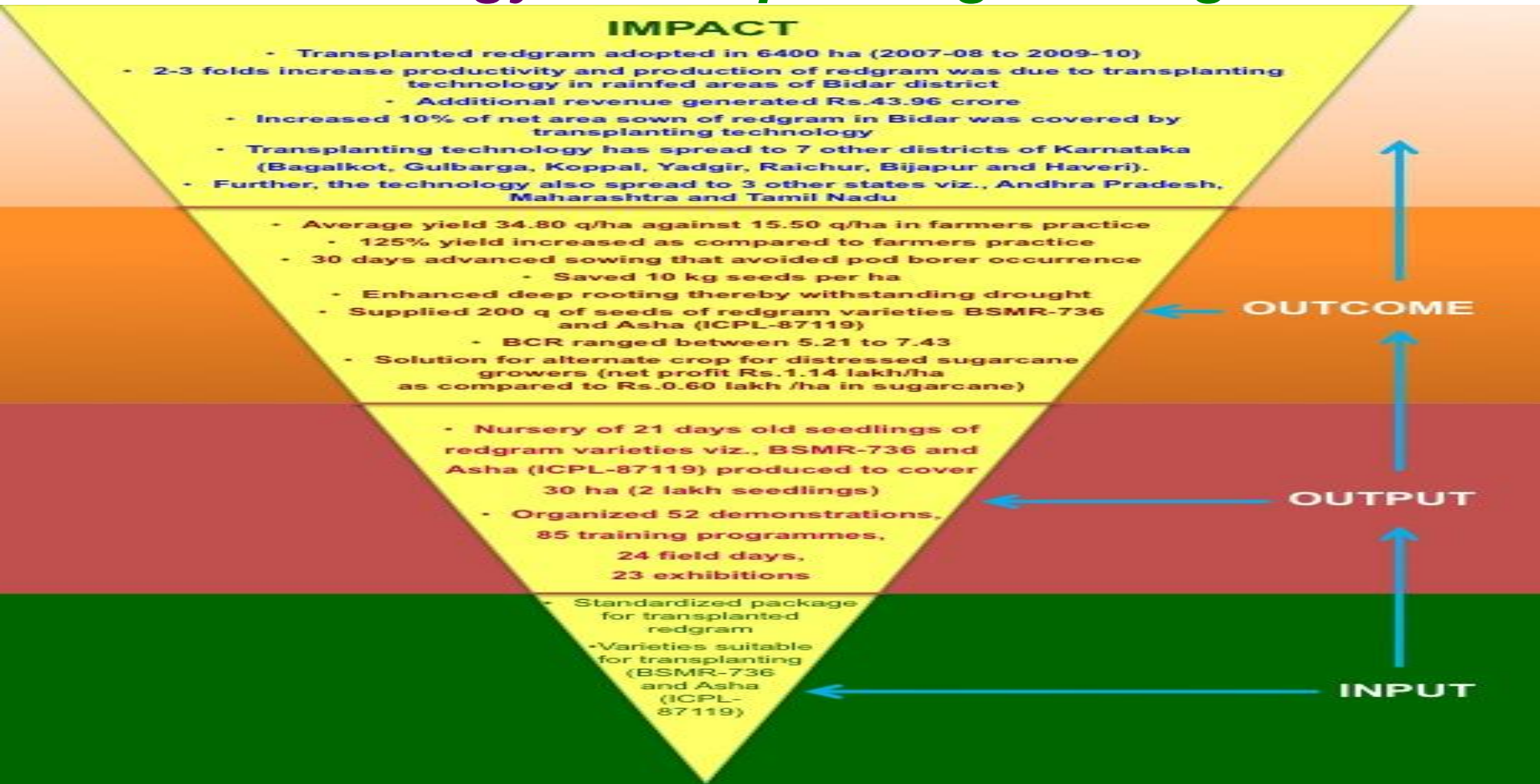
- Transplanted redgram adopted in 6400 ha (2007-08 to 2009-10)
- 2-3 folds increase productivity and production of redgram was due to transplanting technology in rainfed areas of Bidar district
  - Additional revenue generated Rs.43.96 crore
- Increased 10% of net area sown of redgram in Bidar was covered by transplanting technology
- Transplanting technology has spread to 7 other districts of Karnataka (Bagalkot, Gulbarga, Koppal, Yadgir, Raichur, Bijapur and Haveri).
- Further, the technology also spread to 3 other states viz., Andhra Pradesh, Maharashtra and Tamil Nadu





# To be more precise ...

## Technology - Transplanting in Redgram



# Kindly publish your work.....

English  
Français

## New Agriculturist



The Global Forum on Agricultural Research (GFAR) brings together all those working to strengthen and transform agricultural research for development around the world. As part of its role, GFAR is working with *New Agriculturist* to showcase and raise awareness of important initiatives and their outcomes, to update and inspire others.

