Shri Hanumantharaya Educational and Charitable Society

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National Innovations in Climate Resilient Agriculture (NICRA)

Annual Progress Report 2017-18.

Kurnool district of Andhra Pradesh is one of the drought prone districts of the state. Cherlokotturu and Krishnagiri villages which are located at a distance of 14 km from Banaganapalle Panchayat of Banaganapalle mandal with 70% of rainfed agriculture were selected for out reach programme of NICRA project. Desi cotton and redgram were the main crops grown during kharif and Jowar in rabi. Most of the crops get affected with late onset of monsoons followed by dry spells during critical crop growth periods, which in turn severely affecting yield.

During Kharif-17, the short duration millets viz., Foxtail millet SIA 3088 and SIA- 3221 varieties of 65-75 days duration and tolerance to drought and downy mildew were introduced in place of jowar and desi cotton. Like - wise inter copping systems with korra and red gram (5:1), in red gram replacement of long duration Variety with Asha-87119 and PRG-176 were taken up.

This Kharif-17 has started with early monsoon rains during first week of June with Excess rain fall. By taking the advantage of rains received earlier Kharif sowings were taken up and all crops had good germination and good vegetative growth. But subsequent dry spell (prolonged) for 45 days during July to August 7 th had deleterious effect on early duration crops like Setaria , Blackgram and Green gram. Red gram suffered due to early phase drought. The rains that received during second week of August could help to recoup from ill effects of drought. Setaria and other pulses which were adversely effected at reproductive phase, failed to express full yield potential as a result of which poor grain yields were recorded.

With an objective to control the calf mortality, KVK also introduced calf registration programme which was well received by the farmers. The registered calves under this programme were provided medical and nutritional attention up to six months.

For conservation of soil and water, conservation furrows, sub soiling and demonstrations on Dead furrows were taken up in rainfed crops like red gram.

Burrakunta after desilting

Farm Pond filled with water

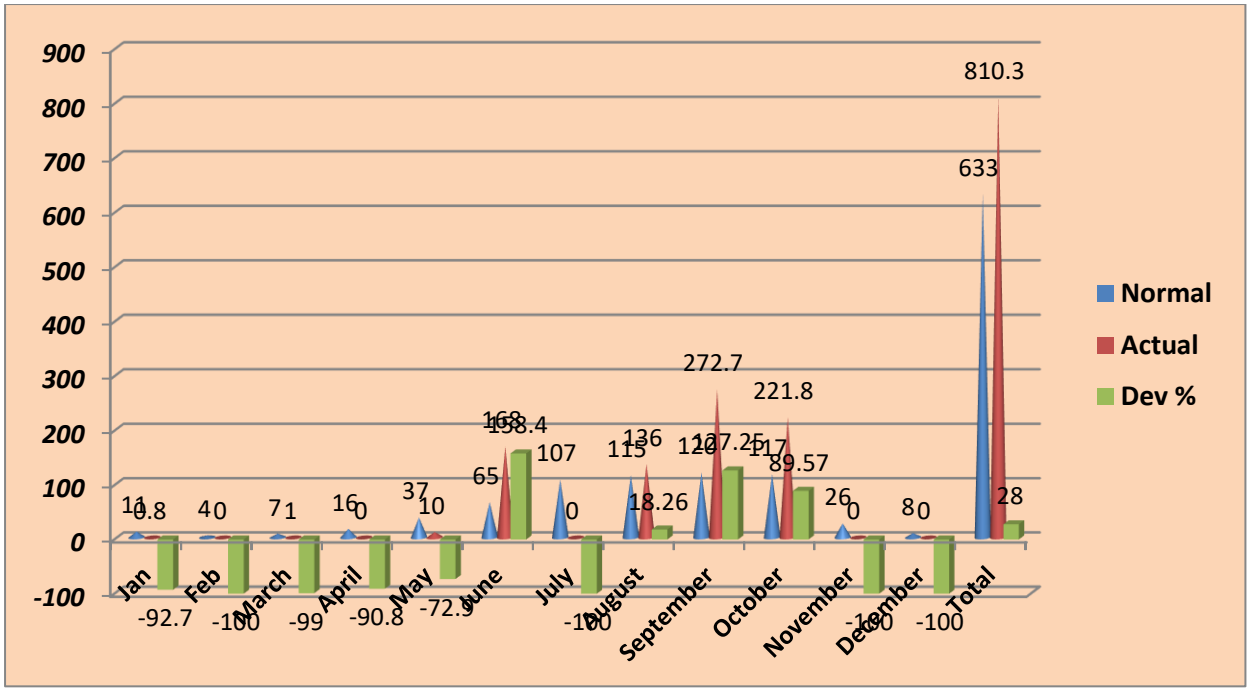
Major Climatic Details of the Village:

Table 1: Distribution of rainfall in comparison with normal 2017

Month	Normal rainfall (mm) Based on min.10 years	Rainfall (mm)	Difference of rainfall in comparison with normal rainfall (mm)	% Deviation i.e., Actual – Normal × 100 Normal
		2017	2017	
Jan	11.0	0.8	- 10.2	-92.7
Feb	4.0	0.0	- 100	-100
March	7.0	1.0	- 6.0	-99
April	16.0	9.2(2)	- 6.8	-90.8
May	37.0	10.0 (1)	- 27	- 72.9
June	65.0	168.0 (8)	103.0	158.4
July	107.0	0.0	-107.0	-100
August	115.0	136.0 (6)	021.0	18.26
September	120.0	272.7 (7)	152.7	127.25
October	117.0	221.8 (11)	104.8	89.57
November	26.0	0.0	-026.0	-100
December	8.0	0.0	-008.0	-100
Total	**633.0**	**819.5**	**186.5**	**29.46**
Total actual rainfall during cropping season (Sowing to harvest)	**558.0**	**798.5**	**240.5**	**43.1**

Table 2: Distribution of rainfall in NICRA Village during 2017:

Day	June	July	August	September	October	November	December
1	000.0	000.0	000.0	000.0	035.6	000.0	000.0
2	000.0	000.0	000.0	000.0	000.0	000.0	000.0
3	000.0	000.0	000.0	000.0	004.8	000.0	000.0
4	000.0	000.0	000.0	000.0	006.2	000.0	000.0
5	025.2	000.0	000.0	000.0	006.0	000.0	000.0
6	000.0	000.0	000.0	001.4	005.0	000.0	000.0
7	85.0	000.0	000.0	020.0	034.4	000.0	000.0
8	000.0	000.0	011.6	000.0	074.0	000.0	000.0
9	000.0	000.0	000.0	000.0	016.2	000.0	000.0
10	000.0	000.0	000.0	000.0	000.0	000.0	000.0
11	000.0	000.0	000.0	000.0	026.4	000.0	000.0
12	000.0	000.0	000.0	000.0	001.8	000.0	000.0
13	000.0	000.0	000.0	000.0	001.0	000.0	000.0
14	006.6	000.0	000.0	083.5	004.0	000.0	000.0
15	007.6	000.0	014.0	014.0	006.4	000.0	000.0
16	009.6	000.0	000.0	028.4	000.0	000.0	000.0
17	000.0	000.0	000.0	008.2	000.0	000.0	000.0
18	014.8	000.0	000.0	000.0	000.0	000.0	000.0
19	000.0	000.0	000.0	000.0	000.0	000.0	000.0
20	000.0	000.0	000.0	000.0	000.0	000.0	000.0
21	011.6	000.0	000.0	000.0	000.0	000.0	000.0
22	000.0	000.0	000.0	000.0	000.0	000.0	000.0
23	008.4	000.0	000.0	000.0	000.0	000.0	000.0
24	000.0	000.0	015.0	006.2	000.0	000.0	000.0
25	000.0	000.0	000.0	000.0	000.0	000.0	000.0
26	000.0	000.0	055.0	000.0	000.0	000.0	000.0
27	000.0	000.0	000.0	000.0	000.0	000.0	000.0
28	000.0	000.0	030.4	111.0	000.0	000.0	000.0
29	000.0	000.0	000.0	000.0	000.0	000.0	000.0
30	000.0	000.0	000.0	000.0	000.0	000.0	000.0
31	--	000.0	010.0	--	000.0	--	000.0
Total:	**168.8**	**000.0**	**136.0**	**272.7**	**221.8**	**000.0**	**000.0**



During the Kharif-17 (June- October) a total quantity of 798.5 mm rainfall was received as against normal rainfall of 524.0 mm. Kharif sowings were taken up with the rain fall received during 1st week of June.

Rabi sowings i.e. Bengal gram were taken up with rain rainfall received during 1st and 2 nd week of October.

Summary of interventions during 2017-18

NRM

Name of the intervention	No. of units	Area (ha)	No. of farmers
Farm ponds	02	04	05
Renovation of Diversion canal	01	02	04
In-situ conservation through Furrows	15	12	06
Total	**18**	**18**	**15**

Crop Production

Name of the intervention	Area (ha)	No. of farmers
Intercropping system(Red gram+ Seteria)	57.6	72
Drought tolerant variety Red gram (PRG-176)	80	100
Bengal gram variety NBeG-3	20	25
Jowar varieties NJ-2647 and NJ-2446	20	30
Alternate crop (Seteria,SIA-3088)	55.2	92
	236.8	**319**

Livestock and fisheries:

Livestock

Name of the intervention	No. of units (Where ever applicable)	No .of animals benefitted	No. of farmers
Calf Registration	50	50	50
RSSM	50	50	50
Backyard poultry	30	--	30
Silage	25	25	25
Total	**155**	**125**	**155**

Fodder production

Interventions (Fodder varieties/Azolla/Hydroponics etc.,)	No. of Units	No. of farmers	Area (ha)
Co-4, Super Napier	01	10	01
Total	**01**	**10**	**01**

Institutional Interventions

Name of the intervention	Area (ha)	No. of farmers covered
Fodder Bank	01	10
Seed Bank	15	25
Custom hire centre	46	21
Total	**62**	**99**

Capacity Building

Date	Title of the training programmes	Duration in days	No.of programmes organized	No. of participants			Remarks
				Male	Female	Total	
12-07-2017, 08-02-2018	Natural resource management	01	02	76	09	85	
20-07-2017	Crop diversification	01	01	42	02	44	
11-08-2017, 3-10-2017, 11-10-2018	Crop management	01	03	96	15	111	
30-08-2017	Live stock management	01	03	62	20	82	
14-09-2017, 06-03-2018	Fodder and feed management	01	02	48	12	60	
08-102017, 14-2-2018 22-12-2017	Crop pest disease management Redgram & Bengalgram	01	03	105	13	118	
08-11-2017	Training on Fodder Varieties	01	01	26	12	38	

05-12-2017	Post harvesting technologies in different crops	01	01	28	04	32	
05-01-2018	Farm implements &machineries	01	01	28	04	32	
	Total	**09**	**16**	**511**	**91**	**602**	

Extension Activities:

Date	Title of the activity	No.of programmes organized	No. of participants			Remarks
			Male	Female	Total	
29-08-17 07-09-17	Method demonstrations Seed treatment of Jowar & Bengal gram	02	22	-	22	
Every Tuesday & Friday	Agro advisory services	51	3315	408	3723	
11-08-17	Awareness on Production technologies in Rain fed crops	01	38	06	44	
13-09-17, 22-10-17, 11-11-17, 14-12-17	Diagnostic visits	04	127	16	143	
01-10-17, 27-11-17, 25-01-18, 14-02-18	Group discussions	04	134	18	152	
	Total	**62**	**3636**	**448**	**4084**	

Weather – Crop – Pests & Diseases Situation in NICRA Village (2017-18)

Item/Month	June,2017	July, 2017	August, 17	Sep., 17	October, 17	Nov., 17
Rainfall	**168.8**	**000.0**	**136.0**	**272.7**	**221.8**	**000.0**
Temperatures	21.0-37.4^{0}C	22.2-36.5^{0}C	23.5-36.0^{0}C	21.4-34.0^{0}C	18.0-34.0^{0}C	
Dry spells	23rd	-	Aug 7th	No dry spell	Oct 16th	Up to 30th
	45days			79 days		
Setaria		17th to 5th Aug		Vegetative to PI stage	Harvested	
Pest/Disease				No pest/disease		
Redgram		17th to 5th Aug		Vegetative	Vegetative	Bud initiation
Pest/Disease					Jassids	Jassids, Webber (1 - 2%)
Bt Cotton		17th July to 15th Aug		Vegetative/ Square	Square/Flowering/Boll	Flower/Boll
				Jassids, Thrips, Whiteflies	Jassids, Whiteflies, Pink boll worm (1-3%)	

20th to 30th	Vegetative	Tasseling	Cob formation	Grain maturation to harvest & Rabi Sowing	Harvesting & Rabi crop in vegetative stage
	Stem borer (5-8%)		No pest		Stem borer (1-5%)
			17th to 10th October		Vegetative
				Shoot fly (10-12%)	Aphids (8-10%) Stem borer (1-5%)
Bengal gram	Dry spell				47 days
					Helicoverpa (1-3%)

Incidence of biotic and abiotic stress:

1. **Setaria :** No pest incidence was observed during the crop growth period. The crop suffered due to dry spells in July and October, which affected the yields (3-4 q/ac only obtained).
2. **Bt. Cotton :** The crop was sown during second week of August. During early vegetative stage, crop received good rains and growth was good. But due to increased temperatures in August and September, Incidence of sucking pests (Aphids 4% and Jassids 5-6/leaf) were observed in October and (Jassids 10-12/leaf and Whiteflies 6-8/leaf) In November due to dry spell prevailed, square drop incidence is high.
3. **Jowar :** The crop was sown with the rains of September. The crop received good rains and recorded optimum growth. Incidence of shoot fly (10-12%) and Stem borer (1-5%) was observed during this period.
4. **Maize:** The crop was sown in 2nd FN of June and suffered the damage of Stem borer (5-8%) in Kharif and due to dry spells of July the crop was affected. The yields recorded were only 8-10q/ac. In some farm holdings of crops was removed.
5. **Redgram:** Majority of the crop was sown during 2nd FN of June. The rains of August and September helped the crop to put forth good vegetative growth. But due to dry spell from November to December 31 st (79 days), jassids and webber incidence were noticed. Now the crop is at Harvesting stage, experiencing moisture stress.
6. **Bengal Gram:** Due to prolonged dry spell after sowing of Bengal gram (oct 2 nd week) crop was suffered with severe moisture stress, hence poor yields were recorded and also less incidence of helicoverpa was noticed.
7. **Mango:** Flowering was delayed due to heavy rain fall received during the month of October-2017.
8. **Pomegranate:** Observed bacterial leaf spot due to high moisture content in the months of September &October -2017.

