

ANNUAL ADMINISTRATION REPORT

2016-17



**DEPARTMENT OF AGRICULTURE
ANDHRA PRADESH, GUNTUR**

INDEX

S.No.	Contents	Page No.
1	Seasonal conditions and crop coverage	3-6
	Rainfall	
	Crop coverage	
2	Natural Calamities	7-8
3	Soil Testing	9-11
4	Integrated Nutrient Management Scheme	12-14
5	Seeds	
	General Seed Distribution	15-16
	Seed Village Programme	17-18
	State Seed Farms	19-22
	Seed Regulation	23-24
6	Fertilizers	
	Fertilizer Plan and Supplies	25-27
	Fertilizer Quality Control	28
7	Plant Protection	29-31
8	Polambadi	32-34
9	Chandranna Rythu Kshetralu	35-36
10	Farm Mechanization	37-39
11	Soil and Water Conservation Program	40-45
12	Media Production	46-48
13	Agricultural Credit	49-53
14	Extension	54-59
	Polam Pilusthondi	
	Farmers Trainings	
	Multi Purpose Extension Officers (MPEOs)	
15	Information Cell	60-64
16	National Agricultural Insurance Scheme (Crop insurance)	65-69
17	Extension Reforms (ATMA)	70-72
18	Rashtriya Krishi Vikas Yojana (RKVY)	73-75
19	National Food Security Mission (NFSM)	76-78
20	National Mission on Oil Seeds & Oilpalm (NMOOP)	79-82
21	Zero Budget Natural Farming (ZBNF)	83-88
22	State Agricultural Management & Extension Training Institute (SAMETI)	89-93
23	Andhra Pradesh Water Sector Improvement Project (APWSIP)	94-96

SEASONAL CONDITIONS AND CROP COVERAGE

The Seasonal conditions during the year 2016-17 on the whole were not satisfactory. During the South-West Monsoon period, the state received deficit rainfall of 4% against normal. North east monsoon period rainfall was received deficit of 71% as compared to normal. During the year 2016-17 an average rainfall of 677.2 mm was recorded as against the normal rainfall of 966.0mm. thus showing the deficit of 29.9% over normal rainfall

SEASON - WISE RAINFALL IN ANDHRA PRADESH

(Rainfall in mm)

S.No	SEASON	NORMAL	2015-16	2016-17	% Dev. Over Normal	STATUS
1	SOUTH WEST MONSOON (JUNE TO SEPTEMBER)	556	523	533.8	-4.0	Normal
2	NORTH EAST MONSOON (OCTOBER TO DECEMBER)	296	287.2	85.3	-71.2	Scanty
3	WINTER PERIOD (JANUARY TO FEBRAURY)	15.7	4.3	1.6	-89.8	Scanty
4	HOT WEATHER PERIOD (MARCH TO MAY)	98.3	98	56.5	-42.5	Deficit
TOTAL		966	912.5	677.2	-29.9	Deficit

PREMONSOON RAINFALL

During the month of May 2016, the state received an average rainfall of 93.8 mm as against the normal rainfall of 68.9 mm, excess being 36 percent. During this month the rainfall was normal in Vizianagaram, West godavari and Kadapa districts and excess rainfall was recorded in the remaining 10 districts of the state.

SOUTH-WEST MONSOON PERIOD (June to September'2016)

The Southwest monsoon has set in over Rayalaseema and Coastal Andhra Pradesh on 9th June, 2016. South –West monsoon has further advanced into remaining parts of Rayalaseema and most part of Coastal Andhra Pradesh on 13th June, 2016. South-west monsoon has further advanced into the remaining parts of Coastal Andhra Pradesh and thus covered entire Andhra Pradesh on 18th June, 2016.

During the South West Monsoon 2016, the State received an average rainfall of 533.8 mm as against the normal rainfall of 556.0 mm, deficit being 4 percent. The rainfall was Excess (+20% and above) in Guntur district. Deficit (-20% to -59% above) in Chittoor, Nellore and Anantapur districts and Normal (-19% to +19%) in the remaining 9 districts of the State.

NORTH EAST MONSOON (October to December, 2016):

The South-West monsoon has withdrawn from some parts of Andhra Pradesh on 18th October, 2016. Simultaneously, North East monsoon have commenced over Rayalaseema and Coastal Andhra Pradesh on 30th October, 2016.

