# **Annual Report 2013-14**

(01-04-2013 to 31.03.2014)



**Shri Hanumantharaya Educational and Charitable Society** 

# KRISHI VIGYAN KENDRA

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# **Abstract**

Kurnool district comes under scarce rainfall zone with normal rainfall of 670.3mm. The district comprises three revenue divisions, 54 revenue mandals, 926 revenue villages and 649 hamlet villages. The net area sown is 8.69lakh and the gross cropped area of the district is 10.21 lakh ha of which 2.71lakh ha are irrigated through canals, tanks, wells and other sources. Seventeen agri -ecological situations exists in the district. Majority of the soils are black (76%) and the remaining are red soils.

#### Mandatory activities carried out in 2013-14

#### On farm testing:

1. Assessment of plant densities (paired row vs ridge planting in Maize)

Maximum grain yield (7145kg/ha) was recorded in ridge planting (60x20cm) as compared to paired row. The higher grain yield in ridge planting was due to higher number of grain rows/cob and test weight.

#### 2. Castor based inter cropping system:

The results showed that intercropping with green gram 1:2/ cluster bean 1:2 ratio resulted in higher castor equivalent yield and gross returns per ha than sole crop. Intercropping of green gram with castor in 1:2 row proportions resulted in the highest LER value of 1:21 coupled with highest yield of castor.

#### 3. Performance of black gram varieties in rain fed black soils:

The results indicated that among the varieties PU-31 has recorded highest yield (1692kg/ha) followed by LBG-752(1567kg/ha).

#### 4. Performance of Bengal gram varieties in rain fed black soils:

The results indicated that nandyala sanaga-1 recorded highest yield (1657kg/ha) followed by JG-11(1527kg/ha) and JG-130.

#### 5. Nutrient management in sunflower based on STCR equation under I/D situation:

The results indicated that highest yield (1845kg/ha) was recorded in T2 (NPK: 71-2730kg/ha) when compared with T1 (NPK: 100-108-0kg/ha) with a saving of Rs 3500/ha on chemical fertilizers.

**6. Nutrient management in chilli based on STCR equation under irrigated situation**: The results indicated that the average yield of T1(NPK:550-450-75 kg/ha) and T2 (NPK 400-89-105kg/ha) were on par (5108 and 5097 kg/ha respectively). However there was reduction in fertilizer cost by Rs 18,000/ha.

#### 7. Management of sucking pest in Bt cotton:

The yields obtained in OFT (2650kg/ha) were 7.07% higher compared to farmers practice with a saving of Rs 1,180/ha on cost of plant protection.

#### 8. Integrated disease management for fruit rot and powdery mildew in chillis:

The results indicated that 53480kg/ha yield was recorded which is 5.07% more than farmers practice with saving of Rs 3350/ha on pp measures. The incidence of fruit rot and powdery were 2.7% 4.5% in OFT and 6.35% &11.6% in farmers practice. Additional net benefit of Rs 18,430/- was realizes per ha.

#### 9. Effect of creep feeding on growth rate in pre weaned lambs:

The results indicated that 38.93% increased body weight was recorded in ram lambs by feeding balanced concentrate feed over farmers practice.

- **10.Effect of azolla supplementation on growth rate in rajasri birds at back yard**:T1- scavenging grains (FP) T2 scavenging+ grain+azolla@50g/day. The results indicated that 23.5% increase in body weight was observed over control.
- 11. Effect of regional specific mineral mixture on reproduction and production performance in milch buffaloes:

The results indicated that 45% animals exhibited heat symptoms and 15.3%increased milk production .

#### 12. Promotion of non traditional vegetables in rabi season:

Results indicates that net returns (BC ratio 3.32) are more in beetroot and it was observed that the duration of the crop and incidence of pest and diseases is less in comparison with tomato.

- **13. Testing the performance of Chrysanthemum varieties**: Results indicates that among varieties tested for their performance, PBAU 107 recorded higher yield, showed high level of establishment, drought and shelf life and consumer acceptance.
- **14.** Assessment of performance of improved sickles with local sickles: Improved sickles of 175g weight were used for harvesting paddy. The results indicated that with improved sickles the labour saved was 37.5 per cent.

#### 15. Performance of refined rotary weeder:

The cost of weeding was saved by Rs 600/- and labour saved by 62.5per cent

### Front line demonstrations of pulses:

- **1. Red gram**: In kharif thirty demonstrations were taken up with PRG-158 with improved production technologies. The yield recorded was 1577kg/ha which was 24% more than farmers practice with one protective irrigation. LRGG-41 recorded 1347kg/ha in medium black soils under rainfed situation which is 19.7% more than farmers practice.
- **2. Bengal gram**: in rabi thirty demonstrations were organized with Digvijay variety and improved production technologies. The yield recorded was 1749kg/ha which is 26.2% more than farmers practice.

#### Other demonstrations:

- **3. Weed management**: The results indicated that post-emergence application of Bispyribac sodium 80ml/acre at 20 DAT reduced weed density with 82%weed control efficiency. It was revealed that post emergence application of herbicide along with on e hand weeding is most economic method for weed control in transplanted rice.
- **4. Demonstration of RP Bio 226 paddy variety**: The result indicated that RP Bio 226 gave equivalent grain yield 7345kg/ha.I t could serve as a replacement for Samba Mahsuri in BLB endemic areas.
- 5. Nutrient management based on STCR in rice: These demonstrations were taken up in 6 villages in 300ha. The results indicated that the average grain yield of paddy under STCR was higher (6829kg/ha) than the grain yield under control(6823kg/ha). It was recorded that an amount of 10,369/ha was realizes as additional income due to low production costs and yield in demonstrations.
- **6. Zinc management in Rice**: Foliar application Zn0.2% at 25 and 30 DAT recorded higher yield (6713kg/ha) compared to farmers practice. An amount of Rs 9551/- was realizes as additional income due to increased yield.
- 7. Nutrient management in Bt cotton: The average yield of cotton was high (4128kg/ha) in INM practice compared to farmers practice (3756kg/ha). An amount of Rs 17703/ha was realized as additional income due to low production costs and increased yield (9.91%).
- **8. Reclamation of sodic soils**: The average yield of paddy in demonstration plot was 5920kg/ha , in controlled plot it was 4852kg/ha. After reclamation PH came down from 9.02 to 8.61.
- 9. Sulphur and Zinc management in Bengal gram based on soil test: The average yield of Bengal gram under sulphur and zinc management was high (1834kg/ha) compared to control (1625kg/ha.

- **10. Management of stem rot in groundnut in kharif**: The stem rot disease incidence in demo(6.75%) is 46.42% lower than the farmers practice(12.26%) under ID condition, with net additional income of Rs 11,700.00 per ha including the saving of Rs 2,250 per ha on cost of plant protection.
- 11. Real time contingent management of pest and disease in red gram: During the season Maruca and pod borer incidence was noticed and the management of the same was take up by spraying neemoil, chlorpyripos and dichlorovos as against indiscriminate use of pesticides by the farmers. Yield recorded in demo was 1316kg/ha as against 1175kg/ha in farmers practice with saving of Rs 1250/ on pp measures.
- 12. Real time contingent management of pests and diseases in castor: The results indicated that in demo there is 8.4% increased yield in castor (1187kg/ha) compared to farmers practice (1095kg/ha) which mainly attributed to management of botrytis, castor semilooper and borer in time .The incidence of borer was reduced by 49.15% in demo over farmers practice and botrytis disease was reduced by 57.35% in demo over control with additional net returns of Rs 2,760-00 per ha.
- 13. Management of wilt and dry root rot in Bengal gram: Seed biopriming with Trichoderma viride@ 10g/kg seed was done and soil application of 2kgTv with FYM was applied before sowing for management of wilt and dryrootrot. Incidence of wilt and dryroot rot was noted. The yield in FLD (1927kg/ha) 8.1% more compared to farmers practice with net additional benefit of Rs 3,935.00 per ha.
- **14.** Integrated crop management in jasmine:

  In demo 4826.3 kg ha was recorded as against4947 kg/ha in farmers practice.
- **15. Demonstration of marigold hybrids**: in demo yield recorded was 123.3 q/ha with good BC ratio of 2.67 as against 1.63 in farmers practice.
- **16.** Effect of feeding sunflower heads supplemented ration on milk production in milch buffaloes: The results indicated that 9.77% increased milk production by feeding SF heads supplemented ration over farmers method. Difference of Rs 3075 on net profit was observed in demo over control.
- **17. Mineral supplementation to lambs through salt licks**( Pre weaned stage ) The results indicated that 11.2% increased body weight gain lambs was noticed by feeding salt licks over farmers practice.
- **18. Bhendi Cutter for Reducing Drudgery for farm women:** Demonstration on Bendi Cutter was organized in Pandlapuram village as the farm women faced constraints while harvesting due

to the fuzzy nature of Bendi. Data revealed that the harvest rate increased by 13.6% and labour saved by 40% over local check.

### 19. Introduction of Cotton hand gloves for harvesting of Castor:

Demonstration on introduction of cotton hand gloves for harvesting of castor crop was organised for ten farm women of Meerapuram village. With introduction of cotton hand gloves, the labour required per acre was reduced from six to four as the farm women wear gloves which speedsup the activity and cost on harvesting saved by 33.3%.

# 20. Introduction of Mogi Improved Wheel hoe for reducing drudgery of Farm women in weeding operations:

Mogi Improved wheel hoe was introduced in Amadala village for weeding in groundnut crop. With the Mogi improved wheel hoe the cost on weeding was saved by Rs 600/- and labour saved by 62.5% for one weeding at 20 days. During the crop period the weeding was taken up for two times and the cost on weeding was saved by Rs 1200.

**Mobile advisory services**: Delivered 36 need based messages for 1545 registered farmers of KVK.

#### **Training programmes**

Discipline	No.of Trainings	Farmers		Rural	Youth	Extension Functionaries	
		Male	Female	Male	Female	Male	Female
Agronomy	14	350	-	-	=	50	-
Soil Science	11	468	-	25	-	25	-
Plant Protection	14	401	48	05	11	=	-
Horticulture	11	269	-	05	-	15	-
Animal Husbandry	13	170	110	05	15	30	10
Home Science	24	-	380	-	228	-	58
Total:	87	1658	538	40	269	105	68
Grand Total:							2678

**Units established:** established jowar processing unit, korra processing unit, Jowar roti making Unit, dairy units, vermicompostsand organic farming units.

# **Services and supplies**

Item	Quantity		
Paddy	-		
BPT-5204	450q		
NDLR-7	200q		
Redgram	-		
ICPH-2740	4.0q		
LRG-41	5.0q		
Castor PCH-111	4.0		
Seteria 9Suryanandi)	10.0q		
Vermicompost	95 tonnes		
Soil Samples	772		
Water Samples	563		
Trichoderma viride	968kg		
Pseudomonas	1145kg		
Neem Powder	8094kg		
Azatobactor	44kg		
Azosprillum	53kg		
Vegetable seedlings	487000		
Rajasri chicks	20495		
Ram lambs	21		
Mineral Mixture	700kg		
Cotton sarees	100		

## **ANNUAL REPORT - 2013 -14**

#### 1. GENERAL INFORMATION ABOUT THE KVK

# 1.1. Name and address of KVK with phone, fax and e-mail

Address	Telephone		E mail	Website
	Office	FAX	_	
Shri Hanumantharaya	9394444439		pendekantikvk@rediffmail.com	
Educational &			pendekantikvk@gmail.com	
Charitable Society,				
Krishi Vigyan Kendra,				
Yagantipalle (P)				
Banaganapalle (M)				
Kurnool (Dt.) A.P.				

# 1.2 .Name and address of host organization with phone, fax and e-mail

Address	Telephone		E mail	Website
	Office	FAX		
Shri Hanumantharaya	9394444439		pb1961@rediffmail.	
Educational &			<u>com</u>	
Charitable Society,				
Krishi Vigyan Kendra,				
Yagantipalle (P)				
Banaganapalle (M)				
Kurnool (Dt.) A.P.				

# 1.3. Name of the Programme Coordinator with phone & mobile No

Telephone / Contact				
Name	Residence	Mobile	Email	
Smt. G.Dhanalakshmi	08142117677	9440607424	dhana66@rediffmail.com	

## 1.4. Year of sanction: 1989

# 1.5. Staff Position (as on 31st March-2014)

SI. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale	Present basic (Rs)	Date of joining	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	G.Dhanalakshmi	Programme Coordinator	Home Science	27,490-00	34,490-00	3-4-2003	Permanent	OC
2	Subject Matter Specialist	K.Venkata Ramanaiah	SMS (Soil Science)	Soil Science	26,160-00	30,640-00	10-7-1996	Permanent	ВС
3	Subject Matter Specialist	M.Sudhakar	SMS (Agronomy)	Agronomy	26,160-00	31,560-00	23-9-1996	Permanent	OC
4	Subject Matter Specialist	D.Balaraju	SMS (Plant Protection)	Plant Protection	22,280-00	27,680-00	4-4-2003	Permanent	OC
5	Subject Matter Specialist	K.Rajeswar Reddy	SMS Horticulture	Horticulture	17,550-00	22,950-00	1-10-2008	Permanent	ОС
6	Subject Matter Specialist	A.Krishna Murthy	SMS (Animal Husbandry)	Animal Husbandry	17,550-00	22,950-00	20-6-2010	Permanent	OC
7	Programme Assistant	K.Lakshmi Priya	Programme Asst. (Home Science)	Home Science	17,830-00	22,030-00	18-6-1996	Permanent	ВС
8	Programme Assistant	B. Koteswar rao	Programme Asst. (Agronomy)	Agronomy		25,000-00	01.2-2013	Temporary	
9	Accountant / Superintendent	Y.V.Rama Subbaiah	Accountant Supt.	Accountant Supt.	18,240-00	22,440-00	1-1-1996	Permanent	OC
10	Jr.Asst. cum Typist (SK)	B.V.M.V.Prasad Rao	Jr. Asst. cum Typist	Jr. Asst. cum Typist	12,230-00	14,630-00	21-3-1990	Permanent	ВС
11	Driver	Iqbal Basha	Driver cum Mechanic	Driver cum Mechanic	9,520-00	11,520-00	20-9-1995	Permanent	OC
12	Driver	D.Obulesu	Driver cum Mechanic	Driver cum Mechanic	9,170-00	11,170-00	1-8-1996	Permanent	SC
13	Attender	P.Raghava Reddy	Attender	Attender	8,210-00	10,010-00	2-11-1990	Permanent	OC
14	Watchman	T.P.Gurappa	Watchman	Watchman	7,960-00	9,760-00	30-12-94	Permanent	ВС
15	Cook	T.Rajeswari	Cook	Cook	7,960-00	9,700-00	20-9-1995	Permanent	ВС
16	Farm Attendent	A.Rama Subbaiah	Farm Attendent	Farm Attendent	7,960-00	9,760-00	1-10-1996	Permanent	ВС

# 1.6. Total land with KVK (in ha)

: 20 ha

S.	Item	Area (ha)
No.		
1.	Under Buildings	2
2.	Under Demonstration Units	1
3.	Under Crops	10
4.	Orchard/Agro-forestry	4
5.	Others (specify)	3

# 1.7. Infrastructural Development:

# A) Buildings

S.	Name of	Source			Stag	e		
No.	building	of		Complete	<u>e</u>		Incompl	ete
		funding	Completion	Plinth	Expenditure	Starting	Plinth	Status of
			Date	area	(Rs.)	Date	area	construction
				(Sq.m)			(Sq.m)	
1.	Administrative	ICAR	1994	550	7.59	1990-91		
	Building							
2.	Farmers Hostel	ICAR	1994	450	8.0	1990-91		
3.	Staff	ICAR	1998	650	32.27	1992-93		
	Quarters(6)							
4.	Demonstration	ICAR	1992-93	300	6.5	1992-93		
	Units (3)							
5	Fencing	ICAR	2005-06		6.5	2004-05		
6	Rain Water	-	-	-	-			
	harvesting							
	system							
7	Threshing floor	-	_	-	-			
8	Farm godown	ICAR	2005-06	112.5	5.28	2005-06		
9	Soil Testing	ICAR	2004-05	112.5	8.59	2004-05		
	Laboratory							

# B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total km. Run	Present status
TATA Sumo	2009	6,00,000-00	1,02,534 KM	OK
Mahindra & Mahindra Tractor	2005	3,54,522-00	30,678 (hrs)	ОК
Motorcycle (Sujiki)	1996	33,090-00	5,25,695 KM	Condemned
Motorcycle (Honda)	2002	45,576-00	20,805 KM	Condemned
Motorcycle (Suzuki MAX-100)	2002	34,100-00	75,324 KM	Condemned
TVS XL-Super	2002	17,900-00	43,335 KM	OK

# C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Tape Recorder	1990	2,600-00	OK
Over Head Projector	1991	6,200-00	OK
Slide Projector	1991	7,168-00	OK
Ahuja Micro phone Set	1994	9,500-00	OK
Television	1994	19,999-00	OK
Video Casette Recorder	1996	19,000-00	OK
Ahuja Portable wireless Amplifier	2003	9,927-00	OK
Cordless micro phone	2003	5,804-00	OK
Collar Mike	2005	5,800-00	OK
Digital Camera Kodak	2005	19,800-00	Condemned
Digital Camera Nikon	2005	15,100-00	Condemned
L.C.D	2005	1,00,000-00	Condemned

# 1.8. A) Details of SAC meeting held on 07.03.2014 for Kharif,2014

SI.	Name and Designation of	Salient Recommendations
No.	Participants	
1.	Dr.Y.Padmalatha, ADR, RARS, Nandyal.	<ul> <li>Organic farming is good in Vegetables and Horticulture crops where premium prices can be realized.</li> </ul>
		<ul> <li>Organic farming in Rice is not necessary. The residual effect of inorganic chemicals if any will be detoxified in due course of time after harvest in storage, dehulling, polishing, soaking in water and cooking.</li> </ul>
		<ul> <li>Green manuring before paddy followed by fertilizers application has increased the availability of micronutrients in the crop (found in grain and straw) viz., Zinc, Fe, Mg, Mn etc. compared to crop taken up without green manuring and fertilizers alone.</li> </ul>
		<ul> <li>Non Bt cotton need to be promoted – NDLH 1935 (Hopper tolerant)</li> </ul>
		<ul> <li>Extra early variety of Setaria (SIH 3121) need to be tested in double cropping.</li> </ul>
		NBeG 3 seed production need to be taken up by KVK.
		<ul> <li>High seed rate need to be given in NBeG 47 (variety for combine harvesting) for realizing maximum yield benefits.</li> </ul>
		<ul> <li>Training Programmes and Publications need to be improved in Agronomy.</li> </ul>
		KVK is good in conduction of collaborative programmes.
		• KVK is maintaining good amounts of Revoving fund (Rs. 58 lakhs). It is appreciable that each SMS is contributing to RF.
		<ul> <li>As cotton area is at increase, high density in cotton need to be tested.</li> </ul>
		• Fertilizer recommendations based on STBR need to be demonstrated for easy understanding.
		Fertilizer management in Bt. Cotton need to be popularized.
		<ul> <li>Top dressing of Gypsum for Paddy @ 500 kg/ha in 2 – 3 splits. Gypsum top dressing need to be done in organic farming also.</li> </ul>
		<ul> <li>Vermicompost can be applied as top dressing in paddy for increasing Nitrogen availability in Organic farming.</li> </ul>

- In OFT of chillis results for Powdery mildew and Fruit rot need to be showed separately.
- Crop rotation in Rabi Groundnut with Sorghum to be taken up for decreasing stem rot incidence (Net returns to be calculated based on the system)
- Irrigations in Rabi groundnut need to be optimized for decreasing stem rot incidence.
- Spray for LLS need to be included in stem rot management with Trichoderma viride and seed treatment.
- Spraying of Zinc Sulphate at fruit setting stage improves shelf life of mango.
- Demonstrations on stem necrosis in marigold need to be taken up.
- Collaborative programmes with ARS, Anantapur need to be taken up in Animal Husbandary.
- Spineless Cactus highly useful for fodder (from Jodhpur University) may be included in fodder demonstrations.
- Supply of drudgery reduction implements to RARS.
- Entrepreneurial activities need to be improved in Home science.
- SAC report should be circulated well in advance to the members.
  - Feedback for research and extension need to be given by each Scientist in their subject.
  - Each of trials may end up in some success stories. Such success stories need to be documented.
  - Testing for chemical fertilizer and herbicide residues along with pesticide residues in organic produce need to be done to know its impact on quality of Organic crop produce.
  - Zinc also may be included in complex fertilizers and the same may be displayed on bag label.
- Crop specific Integrated Crop Management methods viz., Intercropping, trap crops, seed Representative), Nandyal treatment need to be given as pamphlets.
  - Preparation of Pamphlets on use of bio pesticides like Trichoderma and Pseudomonas.
  - Steps for increasing usage of Trichoderma and Pf need to be taken up.
  - Shared his experience in Organic farming in Redgram.
  - As area under Bt cotton and Maize is increasing day by day awareness need to be created on management of these crops, especially 'K' deficiency in Maize.

- Dr. Chari Appaji, Principal Scientist, Zonal Project Directorate, Hyderabad
- Dr. M.R.Sreenivasulu. Special Officer, SHE & CS
- Sri. P.Wilson, ADA (JDA

Scientist & Coordinator, Cotton by brid Aiit 155 is a good yielder with less incidence of sucking nests	
Scientist & Coordinator,  • Cotton hybrid Ajit 155 is a good yielder with less incidence of sucking pests.  DAATTC, Kurnool	
<ul> <li>Dr. Y.Narasimhudu,</li> <li>Principal Scientist &amp;</li> <li>Programme Coordinator,</li> <li>KVK, Yemmiganur</li> <li>As per the 8 year station trials at RARS, Nandyal on Organic paddy, there is no quality in either Organically or Inorganically grown rice.</li> </ul>	difference
7 Sri. N. Sudhakar, ADA, • Taking up trainings in collaboration with KVK on drought.	
Nandyal  • Crop planning as per the rainfall and ground water situation need to be done	
8 Sri. M. Madan Mohan • More awareness among farmers need to be created on high density planting.	
Goud, Horticulture Officer,  Koilakuntla  Along with Carrot and Beetroot awareness on Gourds under pendal cultivation has t up.	o be taken
9 Smt. M. Suvarna, • Income Generating activities and Nutrition education programmes need to be taken up villages.  Banaganapalle	in interior
<ul> <li>Sri. Y.Srinivasa Reddy,</li> <li>Assistant Hydrologist,</li> <li>Kurnool</li> <li>Training programmes need to be taken up with department of agriculture and department in May to create awareness on water budgeting.</li> </ul>	l irrigation
11 Sri. Srinivasulu, Farmer, • Expressed his problems in Bt cotton with regard to sucking pest complex and BPH in Pa	ddy.
Dornipadu  • Expressed his satisfaction in taking up Soil Test Crop Response based nutrient manarice, where in he has saved about Rs. 4000/- per ac. On chemical fertilizers.	agement in
12 Sri Sankar Reddy, Dairy • Seed of Lucerne and Hedge Lucerne may be provided.	
Farmer, Yagantipalle  • Good varieties of maize for both fodder and Grain may be suggested.	
Requested digging of farm ponds under NICRA.	

# List of participants attended the SAC meeting:

1.	Dr. M.R	Sreenivasulu,	Special Office	er. SHE&CS

- 2. Sri. P.Wilson, ADA (JDA Representative), Nandyal
- 3. Dr. S. Saralamma, Principal Scientist & Coordinator, DAATTC,
  Kurnool
- 4. Dr. Y.Narasimhudu, Principal Scientist & Programme Coordinator, KVK, Yemmiganur
- 5. Sri. N. Sudhakar, ADA, Nandyal
- 6. Sri. C. Subba Reddy, MAO, Banaganapalle
- 7. Sri. M. Madan Mohan Goud, Horticulture Officer, Koilakuntla
- 8. Sri. M.Srinivasa Reddy, BTM, ATMA

- 9. Smt. M. Suvarna, Supervisor (Rep. of CDPO), Banaganapalle
- 10. Sri. Y.Srinivasa Reddy, Assistant Hydrologist, Kurnool
- 11. Sri. B.R.Gangavar, Technical Officer, NHRDF, Kurnool
- 12. Sri. B. Srinivasulu, Farmer, Dornipadu
- 13. Sri D.Sankar Reddy, Dairy Farmer, Yagantipalle
- 14. Sri. Tollamadugu Subba Reddy, Farmer, Banaganapalle
- 15. Sri. Venkateswar Reddy, Farmer, Owk Mettapalli
- 16. Smt. B.Rajeswaramma, Women Farmer, Yagantipalle
- 17. Sri. M. Krishnudu, Farmer, Yagantipalle (V), Banaganapalle (M).

# 2. DETAILS OF DISTRICT (2013-14)

# 2.1 Major farming systems/enterprises (based on the analysis made by the KVK)

S.	Farming system/enterprise
No	
1	Agriculture + Horticulture
2	Agriculture + Dairy
3	Agriculture + Horticulture + Dairy
4	Agriculture + Horticulture + Pastural Culture

# 2.2 Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1	Scarce rain fall zone	Low, scanty and erratic rainfall due to which successful crop production with good yields unexpectable and dry land agriculture is predominant with a variety of rainfed crops in the zone.

# Agro-ecological situations:

S.	Agro ecological situation	Characteristics
No		
1	K.C canal irrigated red soils	Paddy-Paddy, Greengram-Paddy
		Paddy-Groundnut, Vegetables
		Paddy-Fallow
2	T.B.Low level canal irrigation	Paddy-Paddy, Paddy-Groundnut
	Red soils	Greengram-Paddy, Vegetables
		Groundnut/Fallow
3	T.B. High level canal irrigation	Greengram-Paddy, Paddy/Groundnut/
	Red soils	Vegetables-Fallow
4	K.C.Canal irrigation Black soils	Paddy-Greengram-Paddy
		Paddy/Groundnut-Vegetables
		Sunflower/Groundnut-Fallow Groundnut/Cotton-Fallow
5	T.B.Low level canal irrigation-	Greengram/Paddy-Paddy
	Black soils	Paddy-Groundnut/Vegetables
		Sunflower-Groundnut
		Groundnut-Sunflower
		Cotton-Fallow
6	T.B.High level canal irrigation	Paddy-Fallow, Sunflower/Groundnut-Fallow
· ·	Black soils	
7	Problem soils	Greengram-Paddy, Fallow-Paddy Fallow-Paddy

8	Tank irrigation Red soils	Paddy-Sunflower/Fallow
		Paddy/Sunflower-Fallow
9	Tank irrigation Black soils	Paddy-Paddy/Groundnut Sunflower-Fallow, Fallow-
		Paddy/Groundnut/Sunflower
10	Well irrigation Red soils	Paddy-Paddy/Sunflower/Groundnut
		Sunflower-Groundnut/Greengram
		Groundnut – Groundnut/Sunflower
		Cotton/Onion-Fallow
11	Well irrigation Black soils	Paddy-Paddy/Sunflower/Groundnut
		Sunflower/Vegetables
		Cotton/Onion/Chillies-Fallow
12	Rainfed Red soils	Sunflower, Groundnut+Redgram
		Groundnut+Jowar, Cotton
		Cotton+Redgra, Jowar, Korra, Redgram-Fallow
13	Rainfed-Black soils	Paddy-Fallow Sunflower/Bengalgram/Coriander fallow
		Jowar/Bengalgram/Tabacco
		Jowar/Groundnut/Cotton-Fallow
14	SRBC – Redsoils	B.t. Cotton, Jowar, Redgram, Groundnut, Korra
15	SRBC – Black soils	Rice, Jowar, Maize
16	TGP – Red soils	G.nut, Vegetables, Sunflower, Chillis, Cotton
17	TGP –Black soils	Rice, B.t. Cotton, Chillis

# 2.3 Soil type/s

S.	Soil type	Characteristics	Area in
No			lakh ha
1	Black cotton soils	Heavy and deep to very deep belonging to vertisols.	3.69
2	Red earths	Clayey sub soil (association of alfisols and inceptisols)	1.29
3	Red earths	Loamy sub soil i.e chalkas (association of inceptisols and alfisols)	3.18
4	Red sandy loam soils	Dubbas & Chalkas (association of entisols, inceptisols and alfisols)-Light textured soils, poor water holding capacity, poor fertility	0.54
5	Problem soils (Saline/sodic)	High pH more than 9.0	1.04
6	Rock land and others	Undulated sloppy lands. Very shallow soils.	0.47

# 2.4. Area, Production and Productivity of major crops cultivated in the district

## **Kharif -2013**

S.	Crop	Normal	Area sown	Production	Productivity
No		areas	(ha)	(QtI)	(Qtl /ha)
1	Rice	86939	97600	-	3687
2	Jowar	10686	10687	-	2129
3	Bajra	7621	7600	-	-
4	Maize	19687	21254	-	5833
5	Ragi	0	1	-	-
6	Minor Millets (Korra)	9956	16752	-	-
7	Redgram	45410	45768	-	631
8	Greengram	2402	1518	-	680
9	Blackgram	3881	856	-	585
10	Horsegram	1	1	-	-
11	Other Pulses	0	0	-	-
12	Groundnut	149524	152259	-	573
13	Sesamum	47	25	-	-
14	Castor	60300	35425	-	728
15	Sunflower	27415	4852	-	612
16	Soybean	88	12		
17	Cotton	72895	165757	-	340
18	Mesta	299	45	-	-
19	Chillies	13594	2875	-	3215
20	Sugarcane	1330	1330	-	-
21	Onion	17222	22523	-	18115
22	Turmeric	2213	1361	-	-
23	Tobacco	1634	58	-	-
24	Others	27888	12656		

Rabi -2013

S.	Crop	Normal areas	Area sown (ha)	Production	Productivity
No				(QtI)	(Qtl /ha)
1	Paddy	27340	12340	-	2775
2	Wheat	479	136	-	-
3	Jowar	61343	49911	-	2134
4	Bajra	526	53	-	-
5	Maize	5969	10927	-	7784
6	Minor Millets	294	104	-	-
7	Redgram	1390	534	-	1145
8	Greengram	873	808	-	-
9	Blackgram	6344	2620	-	480
10	Horsegram	959	616	-	495
11	Bengalgram	220041	208477	-	1751
12	Other pulses	38	-	-	-
13	Groundnut	22269	13987	-	2415
14	Sunflower	57860	14430	-	1974
15	Safflower	448	343	-	-
16	Sesamum	491	330	-	-
17	Rape seed	3256	2857	-	-
	mustard				
18	Chillies	683	804	-	2725
19	Coriander	4899	425	-	595
20	Tobacco	9975	7106	-	1135
21	Cotton	246	179	-	-
22	Onion	2044	2519	-	23174
23	Others	519	268	-	

AREA, PRODUCTION AND PRODUCTIVITY OF DIFFERENT HORTICULTURE CROPS GROWN IN THE DISTRICT				
SI.No	Name of the crop	Area (Ha)	<b>Production in Tones</b>	Productivity in Tons/Ha
1	Mango	7209	108135	15
2	Sapota	432	6480	15
3	Sweet Orange	2888	72200	25
4	Guava	210	3150	15
5	Ber	66	990	15
6	Pomogranate	57	570	10
7	Lime	205	2563	12.5
8	Banana	3373	168650	50
9	Coconut	120	45000	375 Nuts / Tree
10	Papaya	300	2400	8
11	Other fruits	202	-	-
	Total	15062	410138	
Vegetab	les			
12	Tomato	11515	75630	15
13	Brinjal	2856	22848	8
14	Drumstic	150	-	-
15	Gourds	575	4120	10
16	Beans	2605	13250	5
17	Leafy Vegetables	140	-	-
18	Bhendi	4318	8970	6
19	Carrot	310	5840	20
20	Cucumber	45	1500	10
21	Capsicum	125	-	
	Total	22639	132158	
Spices				
21	Chillies	13765	96033	7
22	Onion	16970	254550	15
23	Turmeric	3436	15462	4.5
24	Coriander	50	10000	5
25	Ajwan	4833	4833	1
26	Curry Leafies	181	-	
	Total	39235	380878	
Flowers				
27	Jasmine	520	2080	4
28	Marrygold	452	2260	5
29	Crossandra	498	996	2
30	Rose	35	70	2
31	Lilly	10	20	2
32	Chrysanthemam	202	1616	8
	Total	1717	7042	
Grand To	otal	78653	930216	

## 2.5. Weather data 2013-14

Month	Rainfall (mm)	Temperature <sup>0</sup> C		Avg Relative
		Maximum	Minimum	Humidity (%)
Apr -13	18.0	42.2	24.6	66.7
May-13	18.3	43.2	22.6	67.5
Jun -13	66.8	42.3	21.5	75.8
Jul -13	73.7	36.1	22.7	81.3
Aug -13	135.7	35.3	16.5	79.7
Sep -13	214.5	35.9	21.7	87.3
Oct -13	147.1	34.5	20.8	90.4
Nov-13	1.7	33.4	17.0	87.4
Dec -13	0.0	33.2	13.3	82.1
Jan -14	0.0	31.4	15.0	83.9
Feb -14	19.0	35.2	16.8	71.6
Mar -14	19.0	39.8	19.0	66.1
Total	713.8	36.8	19.3	78.3

# 2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district (Census 2012)

Category	Population	Production	Productivity
Cattle			
Crossbred	6452	3.98 lakh	6-8 lt
Indigenous	514259	metric	1.5-2.5
Buffalo	409741	tonnes of milk	2-3
Sheep			
Crossbred	-	19,087 metric	
Indigenous	1488939	tonnes of	12.5 kg
Goats	500518	meat	
Pigs	16949		
Crossbred			
Indigenous			
Rabbits			
Poultry			
Hens	2,74,957	857 lakh No.s	
Desi	6,41,218	eggs	60-70 eggs
Improved	3,35,127		245-260 eggs
Ducks	942		
Turkey and others			

# 2.6 Details of Operational area / Villages (2013-14)

S. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Banaganapa Ile	Nandyal	Bhanumukkala	B.t.Cotton Brinjal Maize	Indiscriminate use of pesticides	IPM for sucking pests in Cotton IPM for Shoot & Fruit borer in Brinjal Mgmt.of pests & diseases in Maize
				Rice	Low productivity in rice-rice system	Introduction of rice based cropping systems (Rice-maize / rice – sunflower)
				Banana	Indiscriminate use of fertilizers	Integrated Nutrient Management
				Tomato	Poor establishment due to conventional method of nursery rising.	Growing of seedlings in portrays under shadenet.
				Maize	Drudgery to farm women in weeding	Introduction of rotary weeder for weeding.
			Pandlapuram	Bhindi	Difficuty in harvesting	Use of bhindi cutter for harvesting.
			Pasapula Amadala	G.nut	Drudgery in weeding and labour intensive operation.	Improved moghi wheel hoe
			Yagantipalle	Paddy	Drudgery to women in harvesting with heavy weight local sickles.	Serrated light weight sickles for easy harvest.