Effect of Dry spells on standing crops and management practices:

Crop/cropping system	Time of drought	Management strategies
Redgram	Early season drought 23/6/17 to 7/8/17)45 days dry spell after sowing)	Foliar spray of 2% urea or 1.0% kno3 Formation of conservation furrows between two rows of Redgram as preventive measure
		Frequent inter cultivation to conserve soil moisture Foliar spray of 2% urea or 1.0% kno3
	Reproductive phase	Foliar spray of 2% urea or 1.0% kno3
Seteria	Early season drought 23/6/17 to 7/8/17)45 days	Frequent inter cultivation to conserve soil moisture Foliar spray of 2% urea or 1.0% kno3
Bt cotton	Vegetative stage to(Oct-16 th to Dec-31)(79 days)Reproductive phase	Frequent inter cultivation to conserve soil moisture Spray of urea/DAP @2%.
		Boran application @0.2% Supplemental irrigation with harvested rain water in farm ponds
Jowar	10/10/17 to 31/10/17 (23 days)	Foliar spray of 2% urea or 1.0% kno3 Formation of conservation furrows .
Maize	Early season drought 23/6/17 to 7/8/17)45 days days dry spell after sowing)	Earthing up to conserve soil moisture Foliar spray of 2% urea or 1.0% kno3
		Foliar spray of 2% urea or 1.0% kno3

Moisture stress in July & Aug for 45 days

1.Thematic area: NATURAL RESOURCE MANAGEMENT

In-situ moisture conservation

1. Name of the technology	In-situ moisture conservation technologies in Red gram
2. Objectives of the study	To enhance the productivity of rain fed Red gram
3. Thematic area	NRM
4. Problem diagnosis	Low and uncertainty of productivity due to recurrent intermittent drought/erratic rainfall
5. Micro farming situation	Rain fed Medium Black soils
6. Year of start	2011
7. Year of completion	2016
8. Comparisons/treatments	
a) Farmers practice* (Describe the practice) b) Improved technology (mention test crop and varieties/variety used in demonstration)	a)Farmers practice (No conservation measures between two rows of Red gram) a)Formation of Conservation furrows in between two rows of Red gram at 30-35 DAS
9. Area covered for each Demonstration (ha)	0.4
10. No. of farmers covered	15
11. Amount spent for each demonstration/each farmer	400/-
12. Contribution of demonstration from a) Project b) Farmers	 200/- 200/-
1. Results (Yield, Cost of cultivation, Gross income, Net income, B:C ratio, Soil moisture. Water stored (Cum) in depth, Water used for supplemental irrigation/life saving.	

Treatments	Seed yield (kg/ha)	Fodder Yield (kg/ha)	Cost of cultivation (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Farmers practice	924	--	21540	49896	28356	1:2.31
Improved technology	1186	--	22860	64044	41184	1:2.80

Red gram Rs 54/-Kg

This area falls under scarce rainfall zone and frequent prolonged dry spells at critical crop growth stages resulting poor yields were observed. To cope up with this problem, in- situ moisture conservation measures by formation of conservation furrows between rows of red gram during Kharif in an area of 06 ha were taken up.

The results indicated that Red gram variety ICPL-87119 with In-situ conservation measures and sub soiling gave higher yield 1186 kg/ha, which were 26 per cent than that of farmers practice 924 kgs/ha in medium black soils.

De-silting of existing percolation tank:

The project committee proposed to de-silt the existing percolation tank (Burrakunta) for deepening and use of tank silt for marginal soils to improve soil physical properties and fertility. Focus group interactions were held with the villagers to sensitize them on the importance of water harvesting and application of tank silt. The de-silting of Burrakunta (PT) was taken up during July 2012 and 1260 Cu.mt silt was excavated. The silt was applied to 6 ha covering 10 farmers and transportation cost was borne by the farmers.

Chemical properties and nutrient status of tank silt was analyzed before application into the fields and the average pH and EC of tank silt was 7.95 and 0.35 dSm^{-1} respectively which were under normal range. The organic carbon content of silt was high (0.89 %), available phosphorus (112ppm), Potassium (883ppm), Calcium (52me.eq/100gsoil), magnesium (5.5me.eq/100gsoil), ferrous (33.5ppm), copper(3.62ppm) were found in high range. The farmers were ready to transport the tank silt to their poor soils, since it was good nutrient status.

Out comes:

2. Deepening of percolation tank increased the additional water storage capacity (12.60 lakh liters)
3. It was observed that number of defunct bore wells decreasing from 2013-14 to 2017-18 and recharge of defunct bore wells increasing from 2013 to 2017 due to more storage water in Burrakunta by desilting (Table).
4. Water table is increased during monsoon period.

Table. Impact of de silting of Burrakunta on bore well recharge during the year 2017-18

Month	Water table in the bore well (ft)	Availability of water in Water storage structure (ft.)	Average area irrigated acre / Bore well	Rainfall (mm)
June-17	140	2.0	-	168.0 (8)
July-17	140-165	2.0	**2.0**	000.0
August-17	126	4.0	**5.0**	136.0 (6)
September-17	65	8.0	**6.0**	272.7 (7)
October17	90-95	6.0	**6-8**	221.8 (11)
November-17	100-110	5.0	**6-8**	000.0
December-17	110-120	3.5	**4-6**	000.0

(Details (Average of Six bore wells taken for data)-Total number of bore wells - 40

Table.:Year wise impact of Burrakunta on borewells recharge:

Year	No. of borewells under Burrakunta	No.of defunct borewells during summer	No. of defunct borewells recharged during monsoon period	Depth of water table(ft.) during summer	Depth of water table(ft.) during monsoon period	Average rainfall(mm)
2013-14	110	70 (64%)	64 (91 %)	158.4	71.4	594.3
2014-15	110	63(57%)	60 (95%)	150.2	74.6	668.6
2015-16	114	26(23%)	26(100%)	145.4	106.4	621.6
2016-17	114	72(63%)	56(78%)	156.6	96.4	655.5
2017-18	114	0	100%	120.4	64.0	798.0 (Till date)

Impact of Soil Testing:

One hundred soil samples (0~0.15m depth) were collected before implementation of project (2011) and after 5 years of implementation of NICRA activities (2016) in Yagantipalle village of Banaganapalle mandal and analyzed at soil testing laboratory, KVK, Yagantipalle. The soil pH was measured by glass electrode using a soil to water ratio of 1:2.5, electrical conductivity (EC) was determined by an EC meter using a soil to water ratio of 1:2.5. Soil samples were analyzed for organic C by Walkley and Black method (Page et al., 1982), available nitrogen was analyzed by alkaline permanganate method (Subbaiah and Asija, 1956), available phosphorus by Olsen et al.(1954)'s method , available potassium by ammonium acetate method (Hanway and Heidal, 1952)and available micronutrients (Z,Fe,Cu and Mn) by DTPA extracting reagent (Lindsay and Norvell,1978).

Comparison of soil nutrient status before and after implementation of NICRA activities

S.No	Particulars	Unit	Before (2011)	After (2016)
1	Organic carbon	Percent	0.47	0.51
2	Nitorgen	Kg./ha	201	189
3	Phosphorus	Kg./ha	71	62
4	Potash	Kg./ha	543	749
5	Sulphur	Ppm	11.78	10
6	Zinc	Ppm	0.34	1.18
7	Iron	Ppm	13.5	16.2
8	Copper	Ppm	1.56	1.93
9	Manganese	Ppm	12.6	17.2
10	Boron	Ppm	0.68	0.59

The data in Table.1 revealed that the average available soil nitrogen, Phosphorus and sulphur were low (189,62,10 ppm respectively) after Implementation of NICRA activities (After 5 years) when compared to bench mark study (201,71,11.78ppm respectively) due to judicious use of chemical fertilizers based on soil test based nutrient management.

However the organic carbon (OC) content was increased from 0.47% to 0.51% after implementation of NICRA activities due to introduction of green manuring in-situ, recycling of farm waste by different composting methods like Pit method, NADEP method, Composting tubs with locally available Kadapa slabs and increased FYM quantities due to increased live stock population particularly milch animals in project village. And also similar trend was observed in micronutrient status before and after implementation of NICRA activities.

2. Theme Area: CROP PRODUCTION

Demo I: Testing of drought tolerant varieties in Pigeon pea:

1. Name of the technology	Performance of Drought tolerant varieties
2. Objectives of the study	To identify the varieties Suitable under Drought Situation.
3. Thematic area	Crop production
4. Problemdiagnosis	Low yields due to frequent drought Conditions and terminal moisture stress during pre-flowering and Pod development stages respectively.
5. Micro farming situation	Rain fed red soils
6. Year of start	2011
7. Year of completion	
8. Comparisons/treatments (mention test crop and varieties/ variety used in demonstration)	1.Local: Asha 2.Improved variety : PRG-176
9. Area covered for each demonstration(ha)	0.8
10. No. of farmers covered	100 (outreach villages)
11. Amount spent for each demonstration/each farmer	400/-
12. Contribution of demonstration from a) Project b) Farmers	 400/- --
13. Results (yield,cost of cultivation, gross income, net income B:Cratio, soil moisture. Indicators /plant characters of flood/ drought tolerance in terms growth and yield components etc.,	

Introduction of drought tolerant variety of Redgram PRG-176 which is tolerant to drought, suitable for medium to light soils with 140-150 duration , where long duration (180 days) varieties were facing moisture stress at flowering and pod dev. Stage (Terminal moisture stress).

Table: Year 2017-18

Treatments	Seed yield (kg/ha)	Fodder Yield (kg/ha)	Cost of cultivation (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Farmers practice(Asha)	864	--	24530	46656	22126	1:1.90
Improved variety(PRG-176)	926	--	23655	50004	26349	1:2.11

Seed Cost Rs. 45/- per kg.

The results indicated that Redgram variety PRG-176 with Improved production technologies gave higher yield (926 kg/ha), which was 6.2 per cent than that of farmers practice (864 kg/ha) in medium black soils.

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 1:2.11/1.90.

Demo II: Testing of drought tolerant varieties in Bengal gram:

1. Name of the technology	Performance of Drought tolerant varieties
2. Objectives of the study	To identify the varieties Suitable under Drought Situation.
3. Thematic area	Crop production
4. Problem diagnosis	Low yields due to frequent drought Conditions and terminal moisture stress during pre-flowering and Pod development stages respectively.
5. Micro farming situation	Rain fed red soils
6. Year of start	2011
7. Year of completion	
8. Comparisons/treatments (mention test crop and varieties/ variety used in demonstration)	1.Local:JG-11 2.Improved variety :,NBeG-3
9. Area covered for each demonstration (ha)	0.8
10. No. of farmers covered	25
11. Amount spent for each demonstration/each farmer	2650/-
12. Contribution of demonstration from a) Project b) Farmers	 1325/- 1325/-
13. Results (yield, cost of cultivation, gross income, net income B:C ratio, soil moisture. Indicators /plant characters of flood/ drought tolerance in terms growth and yield components etc., **(Brief results to be summarized)**	

Table: Year 2017-18

Treatments	Seed yield (kg/ha)	Fodder Yield (kg/ha)	Cost of cultivation (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Farmers practice(JG-11)	810	-	24500	40500	16000	1:1.65
Improved Variety(NBeG-3)	1040	-	25125	52000	26875	1:2.06

Bengalgram Rs 50/kg

Results of Bengalgram demonstrations indicated that among desi varieties NBeG-3 Performed well in medium to light soils. These varieties are fairly tolerant drought with well developed root system and also tolerant to wilt diseases.

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 Farmers practice indicated that the cultivation of Nandyala sanaga-1 with improved technologies, additional returns of Rs 10875/- /ha were obtained with BC ratio of 1:2.06/1.65 ***The performance of Nandyal Senega was superior to the control for its rooting traits and heat tolerance.***

Demo III: Testing of drought tolerant varieties in Jowar:

1. Name of the technology	Performance of Drought tolerant varieties
2. Objectives of the study	To identify the varieties Suitable under Drought Situation.
3. Thematic area	Crop production
4. Problem diagnosis	Low yields due to frequent drought Conditions and terminal moisture stress during pre-flowering and Pod development stages respectively.
5. Micro farming situation	Rain fed red soils
6. Year of start	2017
7. Year of completion	
8. Comparisons/treatments (mention test crop and varieties/ variety used in demonstration)	1.Local:Mahindra male 2.Improved variety :,NJ-2446,NJ-2647
9. Area covered for each demonstration (ha)	0.8
10. No. of farmers covered	30
11. Amount spent for each demonstration/each farmer	250/-
12. Contribution of demonstration from a) Project b) Farmers	 125/- 125/-
13. Results (yield, cost of cultivation, gross income, net income B:C ratio, soil moisture. Indicators /plant characters of flood/ drought tolerance in terms growth and yield components etc., **(Brief results to be summarized)**	

NJ-2647

NJ-2446

Table: Year 2017-18

Treatments	Seed yield (kg/ha)	Fodder Yield (kg/ha)	Cost of cultivation (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Farmers practice(Mahindra male)	910	1183	11680	12740	1060	1:1.09
Improved Variety(NJ-2647)	1236	1483	11680	17304	5624	1:1.48
NJ-2446 (Yellow Jowar)	1070	1284	11680	36380	24700	1:3.11

Mahindra & NJ-2647 Rs 14/kg, NJ-2446 (Yellow Jowar) Rs 34/Kg

Results of Jowar demonstrations indicated that two varieties NJ-2647 and NJ-2446 Performed well in medium to light soils compared to local varieties. These varieties are fairly tolerant drought with well developed root system .