During the North-East monsoon 2016, the average rainfall received was 85.3 mm as against the normal rainfall of 296.0 mm, deficit being 71 percent. The rainfall was deficit in vizianagaram district and scanty in the remaining 12 districts of the state.

WINTER PERIOD

During the winter period 2017, the average rainfall received was 1.6 mm as against normal rainfall of 15.7 mm, deficit being 90 percent.

HOT WEATHER PERIOD

During the Hot weather period 2017, the average rainfall received was 56.5 mm as against normal rainfall of 98.3 mm, deficit being 43 percent.

ANNUAL RAINFALL 2016 – 2017

During the year 2016-17, the average rainfall received was 677.2 mm as against normal rainfall of 966.0 mm, deficit being 30 percent. The rainfall was deficit in Chittoor ,Srikakulam, Prakasam, Kurnool, East Godvari ,West Godvari , Krishna ,Kadapa and Anantapuram districts and Normal in Vizianagaram , Visakhapatnam and Guntur districts and scanty in Nellore district of the state.

CROP-WISE AREA, YIELD AND PRODUCTION DURING 2016-17.

		AREA (in lakh ha.)			YIELD (Kg./ha.)			PRODUCTION (Lakh tonnes)		
		Kharif	Rabi	Total	Kharif	Rabi	Total	Kharif	Rabi	Total
	CEREALS									
1	PADDY	15.20	5.85	21.05	5166	7095	5702	78.51	41.53	120.04
2	Jowar	0.14	0.83	0.97	1436	2139	2035	0.20	1.78	1.98
3	Bajra	0.39	0.03	0.42	1744	1394	1718	0.68	0.04	0.72
4	Maize	0.86	1.65	2.50	4150	7879	6604	3.55	12.98	16.53
5	Ragi	0.27	0.05	0.32	953	1724	1077	0.26	0.09	0.35
6	Minor Millets	0.24	0.07	0.31	699	1044	773	0.17	0.07	0.24
	Total coarse grain	1.90	2.63	4.53				4.85	14.96	19.82
	PULSES									
7	Bengalgram	0.00	3.97	3.97	0	960	960	0.00	3.81	3.81
8	Redgram	3.43	0.07	3.49	377	583	381	1.29	0.04	1.33
9	Greengram	0.32	1.02	1.34	518	485	493	0.17	0.50	0.66
10	Blackgram	0.60	4.40	5.00	819	636	659	0.49	2.80	3.29
11	Horsegram	0.01	0.11	0.13	129	496	456	0.00	0.06	0.06
12	Other pulses(cowgram etc)	0.08	0.12	0.19	584	985	829	0.04	0.12	0.16
	Total Pulses	4.44	9.69	14.13				1.99	7.32	9.31
	Total Foodgrains	21.53	18.17	39.70				85.35	63.81	149.16
	OILSEEDS									
13	Groundnut	9.33	0.80	10.13	419	2664	595	3.91	2.12	6.03
14	Sesamum	0.33	0.30	0.64	228	290	257	0.08	0.09	0.16
15	Sunflower	0.09	0.13	0.21	698	1215	1007	0.06	0.15	0.21
17	Safflower	0.00	0.00	0.00	731	623	626	0.00	0.00	0.00
18	Niger seed	0.00	0.06	0.06	0	390	390	0.00	0.00	0.00
19	Soybean	0.02	0.00	0.02	922	0	922	0.00	0.00	0.00
20	Castor	0.32	0.01	0.33	471	520	472	0.15	0.00	0.15
21	Rape & Mustard	0.00	0.05	0.05	423	412	412	0.00	0.00	0.00
	Total oilseeds	10.09	1.34	11.43				4.20	2.36	6.56
22	Cotton (KAPAS)	4.63	0.08	4.72	1715	1245	0	0.08	0.00	0.00
23	Mesta (#)	0.07	0.00	0.07	1703	0	1703	0.63	0.00	0.63
24	Chillies	1.69	0.40	2.09	4896	4096	4743	8.29	1.64	9.93
25	Sugarcane	1.03	0.00	1.03	76220	0	76220	78.30	0.00	78.30
26	Turmeric	0.19	0.00	0.19	4156	4231	4156	0.80	0.00	0.80
27	Tobacco	0.04	0.73	0.78	2707	2250	2276	0.12	1.65	1.77
28	Onion	0.32	0.04	0.36	17370	17851	17418	5.56	0.63	6.19
29	Coriander	0.00	0.04	0.04	80	552	551	0.00	0.02	0.02
	Total cropped area	39.60	20.80	60.40						

(#) Mesta production in lakh bales of 180 kgs.

