

**Krishi Vigyan Kendra – Ranga Reddy District
Central Research Institute for Dryland Agriculture
Santoshnagar, Hyderabad**

Action Plan for On Farm Testing (OFT) 2014-15

Discipline: AGRONOMY

A) Assessment:

Discipline: AGRONOMY

1. OFT- 1 NEW

- a. Title : Assessment of high yielding and Extra early duration Redgram variety PRG-176
- b. Objectives : To conduct OFT for assessing the Redgram variety released from RARS, Palem
- c. Problem identified & its intensity : Low yield potential and Long duration in available varieties of Redgram
- d. Description of micro-farming situation : Light soils (red soils) and black soils under rainfed conditions
- e. Interventions planned : Introduction of new Redgram high yielding Variety – PRG-176
- f. Treatments : T₁ – Farmers practice Local varieties
T₂ – Technology Assessed Improved varieties– PRG-176
- g. Source of technology : RARS, Palem,, ANGRAU
- h. No. of farmers : Five farmers (Five replications)
- i. Observations/parameters of study :

1. Pest and disease incidence 2. Yield (q/ha) 3. C:B Ratio

Title of the Trial: Assessment of Redgram Variety PRG-176 in KVK adopted villages

Crop	Season	Farming Situation	Treatments (Kg/ha)	No. of Farmers	Area (ha)/ No. of Animals/implements/units etc	Critical inputs	Cost of Critical Inputs(Rs.)
Redgram	Kharif	Red soils / Black soils under Rainfed conditions	T-1 Farmer's Practice Local Varieties – LRG-30 T-2 Technology Assessed Improved varieties – PRG-176	Five	0.2 ha with two treatments and five replications =2 ha	Fertilizers	3000/-

(A.) Assessment : I year - NEW

Discipline: AGRONOMY

2. OFT -2

- a. Title : Assessment of high yielding and wilt tolerant chickpea variety NBeG-3
- b. Objectives : To conduct OFT for assessing the Chickpea variety released from ARS, Nandyal, ANGRAU
- c. Problem identified & its intensity : Low yield potential of available varieties of chickpea
- d. Description of micro-farming situation : Black soils under rainfed conditions
- e. Interventions planned : Introduction of new Chickpea high yielding Variety – NBeG-3
- f. Treatments : T₁ – Farmers practice Local varieties
T₂ – Technology Assessed Improved varieties– NBeG-3
- g. Source of technology : ARS, Nandyal,, ANGRAU
- h. No. of farmers : Five farmers (Five replications)
- i. Observations/parameters of study :
1. Wilt incidence 2. Yield (q/ha) 3. C:B Ratio

Title of the Trial: Assessment of Chickpea Variety NBeG-3- in KVK adopted villages

Crop	Season	Farming Situation	Treatments (Kg/ha)	No. of Farmers	Area (ha)/ No. of Animals/implements/units etc	Critical inputs	Cost of Critical Inputs(Rs.)
Chickpea	Rabi	Black soils under Rainfed conditions	T-1 Farmer's Practice Local Varieties – Jyothi T-2 Technology Assessed Improved varieties - NBeG-3	Five	0.2 ha with two treatments and five replications =2 ha	Seed/ Fertilizers	3000/-

Discipline: AGRONOMY

3. OFT -3

- a. Title : Assessment of high yielding and wilt tolerant Castor variety DCS-107
- b. Objectives : To conduct OFT for assessing the Castor variety released from DOR, Hyderabad
- c. Problem identified & its intensity : Low yield potential and wilt susceptible local varieties of castor
- d. Description of micro-farming situation : Red soils under rainfed conditions
- e. Interventions planned : Introduction of new Castor high yielding Variety – DCS-107
- f. Treatments : T₁ – Farmers practice Local varieties
T₂ – Technology Assessed Improved varieties– DCS-107
- g. Source of technology : DOR, Hyderabad
- h. No. of farmers : Five farmers (Five replications)
- i. Observations/parameters of study :

- 1. Productive tillers
- 2. Yield (q/ha)
- 3. C:B Ratio

Title of the Trial: Assessment of Castor variety DCS-107 in KVK adopted villages

Crop	Season	Farming Situation	Treatments (Kg/ha)	No. of Farmers	Area (ha)/ No. of Animals/implements/units etc	Critical inputs	Cost of Critical Inputs(Rs.)
Castor	Kharif	Red soils under Rainfed conditions	T-1 Farmer's Practice Local Varieties – Jyothi T-2 Technology Assessed Improved varieties – DCS-107	Five	0.2 ha with two treatments and five replications =2 ha	Seed/Fertilizers	5000/-

Discipline: AGRONOMY

4. OFT -4

- a. Title : Assessment of high yielding and wilt tolerant Safflower variety TSF-1
- b. Objectives : To conduct OFT for assessing the Safflower variety released from ARS, Tandur, ANGRAU
- c. Problem identified & its intensity : Low yield potential and wilt susceptible local varieties of Safflower
- d. Description of micro-farming situation : Black soils under rainfed conditions
- e. Interventions planned : Introduction of new Safflower high yielding Variety – TSF-1
- f. Treatments : T₁ – Farmers practice Local varieties
T₂ – Technology Assessed Improved varieties– TSF-1
- g. Source of technology : ARS, , Tandur, ANGRAU
- h. No. of farmers : Five farmers (Five replications)
- i. Observations/parameters of study :
1. Productive tillers 2. Yield (q/ha) 3. C:B Ratio

Title of the Trial: Assessment of Safflower variety TSF-1 in KVK adopted villages

Crop	Season	Farming Situation	Treatments (Kg/ha)	No. of Farmers	Area (ha)/ No. of Animals/implements/units etc	Critical inputs	Cost of Critical Inputs(Rs.)
Safflower	Rabi	Red soils under Rainfed conditions	T-1 Farmer’s Practice Local Varieties T-2 Technology Assessed Improved varieties – TSF-1	Five	0.2 ha with two treatments and five replications =2 ha	Seed/Fertilizers	5000/-