Yerragudi Meerapuram	Castor	Drudgery to women in harvesting	Use of cotton hand gloves
Illluru Kothapeta	Bengal gram	Wilt and dry root rot	Management of soil borne diseases with application of <i>Trichoderma viridi</i> as seed treatment and soil application.
	Sunflower	Imbalanced nutrient management	STCR based nutrient management
I.K.Peta Yagantipalle	Rice	Incidence of Stem borer in Rabi	Management of stem borer in rice.
Nandavaram Yagantipalle	Redgram	Indiscriminate use of Pesticides	Realtime contingent mgmt, of pests & diseases
Yagantipalle Meerapuram	Castor	Indiscriminate use of pesticides	Realtime contingent mgmt. of pests & diseases
Yagantipalle	Maize	Zinc deficiency Indisciminate use of pesticides	Zinc Management Realtime contingent mgmt. of pests and diseases
Yagantipalle	Bt. Cotton	Low yields due to weed problem	Post emergence weed control with herbicides
Yagantipalle	Jasmine	Poor management of crop	ICM in Jasmine
	Carrot, Beet root	Low market prices for traditional vegetables during Rabi	Alternate cropping with Carrot and Beetroot in place of Tomato.
Yagantipalle	Dairy	Calf mortality & poor growth rate in calves	Feeding of calf starter and timely medication

				Poultry	Poor growth rate in Rajashri birds.	Supplemental feeding of Azolla
			Nandavaram	Redgram Bengalgram	Low productivity in redgram & Bengalgram	Introduction of hybrids and varieties tolerant to wilt and moisture stress.
				Dairy	Improper utilization of dry fodders	Haylage making with maize stover.
			Katikavanikunta	Sheep	High lamb mortality	Mineral supplementation through salt licks
2	Gospadu	Nandyal	Yallur	Groundnut	Indiscriminate use of Pesticides for pest & diseases	IDM for Stem rot
					Indisciminate use of chemical fertilizers	STCR based nutrient management
			Jillella Yaluru Julepalli	Rice	Indisciminate use of chemical fertilizers	STCR based nutrient management
			Gospadu M.Krisnapuram Srinivasapuram Nehrunagar		Low yields due to BLB	Introduction of RP Bio 226 variety with ICM
			Sathyanarayanap uram	Dairy	Reproductive problems in milch buffaloes	Supplementation of Regional specific mineral mixture.
	Sirivel	Nandyal	Kotapadu Veerareddipalem Venkateswarapur am	Rice	Indisciminate use of chemical fertilizers	STCR based nutrient management
			um		Low yields due to BLB	Introduction of RP Bio 226 variety with ICM

3	Owk	Nandyal	K. Sunkesula	Chillis	High cost of plant protection & Incidence of wilt	IDM in chillis Mgmt. of wilt in Chillis
					Indiscriminate and excess use of chemical fertilizers	STCR based nutrient management
			Mettupalli	Bt. Cotton	Indiscriminate and excess application of fertilizers	INM
			Mangampeta tanda	Turmeric	Rhizome rot	Mgmt. of rhizome rot
4	Bethamcher la	Nandyal	Embai	Mango	Micronutrient deficiencies	Correction of micronutrient deficiency
			Sitarampuram	Chrysanthe mum	Low yield due to repeated cultivation of own NS planting material.	Improved varieties with high yield, uniformity, shelf life and attractive colour.
5	Koilakuntla	Nandyal	Kalugotla	Black gram	Low yields due to local varieties	ICM with YMV tolerant varieties.
			Gulladurthy	Sheep	Poor growth rate in lambs	Creep feeding
			Amadala	Dairy	High cost of milk production	Feeding of SF heads supplemented ration
6	Midthur	Nandikotk ur	Jalakanur	Rice	High cost of cultivation	Cost reduction technologies like SRI and Drum Seeder.
7	Sanjamala	Allagadda	Sanjamala	Bengalgrm	Low productivity in bengalgram	ICM in bengalgram
8	Panyam	Nandyal	Bhupanapadu Kowluru	Redgram	Low productivity in pulses	Introduction of tolerant varieties to wilt and moisture stress.

# 2.7 Priority/thrust areas

Crop/Enterprise	Thrust area
Seed Production	Addressing the scarcity of quality seed
	Availability of quality seed to the farmer is one of the major constraint farmer
	is facing every year. They are depending on the private market / government
	agencies for their seed requirements. The supply is not meeting the demand in
	time and more over farmers are being cheated by different agencies with
	spurious seed. Awareness should be created about the production of own seed
	by the farmer. For this, seed village concept is required at least in direct
	varieties in crops like paddy, red gram, desi cotton, Bengal gram, which have
	huge demand in the market has to be promoted.
Inter Cropping System	Drought mitigation and to prevent Crop failures in Red soils
•	In Kurnool district generally crops like red gram and castor yields are
	limited by the amount and distribution of rainfall during monsoon
	period. Farmers are getting low net returns/ha due to changes in price
	of the marketable produce and incidence of pest and diseases also
	increasing year by year due to monocropping.
	In order to increase Net returns of rainfed situation Greengram, seteria
	and Clusterbean crops were introduced as intercrops in Castor.
Double	Crop intensification in Rainfed black soils
cropping:	On black soils of Kurnool district generally one crop
	Bengalgram/fallow-Jowar is being taken during rabi (September -
	october) in an area of 3.02 laksh ha. Farmers are getting low net
	returns/ha . Foxtail millet (korra), crop being its short duration may fit
	well in double cropping sequence (Korra- Bengalgram/ Jowar) under
	rainfed situation in black soils. Inorder to increase net returns Rs/ha and
	cropping intensity, Seteria- bengalgram can be successfully grown in rainfed
	black solis ,if on set of monsoon are intime.
Sunflower,	Promotion of SulphurNutrition in Oil seed crops like Sunflower, Groundnut
Groundnut & Bengal gram	and pulse crops like Bengalgram.
Zengar gram	The data collected in the district reveal that most of the oil seed farmers are
	applying DAP both as basal and as top dress, which supplies only N and P.
	Farmers are not aware of the use of Sulphur, which improves oil content in the

seeds, which is the basis for price of the produce in the market. Sulphur usage can be promoted by use of SSP in place of DAP, to supply Sulphur to the soil in addition to Phosphorus in economical way. Gypsum is promoted as a cheap source of sulphur in Bengal gram

# Cotton, Bengalgram & Vegetables

<u>Promotion of IPM with a stress on biological control in Cotton, Bengalgram and Vegetables:</u>

Due to indiscriminate and heavy use of chemical pesticides, the *Helicoverpa* on Cotton and Bengalgram has developed resistance and no more chemical sprays could manage the pest. The problem of insecticide residues in vegetables is causing panic and has become a threat to human health. Hence, it demands alternate ways of controlling the pest. And use of bio pesticides such as *Bacillus thurungiensis* and Ha NPV could solve the problem. Awareness regarding biological control among farmers is very poor. Hence, we considered it as a major thrust area and we are putting our efforts in promoting biological control through trainings and demonstrations in preparation as well as its usages.

#### Bengalgram

#### Improving productivity in Bengalgram:

#### a. Management of Soil borne diseases:

The data collected in the district revealed that in about 2.1 lakh hectares Bengalgram is grown every year. The farmers are adopting monocropping, because there is no alternative, which is as remunerative as bengalgram. Due to monocropping, soil borne diseases like wilt and dry root rot have become major problem. And they are not manageable by chemicals. Hence, the farmers have to depend on alternate ways for its management. Use of *Trichoderma* for seed treatment and soil application, was found effective in managing the soil borne diseases. But, the farmers are not aware of its use and performance in the field. So the farmers need to be trained in application and usage of *Trichoderma* for controlling the wilt and dry root rot in Bengalgram.

In the same manner, soil borne diseases have become a common problem in many crops of the district like Cotton, Redgram, Chillies and sweet orange. The same *Trichoderma* can be effectively used for the management of these diseases. Farmers are not aware of its use and hence they need training in its application and usage.

#### **Paddy**

#### Integrated Nutrient Management in Paddy:

The paddy farmers are using higher doses of chemical fertilizers (B.C. Ratio: 1:1.5 to 1:1.75) and are going for top dressing with complex fertilizers even after 60 days, which is paving the way for incidence of pests and diseases. It was also observed that the poor soil health is due to low organic matter content and inert /filled material of the chemical fertilizers, which leads to low fertilizer use efficiency. Farmers are not going for soil test based recommendations. There is a dire need for the farmers to go for soil test based fertilizer recommendations with inorganic and organic manures in the ratio of 3:2 so as to reduce the cost and improve the soil health.

# Problematic soils

#### Reclamation of alkaline soils:

Out of total area, alkaline soils represent 10.2%, which are poor to very poor in productivity. To improve the physical properties of these soils, it requires some of the amendments like gypsum application, sulphur and organic manures addition. It is also necessary to follow special package of production to extract better yields from these soils. Training and demos in this regard will help the farmers to overcome this problem.

#### Dryland Horticulture

#### Focus on dry land Horticulture

Of the total area of Kurnool district, 0.81 lakh ha is under cultivable waste. All this area can be converted in to dry land horticulture by making some amendments. The crops that are suitable under dry land horticulture are Mango, Ber, Sapota, Pomogranate and Aonla. So there is every need to focus

on increase of area and productivities of these crops, which indirectly improve the standard of living and income of the farm families.

#### **Milch Animals**

Care and management of milch animals:

The data reveal that the management of milch animals is not to the standards. The data also tells us that the young calves are not taken care, due to which mortality rate is significantly high. The nutrient management is very low which resulted in poor milk yields. The irrigated track farmers are also not going for green fodder cultivation. As the diary is an important component in the farming systems, farmers should be educated about scientific rearing of the animals

## Income Generation

Income generating activities for rural women and adolescent girls.

Survey reveals that income-generating activities can be taken up in off-season for rural women and also for school dropouts depending upon the local resources and market demand.

# **3. TECHNICAL ACHIEVEMENTS**

# 3.A. Details of target and achievements of mandatory activities by KVK during 2013-14

OF	T (T	echnology Asses	sment and	Refinement)	nent) FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)				
			1				2		
N	Num	ber of OFTs	Number of Farmers		Num	ber of FLDs	Number of Farmers		
Targe	ets	Achievement	<b>Targets</b>	Achievement	<b>Targets</b>	Achievement	<b>Targets</b>	Achievement	
18	3	18	90	90	34	34	530	530	

• .	_	ponsored, vocat der Rainwater H	Extension Activities					
		3			4			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Clientele	<b>Targets</b>	Achievement	<b>Targets</b>	Achievement	T	Α	Т	Α
Farmers	69	69	2141	2141	1214	1214	6332	6332
Rural youth	11	11	329	329				
Extn. Functio.	4	4	163	163				
Total	84	84	2633	2633	1214	1214	6332	6332

	Seed Producti	ion (Qtl.)	Planting material (Nos.)			
	5		6			
	Target	Achievement	Target	Achievement		
NDLR-7	250.0	200.0				
BPT-5204-	400.0	450.0				
Redgram -	6.0	4.0				
Hybrid	4.0	4.0				
Castor -	5.0	4.0				
Seteria –	10.0	10.0				

# 3.B. Abstract of interventions undertaken

						Interven	tions		
S. No	Thrust area	Crop/ Enterprise	Identified Problem	Title of OFT if any	Title of FLD if any	Title of Training if any	Title of trainin g for extens ion	Extension activities	Supply of seeds, planting materials etc.
							perso nnel if		
1	Promo tion of IPM	Maize	Increasin g cost of plant protectio n	-	Integrated Pest Manageme nt	-	any -	-	
		Groundnut	Stemrot, LLS,	Manageme nt of stemrot	-	IPM in Groundn ut	-	-	-
		Bengalgra m	Soil borne diseases,		Manageme nt of soil borne diseases in bengalgra m	IPM in bengalgr am	-	-	-
		Redgram	Helicover pa, Maruca and wilt	-	Realtime Contingent mgmt. of pests & diseases	IPM and sustaina ble methods of plant protecti on	-	-	-
		Castor	Jassids, Capsule borer, Botrytis	-	Realtime contingent mgmt. of pests & diseases	-	-	-	-
		Chillis	Fruit rot and Powdery Mildew Wilt	IDM for fruit rot & PM Mgmt. of wilt	-	BIPM in chillies	-	-	-
		Brinjal	Shoot & Fruit borer	-	IPM for shoot & Fruit borer	-	-	-	-
		B.t.Cotton	Jassids, Aphids, Whiteflie s & Mealybu gs	Mgmt. of sucking pests		IPM in B.t. cotton			
		Maize	Increasin g cost of plant protectio n	-	Integrated Pest Manageme nt	-	-	-	

2	INM	Sunflower	Low productiv ity due to poor seed set and test	Nutrient Manageme nt .	-	Integrat ed nutrient manage ment	-	Field day	Supply of sulphur and borax.
		Chilli	weight. Increased cost of producti on due to indiscrimi nate and imbalanc e use of chemical	Nutrient Manageme nt based on Soil Test Crop Response formula	-	-	Field day	Supply of Vermi compost.	Nutrient Managem ent based on Soil Test Crop Response formula
		Groundnut	fertilizers Increased cost of producti on due to indiscrimi nate and imbalanc e use of chemical	Nutrient Manageme nt based on Soil Test Crop Response formula	-	-		Gypsum	Nutrient Managem ent based on Soil Test Crop Response formula
		Rice	fertilizers Increased cost of producti on due to indiscrimi nate and imbalanc e use of chemical fertilizers		Nutrient Manageme nt based on Soil Test Crop Response formula	Soil sampling and soil test based nutrient manage ment	-	Field day	Supply of Vermi compost
		Bengalgra m	Imbalanc ed nutrient manage ment	-	Zinc and sulphur manageme nt	-	-	-	-
		B.T.Cotton	Imbalanc ed nutrient manage ment.	-	Application of Organic, Inorganic and Bio fertilizers				Vermicom post, VAM, KNO <sub>3</sub> , Znso <sub>4</sub> , Mgso <sub>4</sub> , Borax

3			Poor	-	Reclamatio	Reclama	-	-	Supply of
	Recla mation Proble matic soils		physico - chemical propertie s and Low productiv ity.		n of sodic soils with gypsum under irrigated condition.	tion of sodic soils with gypsum under irrigated conditio n.			gypsum
4	Micro Nutrie nt deficie	Rice	60% of soils are deficient in Zinc		Foliar Application of Zinc				Chelated Zinc
	ncy in crops	Maize	60% of soils are deficient in Zinc		Basal application of Zinc Sulphate				Zinc Sulphate
5	Improv ing the produc tivity	Redgram  Bengalgra  m	Low yields with local varieties Low yields with local varieties	-	Varietal demo Varietal demo	Producti on technolo gy Producti on technolo gy	-	Field Days, Exposure Visits -do-	Supply of improved variety PRG-158 Supply of seed Digvijayan d Nandyala
6	Crop geome try	Maize	Low Yields with high density	Asessment of Plant densities	-	-	-	Field Visits	sanaga-1 Seed
7	Resour ce Conser vation	Paddy and Maize	Low Returns Due toHigh Cost of producti on	-	Direct seeding and Zero tillage	-do-	-	Field day	Herbicides
8	Improving productivity under rainfed situati	Seteria Bengalgra m and Castor	Low productiv ity with monocro pping	Castor Based intercroppi ng system	Double cropping and Intercroppi ng	Croppin g systems	-	Field Days, Exposure Visits -	Supply of korra seed and Introducti on of Intercrops
	on	Arboreum Cotton	Low yields due to use of local varieties	-	Varietal demonstra tion	Producti on technolo gy	-	-	Supply of seed & PP chemicals

9	Feed manag ement in	Sheep	High lamb mortality , poor growth	Creep feeding	Mineral supplemen tation through salt licks	Scientific manage ment of sheep and goat.	-	-	-
10		Dairy	High cost of milk producti on, reproductive problems & poor growth in calves	Supplemen tation of Regional Specific mineral mixture	Feeding of calf starter Feeding of SF heads supplemen ted ration Haylage making with maize stover	Milk improve ment technolo gies Preventi on of calf mrthalit y	-	-	-
11		Poultry	Low growth rate in backyard poultry	Supplemen tation of azolla	-	Backyar d poultry manage ment	-	-	-
12	Improv ed varieti es of flower crops	Chrysanth emum Marigold	Repeated use of own planting material leading to loss of vigour in crop	Use of improved varieties which are high yielding with better shelf life	Introductio n of hybrid marigold	ICM in flower crops	-	-	Chrysanth emum suckers and marigold seedlings
13	Low incom e due to traditi onal vegeta ble cultiva tion	Tomato	Low market price due to glut	Carrot and beetroot as alternate crops in Rabi	-	-	-	-	-
14	IDM	Turmeric	Low populatio n leading to reduced yields due to rhizome rot	-	Seed treatment of rhizomes	ICM in turmeric	-	Method demonstr ation on seed treateme nt	-

15	ICM	Jasmine	Nutrition -	ICM in	Training
			imbalanc	Jasmine	on
			es		pruning
			leading		and INM
			to low		
			yields		
			with		
			poor		
			quality		
			flowers		
16	Micron	Mango	Micronut -	Micronutri	INM
	utrient		rient	ent	
	manag		deficienci	manageme	
	ement		es in crop	nt	
			leading		
			to low		
			quality of		
			fruits and		
			flower		
			and fruit		
17	ININA	Danana	drop	Mioroputri	
17	INM	Banana	Improper -	Micronutri	
			nutrient	ent	
			manage ment	spraying on	
			ment	bunches	
				bulles	

# 3.1 Achievements on technologies assessed and refined

# A.1 Abstract of the number of technologies assessed\* in respect of crops/enterprises Kharif-2013, Rabi & Summer 2013-14)

Thematic areas	Cereals	Oilseeds	Pulses	Commercial	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation			2		1		1			4
Seed / Plant production										
Cropping systems		1								1
Integrated Crop Management										
Integrated Nutrient Management		2			1					3
Crop Geometry	1									1
Mushroom cultivation										
Drudgery reduction	1									1
Farm machineries										
Value addition										
Integrated Pest Management				1						1
Integrated Disease Management	1				2					3
Resource conservation technology										
Small Scale income generating										
enterprises										
TOTAL	3	3	2	1	4		1			14

# A.2. Abstract of the number of technologies refined\* in respect of crops/enterprises (Kharif-2013, Rabi & Summer 2013-14)

Thematic areas	Cereals Oilseeds	Pulses Commercial Crops Vegetables Fruits	Flower Plantation crops Tuber Crops
----------------	---------------------	---	-------------------------------------

Varietal Evaluation

Seed / Plant production

Weed Management

Integrated Crop Management

Integrated Nutrient Management

**Cropping System** 

Mushroom cultivation

Drudgery reduction

Farm machineries

Post Harvest Technology

**Integrated Pest Management** 

Integrated Disease Management

Resource conservation technology

Small Scale income generating

enterprises

Total 1

.

#### A.3. Abstract of the number of technologies assessed in respect of livestock / enterprises

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitary	Fisheries	TOTAL
Evaluation of								
Breeds								
Nutrition	1	1	1					3
Management								
Disease of								
Management								
Value Addition								
Production and								
Management								
Feed and Fodder								
Small Scale								
income								
generating								
enterprises								
TOTAL	1	1	1					3

# A.4. Abstract on the number of technologies refined in respect of livestock / enterprises

Thematic areas	Cattle	Poultry	Sheep	Goa	Piggery	Rabbitr	Fisherie	TOTAL
				t		У	S	
Evaluation of								
Breeds								
Nutrition								
Management								
Disease of								
Management								
Value Addition					nil			
Production and								
Management								
Feed and Fodder								
Small Scale								
income								
generating								
enterprises								
TOTAL								

# B. Details of each On Farm Trial to be furnished in the following format

# A. Technology Assessment:

# OFT 1

S.No	Item	Particulars	
1	Title	Assessment of plant densities i.e paired row planting (60x20 cm) in under I.D situation.	Vs ridge
2	Problem diagnosed/refinement	Low yields in Maize due to High population densi	ties
3	Details of technologies selected for assessment/refinement	T1 – Paired row (Farmers Practice ) T2 – Recommended spacing(60X20 cm)	
4	Source of technology	ZREAC Proceeding, RARS, Nandyal.	
5	Production system	Sandy clay loam, Irrigated	
6	Thematic Area	Crop geometry	
7	Performance of the	✓ Plant population	
	Technology with	✓ Yield / ha	
	performance indicators	✓ Economics	
8	Final recommendation for micro level situation	The data on grain yield revealed that grain y affected by population densities. The maximulyield (7145 kg/ha) was recorded in ridge planting cm) as compared to paired rows. The higher grain ridge planting (60x20 cm) mainly due to higher normalized grain rows/ cob and test weight, hence recommended for adoption.	m grain g (60x20 n yield in
9	Constraints identified and feedback for research	-	
10	Process of farmers participation and their	Farmers participated in planning, executi andmonitoring.	on,
	reaction	Convinced with optimum population that high density.	n that of

crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT 4	No. of trials*	Technology Assessed/ refined 6	Parameters of assessment	Data on the parameter 8	Results of assessment	Feedback from the farmer 10
Maize	Irrigated	Low productivity in Maize due to high	Assessment of plant densities i.e paired row Vs ridge	5	T1 – Paired row (Farmers Practice)	Plant population/ha	138888	The maximum grain yield (7145kg/ha) was recorded in ridge	
		population densities.	planting (60x20 cm) in under I.D		T2 – Recommended spacing(60X20	Yield kg/ha	7022	planting (60x20 cm) as compared to paired rows.	
			situation		cm)	Plantpopulation/ha	83333	The higher grain yield in ridge planting (60x20	
						Yield kg/ha	7145	cm) mainly due to higher number of grain rows/ cob and test weight, hence it is recommended for adoption.	

Technology Assessed	Production per unit	Net Return (Profit) in Rs./unit	BC Ratio
11	12	13	14
T1 – Paired row (Farmers Practice)	7022kg/ha	49411-00	1:.2.42
T2 – Recommended spacing(60X20 cm)	7145kg/ha	51287-00	1:2.50

#### OFT-2

S.No	Item		Particulars
1	Title	:	Assessment of castor based intercropping Systems in
			rainfed situation.
2	Problem	:	In Kurnool district generally castor is being cultivated in
	diagnosed/refinement		an area of 60533 ha and yields are limited by the amount
			and distribution of rainfall during monsoon period.  Farmers are getting low net returns/ha due to changes in
			price of the marketable produce and incidence of pest
			and diseases also increasing year by year due to
			monocropping
3	Details of technologies	:	T1: Castor + Greengram (1:2)
	selected for		T2: Castor + cluster bean (1:2)
	assessment/refinement		T3: castor ( Sole)
4	Source of technology	:	RARS, Palem
5	Production system	:	Redsoils, Rainfed
6	Thematic Area	:	Cropping System
7	Performance of the	:	✓ LER
	Technology with		✓ Yield / ha
	performance indicators		✓ Economics
8	Final recommendation	:	. The results shows that intercropping of castor with
	for micro level situation		greengram 1:2 / cluster bean 1:2 ratio resulted in highest
			castor equivalent yield and gross returns/ha than sole
			crops. Intercropping of greengram with castor in 1:2 row proportion resulted in the highest LER value of 1:21
			coupled with highest yield of castor.
9	Constraints identified	:	-
	and feedback for		
	research		
10	Process of farmers	:	Farmers were participated in planning, execution,
	participation and their		monitoring.
	reaction		Convinced with Castor based intercropping
			System than that of solecrops.

crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT 4	No. of trials*	Technology Assessed/ refined 6	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer 10
Castor	Rainfed	Low productivity in castor with sole crop	Assessment of castor based intercropping Systems in rainfed situation.	5	T1: Castor + Greengram (1:2) T2: Castor + cluster bean (1:2) T3: castor ( Sole)	Yield LER Gross Returns(Rs/ha)  Yield LER Gross Returns(Rs/ha)  Yield LER Gross Returns(Rs/ha)	1123+395 1.21 54,465/- 1108+1070 1.13 49,290/-	The results shows that intercropping of castor with greengram 1:2 / cluster bean 1:2 ratio resulted in highest castor equivalent yield and gross returns/ha than sole crops .	

Technology Assessed 11	Production per unit 12	Net Return (Profit) in Rs./unit 13	BC Ratio 14
Castor + Greengram	1123+395	29,465-00	1:2.20
Castor + Clusterbean	1108+1070	25,790-00	1:2.10
Castor sloe	1437	21610-00	1:2.0

# OFT 3.

S.No	Item		Particulars
1	Title	:	Evaluation of new bengalgram varieties suitable for
			Kurnool district
2	Problem diagnosed/refinement	:	In bengalgram JG 11 variety being cultivated over larger area year after year which is leading to incidence of soil borne diseases, resulting in loss in yield. Hence, to promote other high yielding varieties of bengalgram with tolerance or disease resistance, the present trial is proposed.
3	Details of technologies selected for assessment/refinement	:	T1 – Farmers Practice (JG 11) T2 – JG – 130 T3 – Nandyalasanaga-1
4	Source of technology	:	Bengalgram varieties developed by ANGRAU and Jagalpur
5	Production system	:	Rainfed, Black soils
6	Thematic Area	:	Varietal evaluation
7	Performance of the	:	Results showed that the maximum grain yield (1657
	Technology with performance indicators		kg/ha) was recorded Nandyalasanaga-1 followed by
	<b>P</b>		JG-11 1284 (Kg/ha) and JG-130(1336 kg/ha) The
			higher grain yield in Nandyalasanaga- 1 mainly due
			to higher number Pods/plant and test weight, hence
			it is recommended for adoption.
8	Final recommendation for micro level situation	:	-
9	Constraints identified and feedback for research	:	-
10	Process of farmers participation and their reaction	:	Farmers were participated in planning execution, monitoring, evaluation of Varieties and their reaction towards the performance and, adoptability etc. of the improved varieties were assessed.

crop/ enterprise	Farming situation	Problem Diagnosed 3	Title of OFT 4	No. of trials*	Technology Assessed/ refined 6	Parameters of assessment	Data on the parameter 8	Results of assessment	Feedback from the farmer 10
Bengalgram	Rainfed	Low productivity of local varieties	Varietal evaluation	5	1. JG-11  2. JG-130  3 Nandyala sanaga-1	No. of pods/plant, Yield Kg/ha Test weight( gm) No. of pods/plant, Yield Kg/ha Test weight( gm) No. of pods/plant, Yield Kg/ha Test weight( gm) Test weight( gm)	35.0 1527 26.51 32.0 1462 25.83 38.6 1657 29.0	Results showed that the maximum grain yield (1432 kg/ha) was recorded Nandyalasanaga-1 followed by JG-130(1336 kg/ha) and JG-11 1284 (Kg/ha).	

Technology Assessed	Production per unit 12	Net Return (Profit) in Rs. / unit	BC Ratio 14
1.JG-11	1527	21395	1:1.93
2. JG-130	1462	19510	1:1.85
3. Nandyal Sanaga – 1	1657	25165	1:2.10

#### **OFT 4:**

S.No	Item		Particulars
1	Title		erformance of blackgram Varieties under rainfed black oils (Scrace rainfall zone)
2	Problem diagnosed/refinement	: Ir so D n	n Kurnool district bengalgram being cultivated in black oils in an area of 2.5 lakhs ha under rainfed situation. The to stagnation in market price for the last three years et returns are reduced. So farmers are searching for a demunarative crop. Hence there is need to suggest etter alternate crop to Bengalgram
3	Details of technologies selected for assessment/refinement	: T:	1 –LBG-645 2 – LBG-752 3 – PU-31
4	Source of technology	: V	arieties developed by ANGRAU
5	Production system	: R	ainfed, Black soils
6	Thematic Area	: V	arietal evaluation
7	Performance of the Technology with performance indicators	3	he results indicated that the among the Varieties PU-1has recorded highest Yield (1692Kg/ha) followed by BG-752(1567Kg/ha).
8	Final recommendation for micro level situation	: -	
9	Constraints identified and feedback for research	: -	
10	Process of farmers participation and their reaction	e <sub>v</sub>	armers participated in planning execution, monitoring, valuation of Varieties and their reaction towards the erformance and, adoptability etc. of the improved arieties were assessed.

crop/ enterprise	Farming situation	Problem Diagnosed 3	Title of OFT 4	No. of trials*	Technology Assessed/ refined 6	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer 10
Blackgram	Rainfed	Low productivity of local varieties	Varietal evaluation	5	LBG-645 LBG-752 PU-31	Yield Kg/ha Yield Kg/ha Yield Kg/	1447 1567 1692	The results indicated that the among the Varieties PU-31has recorded highest Yield (1692Kg/ha) followed by LBG-752(1567Kg/ha).	The incidenc e of YMV is less in PU-31 compare d to LBG-752

	Technology Assessed	Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
	11	12	13	14
LBG-645		1447	32280-00	1:2.26
LBG-752		1567	37080-00	1:2.45
PU-31		1692	42080-00	1:2.64

#### OFT 5:

S. No.	Item		Particulars
1	Title	:	Management of sucking pests in B.t. cotton
2	Problem diagnosed/refinement	:	Due to shift in pest scenario on B.t. cotton, for the past two years sucking pest incidence is assuming importance in Kurnool district and it has become cause of concern in bt. Cotton production.
3	Details of technologies selected for assessment/refinement	:	Assessment: Recommended module of sucking pest management in B.t. cotton will be assessed against indiscriminate use of pesticides followed by farmers.  T1 – Farmers practice – Indiscriminate use of pesticides.  T2 – Recommended –  • Seed treatment with Imidacloprid 70 WS @ 5g/kg  • Maize/Sorghum as barrier crop.  • Yellow sticky traps 10/ac.  • Stem application with Mono (1:4) or Imidacloprid (1:20) at 20,40 & 60 DAS.  • Need based pesticide spraying – Imidacloprid @0.4 ml/lt or Acetamaprid @ 0.2 g/lt or Thiomethoxam @ 0.2 g/lt or Fipronil @ 2 ml/lt  ANGRAU
5	Production system	:	ID – Black soils
6	Thematic Area	:	Integrated Pest Management
7	Performance of the Technology with performance indicators	:	<ol> <li>Incidence of Jassids, Aphids, Whiteflies.</li> <li>Cost of treatments (Rs./ha)</li> <li>Yield (q/ha).</li> <li>C: B Ratio</li> </ol>
8	Final recommendation for micro level situation	:	-
9	Constraints identified and feedback for research	:	Stem applicators not available locally.
10	Process of farmers participation and their reaction	:	Farmers participated in diagnosis of the pest and pest stages, convinced by the efficiency of stem application with monocrotophos.

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed/ refined	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Bt.Cotton	Rainfed Black Soil	Incidence of sucking pests in	Management of sucking pests in B.t.	5	T1 – Farmer practice – Indiscriminate	*Cost of Plant protection (Rs./ha)	2960	There was a saving of Rs.1,180/-	Effective control of sucking pests
		Bt.cotton result in considerable	cotton		use of insecticides	*Incidence of Jassids/Aphids	4.36/pt 8.4%	ha in cost of plant protection,	is seen with stem application
		loss of the crop.				Yield kg/ha	2475	with 7.07% increase in cotton	compared to sprayed fields.
					T2 – Technology assessed –	* Cost of Plant protection (Rs./ha)	1780	yield.	
					ANGRAU recommended practice	*Incidence of Jassids/Aphids	1.12/pt 3.5%		
						<ul><li>Yield kg/ha</li></ul>	2650		

Production per unit (Kg/ha)	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15
2475	48,850-00	1:2.38
2650	56,580-00	1:2.68

#### **OFT 6**:

S. No.	Item		Particulars
1	Title	:	Performance of IDM module for management of Fruit rot and
			Powdery mildew in Chillis.
2	Problem	:	In Kurnool district, the major the major diseases of chilli occurring
	diagnosed/refinement		regularly are fruit rot, powdery mildew and leaf spots. Powdery
			mildew can cause damage upto 40% in severe cases.
3	Details of technologies	:	Assessment of Integrated Disease Management package.
	selected for assessment/refinement		T1 – Farmer practice – Indiscriminate use of fungicides.
	4.00.000 men.		T2 – Technology assessed – IDM
			o Seedling dip treatment with <i>Pseudomonas</i>
			fluorescens @ 10 g/lt. water.
			<ul> <li>Prophylactic spray of Pseudomonas fluorescens @</li> </ul>
			5 g/lt at flowering.
			<ul> <li>Spray of P.f.@5g/lt + Azoxystrobin @ 0.5 ml/lt on</li> </ul>
			observing initials of fruit rot/powdery mildew.
4	Source of technology	:	NARS
5	Production system	:	Irrigated Dry
6	Thematic Area	:	Integrated Disease Management
7	Performance of the	:	1. Fruit rot and Powdery mildew PDI using standard scales.
	Technology with performance indicators		2. Cost of Plant protection.
	•		3. Yield (Q/ha).
			4. C:B Ratio
8	Final recommendation for	:	During first year it is observed that with <i>Pseudomonas fluorescens</i>
	micro level situation		root dip and prophylactic spray at flowering, the incidence of
			powdery mildew was lower in treatment plot compared to farmers
			field.
9	Constraints identified and feedback for research	:	The methods are tedious to practice and slow in action.
10	Process of farmers	:	Farmers actively involved in observing disease symptoms, taking
	participation and their reaction		up root dipping and spraying. They observed that the treated field
			showed low incidence of powdery mildew compared to
			conventional farmers practice.

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed/ refined	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Chillis	Irrigated Dry	Incidence of fruit rot and powdery mildew causing upto 40 % loss in	Evaluation of Integrated Disease Management module for Fruit rot and Powdery	5	T1 – Farmer practice – Indiscriminate us of fungicides.	*Powdery mildew	19,850/ha 6.35% 11.6%	With IDM, fruit rot and powdery mildew dieases could be effectively	The method involves tedious process of root dipping, but gives better control of diseases as the methods are prophylactically taken up.
		severe cases.	mildew		T2 – Technology assessed – IDM	*Cost of Plant protection *Fruit rot *Powdery mildew	16,500/ha 2.70% 4.50%	managed at lower cost compared to farmers practice	

Production per unit (Kg/ha)	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15
5,120	1,72,310-00	1:2.38
5,380	1,90,740-00	1:2.57

#### **OFT 7**:

S.	Item		Particulars
No.			
1	Title	:	Management of Fusarium wilt in Chillis.
2	Problem	:	In Kurnool district, due to repeated cultivation of chillis year after
	diagnosed/refinement		year, fusarium wilt incidence is increasing and causing significant
			damage to chilli. As the conventional chemical interventions are
			not effective in wilt management, biological interventions which
			are reportedly better option for management of soil borne
			diseases, are chosen in this trial.
3	Details of technologies	:	Assessment of efficacy of bio agents (Pseudomonas fluorescens
	selected for		and Trichoderma viride) in management of wilt.
	assessment/refinement		T1 – Farmer practice – Soil drenching with COC @ 3g/lt or
			Carbendazim @ 1g/lt.
			T2 – Technology assessed – Bioagents ( <i>P.fluorescens</i> ,
			T.viride)
			Application of Pseudomonas flourescense, Trichoderma
			viride @ 2kg/acre (2 Kg bio-agent + 100 kg FYM + 10 Kg
			Neem cake incubated for 10 days).
4	Source of technology	:	NARS
5	Production system	:	Irrigated Dry
6	Thematic Area	:	Integrated Disease Management
7	Performance of the	:	Wilt incidence %.
	Technology with		Cost of Plant protection.
	performance indicators		Yield (Q/ha).
			C:B Ratio
8	Final recommendation	:	During first year it is observed that with soil application of
	for micro level situation		Pseudomonas fluorescens and Trichoderma incubated with FYM,
			the incidence of wilt was lower in treatment plot compared to
			farmers field.
9	Constraints identified		The method of incubation is tedious to practice.
,	and feedback for	•	The method of mediation is realists to practice.
	research		
10	Process of farmers	:	Farmers actively involved in incubating bioagents with FYM and
	participation and their reaction		application to soil before transplantation.
	. Cuction		

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed/ refined	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Chillis	Irrigated Dry	Incidence of wilt causing upto 20 % loss in severe cases.	Evaluation of Bioagents viz., Tv & Pf for Management of wilt disease.	5	T1 – Farmer practice – COC @ 3g/lt or Carbendazim @ 1 g/lt	*Cost of Plant protection *Wilt %	15,400/ha 5.9 %	With Bioagents application, the wilt disease could be better	The method involves tedious process of incubation with FYM, but gives better control of diseases as the methods are prophylactically taken up.
					T2 – Technology assessed – Application of Pseudomonas flourescense, Trichoderma viride @ 2kg/acre incubated in FYM		13,800/ha 1.8 %	managed compared to fungicides. Resulted in 4.79 % increased yield.	