The increased grain yield with Improved production technologies was mainly because of Short duration (105-110) than local varieties(120-125 days). Economics of demonstration and Farmers practice indicated that the cultivation of NJ-2647 and NJ-2446 with improved technologies, additional returns of Rs 5624/- /ha and 24700/-per ha. were obtained with CB ratio of 1:1.48 and 3.11/1.09.

White Sorghum NJ-2647 is semi dwarf in height, matures in 95-100 days. Grain yield is around 15-25 qt/acre and fodder yield is also 3-4 tonnes/acre. Non lodging and good ear head size. Under rain shadow regions, best for cultivation due to dual advantage (grain & fodder). Climate resilience in seen in NJ-2647.

Yellow sorghum NJ-2446 matures in 120 days. Grain yield is around 12-16 qt/acre. This is also best suitable for cultivation under rain fed areas. It is good for health. Market advantage is there for consumption and value addition.

2 .*Demonstration on Intercropping:*

1. Name of the technology	Demonstration of Red gram and Seteria as a intercropping
2. Objectives of the study	To minimize the risk and bring stable income in rain fed situations
3. Thematic area	Crop production
4. Problem diagnosis	Low productivity and income in erratic rainfall Frequent Drought Conditions During crop growth stages and Crop failures due to prolonged dry spells, low net returns.
5. Micro farming situation	Rain fed , Red soils
6. Year of start	2011
7. Year of completion	
8. Comparisons/treatments	
a). Farmers practice* (Describe the practice) b). Improved technology (mention test crop and varieties/variety used in demonstration)	Seteria as a Sole crop Intercropping System(Seteria+Redgram5:1)
9. Area covered for each demonstration (ha)	0.8
10. No. of farmers covered	72
11. Amount spent for each demonstration/each farmer.	520/-
12. Contribution of demonstration from a) Project b) Farmers	520/-
13.Results (yield,cost of cultivation, gross income, net income B:Cratio, other parameters like yield components, soil moisture depth etc., **(Brief results to be summarized)**	

Table: Influence of improved inter cropping systems on yields and income in rain fed environment

Crop/Cropping system	Seed yield (kg/ha)	Fodder (kg/ha)	Cost of cultivation (Rs/ha)	Gross income (Rs/ha)	B:C ratio
Sole Crop1(Seteria)	1200	1440	12000	20700 (Inc;1500 fodder Cost)	1:1.72
Setaria + Redgram	784(S)	941	16890	34388 (Inc;1000 fodder cost)	1:2.03
	386 (R)				

Steria Rs 16/-, **Red gram Rs 54/kg**

Inter Cropping systems for drought mitigation:

Adverse weather conditions like delay onset of rains and prolonged dry spells during the crop period is very common in rainfed situation. Such situation results in economic losses to the farmers due to the partial or total failure of the sole crops.

In order to utilize the bi-model distribution of rainfall and also to insure against crop failure due to drought during crop growth period, millet based inter cropping systems were demonstrated. Introduced Redgram + Seteria (1:5) inter cropping systems in the village, along with sole crop of Redgram/Seteria in order to increase cropping intensity and net returns of the farmers.

- Results of demonstration on intercropping of Red gram + Seteria in row ratio of 1:5 indicated that the gross income was higher (Rs.34388/-) than sole crop of seteria (Rs. 20700/-)

- The results on cropping system oriented demonstrations against drought mitigation clearly indicates that above inter cropping systems are economically advantageous than sole crops under rain fed situations. In the long run the fertility and microbial activity of the soil also increases with addition of biomass of red gram

3. Introduction of alternate crop i.e Seteria

1.Name of the technology	Performance of Seteria as alternate crop to desi cotton
2.Objectives of the study	To Maximize yield and higher returns under harsh weather conditions
3.Thematic area	Crop production
4. Problem diagnosis	Low productivity and income in erratic rainfall
5.Micro farming situation	Frequent Drought Conditions During crop growth stages.
6.Year of start	2011
7.Year of completion	2017
8.Comparisons/treatments	
a). Farmers practice* (Describe the practice) b). Improved technology (mention test crop and varieties/variety used in demonstration)	Desi Cotton SIA-3088 and SIA -3222 as a alternate crops
9.Area covered for each demonstration (ha)	0.6
10.No. of farmers covered	92
11. Amount spent for each demonstration/each farmer.	120/-
12. Contribution of demonstration from a) Project b) Farmers	 120/- --
13.Results (yield, cost of cultivation, gross income, net income B:C ratio, other parameters like yield components, soil moisture depth etc.,	Current year.

Table: Influence of *alternate crops i.,e Seteria* on yields and income in rain fed environment 2017-18

Treatments	Variety	Yield (kg/ha)	Cost of cultivation (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Farmers practice	Desi cotton	345	12930	17940	5010	1:1.38
Improved technology	SIA 3085 & 3222	1200	12000	19200	7200	1:1.60

Seteria Rs 16/-Kg, Cotton Rs 52/-Kg.

In View of drought tolerance and minimum requirement of water seteria crop is preferred Sustainable yield and income was obtained under harsh weather conditions. In view of its superior performance the crop area increased from 05 to 250 acres in the villages during kharif 2017. Area expansion under this crop is expected during ensuing season also .*The adoption of seteria crop by the farmers was due to its suitability to delayed monsoon, its duration and additional benefit of fodder. The market price of seteria is also catching the attention of the farmers.*

With this high yielding variety Farmers were getting on an average of 12 q /ha of grain and more fodder yield.

Economics of demonstration and Farmers practice indicated that the cultivation of alternate crop seteria with improved technologies, additional returns of Rs 7200/- /ha were obtained with BC ratio of 1:1.60/1.38.

Calf registration and Healthy calf programme:

Introduction:

Dairy farming is the most sustainable livelihood to the farmers. Continuous growth in dairy sector in Kurnool district indicates the interest of the farmers towards this sector. Scientific rearing of dairy animals will keep the animals healthy as well as productive. Especially, calves are neglecting and are not offering proper medication and feeding. This resulting in poor growth rate and delayed maturity (4-5years). To educate the farmers towards scientific practices in calf rearing "Calf registration and healthy calf programme" was initiated during 2011-12 under NICRA project in Yagantipalle village.

Methodology:

Initially two villages viz. Cherlokotturu and Krishnagiri of Banaganapalle mandal were selected for the study. Training programme was organized to create awareness about the programme.

- The farmer has to register his calf immediately after birth
- Technical staff of KVK visits the calf and cut the umbilical card and the record the body weight. He will closely monitor calf in feeding of colostrums.
- A calf health card will be issued to the farmers filling the initial data about the calf.
- Calf health card contains details about medication, feeding and growth particulars of the registered calf.
- Every month a health camp will be conducted to treat the registered calves in both the villages.
- De-worming, Supplementation of Vit.A and B-Complex was done to the calves. Body weight was recorded in the health card.
- From the second month onwards, calf starter was provided to feed the calves along with milk as make balance diet.
- To mitigate the mineral deficiency, salt bricks were also given to the registered calves.

In this programme, the registered calves were provided scientific feeding and medication up to six months age.

Theme area: LIVE STOCK AND FISHERIES

Reduction of calf mortality through calf registration programme

Name of the technology	Calf registration and healthy calf programme
Objectives of the study	To reduce the calf mortality To improve the growth rate in calves
Thematic area	Livestock and fisheries
Problem diagnosis	High calf mortality and poor growth rate in buffalo calves
Micro farming situation	Dairy farming
Year of start	2017-18
Year of completion	-
Comparisons/treatments	
a). Farmers practice* *(Describe the practice) b) Improved technology	• Farmers practice • Calf registration (Monthly de-worming + Vit.A and B-complex supplementation
Area covered for each demonstration (ha)	50 calves
No. of farmers covered	50
Amount spent for each demonstration/each farmer	100/-
contribution of demonstration from a) Project b) Farmers	 75/- 25/-
Results (Fodder yield, cost of cultivation, gross income, net income B:Cratio, other No. of . cuttings harvested etc., after imposition of treatment.etc.,) **(Brief results to be summarized)**	--
Any other information/details	

Results **2017-18**

Particulars	***Farmers practice***	***Demonstration***	***Remarks***
Initial body weight (kg)	26.9	25.4	***The increased growth rate helps the calf to come into heat early.***
Final body weight (Kg)	72.7	81.2	
Body weight gain (kg)	45.8	55.8	
% increased in body Weight gain (Rs)	**22%**		
Mortality	11%	**3%**	

Supplementation of mineral mixture to milchbuffaloes : protein and energy are the major factor influencing milk yield in milch animals . Supplementation of protein and energy along with minerals through **Regional Specific Mineral Mixture is** very effective and economical in low and medium production animal

The demonstration was conduction selecting 50 milch buffaloes.

Mitigation of mineral deficiency in milch buffaloes:

Name of the technology	Mitigation of mineral deficiency in milch buffaloes
Objectives of the study	• To correct the mineral deficiency in milch animals • To improve production and reproduction performance
Thematic area	Livestock and fisheries
Problem diagnosis	Low milk production and long inter calving period due to deficiency of essential minerals
Micro farming situation	dairy animals
Year of start	2017-18
Year of completion	
Comparisons/treatments	Milch buffaloes
a). Farmers practice* (Describe the practice) b) Improved technology (Mention test crop and varieties/ variety used in demonstration)	a) Farmers practice of feeding: No supplementation of mineral mixture b) Supplementation of mineral mixture @80grams/day
Area covered for each demonstration (ha) / animals	50

No. of farmers covered	50
Amount spent for each demonstration/each farmer	500/-
contribution of demonstration from a) Project b) Farmers	 425/- 75/-
Results	
Any other information/details	

Results : 2017-18

Table: Influence of Mineral mixture on productivity of live stock (2017-18)

Treatments	Average milk yield/animal (L/day)	Total milk yield per animal (L/60days)	Cost of feeding (Rs/animal)	Gross Returns (Rs/animal)	Net returns (Rs/animal)
Farmers practice	3.28	196.8	1286	6691	5405
FPF+ RSMM	3.96	237.6	1840	9979	8139

Backyard poultry:

Name of the technology	Poultry breed improvement through Rajasri birds
Objectives of the study	• To introduce improved poultry breed for backyard poultry • To encourage backyard poultry with improved breed for supplemental income generation activity
Thematic area	Live stock and fisheries
Problem diagnosis	Low egg production and body weight gain in native poultry
Micro farming situation	Small and marginal farmers depends on mostly daily wages and rainfed agriculture
Year of start	2017-18
Year of completion	
Comparisons/treatments	Type of bird species: local/native
a) Traditional method b) Improved technology	• Traditional method of rearing local birds • Improved method of feeding with improved birds ; Rajasri
No. of families covered in Demonstration	30
No. of units covered/farm family	01 (10 birds)
Amount spent for each demonstration/each farmer	1500/-
Contribution of demonstration from a) Project b) Farmers	 750/- 750/-
Results **(Brief results to be summarized)**	The birds are at 4 months age and weighing 1.2-1.6 kg. The birds are well adapted to the climatic condition of the village
• Any other information/details	

Data on body weight and egg production:

Particulars	Male Birds	Female Birds
Body weight of six weeks age	483.2	445.3
Body weight of adult birds at 6 months	1922.4	1398.6
Egg production in 90days	-	56.4

INSTITUTIONAL INTERVENTIONS:

FARM MACHINERY:

CHCs are basically a unit comprising a set of farm machinery, implements and equipment meant for custom hiring by farmers. Though certain implements and equipment are crop specific,. Therefore, an ideal model envisaged in this project comprise farm machinery that are commonly used for tillage operations for all crops, multi crop equipment and a minimum of crop specific machinery.

Objectives:

1. To make available various farm machinery / equipments to small and marginal farmers
2. To improve mechanization in places with low farm power availability
3. To provide hiring services for various agricultural machinery/implements applied for different operations.
4. To expand mechanized activities during cropping seasons in large areas especially in small and marginal holdings.
5. To provide hiring services for various high value crop specific machines applied for different operations.