Discipline: AGRONOMY

I. OFT 5

- a. Title : Assessment of high yielding and downy mildew tolerant Bajra hybrid PHB-3
- b. Objectives : To conduct OFT for assessing the Bajra Hybrid released from RARS, Palem
- c. Problem identified & its intensity : Low yield potential of available varieties of Bajra
- d. Description of micro-farming situation : Light soils (red soils) under rainfed conditions
- e. Interventions planned : Introduction of new Bajra high yielding Hybrid – PHB-3
- f. Treatments : T₁ – Farmers practice Local varieties
T₂ – Technology Assessed Improved varieties/hybrids –PHB-3
- g. Source of technology : RARS, Palem,, ANGRAU
- h. No. of farmers : Five farmers (Five replications)
- i. Observations/parameters of study :
1. Productive tillers 2. Yield (q/ha) 3. C:B Ratio

Title of the Trial: Assessment of Bajra hybrid PHB-3 in KVK adopted villages

Crop	Season	Farming Situation	Treatments (Kg/ha)	No. of Farmers	Area (ha)/ No. of Animals/implements/units etc	Critical inputs	Cost of Critical Inputs(Rs.)
Bajra	Kharif	Red soils under Rainfed conditions	T-1 Farmer’s Practice Local Varieties – ICTP 8203 T-2 Technology Assessed Improved varieties/Hybrid – PHB-3	Five	0.2 ha with two treatments and five replications =2 ha	Fertilizers	3000/-

Discipline: AGRONOMY

6. OFT 6

- a. Title : Soil test based fertilizer application based on STCR equations developed for rice/cotton
- b. Objectives : To conduct OFT for refinement based on STCR equations used for Soil test based recommendations for crops rice/cotton
- c. Problem identified & its intensity : Injudicious use of fertilizers and high cost of fertilizers
- d. Description of micro-farming situation : Black soils and red soils under rainfed /irrigated conditions
- e. Interventions planned : STCR equations based recommendations for fertilizer application
:T₁ – Farmers practice - procurement from market
:T₂- Technology assessed – On farm production of Bio pesticides
- g. Source of technology : STCR Centre, ANGRAU
- h. No. of farmers : Twenty Five farmers
- i. Observations/parameters of study :

- 1. Soil test results
- 2. Yield (q/ha)
- 3. C:B Ratio

Title of the Trial: Soil test based fertilizer application based on STCR equations developed for rice/cotton

Crop	Season	Farming Situation	Treatments (Kg/ha)	No. of Farmers	Area (ha)/ No. of Animals/implements/units etc	Critical inputs	Cost of Critical Inputs(Rs.)
Rice/Cotton	Kharif/Rabi	Red soils / Black soils under Rainfed and Irrigated conditions	T-1 Farmer’s Practice T-2 Recommended dose of fertilizers T-3 STCR based recommendations		0.2 ha with two treatments and Twenty five replications =5 ha	Fertilizers/Bio - Fertilizers/Ver micompost	20000/-

(A.) Refinement : NEW

Discipline: Plant Protection

7. OFT 7

- a. Title : On Farm Production technology of mass multiplication of Bio-pesticides/Bio-agents (Trichoderma)
- b. Objectives : To conduct OFT for assessment of on farm production technologies for mass multiplication of Bio-pesticides/Bio- agents
- c. Problem identified & its intensity : Difficulty in production of bio-pesticides at farmers level
- d. Description of micro-farming situation :
:T₁ – Farmers practice **Chemical Pesticides application**
T₂- Recommended dose : Biopesticides from market
T₃- OnFarm production technology - Trichoderma
- g. Source of technology : NIPHM, Hyderabad
- h. No. of farmers : Five farmers (Five replications)
- i. Observations/parameters of study :
1. Quality 2. Feasibility studies 3. Cost analysis

Title of the Trial: On Farm Production technology of mass multiplication of Bio-pesticides/Bio-agents (Trichoderma)

Crop	Season	Farming Situation	Treatments (Kg/ha)	No. of Farmers	Area (ha)/ No. of Animals/implements/units etc	Critical inputs	Cost of Critical Inputs(Rs.)
Rice/Cotton	Kharif/Rabi	Red soils / Black soils under Rainfed and Irrigated conditions	T-1 Farmer's Practice- Pesticide application T-2 Recommended : Biopesticides from market T-3 On farm production technology for Biopesticides (Trichoderma)	5	0.2 ha with two treatments and 5 locations	Production input : Cooker, autoclave covers, gas stove and gas, spirit lamp, inoculation chamber, plastic trays and others	25000/-

Action Plan for Front Line Demonstrations 2014-15

Oil Seeds and Pulses

Discipline : AGRONOMY

Season: Kharif /Rabi

S. No.	Name of the crop	Type of Demonstration (Whole Package/Component)	Purpose of demonstration	Yield (q/ha)		Farming situation			Area (ha)	Number of farmers	Name of the village	Critical inputs identified	Cost of critical inputs (Rs)	Observations relevant to technology demonstrated***
				Existing	Potential	Rainfed / irrigated	Soil type	Previous crop						
1.	Pulses Horsegram II Year Cont...	Single Component Varietal - Var : CRHG-19	To demonstrate the disease tolerant, dual purpose and high yielding variety CRHG-19	10	15	Rainfed	Red /black soils	Fallow	10	25	KVK adopted villages and other mandals	Seed / Fertilizer	25000	1. Crop Yield 2. Plant Population 3. Disease incidence 4. Fodder yield 5. Economics B:C ratio