Production per unit (Kg/ha)	Net Return (Profit) in Rs. / ha	<b>BC Ratio</b>
13	14	15
5,215	1,83,270-00	1:2.54
5,465	1,99,370-00	1:2.70

#### **OFT 8**:

S.	Item		Particulars
No.			
1	Title	:	Performance of IPM module for management of Yellow Stem
			Borer in Rice.
2	Problem	:	In Kurnool district, the major pest of Rabi rice is yellow stem borer
	diagnosed/refinement		and it is causing considerable loss in yield.
3	Details of technologies	:	Assessment of Integrated Pest Management module.
	selected for		T1 – Farmer practice – Indiscriminate use of insecticides.
	assessment/refinement		T2 – Technology assessed – IPM
			• Application of Carbofuran 3G granules @160 gm/cent of
			nursery one week before pulling the seedlings
			Clipping leaf tips before transplanting
			Mass trapping of male moths with pheromone traps @ 20 /ha
			• Use of <i>Trichogramma japanicum</i> @ 20 Tricho cards/ha (4
			cards/release, 5 releases starting from 35 DAT at 10 days
			interval)
			Need based pesticide spray (Cartaphydrochloride @2g/lt)
4	Source of technology	:	ANGRAU
5	Production system	:	Irrigated
6	Thematic Area	:	Integrated Pest Management
7	Performance of the	:	Dead hearts and white ears %.
	Technology with		Cost of Plant protection.
	performance indicators		Yield (Q/ha).
			C:B Ratio
8	Final recommendation	:	_
	for micro level situation	-	
9	Constraints identified	:	-
	and feedback for		
10	research Process of farmers	:	Farmers actively involved in erection of Pheromone traps for
-	participation and their reaction		monitoring and involved in estimation of stem borer damage.
	reaction		

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed/ refined	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Rice	Irrigated	Incidence of stem borer causing upto 20 % loss in severe cases.	Performance of IPM module for management of yellow stem borer in Rice	5	T1 – Farmer practice – Indiscriminate us of insecticides.  T2 – Technology assessed – IPM	and white ears %			

Production per unit (Kg/ha)	Net Return (Profit) in Rs. / ha	<b>BC Ratio</b>
13	14	15
-	-	=
	-	=

**OFT 9**: (2<sup>nd</sup> Year completed)

S.No	Item		Particulars
1	Title	:	Nutrient management in Sunflower based on STCR
			equation under I/D situation
2	Problem diagnosed/refinement	:	Sunflower yields are declining due to blanket and
			imbalanced used of chemical fertilizers. Soil test based
			nutrient application helps to realize higher response
			ratio and benefit cost ratio as the nutrients are applied
			in proportion to the magnitude of the deficiency of a
			particular nutrient and the correction of the nutrient
			imbalances in soil helps to harness the synergistic
2	Dataila afta da alamina adamata difan		effects of balanced fertilization.
3	Details of technologies selected for	:	• •
4	assessment/refinement		T2 (STCR for 20q/ha)
4	Source of technology	:	All India Coordinated project on Soil Test crop response.  STCR formula developed for scarce rainfall zone, RARS
			Nandyal.
5	Production system		black soils under ID (Clay loams)
6	Thematic Area	:	Soil testing
7	Performance of the Techynology	:	Yield (q/ha)
	with performance indicators		
8	Final recommendation for micro	:	The result indicated that highest yield (1854kg/ha) was
	level situation		recorded in T-2 (NPK:71-27-30kg/ha) when compared
			with $T_1$ 1845 Kg./ha (NPK:100-108-0kg/ha) hence it is
			recommended for adoption.
9	Constraints identified and feedback	:	
	for research		
10	Process of farmers participation	:	Pre seasonal training on soil sampling and testing,
	and their reaction		fertilizer application and mid seasonal field visits finally
			field days were organized at initial stages, but balanced
			fertilizer usage is more effective with low cost.

#### **Results of On Farm Trials**

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed/ refined	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Sunflower	I/D black soil	Sunflower yields are declining due to blanket and imbalanced	Nutrient management in Sunflower based on STCR equation under rainfed	anagement in p nflower N sed on STCR 1 uation under	T <sub>1</sub> -Farmers' practice NPK:100- 108-0kg/ha	* Yield Kg/ha *Production cost(Rs./ha)	1845 19210	The result indicated that production cost is less in T2 over	STCR based nutrient application is more effective to get higher returns.
		use of chemical fertilizers	situation		T <sub>2</sub> -(STCR for 20q/ha) NPK:71-27- 30 kg/ha	* Yield Kg/ha *Production cost(Rs./ha)	1854 15635	T1	

Technology Assessed	Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T <sub>1</sub> -Farmers' practice	1845 Kg/ha	41675	3.17
T <sub>2</sub> -STCR	1854kg/ha	45547	3.91

# OFT-10 (2<sup>nd</sup> year completed)

S.	ltem		Particulars Particulars
No.			
1	Title	:	Nutrient management in chilli based on STCR equation under irrigated situation
2	Problem diagnosed/refineent	:	Chilli is one of the major vegetable crop cultivating in Kurnool district under both rainfed and ID condition. Production cost is increasing in chilli due to indiscriminate and imbalanced usage of chemical fertilizers. Soil test based nutrient application helps to realize higher response ratio and benefit: cost ratio . Soil test crop response (STCR) can assist in improving yields, nutrient use efficiency and reducing the cost of production.
3	Details of technologies selected for assessment/refinement	:	$T_1$ - $N_1P_1K_1$ ( Farmers Practice) NPK:500-450-75kg/ha $T_2$ - $N_2P_2K_2$ (STCR for50q/ha) -NPK:400:89-105 Kg/ha
4	Source of technology	:	All India Coordinated project on Soil Test Crop Response. STCR formula developed for Guntur, Ongole and Vijayawada and Khammam districts. Now it is taken up for assessment in scarce rainfall zone, Nandyal.
5	Production system	:	Irrigated black soils (Clay loams)
6	Thematic Area	:	Soil testing
8	Final recommendation for micro level situation	:	The result indicated that the average yield of $T_1$ (5108kg/ha)and $T_2$ (5097kg/ha) were on par. However, production cost is less in $T_2$ than $T_1$ hence it may be continued for one more year.
9	Constraints identified and feedback for research	:	
10	Process of farmers participation and their reaction	:	Pre seasonal training on soil sampling and testing, fertilizer application and mid seasonal field visits finally field days were organized at initial stages, but balanced fertilizer usage is more effective with low cost.

# **Results of On Farm Trials**

Crop enterp		Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed/ refined	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Ch	illi Irrigated black soil	Increased cost of production due to excess and imbalanced use of chemical fertilizers	Nutrient management in chilli based on STCR equation under irrigated situation	5	T <sub>1</sub> Farmers' practice NPK: 500-450- 75 Kg/ ha  T <sub>2-</sub> NPK:400-89- 105 kg/ha	* Yield Kg/ha  *Production cost(Rs./ha)  * yield Kg/ha *Production cost(Rs./ha)	5108 136403 5097 116608	The result indicated that production cost is less in T2 over T1	STCR based nutrient application is more effective to reduce production costs towards fertilizers.

Technology Assessed	Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T <sub>1</sub> -Farmers' practice	5108 Kg/ha	170077	2.25
T <sub>2</sub> -STCR	5097kg/ha	189212	2.62

**OFT-11:** (1st year completed)

S.No.	Item		Particulars
1	Title	:	Nutrient management in groundnut based on STCR equation under I/D situation
2	Problem diagnosed/refinement	:	Groundnut yields are declining due to conventional blanket and imbalanced usage of fertilizers. Soil test based nutrient application helps to realize higher response ratio and benefit: cost ratio as the nutrients are applied in proportion to the magnitude of the deficiency of a particular nutrient and the correction of the nutrient imbalances in soil helps to harness the synergistic effects of balanced fertilization. Fertilizer application based on quantitative approaches such as Soil test crop response (STCR) can assist in improving yields and nutrient use efficiency in groundnut.
3	Details of technologies selected for assessment/refinement	:	$T_1$ - $N_1P_1K_1$ ( Farmers Practice) NPK-158-215-75 Kg./ha $T_2$ - $N_2P_2K_2$ (STCR for 45q/ha) - NPK-36-20-25 Kg./ha
4	Source of technology	:	All India Coordinated project on Soil Test Crop Response. STCR formula developed for groundnut in scarce rainfall zone.
5	Production system	:	Bore well irrigated - sandy clay loams
6	Thematic Area	:	Soil testing
8	Final recommendation for micro level situation	:	The result indicated that the average yield of $T_1$ (3515kg/ha)is higher $T_2$ (3453kg/ha. However, production cost is less in $T_2$ than $T_1$ hence it may be continued for one more year.
9	Constraints identified and feedback for research	:	
10	Process of farmers participation and their reaction	:	Pre seasonal training on soil sampling and testing, fertilizer application and mid seasonal field visits finally field days were organized at initial stages, but balanced fertilizer usage is more effective with low cost.

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed/ refined	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Groundnut	Irrigated red soil	Increased cost of production due to excess and imbalanced use of chemical fertilizers	Nutrient management in groundnut based on STCR equation under irrigated situation	5	T <sub>1</sub> Farmers' practice NPK-158-215- 75 Kg./ha  T <sub>2-</sub> NPK-36-20-25 Kg./ha	* Yield Kg/ha  *Production cost(Rs./ha)  * yield Kg/ha *Production cost(Rs./ha)	3515 87120 3453 74415	The result indicated that production cost is less in T2 over T1	STCR based nutrient application is more effective to reduce production costs towards fertilizers.

Technology Assessed	Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T <sub>1</sub> -Farmers' practice	3515Kg/ha	35898	1.41
T <sub>2</sub> -STCR	3453 kg/ha	46440	1.62

#### **OFT: 12**

S.No	Item		Particulars
1	Title	:	Introduction of Carrot, beetroot as alternative to
			traditional rabi vegetables.
2	Problem	:	Continuous cultivation of traditional crops like Tomato is
	diagnosed/refinement		creating glut in the market by which its production is
			becoming uneconomical. Hence, carrot as an alternate
			crop to tomato may be introduced.
3	Details of technologies	:	T1: Farmers practice (Tomato)
	selected for		T2: Alternate crop – Carrot & Beet root
	assessment/refinement		
4	Source of technology	:	APHU
5	Production system	:	Irrigated Sandy loam
6	Thematic Area	:	Introduction of high value crop
7	Performance of the	:	✓ Duration of the crop
	Technology with		✓ Yield (kg/ha)
	performance indicators		✓ Net returns (Rs./ha)
8	Final recommendation for	:	Results indicates that net returns are more in carrot and
	micro level situation		it was observed that the duration of the crop and
			incidence of pest and diseases is less in comparison with
			tomato.
9	Constraints identified and	:	-
	feedback for research		
10	Process of farmers	:	-
	participation and their		
	reaction		

crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed/ refined	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Carrot & Beet root	Irrigated	Less profits from the traditional vegetables in local market due to frequent glut	Introduction of carrot & beet root as alternate crops	5	T1 : Farmers practice (Tomato)	* Yield /ha.  * Net returns (Rs./ha)	46.3 t/ha 78,557-00	Net returns are high with carrot & beetroot and its duration is also less.	Incidence of pests and diseases is less compared to tomato.
					T2. : Carrot Beetroot	* Yield t/ha.  * Net returns (Rs./ha)	31.25 37.47 1,69,937 1,96,406		

Technology Assessed 11	Production per unit 12	Net Return (Profit) in Rs. / unit 13	BC Ratio 14
T1: Tomato	46.3 t/ha	78,557-00	1:1.89
T2: Carrot &	31.25 t/ha	1,69,937-00	1:2.97
Beet root	37.47 t/ha	1,96,406-00	1:3.32

# OFT: 13

S.No	Item		Particulars
1	Title	:	Testing the performance of Chrysanthemum crop
			varieities.
2	Problem	:	Low yields due to growing of the local varieties and
	diagnosed/refinement		repeated use of suckers from same crop as planting
			material.
3	Details of technologies	:	T1: Farmers practice (Local varieities)
	selected for		T2: Raichur – yellow
	assessment/refinement		T3 – PBAU – 107 (white)
4	Source of technology	:	APHU
5	Production system	:	Irrigated Red soil
6	Thematic Area	:	Introduction of high yielding improved varieties
7	Performance of the	:	✓ Duration of the crop
	Technology with		✓ Yield (kg/ha)
	performance indicators		✓ Net returns (Rs./ha)
			✓ C:B Ratio
8	Final recommendation for	:	Results indicates that among varieties tested for their
	micro level situation		performance, PBAU 107 recorded higher yield, showed
			high level of establishment, drought and shelf life and
			consumer acceptance.
9	Constraints identified and	:	-
	feedback for research		
10	Process of farmers	:	Farmers have participated actively in observing the yields,
	participation and their		establishment and shelf life.
	reaction		

crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed/ refined	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Chrysanthemum	Irrigated Red soil	Less profits from the	Performance of high	5	T1: Farmers practice	* Yield /ha.	8.72 tha	Net returns are high with	Shelf life is more for
		local	yielding		(Local)	* Net returns	1,97,899	Raichur and	PBAU 107
		varieties	varieties			(Rs./ha)		PBAU 107	
					T2. : Raichur T3 : PBAU 107	* Yield /ha.	10.85 t/ha.		
						* Net returns (Rs./ha)	3,09,115		
						*Yield /ha	12.17 t/ha		
						*Net returns (Rs./ha)	3,77,718		

Technology Assessed	Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T1: Local	8.72 t/ha	1,97,899-00	2.73
T2: Raichur	10.85 t/ha	3,09,115-00	3.50
T3: PBAU 107	12.17 t/ha	3,77,718-00	4.03

# **OFT-14**

S.No	Item		Particulars
1	Title	:	Effect of creep feeding on growth rate in pre weaned lambs
2	Problem	:	The growth rate in lambs is low at farmers flocks due to
	diagnosed/refinement		the following reasons
			1. Imbalanced feeding
3	Details of technologies	:	T <sub>1</sub> - Farmers practice
	selected for		$T_2$ – Creep feeding @ 50g / day
	assessment/refinement		
4	Source of technology	:	S.V. Veterinary University
5	Production system	:	Lambs
6	Thematic Area	:	creep feeding
7	Performance of the	:	✓ Body weight gain
	Technology with		✓ Growth rate
	performance indicators		
8	Final recommendation for	:	The results indicated that 38.93% increased body weight
	micro level situation		was recorded in ram lambs by feeding balanced
			concentrate feed over farmers practice.
9	Constraints identified and	:	-
	feedback for research		
10	Process of farmers	:	-
	participation and their		
	reaction		

crop/ enterprise	Farming situation	Problem Diagnosed	Title of FLD	No. of trials*	Technology demonstrated	Parameters	Data on the parameter	Results	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Sheep	Mixed farming	The growth rate in pre weaned lambs (bellow 3	Feeding of creep	5	Control- Farmers practice	Initial body	5.84Kg (T1)	The results indicated that	
		months) is less due to	feeding			weight	5.6 Kg(T2)	23.1%	
		Imbalanced feeding and			Demo –Feeding	Final	11.64Kg (T1)	increased	
		low proteins in the			Creep feeding	body		body weight	
		ration			@50gram/day	weight	12.74 Kg(T2)	gain by	
						Body	5.8 Kg (T1)	feeding creep	
						weight		feed over	
						gain (90	7.14 Kg(T2)	farmers	
						days)		practice.	
	Tec	chnology Assessed		Proc	luction per unit	Net Ret	urn (Profit) in I	Rs. / unit	BC Ratio
		11		12		14			

7.14kg

5.8kg

1677.00

1450.00

T1: Farmers practice (feeding of grains)

T2: Creep feeding

1:6.55

1:5.83

# OFT-15 S.No

Item

1	Title	:	Effect of regional specific mineral mixture on reproduction and production performance in milch buffaloes.
2	Problem diagnosed/refinement	:	The reproduction problems like post partum anoestrus condition is high due to mineral deficiency in the feed. (Except reproduction disorders)
3	Details of technologies selected for assessment/refinement	:	$T_1$ –Farmers practice (no feeding of mineral mixture) $T_2$ – Feeding of Regional specific mineral mixture @ $80 \text{gm/day}$
4	Source of technology	:	S.V. Veterinary University
5	Production system		Dairy
6	Thematic Area	:	Mineral supplementation to milch animals
7	Performance of the	:	✓ No. of animals came to heat
	Technology with performance indicators		✓ Milk production
8	Final recommendation for micro level situation	:	The results indicated that 45% animals exhibited heat symptoms and 15.3% increased milk production was recorded through supplementation of RSMM in the feed.
9	Constraints identified and	:	<u>-</u>
	feedback for research		
10	Process of farmers	:	-
	participation and their		
	reaction		

**Particulars** 

crop/ enterprise	Farming situation	Problem Diagnosed			No. of Technology Assessed/ refined 5 6		Parameters of assessment 7	Data on the parameter 8	Results of assessment	Feedback from the farmer 10	
Dairy	Mixed farming	Post partum anoestrus condition is high in milch buffaloes due to mineral deficiency (Except reproduction disorders)	perforn in milch buffalo	f 20a on uction tion nance	animals T f f r r T r s r	T1: Farmoractice eeding mineral mixture regiona specific mineral mixture 80gm/d	ners (No of ) ding of	No. of animals responded Milk production (90 days)	9 (45.0%) 400.5 (T1) 461.7 (T2)	The results indicated that 45% animals exhibited heat symptoms and 15.3% increased milk production was recorded through supplementation of RSMM in the feed.	
		Technology A	ssessed				er unit	Net Retur	n (Profit) in Rs		BC Ratio
		11				12			13		14
T <sub>1</sub> – Farme	ers practice				4	100.5 I		<u> </u>	12015.00		1:3.22
T <sub>2</sub> –Farme	rs practice +	RSMM @ 80g/	'day		4	l61.7 l		-	16159.50		1:3.47
Treatmen period	t 1	-10 days 1	.1-20 days	21-30days	1-2 mon	ths	2 -3 montl	าร			
Animals responded	d	02	2	0	5		0				

# OFT-16 S.No

Item

reaction

1	Title		Effect of azolla supplementation on growth rate in				
1	Title	•	Rajasri birds at backyards.				
2	Problem	:	The growth rate in backyard poultry is low due to un				
	diagnosed/refinement		availability of sufficient proteins in scavenging system.				
3	Details of technologies	:	T <sub>1</sub> – Scavenging + Grains (Farmers practice)				
	selected for		T <sub>2</sub> – Scavenging + Grains + Azolla @ 50g/day				
	assessment/refinement						
4	Source of technology	:	S.V. Veterinary University				
5	Production system	:	Backyard poultry				
6	Thematic Area	:	Azolla supplementation				
7	Performance of the	:	✓ Body weight gain				
	Technology with		✓ Growth rate				
	performance indicators						
8	Final recommendation for	:	The results indicated that 23.5% increase in body weight				
	micro level situation		gain was observed in treatment over control				
9	Constraints identified and	:	-				
	feedback for research						
10	Process of farmers	:	-				
	participation and their						

**Particulars** 

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed/ refined	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Poultry	Mixed farming	The growth rate in low due to non availability of sufficient protein food in scavenging system of backyard poultry	Effect of azolla on growth rate in Backyard poultry	50 birds	T <sub>1</sub> – Scavenging + grain feeding T <sub>2</sub> –Scavenging +Grain feeding + 50grams azolla/day	Initial body weight Final body weight (6 months)	426.3 (T1) 563.0 (T2) 1512.6 (T1) 1904.5 (T2)	23.5% increase in body weight was observed in treatment over control	
						Body weight gain (in 150 days)	1086.3 (T1) 1341.5(T2)		

Technology Assessed	Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T <sub>1</sub> – Scavenging + Grains	1086.3	57.20	1:54
T <sub>2</sub> –Scavenging + Grains + Azolla @50g/day	1341.5	101.00	1:2.01

# **OFT-17**

S.No	Item		Particulars
1	Title	:	Assessment of performance of Improved sickles with Local sickles
2	Problem	:	Farm women face drudgery in harvesting operations by
	diagnosed/refinement		using local sickles with heavy weight.
3	Details of technologies	:	✓ T1-Local Sickles (350-380 gms)
	selected for		✓ T2-Improved Sickles (175 gms)
	assessment/refinement		
4	Source of technology	:	-
5	Production system	:	-
6	Thematic Area	:	Drudgery of farm women
7	Performance of the	:	✓ Area Covered/day
	Technology with		✓ Time Taken for harvest/day
	performance indicators		✓ Feed back on work related stress factors
8	Final recommendation	:	The results indicated that, with the use of improved
	for micro level situation		sickles, the labour saved by 37.5% than their regular
			practice. Women also felt that with the use of improved
			sickles body strain, drudgery at harvest and stress was
			reduced.
9	Constraints identified	:	-
	and feedback for		
	research		
10	Process of farmers	:	-
	participation and their		
	reaction		

crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed/ refined	Parameters of assessment	Data on the paramet er	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Farm	-	Farm women	Assessme	10	T1 – Local sickles	Area	1.0ac	1.0ac	Farm felt
Implemen		face drudgery	nt of		(350-380)	covered/day			that with
ts to		in harvesting	performa		T2 –Improved				the use of
reduce		operations by	nce of		Sickles(175 gms)				improved
drudgery		using local	Improved						sickles body
		sickles with	sickles		T1- Local Sickles	Time taken for	3.30hrs	3.10hrs	strain,drudg
		heavy weight.	with		(350-380)	harvest/ac/day			ery at
			Local		T2 –Improved				harvest
			sickles		Sickles(175 gms)				ranged
									from less to
					T1-Local Sickles	Labour	8	5	normal
					(350-380)	Saved/ac/day			
					T2 –Improved				
					Sickles(175 gms)				
					T1- Local Sickles	Feed	Presente		
					(350-380)	back on work	d in a		
					T2-Improved		separate		
					Sickles(175 gms)	related stress	table		
					( 6 )	factors			

Technology Assessed	Production /unit	Net return (profit) in Rs./unit	<b>BC</b> Ratio
11	12	13	14

T1 – Local Sickles

T2 –Improved Sickles

Feed back on work related stress factors was recorded with the score card developed by AICRP, H.Sc, FRM and presented in the following table.

Matrix ranking of Drudgery for Farm women in Agriculture Operations:

Indices for drudgery: Severe-5, Moderate-4, Normal-3, Less-2, No drudgery-1

Type of drudgery	Indices			
	Local sickles	Improved Sickles		
Drudgery estimation at harvest	4	2		
Stress Estimation	5	3		
Body Strain while in operation	4	2		
Estimation of feel while carrying weights	5	2		
Estimation of operational difficulty	4	2		
Psychological Stress due to work	5	2		

**Inferences:** It was clearly indicated that, with the use of improved sickles the body strain while in operation, estimation of operational difficulty, drudgery estimation at harvest, psychological stress due to work, estimation of feel while carrying weights and stress estimation was ranged from less to normal than their regular practice which was recorded from moderate to severe.

**User Acceptance of Matrix Index on Improved Implement:** 

Indices For Acceptance: Highly satisfied-5, Moderately Satisfied-4, Satisfied-3, Unsatisfied-2, Not Accettable-1

Name of the	User		Feel of Activity	
Implement		Time Taken for the Activity	Area Covered	Energy Spent for work
 Modified Sickles	Farmwomen	4	3	4

**Inferences:** It was opinioned that, with the use of improved sickles time taken for the activity, area covered and energy spent for the work ranged from satisfied to highly satisfied. They also expressed that with the use of improved sickles the strain while work and fatigue was reduced and felt easy in harvest operation.

**OFT-18: Refinement:** 

S.No	Item	Particulars
1 2	Title Problem diagnosed/refinement  Details of technologies	<ul> <li>Performance of Refined Rotary weeder</li> <li>The exsisting length (5 ft) and weight (5.010gms) of the weeder not suiting the anthropometric measurements of farm women. Hence, the weeder is refined with the length-4ft and weight-3.5 kgs.</li> <li>T1 – Manual weeding</li> </ul>
	selected for assessment/refinement	T2 – Weeding with rotary weeder T3- Weeding with refined rotary weeder
4 5	Source of technology Production system	: CIAU, Bhopal. : -
6 7	Thematic Area Performance of the Technology with performance indicators	<ul> <li>: Drudgery of farm women</li> <li>: ✓ Labour required/ac/day</li> <li>✓ Cost on weeding/ac</li> <li>✓ Feed Back on work related stress factors</li> </ul>
8	Final recommendation for micro level situation	: The results indicated that, with the use of rotary weeder(T2) and refined rotary weeder(T3),the weeding was done with 3 labour per acre per day than their regular practice i.e, 8 labour per day per acre and cost on weeding was saved by 62.5% per acre. Labour saving on the implement was same with T1 and T2. But, Women felt that after refinement, the length and weight of the implement is reduced nd with the use of refined weeder body strain, drudgery at weeding, Estimation of feel and stress was ranged from less to moderate than their regular practice which was recorded from moderate to severe.
9	Constraints identified and feedback for research	: -
10	Process of farmers participation and their reaction	: -

crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT 4	No. of trials*	Technology Assessed/ refined 6	Parameters of assessment	Data on the parameter 8	Results of assessment	Feedback from the farmer	Justifi cation for refinement 11
Farm Implements to reduce drudgery	-	Farm women face drudgery in weeding operations due to lack of knowledge on improved weeding implements	Refinement ; Performance of refined rotary weeder	5	T1 – Manual weeding T2 –Rotary weeder T3-Refined rotary weeder T1- Manual weeding T2 –Rotary weeder T3- Refined Rotary weeder T1- Manual weeding T2-Rotary weeder T1- Manual weeding T2-Rotary weeder T3-Refined rotary weeder	Labour required/day/a cost on weeding/day/a Feed back on work related stress factors	Rs 960/- Rs 360/- Presented in a separate table	3	Farm women felt thatbody strain,drudgery,stress was reduced from less to moderate.	The exsisting length (5 ft) and weight (5.010gms) of the weeder not suiting the anthropometric measurements of farm women. Hence, the weeder is refined with the length-4ft and weight-3.5 kgs.

Technology Assessed	Production /unit	Net return (profit) in Rs./unit	BC Ratio
11	12	13	14
T1 – Manual weeding -	-	-	
T2 –Rotary weeder			
T3-Refined rotary weeder			

Feed back on work related stress factors was recorded with the score card developed by AICRP, H.Sc, FRM and presented in the following table.

# Matrix ranking of Drudgery for Farm women in Agriculture Operations: Indices for drudgery: Severe-5, Moderate-4, Normal-3, Less-2, No drudgery-1

Type of drudgery	Indices			
Type of drudgery	Local sickles	Improved Sickles		
Drudgery estimation at harvest	5	4		
Stress Estimation	5	4		
Body Strain while in operation	5	3		
Estimation of feel while carrying weights	4	3		
Estimation of operational difficulty	4	2		
Psychological Stress due to work	4	2		

**Inferences:** It was clearly indicated that with the use of refined rotary weeder, the body strain while in operation, estimation of operational difficulty, drudgery estimation at harvest, psychological stress due to work, estimation of feel while carrying weights and stress estimation was ranged from less to moderate than their regular practice which was recorded from moderate to severe.

# User Acceptance of Matrix Index on Improved Implement:

Indices For Acceptance: Highly satisfied-5, Moderately Satisfied-4, Satisfied-3, Unsatisfied-2, Not Accettable-1

Name of the		Feel of Activity				
Implement	User	Time Taken for the Activity	Area Covered	Energy Spent for work		
Improved weeders	Farmwomen	4	3	4		

**Inferences:** It was opinioned that, with the use of refined rotary weeder time taken for the activity, area covered and energy spent for the work ranges from moderately satisfied to satisfied. They also expressed that with the use of refined rotary weeder, the strain while weeding and fatigue was reduced due to reduced length and weight of the implement.

# **On Farm Testing**





**OFT on Plant densities in maize** 





**OFT on Bengalgram Varieties** 

OFT on Blackgram varieties





Performance of ICRISAT Hybrids i., ICPH-2740 and 2671



**OFT** on Management of wilt in chillis



OFT on Management of sucking pests in B.t. cotton



OFT on Management of fruit rot and powdery mildew in chilli



OFT on Nutrient Management in Sunflower based on STCR equation



OFT on Nutrient management in Groundnut based on STCR



OFT on Nutrient management in Chillies based on STCR





**OFT** on Introduction of Carrot as alternate crop

Effect of creep feeding on growth rate in lambs





**OFT on Evaluation of Chrysanthemum varieties** 





Effect of RSMM on reproduction and production performance in milch buffaloes

Effect of azolla on growth rate in Rajasri birds

# **OFT: Performance of Improved Sickles with Local Sickles:**



**Harvesting Of paddy Crop with Local Sickle** 



Harvesting Of Paddy crop with Improved sickle



Local Sickles (350-380gms)



Improved Sickles (175gms)

**OFT: Refinement: Performance of Refined Rotary Weeder:** 







**Refined Rotary Weeder** 







**Introduction Of Cotton Hand Gloves For Castor Harvesting** 



Introduction of Bendi Cutter for Bendi Harvesting



**Bendi Harvesting with bare hands** 





**Introduction Of Mogi Improved Wheelhoe** 

# 3.2 Achievements of Frontline Demonstrations

a. Follow-up for results of FLDs implemented during previous years
List of technologies demonstrated during previous year and popularized during 2013-14 and recommended for large scale adoption in the district

_	nmended for la	irge scale adop	tion in the distric				
S.	Crop/	Thematic	Technology	Details of	Horiz	zontal spre	ead of
N	Enterpris	Area*	demonstrat	popularization		technolog	У
0	е		ed	methods	No	No.	Area
				suggested to the		of	in ha
				Extension system	of	far	
					vill	mer	
					ag	S	
					es		
1	Bengalgr	Varietal	Varietal	Demonstrations,	15	5000	25000
	am	Evaluation	Demonstratio	Exposure visits, Field			
			n in	Days Seed village			
			Bengalgram	Concept			
			with Jaki-	·			
			9218, digvijay				
			and Nandyala				
			sanaga-1				
2	Cotton	Weedmana	Post-	Demonstrations,	5	4000	30000
	and	gement	emrgence	Exposure visits, Field			
	Paddy	S	herbicides	Days, Seed village			
	,			Concept			
3	Paddy	Resource	Direct Seeding	Demonstrations,	12	500	250
	,	conservatio	<b>0</b>	Exposure visits, and			
		n		Field Days			
4	Paddy	Resource	Zero tillage	Demonstrations,	8	200	250
-	,	conservatio	_0.0 0080	Exposure visits, and	· ·		
		n		Field Days			
5	Rice	Soil testing	Soil testing	Demonstration,	10	235	500
_			crop response	exposure visits, Field			
			based nutrient	Days .			
			application in	20,70			
			rice				
6	Bt	Nutrient	Foliar	Demonstrations,	12	900	2000
Ū	Cotton	manageme	nutrition	Exposure visits, and		300	2000
7		nt		Field Days	15	500	2500
,	Bt	ICM	Spacing	Demonstrations,	13	300	2500
	Cotton	10141	Spacing	Exposure visits, and			
	Cotton			Field Days			
8	Redgram	IPM	Realtime	Spray of Chloro +	8	180	120
O	Reagram	11 141	contingent	Dichlorvos at	Ü	100	120
			mgmt. of	flowring, Wilt			
			pests &	resistant variety			
			diseases	PRG 158			
9	Bengalgram	IDM	Biopriming for	Biopriming with	15	250	350
Э	pengaigi atti	ואוטו	soil borne	T.viride @ 10g/kg +	13	230	330
			disease	30 g Powdered FYM			
				<del>-</del>			
			management	as paste.			_

10	Castor	IPM	Realtime contingent	Chloro for Capsule borer & Spray of	10	100	150
			mgmt. of	Carbendazim pre &			
			pests &	post rain for Botrytis			
			diseases				
11	Brinjal	IPM	Mgmt of fruit	Ph.traps, Neem oil,	7	40	50
			& shoot borer	Neem cake.			
12	Onion	IPM	Thrips & Leaf	Fipronil,	8	60	50
			blight	Thiophanate methyl			
13	Blackgram	IPM	Realtime	Chloro +	6	40	60
			contingent	Dichlorovos, Yellow			
			mgmt. of pest	sticky traps			
			s & diseases				
14	Bt	IPM	Mgmt. of	Stem application,	6	80	100
	cotton		sucking pests	Yellow sticky traps,			
				Need based sprays			
15	Rice	BIPM	Bio Intensive	Pseudomonas,	10	120	150
			Pest	Neem oil,			
			Management	Dung, Urine extract,			
				Bt spray	_		
16	Groundnut	IDM	Management	Soil application of	5	40	60
			of stem rot	T.v + P.f with FYM	_		
17	Mango	ICM	Integrated	Manuring, training,	4	45	55
			Crop	pruning and			
			Manageme	Micronutrient			
10	Jasmine	ICN 4	nt	application,	2	24	10
18	Jasmine	ICM	Integrated	INM, Pest and Disease	2	24	10
			Crop				
			Manageme nt	management			
19	Chillis	INM	Soil test	INM+ Micronutrient	3	60	80
13	Cilliis	IINIVI	based	management and	Э	00	٥0
			fertilizer	optimum use of			
			application	chemical fertilizers			
			аррисации	CHEHIICAI IELUIIZEIS			

Details of FLDs implemented during 2013-14 (Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops,

oilseeds, pulses, cotton and commercial crops.)

SI. No.	Crop	Thematic area	Technology Demonstrated	Season year	Are	ea (ha)		. of farme monstrati	-	Reasons for
		3.53		700.	Pro	Actu	SC/S	Other	Total	shortfall
1	Redgram	ICM	Varietal	K-2013	12	12	7	23	30	
2	Bengalgram	ICM	Varietal	R-2013	12	12	6	24	30	
Othe	r Demonstrations									
1	Seteria	varietal	varietal	K-2013	10.0	10.0	6	19	25	
2	Paddy	Weed management	Herbicides+ Manual weeding	K-2013	4	4	4	6	10	
3	Bt Cotton	Weed management	Herbicides+ Manual weeding	K-2013	4	4	4	6	10	
4	Groundnut	Weed management	Herbicides+ Manual weeding	R-2013	4	4	4	6	10	
5	Hybrid Redgram	Hybrids Evaluation	Hybrids Evaluation	K-2013	-	-	15	45	60.	
6	Seteria – Bengalgrm	Crop intensification	Double cropping	K 2013	4	4	3	7	10	
7	Rice	Varietal	Varietal	K-2013	-	-	38	62	10 0	
8	Rice	Resource conservation	Direct Seeding	K-2013	4	4	3	7	10	
9	Maize	Resource conservation	Zero tillage	R-2013	2	2	2	3	5	
10	Groundnut	IDM	Management of stem rot	K 2013	4	4	2	8	10	
11	Redgram	IPM	Contingent Pest & Dis. Mgmt	K 2013	4	4	2	8	10	
12	Castor	IPM	Contingent Pest & Dis.	K 2013	4	4	2	8	10	

			Mgmt						
13	Brinjal	IPM	IPM for Shoot & Fruit borer	R 2013	4	4	3	7	10
14	Bengalgram	IDM	Biopriming for wilt & dry root rot	R 2013	4	4	1	9	10
15	Maize	IPM	Contingent mgmt. of pests and diseases	R 2013	4	4	2	8	10
16	Paddy	Soil & Water testing	Nutrient Management based on STCR	Kharif-13	4	4	2	8	10
17	Paddy	Micronutrient deficiency in crops	Zinc management	Kharif-13	4	4	3	7	10
18	Bt.cotton	INM	Integrated Nutrient Management	Kharif-13	4	4	2	8	10
19	Paddy	Management of Problematic Soils.	Reclamation of sodic soils	Kharif-13	4	4	4	6	10
20	Bengalgram	Secondary and micronutrient management	Sulphur and zinc management	Rabi-13	4	4	3	7	10
21	Maize	Micronutrient deficiency in crops	Zinc management	Rabi-13	4	4	3	7	10
22	Mango	INM	Micronutrient management	-	4	4	3	7	10
23	Turmeric	IDM	Management of rhizome rot	K 2013	4	4	2	8	10
24	Jasmine	ICM	ICM	-	4	4	1	9	10
25	Marigold	Varieties	Demonstration on hybrids	R 2013	4	4	3	7	10
26	Banana	INM	Micronutrient management	-	4	4	2	8	10

D - 1 - 1	1	C		1.5 (2.1)
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Detai	וט טו	14111111	e situa	LIOII

S. No.	Crop	Season	Farming situation	Soil type		Status of so	oil	Previous crop	Sowing date	Harvest date	Seasona I rainfall	No. of rainy
			(RF/ Irrigated)	-71	N	Р	K	_			(mm)	days
1	Redgra	K-2013	Irrigate	Red	L	Med	Hig	Jowar	3 rd	3 rd week		
	m		d	soil			h		week of July	of December		
		K-13	Rainfed	Medi	L	Med	Hig	Jowar	3 rd	1 <sup>st</sup> Week		
				um Black			h		week of July	of January		
2	Bengal	R-13	Rainfed	Black	L	High	Hig	Jowar	2 <sup>nd</sup> week	3 <sup>rd</sup> week		
	gram			soil			h		of October	of January		
		Other Demo	onstrations									
1	Seteri	K-13	Rainfe	Black	L	М	Hig	Redgram	1 <sup>st</sup> FN of	1 <sup>st</sup> FN of		
	a		d				h		July	Oct		
2	Paddy	K-13	irrigat	Black	L	М	Hig	Jowar	1 <sup>st</sup> week	Last Week		
			ed	soil			h		of August	of January		
3	Bt	K-13	irrigat	M.Black	L	M	М	Chillies	1 <sup>st</sup> week	Last Week		
	Cotton		ed	soils					of	of January		
	•	5.40		5 1 11				D	August			
4	Groun	R-13	irrigat	Redsoil	L	M	M	Blackgra	2 <sup>nd</sup> FN of	Upto 4 <sup>th</sup> week of		
	dnut		ed					m	Oct.	Feb.		
5	Hybrid	K-13	Rainfe	Black	L	Н	Н	Jowar	2 <sup>nd</sup> week	3 <sup>rd</sup> week		
	Redgr		d	soil					of July	of January		
•	am	V 42	Date Co	DII		8.4 - J		1	4St EN -5	ast EN C		
6	Seteri	K -13	Rainfe	Black	L	Med	Hig	Jowar	1 <sup>st</sup> FN of	1 <sup>st</sup> FN of		
	a – Bengal		d	Soil			h		July	Feb		

	grm									
	Rice	K-13	Irrigat	Black	L	Н	Н	Rice	2 <sup>nd</sup> to	3rd week
			ed	soil					3 <sup>rd</sup> week	of Dec
									of July.	
8	Rice	K-13	irrigat	Black	L	Н	Н	Rice	2 <sup>nd</sup> to	3rd week
			ed	soil					3 <sup>rd</sup> week	of Dec
									of Julyr.	
9	Maize	R-13	irrigat	Sandy	L	M	Н	rice	Ist week	1 <sup>st</sup> week of
			ed	loam					of jan	May
10	Groun	K 2013	ID	Black	L	M	M	Redgram	1 <sup>st</sup> FN of	2 <sup>nd</sup> FN of
	dnut								July	Oct
11	Redgr	K 2013	Rainfe	Black	L	M	M	Jowar	1 <sup>st</sup> week	Last <sup>st</sup>
	am		d	soil					of	Week of
43	C1	W 2042	D - 1 - C -	12.1.1				Calla	August	January
12	Castor	K 2013	Rainfe	Light	L	M	M	Cotton	1 <sup>st</sup> week	Last <sup>st</sup>
			d	Black soils					of	Week of
12	Deinial	D 2012	ın			N 4	N 4	Catton	August 2 <sup>nd</sup> FN of	January Upto 4 <sup>th</sup>
13	Brinjal	R 2013	ID	Redsoil	L	M	M	Cotton		•
									Oct.	week of Mar.
14	Bengal	R-2013	Rainfe	Black	L	Н	Н	Jowar	2 <sup>nd</sup> week	3 <sup>rd</sup> week
14	gram	K-2013	d	soil	L	п	П	JOWai	2 week 15of	of January
	grain		u	3011					October	Of January
15	Maize	R 2013	ID	Black	L	Н	Н	Maize	Octobel	
10	IVIAIZE	11 2013	טו	soil	L	11	11	IVIAIZE		
16	Paddy	Kharif-13	Irrigat	Black	L	Н	М	Paddy	2 <sup>nd</sup> to	Last week
	,		ed	soil	-	• •	•••	,	3 <sup>rd</sup> week	of
									of	December.
									August.	
17	Paddy	Kharif-13	Irrigat	Black	L	Н	М	Paddy	2 <sup>nd</sup> to	Last week
	- /		ed	soil				•	3 <sup>rd</sup> week	of
									of	December.
									August.	