Source: Directorate of Economics & Statistics, AP

AREA AND PRODUCTION OF FOOD GRAINS DURING 2016-17

AREA UNDER KHARIF FOOD GRAINS:

The area under foodgrains in Kharif 2016-17 was 21.53 lakh hectares as against 19.86 lakh ha in 2015-16 showing an increase of 8.41 percent.

AREA UNDER RABI FOOD GRAINS:

The area under foodgrains in Rabi 2016-17 was 18.17 lakh hectares as against 21.50 lakh hectares in 2015-16, showing a decrease by 15.49%

FOOD GRAINS PRODUCTION:

The total food grains production in the State is estimated to 149.16 lakh tonnes in 2016-17 as against 143.78 lakh tonnes in 2015-16. The production under foodgrains during 2016-17 is increased by 3.74% compared to previous year.

KHARIF FOOD GRAINS PRODUCTION:

The Kharif food grains production is estimated at 85.35 lakh tonnes in 2016-17 as against 68.12 lakh tonnes in 2015-16, showing an increase of 25.29 % due to an increase of area and yield under Paddy and Maize crops.

RABI FOOD GRAINS PRODUCTION:

The production of food grains during Rabi 2016-17 is decreased to 63.81 lakh tonnes against 75.66 lakh tonnes in 2015-16, showing a decrease of 15.66% when compared to previous year. The decrease of production in food grains is attributed due to decrease in area and productivity of major millets and productivity of pulse crops.

NATURAL CALAMITIES

Different Natural Calamities occurred during 2016-17 and details of districts affected, extent damaged, input subsidy released are as follows :

Unseasonal Rains May -2016

No of Districts affected	2 Ananthapuramu, YSR Kadapa.
Total Extent damaged	132.59 Ha
Input subsidy required (SF /MF)	Rs 17.0 lakhs
Input subsidy required (OF)	Rs 1.5 lakhs
Total Input subsidy released	Rs 18.53 lakhs

Heavy Rains Sep & Oct -2016

No of Districts affected	8 Prakasham, Guntur, Vizianagaram, East Godavari, West Godavari, Kurnool, Srikakulam, Vishkapatnam
Total Extent damaged	36152 ha
Input subsidy required (SF /MF)	Rs 5138.4 lakhs
Input subsidy required (OF)	Rs 60.2888 lakhs
Total Input subsidy released	Rs 5198.71 lakhs

Sand casting due to Heavy Rains June-2016

No of Districts affected	1 West Godavari
Total Extent damaged	254.320 ha
Input subsidy required (SF /MF)	Rs 24.02 lakhs
Input subsidy required (OF)	Rs 7.0 lakhs
Total Input subsidy to be released	Rs 31.02 lakhs

Vaardha Cyclone Dec -2016

No of Districts affected	2 Prakasham, YSR Kadapa
Total Extent damaged	33 ha
Input subsidy required (SF /MF)	Rs 4.4 lakhs
Input subsidy required (OF)	Rs 0.3 lakhs
Total Input subsidy to be released	Rs 4.65 lakhs

Drought Kharif -2016 1st & 2nd Spell

No of Districts affected	7 Srikakulam, Prakasham, Nellore, Chittoor, Ananthapuramu, YSR Kadapa, Kurnool
Total Extent damaged	1207156 ha
Input subsidy required (SF /MF)	Rs 134446.9 lakhs
Input subsidy required (OF)	Rs 33558.9 lakhs
Total Input subsidy released	Rs 168005.76747 lakhs

Drought Kharif -2016 3rd Spell

No of Districts affected	3 Srikakulam, Prakasham, Vizianagaram.
Total Extent damaged	13630 ha
Input subsidy required (SF /MF)	Rs 1930.96 lakhs
Input subsidy required (OF)	Rs 4.38 lakhs
Total Input subsidy released	Rs 1935.3402 lakhs