Other crops/Enterprises

Discipline : AGRONOMY

Season: Kharif /Rabi

S. No.	Name of the crop/enterprise	Type of Demonstration (Whole Package/Component)	Purpose of demonstration	Yield (q/ha)		Farming situation			Area (ha)/ No. of Animals /implements/units etc	Number of farmers	Name of the village	Critical inputs identified	Cost of critical inputs	Observations relevant to technology demonstrated***
				Existing	Potential	Rainfed/ irrigated	Soil type	Previous crop						
2	Ragi (Kharif) New	Single component - Varietal	Demonstration of high yielding and blast tolerant variety of Ragi - PRS-2	15-20	25	Rainfed	Red and Black soils	Joowar	4	10	KVK adopted villages and other mandals	Seed	5000	Crop yield Disease incidence

Discipline : Plant Protection

Season: Kharif 2014

Discipline : PLANT PROTETION

S. No	Name of the crop	Type of Demonstration (Whole Package/Component)	Purpose of demonstration	Yield (q/ha)		Farming situation			Area (ha)	Number of farmers	Name of the village	Critical inputs identified	Cost of critical inputs (Rs)	Observations relevant to technology demonstrated**
				Existing	Potential	Rainfed/irrigated	Soil type	Previous crop						
1.	Pegion pea IV year Cont...	Whole package	IPM in Pegion pea with wilt tolerant variety PRG 158	10	16-20	Rainfed	Red, Black	Maize	10	25	KVK villages	(1) Seed (2) Pheromone traps for Holicoverpa (3) Trichoderma (4) Neem oil (5) NPV 200 LE	20,000	(1) % pod borer damage from flowering /wilt incidence (2) Crop yield
2.	Cotton II year Cont...	Whole package	Sucking pest Management in cotton	10	20-25	Rainfed	Black and red soils	Jowar	10	25	KVK villages	Bottle brush Verticillium	15000	Sucking pest incidence, Crop yield
3.	Paddy III Year	Whole package	BIPM of Paddy Yellow Stem borer	50	70	Irrigated	Black and red soils	Vegetables	10	25	KVK villages	(1) Seed treatment With pseudomonas (2) T. japonicum (3) Pheromone traps	5000	Trap counts, Stem borer incidence Crop yield
4	Maize II year Cont..	Single component Insecticidal	Management of stem borer in maize	25	40-50	Rainfed	Black and red soils	Vegetables	10	25	KVK villages	Insecticide	2000	Stem borer incidence Crop yield
5	Brinjal II year Cont...	Single component	Demonstration of luci water traps with lures for brinjal shoot and fruit borer			Irrigated	Black and red soils	Jowar	10	25	KVK villages	Water traps and Luciflures	5000	Trap counts Stem borer incidence Crop yield

Action Plan for On Farm Testing (OFT) 2014-15
Discipline: Horticulture

(B .) Assessment: I.OFT:New

- a. Title : Assessment of triple resistant F1 hybrid tomato in adopted villages
- b. Objectives : To conduct OFT for assessing Arka Rakshak (Released from IIHR, Bangalore)
- c. Problem identified & : high incidence of pest and disease and lower yields its intensity
- d. Description of micro-farming situation : Red soils under rain fed conditions
- e. Interventions planned : Introduction of Triple resistant Hybrid Arka Rakshak
- f. Treatments : T1 – farmer practice (local Hybrid)
T2 –Arka Rakshak
- g. Source of technology : IIHR, Bangalore
- h. No. of farmers : 10
- i. Observations/parameters of study: *Based on technology in terms of effectiveness, yield improvement and economic viability*
1. Plant population 2. Yield (q/ha) 3. C: B Ratio

Crop	Season	Farming Situation	Treatments (Kg/ha)	No. Of Farmers	Area (ha)/ No. Of Animals/implements/units etc	Critical inputs	Cost of Critical Inputs (Rs.)
Tomato	Kharif	Black /Red soils under I.D conditions	T ₁ – farmer practice (Private hybrid) T ₂ – Arka Rakshak	Five	1.0 ha	Seed	15000

Assessment: III.OFT:-New

- a. Title : Use of Vegetable special for higher flower and fruit set in vegetables
- b. Objectives : To reduce micronutrient deficiency in vegetables
- c. Problem identified & its intensity : Poor nutrient management and lower yields
- d. Description of micro-farming situation : Red soils under irrigation conditions
- e. Interventions planned : Application of vegetable special (5 g/l)
- f. Treatments : T1 - farmer practice: T2 – Application of vegetable special (5g/l)
- g. Source of technology : IIHR
- h. No. Of farmers : 5
- i. Observations/parameters of study : *Based on technology in terms of effectiveness, yield improvement and economic viability*
 1. Plant growth/population 2. Yield (q/ha) 3. C: B Ratio

Crop	Season	Farming Situation	Treatments (Kg/ha)	No. of Farmers	Area (ha)/ No. of Animals/implements/units etc	Critical inputs	Cost of Critical Inputs (Rs.)
vegetables	Rabi	Black /Red soils under I.D conditions	T ₁ – Farmer practice T ₂ - Vegetable special application	Five	1.0 ha	Vegetable special	5000

(B.) Assessment: IV.OFT-New

- a. Title : Adaptation of fertigation technique in Cucurbits
 b. Objectives : To improve fertilizer use efficiency & yield in tomato
 c. Problem identified & its intensity : Poor water and nutrient management and lower yields
 d. Description of micro-farming situation : Red soils under irrigation conditions
 e. Interventions planned : Fertigation schedule in cucurbits
 f. Treatments : T1 – farmer practice(Only drip) : T2 – Fertigation

Crop	Fertigation schedule	Dose (ppm)			Total (Kg/ha)		
		N	P	K	N	P	K
Bottle gourd, Bitter gourd, Ridge gourd	Vegetative stage	25	15	30	87	52	139
	Flowering stage	50	30	60			
	Harvesting	25	15	40			

- g. Source of technology : CPCT, IARI
 h. No. of farmers : 5
 i. Observations/parameters of study : Based on technology in terms of effectiveness, yield improvement and economic viability
 1. Plant growth/population 2. Yield (q/ha) 3. C: B Ratio