18	Bt.cotton	Kharif-13	I/D	Black	Low	Mediu	high	Jowar	Last	Last
				soil		m			week of	picking 3 <sup>rd</sup>
									J uly	week of
										February
19	Paddy	Kharif-13	Irrigat	Black	Low	High	Med	Paddy	2 <sup>nd</sup> to	Last week
			ed	soil					3 <sup>rd</sup> week	of
									of	December.
									August.	
20	Bengalgr	Rabi-13	Rainfe	Black	Low	M to	Med	Bengalgra	3rd week	3 <sup>rd</sup> week
	am		d			Н		m	of Oct.	of Jan
21	Maize	Rabi-13	I/D	Black				Paddy	2 <sup>nd</sup> to 3 <sup>rd</sup>	Last week
									week of	of April
									January.	
22	Mango	-	ID	Red soil	L	Med	High	-	3 <sup>rd</sup>	1 <sup>st</sup> week of
									week of	January.
									July.	
23	Turmeric	K 13	ID	Red soil	L	Low	Med	Cotton	1 <sup>st</sup> Wk of	Last week
									July	of March.
24	Jasmine	-	ID	Red soil	L	Н	М	-	2 <sup>nd</sup> to	Last week
							to		3 <sup>rd</sup> week	of
							Н		of	December.
									August.	
25	Marigold	R 13	ID	Red soil	L	M	М	Brinjal	Last	last week
									week of	of
									July	February.
26	Banana	-	ID	Black	L	Н	М	Paddy	-	-
				soil			to			
							Н			

# **Performance of FLD**

SI.	•	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Dem	o. Yield Qtl	/ha	Yield of local	Increase in yield		neter in relation demonstrated
						Н	L	Α	Check Qtl./ha	(%)	Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Redgram	Component technologies	PRG-158/- ICPL-87119	15	4.0	17.22	14.37	15.77	12.71	24.0		
			LRG-41- ICPL-85063	15	6.0	14.87	12.00	13.47	11.25	19.7		
2	Bengalgram	Component	Digvijay/JG- 11	30	12.0	21.15	15.25	17.49	13.85	26.2	32.6 pods/plant	25.3pods/plant
Oth	er demonstratio	ns										
1	Seteria	varietal	Suryanadi	25	10.0	22.10	20.75	21.50	18.86	14.0		
2	Paddy	Herbicides+ Manual weeding	BPT-5204	10	4.0	73.12	70.30	70.68	70.21	-	Cost on weeding- 3500/ha	Cost on weeding- 5250/ha
3	Bt Cotton	Herbicides+ Manual weeding	Swapna	10	4.0	22.5	18.75	20.94	20.30	-	Cost on weeding- 5625/ha	Cost on weeding- 7200/ha
4	Groundnut	Herbicides+ Manual weeding	TAG-24	10	4.0	42.0	38.0	40.20	38.75	-	Cost on weeding- 3050/ha	Cost on weeding- 4125/ha
5	Hybrid Redgram	Hybrids Evaluation	ICPH-2740	30.	12.0	16.87	12.90	14.68	13.35	10.0		
			ICPH-2671	30	12.0	19.65	15.45	17.58	13.35	32.0		
6	Seteria – Bengalgrm	Double cropping	PRG-158 SIA-3085	10	4.0	14.29(B)	21.15(SE)	-	15.73(B)			
7.	Rice	Varietal	RP-BiO-226	100	25.0	80.0	69.37	73.45	73.59	-	Panicle length-	Panicle length-

											19.7cm	21.6cm
											No of	No of
											grains/panicle-	grains/panicle-
											219	256
8	Rice	Direct Seeding	BPT-5204	10	4.0	75.20	71.25	73.55	71.26	3.0		
9	Maize	Zero tillage	Kaveri-51	5	2.0	77.50	69.50	74.40	68.85	8.0		
LO	Groundnut	Management of Stem rot	TAG 24	10	4.0	2650	2200	2415	2100	15.0	Stem rot 6.75%	Stem rot 12.61%
l1	Redgram	Contingent Pest & Dis. Mgmt.	PRG-158	10	4.0	1160	1480	1316	1175	12.0	Maruca 2.6% Pod borer 2.2%	Maruca 7.8% Pod borer 6.5%
L2	Castor	Contingent Pest & Dis. Mgmt.	PCH 111	10	4.0	1440	1000	1187	1095	8.4	Botrytis 2.9% Borer 3.1%	Botrytis 6.8% Borer 5.9%
.3	Brinjal	IPM for Shoot & Fruit borer	Poluru	10	4.0	26500	23450	24819	22630	9.67	BFSB 7.4%	BFSB 13.3%
L4	Bengalgram	IDM	JG 11	10	4.0	2050	1750	1927	1782	8.10	Wilt 2.1% Dry root rot 2.8%	Wilt 6.2% Dry root rot 5.8%
15	Maize	Contingent Pest and Dis. Mgmt.		10	4.0							
L6	Paddy	Nutrient Management based on STCR	BPT-5204	10	4	72.19	60.0	68.29	68.23	-	The cost on chemical fertilizers and yield	The cost on chemical fertilizers and yield
17	Paddy	Zinc management	BPT-5204	10	4	68.90	64.75	67.14	60.96	10.14	C.P and yield	C.P and yield
L8	Bt.cotton	Integrated Nutrient Management	Jadu	10	4	45.0	36.50	41.28	37.56	9.91	C.P and yield	C.P and yield
19	Paddy	Reclamation of sodic soils	BPT-5204	10	4	60.25	58.50	59.20	48.52	22.02	C.P and yield	C.P and yield

20	Bengalgram	Sulphur and zinc management	JG-11	10	4	20.1	16.9	18.2	16.3	12.21	C.P and yield	C.P and yield
21	Maize	Zinc management	Private hybrids	10	4		Un	der progr	ess			
22	Mango	Micronutrient management	Baneshan	10	4		Un	ider progre	ess			
23	Turmeric	Management of rhizome rot	Duggirala	10	4		Un	ider progre	ess			
24	Jasmine	ICM	-	10	4	54.36	43.65	48.26	40.47	19.25	CP and yield	CP and yield
25	Marigold	Demonstration on hybrids	Jumbo Gold	10	4	135.8	98.7	121.3	92.4	31.27	CP and yield	CP and yield
26	Banana	Micronutrient management	G 9	10	4	776	625	737.5	653.2	12.90	CP and yield	CP and yield
27	Dairy animals	Feeding of SF heads supplemented ration	Graded murrah	10	10	508.5	598.5	553.5	500.2	9.77	% fat Demo 6.91	6.17
28	Calves	Feeding of calf starter	Graded murrah	10	20	22.4	47.2	34.8	27.4	27	-	-
29	Pre- weaned lambs	Supplementation of minerals through salt licks	Nellore Brown	10	100 lambs	7.0	8.4	7.7	6.27	11.12	-	-
30	Fodder	Haylage making with jowar straw and feeding to buffaloes Milk production (90 days)	Graded murrah	10	10	364.2	312.6	338.4	314.5	6.9	Fodder Demo: 9%	wastage Control:39%

Lconomic Impact	ICANTINII ATIAN AT	Providuc table	4
Economic Impact	i continuation oi	DI EVIOUS LADIE	,

S.No	Average Cost of cult	<u> </u>	Average Gross Re	turn (Rs./ha)	Average Net Retui (Rs./ha)	rn (Profit)	Benefit-Cost Ratio (Gross
•	Demonstration	Local Check	Demonstratio	Local Check	Demonstration	Local	Return /
			n			Check	Gross Cost)
	14	15	16	17	18	19	20
1	20375-00	21186-00	63080-00	50840-00	42705-00	29654-00	1:3.10/2.40
	20375-00	21186-00	53880-00	45000-00	33505-00	23814-00	1:2.64/2.12
2	22450-00	22888-00	50721-00	40165-00	28271-00	17277-00	1:2.26/1.75
	Other Demonstrations						
1	12060-00	12060-00	26875-00	23575-00	14815-00	11515-00	1:2.23/1.95
2	48150-00	49900-00	113088-00	112336-00	64938-00	62436-00	1:2.35/2.25
3	38425-00	40,000-00	100512-00	97440-00	62087-00	57440-00	1:2.62/2.44
4	50550-00	51625-00	1,20,600-00	1,16250-00	70050-00	64625-00	1:2.39/2.25
5	22700-00	22700-00	58720-00	53400-00	36020-00	30700-00	1:2.59/3.10
6	35860-00	22905-00	70320-00 66628-00	45617-00	47620-00 30768-00	22712-00	/2.35 1:1.86/1.9
U							•
7	56250-00	56250-00	117520-00	117744-00	61270-00	61494-00	1:2.09/2.09
8	51812-00	58750-00	122607-00	118790-00	70795-00	60040-00	1:2.37/2.02
9	27175-00	34425-00	89280-00	82620-00	62105-00	48195-00	1:3.292/2.40
10	45,625-00	47,875-00	72,450-00	63,000-00	26,825-00	15,125-00	1:16/1.3
11	19,935-00	21,200-00	52,640-00	47,000-00	32,705-00	25,800-00	1:2.64/2.22
12	18,540-00	19,030-00	35,610-00	32,850-00	17,070-00	13,820-00	1:1.92/1.73
13	91,544-00	97,670-00	1,98,552-00	1,81,040-00	1,07,008-00	83,370-00	1:2.17/1.85

14	22,750-00	22,625-00	53,956-00	49,896-00	31,206-00	27,271-00	1:2.37/2.21
15	Demo under process						
16	54,439-00	64704	113767	113663	59328	48959	2.09/
17	57,968-00	57218	111855	101554	53887	44336	1.76 1.93/
1,	37,300 00	3,210	111033	101334	33007	44330	1.78
18	79251	79098	198120	180264	118869	101167	2.50 (D)
19	52835	43835	98272	80537	45437	36702	2.28(C) 1.86(D)
							1.84(C)
20	24390	22640	52896	47125	28506	24485	2.18(D) 2.09(C)
21	Under progress						2.09(C)
22	Under progress						
23	Under progress						
24	139324	138482	482630	404720	343306	266238	3.46/2.92
25	116125	86940	310272	142296	194147	55356	2.67/1.63
26	182742	176130	977335	816500	794593	640370	5.3/4.6
27	4800-00	5760-00	13837.50	11092.40	9037.50	5332.40	1:2.88/1:1.92
28	784-00	840.00	5220.00	4110.00	4436.00	3270.00	1:6.65/1:4.89
29	644.00	638.00	1700.00	1550.00	1600.00	912.00	1:2.64/1:2.43
30	369-00	-	717-00	-	348-00	-	1:1.94

# Analytical Review of component demonstrations (details of each component for rain fed / irrigated situations to be given separately for each season)

S.No	Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
1	Redgram	Kharif- 2013	PRG-158	Irrigated	1577	1271	24.0
			LRG-41	Rainfed	1347	1125	19.7
2	Bengalgram	Rabi -13	ICM on Digvijay/JG-11	Rianfed	1749	1385	26.2
	Other demonstrations						
1	Seteria	K-13	varietal	Rainfed	21.50	18.86	14.0
2	Paddy	K-13	Herbicides+ Manual weeding	Irrigated	70.68	70.21	-
3	Bt Cotton	K-13	Herbicides+ Manual weeding	Irrigated	20.94	20.30	-
4	Groundnut	R-13	Herbicides+ Manual weeding	Irrigated	40.20	38.75	-
5	Hybrid	K-13	Hybrids Evaluation	Rainfed	14.68	13.35	10.0
	Redgram				17.58	13.35	32.0
6	Seteria –	K-13	Double cropping	Rainfed	14.29(B)	15.73(B)	-
7	Bengalgrm Rice	V 43	Varietal	Irrigated	21.15(SE 73.45	73.59	
-		K-13		_			
8	Rice	R-13	Direct Seeding	irrigated	73.55	71.26	3.0
9	Maize	R-13	Zero tillage	Irrigated	74.40	68.85	8.0
10	Groundnut	K 2013	Management of Stem rot	ID	2415	2100	15.0
11	Redgram	K 2013	Contingent Pest & Dis. Mgmt.	Rainfed	1316	1175	12.0
12	Castor	K 2013	Contingent Pest & Dis. Mgmt.	Rainfed	1187	1095	8.4
13	Brinjal	R 2013	IPM for Shoot & Fruit borer	ID	24819	22630	9.67
14	Bengalgram	R 2013	IDM	Rainfed	1927	1782	8.10

15	Maize	R 2013	Contingent mgmt. of pests & diseases	& ID			Under progress	
16	Paddy	Kharif-13	Nutrient Management based on STCR	Irrigated	68.29	68.23	Cost of production reduced towards chemical fertilizers is Rs. 10265/ha,	
17	Paddy	Kharif-13	Zinc management	Irrigated	67.14	60.96	10.14	
18	Bt.cotton	Kharif-13	Integrated Nutrient Management	I/D	41.28	37.56	9.91	
19	Paddy	Kharif-13	Reclamation of sodic soils	Irrigated	59.20	48.52	22.02	
20	Bengalgram	Rabi-13	Sulphur and zinc management	Rainfed	18.2	16.3	12.21	
21	Maize	Rabi-13	Zinc management	I/D	Under			
					progress			
22	Mango	-	Micronutrient management	ID	Under progress			
23	Turmeric	K 2013	Management of rhizome rot	ID	Under progress			
24	Jasmine	-	ICM	ID	48.26	40.47	19.25	
25	Marigold	R 2013	Demonstration on hybrids	ID	121.3	92.4	31.27	
26	Banana	-	Micronutrient management	ID	73.75	65.32	12.90	
27	Dairy animals	Kharif 14	Feeding of SF heads supplemented ration		553.5	500.2	9.77	
28	Calves	Rabi 14	Feeding of calf starter		34.8	27.4	27	
29	Pre- weaned	Kharif	Supplementation of minerals		7.7	6.27	11.12	
	lambs	14	through salt licks					
30	Fodder	Rabi	Haylage making with jowar straw		338.4	314.5	6.9	
		14	and feeding to buffaloes					
			Milk production (90 days)					

Redgram: Redgram variety PRG-158 with Improved production technologies (Improved variety,seed treatment, pre-emergence application of pendimethalin against weeds, Soil test based fertilizer application, Sulphur @20 kg/ha and IPM measures against Helicoverpa and S.exigua) gave higher grain yield(1577 Kg/ha), which was 24.0 per cent than that of farmers practice in red soils with one protective irrigation at pod development stage.

The variety LRG-41 has recorded 19.7 % increased yield over farmers practice in medium black soils under rainfed situation. The Economic Viability of improved technology over farmers practice was calculated depending on prevailing prices of input and output costs. The improved technologies resulted increased income with cost benefit ratio of 1:3.10/2.4 and 1:2.64/2.12 in with protective irrigation and rainfed situation respectively.

**Bengalgram:** In Bengalgram variety Digvijay with Improved production technologies (seed treatment, pre-emergence application of pendimethalin against weeds, Soil test based fertilizer application, Sulphur @20 kg/ha and IPM measures against Helicoverpa and S.exigua) gave higher grain yield(1749), which was 26.2 per cent than that obtained with farmers practice yields of 1385 kg/ha in black soils under rainfed situation.

The increased grain yield with Improved production technologies was mainly because of more no of pods/plant and higher 100 grain weight. Economics of demonstration and local check plots indicated that the with cultivation of Digvijay with improved technologies, additional returns of Rs 10994/- /ha were obtained with BC ratio of 1:2.26/1.75

# **Demonstration on Seteria Variety Suryanandi:**

During Kharif-2013 twenty five FLDs were organized with **Suryanandi** variety of seteria at different locations of Banaganapalli mandal. The data revealed that the grain yield of improved variety was increased by 14.0 per cent with additional returns of Rs 3875/- per ha. The improved variety proved to be superior as compared to local variety both in terms of grain and fodder yield

#### **Weed Management in Paddy:**

FLDs on Weed management were taken up in an area of 4ha at Yagantipalli Village with post—emergence application Bispyribac sodium80 ml /acre at 20 DAT+ one hand weeding at 40 DAT. The results indicated that post—emergence application Bispyribac sodium80 ml /acre at 20 DAT reduced the weed density most effectively and 82.0 per cent weed control efficiency was recorded. The hand weeding is laborious and generally more expensive. It was revealed that Post emergence application of herbicide along with one hand weeding most economic method for weed control in transplanted rice.

#### Weedmanagement in Bt cotton

During khairf-13 FLDs were taken up at Yagantipalli village of Banaganapalli and Jalakanur village of Midthur mandal with Post emergence application of Pyrithiobac sodium + Quizalofop ethyl at 20-25 DAS in Bt cotton. The results indicated that weed density was Significantly reduced and 86.0 per cent weed control efficiency was recorded. The hand weeding is laborious and generally more expensive. It was revealed that Post emergence application of herbicide along with two hand weeding most economic method for weed control in Bt cotton

#### **Demonstration on Hybrid redgram:**

During Kharif -13 on-farm testing on assessment of Redgram Hybrids i.e ICPH-2740 and ICPH-2671 were organized at Koilakuntla and Banaganapalli mandal in 30 locations each. The results indicated that the hybrid ICPH-2671 has recorded highest Yield (1758 Kg/ha) followed by ICPH-2740- (1468 Kg/ha) as compared with local varieties i.,e LRG-41, Asha and ICPI-85063.

#### Feedback:

- ❖ The two Pigeonpea hybrids i.e ICPH- 2740 and 2671 are performed well in both rainfed and irrigated situations.
- Farmers Opined that the hybrids are suitable for medium black to black soils than light solis.

Two hybids i.e ICPH- 2740 and 2671 are fairly tolerant to wilt.

# **Demonstration of crop intensification Growing of Korra before Bengalgram**

The results indicated that highest net returns was obtained with Korra-Bengalgram sequence (Rs30948/ha) than fallow – bengalgram, which is Rs8236/- more than the Fallow- Bengalgram. This shows the increased profitability of Korra- Bengalgram sequence

#### Promotion of SRI-Cultivation/ Drum Seeder Methods of Paddy

- The data clearly indicated that direct seeding of pre- germinated paddy seeds with drum seeder on puddle field recorded higher grain yield over transplanting. The mean yield of direct seeding was 7355Kg/ha as compared to 7126 kg/ha in case transplanting. The increased grain yield in direct seeding might be due to avoidance of root injury, transplanting shock and quicker tiller initiation leading to longer tillering period.
- The economic feasibility of direct seeding with drum seeder revealed that higher gross returns of Rs 1,22,607/- than transplanting Rs 1,18,790/- . Further the cost of cultivation was also lower in case of direct seeding mainly due to absence operations like nursery raising and transplanting.

Based results of demonstrations it was clearly indicated that direct seeding of paddy with drum seeder recorded higher grain yield, better yield parameters, lower cost of cultivation and resulted higher net returns than transplanting. The direct seeding technique can provide definitely more sustainable production in those areas where labour is costly and availability is less which affects timely planting of rice by transplanting method.

# **Demonstration on Zero tillage Maize:**

The results indicated that the cost of cultivation for zero tillage method is Rs. 27,175/ha which is Rs. 7,250/- less than the normal maize. This resulted in increased returns to the farmers. The net income of the farmers was also increased in zero tillage method which is calculated as Rs. 62105/- per ha which is Rs. 13910/- more than the normal maize. This shows the increased profitability through zero tillage methodology which is the ultimate requirement of any activity especially in agriculture.

# **Management of Stem rot in Groundnut:**

The demonstration on stem rot management in groundnut with soil application of Trichoderma viride gave 46.4% reduction in incidence of stem rot disease and an increase of 15% in yield compared to farmers practice.

#### Realtime Contingent management of pests and diseases in Redgram :

The demo resulted in 12% increased yield while reducing the incidence of maruca and pod borer considerably, with net additional returns of Rs. 6,905/- per ha.

#### Realtime contingent management of pests and diseases in Castor:

The demonstration resulted in 8.4% increased yield of castor, with minimum incidence of botrytis and capsule borer, with additional net returns of Rs. 3,250/- per ha.

#### **Management of Shoot and Fruit borer in Brinjal:**

The demonstration resulted in 9.67% increased yield, with a saving of Rs. 6,126/- per ha. On cost of plant protection, thus resulting in net additional returns of Rs. 23,638/- per ha. while keeping the pest incidence at minimum.

#### Management of wilt and dry root rot in Bengalgram:

The demonstration resulted in 8.1% increased yield, with minimum incidence of wilt and dry root rot and an additional net returns of Rs. 3,935/per ha.

Nutrient management in rice based on STCR equation: The results indicated that the average grain yield of paddy under STCR was higher (6829Kg/ha) than the grain yield produced under controlled practice (6823Kg/ha). Gross and net income were high in demonstration plots (Rs.113767 ha<sup>-1</sup> and Rs. 59328 ha<sup>-1</sup>, respectively) as compared to controlled practice (Rs.113663 ha<sup>-1</sup> and Rs.48959 ha<sup>-1</sup>, respectively). It was also observed that an amount of Rs.10369/ha was realized as additional income due to low production costs and yield increments in demonstrations. Benefit-cost ratio was also high in demonstrations (1:2.09) as compared to check (1:1.76) due to low cost production.

<u>Zinc Management in rice</u>: Ten Demonstrations were organized on Zinc management in rice at Bhanumukkala village of Banaganapalle mandal. The average yield of rice under Zinc foliar application was high (6714Kg/ha) as compared to controlled practice (6096Kg/ha). An amount of Rs. 9551/ha was realized as additional income due to yield increments (10.14 %)in demonstrations. Benefit-cost ratio was high in demonstrations (1:1.93) as compared to controlled practice (1:1.78) due to higher gross income.

INM in Bt.Cotton: Ten Demonstrations were organized on integrated nutrient management in Bt.cotton at Mettupalle village of Owk mandal. The average yield of cotton was high (4128Kg/ha)in INM practice when compared to farmer's practice (3756 Kg/ha). An amount of Rs. 23703/ha was realized as additional income due to low production costs and yield increments (9.91%) in demonstrations. Benefit-cost ratio was high in demonstrations (1:2.70) as compared to farmers practice (1:2.28) due to low cost of Production and higher gross income.

Reclamation of sodic soils with gypsum: Ten Demonstrations were organized on reclamation of sodic soils with gypsum at Yagantipalle village of Banaganapalle mandal. The initial soil pH was ranged from 9.02 to 9.16 and after reclamation it is ranged from 8.61 to 8.78. The Paddy crop was cultivated after reclamation. The average yield of paddy in demonstration plots was high (5920Kg/ha) as compared to controlled plots (4852 Kg/ha). The results indicated that 22.02 percent yield increase in demonstration plots over the controlled plots. An amount of Rs. 8735/ha was realized as additional income in demonstrations due to yield increments.

Sulphur and zinc management in Bengalgram based on soil test: Ten Demonstrations were organized in bengalgram at Sanjamala village. The average yield of bengalgram under Sulphur and zinc management was high (1824Kg/ha) as compared to control (1625Kg/ha). An amount of Rs. 4021/ha was realized as additional income due to yield increments (12.21%) in demonstrations. Benefit-cost ratio was high in demonstrations (1:2.18) as compared to farmers practice (1:2.09) due to higher gross income.

**Zinc management in maize.** Organising ten demonstrations at Yagantipalle village. Zinc sulphate applied @50 kg/ha at basal. Now the crop is at knee high stage.

**Micro nutrient management in mango:** Ten demonstrations were organized at Emboi village of Bethamcherla mandal. Micronutrient mixture was sprayed twice at pre bloom period and at pea nut stage @ 5gms/lit of water. Now the crop is at fruiting stage.

Rhizome rot management in Turmeric: Demonstration was taken up with 10 farmers in Mamgampeta Thanda of Owk Mandal. The seed treatment of rhizomes was done by soaking the rhizomes in Ridomyl MZ (3g/lt.) one month after sowing Trichoderma Viridae enriched manure (2.5q/ha.) was applied. Now the crop is at harvesting stage.

**Integrated crop management in Jasmine:** Demonstration was taken up in Yagantipalle village with 10 farmers. Vermicompost (10kg/plant) was applied along with recommended dose of fertilizer and foliar application of micro nutrient mixture was done twice. One at new flush stage and second at bud formation stage. There was an increase of 19.25% in yield due to ICM (48.26 q/ha) as against farmers practice (40.47 q/ha).

**Demonstration of Hybrid Marigold :** Demonstration was taken up in Yagantipalle and Banumukkala of Banaganapalle Mandal. The results indicate that percentage increase in demo plot was 31.27% and the additional net returns obtained was Rs. 1,38,791/- per ha. and the shelf life of the flowers was as high as 7 days in demo compare to 3 days in control plot.

**Integrated Nutrient Management in Banana:** In this Demonstration spray of micro nutrient mixture along with NPK was sprayed thrice at bunch initiation, bunch elongation and finger filling stage. There was an increase of yield by 12.9%.

Feeding of sunflower heads supplemented ration to milch buffaloes: The demonstration was conducted at Amadala and Koilakuntla villages. 30% SF heads mixed ration was fed to the animals for 90 days. The results indicated that 9.77% increased milk production by feeding SF heads supplemented ration over farmer's method. Difference of Rs.3705/- on net profit was observed in demo over control.

Feeding of calf starter to buffalo calves: The demonstration was conducted at Yagantipalle village. Calf starter feeding along with timely medication was done to the calves for five months. The data on body weight gain at six months age revealed that 27% increased body weight by feeding calf starter over farmers practice.

Mitigation of mineral deficiency in lambs: The demonstration was conducted at Katikavanikunta village of Banaganapalle (M). Salt licks were hanged in the lamb pen for 90 days. Data on body weight revealed that 11.12% increased body weight in lambs by feeding salt licks over farmers practice.

**Effective utilization of maize stover through Haylage:** The demonstration was conducted at Nandavaram village. Haylage was fed to milch animals for 90 days. The fodder utilization in haylage was 91% while in control it was 61% and 6.9% increased milk yield was observed in demo over control.

# **Technical Feedback on the demonstrated technologies:**

S.	Feed Back
No	

#### 1 Redgram:

- The redgram variety PRG-158 being its short duration, it is suitable for red soil situations.
- It is suitable for intercrop in groundnut
- The incidence of wilt is significantly less in PRG-158 compared to local check.
- The redgram variety LRG-41 being its Long duration, it is suitable for Medium black under rainfed situations.
- Moderately tolerant to Helicoverpa pod borer.
- Pods are brick red in colourand Seeds dark red and bold.

#### 2 Bengalgram:

- Plant height, no. of branches/plant, No. of pods/plant were more in Digvijay
- It matures 5-7 days earlier than Annegiri.
- The incidence of wilt is comparatively less than local check.
- Plant was bushy with basal branching habit.
- Research on development of desi varieties with short duration has to be strengthened
- Development of varieties tolerant to pod borer complex.
- Development of transgenics particularly for resistance to pod borer.

# 3. Integrated weed management in Rice, Bt cotton and Rabi Groundnut

- Cost on manual weeding was reduced (Rs 950/- per ha)
- Weed control efficiency was 82-86.0Per cent
- Weed density was less in demo plot up to critical periods

#### 4 Cropping systems:

- Castor and greengram intercropping system found to be remunerative than sole crop of Castor/ Greengram even under drought conditions.
- While maintaining the yield levels of the sole crop, additional yields with the intercropping component have been realized.
- Since, a food legume is involved in the system, it will not only enhance the income of the farmer, but also provide with the much-needed protein to supplement the predominantly cereal diet of farmers.

#### 5 Zero tillage in Maize:

- Cost on preparatory cultivation was reduced to Rs 2500-3000/ha
- Timely sowing is possible
- Additional returns of Rs 13910/-ha was obtained
- Rice-Maize system under zero tillage was profitable where water is not sufficient to take up rice-rice under well /canal irrigation.

#### 6 STCR based nutrient management in rice:

- The status of phosphorus was more than 100 kg./ha in all demonstration fields. Hence Phosphorus was not applied in demonstrations.
- Nutrient use efficiency (kg grain-/kg<sup>-1</sup> nutrient) was high in STCR (27.10) as compared to farmers practice (12.29).
- Soil test based nutrient management helped in fertilizer cost reduction (Rs.10,265 ha<sup>-1</sup>) in demonstration

# 7 Zinc management in Rice :

- Foliar application of chelated zinc performed equally as basal application.
- Zinc deficiency correction gave higher yield than control

#### 8 INM in Bt.cotton:

Integrated nutrient management gave higher yield than control

#### 9 Reclamation of sodic soils:

Application of gypsum helped in reduction of soil pH.

# 10 Sulphur and zinc management in Bengalgram based on soil test

Productivity enhancement due to application of sulphur and zinc in respective nutrient deficient soils

# **Farmers reaction on Specific technologies**

S.	Feed Back	
No		

#### 1 STCR in Rice:

Farmers were satisfied with crop performances and expressed that Soil test based nutrient management is a viable technology in Rice, because of less cost of chemical fertilizers and without reduction in yield compared to their own practice. They realized that they are resorting to higher expenditure on fertilizers in absence of soil testing of their fields. They are now willing to adopt the STCR technology in succeeding seasons for raising crops. They have also noticed that Pest incidence was less in demonstration plots than farmers practice fields.

#### 2 Zinc Management in Rice:

Foliar application of zinc is more economic than basal.

#### 3 INM in Bt. Cotton:

INM is required to improve soil physic-chemical properties and increase in productivity

#### 4 Reclamation of sodic soils:

Sodic soil reclamation by gypsum application is more effective than other methods.

#### 5 Sulphur and zinc management in Bengalgram based on soil test:

Need based application of Sulphur and zinc is more essential for improving bengalgram yield.

#### 6 Management of stem rot in Groundnut

 Soil application of Trichoderma viride incubated with FYM before sowing effectively reducing the incidence of stem rot disease.

#### 7 Realtime contingent Management of pests and diseases in Redgram

• Spraying Chloro + Dichlorovos at flowering or on observing initials of leaf webbing, offered good control of the pest.

#### 8 Realtime contingent Management of pests and diseases in Castor

• Spraying Carbendazim before and after rainfall, considerably reduced the incidence of botrytis and thus yield loss.

#### 9 IPM for Shoot & Fruit borer in Brinjal

- With Pheromone traps the pest activity can be assessed and even it offers good trapping of male moths, offering some control in populations.
- With Azadirachtin 1500 PPM spray, the gap between two chemical sprays can be increased, thus less number of sprays are needed.
- Spraying Rynaxypyr @ 0.3 ml/lt offered good control of shoot and fruit borer.

#### 10 Management of Wilt and Dry root rot in Bengalgram

• Seed treatment with T.viride @ 10g/kg along with FYM powder offer the food source for germinating T.viride and ensure its better establishment in the soil.

#### 11 Hybrid marigold cultivation:

Due to cultivation of Hybrid Marigold, the harvesting of the flowers can be extended to meet the market demands or occations, which enables getting higher price. The yield and quality of the flowers are also very good compared to traditional varieties, which attracts premium price for the produce, thus giving almost double income than the traditional varieties.

# 12 Management of rhizome rot in turmeric:

Due to seed treatment in turmeric, rhizome rot can be reduced to a greater level at very meager cost of treatment.

### 13 ICM in Mango:

Retention of flowers and fruits in Mango improved very much due to micro nutrient application, twice in the cropping season.

#### **Extension and Training activities under FLD**

S. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	2	17-1-2014	75	
			30-1-2014	85	
2	Farmers Training	5	25-6-2013	30	
			25-11-2013	25	
			24-9-20113	30	
			15-12-2013	25	
3	Training for extension functionaries	1	18-12.2013	40	

# **Front Line Demonstrations**



Demonstration on Seteria Variety Suryanandi



Demonstration on Rice Variety RP Bio-226



Demonstration on Post- emergence weed Management in Rabi Groundnut



Demonstration on Post- emergence weed Management in Bt cotton





Demonstration on crop intensification Seteria - Bengalgram



Demo on Sulphur and zinc management in Bengalgram



**Demo on Zinc management in Maize** 



Demo on STBR based fertilizer mgmt. in Rice



Demo on foliar application of Zinc in Rice



**Demo on INM in Bt.Cotton** 



**Demo on Reclamation of Sodic Soils** 



Demo On Contingent Management of Pests & diseases in Redgram



Demo on contingent management of Pests and Diseases in Castor



**Demo on IPM in Brinjal** 



Demo on IDM for wilt and dry root rot in Bengalgram



Demo On Management of stem rot in groundnut



Demo on contingent management of pests and diseases in Maize



**Rhizome rot management in Turmeric** 



Demo on hybrid marigold cultivation



**ICM** in Jasmine



Demo on micronutrient management in tissue culture banana



Feeding of calf starter to buffalo calves



Supplementation of minerals to lambs through salt licks



Feeding of SF heads mixed ration







introduction of Bendi Cutter for reducing drudgery for farm women

FLD on introduction of Bendi Cutter for reducing drudgery for farm women





FLD on introduction of cotton hand gloves for harvesting of castor

FLD on introduction of cotton hand gloves for harvesting of castor

#### (i) Farm Implements:

Name of	Crop	No.	Area	Performance	* D	ata on	%	Remarks
the		of	(ha)	parameters /		meter in	chang	
implemen		farm		indicators		ition to	e in	
t		ers			tech	nnology	the	
					dem	onstrate	para	
						d	mete	
					De	Local	r	
					mo	check		
Cotton	Castor	10	0.4	Labour required/	4	6		With the introduction of
Hand				picking/acre/day				cotton hand gloves for
Gloves				Reduction on cost on	480	720	22.2	castor harvesting, the
				Harvesting/picking /			33.3	labour required and cost
				acre/day (Rs.) Feed back on work				on harvesting saved by 33.3% and the drudgery
				related stress factors				was reduced from less
				presented in a separate				to normal than their
				table				regular practice
								recorded from
								moderate to severe
Bhendi	Bhend	10	0.4	Qty. harvested in kgs/	62.	55	13.6	With the introduction of
Cutter	i			day/person	5	C00	40.0	Bendi cutter(from
				Labour Saved In Rs /day	360	600	40.0	MPKV,Rahuri) the harvesting rate
				Feed back on work				increased by 13.6% and
				related stress factors				labour cost saved by
				presented in a separate				40% and the drudgery
				table				was reduced from
				Feed back on work				normal to moderate
				related stress factors				than their regular
				presented in a separate				practice
				table				severe
Mogi	Groun	5	0.4	Labour required/	8	3	62.5	With the introduction of
Improved	dnut			acre/day				Mogi improved
Wheelhoe								wheelhoe, the cost on
				Reduction on cost on	360	960		weeding was saved by
				weeding / acre				600/- and labour saved
				❖ Feed back on work				by 62.5% for one
				related stress factors presented				weeding at 20 days.  During the crop period,
				in a separate table				the weeding, the cost on
				in a separate table				weeding was saved by
								1200/-(Two times). The
								drudgery was reduced
								from less to moderate
								than their regular
								practice i.e, from
								moderate to severe.