Bud necrosis virus disease, Feb-2017

No of Districts affected	3 West Godavari, Krishna, Guntur.
Total Extent damaged	68676 ha
Input subsidy required (SF /MF)	Rs 5971.1 lakhs
Input subsidy required (OF)	Rs 896.5 lakhs
Total Input subsidy released	Rs 6867.57 lakhs

Drought Rabi -2016-17 in Prakasam

No of Districts affected	1 Prakasam
Total Extent damaged	202 ha
Input subsidy required (SF /MF)	Rs 20.045 lakhs
Input subsidy required (OF)	0.00
Total Input subsidy not considered	Rs 20.045 lakhs

SOIL TESTING

Soil Sampling and Soil testing programme is organized in a systematic manner to evaluate the fertility status and to identify the problems (Alkalinity/Salinity) and deficiency of nutrients if any to improve fertility and to apply fertilizer based on soil test data.

The GOI has launched Soil Health Card Scheme on 19.02.2015 with an objective to issue soil health cards to farmers covering all the land holdings. The farmers will be covered once in two years at presently.

Objectives of the scheme:

- To evaluate the fertility status and deficiency of nutrients
- To identify and reclaim the problematic soils
- To promote soil test based fertilizer usage.
- To adopt balanced and integrated use of fertilizers and thereby reducing cost of cultivation.
- To improve soil health.

Infrastructure:

Andhra Pradesh state is networking of One Regional Soil Testing Lab, 16 District Soil Testing Labs, 4 Mobile Soil Testing Labs, 30 Agricultural Market Committee level labs. In addition to the above STLs, 5 MSTLs were established in Srikakulam, West Godavari, Prakasam, Chittoor and Ananthapuramu districts during the year 2016-17. (The list of STLs enclosed).

Strengthening of Soil Testing Labs:

Under Soil Health Management Scheme/RKVY Schemes, the advanced equipment like MPAES (Micro Plasma Atomic Emission Spectroscopy) supplied to the STLs of Vizianagaram, Prakasam and Chittoor districts and AAS (Atomic Absorption Spectrophotometer) for micronutrient analysis and also supplied other required equipment like UV. Spectrophotometers, Kelpus units, Mechanical Shakers, Auto burettes, single & double distillation units, Ultra purified water systems, Flame photometers, Calorimeters, Conductivity bridge. The required plastic, plain & Quartz Glass ware have been also supplied to the STLs for testing of huge targets of Soil Samples in the stipulated time.

Staff:-

Assistant Director of Agriculture of STLs in the districts supervises the analysis. Based on the targets given to the labs, the required MPEOs/AEOs deployed to the STLs during analysis period in STLs.

Soil sample collection and analysis:

Based on the rain fed and irrigated areas, the soil samples will be collected in a grid of 10 ha in rain fed and 2.5 ha grid in irrigated areas duly registering the farmers details in Soil Health Card portal i.e into NIC portal by the field functionaries.

The collected soil samples have been sent to the STLs for analyzing 12 parameters of soils i.e., pH, EC, OC and available Macro nutrients (N,P,K) secondary nutrient Sulphur (S) and micronutrients (Zn, Fe, Mn, Cu & Boran).

Immediately after analysis, the results will be uploaded in Soil Health Card portal using the sample IDs by the STLs, then the Soil Health Card is available for printing and thereby distributed to the farmers before commencement of season duly conducting interactive meetings on soil test results to promote balanced and Integrated Nutrient Management (INM) including correction of micronutrient deficiencies and problematic soils (Alkalinity/Salinity)..

During 2016-17, a total of 12.01 lakh no.of soil samples were collected and analyzed and 48.02 lakh no.of Soil Health Cards were distributed to the farmers in 2 spells as the Govt. of India has instructed to complete the 1st cycle of SHC Scheme by March 2017. The following are the district wise phase wise targets and achievements during 2016-17:

S. No	District	2016-17 (2nd phase)				2016-17 (3rd phase)				Total Soil samples collected & analysed	Total SHC distributed
		Soil Samples		Soil Health Cards		Soil Samples		Soil Health Cards			
		Target	Collected & Tested	Target	Distributed	Target	Collected & Tested	Target	Distributed		
1	Srikakulam	34625	34625	212875	212875	34625	34648	212898	213589	69273	426464
2	Vizianagaram	23527	23658	129873	129873	23658	23779	210000	210678	47437	340551
3	Visakhapatnam	28612	28159	171629	171629	10413	10628	52579	52579	38787	224208
4	East Godavari	53643	53643	233944	233944	38652	38652	100863	130509	92295	364453
5	West Godavari	72452	70850	193074	193074	17601	33828	54419	69388	104678	262462
6	Krishna	60680	94989	225646	338255	16178	16308	76723	76723	111297	414978
7	Guntur	81560	82861	252678	252678	80913	80913	236744	236744	163774	489422
8	Prakasam	47505	47644	263375	264838	47644	47697	220738	220738	95341	485576
9	Nellore	46790	46985	167377	168678	46985	47256	199991	198061	94241	366739
10	Chittoor	27070	27144	144907	146451	27144	27247	131439	131439	54391	277890
11	Kadapa	30567	30589	182116	182116	30589	30613	159063	165581	61202	347697
12	Ananthapur	65531	65705	220174	220174	65705	65831	154136	154136	131536	374310
13	Kurnool	68098	68221	204663	204663	68221	68225	222436	222436	136446	427099
Total		640660	675073	2602331	2719248	508328	525625	2032029	2082601	1200698	4801849

Quality Check for Soil Samples:

During 1st phase for the year 2016-17, two check samples from each Gram Panchayat, i.e total of 21,000 No of Soil Samples has been sent to ICRISAT, Hyderabad for cross verification of Soil Samples tested in 56 Soil Testing Labs of Andhra Pradesh State.

For the 2nd phase, two check samples from each Gram Panchayat i.e 26,018 No of Soil Samples has been sent to Soil Testing Labs Vizianagaram and Tirupati for cross verification of the Soil Samples. Since, we have established with advanced equipment like MPAES in these Labs for accurate analysis of Boron & Micro Nutrients.

World Soil Day on 05th December 2016:

The World Soil Day celebrations on 05-12-2016 at district level block level and village level organised by giving wide publicity under Soil Health Card Scheme for by inviting VIPs and Farmers and involve the KVKs, Scientists in this programme. The Soil Health Cards distributed to the farmers through VIPs.

Funds released under SHC Scheme:

The funds released during the years 2015-16 and 2016-17 under SHC scheme i.e 762.92 lakhs and 2324.116 lakhs were utilized for implementing 2nd & 3rd phase respectively. The funds released by the Central and State governments in 60:40 ratio. The district wise funds released and expenditure details are enclosed.

Funds released under SHM Scheme

Soil Health Card scheme under NMSA during 2016 -17.				
NMSA-SHC 2016-17 (3rd Phase)				
S.No	Name of the District	(Funds In Rupees)		
		Funds Released to JDAs	Expenditure of JDAs	Balance funds available at JDAs
1	Srikakulam	8735958	8444000	291958
2	Vizianagaram	6942990	5699374	1243616
3	Visakhapatnam	4624554	3788323	836231
4	East Godavari	10797355	9113565	1683790
5	West Godavari	5311491	4786158	525333
6	Krishna	6217748	5964330	253418
7	Guntur	13583906	13436150	147756
8	Prakasam	10366058	8794187	1571871
9	Nellore	9388135	9388135	0
10	Chittoor	7215912	6684788	531124
11	Ananthapur	10961890	9920716	1041174
12	Kadapa	6524357	6351805	172552
13	Kurnool	11676352	11510129	166223
	Total	112346706	103881660	8465046

INTEGRATED NUTRIENT MANAGEMENT SCHEME - with special emphasis on micronutrient deficiency correction Implemented under State Development Plan

Analysis of soil samples has indicated that 40-49% of soils in Andhra Pradesh are potentially deficient in Zn, 12% in Iron(Fe), 5% in Manganese(Mn), 3% in copper (Cu), 33% in boron (Bo), 11% in molybdenum (Mo) and 20-24 % of soils in AP are deficient in Sulphur. Basal application to soil and/or foliar sprays of these nutrients have shown significant effect on crop yields.

It has been observed by preliminary soil mapping exercise undertaken by Department of Agriculture with ICRISAT, soil health card scheme 1st cycle & Other Organizations, large scale deficiencies of multiple nutrients such as micro and secondary nutrients like Zinc, Boron, Sulphur, Iron and in some case copper are recorded below critical limits which are reducing the responses to added N,P,K nutrients also. In most cases, farmers attribute the deficiencies caused by micronutrients to macronutrients and in turn add more quantities of N,P,K fertilizers to soils which do not result in increased crop yields.