CROP PRODUCTION: FARM MACHINERY

1. Name of the technology	Seeding methods in Jowar & Bengal gram
2. Objectives of the study	To reduce the cost of sowing of agricultural crops and increase precision and to cover more area in unit time
3. Thematic area	Crop production- Farm Machinery
4. Problem diagnosis	Traditional method of seeding with bullocks involves high cost, less coverage and less precision
5. Micro farming situation	Rain fed red soils/black soils/irrigated black soils/red soils/topography flat/slopy land
6. Year of start	2017-18
7. Year of completion	2017-18
8. Comparisons/treatments	Test crop: variety
a). Farmers practice* (describe the practice) b) Improved technology (mention test crop and varieties/variety used in demonstration)	• Farmers method of seeding • Improved method of seeding with seed drill in Jowar & Bengal gram
9. Area covered for each demonstration (ha)	1.0
10. No. of farmers covered	10+10
11. Amount spent for each demonstration/each farmer	
12. Contribution of demonstration from a) Project b) Farmers	 -- --
13. Results	
14. Any other information/details	

Year 2017-18 Bengal gram

Treatments	Seed / Grain yield (kg/ha)	Fodder Yield (kg/ha)	Cost of cultivation (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Improved seed drill	1164	--	26540	58200	31660	1:2.19
Farmers method of seeding	1040	--	27950	52000	24050	1:1.86

Seed cost (Bengalgram) Rs. 50/- per kg.

Year 2017-18 Jowar

Treatments	Seed / Grain yield (kg/ha)	Fodder Yield (kg/ha)	Cost of cultivation (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Improved seed drill	1324	-	11000	18536	7536	1:1.68
Farmers method of seeding	1236	-	11680	17304	5624	1:1.48

Indicate price of Jowar seed Rs 14 /Kg at the time of computing gross income.

Custom Hiring center:

Custom hiring center with seed drills, Rotavator, Drumseeders, Taiwan sprayer, sprinklers with Pumpset and sheep de- worming gun etc. was established and the same is running successfully.

Custom Hiring center

• Name of the technology	Custom hiring center
• Objectives of the study	To establish community based custom hiring center to provide hiring services of agricultural operations in a village
• Thematic area	Institutional innovations
• Problem diagnosis	Low productivity of crops due to lack of timely operations
• Micro farming situation	Group based activity in a village
• Year of establishment	2011
• No. of families as members in community based custom hiring center	-

• Contribution for the establishment of the center (Rs) (a) From the Project	6.25 +4.85lakhs
(b) Farming community	0.69 lakshs
(c) Loan from the Bank	-
(d) Other sources	-
Total	11.79 lakshs
• Process of establishment	
• Date of formation of Management committee	
• Type s of equipments procured for running the center	Annexure
• No. of persons engaged on hire basis in running and maintenance of equipments	-
• No. of meetings held by the Management committee in a year with dates	
• Recommendations of the committee for improved functioning	
• Results/ performance	
• Key leanings for sustainability of the center	

Table: Performance of custom hiring center

Year	Crops in demand for servicing custom hiring center	Area covered with hiring services (ha)	Amount realized due to services with custom hiring services (Rs)	Amount spent on contact service personnel For running the center	Amount incurred in maintenance of tools and center	Net amount realized due to custom hiring center	Any other information
2016	*Kharif & Rabi*						
	1.Redgram						
	2.Jowar						
	3.Bengalgram						
	4.seteria	46	5100	---		5100	

- Contribution from Farmers : Rs 2,84,811-00
- Amount invested to purchase implements : Rs 66,900-00
- Net amount realized : 2,17,911-00

S.No.	Name of the implement	No of Units
1	GPS unit	1
2	Seed drills	3
3	Rotavator	2
4	Power weeder	1
5	7- Tyned gorru	2
6	Sprinkler set	2
7	Oil engine	2
8	Taiwan Sprayers	8
9	De-worming gun	1
10	Soil augers	5
11	2-Plough set	1
12	Sub Soiler	1
13	Bullock drawn seed drill	1
14	Chesile plough	1

Custom Hiring Centre

Land preparation with Rotavator

Sowing with seed drill

Sowing with seed drill

Supplemental irrigation with Pipes

Oil Engine for lifting Irrigation water

Spraying with Tiwan Sprayer

Seed Production (Seed Bank):

Quality seed of improved varieties is an important basic input for enhancing productivity of any crop species. The existing mechanisms are not adequate to meet the seed requirements of small-scale farmers and have serious limitations. Particularly to small holder farmers at affordable prices and at the right time to enhance crop productivity and house hold food security.

The baseline studies in the project area identified key problems related to seed supply system. Lack of timely availability of good quality seeds of high-yielding varieties is one of the major constraints contributing to stagnant yields of crops in the project area.

The project devised alternate seed systems, which ensure availability of quality seed of improved varieties at local level. The concept of village seed banks was promoted and successfully validated in the project village. It not only ensured timely availability of quality seed of farmer-preferred varieties at affordable prices at local level but also enhanced crop productivity and local seed enterprises leading to higher incomes to farmers.

During this kharif seed production in Red gram (Asha-87119 & PRG-176) and Korra (SIA-3088) and Bengal gram (NBeG-3) was taken up to establish seed bank in the village.

Seed bank

1. Name of the technology	Establishment of Seed Bank
2. Objectives of the study	Lack of timely availability of good quality seeds of high-yielding varieties is one of the major constraints contributing to stagnant yields of crops in the project area.
3. Thematic area	Institutional innovations
4. Problem diagnosis	The existing mechanisms are not adequate to meet the seed requirements of small-scale farmers and have serious limitations.
5. Micro farming situation	Community based village system
6. Year of establishment	2017
7. No. of families as members in community based seed Bank	25
8. Contribution for the establishment of the center (Rs)	
(a) From the Project	
(b) Farming community	-
(c) Loan from the Bank	
(d) other sources	-
Total	

• Process of establishment	
• Date of formation of Management committee for seed bank	-
• Type of infrastructure created for the bank godown etc.,	
• No. of persons engaged on hire basis in running and maintenance of seed bank	
• No. of meetings held by the Management committee in a year with dates	
14. Procurement of improved breeder/foundation/ certified seed from SAU/ICAR institutions for multiplication	Crop Variety Qty. procured for Multiplication 1. Redgram-PRG-176 - 25 Qts 2. Red gram- Asha - 10 Qts 3. Seteria - SIA-3088 - 15 Qts 4. Seteria - SIA-3221 - 10 Qts 5. Bengal gram- NBeG-3 –15 Qts
• No. of farmers involved assessed producers involved	25
• Quantity of seed produced (t)	1. Redgram-PRG-176 - 2.5 t 2. Redgram- Asha - 1.0 t 3. Seteria - SIA-3088 - 1.5 t 4. Seteria - SIA-3221 - 1.0 t 5. Bengal gram - NBeG-3 –1.5 t
• Key learning's for sustainability of the center	
• Any other related information	

Year	Quantity of seed proposed to produce from different crops (t)	Number of farmers Covered	Area (ha)	Quantity of seed produced (t)	Quantity of fodder sold (t)	Amount realized due to sale of seed from the bank (Rs.)
2017-18	Redgram (Asha)	5	2	01 tonne		
	Redgram (Prg-176)	5	3	2.5 tonne		
	Seteria (SIA-3088)	5	2	1.5 tonne		
	Seteria (SIA-3221)	5	2	01 tonne		
	Bengalgram	5	3	1.5 tonne		

Fodder Bank

Name of the technology	FODDER BANK
Objectives of the study	To mitigate the problem of fodder scarcity to livestock in the village
Thematic area	Institutional innovations
Problem diagnosis	Low productivity and profitability of livestock rearing due to fodder scarcity
Micro farming situation	Village based Institutions
Year of establishment	2017 (outreach villages)
No. of families as members in community based fodder Bank	10
8.Contribution for the establishment of the center (Rs) (a) From the Project	3000/-
(b) Farming community	-
(c) Loan from the Bank	-
(d) Other sources	
Total	
Process of establishment	
Date of formation of Management committee for fodder bank	-
Type of infrastructure created for the bank godown etc.,	
No. of livestock in the village	Type Qty and no.Fodder req.(t)
Quantity of fodder requirement in the village	
Average quantity of fodder produced in a year (t)	
Quantity of fodder deficit in the village *Kharif* *Rabi* *Summer*	
Fodder scarcity period(specify months)	
Detailed plan for production of fodder in Bank	*Kharif* Target(t) Achievement *Rabi* *Summer*
No. of persons engaged on hire basis in running and maintenance of fodder bank	
No. of meetings held by the Management committee in a year with dates	

Procurement of improved breeder/foundation/ certified fodder seed /slipsfrom SAU/ICAR institutions for multiplication	Crop Var. Qty (kg/no)
No. of farmers involved as fodder producers involved and area of production	
Key learning's for sustainability of the center	
Any other related information	
Results/progress	

6.5 Capacity Building

Date	Title of the training programmes	Duration in days	No.of programmes organized	No. of participants			Remarks
				Male	Female	Total	
12-07-2017, 08-02-2018	Natural resource management	01	02	76	09	85	
20-07-2017	Crop diversification	01	01	42	02	44	
11-08-2017, 3-10-2017, 11-10-2018	Crop management	01	03	96	15	111	
30-08-2017	Live stock management	01	03	62	20	82	
14-09-2017, 06-03-2018	Fodder and feed management	01	02	48	12	60	
08-102017, 14-2-2018 22-12-2017	Crop pest disease management Redgram & Bengalgram	01	03	105	13	118	
08-11-2017	Training on Fodder Varieties	01	01	26	12	38	
05-12-2017	Post harvesting technologies in different crops	01	01	28	04	32	
05-01-2018	Farm implements &machineries	01	01	28	04	32	
	Total	**09**	**16**	**511**	**91**	**602**	

6.6 Extension Activities

Date	Title of the activity	No.of programmes organized	No. of participants			Remarks
			Male	Female	Total	
29-08-17 07-09-17	Method demonstrations Seed treatment of Jowar & Bengal gram	02	22	-	22	
Every Tuesday & Friday	Agro advisory services	51	3315	408	3723	
11-08-17	Awareness on Production technologies in Rain fed crops	01	38	06	44	
13-09-17, 22-10-17, 11-11-17, 14-12-17	Diagnostic visits	04	127	16	143	
01-10-17, 27-11-17, 25-01-18, 14-02-18	Group discussions	04	134	18	152	
	Total	**62**	**3636**	**448**	**4084**	

Extension Activities:

KVK Kurnool extended their services in transferring technologies related to climate resilient agriculture. The other activities include group dynamics, method demonstration, seeding devices, awareness programmes were also organized on climate resilient agriculture. Agro advisory services through mobile alert systems, exposure visits and kisan melas etc.

Up scalable Technologies

S.No.	Name of the Technology	Present area of adoption (ha)	Target area to be achieved during 2017-18 (ha)	Area of adoption achieved during 2017-18 (ha)	Remarks
1.	Inter cropping System	72	50	72	
2.	Seteria is an alternate to Desi cotton	60	50	60	
3.	Short duration variety Red gram (PRG-176)	45	30	45	

Budgetary Details

Sanctioned BE for 2017-18	Opening balance as on 1st April 2017	Funds received	Expenditure up to March 2018	Closing balance
10,30,00-00	10,30,00-00	10,30,00-00	10,26,022-50	3,977-50

List of contributors for implementing the NICRA Programme:

S.No.	Name	Designation	Address	Phone and e-mail
1	Smt.G.Dhanalakshmi	Programme Coordinator	SHE & CS, Krishi vigyan Kendra, Yagantipalli, Kurnool A.P	9440607424
2	Sri M.Sudhakar	SMS(Agronomy)		9440739378
3	Sri K.V.Ramanaiah	SMS(Soil Science)		9440238071
4	Sri. D.Balaraju	SMS(Plant Protection)		9493836890
5	Sri.A.Krishnamurthy	SMS(AH)		9493619020
6	Smt.K.Lakshmipriya	Pro.Asst (Hsc)		9441192765
7	P.Vishnu Mohan Reddy	S R F		9963875833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Action Plan Format For 2018-19

1.0 A. Basic information about NICRA cluster DISTRICT: Kurnool

S. No.	*Item*	*Existing NICRA village*	*Additional villages selected in the programme**		
			Village 1	*Village 2*	*Village 3*
1.1	Village name	Yagantipalle & Meerapuram	Cherlokotturu	Krishnagiri	--
1.2	Name of mandal/Block	Banaganapalle	Banaganapalle	Banaganapalle	--
1.3	Total area (ha)	640 + 200	264	406	--
1.4	No. of house holds	361,381	161	128	--
1.5	Extent of rain fed area (ha)	70%	75%	76%	--

***B. Technologies proposed to be scaled up in the NICRA village during 2018**

Sl. No.	Name of technology	No. of farmers covered	Approx. area to be covered (ha)	Remarks
1.	Inter cropping system Red gram +Setaria(5:1)	150	100	
2.	Seteria SIA-3088 & 3222	200	150	
3.	In-situ Moisture conservation in Red gram	50	100	
4	Calf registration	50	100(no of calves)	
5	silage	50	50	

C. Module-wise technologies proposed to be scaled up in the adjoining villages during 2018

Sl. No.	Name of technology	No. of farmers covered	Approx. area to be covered (ha)	Remarks
1.	Inter cropping system	50	60	
2.	Drought tolerant varieties Redgram-PRG-176 and LRG-52	100	80	
3.	In-situ Moisture conservation in Red gram	50	20	
4.	Calf registration	50	100(no of calves)	
5.	silage	50	50	

*** Simple and low cost resilient practices are to be scaled up so as to reach as many farmers as possible with minimal cost**