<sup>\*</sup> Field efficiency, labour saving etc.

Feed back on work related stress factors was recorded with the score card developed by AICRP, H.Sc, FRM, ANGRAU and presented in the following table separately for all the demonstrations. .

#### 1. Introduction of Cotton hand gloves for harvesting of castor:

Feed back on work related stress factors was recorded with the score card given by AICRP, H.Sc, FRM, ANGRAU and presented in the following table.

Matrix ranking of Drudgery for Farm women in Agriculture Operations:

Indices for drudgery: Severe-5, Moderate-4, Normal-3, Less-2, No drudgery-1

	Indices						
Type of drudgery	<b>Cutting with bear</b>	<b>Cutting with</b>					
	hands	Gloves					
Drudgery estimation at harvest	5	3					
Stress Estimation	5	3					
Body Strain while in operation	5	3					
Estimation of feel while carrying weights	5	3					
Estimation of operational difficulty	4	2					
Psychological Stress due to work	5	2					

**Inferences:** Farm women felt that, with the use of cotton hand gloves the body strain while in operation, estimation of operational difficulty, drudgery estimation at harvest, psychological stress due to work, and stress estimation ranged from less to normal than their regular practice where it is moderate to severe.

**User Acceptance of Matrix Index on Improved Implement:** 

Indices For Acceptance: Highly satisfied-5, Moderately Satisfied-4, Satisfied-3, Unsatisfied-2, Not Accettable-1

Name of the		Feel of Activity							
Implement	User	Time Taken for the Activity	Area Covered	Energy Spent for work					
Cotton Hand Gloves	Farmwomen	3	4	3					

**Inferences:** It was opinioned that, with the use of Cotton hand gloves time taken for the activity, area covered and energy spent for the work ranges from satisfied to moderately satisfied. They also expressed that with the use of cotton hand gloves the strain while harvesting, scratches, injuries and fatigue was reduced and this helped them for harvesting more area with less time and less labour and less drudgery.

#### **II.** Introduction of Bhendi Cutter for reducing drudgery:

Feed back on work related stress factors was recorded with the score card developed by AICRP, H.Sc, FRM, ANGRAU and presented in the following table.

## Matrix ranking of Drudgery for Farm women in Agriculture Operations: Indices for drudgery: Severe-5, Moderate-4, Normal-3, Less-2, No drudgery-1

	Indices						
Type of drudgery	Picking with bare	Picking with					
	hands	Gloves					
Drudgery estimation at harvest	5	4					
Stress Estimation	5	4					
Body Strain while in operation	5	3					
Estimation of operational difficulty	5	4					
Psychological Stress due to work	5	3					

**Inferences:** Farm women felt that, with the use of Bendi Cutter, the body strain while in operation, estimation of operational difficulty, drudgery estimation at harvest, psychological stress due to work, and stress estimation was ranged from normal to moderate than their regular practice which was recorded severe.

#### **User Acceptance of Matrix Index on Improved Implement:**

Indices For Acceptance: Highly satisfied-5, Moderately Satisfied-4, Satisfied-3, Unsatisfied-2, Not Acceptable-1

Name of the		Feel of Activity							
Implement	User	Time Taken for the Activity	Area Covered	Energy Spent for work					
Bendi Cutter	Farmwomen	3	4	4					

**Inferences:** It was opinioned that, with the use of Bendi Cutter, time taken for the activity, area covered and energy spent for the work ranges from moderately satisfied to satisfied. They also expressed that with the use of Bendi cutter, the strain while harvesting, scratches, injuries and fatigue was reduced and this helped them for increasing harvest rate with less time and less labour.

# III. Introduction of Mogi Improved Wheelhoe for reducing drudgery of farm women in weeding operations:

Feed back on work related stress factors was recorded with the score card given by AICRP, H.Sc, FRM, ANGRAU and presented in the following table.

Matrix ranking of Drudgery for Farm women in Agriculture Operations:

Indices for drudgery: Severe-5, Moderate-4, Normal-3, Less-2, No drudgery-1

	Indices						
Type of drudgery	Manual Weeding	Weeding with refined rotary weeder					
Drudgery estimation at harvest	5	4					
Stress Estimation	5	4					
Body Strain while in operation	5	3					
Estimation of feel while carrying weights	4	3					
Estimation of operational difficulty	4	2					
Psychological Stress due to work	4	2					

**Inferences:** It was clearly indicated that with the use of Mogi Improved Wheelhoe, the body strain while in operation, estimation of operational difficulty, drudgery estimation at harvest, psychological stress due to work, estimation of feel while carrying weights and stress estimation ranged from less to moderate than their regular practice which was moderate to severe.

**User Acceptance of Matrix Index on Improved Implement:** 

Indices For Acceptance: Highly satisfied-5, Moderately Satisfied-4, Satisfied-3, Unsatisfied-2, Not Acceptable-1

Name of the		Feel of Activity							
Implement	roved Farmwomen	Time Taken for the Activity	Area Covered	Energy Spent for work					
Mogi Improved Wheelhoe	Farmwomen	3	4	3					

**Inferences:** It was opinioned that, with the use of Mogi nImproved Wheelhoe, time taken for the activity, area covered and energy spent for the work ranges from moderately satisfied to satisfied. They also expressed that with the use of Mogi Improved wheelhoe, the strain while harvesting, and fatigue was reduced but they required practice for easy operation of the implement.

## (ii) Livestock Enterprises

Enterpris e	Breed	No. of farmer s	No. of animals , poultry birds	Performance parameters / indicators	* Data on parameter in relation to technology demonstrated		% change in the paramete r	Remark s
			etc.		Demon	Local chec		
						k		
Calves	Graded murrah	10	20	Body weight gainkg/90day s	8.85	6.37	38.93	
Lambs	Nellore Brown	10	100	Body weight gain/90days	28.43	21.12	34.61	
Ram lambs	Nellore Brown	10	100	Body weight gain/90days	7.70	6.27	22.8	
Fodder	Haylag e making	10	10	Milk yield/90days	338.4	314.5	7.6	

<sup>\*</sup> Milk production, meat production, egg production, reduction in disease incidence etc.

## (iii) Other Enterprises

Enterpris	Variety/	No. of	No.	Performanc	Data on	% change	Remark
е	breed/Species	farmer	of	e	parameter in	in the	S
	/	S	Unit	parameters	relation to	paramete	
	others		S	/	technology	r	
				indicators	demonstrate		
					d	<del>-</del>	
					Dem Local		
					o check		

## 3.3 Achievements on Training (Including the sponsored, vocational, FLD and trainings under Rainwater Harvesting Unit):

A) ON Campus

Thematic area	No. of	No. of				articipa	ants			
	courses		Other			SC/ST			and To	
(1) - 0 - 11		M	F	T	M	F	T	M	F	Т
(A) Farmers & Farm Women I Crop Production										
Weed Management	1	22	-	22	8	-	8	30	-	30
Resource Conservation Technologies	1	16	-	16	9	-	9	25	-	25
Cropping Systems	1	18	-	18	7	-	7	25	-	25
Crop Diversification	1	25	5	30	10	-	10	35	5	40
Water management	1	20	-	20	10	-	10	30	-	30
Seed production Integrated Crop Management	1 4	18 139	5 15	23 154	7 46	-	7 46	25 185	5 15	30 200
II Horticulture	4	139	13	134	40	_	40	103	13	200
a) Vegetable Crops										
Production of low volume and high value crops	1	26		26	3		3	29		29
Protective cultivation (Green Houses, Shade Net etc.) <b>b) Fruits</b>	1	27		27	3		3	30		30
Training and Pruning	1	26		26	2		2	28		28
Cultivation of Fruit	5	126		126	11		11	137		137
c) Ornamental Plants										
Crop Management III Soil Health and Fertility	2	42		42	5		5	47		47
Management										
Integrated Nutrient Management	1	19	-	19	6 12	-	6 12	25	-	25 45
Production and use of organic inputs	1	33	-	33	12	-	12	45	-	45
Management of Problematic soils	1	21	-	21	4	_	4	25	_	25
Soil and Water Testing	1	27	-	27	8	-	8	35	-	35
IV Livestock Production and										
Management										
Poultry Management	2	-	-	-	-	75	75	-	75	75
Disease Management	2	33	-	33	7	-	7	40	-	40
Feed management	1	16	-	16	4	-	4	20	-	20
V Home Science/Women										
empowerment										
Household food security by kitchen gardening and nutrition gardening	1	-	17	17	-	13	13	-	30	30
Design and development of low/minimum cost diet	1	-	2	2	-	28	28	-	30	30
Designing and development for high nutrient efficiency diet	1	-	19	19	-	11	11	-	30	30
Value addition	4	-	89	89	-	46	46	-	135	135
Income generation activities for empowerment of rural Women	4	-	68	68	-	29	29	-	97	97
Location specific drudgery reduction technologies	1	-	22	22	-	14	14	-	36	36

VII Plant Protection										
Integrated Pest Management	5	94	38	132	17	6	23	111	44	155
Bio-control of pests and diseases	1	31	-	31	2	-	2	33	-	33
Production of bio control agents and bio pesticides	2	67	-	67	13	-	13	80	-	80
IX Production of Inputs at site										
Vermi-compost production	1	11	-	11	9	-	9	20	-	20
TOTAL	50	857	280	1137	203	222	425	1060	502	1562
(B) RURAL YOUTH										
Seed production	1	25	5	30	-	5	5	25	10	35
Nursery raising	1	24		24	2		2	26		26
Production of organic inputs	2	21	9	30	9	2	11	30	11	41
Tailoring and Stitching	2	-	51	51	-	27	27	-	78	78
Rural Crafts	4	-	73	73	-	27	27	-	100	100
TOTAL	10	70	138	208	11	61	72	81	199	280
(C) Extension Personnel										
Productivity enhancement in field	4	35	-	35	5	-	5	40	-	40
crops	1									
Production and use of organic	4	25	-	25	-	-	-	25	-	25
inputs	1									
TOTAL	2	60		60	5		5	65		65

#### B) OFF Campus

Thematic area	No. of				Par	ticipa	ants			
	courses		Other	S		SC/S1	Γ	Gra	and To	otal
		M	F	Т	M	F	Т	M	F	T
(A) Farmers & Farm Women										
I Crop Production										
Integrated Crop Management	3	70	15	85	12	_	12	82	15	97
III Soil Health and Fertility Management	_									•
Soil fertility management	1	24	-	24	10	-	10	34	-	34
Soil and Water Conservation	1	36	-	36	14	-	14	50	-	50
Micro nutrient deficiency in crops	1	20	-	20	5	-	5	25	-	25
Nutrient Use Efficiency	1	17	-	17	8	-	8	25	-	25
Soil and Water Testing	1	32	-	32	8	-	8	40	-	40
IV Livestock Production and Management										
Dairy Management	3	52	_	52	15	_	15	67	_	67
Disease Management	1	14	_	14	6	_	6	20	_	20
Feed management	1	-	28	28	-	7	7	-	35	35
Production of quality animal products	1	20	-	20	3	_	3	23	-	23
V Home Science/Women empowerment					_		_			
•			12	12		0	•		22	22
Income generation activities for	1	-	13	13	-	9	9	-	22	22
empowerment of rural Women VII Plant Protection										
VII Flant Flotection										
Integrated Pest Management	3	101	-	101	16	-	16	117	-	117
Production of bio control agents and bio	2	50	4	54	10	-	10	60	4	64
pesticides										
TOTAL	20	436	60	496	107	16	123	543	76	619
(B) RURAL YOUTH		_			_	_				
Dairying	1	2	14	16	2	2	4	4	16	20
Tailoring and Stitching	2		47	47	-	28	28	-	75	75
TOTAL	3	2	61	63	2	30	32	4	91	95
(C) Extension Personnel	4	4.0	0	26	0	_	4.4	26	4.4	40
Livestock feed and fodder production	1	18	8	26	8	6	14	26	14	40
Women and Child care	1	- 40	42	42	-	16	16	-	58	58
TOTAL	2	18	50	68	8	22	30	26	72	98

## C) Consolidated table (ON and OFF Campus)

Thematic area	No. of				Pa	rticip	ants			
	courses		Other	S		SC/ST		Gr	and To	tal
		M	F	Т	M	F	Т	M	F	T
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	1	22	-	22	8	-	8	30	-	30
Resource Conservation Technologies	1	16	-	16	9	-	9	25	-	25
Cropping Systems	1	18	-	18	7	-	7	25	-	25
Water management	1	20	-	20	10	-	10	30	-	30
Seed production	1	18	5	23	7	-	7	25	5	30
Integrated Crop Management	7	209	30	239	58	-	58	267	30	297
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value	1	26		26	3		3	29		29
crops										
Protective cultivation (Green Houses, Shade	1	27		27	3		3	30		30
Net etc.)										
b) Fruits										
Training and Pruning	1	26		26	2		2	28		28
Cultivation of Fruit	5	126		126	11		11	137		137
c) Ornamental Plants										
Crop Management	2	42		42	5		5	47		47
III Soil Health and Fertility Management										
Soil fertility management	1	24	-	24	10	-	10	34	-	34
Soil and Water Conservation	1	36	-	36	14	-	14	50	-	50
Integrated Nutrient Management	1	19	-	19	6	-	6	25	-	25
Production and use of organic inputs	1	33	-	33	12	-	12	45	-	45
Management of Problematic soils	1	21	-	21	4	-	4	25	-	25
Micro nutrient deficiency in crops	1	20	-	20	5	-	5	25	-	25
Nutrient Use Efficiency	1	17	-	17	8	-	8	25	-	25
Soil and Water Testing	2	59	-	59	16	-	16	75	-	75
IV Livestock Production and Management										
Dairy Management	3	52	-	52	15	-	15	67	-	67
Poultry Management	2	_	-	-	-	75	75	-	75	75
Disease Management	3	47	-	47	13	-	13	60	-	60
Feed management	2	16	28	44	4	7	11	20	25	55
Production of quality animal products	1	20	-	20	3	-	3	23	-	23
V Home Science/Women empowerment										
Household food security by kitchen	4	-	17	17	-	13	13	-	30	30
gardening and nutrition gardening	1									
Design and development of low/minimum	4	-	2	2	-	28	28	-	30	30
cost diet	1									
Designing and development for high	4	-	19	19	-	11	11	-	30	30
nutrient efficiency diet	1									
Value addition	4	-	89	89	-	46	46	-	135	135

Income generation activities for	5	-	81	81	-	38	38	-	119	119
empowerment of rural Women	•									
Location specific drudgery reduction	1	-	22	22	-	14	14	-	36	36
technologies	_									
VII Plant Protection										
Integrated Pest Management	8	195	38	233	33	6	39	228	44	272
Bio-control of pests and diseases	1	31	-	31	2	-	2	33	-	33
Production of bio control agents and bio	4	117	4	121	23	-	23	140	4	144
pesticides	4									
IX Production of Inputs at site										
Vermi-compost production	1	11	-	11	9	-	9	20	-	20
TOTAL	69	1268	335	1603	300	238	538	1568	563	2141
(B) RURAL YOUTH										<u></u>
Seed production	1	25	5	30	-	5	5	25	10	35
Production of organic inputs	2	21	9	30	9	2	11	30	11	41
Tailoring and Stitching	2	-	51	51	-	27	27	-	78	78
Rural Crafts	6	-	120	120	-	55	55	-	175	175
TOTAL	11	46	185	231	9	89	98	55	274	329
(C) Extension Personnel										
Productivity enhancement in field crops	1	35	-	35	5	-	5	40	-	40
Livestock feed and fodder production	1	18	8	26	8	6	14	26	14	40
Women and Child care	1	-	42	42	-	16	16	-	58	58
Production and use of organic inputs	1	25	-	25	-	-	-	25	-	25
TOTAL	4	78	50	128	13	22	35	91	72	163
Grand Total	84	1392	570	1962	322	349	671	1714	909	2633

## **Training Programmes**





Training on productivity enhancement in Pulses

**Training on Drum seeder in Rice** 



Training on weed management in field crops



Training on "SRI" Cultivation in Rice

## **Training Programmes**





**Training on Vermicomposting** 

**Training on organic inputs production** 



**Training on NADEP Composting to PF** 

**Training on Soil Testing** 



**Training on IPM in Redgram** 



Training on Weather Based Pest Management in Castor



Training on IPM in B.t. cotton



**Training on BIPM in Rice** 





Training Programme on Soil testing for P.F

Training Programme on Soil testing for E.F



**Training on Vermicompost Production** 



**Training on NADEP Composting** 





**Training on pruning techniques in Mango** 

Training on vegetable cultivation



Training on nursery raising in protrays



**Training on Papaya cultivation** 

## **Training Programmes**



Training on care and management of milch animals



Training on azolla cultivation



Training for rural youth on opportunities in dairy farming



Training on backyard poultry management



**Value Addition** 



Drudgery Reducing Implements for Farm Women



**Quilt Bag Making** 



**Tailoring** 



Non woven Polypropylene Cloth Bags



**Blouse Designing** 



**Fabric Painting** 



**Nutrition Education Through A.V.Aids** 



**Dyeing And Printing** 



Training to mothers on Adolescent and child nutrition



Training farm women on preparation of value added products with millets



Training on pickle making as income generating activity for SHG women



Vermicompost Preparation for SHG women as IG Activity





Training Adolescent girls on tailoring

Vocational skill training to adolescent girls on fabric painting



Training adolescent girls on nutritional deficiency disorders



Training adolescent girls on balanced diets

#### **Annexures**

A. KVK funded:

#### Agronomy

Date	Clientele	Title of the training programme	Discipline	Thematic area	Duration in days	Venue (Off / On Campus)		per of o			mbe			numb ticipa	
							M	F	Т	M	F	Т	M	F	Т
17-6-2013	PFM	Crops and cropping system for dry land black soils/red soils	Agronomy	Crop & cropping system	1	On	18	-	18	7	-	7	25	-	25
15.7.2013	PFM	Low cost production technologies in rainfed oil seeds.	-do-	Integrated crop management	1	OFF	25	-	25	5	-	5	30	-	30
18-8-2013	PFM	Integrated weed management in practices in rainfed crops	-do-	Weed management	1	On	22	-	22	8	-	8	30	-	30
9-10-2013	PFM	Critical technologies for enhancing yield in rabi pulses	-do-	Integrated crop management	1	On	18	-	18	7	-	7	25	-	25
24.10- 2013	PFM	Production technologies in Redgram and Bengalgram	-do-	Integrated crop management	1	Off	16	-	16	9	-	9	25	-	25
17.7.13 22-12- 2013	PFM RYM	Seed production technology and importance of seed village concepts	-do-	Seed production	2	On	43	10	53	7	5	12	50	15	65
20-12- 2013	PFM	Rice based cropping systems with reference to Zero tillage concept.	do	Resource conservation	1	on	16	-	16	9	-	9	25	-	25
28-12- 2013	PFM	Water management in ID crops		Water management	1	on	20	-	20	10	-	10	30	=	30
		Total:			9	On/ off	178	10	188	62	5	67	240	15	255

#### **Plant Protection**

			a	Thematic	Duratio	Venue							ipants			Sponso
	(PF/		ij.	area	n (days)	(Off/		)thers			SC/S			Tota	<u> </u>	ring
	RY/ EF)		Discipline			On campus)	M	F	Т	M	F	Т	M	F	Т.	Agency
ing Farmer	rs															
9.10.13	PF	Sucking pest management in Bt cotton		IPM	1	On	19	-	19	4	-	4	23	-	23	KVK
18.10.13	PF	Management of pests and diseases in chillis		IPM	1	Off	21	-	21	6	-	6	27	-	27	KVK
11.12.13	PF	Weather based plant protection in Castor and Redgram		IPM	1	On	34	2	36	4	-	4	38	2	40	KVK
18.12.13	PF	Organic farming in Field crops and Vegetables - possibilities	tection	Organic farming	1	Off	28	4	32	8	-	8	36	4	40	KVK
9.1.14	PF	Organic farming: Production and use of organic inputs for pest	Plant pro	Organic Farming	1	Off	22	-	22	2	-	2	24	-	24	KVK
28.1.14	PF	Pest and disease management in Onion and chillis.		IPM	1	On	13	11	24	3	1	4	16	12	28	KVK
26.02.14	PFF	Stored Grain Pest Management		IPM	1	On	-	19	19	-	3	3	-	22	22	KVK
		Sub Total			7		137	36	173	27	4	31	164	40	204	
outh/																
23.1.14	RY	Farm level Enterpreneuring in Crop Protection – Sustainability.		IG Activity	1		2	9	11	3	2	5	5	11	16	KVK
		Sub Total			1		2	9	11	3	2	5	5	11	16	
ion functio	naries															
		Sub Total														
		Total			8		139	45	184	30	6	36	169	51	220	
11 11 11 11 11 11 11 11 11 11 11 11 11	9.10.13 18.10.13 11.12.13 18.12.13 9.1.14 28.1.14 26.02.14 outh 3.1.14	ng Farmers 9.10.13 PF 18.10.13 PF 11.12.13 PF 18.12.13 PF 9.1.14 PF 28.1.14 PF 26.02.14 PFF	ng Farmers  9.10.13 PF Sucking pest management in Bt cotton  18.10.13 PF Management of pests and diseases in chillis  11.12.13 PF Weather based plant protection in Castor and Redgram  18.12.13 PF Organic farming in Field crops and Vegetables - possibilities  9.1.14 PF Organic farming: Production and use of organic inputs for pest management.  28.1.14 PF Pest and disease management in Onion and chillis.  26.02.14 PFF Stored Grain Pest Management  Sub Total on functionaries  Sub Total	9.10.13 PF Sucking pest management in Bt cotton  18.10.13 PF Management of pests and diseases in chillis  11.12.13 PF Weather based plant protection in Castor and Redgram  18.12.13 PF Organic farming in Field crops and Vegetables - possibilities  9.1.14 PF Organic farming: Production and use of organic inputs for pest management.  28.1.14 PF Pest and disease management in Onion and chillis.  26.02.14 PFF Stored Grain Pest Management  Sub Total on functionaries  Sub Total	9.10.13 PF Sucking pest management in Bt cotton  18.10.13 PF Management of pests and diseases in chillis  11.12.13 PF Weather based plant protection in Castor and Redgram  18.12.13 PF Organic farming in Field crops and Vegetables - possibilities  9.1.14 PF Organic farming: Production and use of organic inputs for pest management.  28.1.14 PF Pest and disease management in Onion and chillis.  26.02.14 PFF Stored Grain Pest Management  Sub Total  on functionaries  Sub Total  Onion and chillis.  Sub Total	9.10.13 PF Sucking pest management in Bt cotton  18.10.13 PF Management of pests and diseases in chillis  11.12.13 PF Weather based plant protection in Castor and Redgram  18.12.13 PF Organic farming in Field crops and Vegetables - possibilities farming  9.1.14 PF Organic farming : Production and use of organic inputs for pest management.  28.1.14 PF Pest and disease management in Onion and chillis.  26.02.14 PFF Stored Grain Pest Management IPM 1  Sub Total 7  Outh 3.1.14 RY Farm level Enterpreneuring in Crop Protection – Sustainability.  Sub Total 1  On functionaries	9.10.13 PF Sucking pest management in Bt cotton  18.10.13 PF Management of pests and diseases IPM 1 Off in chillis  11.12.13 PF Weather based plant protection in Castor and Redgram  18.12.13 PF Organic farming in Field crops and Vegetables - possibilities  9.1.14 PF Organic farming: Production and use of organic inputs for pest management.  28.1.14 PF Pest and disease management in Onion and chillis.  26.02.14 PFF Stored Grain Pest Management IPM 1 On  Sub Total  On IPM 1 On  Sub Total  7  Sub Total  On IPM 1 On  Sub Total  On IPM 1 On  Sub Total  On IPM 1 On  Sub Total	9.10.13 PF Sucking pest management in Bt IPM 1 On 19 cotton  18.10.13 PF Management of pests and diseases IPM 1 Off 21 in chillis  11.12.13 PF Weather based plant protection in IPM 1 On 34 Castor and Redgram  18.12.13 PF Organic farming in Field crops and Vegetables - possibilities Vegetabl	9.10.13 PF Sucking pest management in Bt cotton  18.10.13 PF Management of pests and diseases in PM 1 Off 21 - in chillis  11.12.13 PF Weather based plant protection in Castor and Redgram  18.12.13 PF Organic farming in Field crops and Vegetables - possibilities paragement.  18.12.14 PF Organic farming: Production and use of organic inputs for pest management.  28.1.14 PF Pest and disease management in Onion and chillis.  26.02.14 PFF Stored Grain Pest Management IPM 1 On - 19  Sub Total 7 137 36  Organic 1 Off 22 - 137 36  Outh Crop Protection – Sustainability.  Sub Total 1 2 9  On functionaries	9.10.13 PF Sucking pest management in Bt cotton  18.10.13 PF Management of pests and diseases in chillis  11.12.13 PF Weather based plant protection in Castor and Redgram  18.12.13 PF Organic farming in Field crops and Vegetables - possibilities  9.1.14 PF Organic farming: Production and use of organic inputs for pest management.  28.1.14 PF Pest and disease management in Onion and chillis.  26.02.14 PFF Stored Grain Pest Management IPM 1 On - 19 19 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10	9.10.13 PF Sucking pest management in Bt cotton  18.10.13 PF Management of pests and diseases in chillis  11.12.13 PF Weather based plant protection in Castor and Redgram  18.12.13 PF Organic farming in Field crops and Vegetables - possibilities  9.1.14 PF Organic farming: Production and use of organic inputs for pest management.  28.1.14 PF Pest and disease management in Onion and chillis.  26.02.14 PFF Stored Grain Pest Management IPM 1 On - 19 19 - 19 19 - 19 19 19 19 19 19 19 19 19 19 19 19 19	9.10.13 PF Sucking pest management in Bt cotton  18.10.13 PF Management of pests and diseases in chillis  11.12.13 PF Weather based plant protection in Castor and Redgram  18.12.13 PF Organic farming in Field crops and Vegetables - possibilities  9.1.14 PF Organic farming: Production and use of organic inputs for pest management.  28.1.14 PF Pest and disease management in Onion and chillis.  26.02.14 PFF Stored Grain Pest Management  Sub Total  PF Organic Enterpreneuring in Crop Frotection — Sustainability.  Sub Total  PF Annagement — On 19 19 - 19 19 - 3  Sub Total  On 19 - 19 4 - 19 4 - 19 19 - 19 19 - 19 19 - 19 19 - 19 19 19 - 19 19 19 19 19 19 19 19 19 19 19 19 19	9.10.13 PF Sucking pest management in Bt cotton  18.10.13 PF Management of pests and diseases in chillis  11.12.13 PF Weather based plant protection in Castor and Redgram  18.12.13 PF Organic farming in Field crops and Vegetables - possibilities  9.1.14 PF Organic farming: Production and use of organic inputs for pest management.  28.1.14 PF Pest and disease management in Onion and chillis.  26.02.14 PFF Stored Grain Pest Management  Sub Total  PS Donganic Farm level Enterpreneuring in Crop Protection – Sustainability.  Sub Total  PPM 1 On 13 11 24 3 1 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	9.10.13 PF Sucking pest management in Bt cotton  18.10.13 PF Management of pests and diseases in PM 1 Off 21 - 21 6 - 6 27 in chillis  11.12.13 PF Weather based plant protection in Castor and Redgram  18.12.13 PF Organic farming in Field crops and Vegetables - possibilities  9.1.14 PF Organic farming: Production and use of organic inputs for pest management.  28.1.14 PF Pest and disease management in Onion and chillis.  26.02.14 PFF Stored Grain Pest Management  Sub Total  Total  PM 1 On 19 - 19 4 - 4 23  Off 21 - 21 6 - 6 27  IPM 1 On 34 2 36 4 - 4 38  Off 28 4 32 8 - 8 36  Organic 1 Off 28 4 32 8 - 8 36  Farming  Organic 1 Off 22 - 22 2 2 2 2 2 2 2 2 2 2 2 3 36  Farming  Organic 1 Off 22 - 22 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3	9.10.13 PF Sucking pest management in Bt cotton  18.10.13 PF Management of pests and diseases in PM 1 On 19 - 19 4 - 4 23 - 6 27 - 6 in chillis  11.12.13 PF Weather based plant protection in Castor and Redgram  18.12.13 PF Organic farming in Field crops and Vegetables - possibilities  9.1.14 PF Organic farming: Production and use of organic inputs for pest management.  28.1.14 PF Pest and disease management in Onion and chillis.  26.02.14 PFF Stored Grain Pest Management  Sub Total  PF Organic Total  1 On 13 11 24 3 1 4 16 12 000000000000000000000000000000000	9.10.13 PF Sucking pest management in Bt cotton  18.10.13 PF Management of pests and diseases in chillis  11.12.13 PF Weather based plant protection in Castor and Redgram  18.12.13 PF Organic farming in Field crops and Vegetables - possibilities  9.1.14 PF Organic farming: Production and use of organic inputs for pest management.  28.1.14 PF Pest and disease management in Dinion and chillis.  26.02.14 PFF Stored Grain Pest Management  Sub Total  1

#### **Soil Science**

SI. no	Date	Clien tele	Title of the training programme	Discipli	Thematic Area	Duratio n	Venue		ber of or			nbe C/S				mber pants
				Dis		(days)		M	F	Т	M	F	Т	M	F	Т
Prac	ticing Farn	ners														
1	23-4-13	PF	Soil sampling procedure		Soil and water testing	3	on	27	-	27	8	-	8	35	-	35
2	16-5-13	PF	Vermicompost preparation		Vermicompost production	2	on	11	-	11	9	-	9	20	-	20
3	18.6.13	PF	Methods to improve fertilisers use efficiency		Nutrient use efficiency	2	off	17	-	17	8	-	8	25	-	25
4	23.7.13	PF	Calculation of fertilizers based on nutrient recommendations		Soil fertility management	3	off	24	-	24	10	-	10	34	-	34
5	12.8.13	PF	Integrated Nutrient Management in rice .	ce	INM	2	on	19	0	19	6	-	6	25	-	25
6	19.9.13	PF	Diagnosis and correction of micronutrient deficiencies in young mango orchards	Soil Science	Micronutrient deficiency in crops	1	off	20	-	20	5	-	5	25	-	25
7	14.11.1 3	PF	Judicious use of fertilizers application in groundnut	S	Soil and water testing	2	off	32	-	32	8	-	8	40	-	40
8	2.1.14	PF	Reclamation of alkaline soils		Management of problematic soils	3	on	21		21	4	-	4	25	-	25
9	5.2.14	PF	Vermi and NADEP composting technologies		Production and use of organic inputs	1	on	33	-	33	12	-	12	45	-	45
10	10.3.14	PF	Soil and moisture conservation measures in rainfed black soils		Soil and Water conservation	1	off	36	-	36	14	-	14	50	-	50
Rura	al Youth															
11	17.1.14	RY	Preparation of organic inputs viz. CPP compost, Bio dynamic compost, vermicompost, etc.		Production of Organic inputs	3	On	19	-	19	6	-	6	25	-	25
Exte	nsion Fund	ctionarie	s													
12	9.12.13	EF	Preparation of organic inputs viz. CPP compost, vermicompost, NADEP compost, Panchagavya Amruthapani etc	Soil Scie nce	Production of Organic inputs	3	On	25	-	25	-	-	-	25		25
Gra	nd Total		·					284	0	284	90	0	90	374	0	37

#### Horticulture

S. No	Date	Clintel e	Title	Disciplin e	Themati c area	Durati on	Venue			N	lo. of	Part	icipan	ts		
NO		•		•	Calea	(days)		No.	of Ot	hers		SC/S	T		Tota	<u> </u>
						(		M	F	T	M	F	Т	M	F	Т
1	23-05-13	PF	Package practices for cultivation of chrysanthemum	Horticult ure	ICM	1	Off	23	-	23	2	-	2	25	-	25
2	18-06-13	PF	Management of mango orchards after harvest	-do-	Training & Pruning	1	Off	19	-	19	3	-	3	22	-	22
3	29-06-13	PF	Package of practices for cultivation tissue culture Banana	-do-	ICM	1	On	24	-	24	2	-	2	26	-	26
4	21-07-13	PF	Micro nutrient management in fruit crops	-do-	INM	1	On	26	-	26	3	-	3	29	-	29
5	11-08-13	PF	Package practices for cultivation of Tomato	-do-	ICM	1	On	27	-	27	3	-	3	30	-	30
6	15-09-13	PF	Package of practices for cultivation of Jasmine	-do-	ICM	1	On	31	-	31	4	-	4	35	-	35
7	10-10-13	PF	Package of practices for cultivation of sweet orange	-do-	ICM	1	On	26	-	26	1	-	1	27	-	27
8	19-11-13	PF	Flower and fruit drop management in mango	-do-	ICM	1	On	22	-	22	3	-	3	25	-	25
9	23-01-14	PF	Package of practices for cultivation of papaya	-do-	ICM	1	Off	21	-	21	1	-	1	22	-	22
10	03.02.14	PF	Intigrated Crop management in mango	-do-	ICM	1	Off	26	-	26	2	-	2	28	-	28
			Total			10		245	0	245	24	0	24	269	0	269
Rural	youth															
11	30-01-14	RY	Vegetable nursery cultivation in portrays under shade net	-do-	Nursery	2	On	26	-	26	2	-	2	28	-	28
Grand	d TOTAL					12		271	-	<b>271</b>	26	_	26	297	_	297

**Animal Husbandry** 

Date	Clientele	Title of the training	Discipline	Thematic	Duration	Venue (Off	No	. of o	ther		ımbe		Tota	l numl	ber of
		programme		area	in days	/ On	pai	rticipa	ants		SC/S	Γ	pa	rticipa	ants
						Campus)	M	F	T	M	F	T	M	F	т
24.5.13	PFM	Preventive measures	Animal	Disease	1	On	22	-	22	3	-	3	25	-	
		against contagious diseases in livestock	Husbandry	management											25
22.06.13	PFF	Rearing of Rajasri birds at backyards and its management	-do-	Poultry management	1	On	-	-	-	-	40	40	-	40	40
19.07.13	PFM	Scientific method of calf rearing	-do-	Dairy management	1	Off	18	-	18	7	-	7	25	-	25
2.08.13	PFM	Sheep & Goat management		Feed management	1	Off	16	-	16	4	-	4	20	-	20
27.08.13	PFF	Problems in backyard poultry	-do-	Poultry management	1	On	-	-	-	-	35	35	-	35	35
)5.09.13	PFM	Reproduction disorders and improvement of reproduction efficiency in milch animals	-do-	Dairy management	1	Off	18	-	18	4	-	4	22	-	22
07.10.13	PFM	Cultivation of azolla and its utilization	-do-	Feed management	1	On	16	-	16	4	-	4	20	-	20
14.11.13	PFM	Milk improvement technologies	-do-	Dairy management	1	Off	18	-	18	5	-	5	23	-	23
03.12.13	PFM	Different fodder varieties and fodder conservation	-do-	Feed management	1	Off	-	19	19	-	16	16	35	-	35
11.12.13	PFM	Prevention of calf mortality	-do-	Dairy management	1	Off	17	-	17	3	-	3	20	-	20
26.12.13	PFM	Prevention of mastitis in milch animals	-do-	Disease management	1	On	12	-	12	3	-	3	15	-	15
8.01.14 to	RY	Self employment	-do-	Dairy	2	On	2	14	16	2	2	4	4	16	20
29.01.14		opportunities in livestock sector		management											
0.02.14 to 11.02.14	EF	Recent trends in livestock nutrition	-do-	Feed management	2	On	18	8	26	8	6	14	26	14	40
11.02.17		Sub Total		management	13		149	1	150	46	44	90	195	45	240