Crop	Season	Farming Situation	Treatments (Kg/ha)	No. Of Farmers	Area (ha)/ implements/units etc	Critical inputs	Cost of Critical Inputs (Rs.)
Cucurbits	Rabi	Black /Red soils under I.D conditions	T ₁ – farmer practice T ₂ – Fertigation	Five	1.0 ha	Speciality fertilizers	25000/-

Action Plan for Front Line Demonstrations

S. No	Name of the crop	Type of Demonstration (Whole Package/ Component)	Purpose of demonstration	Yield (q/ha)		Farming situation			Area (ha)	Number of farmers	Critical inputs identified	Cost of critical inputs (Rs)	Observations relevant to technology demonstrated***
				Existing	Potential	Rainfed/ irrigated	Soil type	Previous crop					
1.	Tomato	Single component – Agronomic practices : Mulching	To demonstrate Mulching practice in tomato	50-55	90-100	I.D conditions	Black soils	Cotton, maize	2 ha	10	Mulching sheet	45000/-	1. Plant Population 2. and diseases incidence 3. Crop Yield 4. Economics , B:C ratio
2	Cucurbits	Single component – Agronomic practices : Mulching	To demonstrate Mulching practice in cucurbits	60-65	70-85	I.D conditions	Black soils	Cotton	1 ha	10	Mulching sheet	30000/-	1. Plant Population 2. P&D incidence 3. Crop Yield 4. Economics , B:C ratio
3	Tomato	Single component – raising of nursery in Pro-trays	Demonstration of raising hybrid tomato nursery in portrays under shade net	50-55	75-80	Rain fed	Red soils	Maize	1 ha	10	Pro-trays, Coco peat, Shade net	30,000/-	1. Plant Population 2. P& D incidence 3. Crop Yield 4. Economics , B:C ratio
4	Mango	Single component	Demonstration of pheromone traps to control fruit fly	50-60	70-80	I.D conditions	Red soils	Mango	4ha	10	Traps with lure	8000	1.Plant Population 2. P&D incidence 3. Crop Yield 4. Economics , B:C ratio
5	Chrysanthe mum	Single component	Demonstration of PBAU 107	50-60	80-90	I.D conditions	Red soils	Maize	4 ha	10	PBAU 107 seedlings	40000	1.Plant Population 2. P&D incidence 3. Crop Yield 4. Economics , B:C ratio

Action Plan for On Farm Testing (OFT) 2014-15

Discipline: Veterinary

OFT (1):

- i) Title : Studies on efficacy of coated vitamins and chelated minerals in anoestrous condition due to nutritional deficiency in cattle.
- ii) Objectives : To control the anoestrous condition due to nutritional deficiency in cattle by supplementation of coated vitamins and chelated minerals.
- iii) Problem identified & its intensity : Lack of proper management and knowledge
- iv) Interventions planned : It is planned to conduct OFT by Supplementation of coated vitamins, chelated minerals (Garbhamin)
- v) Treatments : T₁ - Farmers practice- Natural grazing
T₂ - Recommended practice- Natural grazing + Balanced ration with supplementation of coated vitamins, chelated minerals
- vi) Source of technology : Recommendations from Scientists of CRIDA and Sri Venkateswara Veterinary University
- vii) No .o farmers : Five farmers (5)
- viii) Observations / Parameters of study: Healthy status, proper calves per year & heat regularly.

Species	Season	Treatments	No .of farmers	Critical inputs	Cost of critical inputs (Rs.)
Cattle	2014-2015	T 1- Farmers practice Natural grazing T 2 – Recommended practice Natural grazing and balanced ration	5	Coated vitamins and chelated minerals	3000 /-

OFT (2) :

- i) Title : Effect of area specific mineral mixtures on livestock productivity at farmer level.
- ii) Objectives : To see the effect of Area specific mineral mixture supplementation in milch animals in KVK adopted villages.
- iii) Problem identified & its intensity : Feed & Fodder deficient in major and minor nutrients leads to mineral & vitamin deficiency ultimately reflects on Immunity, bodyweight of calves and heifers, reproductive and productive performance.
- iv) Interventions planned : It is planned to see the effect of Area specific mineral mixture (Ca, P, S, Cu, Zn, Co, I) supplementation in milch animals
- v) Treatments : T₁ - Farmers practice- farmers depends mostly on natural grazing methods without proper balanced ration.
T₂ - Recommended practice- By providing balanced ration apart from natural grazing with proper mineral mixture supplementation
- vi) Source of technology : Recommendations from Scientist of CRIDA and Sri Venkateswara Veterinary University
- vii) No .of farmers : Five farmers (5)
- viii) Observations / Parameters of study: Health status, Body weight, Milk yield.

Species	Season	Treatments	No .of farmers	Critical inputs	Cost of critical inputs (Rs.)
Cattle	2014-2015	T 1- Farmers practice T 2 – Recommended practice	5	Area specific mineral mixture (Ca, P, S, Cu, Zn, Co, I)	10,000 /-

OFT (3):

- i) Title : Comparative efficacy of Oxyclozanide and Levamisole in control of antihelminthics in calves which responsible for calf mortality.
- ii) Objectives : Antihelminthics control in calves which are responsible to calf diarrhea that leads to calf mortality.
- iii) Problem identified & its intensity : Lack of knowledge and indiscriminate use of various antibiotics to control calf mortality.
- iv) Interventions planned : Administration of oxyclozanide and levamisole @ 1ml per 4 kg.b.wt, booster dose on 14th day same dose.
- v) Treatments : T₁ - Farmers practice-
T₂ - Recommended practice
- vi) Source of technology : Recommendations from Scientists of CRIDA
- vii) No .o farmers : 10
- viii) Observations / Parameters of study : Faecal samples collected on pre treatment and post treatment on 7th and 14th day for faecal eggs count reduction test by Stoll's method.