D. Module-wise resilient technologies proposed to be demonstrated for the year 2018-19

S. No.	Module	Climatic constraint addressed	Key intervention	No. of farmers proposed to be involved	Measurable indicator (s)
1	**Natural resource management**				
1.	Farm ponds	Drought	Critical irrigation	06	Yields
2.	In-situ moisture conservation (dead furrows)		Avoid moisture stress	20	Yields
3.	Chisel plough		Conservation furrows.	15	Yields
2	**Crop production**				
1.	Drought tolerant varieties Redgram Setaria Jowar Bengalgram	Terminal moisture stress	Terminal moisture stress	50 50 25 25	Yields
2.	Intercropping System Red gram +Green gram(5:1) Red gram +Castor(1:1) Red gram + Bajra (1:2)	Drought		50	
3	Introduction of Bengal gram as Relay crop in Red gram + Setaria inter cropping system	drought	Relay crop	15	
4.	Weather based IPM technology in Red gram & Castor			50	
5	Efficacy of waste decomposer performance in jasmine			10	Yield & pest disease situation
6	Introduction of Bajra as climate resilient crop.	Drought		20	
7	Foliar application of silica @3.0% against moisture stress	Drought		25	
8	Introduction of Horse gram as contingent crop	Drought		20	
	Horticulture				
9.	Avenue plantation				
10.	Drip Irrigation	WUE		10	Yield
11	Dolychos bean			10	
12.	Chrysanthemum			05	

13	Integrated crop management in Chillis & Brinjal.			10	
14	Soil test based nutrient management in onion			05	
15	Best management practices in pomegranate			10	
16	Fertigation managements in vegetable crops			10	
3	**Livestock & Fisheries**				
1.	Rajasree birds	Breed Improvement	Income generation	50	
2.	Integrated farming System (IFS)	Low income through single enterprenure	Sustainable income generation	02	
3.	RSSM	Mitigation of Mineral deficiency	Improve milk yield	50	
4.	Silage	Fodder shortage	Fodder conservation	50	
5.	Ration Balancing	Low milk Production	Feeding management	20	
6.	Demo on improved fodder (Super napier)	Non availability of green fodder .	Introduction of new varieties	10	
7.	Hydroponics	Non availability of green fodder throughout the year	Low cost hydroponic fodder production	05	
8.	Calf Registration			50	
4	**Institutional interventions**				
1.	Custom hire center	Non availability of equipment	Timely operation	10	
2.	Seed bank	Non availability of good seed	Quality seed production	20	
3.	Fodder bank	Green fodder scarcity	Availability of green fodder throughout the year	10	

***add rows if required**

ACTIVITIES AND COSTS

2.0 Non-recurring contingencies – Equipment

Proposal for Procurement of farm machinery/ implements for Custom Hiring entre

S. No.	*Item*	*Unit cost* (Rs)*	*No. of units*	*Total amount (Rs)*
1.	Tractor drawn Blade (Guntaka)	22,000/-	01	22,000/-
2.	Cultivator	24,000/-	01	24,000/-
3.	Village level Small Weather station	15,000/-	01	15,000/-
4.	Camera	25,000/-	01	25,000/-
	Total NRC 2.0	**86,000/-**	**04**	**86,000/-**

3.0 Contingencies

3.1 Module 1 – NRM interventions

A) Repair / Renovation of existing water harvesting structures, drainage channels etc.

S. No.	*Intervention* and village*	*Dimensions*	*No. of units*	*No. of benefi-ciaries*	*Convergence value, if any (Rs)*	*Value of farmers share (Rs)*	*Cost to project (Rs)*
1.	Farm ponds	20X20X3 mts	02	02	-	-	2,00,000
2.	Ground water Recharge pits	2X2X2 mts	05	05	-	-	75,000
3.	Vermi compost units	15X10 ft	10	10	-	10,000	90,000
4.	Drip irrigation		10	10		5,000	50,000
	Sub-total 3.1 A		**17**	**19**	**-**	**10,000**	**4,15,000**

B) *In situ* conservation – Resource Conservation Technologies (RCTs)

Item (specify the interventions) and village	*Unit cost Rs/acre*	*No. of demos*	*Coverage*		*Total amount (Rs)*	*Remarks*
			Area (acres)	*No. of farmers*		
	A	**B**	**C**	**D**	**A x C**	
1.*In situ* conservation	800/-	15	15	15	12,000/-	
2. chisel plough	600/-	15	15	15	9000/-	
Sub-total 3.1 B		**30**	**30**		**21,000/-**	

3.2 Module II – Crop production interventions

A. Stress tolerant / Improved varieties / Short duration / Legume crops

Intervention and village	*Description*		*Cost (Rs/acre)*	*No. of demos*	*Coverage*		*Total amount (Rs)*	*Remarks (purpose of intervention)*
	Crop	*Variety (s)*			*Area (ac)*	*No. of farmers*		
			A	*B*	*C*	*D*	*A x C*	
Drought tolerant varieties	Redgram	PRG-176	400	50	50	50	20,000	
	Bengal gram	NBeG-3	2400	50	50	50	1,20,000	
	Jowar	NJ-2446	200	25	25	25	5,000	
		NJ-2647	200	25	25	25	5,000	
	Seteria	SIA-3088	120	50	50	50	6,000	
		SIA-3222	120	50	50	50	6,000	
Relay crop	Bengal gram	NbeG-3	2400	15	15	15	36,000	
Climate resilient crop.	Bajra	-	500	20	20	20	10,000	
Foliar application of silica @3.0%	Red gran & cotton	PRG-176& Bt cotton	150	20	20	50	3,000	
contingent crop	Horsegram/ Safflower	-	500	25	25	25	12,500	
Avenue plantation	Plant seedlings	--	2000 plants	-	--	-	80,000	
Intercropping systems Red gram +Green gram(5:1) Red gram+ Castor(1:1) Red gram+ Bajra(1:2)	Red gram+ Seteria	PRG-176+ SIA-3088	520	100	100	100	52,000	
Sub Total 3.2 A							3,55,500	

B) Improved agronomic practices and other crop interventions

Intervention		***Cost (Rs/ acre)***	***No. of demos***	***Coverage***		***Amount (Rs)***	***Remarks (Purpose of intervention)***
				Area (ac)	***No. of farmers***		
		A	***B***	***C***	***D***	***A x C***	
Water saving paddy cultivation methods	DSR	500	10	10	10	5,000	Water saving technologies in paddy
	Aerobic	500	10	10	10	5,000	Water saving technologies in paddy
Establishment of Home stead Nutritious gardens				*50*	*50*	*2,500*	
Grow bags				*50*	*50*	*2,500*	
Income generation activities Value addition –Primary processing dhal unit				*1,80,000*	*01*	*1,80,000*	
Dolychos bean				10	10	12,000	
Chrysanthemum				05	10	50,000	
Integrated crop management in Chillis & Brinjal.				10	10	40,000	
Soil test based nutrient management in onion				05	05	20,000	
Best management practices in pomegranate				10	10	30,000	
Fertigation managements in vegetable crops				*05*	*10*	*25,000*	
Weather based pest & disease management in red gram & castor		*1500*	*50 (25Redgram+ 25 Castor)*	*50*	*50*	*75,000*	
Sub-total 3.2 B						***4,47,000***	

4.0 Module 3 – Livestock & Fisheries interventions

4.1 Year round fodder production strategies (annual/perennial fodder) in the village

Season	Name of fodder	Variety	Area (ha)	Unit cost of demo (Rs/ha)*	No. of demos	Total amount (Rs/ha)*	*Remarks (purpose of intervention & No. of farmers covered)*
Kharif	Perennial fodder crops	Super napier	0.1 ha	1250	10	12,500	10
	Sub-total 4.1					**12,500**	

4.2 Feed demonstrations for crop residue management / stress management: silage / feed blocks/ mineral mixture (MM) blocks / feed enrichment

Details of feed demo*	Unit cost of demo (Rs)	No. of demos	Total amount (Rs/ha)	*Remarks (purpose of intervention & No. of farmers covered)*
a) Silage demos	1200	30	36,000	30
b) Mineral mixture demos	490	50	24,500	50
c) IFS (integrated farming system)	14,200	02	28,400	02
d) Feeding management & disease control programme in livestock (Total Mixed Ration, Mineral block, medicines & disinfectant solution)	1300	20	26,000	20
e)Animal health camps	10,000	02	20,000	Whole Village
f)Hydroponics	1500	05	7,500	05
g) Calf Registration	200	50	10,000	50
Sub-total of 4.2			**1,52,400**	

4.4 Livestock / Fisheries units

A	B	C	D	E	F	G
Enterprise/unit*	**Unit cost (Rs)**	**Convergence share in unit cost, if any** (Rs)**	**Project share in unit cost (Rs)**	**No. of units/ farmers**	**Cost to Project (D x E) (Rs)**	***Remarks (purpose of intervention& farmers covered)***
Back yard Poultry	750	375	375	50	37,500	
Sub-total of 4.4				**50**	**37,500**	

5.0 Module 4 – Community interventions

5.1 Establishment of fodder banks (hay)

Name of the SHG	Fodder type	Quantity of storage (t)	Unit cost (Rs.)	No. of units	Amount (Rs.)	*Remarks (purpose of intervention& farmers covered)*
	Hybrid Napier			02(ha)	20,000/-	20 (for six months)
Sub-total 5.1				**02**	**20,000/-**	

5.2 Establishment of Seed banks :

Name of the SHG	Crop and variety	Quantity of storage (t)	Unit cost (Rs.)	No. of units	Amount (Rs.)	Remarks (No. of beneficiaries & Period of use)
	Red gram	12 qtls	6000 per qt	01	72,000/-	10 members 6-8 months
	Jowar	10 qtls	1800 per qt	01	18,000/-	8-10 farmers
	seteria	15 qtls	1600 per qt	01	24,000/-	5-8farmers
Sub-total 5.2		**37 qtls**			**1,14,000/-**	

6.0. Capacity Building & Training Programmes

6.1 Training Courses proposed

Theme	Title of training course	Proposed month	No. of participants	Cost to project (Rs.)
ICM	Production technologies for Rain fed crops	June	50	10,000-00
	Contingent crop planning & management	July	50	10,000-00
	Production technologies in pulse crops	October	50	10,000-00
Resource conservation technologies	Water and soil conservation technologies for rainfed areas	June	50	10,000-00
	Soil health management	July	50	10,000-00
	Micro irrigation systems	Septembe r	50	10,000-00

IPM	Integrated pest management in Major crops	August	50	10,000-00
Value addition	Value addition to millets	October	50	10,000-00
Income generating activity	Awareness Training programme on Income generating activity.	August	50	10,000-00
Nutrition Gardens	Trining programme on importance of home stead nutritional gardens	Septembe r	50	10,000-00
Dairy	Management of milch animals during summer	May	50	10,000-00
Feed & Fodder	Feed & fodder technologies for livestock	June	50	10,000-00
	Prevention of diseases in livestock	July	50	10,000-00
Sub-total 6.1			**650**	**1,30,000-00**

6.2 Field Days proposed

Theme	Title of training course	Proposed month	No. of participants	Cost to project (Rs.)
1.Inter Cropping	Red gram + Seteria Inter cropping (1:5)	October	85	7,500/-
2. Short duration varieties	Red gram PRG-176	January	100	8,500/-
Sub-total 6.2			**185**	**16,000/-**

6.3 Exposure Visits proposed

Place of visit	Purpose of visit	Proposed month	No. of participants	Cost to project (Rs.)
1.ARS,Ananthapur	Dry land agriculture		25	20,000/-
2.ICRISAT	Incubation centre agriculture	January	25	20,000/-
3.SEED,Hyd	Viable income generating activities for EDP promotion.	February	25	20,000/-
Sub-total 6.3			**75**	**60,000/-**

7.0 Plan for contingency situations involving various crops during the cropping season 2018-19

Sl. No	Possible contingency situation	Measures envisaged	Unit cost/ acre	No. of farmers to be covered	Cost to project (Rs.)	Remarks
1.	Late onset of monsoon	Sowing of Contingent crops ie Maghi jowar, closer spacing in redgram, seteria, horse gram, Fodder jowar, direct seeded rice.	500/-	100	50,000	
2.	Prolonged breaks during the season	With foliar application of KNo3 during dry spells, frequent intercultivations, 2% urea spray, Insitu moisture conservation measures.	120	125	15,000	
3.	Early withdrawal of monsoon	-do-	120	125	15,000	
4.	Intense storms	Provision of drainage channel. Application of Nitrogen @25kg/acre and potash @10kg.	100	200	20,000	
5.	Temporary flooding/ Water logging due to heavy rains	- do -	100	200	20,000	
Sub-total 7.0					**1,20,000**	

8.0 Contractual Manpower (SRFs/YPs)

Category	Rate/month (Rs.)	No. of months	Amount (Rs.)
Senior Research Fellow	28,000	12	3,36,000
Sub-total 8.0			**3,36,000**

9.0 Media Products to be developed (video films/brochures/bulletins proposed to be developed)

Item description	No. of copies	Amount (Rs.)
1.CD on NICRA activities	150	25,000
2.		
Sub-total 9.0		**25,000**

Summary of budget Estimates for 2018-19 (Tentative)

Item number	*Title of the Item*	*Amount (Rs.)*
2.0	Procurement of farm machinery/implements for CHC	86,000
3.1 A	Repair/ Renovation of existing water harvesting structures & drainage channels etc.	4,15,000
3.1 B	*In situ* conservation – Resource Conservation Technologies (RCTs)	21,000
3.2 A	Stress tolerant/ Improved varieties	3,55,000
3.2 B	Improved agronomic practices and other crop interventions	4,47,000
4.1	Year round fodder production strategies (annual/perennial fodder) in the village	12,500
4.2	Feed demonstrations for crop residue management / stress management: silage / feed blocks/ mineral mixture blocks / feed enrichment	1,52,400
4.4	Livestock/fisheries units	37,500
5.1	Establishment of fodder banks (hay)	20,000
5.2	Establishment of seed banks	1,14,000
6.1	Training courses	1,30,000
6.2	Field days	16,000
6.3	Exposure visits	60,000
7.0	Plan for contingency measures for various crops during the cropping season 2018-19	1,20,000
8.0	Contractual manpower (SRFs/YPs)	3,36,000
9.0	Media products to be developed	25,000
10.0	Any other contingencies (TA etc)	
	Grand total (Rs.)	**35,17,400**