#### **Home Science**

Date	Clientele	Title of the training programme	Discipline	Thematic area	Duratio n in days	Venue (Off / On Campus)	Num of ot parti	ther cipa	Nur	mber	of SC	/ST		ıl num articip	nber of ants
							M	F	т	М	F	Т	M	F	т
15.5.13to2 4.5.13	PFF	Training Programme on Polypropylene non woven cloth bags preparation	Home Science	IG Activities for empowermen t of rural families	10	On	-	14	14	-	6	6	-	20	20
19.6.13to2 0.6.13	PFF	Preservation of Vegetables i.e, Pickle making for SHG Women	-do-	-do-	2	on	-	18	18	-	9	9	-	27	27
21.6.13	PFF	Awareness programme on nutrition education to pregnant and lactating mothers	-do-	House hold food security	1	On	-	2	2	-	28	28	-	30	30
27.7.13	PFF	Awareness programme on nutrition education to mothers on adolescent and child nutrition	-do-	House hold food security	1	on	-	19	19	-	11	11	-	30	30
29.7.13	PFF	Importance of raising of homestead nutrition gardens	-do-	House hold food security	1	On	-	17	17	-	13	13	-	30	30
19.9.13to2	PFF	Quilt Bag Making as IG	-do-	IG Activities	10	On	-	17	17	-	8	8	-	25	25

9.9.13		Activity		for empowermen t of rural families											
23.9.13	PFF	Training on drudgery reducing implements for farm women	-do-	Drudgery reducing implements for farm women	1	On	-	22	22	-	14	14	-	36	36
25.9.13to 26.9.13	PFF	Value addition to millets	-do-	Value addition	2	On	-	19	19	-	6	6	-	25	25
12.2.14	PFF	Preparation of vermicompost as IG Activity for SHGs	-do-	IG Activities for empowermen t of rural families	1	On	-	19	19	-	6	6		25	25
17.2.14 to 19. 2.14	PFF	Awareness training programme on value addition to jowar and korra for farm women (2 Courses)	-do-	Value addition	3	On	-	53	53	-	27	27	-	80	80
10.3.14	PFF	Value Added products with Tomato	-do-	Value addition	1	On	-	17	17	-	13	13	-	30	30
26.3.14	PFF	Preparation of botanical pesticides	-do-	IG Activities for empowermen t of rural families	1	OFF	-	13	13	-	9	9	-	22	22

1.7.13to15. 10.13	RYF	Long Duration Vocational Skill Training Programme on Tailoring as I.G.Activity	-do-	IG Activities for empowerme nt of rural families	90days	On	-	24	24	-	14	14	-	38	38
17.10.13to 26.10.13	RYF	Vocational skill training programme on Fabric Painting	-do-	IG Activities for empowerme nt of rural families	10	On	-	17	17	-	8	8	-	25	25
28.10.13to 2.11.13	RYF	Vocational skill training programme on Blouse designing	-do-	IG Activities for empowerme nt of rural families	5	On	-	27	27	-	13	13	-	40	40
25.10.13to 14.11.13	RYF	Vocational skill training programme on Fabric Painting	-do-	IG Activities for empowerme nt of rural families	20	Off	-	31	31	-	19	19	-	50	50
18.11.13to 27.11.13	RYF	Vocational skill training programme on Tie&Dye	-do-	IG Activities for empowerme nt of rural families	10	On	-	24	24	-	6	6	-	30	30
5.12.13to 17.12.13	RYF	Vocational skill training programme on Tie&Dye	-do-	IG Activities for empowerme nt of rural families	10	On	-	16	16	-	4	4	-	20	20

23.12.13to 11.1.14	RYF	Vocational skill training programme on Fabric Painting	-do-	IG Activities for empowerme nt of rural families	20	Off	-	16	16	-	9	9	-	25	25
20.1.14to2 9.1.14	RYF	Vocational skill training programme on Tie&Dye	-do-	IG Activities for empowerme nt of rural families	10	On	-	16	16	-	9	9	=	25	25
20.12.13to 21.12.13	EFF	Capsule Trg.Prog. to Balika mandals as social change agents on health&hygiene,nutriti on education,lifeskills development,girlchild education etc in collaboration with ICDS Project,KKL.	-do-	Women andchildcare	2	off	-	42	42	-	16	16	-	58	58
		TOTAL			21			200	200		99	99		299	299

#### D) Vocational training programmes for Rural Youth

## **Discipline :Home Science**

Crop /	Date	Training title*	Identified	Duration	No.	of Particip	ants	Self emp	oloyed afte	r training	Number of
Enterprise			Thrust Area	(days)	Male	Female	Total	Type of units	Number of units	Number of persons employed	persons employed else where
Women Empowerment	1.7.13 to 15.10.13	Long Duration Vocational Skill Training Programme on Tailoring as I.G.Activity	I.G Activity	90	-	38	38	Individual	26	26	4
	17.10.13 to 26.10.13 25.10.13to14.11.13 23.12.13to29.1.14	Vocational skill training programme on Fabric Painting	I.G Activity	10 20	-	100	100	Individual	67	67	6
Women Empowerment	28.10.13 to 2.11.13	Vocational skill training programme on Blouse designing	I.G Activity	5	-	40	40	Individual	34	34	8

	20.1.14to29.1.14	Tie & Dye									
Empowerment	5.12.13to17.12.13	training programme on	Activity								
Women	18.11.13 to 27.11.13	Activity Vocational skill	I.G	10	-	75	75	Individual	-	-	5
Empowerment		Making as IG	Activity								
Women	19.9.13 to 29.9.13	Polypropylene non woven cloth bags preparation Quilt Bag	I.G	10	-	25	25	Individual	16	16	4
Women Empowerment	15.5.13 to 24.5.13	Training Programme on	I.G Activity	10	-	20	20	Individual	5	5	-

#### **E. Sponsored Training Programmes :**

#### Agronomy

S. No	Date	Title	Disci pline	Themati c area	Duratio n (days)	Client (PF/RY/E F)	No.of course s	No. (		rticipa		nts SC/ST		Tota	I		Sponsori ng Agency	Amoun t of fund receive d (Rs.)
								M	F	Т	M	F	Т	M	F	Т	_	
1	17.12.13 27.2.14	SRI:" cultivation in rice	Agron omy	ICM	1	PFM	2	45	15	60	20	-	20	65	15	80	ATMA	16000/-
2	10-11- 2013	Improved production technologies in Rice, Groundnut, Sunflower, Maize and Redgram.	Agron omy		2	EF	1	35	-	35	5	-	5	40	-	40	Dhanuka	
3	11-1- 2014\18- 1-2014	Seteria production technom	Agron omy		1	PFM	2	70	-	70	10	-	10	80	-	80	Dept Agrl	
		Total:					5	150	15	165	35	-	35	185	15	200		

#### **Plant Protection:**

S.	Date	Title		Discipline Thematic area	Duratio	Client (PF/RY /EF)	No.of course s			N	o. of	Sponsoring	Amount of					
No			ipline		n (days)				Others		S		SC/ST		Tota	l	Agency	fund received (Rs.)
			Disc					M	F	Т	M	F	Т	M	F	Т		
1	3.09.13	Use of biopesticides for quality produce in Groundnut, Redgram and Castor		Bio control	1	PF	1	31	-	31	2	-	2	33	-	33	CLRC, Ndl	-
2	21.12.13	Low Cost Plant protection measures in Rice and Redgram	ion	IPM	1	PF	1	28	6	34	6	2	8	34	8	42	CLRC, Ymgr	-
3	3.2.14	Pest and Disease Management in Mango	Protection	IPM	1	PF	1	42	-	42	4	-	4	46	-	46	Hort.	-
4	7.2.14	Pest and Disease Management in Onion	Plant	IPM	1	PF	1	38	-	38	6	-	6	44	-	44	Hort.	-
5	17.02.14	Organic farming for Sustaining Agriculture		Organic Farming	1	PF	1	35	-	35	5	-	5	40	-	40	ATMA	-
6	18.02.14	Organic farming for Sustaining Agriculture		Organic Farming	1	PF	1	32	-	32	8	-	8	40	-	40	ATMA	-
		Total			6		6	206	6	212	31	2	33	237	8	245		

## **Discipline : Soil Science**

S.	Date	Title	Discipli	Thematic	Durati	Client	No.of	No. of	Partici	pants				Sponsor	Amount			
No			ne	area	on	(PF/RY	courses	Others	S		SC/S	ST.		Total			ing	received
					(days)	/EF)		M	F	Т	M	F	T	M	F	T	Agency	(Rs.)
1	18.6.2013 to 21.6.13 23.7.13&2 4.7.13 9.12.2013 to 12.12.13	Soil test based nutrient management in rice	Soil Science	Soil and water testing	1	PF	10	414	-	414	78	-	78	492	-	492	NABAR D	50,000
		TOTAL					10	414	-	414	78	-	78	492	-	492		50,000

## **Discipline : Home Science**

S.	Date	Title	Discipline	Thematic	Client	No.					Parti	Sponsoring	Amount				
No				area	(PF/	of		Other SC/S		SC/ST	Γ		Tota	l	Agency	received	
					RY/	Courses	M	F	Т	M	F	Т	M	F	T		(Rs)
					EF)												
1-2	17.2.14 , 19.2.14	Value addition to minor millets and entrepreneurial opportunities for farm women	Home Science	House hold food security Value addition	PFF	2	-	53	53	-	27	27	-	80	80	ATMA	16,000/-
3-4	25.10.13 to 14.11.13 23.12.13 to 11.1.14	Long duration Vocational skill training programme on Fabric Painting	Home Science	I.G.ACtivity	RYF	1	-	47	47	-	28	28	-	75	75	CFI, Koilkuntla	95625/-
5-7	18.11.13 to 27.11.13 5.12.13 to 17.12.13 20.1.14 to 29.1.14	Vocational skill training programme on Tie and Dye	Home science	IG Activity	RYF	3	-	56	56	-	19	19	-	75	75	CFI, Koilakuntla	95625/-
		Total				5		121	121		69	69		190	190		

# 3.4. Extension Activities (including activities of FLD programmes)

S. No.	Nature of Extension	Purpose/	No. of						Partici	pants					
	Activity	topic and	activities	Fai	mers (Ot	hers)	SC	/ST (Farm	iers)	Exte	nsion Of	ficials		<b>Grand Tot</b>	al
		Date			(1)			(II)			(III)			(1+11+111)	
				M	F	Total	M	F	Total	M	F	Total	M	F	Total
1	Field Day	STCR in rice	1												56
3	Kisan Mela														
4	Kisan Ghosthi	Drum seeder	1												106
5	Farmer-scientist interaction meet		7												235
6	Exhibition	All activities	3												
7	Film Show	Nutrition	4	-	74	74	-	53	53	-	-	-	-	127	127
8	Method Demonstrations		6	53	-	53	12	-	12	2	-	2	67	-	67
9	Farmers Seminar														
10	Workshop														
11	Group meetings		12												265
12	Lectures delivered as resource persons	All disciplines	22												680
13	Newspaper coverage		23												
14	Radio talks	Various aspects	15												
15	TV talks		4												
16	Popular articles		9												
17	<b>Extension Literature</b>		4												
18	Advisory Services														
19	Scientific visit to farmers field		68												186

S.	Nature of Extension	Purpose/	No. of						Partio	ipants					
No.	Activity	topic and Date	activities	Far	mers (Oth	ers)	SC/	/ST (Farmo	ers)	Exte	nsion Off	icials	(	<b>Grand Tot</b>	al
					(1)			(II)			(III)			( +  +   )	
				Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
20	Diagnostic visits		18												123
21	Farmers visit to KVK		496												496
22	Exposure visits		1												24
23	Ex-trainees														
	Sammelan														
24	Soil health Camp														
25	Animal Health		2												485
	Camp														
26	Agri. mobile SMS		136										1545	906	2451
27	Soil test campaigns		10												513
28	Farm Science Club														
	Conveners meet														
29	Self Help Group														
	Conveners meetings														
30	Mahila Mandals														
	Conveners meetings														
31	Celebration of	16.10.2013	1	-	35	35	-	15	15	-	20	20	-	70	70
	important days														
	(specify)														
	1.World Food Day														
	2.National Nutrition		1	-	61	61	-	15	15	-	2	2	-	78	78
	Week														
32	Homestead		370	-											370
	nutritional gardens														



Method demonstration on botanical pesticide preparation



Method demonstration on stem application in cotton



Diagnostic visit



Diagnostic visit



**Animal Health camp** 



Diagnostic visit



Kisan gosti



Parthenium awareness programme



Hybrid seed production in farmers fields



**Exposure visit** 



Awareness programme on PPV&FR act



D.E Visited KVK Stall during Exhibition At RARS, Nandyal



**National Nutrition Week Celebrations** 



Agriculture Commissioner Visited KVK Stall at Millet fest



Bio-gas Plants Construction In Collaboration With NEDCAP



Introduction Of Smokeless Chullhas In collaboration with Nedcap



Millet Unit Established By SHG Women

# 3.5 (A). Kisan Mobile Advisory Services

No. of registered farmers of KVK : 1545

# **ANNEXURE – 1(AGRICULTURE)**

# Details of Kisan Mobile Advisory Services from 01.04.13 to 31.03.14

Major	Category	Crop/	Thematic	Date	Message				N	lumb	er of	Farme	rs			
Group		Enter	Area			gs		Other	S		SC/S	T		Total		ses
		pirse				No. of msgs	M	F	Т	M	F	Т	M	F	Т	Responses
Agriculture	Cereals	Rice	INM	12.4.13	KVK,Banaganapalle: Bhoosara pariksha cheyinchukondi- report adhaaranga yeruvulu vaadi, rasayana yeruvulapai pettubadi thagginchandi. Vivaralaku - 9440238071	1	1480	-	1480	65	-	65	1545	-	1545	14
Agriculture	Comm. crops	Cotton	IPM	19.4.13	KVK,BPL: Bt pattilo Doma, Nalla jeeda rakundaa, Imidacloprid 70 WS tho vittana suddi chesi, vittaali. Panta chuttoo 4 varusalu jonna naataali. 9440348760	1	1480	-	1480	65	-	65	1545	-	1545	12
Agriculture	Cereals	Rice	INM	14.05.1 3	KVK,Banaganapalle : Tholakari loga, Bhusara Pareekshalu cheyinchandi, Pasuvula Yeruvunu Pogu chesukondi mariyu Vesavi dukkulu cheyandi.9440238071	1	1480	-	1480	65	-	65	1545	-	1545	16
Agriculture	Cereals	Rice	INM	21.05.1	Vari naatu polaallo, Pacchi rotta pairlu Jeeluga, Janumu penchi, 45 rojulaku Dammu chesi vari natithe, eruvula karchu thagginchukovacchu. 9440238071	1	1480	-	1480	65	-	65	1545	-	1545	22
Agriculture	Cereals	Rice	INM	24.05.1	Bhoosara pariksha phalithaala prakaram Varilo Yeruvulu vaadithe, rasaayana yeruvulapai kharchu baagaa thagginchukovacchu. 9440238071	1	1480	-	1480	65	-	65	1545	-	1545	12
Agriculture	General	All	ICM	28.5.13	KVK, Banaganapalle : Ippudu padina varshala adhaarangaa valuku addangaa, lothayina vesavi dukkulu chesukondi. Peda Yeruvunu pogu chesukondi. 9440739378	1	1480	-	1480	65	-	65	1545	-	1545	20

Agriculture	Cereals	Rice	Crop Varities	31.5.13	KVK, BPL: Varilo BPT 5204, Kandilo PRG 158, LRG 41, Amudamlo PCH 111, Korralo SIA 3085 mariyu SRILAKSHMI vittanalakai KVK nu Sampradinchandi. 9440739378	1	1480	-	1480	65	-	65	1545	-	1545	12
Agriculture	Millelts	Korra	ICM	04.06.1	KVK, BPL: Nalla Regadi nelallo ee varshalaku Korra SIA 3085, 3088 lanu modati pantagaa vittukuni, tharuvaatha pantagaa Senaga vittukovacchu. 9440739378	1	1480	-	1480	65	-	65	1545	-	1545	14
Agriculture	Commerc ial crops	Bt Cotton	IPM	11.06.1 3	KVK, BPL: B.t. Pattilo 20,40,60 rojulaku Imidacloprid mariyu neetini, 1:20 damashalo kalipi, kandaniki bottu petti doma, jeedalanu nivarinchandi. 9440348760	1	1480	-	1480	65	-	65	1545	-	1545	12
Agricuture	Pulses	Green gram	ICM	14.06.1 3	KVK,BPL: Ee varshalaku, Vari vese polallo, munduga Pesara ML 267, LGG 407, 460 leda TM 96-2 rakalu sagu chesi, tharvaatha vari naatukuni adhika laabhalu pondandi. 9440739378	1	1480	-	1480	65	-	65	1545	-	1545	14
Agriculture	Ruminant s	Sheep & Goat	IDM	18.06.1 3	KVK, BPL : Ee varshalaku, Gorrelalo, Mekalalo Chituku vyaadhi raakundaa, teekalu veyinchandi. A.Krishnamurthy, 9493619020	1	1480	-	1480	65	-	65	1545	-	1545	16
Agriculture	General	All crops	IPM	21.06.1	KVK,BPL: Vepa ginjalu sekarinchi,aranichi,podichesi,Urea tho kalipi polamlo challithe bhoosaram peragadame kaka, purugulanu kooda nivarinchavacchu.9440348760	1	1480	-	1480	65	-	65	1545	-	1545	6
Agriculture	Cereals	Rice	IDM	28.06.1 3	KVK, Banaganapalle : Varilo aggitegulu, pamupoda raakundaa, SOODOMONAS @ 10g/lt/kg prakaram vittanasuddi chesi, naru madi posukovaali. 9440348760	1	1480	-	1480	65	-	65	1545	-	1545	20
Agriculture	Cereals	Rice	ICM	02.7.13	KVK,BPL: Podi gaalulaku vari naaru yenduthunte, 19-19-19, 5g/lt neetiki kalipi spray cheyyali. Naaru poyani vaaru, 1 vaaram taruvatha poya soochana.9440739378	1	1480	-	1480	65	-	65	1545	-	1545	12

Agriculture	Commerc ial crops	Bt Cotton	IPM	05.07.1	KVK-Banaganapalle: B.t. patti lo 20, 40, 60 rojulaku Mono leda Imidacloprid la tho Kandaniki mandu poosi, paccha doma, jeeda nundi kapaadandi. 9440348760	1	1480	-	1480	65	-	65	1545	-	1545	14
Agriculture	Commerc ial crops	Redgra m, Cotton	IDM	09.07.1	KVK,Banaganapalle : Kandi, Patti, Amudam pantalalo Yendu tegulu raakundaa, 2 kg Trichodarma nu 200 kg peda yeruvutho kalipi, polamlo challi, vittukovali. 9440348760	1	1480	-	1480	65	-	65	1545	-	1545	12
Agricuture	Oil seeds	Castor Groun dnut	ICM	12.07.1	KVK,BPL: Verusanaga lo modalu kullu rakundaa, Mancozeb 3g/kg leda Trichoderma 10g/kg, Verupurugu kai, Chloro 6ml/kg vittananiki kalipi, vittukovali.9440348760	1	1480	-	1480	65	-	65	1545	-	1545	14
Agriculture	Cereals	Maize	IPM	23.7.13	KVK,BPL: Mokkajonnalo kandam tolchu purugu nivaranaku, Carbofuron 3G gulikalanu, yekaraaku 3 kg choppuna, aaku sudulalo challandi. 9440348760	1	1480	-	1480	65	-	65	1545	-	1545	12
Agriculture	Cereals	Rice	INM	2.8.13	KVK-Banaganapalle: Variki mundu, Jeeluga leda Janumu penchi, Kaliya dunni vari natukonte, bhoosaram peruguthundi, Eruvula kharchu thagguthundi. 9440238071	1	1480	-	1480	65	-	65	1545	-	1545	18
Agriculture	Commerc ial crops	Bt Cotton	IPM	6.8.13 KISAAN	B.t. patthilo Pacchadoma, Penubanka nivaranaku Imidacloprid anu mandunu 1 lt. neetiki 0.25 ml prakaram kalipi pairanthaa thadichela pichikaari cheyyali leda Mono 250 ml nu 1 lt. neetiki kalipina dravanamtho kandaaniki mandu poothagaa raayaali. D.Balaraju, KVK, Banaganapalle	1	1480	-	1480	65	-	65	1545	-	1545	14
Agriculture	Oilseed crop	Castor	ICM	10-8-13 KISAAN	Amudamlo yekarku 25 kg Urea, 15 kg potash lanu challukovali. Namalapurugu nivarnaku quinalphos nu 2 ml/lt neetiki kalipi pairanthaa thadichela pichikari cheyyali. D.Balaraju, KVK, Banaganapalle.	1	1480	-	1480	65	-	65	1545	-	1545	16
Agriculture	Cereals	Rice	INM	13-8-13 KISAAN	Vari naatu mundu, dukkilo yekaraaku 10 kg Zinc Sulphate,25 kg Urea, 25 kg Potash challi, 3 rojula tharuvaatha 75 kg DAP challukovali. Naaru kosalu tunchi, naataali. K.V.Ramanaiah, SMS(SS),KVK,Banaganapalle.	1	1480	-	1480	65	-	65	1545	-	1545	12

Agricuture	Oil seeds	Castor	IPM	16.08.1 3	Amudamlo Dasari purugu, Ladde purugula nivaranaku 1 lt. neetiki Profenophos 2 ml, Soap powder 1g kalipi, pichikaari cheyyali. SMS(PP), KVK, Banaganapalle.	1	1480	-	1480	65	-	65	1545	-	1545	14
Agriculture	Pulses	Redgra m	ICM	20.8.13 KISAAN	Alasyangaa kandi vitte raithulu saaluku, saaluku madhya 3-4 adugula dooramlo, LRG 41, PRG 158, ICPL 85063, 87119 rakaalu, yekaraku 6 kilola prakaram, Trichoderma tho (8g/kg ki) vittanasuddi chesi, vittukovali. SMS (Agro), KVK, Banaganapalle.	1	1480	-	1480	65	-	65	1545	-	1545	12
Agriculture	Oilseeds	G.nut	IPM	24.08.1 3 KISAAN	Pootha dasalo vunna Verusanagalo Akumudatha nivaranaku QUINALPHOS 2 ml/lt, Tikka Aku Maccha nivaranaku HEXACONAZOLE 2 ml/lt neetiki kalipi pichikaari cheyyali. SMS (PP), KVK, Banaganapalle.	1	1480	-	1480	65	-	65	1545	-	1545	12
Agriculture	Cereals	Rice	INM & IDM	27.08.1	Vari naatina 20 rojulalopu, yekaraku 1 kg Pseudomonas, 1 kg PSB, 1 kg Azotobacter la nu 20 kg la yeruvutho kalipi challithe, Tegullu nivarinchadame kaka, Natrajani, Bhasvaram yeruvula vadakam thagginchavacchu. SMS (PP), KVK, Banaganapalle.	1	1480	-	1480	65	-	65	1545	-	1545	10
Agriculture	Oilseed crop	Castor	ICM	10-9-13 KISAAN	EE varshalaku amudam pairulo yekaraku 25 kg Urea, 10 Kg MOP lanu, vittukunte manchi digubadulanu pondavacchu. SMS (Agro)	1	1480	-	1480	65	-	65	1545	-	1545	16
Agriculture	Cereals	Rice	INM	13-9-13 KISAAN	Naati 20 rojulaina Vari pairulo kalupu nivaranaku BIS-PYRIBACK SODIUM yekaraku 80 ml nu 200 lt neetilo kalipi pichikaari cheyyali. SMS(Agro)- 9440739378, KVK,Banaganapalle	1	1480	-	1480	65	-	65	1545	-	1545	12
Agricuture	Millets	Jowar	IPM	17-09- 13	Jonna vitte mundu 1 kg vittananiki 3g Capton mandu kalipi vittanasuddi chesi, vittukovali. SMS (PP)	1	1480	-	1480	65	-	65	1545	-	1545	14

Agriculture	Millets	Korra	IPM	20.9.13	Korralo aggitegulu nivaranaku, Carbendazim @ 1g/lt neetiki kalipi pichikaari cheyyali. SMS (PP)	1	1480	-	1480	65	-	65	1545	-	1545	12
Agriculture	Commerc ial crops	B.t. Cotton	IPM	24.9.13	B.t. Pattilo pandaku tegulu nivaranaku 1 lt neetiki 10 g MgSO4 mariyu 20g Urea kalipi, varam vyavadhilo 2 saarlu pichikaari cheyyali. KVK, BPL	1	1480	-	1480	65	-	65	1545	-	1545	10
Agriculture	Cereals	Rice	IPM	15-10- 13 KISAAN	Varilo sudidoma, aakumudatha nivarnaku Ethofenprox 2ml/lt mariyu Chloro 2.5 ml/lt prakaram pichikari cheyyali. SMS (PP)	1	1480	-	1480	65	-	65	1545	-	1545	28
Agriculture	Cereals	Rice	IPM	22-10- 13 KISAAN	Varilo Kandam kullu tegulu asinchind. Nivaranaku Hexaconazole @ 2 ml/lt leda Propiconazole @ 1 ml/lt kalipi pairantha tadichela pichikari cheyyali. SMS (PP), KVK,Banaganapalle	1	1480	-	1480	65	-	65	1545	-	1545	18
Agriculture	Commerc ial crops	B.t. Cotton	IPM	25-10- 13 KISAAN	B.t. Pattilo Pindinalli nivaranaku 1 lt neetiki 3ml Profenophos mariyu 1g Khada soap kalipi, pairantha tadichela pichikari cheyyali. SMS (PP), KVK, Banaganapalle.	1	1480	-	1480	65	-	65	1545	-	1545	10
Agriculture	Commerc ial crops	Chillis	IPM	19.11.1	KVK, Bpl:Mirapalo yendu tegulu/veru kullu nivaranaku, COC @ 3g/lt neetiki kalipi, nela thadichela challali. Trichoderma kalipina yeruvunu modallalo challaali.	1	1480	-	1480	65	-	65	1545	-	1545	14
Agriculture	Cereals	Rice	IPM	26.11.1	KVK, BPL: Varilo Aggitegulu, Akumudatha nivaranaku Isoprothiolane Tricyclazole @ 0.6 g/lt mariyu Chlorpyriphos @ 2.5 ml/lt neetiki kalipi pichikari cheyyali. 9440348760	1	1480	-	1480	65	-	65	1545	-	1545	29
				TOTAL:		36	53280	0	53280	2340	0	2340	55620	0	55620	5

# **ANNEXURE – 1 (HORTICULTURE)**

Major	Category	Crop/	Themati	c Date	Message					Numbe	r of F	armer	5			
Group		Enterp	Area			ges		Others	5	S	C/ST			Total		Š
		irse				No. of messages	M	F	Tot	M	F	Tot	M	F	Tot	Responses
Horti culture	Fruit crops	Citrus	IDM	17.05.1 3	KVK,Banaganapalli: Cheeni, nimmallo verukullu ku, Trichoderma 2 kg, 90 kg Penda, 10 kg Vepachekka kalipi, 15 rojulu magganicchi, paaduku 5 kg challali	1	1480	-	1480	65	-	65	1545	-	1545	18
Horticulture	Fruit crops	Mango	IDM	25.06.1 3	KVK, BPL: Mamidi kotha tharuvaatha, yendu pullalu katthirinchi, COC pichikaari chesi, paadulu chesi neeti thadulu ivvali. 9848609233	1	1480	-	1480	65	-	65	1545	-	1545	12
Horticulture	General	All crops	IPM	19.7.13	KVK,BPL: Tomato, Mirapa, Vanga, Vulli naaru madilo, maagudu tegulu raakundaa, COC 3g/lt neetiki kaipi, naaru poorthigaa thadichela, challaali. 9440348760	1	1480	-	1480	65	-	65	1545	-	1545	6
Horticulture	Cereals	Maize	IPM	23.8.13 KISAAN	Mokkajonna lo Kandam tolchu purugu nivaranaku Carbofuron 3kg/yekaraku aaku sudulalo challali. Aaku yendu tegulu nivaranaku Mancozeb 3g/lt neetiki kalipi, pichikaari cheyyali. SMS (PP), KVK, Banaganapalle.	1	1480	-	1480	65	-	65	1545	-	1545	10
Horticulture	Fruit Crops	Mango	IDM	25-02- 14	KVK,Banaganapalle : Mamidilo pakshi kannu tegulu nivaranaku Propiconazole @ 1 ml/lt choppuna pichikaari cheyyaali.	1	1480	-	1480	65	-	65	1545	-	1545	10
				TOTAL:		5	7400	0	7400	325	0	325	7725	0	7725	56

# **ANNEXURE – 1 (ANIMAL HUSBANDRY)**

Major	Category	Crop/	Thematic	Date	Message					Numb	er of F	armer	S			
Group		Enterp	Area			ges		Others			SC/ST			Total		S
		irse				No. of messa	M	F	Tot	M	F	Tot	M	F	Tot	Responses
Animal Husbandry	Birds	Poultry	Dis. mgm t.	23.4.13	KVK,BPL: Kollaku kokkera tegulu rakundaa, Lasota leda F 1 teekalanu veyinchandi. Mee daggaraloni pasu vydya shalalo Ee mandu dorukuthundi. 9493619020	1	170	-	170	18	-	18	188	-	188	10
Animal Husbandry	Ruminants	Milch cattle	IDM	16.7.13	KVK,BPL: Paalicchu pasuvulaku podugu vaapu vyaadhi raakundaa, prathi roju paalu pithike mundu, tharuvaatha POTASSIUM PERMONGANATE draavanamtho podugunu kadagaali.	1	1480	-	1480	65	-	65	1545	-	1545	16
			1	ΓΟΤΑL:		2	1650	0	1650	83	0	83	1733	0	1733	26

# **ANNEXURE – 1 (HOME SCIENCE)**

Major	Category	Crop/	Thematic	Date	Message	_				Num	ber of	Farmers	5			
Group		Enterp	Area			ges		Others			SC/S	Т		Total		S
		irse				No. of messages	M	F	Tot	M	F	Tot	M	F	Tot	Responses
Home	Nutrition	-	Nutrition	17.4.13	Folic acid is essential for formation of	1	-	582	582	-	325	325	-	907	907	26
Science	Education		Education		haemoglobin and it is rich in green leafs, liver, pulses etc.											
Home	Nutrition	-	Nutrition	29.4.13	Calcium is essential for growth, development	1		582	582	-	325	325	-	907	907	-
Science	Education		Education		and maintenance of bones.											
Home	Nutrition	-	Nutrition	01.05.1	Calcium is essential for prevention of	1		582	582	-	325	325	-	907	907	34
Science	Education		Education	3	osteoporosis											
Home	Nutrition	-	Nutrition	31.05.1	Calcium is rich in milk, curds, eggs, green leafy	1	-	582	582	-	325	325	-	907	907	-
Science	Education		Education	3	Vegetables, fish, meat, ragi, thill, beans, fruits and vegetables etc.											
Home	Nutrition	-	Nutrition	15.06.1	lodine is a mineral essential for thyroid	1	-	582	582	-	325	325	-	907	907	48
Science	Education		Education	3	function. It promotes proper growth and mental davelopment.											
Home	Nutrition	-	Nutrition	30.06.1	Deficiency of iodine in regular diet causes	1	-	582	582	-	325	325	-	907	907	-
Science	Education		Education	3	goitre.During pregnancy iodine deficiency causes cretinism.											
Home	Nutrition	-	Nutrition	17.07.1	Mothers milk is complete food for children up	1	-	582	582	-	325	325	-	907	907	73
Science	Education		Education	3	to six months. Weaning foods can beintroduced after six months along with mothers milk											
Home	Nutrition	-	Nutrition	31.07.1	Weaning foods can be introduced to begin	1	-	582	582	-	325	325	-	907	907	-
Science	Education		Education	3	with liquids like green leafy and dhal cooked extracts,fruit juices,semi solids and solids.											
Home	Nutrition	-	Nutrition	20.8.13	Avoid repeated washings of rice as it results	1	-	582	582	-	325	325	-	907	907	56
Science	Education		Education		in loss of B vitamins.											
Home	Nutrition	-	Nutrition	31.8.13	Cut green leafy and other vegetables after	1	-	582	582	-	325	325	-	907	907	-
Science	Education		Education		thorough washing and cover with lid while cooking.											