Species	Season	Treatments	No .of farmers	Critical inputs	Cost of critical inputs (Rs.)
Calves	2014-2015	T 1- Farmers practice T 2 – Recommended practice	10	Deworming medicines	5,000 /-

i) **Assessment :**

OFT (4):

- i) Title: Effect of mineral bricks supplementation on growth characteristics in grazing Ram lambs.
- ii) Objectives: Supplementation of mineral bricks would be economical for obtaining optimum growth in grazing ram lambs than sole grazing
- iii) Problem identified & its intensity: Conventional grazing of sheep does not supply adequate nutrients for obtaining optimum growth.
- iv) Interventions planned: Planned to Supplementation of mineral bricks in grazing sheds
- v) Treatments : T₁ - Farmers practice- Conventional grazing
T₂ - Recommended practice- Apart conventional grazing along with mineral bricks supplementation.
- vi) Source of technology: Recommendations from Scientists of CRIDA and SVVU
- vii) No .of farmers : 5
- viii) Observations / Parameters of study: Weight gain, average daily weight gain, Healthy status.

Species	Season	Treatments	No .of farmers	Critical inputs	Cost of critical inputs (Rs.)
Sheep	2014-2015	T 1- Farmers practice T 2 – Recommended practice	5	Mineral bricks	3000 /-

ii) Assessment :

OFT (5):

- i) Title: Comparative efficacy of Oxyclozanide and Levamisole in control of lamb and kid mortality due to antihelminthics.
- ii) Objectives : Antihelminthics control in lamb and kid mortality which are responsible to diarrhoea that leads to lamb and kid mortality.
- vi) Problem identified & its intensity : Lack of knowledge and indiscriminate use of various antibiotics to control lamb and kid mortality.
- vii) Interventions planned : Administration of oxyclozanide and levamisole @ 1ml per 4 kg.b.wt, booster dose on 14th day same dose.
- viii) Treatments : T₁ - Farmers practice-
T₂ - Recommended practice
- vi) Source of technology: Recommendations from Scientists of CRIDA
- vii) No .o farmers : 10

Viii) Observations / Parameters of study : Faecal samples collected on pre treatment and post treatment on 7th and 14th day for faecal eggs count reduction test by Stoll's method.

Species	Season	Treatments	No .of farmers	Critical inputs	Cost of critical inputs (Rs.)
Sheep and Goat	2014-2015	T 1- Farmers practice T 2 – Recommended practice	10	Deworming medicines	5,000 /-

OFT (6):

- i) Title : Assessment & performance of new Srinidhi breed (dual Purpose)- PDP (ICAR).
- ii) Objectives : To provide rural livelihood to poor farmers and farm women and create nutritional supplementation to rural child.
- iii) Problem identified & its intensity: Farmers have Local desi breeds with low egg production, low body weight, more age at sexual maturity, survivability.
- iv) Interventions planned : Planned to evaluate performance of Srinidhi breed.
- v) Treatments : T₁ - Farmers practice-
T₂ - Recommended practice
- vi) Source of technology: Recommendations from Scientists of CRIDA and PDP
- vii) No .o farmers : 25
- viii) Observations / Parameters of study: Egg production, Body weight, Survivability.

Species	Season	Treatments	No .of farmers	Critical inputs	Cost of critical inputs (Rs.)
Poultry	2014-2015	T 1- Farmers practice T 2 – Recommended practice	25@ 10 birds each	6 weeks old birds	25000 /-

vi) **Assessment :**

OFT (7):

- i) Title: Comparative yield performance of Hybrid Bajra Napier Co4 and Hybrid Bajra Napier RBN-13 (phule jaywant).
- ii) Objectives : Comparative green fodder yield performance.
- iii) Problem identified & its intensity : Green fodder yield performance of Hybrid napier Co 4 with Phule Jaywanth (RBN-13).
- iv) Interventions planned : Supplementation fodder slips of hybrid napier Co-4 and RBN-13 .
- v) Treatments : T₁ - Farmers practice-
T₂ - Recommended practice
- vi) Source of technology: Recommendations from Scientists of CRIDA and SVVU
- vii) No .o farmers : 5

Viii) Observations / Parameters of study : Green fodder yield, palatability of animals

Species	Season	Treatments	No .of farmers	Critical inputs	Cost of critical inputs (Rs.)
fodder	2014-2015	T 1- Farmers practice T 2 – Recommended practice	5	Fodder slips Co 4 and RBN-13	5,000 /-

Action Plan for FLD proposed for the year 2014-2015

FLD (1):

- i) Name of the technology : Demonstration of C0-4 fodder variety with local fodder variety
- ii) Name of intervention : Front line demonstration.
- iii) Problem and its cause : No proper fodder crops to meet the day to day feed.
- iv) Inputs given : C0-4 stem cuttings @ 9000 per acre and Broadcasting of Stylo hamata,
- v) Cost of inputs : 25,000/-
- vi) Objectives : To get more green fodder per acre and thereby increase in milk production.
- vii) Justification : To develop cultivation of fodder crops, pasture lands and forests with improved and fodder seeds also like stylo
- viii) No. of location : 25 - KVK adopted villages

FLD (2):

- i) Name of the technology: Demonstration of complete concentrate feed mixture usage for milch animals.
- ii) Name of intervention : Front line demonstration.
- iii) Problems and its causes: Fodder deficient in major and minor nutrients leads to mineral & vitamin deficiency ultimately reflects on immunity, bodyweight of calves, reproductive and productive performance.
- iv) Inputs given : Complete balanced Concentrate feed supply by utilization of all agricultural by-products
- v) Cost of Inputs : 25,000/-
- vi) Objectives: To get fatter and increase milk yield and good reproductive performance.
- vii) Justification : Farmers are more interested to feed concentrate feed to enhance milk production
- viii) No. of locations : 20-KVK adopted villages

FLD (3):