Date: **Signature of PC, KVK/ In-charge NICRA**

Date: **Signature of Nodal Officer, NICRA-ZPD Zone**

List of Annexures to be enclosed in Annual report

ANNEXURE-I

Rainfall details in NICRA village -2017

Days	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	035.6	000.0	000.0
2	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0
3	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	004.8	000.0	000.0
4	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	006.2	000.0	000.0
5	000.0	000.0	000.0	**005.2**	000.0	025.2	000.0	000.0	000.0	006.0	000.0	000.0
6	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	001.4	005.0	000.0	000.0
7	000.0	000.0	000.0	000.0	000.0	85.0	000.0	000.0	020.0	034.4	000.0	000.0
8	000.0	000.0	000.0	000.0	000.0	000.0	000.0	011.6	000.0	074.0	000.0	000.0
9	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	016.2	000.0	000.0
10	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0
11	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	026.4	000.0	000.0
12	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	001.8	000.0	000.0
13	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	001.0	000.0	000.0
14	000.0	000.0	000.0	000.0	000.0	006.6	000.0	000.0	083.5	004.0	000.0	000.0
15	000.0	000.0	**000.6**	000.0	000.0	007.6	000.0	014.0	014.0	006.4	000.0	000.0
16	000.0	000.0	000.0	000.0	000.0	009.6	000.0	000.0	028.4	000.0	000.0	000.0
17	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	008.2	000.0	000.0	000.0
18	000.0	000.0	000.0	000.0	000.0	014.8	000.0	000.0	000.0	000.0	000.0	000.0
19	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0
20	000.0	000.0	**000.4**	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0
21	000.0	000.0	000.0	000.0	000.0	011.6	000.0	000.0	000.0	000.0	000.0	000.0
22	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0
23	000.0	000.0	000.0	000.0	000.0	008.4	000.0	000.0	000.0	000.0	000.0	000.0
24	000.0	000.0	000.0	000.0	000.0	000.0	000.0	015.0	006.2	000.0	000.0	000.0
25	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0
26	**000.8**	000.0	000.0	000.0	000.0	000.0	000.0	055.0	000.0	000.0	000.0	000.0
27	000.0	000.0	000.0	000.0	**010.0**	000.0	000.0	000.0	000.0	000.0	000.0	000.0
28	000.0	000.0	000.0	**003.0**	000.0	000.0	000.0	030.4	111.0	000.0	000.0	000.0
29	000.0	000.0	000.0	**001.0**	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0
30	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0
31	000.0	000.0	000.0	000.0	000.0	--	000.0	010.0	--	000.0	--	000.0
Total	**000.8**	**000.0**	**001.0**	**009.3**	**010.0**	**168.8**	**000.0**	**136.0**	**272.7**	**221.8**	**000.0**	**000.0**
Rainy days	**00**	**00**	**00**	**02**	**01**	**08**	**00**	**06**	**07**	**11**	**00**	**00**

ANNEXURE-II

Farmer wise yield data for different interventions implemented --- 2017-18

1 .Title of the intervention : In-situ moisture conservation in Redgram

2 .Year of the study : 2017-18

3. No. of farmers covered : 15

4 . Area covered in each demonstration (ha) : 0.4

5 .Total area covered in the intervention (ha) : 06

S no	Farmer	Seed yield (kg/ha)	Date of sowing	Date of harvesting
1	K.Yaganti	1456	21-6-2017	26-11-17
2	K.Chinnathimma Reddy	1250	20-6-2017	18-11-17
3	N.Lakshmi Devi	1145	16-8-2017	5-1-18
4	N.Chinna thimma Raju	1025	19-8-2017	6-1-18
5	N.Thimma Reddy	1324	26-6-2017	30-11-17
6	O.Rambhupal Reddy	1025	21-6-2017	24-11-17
7	N.Narayana	1160	20-6-2017	18-11-17
8	N.Ramulamma	1230	14-8-2017	16-11-17
9	S.Siva Bhaskar Reddy	1030	26-6-2017	28-11-17
10	S.sumalatha	1205	25-6-2017	28-11-17
11	N.Nadipi Husseni	1440	18-8-2017	16-1-18
12	D.Hussainamma	1006	9-6-2017	30-11-17
13	V. Ayyapu Reddy	1240	26-6-2017	24-11-17
14	N. Sambasiva reddy	1190	18-8-2017	5-1-18
15	A.Lakshmi Devi	1064	26-6-2017	30-11-17
		1186		

Farmer wise yield data for different interventions implemented --- 2017-18

1 .Title of the intervention : Drought tolerant varieties Red gram (PRG-176)

2 .Year of the study : 2017-18

3. No. of farmers covered : 100

4 . Area covered in each demonstration (ha) : 0.8

5 .Total area covered in the intervention (ha) : 80

S no	Farmer	Seed yield (kg/ha)	Date of sowing	Date of harvesting
1	E.Balalingaiah	954	11-6-2017	25-11-17
2	E.Tulasi	980	21-6-2017	24-11-17
3	G.Gurramma	875	20-6-2017	30-11-17
4	N,Maddilety	987	16-8-2017	24-12-17
5	N.Balayagantamma	954	19-8-2017	26-12-18
6	E.Balalingaiah	1054	26-6-2017	30-11-17
7	E.Tulasi	974	25-6-2017	5-12-18
8	G.Gurramma	896	10-6-2017	26-11-17
9	N,Maddilety	985	9-6-2017	18-11-17
10	N.Balayagantamma	918	26-6-2017	19-11-17
11	K.Yaganti	956	18-8-2017	21-12-17
12	K.Chinnathimma Reddy	989	12-6-2017	10-12-17
13	N.Lakshmi Devi	976	20-6-2017	15-12-17
14	N.Chinna thimma Raju	1040	11-8-2017	4-1-18
15	N.Thimma Reddy	992	21-6-2017	30-11-17
16	O.Rambhupal Reddy	980	20-6-2017	9-12-17
17	N.Narayana	840	16-8-2017	18-1-18
18	N.Ramulamma	986	19-8-2017	15-1-18
19	S.Siva Bhaskar Reddy	995	26-6-2017	28-11-17
20	S.sumalatha	864	21-6-2017	06-12-17
21	N.Nadipi Husseni	954	20-6-2017	19-12-17
22	D.Hussainamma	1020	14-8-2017	15-1-18
23	V.Ayyapu Reddy	954	26-6-2017	16-12-17
24	K.Chandara Babu	965	25-6-2017	5-12-17
25	V.Chinnapu Reddy	974	18-8-2017	26-1-17
26	N.Seera Reddy	896	9-6-2017	26-11-17
27	A.Lakshmi Devi	992	26-6-2017	6-12-17
28	N.Sivamma	980	18-8-2017	10-1-18
29	N.Subhadra	840	26-6-2017	8-12-17
30	S.Yaganti Reddy	786	25-6-2017	10-12-17
31	S.Padmavathi	795	17-6-2017	6-12-17

32	T.Lakshmi Narayana	864	18-8-2017	20-1-18
33	C.Thimmaiah	786	26-6-2017	4-12-17
34	Y.Madhusudhan	995	25-6-2017	12-12-17
35	S.Lakshmi Devi	864	10-8-2017	4-1-18
36	S.Lakshmi Devi	1056	22-6-2017	3-12-17
37	B.Venkata Lakshmamma	887	26-6-2017	7-12-17
38	C.Maddulety	984	25-6-2017	12-12-17
39	C.Subbadu	854	20-8-2017	12-1-18
40	C.Thirupalu	964	9-6-2017	12-12-17
41	N.Ramlakshamma	832	26-6-2017	4-12-17
42	M.Maddamma	1080	26-6-2017	2-12-17
43	R.Ghanana Maddamma	946	21-6-2017	26-11-17
44	N. Rama Chandrudu	876	22-6-2017	30-11-17
45	N.Rajeswari	823	9-8-2017	6-1-18
46	R.Lakshmi Devi	912	18-8-2017	12-1-18
47	N.Peddahussain	963	17-6-2017	1-12-17
48	K. Maddulety Reddy	1025	18-8-2017	20-1-18
49	O.Rami Reddy	853	26-6-2017	25-11-17
50	A.Rathnamma	832	25-6-2017	19-11-17
51	V.Venkata Lakshmamma	892	10-8-2017	24-1-18
52	N.Thimmaiah	1060	21-6-2017	30-11-17
53	N.Bala Hussaini	973	10-8-2017	18-1-18
54	N.Rama Subbaiah	946	21-6-2017	30-11-17
55	N.Chinna Lakshmamma	975	20-6-2017	2-12-17
56	I.Malleswari	982	16-8-2017	26-1-18
57	M.Ramaddilety	912	19-8-2017	24-12-18
58	R.Maddilety	832	26-6-2017	26-11-17
59	N.Maddi Reddy	846	21-6-2017	30-11-17
60	A.Nageswaramma	856	20-6-2017	5-12-17
61	T.Maddilety	1065	18-8-2017	21-1-18
62	Thalari.Narasamma	954	17-6-2017	22-11-17
63	V.Madhavi	923	18-8-2017	18-1-18
64	Y.Subbamma	765	26-6-2017	30-11-17
65	N.Bali Reddy	846	25-6-2017	4-12-17
66	N. SivaLakshamma	1060	10-8-2017	30-12-17
67	A.Venkata Ramudu	794	21-6-2017	4-12-17
68	Golla. N.Thimma Raju	825	21-6-2017	26-11-17
69	G.Ramesh	1036	20-6-2017	31-11-17
70	G.Chinna Thimmaiah	941	16-8-2017	21-1-18
71	G.LaksmiDevi	853	19-8-2017	15-1-18
72	O.Ram Bhupal	965	17-6-2017	6-12-17

73	R.Lakshmi Devi	846	18-8-2017	19-1-18
74	A.Chinnapaparayudu	1030	26-6-2017	6-12-17
75	G.Maddilety Reddy	921	19-8-2017	26-1-18
76	S.Jayachandrudu	763	17-6-2017	1-12-17
77	N.Nageswara rao	845	18-8-2017	15-1-18
78	N.C.Lakshmaiah	860	26-6-2017	30-11-17
79	N.shivasankar	880	25-6-2017	28-11-17
80	Madhanmohan krishna	890	10-8-2017	21-1-18
81	G.Thimma raju	863	21-6-2017	12-12-17
82	P.venkata ramudu	1020	26-6-2017	30-11-17
83	O.Jayarami Reddy	780	20-8-2017	20-1-18
84	B.Narayana Reddy	870	9-6-2017	26-11-17
85	N.Thimma Reddy	845	26-6-2017	26-11-17
86	G.Gopinath	840	26-6-2017	30-11-17
87	A.Ayyapu Reddy	950	21-6-2017	26-11-17
88	A.AdhiNarayan	930	22-6-2017	28-11-17
89	P.Bhupal Yadav	780	9-8-2017	12-1-18
90	G.Lakshmi Reddy	1030	25-6-2017	4-12-18
91	Shaik.Himam Bee	960	20-8-2017	16-1-18
92	S.Ma Basha	900	9-6-2017	28-11-17
93	Y.Malleesawra Reddy	945	26-6-2017	29-11-17
94	Y.Venakata Reddy	986	26-6-2017	4-12-17
95	A.Sambha Siva Reddy	1000	10-8-2017	16-1-18
96	G.ThimmaRaju	946	20-8-2017	24-1-18
97	Yaganti Reddy	873	9-6-2017	24-11-17
98	Y.Manohar	987	26-6-2017	30-11-17
99	Y.Ramulamma	979	26-6-2017	26-11-17
100	A.Lakshmidevi	1056	18-8-2017	5-1-18
	Avg	926		

Farmer wise yield data for different interventions implemented --- 2017-18

1 .Title of the intervention : Drought tolerant variety Bengal gram (Nandyal sanaga-1)

2 .Year of the study : 2017-18

3. No. of farmers covered : 25

4 .Area covered in each demonstration (ha) : 0.8

5 .Total area covered in the intervention (ha): 20

S no	Farmer	Seed yield (kg/ha)	Date of sowing	Date of harvesting
1	S.sivasnkara Reddy	382	18-10-2017	10-1-18
2	S.Chandrasekhar Reddy	395	20-10-2017	16-1-18
3	S.Maheswara Reddy	408	25-10-2017	22-1-18
4	G.Nagasubba Reddy	398	23-10-2017	30-1-18
5	S.Sreenivasa Reddy	454	18-10-2017	26-1-18
6	B.Jagadeeswra Reddy	404	19-10-2017	20-1-18
7	S.prasad Reddy	418	22-10-2017	25-1-18
8	Y.Prthasarathi Reddy	394	26-10-2017	1-2-18
9	B.V.Janardhan Reddy	373	18-10-2017	22-1-18
10	B.Ramachandra Reddy	393	24-10-2017	20-1-18
11	B.V.Sudhakar Reddy	458	21-10-2017	24-1-18
12	M.Chandrudu	488	20-10-2017	30-1-18
13	B.Malleswara Reddy	394	22-10-2017	1-2-18
14	B.Pratap Reddy	402	18-10-2017	21-1-18
15	Y.Sreenivasa Reddy	384	20-10-2017	22-1-18
16	B.Venkateswara Reddy	410	25-10-2017	24-1-18
17	M.Subbaiah	408	23-10-2017	19-1-18
18	B.Sivasatyam Reddy	446	18-10-2017	26-1-18
19	M.Krishnudu	394	19-10-2017	20-1-18
20	P.Chandrahas Reddy	386	22-10-2017	25-1-18
21	S.Ramakrishna Reddy	412	26-10-2017	1-2-18
22	B.Sivasankar Reddy	486	18-10-2017	22-1-18
23	K.V.Rajeswara Reddy	396	20-10-2017	20-1-18
24	K.Rami Reddy	450	25-10-2017	26-1-18
25	B.Parameswara Reddy	462	23-10-2017	20-1-18
Avg.		**416**		