### Precision farming - sustaining agricultural productivity in India



Rice, millet, pulses, sugarcane and cotton are the main crops grown in Madurai District  
© Dr C Ravindran

Rice, millet, pulses, sugarcane and cotton are the main crops grown in the Madurai District of Tamil Nadu, India, where, to overcome poor management practices, Tamil Nadu Agricultural University, in partnership with the World Bank and Krishi Vigyan Kendra (KVK), provided training on 'precision farming' for 3,000 farmers between 2007 and 2010. The poor practices addressed included groundwater depletion through use of surface flood irrigation and ridge and furrow irrigation, escalating costs of inputs and a lack of labour which is a major constraint in Indian agriculture.

Precision farming is an approach where inputs, including water and fertilisers are applied in precise amounts to maximise yields. The aim is to encourage farmers to adopt market-led horticultural production and to promote hi-tech agricultural practices. After clusters of 25-30 farmers had been selected, KVK

evaluated farmers' soil, water supply and pumping equipment before beginning to provide hands-on training.

A high-tech community nursery was installed for each cluster, to produce quality planting material, and farmers were taught how to produce high quality planting materials using the pro-tray method, in which hybrid seeds are sown in compost-filled plastic trays. Made of soft plastic, seedlings can be removed from trays without damaging the roots. The nurseries were covered with 50 per cent shade net, which protects seedlings from wind damage, heavy rain, and excess sunlight.

KVK distributed seeds of tomato, brinjal, onion and lablab (bean) to each group in order to establish each nursery, and to conserve water and enable drip fertigation with water soluble fertilisers and urea, a system of drip irrigation was installed in four villages. Drip irrigation equipment supplied to farmers was subsidised, while seed and fertilisers were provided free in the first year. In subsequent years, most of the farmers continued to adopt this technology using their own money.

#### Overcoming hurdles

Initially, many farmers did not believe that they could double their yields of vegetables while reducing the amount of water they applied to their crops by 40 per cent. But after the first harvest, most changed their minds and 2,200 hectares in Madurai District are now being cultivated using precision farming techniques. Three registered precision farming associations have also been established; involving 60 farmers, the associations meet regularly to discuss market strategies and interact with buyers and input suppliers. KVK and the other developers hope that the area under precision farming will continue to expand as awareness is raised through exhibitions and distribution of pamphlets.

New Agriculturist: Research and innovation - Precision farming - sustaining agricultural productivity in India

06/07/13 3:08 PM

Precision farming reduced water use, residues in soil and water, and chemical sprays, and substantially increased average yields compared to traditional cultivation techniques: tomato (from 35 to 100 tonnes/ha), onion (11-21 tonnes/ha) and banana (40-120 tonnes/ha). Quality also improved, leading to premium prices at market. Thiru Mitcharaha, from Nadumuthalikkulam, increased his yield of brinjal from 60 tonnes/ha to 200 tonnes/ha, earning US\$5,700 in one year.

Despite the high cost of water soluble fertilisers the total incomes of farmers increased two- to three-fold and their socio-economic status improved. The developers are now calling on the government to reduce the cost of water soluble fertilisers, improve their availability, and look to the improvement of post-installation maintenance of drip irrigation systems.

Due to increasing yields, some markets have become saturated and farmers have faced difficulties in marketing their produce. But this has been overcome by helping farmers to sell their produce at markets further afield. Farmers are also being taken to markets to be shown the importance of grading and sorting at farm level, while buyers are to be invited to demonstration sites to be made aware of the quality of vegetables that are being produced.



KVK provided training on precision farming for 3,000 farmers between 2007 and 2010  
© Dr C Ravindran

### Gaining recognition



Precision farming reduced water use and substantially increased average yields  
© Dr C Ravindran

Due to the high water use efficiency of precision farming, and high production of both staple and horticultural crops, various government departments have expressed their willingness to spread the technology throughout Tamil Nadu. The Department of Agriculture has set targets to spread the technology, send farmers for training and provide subsidies. Meanwhile, the Government of Tamil Nadu has begun to offer subsidies, including 15,000 INR (US\$260) per ha for water soluble fertilisers, 5,000 INR (US\$90) for seed, and 44,000 INR (US\$780) for drip fertigation.

According to the developers, one of the biggest challenges is that few farmers recognise the importance of this technology, and instead adopt their own combination of flood irrigation, ridge and furrow irrigation, and transplanting seedlings raised in beds, which leads to 30 per cent mortality

and poor yields. Some farmers are also not adopting precision farming because of the seemingly plentiful availability of water in their region, unaware that groundwater is being depleted. Tamil Nadu Agricultural University and the Indian government, therefore, are aiming to get every farmer to adopt this technology, through raising awareness, training, and subsidies.