- i) Name of the technology: Demonstration of Vitamin E, Selenium along with Meloxicam plus, Enrofloxacin in treatment of bovine mastitis.
- ii) Name of intervention : Front line demonstration.
- iii) Problems and its causes: Mastitis major problem in high yielding dairy animals with unhygienic condition.
- iv) Inputs given: Veterinary Medicines, CMT kits, Milk cans.
- v) Cost of Inputs : 15,000/-
- vi) Objectives: Mastitis control in milch animals and create awareness on mastitis.
- vii) Justification : Farmers are more benefitted by controlling clinical mastitis so that enhance milk production & improved their income.
- viii) No. of locations : 10-KVK adopted villages

Action Plan for On Farm Testing (OFT) 2014-15

Discipline: Agricultural Engineering

OFT- 1

- a. Title : Water conservation furrows in pigeon pea with CRIDA paired row planter
- b. Objectives : To educate farmers about CRIDA paired row planter technology
- c. Problem identified & its intensity : in-situ moisture conservation less, percentage of germination and area coverage less
- d. Description of micro-farming situation : Mixed black soils and rainfed
- e. Interventions planned : paired planter in different row spacing
- f. Treatments : T1- Farmers Practice (Animal Drawn sowing)
T-2 – Assessment: CRIDA paired row planter
- g. Source of technology : CRIDA
- h. No. of farmers : 15
- i. Observations/parameters of study : Conserve the moisture, Percentage of germination, plants per Sq.m area, percentage of production increased, Benefit Cost ratio

Crop	Component / technology demonstrated	Variety	No. of farmers	Area (ha)	Observations to be recorded
Pigeonpea	CRIDA paired row Planter	PRG 158 /Asha	15	7	Labour cost, Time savings, Increasing Yield, Plant Population. C:B ratios

OFT- 2

- a. Title : Chick pea with CRIDA 6 row planter
- b. Objectives : To educate farmers about CRIDA 6 row planter technology
- c. Problem identified & its intensity : Percentage of germination and area coverage less
- d. Description of micro-farming situation : Mixed black soils and rainfed
- e. Interventions planned : 6 planters in different row spacing
- f. Treatments : T1- Farmers Practice (Animal Drawn sowing)
T-2 – Assessment: CRIDA 6 row planter sowing
- g. Source of technology : CRIDA
- h. No. of farmers : 5
- i. Observations/parameters of study : Percentage of germination, plants per Sq.m area, percentage of production increased, Benefit Cost ration

Crop	Component / technology demonstrated	Variety	No. of farmers	Area (ha)	Observations to be recorded
Chickpea	CRIDA 6 row Planter	JG 11	10	4	Labour cost, Time savings, Yield, Plant Population. C:B ratios

OFT- 3

- a. Title : Performance and evaluation cotton picker machine at KVK adopted Villages
b. Objectives : To educate farmers about cotton picking machine technology
c. Problem identified & its intensity : To pick up the cotton by labour it time consuming
d. Description of micro-farming situation : Mixed black soils and rainfed
e. Interventions planned : Performance of machine under Assessment mode
f. Treatments : T-1 cotton picking by manual (Farmers Practice)
T-2 cotton picking by cotton picker machine
g. Source of technology : MARI, Warangal
h. No. of farmers : 10
i. Observations/parameters of study : Cotton picks by machine capacity (kg/day)

Crop	Component / technology demonstrated	Variety	No. of farmers	Area (ha)	Observations
Cotton	Cotton Picking Machine	-	10	4	Labour saving, cost saving, Harvest quantity. Time and economics

Action Plan for FLD proposed for the year 2014-2015
Discipline: Agricultural Engineering

Front line demonstrations (FLD)

1. Six row planters used for effective sowing pigeon pea and Maize crops.
2. Comparison of CRIDA manual weeder and bullock drawn weeders with local practice methods in vegetable and flower crops
3. Different Micro Irrigation methods for conserving water and comparison with local methods
4. Alternate Wetting and Drying method for Paddy to conserve the water and time
5. Conoweeder for weeding in row system planting in paddy
6. Different Soil and water conservation structures in the farmers fields
7. Running the Farm Implements and Equipments custom hiring center
8. Different crop mulching methods for conserving moisture comparison with local methods

FLD1 : Direct sowing of paddy by drum seeder

Problem : Labour shortage, time consuming and high cost of cultivation towards transplanting
 Intervention : Demonstration of Direct seedling using drum seeder in Paddy
 Objectives : To educate farmers about Drum seeder technology.
 Villages selected : KVK adopted three villages
 No of farmers : 6
 Area : 3.0 ha

Treatments	Details of treatment	Technical and Economic Observations
T1-Farmers Practice	Normal transplanting by labour	<u>Technical observations</u> a). No. of plants per sq.mt, percentage of germination and tillers per plant b). Cost saving, Water saving, time saving and labour saving c).Efficiency of the drum seeder
T2 - Recommended	Direct seedling by drum seeder	<u>Economical observations</u> a). Benefit Cost Ratio b). Percentage of yield increase/decrease

FLD 2 : **Demonstration of Brush cutter using for Paddy Harvesting**

Problem : Labour shortage, time consuming and high cost of harvesting by manual

Intervention : Demonstration of Brush Cutter using for Paddy harvesting

Objectives : To educate farmers about Mechanical Brush Cutter technology.