Farmer wise yield data for different interventions implemented --- 2017-18

1 .Title of the intervention Drought tolerant variety- JOWAR (NJ-2647)

2 .Year of the study : 2017-18

3. No. of farmers covered : 15

4 . Area covered in each demonstration (ha) : 0.8

5 .Total area covered in the intervention (ha) : 12

S no	Farmer	Seed yield (kg/ha)	Date of sowing	Date of harvesting
1	N.V.krishna Reddy	1236	9-9-2017	22-1-18
2	A.Rathnamma	1450	21-9-2017	29-1-18
3	P.Nageshudu	1590	22-9-2017	2-1-18
4	P.Bhupal	1358	21-9-2017	1-2-18
5	P.Madhu Prakash	1424	19-9-2017	20-1-18
6	B. Lakshmi Narayana	1668	12-9-2017	26-1-18
7	C.Subbadu	1496	21-9-2017	29-1-18
8	N.Nageswara rao	1528	13-9-2017	31-1-18
9	N.Chennamma	1324	20-9-2017	31-1-18
10	Y.Nagendrudu	1564	9-9-2017	24-1-18
11	Y.Maddilety	1650	11-9-2017	22-1-18
12	V.Chinna yaganti Reddy	1502	19-9-2017	3-2-18
13	G.Ramesh	1360	21-9-2017	22-1-18
14	N.Bali Reddy	1464	20-9-2017	20-1-18
15	Y.Nagasiddaiah	1631	12-9-2017	29-1-18
		1483		

Farmer wise yield data for different interventions implemented --- 2017-18

1 .Title of the intervention Drought tolerant variety- JOWAR (NJ-2446)

2 .Year of the study : 2017-18

3. No. of farmers covered : 15

4 . Area covered in each demonstration (ha) : 0.8

5 .Total area covered in the intervention (ha) : 12

S no	Farmer	Seed yield (kg/ha)	Date of sowing	Date of harvesting
1	Y.Ramulamma	1140	11-9-2017	3-2-18
2	A.Lakshmidevi	1420	19-9-2017	22-1-18
3	N.Ayyapu Redy	1280	21-9-2017	20-1-18
4	T.Naidu	1203	20-9-2017	29-1-18
5	N. Thirupalaiah	1335	12-9-2017	26-1-18
6	S. Vijayabhaskar Redy	1160	9-9-2017	30-1-18
7	A. Samba Siva Reddy	1223	21-9-2017	24-1-18
8	G.Thimma Raju	1160	22-9-2017	22-1-18
9	Yaganti Reddy	1403	21-9-2017	20-1-18
10	Y.Manohar	1358	19-9-2017	26-1-18
11	Y.Bhupal Yadav	1405	12-9-2017	2-1-18
12	N.Hussainaiah	1205	21-9-2017	1-2-18
13	N.Dastagiramma	1408	13-9-2017	20-1-18
14	K.Chandra Babu	1310	20-9-2017	26-1-18
15	N.Nadipi Hussain	1245	9-9-2017	19-1-18
		1284		

Farmer wise yield data for different interventions implemented --- 2017-18

1 .Title of the intervention : Intercropping systems (Red gram + Seteria, 1:5)

2 .Year of the study : 2017-18

3. No. of farmers covered : 72

4 . Area covered in each demonstration (ha) : 0.8

5 .Total area covered in the intervention (ha) : 57.6

S no	Farmer	Seed yield (kg/ha)		Date of sowing	Date of harvesting
		Redgram	Korra		
1	A.Chinna Paparayudu	452	654	9-8-2017	5-1-18
2	O.Chinnapa Reddy	245	879	12-8-2017	6-1-18
3	E.Bala Lingaiah	345	960	11-8-2017	31-12-17
4	E.Thulasi	465	735	9-8-2017	4-1-18
5	G.Gurramma	249	865	12-8-2017	29-12-18
6	N.Lakshmidevi	380	1020	11-8-2017	3-1-18
7	N.Maddilety	450	845	9-8-2017	12-1-18
8	N.BalaYagantamma	268	954	12-8-2017	31-12-17
9	N.Chinna Lakshmaiah	450	645	11-8-2017	4-1-18
10	P.Nageshudu	336	785	9-8-2017	29-12-18
11	O.Lakshmi Jyothieswari	426	934	12-8-2017	3-1-18
12	O.LakshmiDevi	548	761	11-8-2017	12-1-18
13	V.Chandrasekhar Reddy	645	834	9-8-2017	31-12-17
14	V.Maddilety Reddy	451	943	11-8-2017	4-1-18
15	V.RamaDevi	365	756	9-8-2017	29-12-18
16	P.Sreenivasulu	245	942	9-8-2017	3-1-18
17	O.Siva Reddy	485	763	12-8-2017	31-12-17
18	O.Papi Reddy	345	842	11-8-2017	4-1-18
19	V.Sivasankara Redy	324	684	9-8-2017	29-12-18
20	D.Shaleeni	456	507	12-8-2017	3-1-18
21	K.Yaganti	246	903	11-8-2017	31-12-17
22	K.Chinna Thimma Reddy	554	1012	9-8-2017	4-1-18
23	N.Pedda Hussaini	281	846	12-8-2017	29-12-18
24	N.Lakshmi Devi	349	655	9-8-2017	3-1-18
25	N.Chinna Thimma Reju	469	760	12-8-2017	12-1-18
26	N.Thimma Reddy	378	650	11-8-2017	6-1-18
27	K.Maddilety Reddy	298	765	9-8-2017	31-12-18
28	O.Rambhupal Reddy	379	875	12-8-2017	12-1-18
29	N.Maddilety Reddy	498	940	11-8-2017	10-1-18
30	N.Narayana	554	875	9-8-2017	12-1-18
31	K.Madangopal Reddy	289	695	12-8-2017	16-1-18
32	N.Ramaswamy	370	654	11-8-2017	5-1-18
33	N.Ramulamma	287	879	9-8-2017	29-12-17
34	S.Siva Bhaskar Reddy	440	960	12-8-2017	31-12-17
35	S.Sumalatha	346	735	11-8-2017	30-12-17
36	N.Narayana Reddy	284	865	9-8-2017	24-12-17

37	O.Lalithamma	257	980	11-8-2017	30-12-17
38	S.Siava Shankar Reddy	379	845	9-8-2017	26-12-17
39	S.LakshmiDevi	435	954	9-8-2017	5-1-18
40	P.Pedda Hussaini	268	645	12-8-2017	7-1-18
41	P.Nadipi Hussaini	436	785	10-06-2017	19-11-17
42	D.Hussainamma	254	934	13-6-2017	21-11-17
43	D.Hussaini	379	761	13-6-2017	18-11-17
44	V. Ayyapu Reddy	462	834	22-6-2017	29-12-17
45	V. Chinnaiah	379	943	12-06-2017	31-12-17
46	N. Hussainaiah	297	756	11-6-2017	30-12-17
47	N.Dastagiramma	401	942	21-6-2017	24-12-17
48	K.Chandra Babu	305	763	9-8-2017	30-12-17
49	V.Chinnapu Reddy	298	842	12-8-2017	26-12-17
50	N.Seera Reddy	436	758	11-8-2017	21-11-17
51	N.Eswaramma	601	655	11-6-2017	24-11-17
52	B.Pedda Kondanna	332	760	10-6-2017	26-11-17
53	B.Peddda Pulaiah	298	650	10-8-2017	12-1-18
54	A.Lakshmaiah	422	765	14-08-2017	16-1-18
55	A.Lakshmamma	276	875	12-06-2017	19-11-18
56	B.NagaSulochana	521	940	9-8-2017	12-1-18
57	B.Chinna Pullaiah	328	875	12-8-2017	16-1-18
58	K.Chinnapu Reddy	512	695	11-8-2017	29-12-17
59	B.Sunkamma	461	654	9-8-2017	31-12-17
60	P.Gokari Bee	346	879	12-8-2017	30-12-17
61	V.Bhaskar Reddy	509	695	11-8-2017	24-12-17
62	V.Prabhakar Reddy	495	455	9-8-2017	30-12-17
63	O.Rami Reddy	286	755	13-6-2017	21-11-17
64	B.Sumathi	346	598	13-6-2017	24-11-17
65	A.Krishnudu	285	405	22-6-2017	26-11-17
66	A.Rathnamma	384	724	12-06-2017	29-11-17
67	P.Fathima Bee	486	786	11-6-2017	30-11-17
68	V.Thirupal Reddy	312	565	21-6-2017	4-12-17
69	V.Venkata Lakshamma	418	876	13-6-2017	21-11-17
70	P.Slamma	398	550	9-8-2017	12-1-18
71	O.Narayanamma	346	645	12-8-2017	16-1-18
72	O.Anasuya	426	564	11-8-2017	16-1-18
Avg		**385**	**785**		

Farmer wise yield data for different interventions implemented --- 2017-18

Title of the intervention : Seteria as alternate crop

1. Year of the study : 2017-18
2. No. of farmers covered : 92
3. Area covered in each demonstration (ha) : 0.6
4. Total area covered in the intervention (ha) : 55.2

S.No	Farmer	Seed yield (kg/ha)	Date of sowing	Date of harvesting
1	N.V. krishna Reddy	1578	10-06-2017	4-9-2017
2	A. Rathnamma	980	13-6-2017	5-9-2017
3	P.Nageshudu	1396	13-6-2017	4-9-2017
4	P.Bhupal	1467	22-6-2017	10-9-2017
5	P.Madhu Prakash	954	12-06-2017	3-9-2017
6	B.Lakshmi Narayana	1054	11-6-2017	11-9-2017
7	C.Subbadu	974	21-6-2017	9-9-2017
8	N.Nageswara rao	1298	9-8-2017	22-10-2017
9	N.Chennamma	985	12-8-2017	18-10-2017
10	Y.Nagendrudu	1564	11-8-2017	12-10-2017
11	Y.Maddilety	956	11-6-2017	8-9-2017
12	V.Chinna yaganti Reddy	989	10-6-2017	9-9-2017
13	G.Ramesh	1297	10-8-2017	5-11-2017
14	N.Bali Reddy	1040	14-08-2017	6-11-2017
15	Y.Nagasiddaiah	992	12-06-2017	3-9-2017
16	Y.Gopal	1198	9-8-2017	22-10-2017
17	A.Samba siva Reddy	1375	12-8-2017	18-10-2017
18	N.Dastagiramma	1456	11-8-2017	12-10-2017
19	R.Lakshmi Devi	1289	9-8-2017	22-10-2017
20	A.Lakshmidevi	1134	12-8-2017	18-10-2017
21	N.Ayyapu Redy	954	11-8-2017	12-10-2017
20	T.Naidu	1020	9-8-2017	22-10-2017
23	N.Thirupalaiah	954	13-6-2017	5-9-2017
24	O.JayaRami Reddy	965	13-6-2017	4-9-2017
25	O.Rama Swami Reddy	974	22-6-2017	10-9-2017
26	N.Ramapullaiah	1245	12-06-2017	3-9-2017
27	E.Balalingaiah	992	11-6-2017	11-9-2017
28	E.Tulasi	980	21-6-2017	9-9-2017
29	G.Gurramma	1302	13-6-2017	5-9-2017
30	N,Maddilety	1115	9-8-2017	22-10-2017

31	N.Balayagantamma	1265	12-8-2017	18-10-2017
32	K.Yaganti	1498	11-8-2017	12-10-2017
33	K.Chinnathimma Reddy	1024	9-8-2017	22-10-2017
34	O.JayaRami Reddy	995	13-6-2017	5-9-2017
35	Y.Ramulamma	1285	13-6-2017	4-9-2017
36	A.Lakshmidevi	1056	22-6-2017	10-9-2017
37	N.Ayyapu Redy	1184	12-06-2017	3-9-2017
38	T.Naidu	984	11-6-2017	11-9-2017
39	N.Thirupalaiah	1456	12-6-2017	5-9-2017
40	S.Vijayabhaskar Redy	964	13-6-2017	5-9-2017
41	A.Sambha Siva Reddy	1124	13-6-2017	4-9-2017
42	G.ThimmaRaju	1080	22-6-2017	10-9-2017
43	Yaganti Reddy	946	12-06-2017	3-9-2017
44	Y.Manohar	1345	11-6-2017	11-9-2017
45	Y.Bhupal Yadav	1425	21-6-2017	9-9-2017
46	N.Hussainaiah	912	13-6-2017	5-9-2017
47	N.Dastagiramma	963	10-6-2017	3-9-2017
48	K.Chandra Babu	1025	22-6-2017	18-9-2017
49	N.Nadipi Hussain	1194	9-8-2017	22-10-2017
50	Y.Ramulamma	1248	12-8-2017	18-10-2017
51	G.Ramesh	1394	11-8-2017	12-10-2017
52	G.Thimmaiah	1060	9-8-2017	22-10-2017
53	S.Yaganti Reddy	973	12-8-2017	18-10-2017
54	N.Hussain	1136	11-8-2017	12-10-2017
55	N.Madhu krishna Reddy	975	9-8-2017	22-10-2017
56	E.Bala lingaiah	1285	12-8-2017	18-10-2017
57	N,Maddilety	980	11-8-2017	12-10-2017
58	N.Balayagantamma	1189	9-8-2017	22-10-2017
59	E.Balalingaiah	1287	12-8-2017	18-10-2017
60	E.Tulasi	1348	11-8-2017	12-10-2017
61	G.Gurramma	1065	9-8-2017	22-10-2017
62	N,Maddilety	1597	12-8-2017	18-10-2017
63	N.Balayagantamma	1389	11-8-2017	12-10-2017
64	K.Yaganti	1112	9-8-2017	22-10-2017
65	K.Chinnathimma Reddy	1298	12-8-2017	18-10-2017
66	N.Lakshmi Devi	1060	11-8-2017	12-10-2017
67	N.Chinna thimma Raju	1413	9-8-2017	22-10-2017
68	N.Thimma Reddy	1376	12-8-2017	18-10-2017
69	O.Rambhupal Reddy	1036	11-8-2017	12-10-2017
70	N.Narayana	1287	9-8-2017	22-10-2017
71	N.Ramulamma	1578	12-8-2017	18-10-2017