Home	Nutrition	-	Nutrition	21.9.13	Cardohydrates gives energy to our body to perform various functions	1	-	582	582	-	325	325	-	907	907	72
science	Education Nutrition		Education	31.9.13	Deficiency of carbohydrates results in	1		582	582		325	325		907	907	
Home	Education		Nutrition education	31.9.13	weakness, weight loss and reduced immunity	1		582	582	-	325	325	-	907	907	-
science Home	Nutrition		Nutrition	17-10-	Carbohydrates are rich in	1		582	582		325	325		907	907	69
science	Education	-	Education	17-10-	rice, wheat, jowar, maize, potatoes, sweet	1	-	362	362	-	323	323	-	907	907	09
	AL LUID.		NI LOUI	24.40	potato, nuts, jaggery, dry fruits etc. Proteins are essential for formation of			500	500		225	225		007	007	
Home	Nutrition	-	Nutrition	31-10-	muscles,bones,cartilage,skin and blood and it	1	-	582	582	-	325	325	-	907	907	-
science	Education		education	13	also provides calories.											
Home	Nutrition	-	Nutrition	20.11.1	Proteins are essential for formation of	1	-	582	582	-	325	325	-	907	907	48
science	Education		Education	3	muscles, bones, cartilage, skin, blood and it also provides calories											
Home	Nutrition		Nutrition	30.11.1	Proteins are rich in milk and milk products,oil	1		582	582	-	325	325	-	907	907	-
science	Education		education	3	seeds,soya,pulses,meat,liver,fish and eggs											
Home	Nutrition	-	Nutrition	10-12-	Proteins are rich in milk and milk products,oil	1	-	582	582	-	325	325	-	907	907	48
science	Education		Education	13	seeds,soya,pulses,meat,liver,fish and eggs											
Home	Nutrition		Nutrition	31-12-	Green leafy vegetables are rich sources of	1		582	582	-	325	325	-	907	907	-
science	Education		education	13	vitamins,minerals and fibre.											
Home	Nutrition	-	Nutrition	27-01-	Iron is very much essential for adolescent	1	-	582	582	-	325	325	-	907	907	67
science	Education		Education	14	girls and it is rich in Green leafy vegetables,eggyolk,Jaggery,pulses,chikkul lu,groundnuts											
Home	Nutrition	-	Nutrition	31-01-	Green leafy vegetables are rich sources	1		582	582	-	325	325	-	907	907	-
science	Education		education	14	of vitamins, minerals and fibre.											
Home	Nutrition	-	Nutrition	27.02.1	Ragi is good for all ages and it is rich	1	-	582	582	-	325	325	-	907	907	4
science	Education		Education	4	source of Calcium. Calcium is 30 times more in ragi than in rice.											
Home	Nutrition		Nutrition	28.02.1	Fibre present in minor millets is 50 times	1		582	582	-	325	325	-	907	907	-
science	Education		education	4	more than in rice. Fibre is essential for											
Home	Nutrition	_	Nutrition	15.03.1	digestion and constipation.  Minor millets like Bajra,korra,Ragi,Maize,	1	_	582	582	_	325	325	_	907	907	4
science	Education		Education	4	Jowar are good for children, Pregnant and											
			-		lactating mothers.											
Home	Nutrition		Nutrition	28.03.1	Minor millets are rich sources of	1		582	582	_	325	325	-	907	907	-
science	Education		education	4	iron,calcium and fibre.											
				TOTAL:	<u>, , , , , , , , , , , , , , , , , , , </u>	24	0	13968	13968	0	7800	7800	0	21768	21768	(

# ANNEXURE – 1 (WEATHER FORECAST)

Major	Category	Crop/	Thematic	Date	Message					Numb	er of	Farmer	S			
Group		Enterp	Area			ges		Others	5		SC/S	T		Total		S
		irse				No. of message	M	F	Tot	M	F	Tot	M	F	Tot	Responses
Agriculture	weather	foreca st	Short term weather forecast	2-4-13	Agromet NICRA ,kvk,yagantipalle :- Chances of summer showers on 3 <sup>rd</sup> April, T MAX 40-41 oc.	1	292	20	312	32	-	32	324	20	344	10
Agriculture	weather	foreca st	Short term weather forecast	12-4-13	Agromet NICRA ,kvk,yagantipalle :- T Max Temperature will be increased for the next 5 days in Kurnool district, T MAX 42-43 OC.	1	292	20	312	32	-	32	324	20	344	4
Agriculture	weather	foreca st	Short term weather forecast	23-4-13	Agromet NICRA ,kvk,yagantipalle :- T MAX 37-39 $^{\circ c}$ ,T MIN 27-28 $^{\circ c}$ ,W speed 6-9 (k mph) for the next 3 days in Kurnool district.	1	292	20	312	32	-	32	324	20	344	6
Agriculture	weather	foreca st	Short term weather forecast	26-4-13	Agromet NICRA ,kvk,yagantipalle:- Partly cloudy, Chances of summer showers (1-2mm) T MAX (40-41),w speed 8-20 (K mph).	1	292	20	312	32	-	32	324	20	344	8
Agriculture	weather	foreca st	Short term weather forecast	03-05- 13	Agromet NICRA ,kvk,yagantipalle:- Partly cloudy ,T MAX (42-43),w speed 8 -15 (K mph).	1	292	20	312	32	-	32	324	20	344	6

Agriculture	weather	foreca st	Short term weather forecast	08-05- 13	Agromet NICRA ,kvk,yagantipalle :- T Max Temperature will be increased for the next 5 days in Kurnool district, T MAX 43-44 OC.	1	292	20	312	32	-	32	324	20	344	8
Agriculture	weather	foreca st	Short term weather forecast	10-05- 13	Agromet NICRA ,kvk,yagantipalle:- Partly cloudy ,T MAX (42-43),w speed 13 -17 (K mph).	1	292	20	312	32	-	32	324	20	344	8
Agriculture	weather	foreca st	Short term weather forecast	14-05- 13	Agromet NICRA ,kvk,yagantipalle:- Partly cloudy T MAX 42-43 w speed 16 -20 K mph	1	292	20	312	32	-	32	324	20	344	5
Agriculture	weather	foreca st	Short term weather forecast	17-05- 13	Agromet NICRA kvk yagantipalle :- Chances of summer showers on 21& 22 <sup>nd</sup> May T MAX 41-42 oc	1	292	20	312	32	-	32	324	20	344	5
Agriculture	weather	foreca st	Short term weather forecast	21-05- 13	Agromet NICRA kvk yagantipalle:- Partly cloudy Chances of summer showers T MAX 42-43	1	292	20	312	32	-	32	324	20	344	5
Agriculture	General	All	ICM	28.5.13	KVK, Banaganapalle : Ippudu padina varshala adhaarangaa valuku addangaa, lothayina vesavi dukkulu chesukondi. Peda Yeruvunu pogu chesukondi. 9440739378	1	1480	-	1480	65	-	65	1545	-	1545	20
Agriculture	weather	foreca st	Short term weather forecast	02-07- 13	(Agromet NICRA kvk yagantipalle):- Chances of light rains (6-7 mm) on 3 <sup>rd</sup> And 4 <sup>th</sup> July in Kurnool district, T MAX 34-36 °C, T MIN 26-27 °C, w speed 16-24(K mph).	1	292	20	312	32	-	32	324	20	344	12
Agriculture	weather	foreca st	Short term weather forecast	05-07- 13	(Agromet NICRA kvk yagantipalle):- Chances of light rains (13-17 mm) on 6 <sup>th</sup> and 7 <sup>th</sup> July in Kurnool district, T MAX 34-36 °C, T MIN 26-27 °C, w speed 16-24(K mph).	1	292	20	312	32	-	32	324	20	344 160	20

Agriculture	weather	foreca	Short	09-07-	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	10
_		st	term	13	Chances of light to medium rains (4 -16											
			weather		mm) for the next 5 days in Kurnool											
			forecast		district, T MAX 30-31 $^{\rm oc}$ ,T MIN 22-23 $^{\rm oc}$ .											
Agriculture	weather	foreca	Short	12-07-	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	8
		st	term	13	Chances of light rains (3-8 mm) for the											
			weather		next 4 days in Kurnool district, T MAX											
			forecast		30-31 $^{\circ c}$ ,T MIN 23-24 $^{\circ c}$ , w speed 16-18(K mph).											
Agriculture	weather	foreca	Short	16-07-	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	14
		st	term	13	Chances of light rains (4-7 mm) for the											
			weather		next 5 days in Kurnool district, T MAX											
			forecast		32-33 °c ,T MIN 23-24 °c, w speed 18-20											
					(K mph).											
Agriculture	weather	foreca	Short	19-07-	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	8
		st	term	13	Chances of light to medium rains (10 -											
			weather		17 mm) for the next 5 days in Kurnool											
			forecast		district, T MAX 31-32 °C ,T MIN 23-24 °C.w											
					speed 18-20 (K mph).											
Agriculture	weather	foreca	Short	23-07-	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	_	32	324	20	344	14
Ü		st	term	13	Chances of medium rains (3 -12 mm) for											
			weather		the next 5 days in Kurnool district, T											
			forecast		MAX 32-33 $^{\rm oc}$ ,T MIN 24-25 $^{\rm oc}$ .w speed 18-											
					20 (K mph).											
Agriculture	weather	foreca	Short	06.08.	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	_	32	324	20	344	10
J		st	term	13	Partly cloudy, Chances of light Rains(4-											
			weather		8mm) for the next 5 days in Kurnool											
			forecast		dist, TMAX 32-34 °C, TMIN 22-23 °C.w											
					speed 15-17 (K mph).											

Agriculture	weather	foreca	Short	16.08.1	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	15
		st	term	3	Generally cloudy ,Chances of medium											
			weather		Rains(4-14 mm) for the next 5 days in											
			forecast		Kurnool dist, TMAX 28-30 $^{\circ c}$ ,TMIN 22-23 $^{\circ c}$ .w speed 14-16 (K mph).											
griculture	weather	foreca	Short	20-08-	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	8
		st	term weather forecast	13	Partly cloudy ,Chances of light Rains(3-5 mm) for the next 5 days in Kurnool dist, TMAX 33-34 °C, TMIN 23-24 °C.w speed											
			TOTECASE		15-17 (K mph).											
Agriculture	weather	foreca	Short	23-08-	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	7
		st	term weather	13	Partly cloudy ,Chances of light Rains(2-4 mm) for the next 5 days in Kurnool dist,											
			forecast		TMAX 32-33 $^{\rm oc}$ ,TMIN 23-24 $^{\rm oc}$ .w speed 15-16 (K mph).											
Agriculture	weather	foreca	Short		(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	$\epsilon$
		st	term	27-08-	Partly cloudy ,Chances of light Rains(3-6											
			weather forecast	13	mm) for the next 5 days in Kurnool dist, TMAX 33-34 °C, TMIN 23-24 °C. w speed											
					10-14 (K mph).											
Agriculture	weather	foreca	Short		(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	8
		st	term		Partly cloudy ,Chances of light to											
			weather	03-09-	medium Rains(2-17 mm) for the next 5											
			forecast	13	days in Kurnool dist, TMAX 34-35 °C ,TMIN 24-25 °C.w speed 12-15 (K mph).											
Agriculture	weather	foreca	Short		(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	_	32	324	20	344	6
J		st	term		Partly cloudy ,Chances of light to											
			weather	06-09-	medium Rains(5-23 mm) for the next 5											
			forecast	13	days in Kurnool dist, TMAX 28-31 oc											
					,TMIN 23-24 °c.w speed 12-16 (K mph).											

Agriculture	weather	foreca	Short	10-09-	(Agromet NICRA-KVK yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	16
		st	term	13	Mostly Cloudy ,Chances of medium											
			weather		Rains (17-29 mm) for the next 5 days in											
			forecast		Kurnool dist, T MAX 28-30 oc ,T MIN 21-											
					22 <sup>oc</sup> W.Speed 8-11 Kmph.											
Agriculture	weather	foreca	Short	13-09-	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	12
		st	term	13	Partly cloudy ,Chances of light to											
			weather		medium Rains(10-30 mm) for the next											
			forecast		5 days in Kurnool dist, TMAX 30-31 oc											
		•	<b>a.</b> .		TMIN 21-22 oc. w speed 8-10 (K mph).											_
Agriculture	weather	foreca	Short	01.10.	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	9
		st	term	13	Partly cloudy ,Chances of light drizzle (1-											
			weather		2 mm) for the next 5 days in Kurnool											
			forecast		dist, TMAX 33-34 °C ,TMIN 23-24 °C.w speed 13-14 (K mph).											
Agriculture	weather	foreca	Short	04.10.	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	_	32	324	20	344	9
Agriculture	weather	st	term	13	Partly cloudy ,Chances of light to	1	232	20	312	32	-	32	324	20	344	9
		30	weather	15	medium Rains (2-12 mm) for the next 5											
			forecast		days in Kurnool dist, TMAX 31-32 °C											
					TMIN 23-25 °c.w speed 9-12 (K mph).											
Agriculture	weather	foreca	Short	08.10.1	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	14
J		st	term	3	Partly cloudy ,Chances of light to											
			weather		medium Rains (10-20 mm) for the next											
			forecast		5 days in Kurnool dist, TMAX 31-32 oc											
					,TMIN 22-23 $^{\circ c}$ .w speed 11-14 (K mph).											
Agriculture	weather	foreca	Short	11.10.	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	18
		st	term	13	Partly cloudy ,Chances of light to											
			weather		medium Rains (8-12 mm) for the next 5											
			forecast		days in Kurnool dist, TMAX 29-31 oc											
					,TMIN 19-20 °c.w speed 11-14 (K mph).											
Agriculture	weather	foreca	Short	15.10.	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	16
		st	term	13	Partly cloudy ,Chances of light to											
			weather		medium Rains (13-22 mm) for the next											
			forecast		5 days in Kurnool dist, TMAX 33-34 oc											
					,TMIN 23-24 <sup>oc</sup> .w speed 3-5 (K mph).											

Agriculture	weather	foreca	Short	18.10.	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32		32	324	20	344	9
Agriculture	weather	st	term	13	Partly cloudy ,Chances of light drizzles	-	232	20	312	32		32	324	20	544	,
			weather		(1-3 mm) for the next 5 days in Kurnool											
			forecast		dist, TMAX 33-34 oc ,TMIN 23-24 oc.w											
					speed 3-17 (K mph).											
Agriculture	weather	foreca	Short	22.10.	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	14
		st	term	13	Partly cloudy ,Chances of medium rains											
			weather		(20-30 mm) for the next 5 days in											
			forecast		Kurnool dist, TMAX 26-30 °C, TMIN 20-21											
		•	GI .		oc.w speed 6-10 (K mph).	_	202	20	242			22	224	20	244	
Agriculture	weather	foreca	Short		(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	4
		st	term weather	01-11-	Partly cloudy ,Chances of light drizzles (1-5 mm) for the next 3 days in Kurnool											
			forecast	13	dist, TMAX 31-32 °C, TMIN 18-20 °C.w											
			TOTECASE	13	speed 4-7 (K mph)											
Agriculture	weather	foreca	Short		(Agromet NICRA kvk yagantipalle) :- No	1	292	20	312	32	_	32	324	20	344	2
0		st	term		rainfall forecast for the next 3 days in											
			weather	08-11-	Kurnool dist, TMAX 28-30 °C, TMIN 19-20											
			forecast	13	<sup>oc</sup> .w speed 4-6 (K mph).											
Agriculture	weather	foreca	Short		No rainfall for the next 3 days, November	1	292	20	312	32	-	32	324	20	344	8
		st	term		16 <sup>th</sup> may be Chances of light rains (3-5											
			weather	12-11-	mm) in Kurnool dist, TMAX 25-30 °c,											
			forecast	13	TMIN 18-21°.w speed 4-12 (K mph).											
Agriculture	weather	foreca	Short		No rainfall forecast for the next 3 days,	1	292	20	312	32	-	32	324	20	344	10
		st	term		November 23 <sup>th</sup> may be Chances of light											
			weather	19-11-	rains (1-3 mm) in Kurnool dist, TMAX 29-											
			forecast	13	30 °c, TMIN 17-18°c.w speed 5-13 (K											
					mph).											

Agriculture	weather	foreca	Short	22-11-	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	16
		st	term	13	Chances of light rains (10-11 mm ) for the											
			weather		next 3 days in kurnool district , TMAX 29-											
			forecast		30 °c, TMIN 16-17°c.w speed 3-8 (K mph).											
Agriculture	weather	foreca	Short	26-11-	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	6
		st	term	13	Chances of light rains for the next 5 days											
			weather		in Kurnool district , TMAX 29-30 °c, TMIN											
			forecast		19-20 °c.w speed 4-6 (K mph).											
Agriculture	weather	foreca	Short	03-12-	(Agromet NICRA kvk yagantipalle) :- No	1	292	20	312	32	-	32	324	20	344	2
		st	term	13	rainfall forecast for the next 3 days in											
			weather		Kurnool Dt. TMAX 32-33°C TMIN 18-20°C											
			forecast		W Speed 7-9 (K mph).											
Agriculture	weather	foreca	Short	06-12-	(Agromet NICRA kvk yagantipalle) :- No	1	292	20	312	32	-	32	324	20	344	5
		st	term	13	rainfall forecast for the next 3 days in											
			weather		Kurnool Dt. TMAX 30-31 oc TMIN 16-17 oc											
			forecast		W Speed 6-10 (K mph).											
Agriculture	weather	foreca	Short	10-12-	(Agromet NICRA kvk yagantipalle) :- No	1	292	20	312	32	-	32	324	20	344	6
		st	term	13	rainfall forecast for the next 3 days in											
			weather		Kurnool Dt. TMAX 30-31 oc TMIN 15-17 oc											
			forecast		W Speed 6-10 (K mph).											
Agriculture	weather	foreca	Short	13-12-	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	8
		st	term	13	TMIN temperature will be decreased for											
			weather		the next 3 days in Kurnool Dt. T MAX 31-											
			forecast		32 °C TMIN 14-16.											
Agriculture	weather	foreca	Short	17-12-	(Agromet NICRA kvk yagantipalle) :-	1	292	20	312	32	-	32	324	20	344	4
		st	term	13	TMIN temperature will be range between											
			weather		13-14 oc for the next 3 days in Kurnool dt.											
			forecast		TMAX 31-32 oc W Speed (6-8) (Kmph)											

Agriculture	weather	foreca st	Short term weather forecast	20-12- 13	(Agromet NICRA kvk yagantipalle) :- TMIN temperature will be range between 16-17 °C for the next 3 days in Kurnool dt. TMAX 30-31 °C W Speed (9-10) (Kmph)	1	292	20	312	32	-	32	324	20	344	7
Agriculture	weather	foreca st	Short term weather forecast	24-12- 13	(Agromet NICRA kvk yagantipalle) :- :- No rainfall forecast for the next 3 days in Kurnool ditTMX 30-31 °C TMIN 16-17 °C W Speed 6-8 (K mph)	1	292	20	312	32	-	32	324	20	344	8
Agriculture	weather	foreca st	Short term weather forecast	04-02- 14	(Agromet NICRA kvk yagantipalle):- T MIN Temperature will be range b/w 19- 20 °C for the next 3 days in Kurnool district, TMAX 31-32 °C, w speed 8-10 kmph.	1	292	20	312	32	-	32	324	20	344	2
Agriculture	weather	foreca st	Short term weather forecast	07-02- 14	(Agromet NICRA kvk yagantipalle):- T MIN Temperature will be range b/w 18-19 oc for the next 3 days in Kurnool district, TMAX 33-34 oc, w speed 9-10 kmph.	1	292	20	312	32	-	32	324	20	344	4
Agriculture	weather	foreca st	Short term weather forecast	11-02- 14	(Agromet NICRA kvk yagantipalle) :- No rainfall forecast for the next 5 days in Kurnool dts. T MIN 18-19 °C, TMAX 33-34 °C, w speed 8-11 kmph.	1	292	20	312	32	-	32	324	20	344	8
Agriculture	weather	foreca st	Short term weather forecast	14-02- 14	(Agromet NICRA kvk yagantipalle):- No rainfall forecast for the next 5 days in Kurnool dts. TMAX 34-35 °C, T MIN 17-20 °C, w speed 5-12 kmph.	1	292	20	312	32	-	32	324	20	344	7
Agriculture	weather	foreca st	Short term weather forecast	18-02- 14	(Agromet NICRA kvk yagantipalle) :- forecast of light rainfall (6 mm) on Friday (21 st feb) in Kurnool district TMAX 32- $34$ $^{\circ c}$ , T MIN 17-20 $^{\circ c}$ , w speed 9-11 kmph.	1	292	20	312	32	-	32	324	20	344	14

Agriculture	weather	foreca st	Short term weather	04-03- 14	(Agromet NICRA kvk yagantipalle) :- Partly cloudy ,Chances of light rains (3-5 mm) for the next 3 days in Kurnool	1	292	20	312	32	-	32	324	20	344	10
			forecast		dist,TMAX 33-34 $^{\rm oc}$ , T MIN 20-21 $^{\rm oc}$ wind speed 9-13 k mph											
Agriculture	weather	foreca st	Short term weather forecast	07-03- 14	(Agromet NICRA kvk yagantipalle) :- Partly cloudy ,TMAX 32-34 $^{\rm oc}$ , T MIN 20-21 $^{\rm oc}$ , wind speed 9-12 kmph .	1	292	20	312	32	-	32	324	20	344	8
Agriculture	weather	foreca st	Short term weather forecast	14-03- 14	(Agromet NICRA kvk yagantipalle):- T MAX Temperatures will be increased for the next 5 days in Kurnool dist,TMAX 33- 35 °C, T MIN 21-22 °C wind speed 9-13 k mph	1	292	20	312	32	-	32	324	20	344	6
Agriculture	weather	foreca st	Short term weather forecast	21-03- 14	(Agromet NICRA kvk yagantipalle) :- T MAX Temperatures will be increased for the next 5 days in Kurnool dist,TMAX 38- $39^{\circ c}$ , T MIN 23-24 $^{\circ c}$ wind speed 9-13 k mph .	1	292	20	312	32	-	32	324	20	344	4
				TOTAL:	·	56	17540	1100	18640	1825	0	1825	19365	1100	20465	49

# (B). Details of SMSs

Content category	No.of	No.of Farmers	Feedback from
	Messages		farmers
Crop Production	36	1545	531
Crop Protection			
Livestock & Fisheries Advisory	2	188	26
Weather Advisory	56	1545	497
Market information			
Events information			
Inputs availability			
Others (specify) Horticulture	5	1545	56
Homescience	64	907	637
Total	163	5730	1747

# 3.5 Production and supply of Technological products

# **SEED MATERIALS**

Major group/ class	Crop	Variety	Quantity (Qtl.)	Value (Rs)	Provided to No of Farmers
Cereals	Paddy	NDLR-7	200.00	3,37,500-00	215
		BPT-5204	450.00	8,00,000-00	1200
Millets	Setaria	SIA 3085	10.0	25,000-00	178
Oilseeds	Castor	PCH 111	4.00	40,000-00	95
Pulses	Redgram	LRG 41 ICPH-2740	4.00 5.00	30,000-00 52,000-00	156

# **Summary**

S.No.	Major group/ class	Quantity (qtl.)	Value (Rs)	Provided to No of Farmers
1	Cereals	650.00	11,37,500-00	1415
2	Millets	10.00	25,000-00	178
3	Oilseeds	4.0	40,000-00	95
4	Pulses	9.0	82,000-00	156

# **PLANTING MATERIALS**

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS					
SPICES					
VEGETABLES					
	TOMATO	Siri 9005	2,45,000	73,500	52
	BRINJAL	Poluru	50,000	12,500	8
	CHILLIS	Ramya	1,39,500	34,875	30
		Teja			
	Others	-	50,000	12,500	20
FOREST SPECIES					
Medicinal plants					
PLANTATION					
CROPS					
Others (specify)					
			4,84,500	1,33,375	110

# **SUMMARY**

Sl. No.	Major group/class	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS			
2	VEGETABLES	4,84,500	1,33,375	110
3	SPICES			
4	FOREST SPECIES			
5	ORNAMENTAL CROPS			
6	PLANTATION CROPS			
7	OTHERS			
	TOTAL	4,84,500	1,33,375	110

# **BIO PRODUCTS**

Major	<b>Product Name</b>	Species	Qu	antity	Value (Rs.)	Provided
group/class			No	(kg)		to No. of
						Farmers
BIO PESTICIDES						
1	Pseudomonas	P.fluorescens	-	1161	1,16,100-00	45
2	Trichoderma	T.viride	-	1062	1,06,200-00	32
3	Neem powder	-	-	8514	1,24,458-00	14
BIO						
FERTILIZERS						
1	Phosphorus	PSB	-	1323	66,150-00	24
	Solubulizing					
	Bacteria					
2	Azatobacter	Azotobacter	-	47	2,350-00	8
3	Azospirillum	Azospirillum	-	56	2,800-00	11
4	Vermicompost	Eudrilus eugini	-	115000	5,75,000-00	209
5	Earth worms	Eudrilus eugini	-	1050	52,500-00	-
Total			•	1,28,213	10,45,558-00	343

# **SUMMARY**

SI.	Product Name	Species	Qu	antity	Value (Rs.)	Provided
No.			Nos	(kg)		to No. of Farmers
1	BIOAGENTS					_
2	<b>BIO FERTILIZERS</b>	-	-	1,17,476	6,98,800-00	228
3	BIO PESTICIDE	-	-	10,737	3,46,758-00	115

# **LIVESTOCK**

Sl. No.	Туре	Breed	Quai	ntity	Value	Provided to No.
			Nos	Kgs	(Rs.)	of Farmers
Cattle						
SHEEP AND GOAT	Sheep	Nellore brown	26	404	70,825.00	14
POULTRY	Backyard poultry	Rajasri	9430	-	5,65,800	765
FISHERIES						
Others (Specify)						

# **SUMMARY**

	_	_	Qua	intity		Provided to No. of
SI. No.	Туре	Breed	Nos	Kgs	Value (Rs.)	Farmers
1	CATTLE					_
2	SHEEP	Sheep	Nellore brown	26	70,825.00	14
3	POULTRY	Backyard poultry	Rajasri	9430	5,65,800.00	765
4	FISHERIES					
5	OTHERS					
	TOTAL				6,36,665.00	779

# 3.6. Literature Developed/Published (with full title, author & reference)

- A) KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.)
- B) Literature developed/published

## 1. Brochures & Booklets developed:

- Preparation of jowar products.
- Rearing of Rajashri birds
- Organic preparations in crop protection.
- Preparation of Organic Inputs

## 2. Articles and Scientific Publications:

- An article on "Effect of feeding Regional Specific Mineral Mixture on reproductive performance in milch buffaloes" published in Research Journal of Agricultural Sciences, March – April, 13 pp.4(2)301-302.
- An article entitled "Scientific rearing practices of Rajashri birds and their level
  of adoption in tribal areas of Kurnool district A field study" published in
  International Journal on Agricultural Sciences Vol. IV (1st issue) pp.11-15,2013.

## 3. Popular Articles

Rearing of rajasri birds for more income	A.Krishnamurthy	Pasunestham , May 2013 pp.17
Success story of dairy farming	A.Krishnamurthy	Rythunestham, May 2013, pp. 32-33
First aid in live stock	A.Krishnamurthy	Pasunestham, June, 2013 pp. 35-36
Total mixed ration in dairy animal feed	A.Krishnamurthy	Pasunestham, Sep.,2013 pp. 43-45
Management of cross bred cows	A.Krishnamurthy	Pasunestham, Nov, 2013 pp. 30-32
Problems in backyard poultry	A.Krishnamurthy	Pasunestham, Dec, 2013 pp.29-31

## (C) Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD / Audio-Cassette)	Title of the programme	Number
1	VCD	Rearing of Rajasri birds as backyard poultry	100

# 3.7. Success stories/Case studies, if any (two or three pages write-up on each case with suitable action photographs)

## 1. Promotion of Millet products through SHGs.

## **Introduction:**

Jowar is an important traditional millet crop in Andhra Pradesh growing in sizeable area. Particularly in Kurnool district Jowar is grown in an area of 75226 ha. It is a nutritious millet with good amount of dietary fibre and essential minerals compared to rice and wheat. The grain is rich in starch (70%), Protein (11%), Fat (1.9%) and dietary fibre and minerals. The added advantage of the grain is the slow digestability and it is good diet for the diabetic patients. The consumption of Jowar is limited to traditional recipies i.e. roti and sangati. To increase the consumption of jowar, diversified and value added products are essential that deliver convenience, taste, texture, colour and shelf stability at an economical cost. In this scenario, there is a need to develop and diversify different value added products with jowar according to the choice and taste of the consumer. Women participation is very much crucial in promotion and popularization of any kind of food products. To generate income among the rural women folk, involving SHGs, a product of local traditional innovation is now to be manufactured and marketed. The decentralized, small scale house hold based economy of food production and food processing is huge in aggregate. It also generates livelihoods for the economic sustainability of rural women.

## Background:

Women play a vital role in food security and they personally involve in food preparation and ensure basic nutrition and food need of the households. As the majority of the rural women were formed into SHGs and taking up various entrepreneurial and income generating activities, with the help of various line departments, banks, agencies and NGOs, any technology or intervention taken up by them will have wider access and acceptability. Hence, KVK has involved SHGs in promotion of Jowar Products and selected Sri Kalki Bhagawan Podupu group of Pandurangapuram village of Nandyal mandal.

### **Intervention:**

KVK organized 14 Training programmes and method demonstrations on value added products with jowar i.e, Breakfast, Lunch and Ready to eat Snack items for 162 farm women of Yagantipalle, Battulurupadu, Nandavaram, Banaganapalle, Kalugotla, Sadhukottam, Madasupalle, Koilakuntla etc. The consumption of value added products was restricted to roti and sangati only, because of non availability of Jowar bi products like dehulled flour and ravva. Establishment of dehullers and flour mills at village level is needed to make the bi products available to the consumers. Keeping this in view, KVK has Planned to promote preparation of jowar bi products i.e, Jowar fine, Bold ravva and

flour, by involving local SHGs and supporting them with machinery and giving technical knowhow. The SHGs were encouraged to market the bi products by tapping local avenues like word of mouth among friends and relatives, weekly shandys, rythu bazaars, super markets and local grocery shops.

#### **Impact:**

Initially two women members of the SHG have come forward to start the jowar bi products preparation, by procuring 10 quintals of Jowar to start with. Seeing the acceptance and demand from the local community and near by villages, they increased the scale to 150 quintals, with the financial support from Mahila Bank and Bank Linkage, the group had. By seeing the success and profitability of the unit, another 3 women of the group have joined hands and now they are planning to expand the business, with prior orders from super markets and shops.

**Economic Benefit :**Cost of Production for 10 quintals (per month) of Jowar bi products

S.No.	Item	Quantity	Cost (Rs.)	Total cost for 6
				months (60
				qtis)
1	Jowar	1000 kg	15,000-00	90,000-00
2	Labour	80 man days @ 100/- per day	8,000-00	48,000-00
3	Packing	Q.S.	800-00	4,800-00
4	Electricity charges	15 units/ quintal	1,050-00	6,300-00
		(@ 7/- per unit)		
5	Rent for building	Rs. 500/-	500-00	3,000-00
6	Interest on capital	Rs. 25,000-00	250-00	1,500-00
	invested @ 12% p.a.			
	Total cost	of production /month (10 qtls)	25,600-00	1,53,600-00

The unit is producing 10 quintals of Jowar bi products (3 types) per month and the cumulative production and gross income for 6 months is as under:

S.	Jowar Bi Product	Quantity produced	Cost per Kg	<b>Gross Income</b>
No.				(Rs.)
1	Jowar bold Ravva	3900	40	1,56,000-00
2	Jowar fine Ravva	900	35	31,500-00
3	Jowar flour	780	30	23,400-00
4	Jowar Bran	420	15	6,300-00
	Total	6000		2,17,200-00

#### **Economics of the enterprise:**

S. No.	Item	Amount (Rs.)
1	Gross Income from sale of bi products (60 qtls)	2,17,200-00
2	Cost of production for 60 qtls	1,53,600-00
3	Net income	63,600-00
4	BCR	1:1.41

A net income of Rs 63,600 is obtained, in addition to their earning as labour for this activity.

#### Feed Back:

With ready acceptance and bulk requirement from the consumers, there is a lot of demand for these jowar bi products. As the raw materials are easily available in the villages, procurement is easy. As the awareness on use of millet products is increasing among consumers, jowar bi products consumption is increasing along with other millet products like ragi and korra. The technology of preparation of millet products from KVK has come in right time and helped the SHG members to catch up the arising demand for jowar products.

# 2) Rearing of Rajasri chicks – A success story

#### Introduction:

Badrinaikthanda, Pasupula thanda and Kalenaik thanda are small tribal villages in remote areas of Banaganapalle mandal. The Most of them are agricultural labourers. The women and children were suffering from malnutrition. Due to their low economic status the intake of proteins like eggs and meat is very less. Most of them are rearing desi poultry at backyards. The low production of eggs and meat from these birds couldn't support them. Taking these problems in consideration, it was planned to promote high yielding breeds as backyard poultry by involving women.

#### **Process:**

Demonstrations were taken up to promote the backyard poultry rearing for additional income and to provide nutritional security to the BPL families with Rajasri birds under ATMA during 2011-12. Rajasri is a layer with egg production of 150-180 in a year and have 25% native blood which is advantageous trait for backyard poultry. The chicks were reared for six weeks at KVK. Training was organized on backyard poultry management and distributed ten Rajasri birds to each family.

Frequent visits were made to monitor the demonstrations and periodical vaccination and deworming was done. The birds let loose in the backyards to find their food through scavenging. Beside this, kitchen waste, grain waste etc provided to the birds. Small poultry house with Kadapa slabs were constructed at backyards. Body weight and perception of the women towards these birds was recorded during the study



period. Two training programmes were organized to update the knowledge towards poultry

management and prevention of diseases and also motivated the farmers to develop the strength by keeping the eggs under brooding desi hen. This helped to multiply the flock.

## Follow up action:

Local veterinary department officials visited the village and also involved in vaccination programme. Women farmers were from different villages in Banaganapalle mandal also taken to the village and interacted with the farmers. The surplus eggs and male birds were sold at better price with the help of KVK.

## Result:

Particulars on performance	Male birds	Female birds
Mean body weight at six weeks age (g)	469.9 <u>+</u> 18.02	431.72 <u>+</u> 18.54
Mean body weight of adult birds at 6 months age (g)	1896.83 <u>+</u> 47.13	1371.05 <u>+</u> 35.92
Mean egg production in 90days	-	54.6 <u>+</u> 1.54
Mean egg weight (g)	-	49.06 <u>+</u> 1.08
Mortality	7.0	6%
Mean additional income in 9 months per family	Rs.1059.6	56 <u>+</u> 28.85
Weekly egg consumption	1.7 (Before)	3.3 (After)

#### **Outcome**

The performance of Rajasri birds attracted the farmers in surrounding villages. Some of the rural youth started rearing these birds in commercial farms. Six weeks rajasri birds were supplied by KVK.

#### Conclusion:

The results revealed that Rajasri chicks are well adapted to the climatic conditions of tribal areas and rearing of these birds provides supplementary income and nutritional security to the BPL families.

## 3) <u>Hybrid marigold cultivation – a success story</u>.

Cultivation of hybrid marigold has brought smile back on face of the farmer Sri. Vishnu Vardhan Reddy of Govindapalli, Sirivel mandal after a long time. Every year the farmers used to grow paddy on his land of 2 ha. which is under borewell irrigation. He used to incur lot of expenditure for various operations of production, but realizing profits as low as Rs. 6,000/- to 8,000/- per ac., due to ever increasing costs of labour, inputs, frequent power cuts and

increasing pest and disease problems. With the intervention of KVK, the farmer wanted to diversify and take up other crops of commercial value.

**Process**: With the suggestions and guidance of scientists of KVK, he took up Hybrid marigold cultivation in an area of 0.4 ha. during Rabi, 2013-14. The seedlings of hybrid Jumbo Gold were raised in the shadenets at KVK and transplanted @ 10,500 plants/acre. With good management of the crop, it started yielding from 45<sup>th</sup> day of transplantation itself. He has recorded an yield of 4.25 tons/ac., which were sold in the local market at an average price of Rs. 32.42/kg. of flowers. As the farmer could match the harvesting with festive occation, he has realized good price compared to normal market price and thus got an income of Rs. 1,46,448-00 per acre with in a span of 3 months.

The economics of the crop production are:

Item	Amount (Rs.)
Cost of seedlings	21,000-00
Preparatory cultivation and planting	4,500-00
Manures and Fertilizers	5,300-00
Plant protection chemicals	4,500-00
Harvesting	6,000-00
Marketing charges	2,500-00
Total cost of production	44,800-00
Gross income @ Rs. 32.42/kg for 4,520 kg	1,46,448-00
Net income	1,01,648-00
B:C Ratio	1: 3.26

**Conclusion**: As the benefit to cost ratio in marigold cultivation is attractive, cultivation of the crop in places of vicinity to towns, the farmers can take it up as a part of crop diversification in a limited scale and earn good income, by matching the season with important occations and festivals.

3.8 Give details of innovative methodology/technology developed and used for Transfer of Technology during the year

# 3.9 Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

S.	Crop /	ITK Practiced	Purpose of ITK		
No.	Enterprise				
1	Redgram	When Jaggery solution is sprayed on the crop,	To manage		
		black ants were attracted to the plants and all the	Helicoverpa in		
		egg and larval stages were seen eaten away by	Redgram		
		the ants.			
2	Paddy	When 1.5 lt Neem oil is mixed with 25 kg sand and	To control BPH in		
		applied in 1 acre after reducing the water in the	Paddy		
		field, in 48 hours all the BPH were seen flushed			
		out from the field and pungent smell of neem oil			
		persists in the field for 5 days.			
3	Maize	Tieing of stitched old saries around the crop as	To prevent wild		
		border of Maize, to prevent the entry of wild	boar entry.		
		boars into the field.			
4	Paddy	Placing used bamboo baskets at water discharge	To prevent		
		points of bore wells	erosion of the		
			soil.		

# 3.10 Indicate the specific training need analysis tools/methodology followed for

Identification of courses for farmers/farm women

- Baseline survey
- o Family survey
- o PRA
- o Group discussion

## For Rural Youth

- Group discussion
- o PRA
- o Through interaction with farmers clubs

## 3.11 Field activities

- i. Number of villages adopted 14
- ii. No. of farm families selected 300
- iii. No. of survey /PRA conducted 14

# 3.12. Activities of Soil and Water Testing Laboratory

# Status of establishment of Lab

1.Year of establishment : 2005

# 2.List of equipments purchased with amount :

SI. No	Name of the Equipment	Qty.	Cost
1	Digital pH Meter	1	7,080-00
2	$\upsilon$ P based EC-TDS Analyser	1	13,680-00
3	Scanning Visible Spectrophotometer	1	36,800-00
4	υP based Flamephotometer	1	30,400-00
5	Nephelometer	1	7,600-00
6	Electronic KEL Plus Automatic Microprocessor	1	79,200-00
	(Digestion system)		
7	Electronic Superior Automatic Microprocessor based	1	1,42,300-00
	Distillation system		
8	Electronic Laboratory Shaker	1	57,350-00
9	Mettler Electronic Analytical Balance	1	91,843-00
10	INDION two bed portable Deioniazer	1	45,900-00
11	INDION portable mixed bed Deionizer	1	
12	Atomic Absorption spectrophotometer	1	8,11,108-00
	Total	12	13,23,261-00

# 3. Details of samples analyzed so far:

Details	No. of Samples	No. of Farmers	Amount realized	
				(Rs. In Lakhs)
Soil Samples	3852	3135	374	7.24
Water Samples	1036	968	192	0.67
Plant Samples	64	64	2	0.384
Petiole Samples	-	-	=	=
Total	4952	4167	568	8.294

# 3.13. Activities under rainwater harvesting (for those KVKs

Date	Nature of	Title	Client	No.	No. of		No. of SC/ST			Total			
	Activity		(PF/R	of	Participants		•				ants	Participants	
			Y/EF)	Cour	including								
				ses	SC/ST								
					M	F	Tot	M	F	Tot	M	F	Tot

#### 4.0 IMPACT

# 4.1. Impact of KVK activities (Not to be restricted for reporting period).

Name of specific	No. of	% of adoption	Change in income (Rs.)			
technology/skill transferred	participants		Before	After		
			(Rs./Unit)	(Rs./Unit)		
Nutrient Management in rice based on STCR	559	52	48,959/ha	59,328/ha		

## 4.2 Cases of large scale adoption (Please furnish detailed information for each case)

#### 1. Soil test based nutrient application in rice for reduced costs of production.

Rice (<u>Oryza sativa</u> L.) is one of the main staple cereal food crops in the world. In 2007 about 650 million metric tones of unmilled rice was produced globally on about 157 million ha (FAO, 2008). KC canal and TBLLC command area is the most potential belt for paddy cultivation in Kurnool district of Andhra Pradesh. Paddy is being cultivated nearly in one lakh hectares in both Kharif and Rabi seasons. In order to get highest yields farmers resorted to excess use of chemical fertilizers which leads to adverse effects on soil and crop with nutrient toxicity and deficiency either by over use or inadequate use, which in turn increases the production costs, subsidies on chemical fertilizers and environmental degradation.