Villages selected : KVK adopted three villages

No of farmers : 20

Area : 10 ha

Treatments	Details of treatment	Technical and Economic Observations
T1-Farmers Practice	Normal Harvesting by Manual	<u>Technical observations</u> a). Fast and Efficient crop harvesting b). Cost saving, harvesting area increased, time saving and labour saving
T2 - Recommended	Paddy Harvesting by Brush Cutter	<u>Economical observations</u> a). Benefit Cost Ratio b). Percentage of harvesting capacity increase/decrease

Paddy harvesting by Brush cutter

Paddy harvesting by brush cutter is a kind of equipment which offers an efficient way to harvest paddy and it can also be used to fodder harvest, weeding and trimming horticultural crops. This Brush cutter has 4-stroke engine and has 360° working angle which allows flexibility to the operator for cutting and harvesting. Paddy harvester light in weight and easy to operate by men or women to cuts the crop and a special attachment provided collects the crop after cutting which with the minimum skills of the operator can be laid down in rows. It can be the best way to encounter labour problem in paddy growing areas. In the KVK adopted villages all the fields are in very small in size big machines like combine harvester problem to operated and labour shortage in season, and the brush cutter with paddy cutting attachment is very use full to the farmer and its around saves Rs.975 per acra, operating procedure is easy and very less weight of the machine approx 6 to 10 kgs. Use of improved implements for farm operations in order to improve the quality of work, Maintain timeliness of operations, Reduce drudgery, and Reduce cost of operations .The concept of harvesting paddy by mechanization is dynamic and situation specific.

Introducing Mechanization in paddy for the year of 2014 to 15

1. Land preparation and puddling : -- Rotavator
2. Direct seeding : -- Drum Seeder
3. Row system transplantation : -- Marker
4. Weeding : -- Cono Weeder
5. Water & Time Conserving method : -- AWD Method
Harvesting

Action Plan for Front Line Demonstrations (FLD) 2014-15 Discipline : Home Science

Front Line Demonstration – 1

Sl.	Name of the Title	Type of demonstration	Purpose of demonstration	Number of families	Name of the villages	Critical inputs identified	Cost of critical inputs
1.	Intervention with green leaf vegetables for improvement of haemoglobin levels in farm women	FLD	Nutrition awareness, improvement in Haemoglobin levels	10	New villages	Greens, field kit for haemoglobin estimation	Rs.20000/-
2.	Introducing multigrain atta for quality protein and micronutrients	FLD	Nutrition awareness, improvement in Haemoglobin levels	40	New villages	Millets, soya, maize	Rs.20000/-
3.	Capron for protective clothing during field operations for women farmers	FLD	Protective clothing to prevent occupational hazards	50	New villages	Capron	Rs.7500/-
4.	Finger guards for vegetables and fruit harvesting	FLD	Drudgery reduction	50	New villages	Fingerguards	Rs.3750/-
5.	Cotton picking bags for cotton harvesting	FLD	Drudgery reduction	50	New villages	Cotton picking bags	Rs.7000/-
6.	Bhendi cutters for harvesting vegetables and flowers	FLD	Drudgery reduction	50	New villages	Bhendi cutters	Rs.7000/-

Action Plan for Training Programmes

TRAINING PROGRAMMES PROPOSED FOR THE PERIOD April - March 2014-15

MONTH	Title of the course	ON/OFF	Duration	No. of participants			Client	Discipline	Anticipated Expenditure	Source of fund (KVK/ specify if others)
				Male	Female	Total				
Discipline : AGRONOMY										
May 14	Soil sample collection methods and awareness to farmers (2 Programmes)	OFF	1	35	5	50	PF/PFW	Agronomy	2000	KVK
June 14	Use of Bio fertilizers	ON	2	20	5	25	PF/PFW /Extn. Func.	Agronomy	3500	KVK
July, 14	Weed management in pigeonpea, Cotton, maize	OFF	1	20	5	25	PF/PFW	Agronomy	3000	KVK
July, 14	Weed management Rice	OFF	1	20	5	25	PF/PFW	Agronomy	3000	KVK
August, 14	Weed control – Parthenium control – Awareness programme in villages	OFF	1	80	20	100	PF/PFW/RV	Agronomy	4000	KVK
August, 14	Contingency measures /planning during midseason due to climatic aberrations (Drought/Excess rains) (3 trainings)	OFF	1	45	5	50	PF/RV	Agronomy	6000	KVK

Action Plan for Vocational Training Programmes (Agriculture and allied enterprises)

Discipline : Agronomy

Sl. No.	Date	Thematic area	Title of the Course	Duration (days)	Venue (On/Off campus)	No. of Participants			Anticipated Expenditure (Rs.)	Source of fund (KVK/specify if others)	Name of the Course In-charge
						Male	Female	Total			
1	October 2014	Rural Youth 5 programmes	<i>Production of vermi compost</i>	2	ON	75	25	100	10000	KVK	Dr. S.M. Vidya Sekhar
2	December 2014	Rural Youth/Entrepreneurs	<i>Production of Bio-fertilizers/Biopesticides</i>	5	ON	20	5	25	12500	KVK	Dr. S.M. Vidya Sekhar

Discipline : Plant Protection

MONTH	Title of the course	No. of program mes	ON/OFF	Duration	No.of participants			Client	Discipline	Anticipated Expenditure	Source of fund (KVK/ specify if others)
June & July, 2014	Good quality neem seed collection and NSKE preparation and its uses	1	Off	1	75	-	75	PF	Plant Protection	2000	KVK
July, 2014	Sucking pests Management in cotton	1	Off	1	75	-	75	PF		6000	KVK
Aug, 2014	IPM in Brinjal and chillies	1	Off	1	75	-	75	PF		2000	KVK
	Yellow stem borer Management in Paddy	1	Off	1	75	-	75	PF		2000	KVK
Aug, 2014	Pest and diseases of Maize and its control	3	Off	1	75	-	75	PF		2000	KVK
Oct., 2014	IPM in Bengalgram	1	Off	1	75	-	75	PF		2000	KVK
Nov, 2014	Pest and disease Management in Winter vegetables	1	On	2	75	-	75	PF		6000	KVK
Dec., 2014	Bio-pesticides and its on usage in vegetables	1	On	2	75	-	75	PF		6000	KVK