72	S.Siva Bhaskar Reddy	1389	11-8-2017	12-10-2017
73	S.sumalatha	1489	9-8-2017	22-10-2017
74	N.Nadipi Husseni	1030	12-8-2017	18-10-2017
75	D.Hussainamma	1546	11-8-2017	12-10-2017
76	V.Ayyapu Reddy	1312	9-8-2017	22-10-2017
77	K.Chandara Babu	1245	12-8-2017	18-10-2017
78	V.Chinnapu Reddy	1487	11-8-2017	12-10-2017
79	N.Seera Reddy	1146	9-8-2017	22-10-2017
80	A.Lakshmi Devi	1378	12-8-2017	18-10-2017
81	N.Sivamma	1245	11-8-2017	12-10-2017
82	N.Subhadra	1020	9-8-2017	22-10-2017
83	G.Chinna Thimmaiah	1386	11-8-2017	12-10-2017
84	G.LaksmiDevi	1125	9-8-2017	22-10-2017
85	O.Ram Bhupal	1489	9-8-2017	22-10-2017
86	R.Lakshmi Devi	1289	12-8-2017	18-10-2017
87	A.Chinnapaparayudu	1080	11-8-2017	12-10-2017
88	G.Maddilety Reddy	1484	9-8-2017	22-10-2017
89	S.Jayachandrudu	1387	12-8-2017	18-10-2017
90	N.Nageswara rao	1098	11-8-2017	12-10-2017
91	N.C.Lakshmaiah	1289	9-8-2017	22-10-2017
92	N.shivasankar	1198	12-8-2017	18-10-2017
	Avg	**1200**		

Farmer wise yield data for different interventions implemented --- 2017-18

1 .Title of the intervention : Farm machinery- Seeding methods in Jowar

2 .Year of the study : 2017-18

3. No. of farmers covered : 10

4 .Area covered in each demonstration (ha) : 0.8

5 .Total area covered in the intervention (ha) : 08

S no	Farmer	Seed yield (kg/ha)	Date of sowing	Date of harvesting
1	O.JayaRami Reddy	1325	20-9-2017	26-01-18
2	O.Rama Swami Reddy	1456	12-9-2017	18-1-18
3	N.Ramapullaiah	1424	9-9-2017	22-1-18
4	E.Balalingaiah	1248	21-9-2017	26-8-18
5	E.Tulasi	1126	22-9-2017	29-8-18
6	G.Gurramma	1435	19-9-2017	16-1-18
7	N,Maddilety	1254	12-9-2017	14-1-18
8	N.Balayagantamma	1178	21-9-2017	22-1-18
9	K.Yaganti	1438	13-9-2017	26-1-18
10	K.Chinnathimma Reddy	1356	20-9-2017	16-1-18
		1324		

Farmer wise yield data for different interventions implemented --- 2017-18

1 .Title of the intervention : Farm machinery- Seeding methods in Bengal Gram

2 .Year of the study : 2017-18

3. No. of farmers covered : 10

4 .Area covered in each demonstration (ha) : 0.8

5 .Total area covered in the intervention (ha) : 08

S no	Farmer	Seed yield (kg/ha)	Date of sowing	Date of harvesting
1	S.Kaladhar Reddy	1145	18-10-2017	5-1-18
2	B.Sivareddy	1136	20-10-2017	12-1-18
3	K.Chinna Thimmaiah	1324	25-10-2017	16-1-18
4	M.Chalapathi	1035	23-10-2017	22-1-18
5	M.Krishnudu	1235	18-10-2017	26-1-18
6	B.Ramachandra Reddy	1152	19-10-2017	29-1-18
7	B.Bhaskar Reddy	1262	22-10-2017	1-2-18
8	B.Manohar Reddy	1176	26-10-2017	2-2-18
9	S.Siva Reddy	1090	18-10-2017	5-2-18
10	Y.Sreenivasa Reddy	1085	20-10-2017	28-1-18
	Avg	**1164**		

Farmer wise yield data for different interventions implemented --- 2016-17

1 .Title of the intervention : Calf Regristation

3. No. of farmers covered : 50

4 .Area covered in each demonstration (ha) :

5 .Total area covered in the intervention (ha):

S no	Name of the farmer	Calf Registration Programme	
		Initial B.wt (Buffalo)	Final B.wt (Buffalo)
1	N.Madhu mohana Reddy	32	52.6
2	Y.Chinna yaganti Reddy	30	56.3
3	N.Hussani	32	62
4	N.Parvathi	35	58.4
5	N.Madhu krishna Reddy	26	56.1
6	E.Bala lingaiah	24	52
7	N,Maddilety	32	62.4
8	N.Balayagantamma	34	70
9	E.Balalingaiah	31	56.6
10	E.Tulasi	28	52.6
11	G.Gurramma	23	57.3
12	N,Maddilety	31	61
13	G.Paparayudu	24	56
14	t.Lakshmi Narayana	23	53.7
15	N.Thimmaiah	25	57.1
16	N.Bala Hussaini	28	56.8
17	N.Rama Subbaiah	27	54
18	N.Chinna Lakshmamma	22	46.4
19	I.Malleswari	22	48.7
20	M.Ramaddilety	25	52
21	R.Maddilety	23	59.4
22	N.Maddi Reddy	31	63
23	A.Nageswaramma	29	50.6
24	T.Maddilety	25	58.2
25	Thalari.Narasamma	23	52.9
26	V.Madhavi	27	57
27	Y.Subbamma	23	56
28	G.Maddilety Reddy	20	48.2
29	S.Jayachandrudu	23	52.3
30	N.Nageswara rao	23	57.5
31	N.C.Lakshmaiah	24	52

32	N.Nadipi Husseni	20	46.4
33	D.Hussainamma	21	54.2
34	V.Ayyapu Reddy	19	55.8
35	K.Chandara Babu	27	56.3
36	V.Chinnapu Reddy	25	65.8
37	N.Seera Reddy	31	61.4
38	G.Lakshmi Reddy	27	55.9
39	Shaik.Himam Bee	23	60.4
40	S.Ma Basha	25	55.6
41	Y.Malleesawra Reddy	23	58.7
42	Y.Venakata Reddy	32	59.8
43	S.SambaSiva Reddy	26	61.2
44	N.Seera reddy	23	56.4
45	K.Subbarayudu	32	42.6
46	O.Jayarami Reddy	26	49.6
47	B.Narayana Reddy	24	58.6
48	N.Thimma Reddy	34	59
49	G.Gopinath	31	58
50	N.Krishnaiah	24	46.9
	Avg	26	56.0

Farmer wise yield data for different interventions implemented --- 2017-18

1 .Title of the intervention : Backyard Poultry

2 .Year of the study : 2017-18

3. No. of farmers covered : 30

4 . Area covered in each demonstration (ha) :

5 .Total area covered in the intervention (ha)

S no	Farmer	Initial Weight	Final weight(90Days)
1	N.Vanitha	486.2	1452.6
2	N.Chennamma	396.8	1596.8
3	G.Ramesh	412.2	1856.9
4	E.Balalingaiah	456.1	1758.6
5	B.Sudhakar Reddy	486.3	1825.6
6	B.Ram mohan Reddy	478.2	1568.7
7	Y.Nagendrudu	446	1698.4
8	Y.Maddilety	458.7	1757.4
9	G.Maddilety Reddy	496.8	1864.7
10	S.Jayachandrudu	467.2	1698.2
11	N.Nageswara rao	498.4	1754.2
12	N.C.Lakshmaiah	497.2	1698.7
13	N.shivasankar	468.6	1532.9
14	Madhanmohan krishna	479.2	1824.1
15	G.Thimma raju	496.3	1694.3
16	P.venkata ramudu	452.5	1589.2
17	O.Jayarami Reddy	468.8	1736.4
18	B.Narayana Reddy	486.4	1546.8
19	N.Thimma Reddy	446.5	1496.7
20	G.Gopinath	489.5	1534.8
-21-	A.Ayyapu Reddy	418.2	1826.6
22	A.AdhiNarayan	432.8	1638.7
23	P.Bhupal Yadav	422.1	1498.8
24	G.Lakshmi Reddy	496.2	1636.7
25	Shaik.Himam Bee	482.6	1725.9
26	S.Ma Basha	482.4	1634.6
27	Y.Malleesawra Reddy	464.25	1520.6
28	Y.Venakata Reddy	434.9	1585.5
29	S.SambaSiva Reddy	485.5	1696.2
30	N.Seera reddy	440.6	1566.4
	Avg	464.25	1660.53

Farmer wise yield data for different interventions implemented --- 2017-18

1 .Title of the intervention: Mitigation of mineral deficiency in milch buffaloes

3. No. of farmers covered : 50

4 .Area covered in each demonstration (ha) :

5 .Total area covered in the intervention (ha):

S no	Farmer	Milk Production(Avg 90days)
1	G.Ramesh	198.2
2	G.Thimmaiah	254.8
3	S.Yaganti Reddy	208.3
4	N.Hussain	218.6
5	N.Madhu krishna Reddy	218.1
6	E.Bala lingaiah	222
7	N,Maddilety	237.8
8	N.Balayagantamma	234.9
9	E.Balalingaiah	243.4
10	E.Tulasi	265.9
11	G.Gurramma	225.1
12	N,Maddilety	198.6
13	N.Balayagantamma	234.1
14	K.Yaganti	248.6
15	K.Chinnathimma Reddy	249.8
16	N.Lakshmi Devi	252
17	N.Chinna thimma Raju	234.6
18	N.Thimma Reddy	256.8
19	O.Rambhupal Reddy	243.2
20	N.Narayana	245.3
21	N.Ramulamma	236.1
22	S.Siva Bhaskar Reddy	199.8
23	S.sumalatha	246.1
24	N.Nadipi Husseni	222.5
25	D.Hussainamma	251.8
26	V.Ayyapu Reddy	246.8
27	K.Chandara Babu	253.8
28	V.Chinnapu Reddy	234.6
29	N.Seera Reddy	236.7
30	A.Lakshmi Devi	222.8
31	N.Sivamma	256.9
32	N.Subhadra	254.3

33	G.Chinna Thimmaiah	228.4
34	G.LaksmiDevi	248.9
35	O.Ram Bhupal	251.7
36	R.Lakshmi Devi	198.4
37	A.Chinnapaparayudu	208.7
38	G.Maddilety Reddy	234.8
39	S.Jayachandrudu	246.2
40	N.Nageswara rao	228.8
41	N.C.Lakshmaiah	259.4
42	N.shivasankar	258.1
43	Madhanmohan krishna	240.8
44	G.Thimma raju	286.4
45	P.venkata ramudu	240.6
46	O.Jayarami Reddy	251.8
47	B.Narayana Reddy	241.5
48	N.Thimma Reddy	223.8
49	G.Gopinath	241.8
50	Seeraiah	211.4
	Avg	237.6

Annexure –III

Details of interventions implemented in NICRA village (2016-17)

Module/ Thematic Area	Title of intervention	No. of farmers covered	Area covered (ha)	Details of critical inputs	Cost of critical inputs supplied for each farmer/	Cost of critical inputs Supplied for each intervention.
I. NRM	Example: In-situ moisture conservation technologies in Redgram, Sub soilar	30	12		200/-	6,000/-
	Compost bins	-	-	-	-	-
	Recharge pits	-	-	-	-	-
	Farm ponds	04	-	-	50000/-	200000/-
II. Crop Production						
Varieties:1 Asha-871197& PRG-176	Drought tolerant Varieties	87	34.8	Seed	200/-	17400/-
NBeG-1		25	10	Seed	1275/-	31875/-
Cropping systems Redgram+Seteria(5:1)	Intercropping Systems	63	25.2	seed	300/-	18,900/-
Redgram+Castor(1:1)		-	-		-	-
Crop Diversification Seteria(SIA-3085)	Alternate crops	48	19.2	seed	100/-	4800/-
Crop Diversification Castor-PCH-111	Alternate crops	25	10	Seed	200/-	2000/-
Farm Machinery	Implement given to farmers on Free basis	50	20	Seed Drill for sowing-	*200/-*	10,000/-
Bt-Cotton		45	18	Imida,mono, Yellow sticky traps,Two Brusesh-	370/-	16,650/-
III. Live stock and Fisheries	Livestock activities	50	--	Rajashri birds and medicines	350/-	17,500/-
	Calf Registration	50	-		100/-	5,000/-
	Mineral Mixture	10	-	-	100/-	1,000/-
Fodder production	Hydroponic Units	04	-	Hydroponic unit & Trays, Seed	3500/-	14,000/-
IV. Institutional Interventions	Biogas and capacity building	-	-	-	-	-