Written by: Dr C Ravindran, Assistant Professor (Horticulture), Krishi Vigyan Kendra, Tamil Nadu Agricultural University, and Dr S Kumar, Professor (Horticulture), Tamil Nadu Agricultural University

Date published: July 2012

The *New Agriculturist* is a [WRENmedia](#) production.

This website uses cookies to improve your experience. By continuing to browse the site you are agreeing to our use of cookies.

Accept  
[Read more](#)

# Kindly publish your work.....

Ensuring Nutritional security by Rural Business Entrepreneurship at Madurai District | EGFA

06/07/201



## Global Forum on Agricultural Research (GFAR)

SEARCH

### Ensuring Nutritional security by Rural Business Entrepreneurship at Madurai District

[News]



#### Background – what was the drive behind the new development

Rice was the main crop grown in the Madurai District of Tamil Nadu, India. Due to the problem of inadequate irrigation water due to ground water depletion, farmers started giving up rice. Millet is highly suitable for promotion as an alternative crop in climate change era for the food and nutritional security. With the intervention of ICAR Krishi Vigyan Kendra (KVK), the activities on millet technologies in terms of location specific sustainable land use systems to convert rice growing areas to millet growing areas was taken. To present the production of millets is increased and estimated at all time high levels in this region.

Millets grown at Madurai include finger millet (Eleusine coracana), pearl millet (Pennisetum glaucum) foxtail or Italian millet (Setaria italica), kodos millet (Paspalum scrobiculatum), common proso millet (Panicum miliaceum), little millet (Panicum sumatrense), and barnyard or sawa millet (Echinochloa). But the farmers are not really benefited of it because of the disrupt rate they get on selling millets to middlemen's or directly to processors. KVK created awareness to farmers on secondary agriculture of millets...[Read more](#)

Attachment

[ensuring nutritional security by rural business entrepreneurship at madurai district new.pdf](#) 1.71 MB

Posted on 19/06/201

waste utilization in Banana Pseudostem | TECA

06/07/13 3:15 I



Search the whole site

FAQ Home  
TECA Home  
Search & Browse  
Exchange Groups  
Login  
FAQ



Home > Exchange groups > Farmer Innovation Exchange Group > Discussions >

#### waste utilization in Banana Pseudostem

P.M Murgesan is progressive banana farmers from Malakal village of Madurai district has been participated Farmer day cum workshop on 'Waste of Agricultural and Horticultural Crops' conducted by Agricultural College and Research Institute, TNAU, Madurai during 2007. This workshop has motivated him for waste utilization of Banana pseudostem after the harvest just like Paddy and Sugarcane in Muzumbar and Organic compost mix respectively. Disposing of Banana pseudostem after the harvest is the biggest problem faced by the farmers which degrades the soil and aggravate environmental pollution.

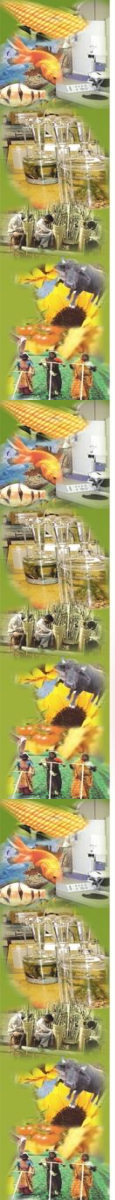
Keep this a novel idea in mind, a company started at Malakal Village and registered (Reg. No. 33 024 11 02487) under Micro Level Enterprise in Department of Industries and Commerce, District Industries Centre, Madurai Under the Ministry of Industries and Commerce, during 2007. For collection of raw materials, extraction of fiber and making value added product 20 rural women were initially employed to takeoff the business. **rope making machine has been invented with the help of Krishi Vigyan Kendra, TNAU, Madurai for which he has been awarded Farmer scientist** from Horti ble Union Minister Shri. Sharad Pawar Ji for Agriculture and Cooperation, New Delhi.

Identification of domestic and international market, leads to expansion of company with the help of loan obtained from State Bank of India and app 40 rural women's of permanent employment in the village with the capacity to produce 15,000m rope/day and make value added products like bag, bags etc. besides weaving mat, weaving grill and other products.

Due to the intervention of this company, farmers in and around area got additional income of Rs. 5Pseudo stem, employment opportunities for rural and protection of environment by waste utilization of Pseudo stem, use of eco products which is alternative to plastics.

IMAGES:





To conclude our Approach for Organizational Effectiveness in KVK System should be.....

***TALKING WITH  
THE FARMERS;  
NOT TALKING  
ABOUT THE  
FARMERS***

***BECAUSE THEY  
ARE OUR  
PARTNERS;  
NOT  
BENEFICIARIES***

*Thanks to TEAM ZUK !*

Change is mandatory for  
extraordinary results.