Action plan for proposed training for the year 2014-15 – Horticulture

Title of the course	ON/OFF	Duration	No. of participants			Client	Source of fund (KVK/ specify if others)
			Male	Female	Total		
Summer tomato cultivation	OFF	1	20	10	30	PF/PFW/Ry	KVK
Raising of Vegetable nursery under shade net in portrays (3 programmes)	On	1	20	5	25	PF/PFW/Ry	KVK
Training & pruning in Mango	On	1	20	5	25	PF/PFW/Ry	KVK
Measures to avoid alternate/ irregular bearing in Mango	OFF	1	20	5	25	PF	KVK
Grafting in Mango	ON	2	20	10	30	PF/Ry	ATMA
Tips for higher productivity in Chrysanthemum	OFF	1	42	8	50	PF/PFW	KVK
Production technology of tuberose	OFF	1	20	5	25	PF	KVK
Production technology of tomato trellising	OFF	2	45	5	50	PF/PFW	ATMA
Leafy vegetable cultivation in summer season under shadenet	ON	2	40	10	50	PF/Ry	ATMA
Poly house gerbera cultivation	OFF	1	30	10	40	PF/PFW/Ry	KVK

Action plan for proposed training programmes - 2014-15 – Veterinary Science

S.No	Title	ON/ OFF Campus	No. Of participants	Clientele	Duration
1	Improved Dairy management for higher farm income and rural entrepreneurship development (2)	ON	50	Practising farmers	1 day
2	Training Programme on Animal Husbandry Health Management. (ATMA sponsored)	ON	20	Practising farmers	1 day
3	Animal Health Management – Awareness on mastitis	OFF	30	Practising farmers& women	1 day
4	Animal Health Management – prophylactic measures for cattle diseases.	OFF	25	Practising farmers& women	1 day
5	Animal Health Management - prophylactic measures for Sheep and Goat diseases.	OFF	50	Practising farmers& women	1 day
6	Profitable ram, lamb production for rural entrepreneurship development	ON	25	Progressive farmers/ rural youth	1 day
7	Improved livestock management for higher productivity.	ON	30	Practising farmers	3 days
8	Training Programme on Animal Husbandry, fodder, Health Management.	ON	20	Practising farmers, Progressive farmers	1 day
9	Improved livestock management for higher productivity.	ON	25	Practising farmers	1 day

Action plan for proposed training programmes - 2014-15 – Home Science

Date	Title of the course	Duration (days)	Venue (On/Off campus)	Client (PF/RY/EF)*	No. of Participants	Anticipated expenditure (Rs.)	Source of fund KVK/ Others	Name of the course in-charge
April 14	Preparation of detergents , phenyle	3	Off	SHG	50	5000	KVK	Vidyaadhari.a
May 14	Value addition to mangoes	3	Off	SHG	50	4000	KVK	Vidyaadhari.a
June 14	Vermicompost Preparation and utilization	2	off	SHG	50	1000	KVK	Vidyaadhari.a
July 14	Value addition to tomatoes	3	off	SHG	50	5000	KVK	Vidyaadhari.a
August 14	Combating anaemia by introducing iron rich food	3	off	SHG	50	2000	KVK	Vidyaadhari.a
Sep 14	Inroduction of maize recipes	3	off	SHG	50	3000	KVK	Vidyaadhari.a
Oct 14	Value addition to amla (candy and supari)	3	off	SHG	50	8000	KVK	Vidyaadhari.a
Nov 14	Introduction of recipes with minor millets	3	off	SHG	50	2000	KVK	Vidyaadhari.a
Dec 14	Candle making	2	off	SHG	50	3000	KVK	Vidyaadhari.a
Jan 15	Making biscuits and cakes	2	off	SHG	50	3000	KVK	Vidyaadhari.a
Feb 15	Preparation of neem seed kernel extract	3	off	SHG	50	2000	KVK	Vidyaadhari.a
March 15	Income generation activities	2	off	SHG	50	3000	KVK	Vidyaadhari.a

Vocational / Sponsored Training Programmes

Date	Title of the course	Duratio n)	Venue (On/Off campus)	Client (PF/Ry/ EF)*	No. of Participan ts	Anticipated expenditure (Rs.)	Linkage with organization	Name of the course in- charge
April, 2014	Value addition to fabric with maggam embroidery	90 days	off	RY	60	60000	NABARD	Vidyaadhari.a
May, 2014	Post harvest technologies of fruits and vegetables	7	off	SHG	50	20000	M.V.Foundation	Vidyaadhari.a
April , 2014	Garment making	90	off	RY	30	10000	Rythu samakhya	Vidyaadhari.a
Dec,2014	Dyeing and printing	14	off	SHG	30	10000	MEDP NABARD	Vidyaadhari.a
Jan, 2015	Cloth bag and paper bag making	14	off	SHG	30	20000	MEDP NABARD	Vidyaadhari.a
Feb, 2015	Bakery with LPG oven	7	Off	RY	30	10000	KVK	Vidyaadhari.a
March, 16	Leaf plate making	7	off	SHG	30	10000	KVK	Vidyaadhari.A

Other Extension Activities

Particulars	Topic
Radio talk	Summer vegetable cultivation
	Protected cultivation
	Raising of vegetable nursery in portraits under shade net
	Pruning and training in fruit crops
	Cultivation practices in flower crops
	Pest and disease management in mango
TV Show	Drip/fertigation for horticultural crops
	Pruning in mango
	Staking in hybrid tomato
Popular articles	Cultivation practices in flower crops
	Off season vegetable cultivation
	Pest and disease management in mango
	Cultivation vegetables under poly house

Action plan for extension activities – Home Science

Activity	Date	Name of the village	Topic	Expected No. of participants	Anticipated expenditure (Rs.)
World food day	16.10.2014	Kandlapally	Food security nutrition deficient disorders	100	4000
National nutrition week	1-7 sep 2014	Mirzapur	Nutrition deficient disorders	200	8000
Women in agriculture day	4-12-2015	Yenkepalli	Drudgery reduction	200	8000
Technology week		KVK adopted villages / NICRA Cluster	Importance of self help groups and income generating activity	200	8000