Soil test based nutrient application helps to avoid wasteful expenditure on irrational nutrient application and realize higher benefit: cost ratio as the nutrients applied are in proportion to the magnitude of the deficiency of a particular nutrient and correction of the nutrient imbalances in soil.

One hundred and thirty frontline demonstrations were organized in farmer's fields from the year 2007 to 2009 and soil samples (0~0.15m depth) were collected and analyzed at soil testing laboratory, KVK, Yagantipalle before implementation of demonstrations.

#### **RESULTS:**

#### **Soil characteristics:**

The soils were neutral to moderate alkali in reaction with pH varying from 7.27 to 8.1 and EC ranged from 0.29 to 0.96 dsm<sup>-1</sup>. The organic carbon content varied from 0.32 % to 0.98 %. Texture of the surface soil varied from sandy clay loam to clay loam. The soils were low to medium in N (ranging from 38 to 238 kg/ha kg/ha), medium to high in P (ranging from 54 to 469 kg/ha) and medium to high in K (from 152 to 831 kg/ha). Though these soils are considered to be fertile, they are deficient in nitrogen in all mandals but moderately high with available phosphorus and potassium in all mandals.

<u>Nutrient Application</u>: Based on soil test results the farmers of demonstration plots applied lower doses of N-P-K (230-19-59 Kg./ha, respectively) as compared to farmer's practice (317-190-62 Kg./ha, respectively) which is reflected in cost of production.

#### Yield and Economics of front line demonstrations:

S.No	Item	Demonstration (STCR)	Farmers practice
1	Mean yield of paddy grain (Kg./ha)	7402	6950
2	Cost of production per hectare (Rs.)	33968	40134
3	Gross returns per hectare (Rs.)	103239	109559
4	Net returns per hectare (Rs.)	75592	63105
5	C:B ratio	1:3.23	1:2.57

#### **IMPACT OF STCR:**

**Additional income**: Farmers of demonstration plots realized additional income of Rs.12487 per hectare over farmer's practice due to low cost of production and yield increments in demonstrations.

#### Farmer's feed back

Farmers were satisfied with crop performances and expressed that Soil test based nutrient management in rice is a viable technology, because of less cost on chemical fertilizers and without reduction in yield compared to their own practice. They finally realized that they are incurring higher expenditure on fertilizers in the absence of soil testing of their fields. Many farmers have come forward to adopt this methodology in their fields.

Extent of Adoption: So far STCR based nutrient management was by adopted 253 farmers of TBLLC and KC canal command villages covering 500 ha. It was observed that reduction in cost on fertilizers is around Rs.30.0 lakh with an additional income of Rs.60.0 lakh due to adoption of soil test based nutrient management in rice.

#### 2. Vermicomposting Technology.

The long term and increased usage of chemicals without adequate organic manures has not only aggravated multi nutrient deficiencies in soil plant system but also deteriorate soil health and created environmental pollution. Vermitechnology is an eco-friendly, low cost and effective way to recycle any agricultural animal residues. The application of vermi compost not only adds plant nutrients and growth regulators but also improves soil physical properties, microbial population and carbon content of soil. The total farm yard manure requirement is higher than its availability so vermi technology is an alternative method to fulfill the requirement and the whole process ensured part time job to the rural people. Vermi technology is simple low cost, low energy biotechnology of multiplying earthworms and bioconversion of organic waste materials into vermicastings through earthworm consumption by providing them optimum conditions in every household, every village and every town.

As KVK is nodal agency for vermiculture/vermicomposting, trainings were imparted to all beneficiaries of the vermiculture units, Agriculture Extension Officers, Mandal Agriculture Officers and Asst. Directors of Agriculture of the district on preparation of vermicompost and its application. The details of vermicompost units established in Kurnool district are furnished in table-1

Table.1 Status of vermi compost units in Kurnool district from 2005-06 to 2012-13

S.	Year	Vermicompost	Earth worms supplied	No. of units established
No.		production	by KVK (Kgs)	at village level
		(Tonnes) at KVK		
1	2005-06	29.73	10404	139
2	2006-07	40.00	13275	177
3	2007-08	30.56	6311	85
4	2008-09	34.96	5635	76
5	2009-10	27.93	5879	78
6	2010-11	47.80	2720	36
7	2011-12	108	1980	25
8	2012-13	109	2628	36
	Total	427.98	48832	652

KVK established eight vermicomposting units on the campus since 2003 (Each unit size is 50x24 ft.) and 428 tones of vermicompost was produced and supplied to 726 farmers @ Rs.5-00/per Kg. for various crops. Besides this 48.8 tonnes of earthworms (including filled material) supplied to 616 farmers of the district for establishing 652 vermicompost units (5-10 tones/annum/unit capacity) at farmer level covering all mandals of the district with coordination of Dept. of Agriculture, Dept. of Horticulture, ATMA, NWDPRA and some of the NGO's of the district. Some of the vermiculture /vermicomposting beneficiaries were selling the compost and earth warms to other farmers and getting Rs.20,000/- to 25,000/- annum and some of them are using vermicompost for their crops and reducing cost of production @ Rs.1500-00 to 2,000-00/ha.

# 3) ZERO TILLAGE A RESOURCE CONSERVATIVE TECHNOLOGY FOR RABI MAIZE IN KURNOOL DISTRICT

Name, address and mobile number of the farmer: D. Chinnapu Reddy, BANUMUKKALA, Kurnool Dist, 9441515637

Background: In Kurnool district Maize crop is being cultivated in an area of 14,604 ha and 10898 ha during *kharif* and *rabi* respectively with average productivity of 6250 kg /ha. In the district recently Rice followed by maize gaining popularity moreover their reaping good yields. There is lot of scope to increase the acreage under this cropping system. Comparison of Zero Tillage Maize with that of normal maize or paddy cultivated during Rabi ,that there is no expenditure on land preparation in zero tillage maize, where as Rs. 1500/ac. was spent for normal maize and Rs. 2550/ac. was spent for paddy cultivation. The time taken for land preparation was also varied as 0, 15 and 20 days for zero tillage maize, normal maize and paddy respectively.

The present day farmers are in search of resource conservation technology especially water and labour shortage is the major issues that are worrying the farmers in a big way. This technology

of zero tillage in maize cultivation was found to be effective to save the water as well as to increase the net returns in maize cultivation without requiring any additional resources.

After assessment of technology for two years, the successful results of the technology is considered for large scale adoption in the district. In order to create awareness on the method of zero tillage three trainings were conducted to farmers, adarsha rythus and extension personnel. The methodology and results were published as two popular articles in Daily news papers. Extensive coverage through mass media also helped to reach more number of farmers in the district.

Organised demonstrations on Zero tillage Maize cultivation in ten locations at Banaganapalli mandal and provided critical inputs i.e seed, herbicides and P.P chemicals to the selected farmers. During the crop period five field visits were organized to the farmers and others farmers from different villages to show the new farming technology.

The results indicated that the cost of cultivation for zero tillage method is Rs. 20625/ha which is Rs. 3625/- less than the normal maize. This resulted in increased returns to the farmers. The net income of the farmers was also increased in zero tillage method which is calculated as Rs. 54187/- per ha which is Rs. 4937/- more than the normal maize. This shows the increased



profitability through zero tillage methodology which is the ultimate requirement of any activity especially in agriculture.

**Conclusion:** Maize can be successfully grown without any primary tillage under no till situation with less cost of cultivation higher farm profitability and better resources efficiency. The technology is in place with large number of farmers particularly under Rice- maize situation

4) Case study on crop intensification in Rainfed black soils (Double cropping):

Name, address and mobile number of the farmer: A. Madhava Reddy, Appalapuram, Banaganapalli, Kurnool Dist, 9701623440

**Background :** On black soils of Kurnool district generally one crop Bengalgram/fallow-Jowar is being taken during rabi (September - october) in an area of 3.02 laksh ha. Farmers are getting low net returns/ha . Foxtail millet (korra), crop being its short duration may fit well in double cropping sequence under rainfed situation in black soils. In order to increase Net returns/ha and cropping intensity in drylands this demonstration was planned.

**Details of the activity implemented:** organised Demonstrations on crop intensification in Rainfed black soils (Double cropping), at Appalapuram Village of Banaganapalli mandal and provided critical inputs i.e seed, Fertilizers and P.P chemicals to the selected farmers. During the crop period five field visits were organized to the farmers and others farmers from different villages to show the new cropping system i.e growing of Seteria before bengalgram.

#### Initiation taken for follow up action:

After assessment of technology for two years, the successful results of the technology is considered for large scale adoption in the district. In order to create awareness on double cropping, three trainings were conducted to farmers, adarsha rythus and extension personnel. The methodology and results were published in Daily news papers. Out of 120 trained farmers twenty farmers were selected for demonstration in an area 20 acres and provided critical inputs like seteria seed, fertilizers and need based pp chemicals. Seteria crop was sown during the month of 1 st week of july and harvested during last week of September . second crop i.e Bengalgram was Sucessfully sown during second week of October . During the crop period five field visits were organized to the farmers and others farmers from different villages to show the new cropping system i.e growing of Seteria before bengalgram.

**Result** (photos-Farmers with crop, etc.): The results indicated that highest net returns was obtained with Korra-Bengalgram sequence (Rs32948/ha) than fallow—bengalgram. The net income of the farmers was also increased in Korra-Bengalgram sequence which is calculated as Rs. 32948/- per ha which is Rs. 8535/- more than the Fallow-Bengalgram. This shows the increased profitability through Korra-Bengalgram sequence.

**Conclusion:** Foxtail millet (korra), crop being its short duration may fit well in double cropping sequence under rainfed situation in black soils. Inorder to increase net returns Rs/ha and cropping intensity, Seteria- bengalgram can be successfully grown in rainfed black solis, if on set of monsoon are intime.

#### 4.3 Details of impact analysis of KVK activities carried out during the reporting period

## **5.0 LINKAGES**

## 5.1 Functional linkage with different organizations

S.No.	Name of organization	Nature of linkage
1	FTC, Nandyal	Advisory board member, Krishi Vigyan Kendra as resource persons
2	RARS, Nandyal	Technical support to Krishi Vigyan Kendra
3	ATMA, Kurnool	GB member, AMC member, trainings, demonstrations, Kisan gostis.
4	DAATTC	DLCC member & technical support from DAATTC
5	Dept. of Agriculture	Advisory member for NWDPRA & programs, supply of earthworms and organic farming.
6	Local NGOs	Technical support by KVK
7	Department of Women Development & Child Welfare	Training Programmes to Extension Functionaries
8	Child Fund India	Training on IG activities to Adolescent girls.
9	NABARD	FTTF Programme
10	Department of Animal Husbandry	Organising, Health camps and Technical support
11	Dept.of Horticulture	Trainings
12	ICRISAT	Demonstrations, seed production
13	DRR	Demonstrations

# 5.2 List special programmes under taken by the KVK, which have been financed by State Govt./Other Agencies

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Anganwadi Trainings	April, 2013	Women	
		Development &	
		Child Welfare	
Demonstration and training programmes and extension activities	April, 2013	ATMA	5,30,000-00
Soil test crop response based nutrient application in rice under FTTF scheme	April-2013	NABARD	7,02,000-00

# 5.3 Details of linkage with ATMA

## a) Is ATMA implemented in your district: Yes

S. No.	Programme	Nature of linkage	Remarks
1	Training Programme		
2	Demonstrations		
3	Exposure visit	Financial cumpert from ATMA	
4	Kisan ghosti	Financial support from ATMA	
5	Technology assessment & refinement		

## 5.4 Give details of programmes implemented under National Horticultural Mission

S. No. Programme		Nature of linkage	Constraints if any
		NIL	

## 5.5 Nature of linkage with National Fisheries Development Board

S. No.	Programme	Nature of linkage	Remarks	
		NIL		

## 6. PERFORMANCE OF INFRASTRUCTURE IN KVK

# 6.1 Performance of demonstration units (other than instructional farm)

SI.	Demo	Year	Ar	Details	of production		Amour	nt (Rs.)	Net
No	Unit	of	ea	Variety	Produce	Qty.	Cost of	Gross	income
		estt.				tones	inputs	income	
1	Vermi	2003	-	Udrilus	Vermi	115	2,56,569	6,35,000	3,78,431
	compostin			eugeni	compost				
	g unit								
					Earthworms	1.05			
2	Biopestici	2010	-	P.f.	P.f.	1.169	2,96,500	4,18,058	1,21,558
	des unit			T.v.	T.v.	1.062			
				Neem	Neem	8.514			
				Powder	Powder				
				PSB	PSB	1.323			
				Azatobacter	Azatobacter	0.047			
				Azospirillum	Azospirillum	0.056			

S.	Demo	Year of	Area	Details of production			Amour	nt (Rs.)	Remarks
No.	Unit	estt.		Variety	Produce	Qty.	Cost of	Gross	_
							inputs	income	
1	Dyeing &	1999	-	-	Cotton	75	24,375	37,500	-
	Printing				Sarees				

# a. Performance of instructional farm (Crops) including seed production

Name of	Date of	Date of	Area	Details	of produc	tion	Amoui	nt (Rs.)	Remarks
the crop	sowing	harvest	(ha)	Variety	Type of	Qty	Cost of	Gross	
					Produce	(Qtl).	inputs	income	
Cereals									
Paddy	1 St wk of	Last wk of	4.0	NDLR-7	Seed	200	2.00,000	3,37,500	
	Aug 1 St wk of Aug	Dec 1 St wk of Jan	7.2	BPT-5204	Seed	450	4,50,000	8,00,000	
Millets									
Setaria	3 <sup>rd</sup> wk of July	2 <sup>nd</sup> wk of Oct.	0.6	Suryanandi	Seed	10.0	5,000	25,000	
Pulses	-								
Pigeonpea	Last wk of July	2 <sup>nd</sup> wk of Jan	0.6	LRG- 41 ICPH- 2740	Seed	.9.0	25,000	52,000	
Oilseeds									
Castor	Ist wk of Oct	2 nd wk of April	1.0	PCH- 111	Seed	4.0	20,000	40,000	

## 6.3 Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,)

SI.	Name of the	Qty	Amour	nt (Rs.)	Domonilo
No.	Product	tonnes.	Cost of inputs	<b>Gross income</b>	Remarks
1	Vermicompost	115	2,56,569-00	6,35,000-00	
2	Earthworms	1.05			
3.	Pseudomonas	1.169	63,870-00	1,16,900-00	
4.	Trichoderma	1.062	42,480-00	1,06,200-00	
5.	Neem powder	8.514	85,140-00	1,24,458-00	
6.	PSB	1.323	41,010-00	66,150-00	
7.	Azatobacter	0.047	1,660-00	2,350-00	
8.	Azospirillum	0.056	2,340-00	2,800-00	
Т	otal	128.221	4,93,069-00	10,53,858-00	

## 6.4 Performance of instructional farm (livestock and fisheries production)

SI.	Name	Details of production			Amou	ınt (Rs.)	Remarks
No	of the	Breed	Type of	Qty.	Cost of	Gross	_
	animal /		Produce		inputs	income	
	bird /						
	aquatics						
1	Poultry	Rajasri	Chicks	9430	447814.00	565800.00	

## **6.5** Rainwater Harvesting

## Training programmes conducted by using Rainwater Harvesting DemonstrationUnit

Date	Title of the training course	Client (PF/RY	No. of Courses		of Particip	_	No. of	SC/STParti	cipants
		/EF)		Male	Female	Total	Male	Female	Total

## 6.6 Utilization of hostel facilities

Accommodation available (No. of beds): 40

Months	Title of the training course/Purpose of stay	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April-13		30	90	
		30	90	
Total		60	180	
May,13		25	75	
Total		<b>25</b>	75	
June,13		30	60	
Total		30	60	
July,13		102	281	
Total		102	281	
Aug,13		26	130	
Total		26	130	
Sep,13				
		72	72	
Total		72	72	
Oct,13				
		52	260	
Total		52	260	
Nov,13		114	228	
Total		114	228	
Dec,13		201	603	
Total		201	603	
Jan,14		45	45	
Total		45	45	
Feb,14		210	420	
Total		210	420	
Mar,14		270	540	
Total		270	540	
<b>Grand total</b>		1207	2894	

## 7. FINANCIAL PERFORMANCE

## 7.1 Details of KVK Bank accounts

Bank account	Name of the Bank	Location	Account Number
With Host Institute With KVK			
Main A/C	Andhra Bank	Banaganapalle	SB 005910011006023
Revolving Fund	Andhra Bank	Banaganapalle	SB 005910011006024

# 7.5 Utilization of KVK funds during the year 2013-14

S.	Particulars	Sanctioned	Released	Expenditure			
No.							
A. RE	A. RECURRING ITEMS						
1	Pay & Allowances	77,00,000	77,00,000	81,81,474-00			
2	Traveling allowances	1,20,000	1,20,000	1,16,191-00			
3	Contingencies						
Α	Stationery, telephone, postage and other						
	expenditure on office running, publication of	4,30,000	4,30,000	4,27,721-00			
	Newsletter and library maintenance (purchase of News paper & Magazines)						
В	POL, repair of vehicles, tractor and equipments						
С	Meals/refreshment for trainees (celling upto			71,035-00			
C	Rs.40/day/trainee be maintained)			71,033 00			
D	Training material (posters, charts, demonstration			15,078-00			
	material including chemicals etc., required for						
	conducting the training).						
Ε	Frontline demonstration except oilseeds and pulses			75,946-00			
	(minimum of 30 demonstration in a year)						
F	On farm testing (on need based location specific	3,00,000	3,00,000	96,430-00			
	and newly generated information in themajor	3,00,000	3,00,000				
	production systems of the area)						
G	Training of extension functionaries			16,736-00			
Н	Honarorium for Trainers						
I	Establishment of Soil, Plant & Water Testing						
,	Laboratory			6 612 00			
J K	Libray Maintenance of farm			6,613-00 15,823-00			
Λ	TOTAL (A)			13,823-00			
B.Tec	hnology Demonstration on Pulses						
А.	Redgram 30 demonstrations for Kharif @			1,19,235-00			
	Rs.4000/demo = Rs.120000			, ,			
В.	Bengalgram 30 demonstrations for Rabi @			1,18,871-00			
	Rs.4000/demo = Rs.120000	3,20,000	3,20,000				
С.	Contractual Services = Rs. 60000			60,000-00			
D.	Micro irrigation			19,965-00			
	TOTAL (B)			10,43,453-00			
C.FLD	Cotton						
D M =	TOTAL (C)						
	n Recurring Contingencies Works						
1							
2	Equipments including SWTL & Furniture						
3	Vehicle (Four wheeler/Two wheeler, please specify)						
4	Library (purchase of assets like books & journals)						
_	TOTAL (D)						
Е	REVOLVING FUND	00 70 000	00 70 000	02.44.442.02			
	GRAND TOTAL (A+B+C+D+E)	88,70,000	88,70,000	93,41,118-00			

# 7.5 Status of revolving fund (Rs. in lakhs) for the three years

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April of each year
April -2011 to March-2012	41,01,978-00	39,34,975-00	37,64,788-00	42,72,165-00
April -2012 to March-2013	42,72,165-00	35,31,491-00	25,93,520-00	52,10,136-00
April-2013 to March -2014	52,10,136-00			57,30,752-00

# 8.0 Please include information which has not been reflected above (write in detail).

## 8.1 Constraints

- (a) Administrative
- (b) Financial
- (c) Technical

#### **ANNEXURE - 1**

## **District Profile:**

#### 1. General Census:

Area :17658 sq. km **Population** :35.29 lakhs : 17.96 lakhs Male population Female population : 17.33 lakhs No of households : 6.99 lakhs Inhabited villages : 1514 Literates : 15.92 lakhs Literacy rate : 53.22 : 670.0 mm Normal rainfall Revenue villages : 928 : 898 Gram panchayats

#### 2. Agriculturural and Allied Census:

Gross cropped area 9.91 lakh ha 8.86 lakh ha Net cropped area Cropping intensity 111.87 % 2.31 lakh ha Gross area irrigated Net irrigated area 1.92 lakh ha **Forests** 3.18 lakh ha Cultivable waste 0.77 lakh ha Uncultivable land 0.99 lakh ha Land put to non agricultural use 1.35 lakh ha Permanent pastures 0.04 lakh ha Other fallow lands 1.21 lakh ha **Current fallows** 1.16 lakh ha Net area sown 8.86 lakh ha Area sown more than once 1.05 lakh ha No of marginal farmers 2.02 lakhs No of Small farmers 1.41 lakhs No. of Medium farmers 0.51 lakhs No. of Large farmers 0.09 lakhs Cultivators 3.64 lakhs Agricultural labour 6.25 lakhs Livestock population 24.44 lakhs Cattle population 4.29 lakhs 4.59 lakhs No of Buffaloes Sheep 11.49 lakhs Goat 3.87 lakhs Pigs 13.47 lakhs Poultry 11.79 lakhs

## 3. Agroclimatic Zones:

Scarce rainfall zone Low scanty and erratic rainfall due to which successful crop production

with good yields is unexpectable and dryland agriculture is

predominant with a variety of rainfed crops in the zone.

#### 4. Agro –Eco systems:

K.C.Canal irrigated red soils

T.B.Low level canal irrigation red soils

T.B.High level canal irrigation black soils

K.C.Canal irrigation blacksoils

T.B.Low level canal irrigation black soils

T.B.high level canal irrigation black soils

Problem soils

Tank irrigation red soils

Tank irrigation black soils

Well irrigation red soils

Rainfed red soils

Rainfed black soils

#### 5. Major and micro farming systems:

- 1 Agriculture + Horticulture
- 2 Agriculture + Dairy
- 3 Agriculture + Horticulture + Dairy
- 4 Agriculture + Horticulture + Pastural culture

#### 6. Major production systems:

Paddy- Paddy,

Greengram-Paddy,

Paddy- Groundnut/ vegetables

Paddy-fallow

Paddy/Groundnut/vegetables-fallow

Paddy- Greengram- Paddy,

Paddy/Groundnut-vegetables

Sunflower/ Groundnut-fallow

Groundnut/ Cotton-fallow

Sunflower- Groundnut

**Groundnut-Sunflower** 

Cotton-fallow

Paddy- Sunflower

Cotton/Onion-fallow

Cotton/Onion/ Chillies- fallow

Sunflower- Groundnut+ Redgram

Groundnut+ Jowar, Cotton

Cotton+ redgram/ Korra/ Redgram-fallow

Jowar/Bengalgram/Tobacco-fallow

Jowar-fallow

Groundnut-fallow

#### 7. Major agriculture and allied enterprises

Agriculture

Horticulture

Floriculture

Olericulture

Silviculture

Pastoral culture

Dairy farming

Pisciculture

Sheep farming

Goatry

#### Agro-ecosystem Analysis of the focus/target area

#### 1.Names of villages, focus area, target area etc.

Farming situation	Name of the village	Focus area	Target area

#### 2. Survey methods used (survey by questionnaire, PRA, RRA, etc.)

**Questionnaire**: Primary and secondary data about the villages was collected through a pre scheduled questionnaire by gathering a group of farmers. Information about the management practices being followed and technology used was collected from individual farmers through semi structured interview schedule.

3. Various techniques used and brief documentation of process involved in applying the techniques used like release transect, resource map, etc.

**Resource map**: Villagers were involved in a transect walk along the pathways of the village and later on a social map was drawn to know the resources available in and around the villages.

#### 4. Analysis and conclusions

#### Rainfed red soils:

Major crops are Sunflower, Groundnut, Jowar and Redgram Specific constraints are poor soil fertility and water retentivity, late rains, drought and frequent dry spells. Production constraints are improper spacing, non usage of recommended fertilizers, high doses of pesticides. Potentials identified are rainfed greengram to enrich soils, encourage inter crops against failures.

#### Rainfed black soils:

Major crops are Bengalgram & Cotton. Specific constraints are erratic rainfall, drought, frequent dry spells and terminal drought in bengalgram and jowar. Production constraints are improper spacing, non usage of recommended fertilizers, high doses of pesticides. Potentials identified are rainfed greengram to enrich soils, encourage inter crops against failures.

#### TBP LLC canal irrigated black soils:

Main crops are Groundnut, Sunflower, Paddy: Specific constraints are late and uncertain release of water due to erratic rainfall, non availability of water in tail end areas. Production constraints are poor pod filling in groundnut. Potentials identified are double cropping in tail end areas and growing of off – season vegetables.

#### TBP LLC canal irrigated red soils:

Main crops are Paddy, Groundnut and vegetables like Onion Chillies and Tomato. Specific constraints are soils poor in organic carbon content, water problem in tail end areas due to erratic rainfall leading to non availability of water in critical crop stages. Production constraints are high N&P application in paddy, poor pod filling in groundnut. Potentials identified are greengram or green manure crop preceding paddy to enrich soil and kharif pulse crop in the follow areas.

# 5. List of location specific problems and brief description of frequency and extent/ intensity/severity of each problem

Rainfed red soils: The area being mostly rainfed, farmers were found to be non aware of moisture conservation measures, methods of fertilizer application, appropriate spacing etc.

- Need based plant protection measures are not adopted.
- Traditional varieties are cultivated. Crop rotation is not followed.

#### • Groundnut:

- Proper plant population not maintained.
- Usage of local variety for a long time.
- Improper fertilizer management.
- Lack of knowledge on usage of bio pesticides.

#### **Rainfed black soils:**

- Mungari cotton:
  - o Proper spacing not adopted.
  - o Non awareness of IPM measures.

#### • Bengalgram:

- o No practice of growing preceding crop to Bengalgram.
- o Latest improved varieties not adopted.
- o Proper management practices not followed.
- o IPM techniques not adopted.

## TBP LLC canal irrigated red soils:

- Improved and high yielding varieties not grown.
- Indiscriminate usage of fertilizers.
- Recommended spacing and plant population not followed.

• Timely and proper plant protection measures not adopted.

## Paddy:

- High doses of fertilizers being applied.
- IPM techniques not adopted.

## Groundnut:

- Improved varieties not adopted.
- IPM measures not followed.
- Non usage of micronutrients.

## Tank irrigation black soils:

## Chillis:

- Indiscriminate usage of Fertilizers and pesticides.
- Direct sowing of seed. No nursery management.

#### **Annexure 2**

#### **Proceedings of Scientific Advisory Counsil Meeting held on 07-03-2014.**

The SAC meeting was held on 7<sup>th</sup> March, 2014 at KVK and was presided over by Dr. M.R.Sreenivasulu, Special Officer, SHE & CS. At the outset, Sri. K.V.Ramanaiah, SMS (SS) has welcomed the SAC members, Guests viz., Dr. Y.Padmalatha, ADR, RARS, Nandyal and Dr. Chari Appaji, Principal Scientist, ZPD and farmers. The programme started with playing of ICAR Song.

Significant Achievements of KVK and Action Taken Report were presented by Smt. G.Dhanalakshmi, Programme Coordinator, KVK. The Work Done Reports for 2013-14 and Action Plans 2014 were presented by individual SMSs Viz., Crop Production, Soil Science, Plant Protection, Horticulture, Animal Husbandary and PA, Home Science.

The following observations, remarks and suggestions were made by the SAC members.

#### Dr. Y.Padmalatha, ADR, RARS, Nandyal:

- Organic farming is good in Vegetables and Horticulture crops where premium prices can be realized.
- Organic farming in Rice is not necessary. The residual effect of inorganic chemicals if any will
  be detoxified in due course of time after harvest in storage, dehulling, polishing, soaking in
  water and cooking.
- Green manuring before paddy followed by fertilizers application has increased the availability of micronutrients in the crop (found in grain and straw) viz., Zinc, Fe, Mg, Mn etc. compared to crop taken up without green manuring and fertilizers alone.
- Non Bt cotton need to be promoted NDLH 1935 (Hopper tolerant)
- Extra early variety of Setaria (SIH 3121) need to be tested in double cropping.
- NBeG 3 seed production need to be taken up by KVK.
- High seed rate need to be given in NBeG 47 (variety for combine harvesting) for realizing maximum yield benefits.
- Training Programmes and Publications need to be improved in Agronomy.
- KVK is good in conduction of collaborative programmes.
- KVK is maintaining good amounts of Revoving fund (Rs. 58 lakhs). It is appreciable that each SMS is contributing to RF.
- As cotton area is at increase, high density in cotton need to be tested.
- Fertilizer recommendations based on STBR need to be demonstrated for easy understanding.
- Fertilizer management in Bt. Cotton need to be popularized.

- Top dressing of Gypsum for Paddy @ 500 kg/ha in 2 − 3 splits. Gypsum top dressing need to be done in organic farming also.
- Vermicompost can be applied as top dressing in paddy for increasing Nitrogen availability in Organic farming.
- In OFT of chillis results for Powdery mildew and Fruit rot need to be showed separately.
- Crop rotation in Rabi Groundnut with Sorghum to be taken up for decreasing stem rot incidence (Net returns to be calculated based on the system)
- Irrigations in Rabi groundnut need to be optimized for decreasing stem rot incidence.
- Spray for LLS need to be included in stem rot management with *Trichoderma viride* and seed treatment.
- Spraying of Zinc Sulphate at fruit setting stage improves shelf life of mango.
- Demonstrations on stem necrosis in marigold need to be taken up.
- Collaborative programmes with ARS, Anantapur need to be taken up in Animal Husbandary.
- Spineless Cactus highly useful for fodder (from Jodhpur University) may be included in fodder demonstrations.
- Supply of drudgery reduction implements to RARS.
- Enterpreneurial activities need to be improved in Homescience.

#### Dr. Chari Appaji, Principal Scientist, Zonal Project Directorate, Hyderabad

- SAC report should be circulated well in advance to the members.
- Feedback for research and extension need to be given by each Scientist in their subject.
- Each of trials may end up in some success stories. Such success stories need to be documented.

#### Dr. M.R. Sreenivasulu, Special Officer, SHE & CS

- Testing for chemical fertilizer and herbicide residues along with pesticide residues in organic produce need to be done to know its impact on quality of Organic crop produce.
- Zinc also may be included in complex fertilizers and the same may be displayed on bag label.

#### Sri. P.Wilson, ADA (JDA Representative), Nandyal

- Crop specific Integrated Crop Management methods viz., Intercropping, trap crops, seed treatment need to be given as pamphlets.
- Preparation of Pamphlets on use of bio pesticides like Trichoderma and Pseudomonas.
- Steps for increasing usage of Trichoderma and Pf need to be taken up.
- Shared his experience in Organic farming in Redgram.
- As area under Bt cotton and Maize is increasing day by day awareness need to be created on management of these crops, especially 'K' deficiency in Maize.

#### Dr. S. Saralamma, Principal Scientist & Coordinator, DAATTC, Kurnool

- Maize hybrid DHM 117 may be used as dual purpose crop for fodder and grain.
- Cotton hybrid Ajit 155 is a good yielder with less incidence of sucking pests.

#### Dr. Y.Narasimhudu, Principal Scientist & Programme Coordinator, KVK, Yemmiganur

• As per the 8 year station trials at RARS, Nandyal on Organic paddy, there is no quality difference in either Organically or Inorganically grown rice.

#### Sri. N. Sudhakar, ADA, Nandyal

- Taking up trainings in collaboration with KVK on drought.
- Crop planning as per the rainfall and ground water situation need to be done.

#### Sri. C. Subba Reddy, MAO, Banaganapalle

• Convergence with KVK is good in all extension activities.

#### Sri. M. Madan Mohan Goud, Horticulture Officer, Koilakuntla

- Explained about different schemes of Hort. Department in 2014-15.
- More awareness among farmers need to be created on high density planting.
- Along with Carrot and Beetroot awareness on Gourds under pendal cultivation has to be taken up.

#### Sri. M.Srinivasa Reddy, BTM, ATMA

• Seed production in Diancha may be taken up by farmers.

#### Smt. M. Suvarna, Supervisor (Rep. of CDPO), Banaganapalle

 Income Generating activities and Nutrition education programmes need to be taken up in interior villages.

#### Sri. Y.Srinivasa Reddy, Assistant Hydrologist, Kurnool

• Training programmes need to be taken up with department of agriculture and irrigation department in May to create awareness on water budgeting.

## Sri. B.R.Gangavar, Technical Officer, NHRDF, Kurnool

Explained about various programmes of NHRDF.

#### Sri. Srinivasulu, Farmer, Dornipadu

- Expressed his problems in Bt cotton with regard to sucking pest complex and BPH in Paddy.
- Expressed his satisfaction in taking up Soil Test Crop Response based nutrient management in rice, where in he has saved about Rs. 4000/- per ac. On chemical fertilizers.

#### Sri Sankar Reddy, Dairy Farmer, Yagantipalle

- Seed of Lucerne and Hedge Lucerne may be provided.
- Good varieties of maize for both fodder and Grain may be suggested.
- Requested digging of farm ponds under NICRA.

## Sri. Tollamadugu Subba Reddy, Farmer, Banaganapalle

 Expressed that sowing on one side of ridge is better than double side sowing in Maize in terms of Yield and Saving of seed cost.

#### Sri. Venkateswar Reddy, Farmer, Owk Mettapalli

- Expressed his satisfaction Programme.
- Use of Gypsum in sodic soils, increased the plant stand in Rice.
- By utilizing Millet processing unit extra income was generated.
- over Soil Test Based Fertilizer Recommendation in Bt Cotton.

## Smt. B.Rajeswaramma, Women Farmer, Yagantipalle

- Expressed her satisfaction over use of serrated sickles that reduced drudgery.
- Expressed her satisfaction over Calf Registration The SAC meeting was concluded by offering Vote of Thanks by Sri. M.Sudhakar, SMS (CP).

#### **List of Participants attended Scientific Advisory Committee Meeting:**

S.No	Name	Designation
1.	Sri. Y.Srinivasa Reddy	Assistant Hydrologist, Kurnool
2.	Sri. M.Madana Mohan Goud	HO, Koilakuntla
3.	Sri. N.Srinivasa Reddy	BTM, ATMA, Nandyal
4.	Smt. M.Suvarna	Supervisor, ICDS, BPL
5.	Sr. P.Wilson	ADA (Rep.of JDA), Kurnool
6.	Sri. N.Sudhakar	ADA, Nandyal
7.	Dr. Y. Narasimhulu	PC, KVK, Banavasi.
8.	Dr. Chari Appaji	PS, ZPD, Zone V, Hyd.
9.	Dr. Y. Padmalatha	ADR, RARS, NDL.
10.	M.R. Sreenivasulu	Spl. Officer, SHE&CS, Y.palle.
11.	G. Dhanalakshmi	Programme Coordinator
12.	Dr. S. Saralamma	PS & Coordinator
13.	Sri. Gangavar	NHRDF, Kurnool
14.	Sri. C.Subba Reddy	MAO, Banaganapalle
15.	Sri. B.Sreenivasulu	Farmer, Dornipadu
16.	Sri. B.V.Subba Reddy	Farmer, Banaganapalle
17.	Sri. Venkateswar Reddy	Farmer, Owk Mittapalle
18.	Sri. D.Sankar Reddy	Farmer, Yagantipalle
19.	Sri. M.Subramanyam	Farmer, Yagantipalle
20.	Sri. M.Chandra Sekhar	Farmer, Kaipa
21.	Smt. B.Rajeswari	Women farmer, YPL
22.	Sri. M.Krishnudu	Farmer, Yagantipalle

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