Objectives:

1. To create awareness on identification of deficiency symptoms of nutrients in crops.
2. Increase awareness among farmers about the soil health to enable sustainability of agriculture production.
3. Reduce usage of Nitrogen and phosphoric fertilizer applications and emphasize the importance of Integrated Nutrient Management based on soil test recommendations.

Benefits of the Programme:

1. Improvement and maintenance of soil fertility.
2. Regulated nutrient supply for optimum crop growth.
3. Increased productivity.

Guidelines for Implementation of the Program

- Micronutrients like Zinc Sulphate, Borax, and Gypsum are supplied to farmers on subsidy through aadhar enabled biometric system based on soil test results on production of Soil Health Card.
- Gypsum is supplied for Reclamation of alkaline soils also.
- Zinc Sulphate will be supplied to paddy, maize, cotton, groundnut and other crops @ 50Kg/ha for basal application and Zinc Foliar spray @ 0.5Kg/ha.
- Gypsum will be supplied to Paddy in moderately alkaline soil, Groundnut @ 500Kg/ha and also for reclamation of alkaline soils @ 1000Kg/ha.
- Boron will be supplied to cotton and groundnut for soil application @ 2.5kg/ha.

The Govt. of Andhra Pradesh has given utmost importance for correcting the micronutrient deficiencies in Soils and has been providing funds for successful implementation of the program in the State.

The crop cutting experiments were conducted in major crops in all the districts at the end of season to study the effect of deficiency correction on crop productivity.

The quantities which were distributed to farmers on 50% subsidy for correcting deficient areas in all major crops cultivated during 2016-17 under the scheme are enclosed in **Annexure I**.

10 Mandal level trainings were organized and five crop cutting experiments per mandal were conducted in all major crops during 2016-17 to create awareness among farmers on micronutrient deficiencies, identification of deficiency symptoms. The CC experiments organized have shown significant increase in yields of about 6-15% over non applied fields.

The Government has provided Rs. 8000.00 Lakhs in 2016-17 BEs towards implementation of the Scheme, of which release was taken only for Rs. 4755.925 Lakhs as previous year budget was available and Rs. 4542.97 was utilized. The expenditure particulars are enclosed in **Annexure II**.

Annexure I

Districtwise micronutrients distributed and deficient area covered under Integrated Nutrient Management Scheme during 2016-17

S. No.	District	Quantity distributed in M.tons						Area covered in Ha
		Zinc		Boron		Gypsum		
		Target	Distributed	Target	Distributed	Target	Distributed	
1	Srikakulam	204	386	1	0.3	443	555	13365
2	Vizianagaram	299	415	23	23.1	751	617	42055
3	Visakhapatnam	450	271	9	0.0	450	131	32686
4	East Godavari	912	566	20	24.0	1400	1336	90500
5	West Godavari	662	636	32	31.6	1873	1873	97674
6	Krishna	959	313	56	22.5	1876	2114	82516
7	Guntur	855	949	10	4.4	1444	2650	59576
8	Prakasam	1046	542	27	30.0	4582	3286	95487
9	Nellore	2178	981	30	19.8	3790	8349	47417
10	Chittoor	346	250	49	41.4	6550	10151	70941
11	Kadapa	542	288	43	15.0	9309	6436	26277
12	Anantapur	1608	499	206	57.4	31158	16184	101107
13	Kurnool	954	611	87	19.6	6034	5896	58475
	Total	11015	6706	592	289.1	69660	59578	818077

Annexure II

Releases & Expenditure incurred under Integrated Nutrient Management Scheme during 2016-17

(Rs. in Lakhs)

District	RELEASE							ACTUAL EXPENDITURE							Total Releases	Total Actual expenditure
	2401-105-11-07			2401-789-11-04		2401-796-11-60		2401-105-11-07			2401-789-11-04		2401-796-11-60			
	330 Subsidies	500/503-OE	300-OCS	330 Subsidies	500/503-OE	330 Subsidies	500/503-OE	330 Subsidies	500/503-OE	300-OCS	330 Subsidies	500/503-OE	330 Subsidies	500/503-OE		
Srikakulam	0.00	13.24	14.8	0.00	3.96	0.00	1.24	0.00	11.39	7.32	0.00	2.10	0.00	0.95	33.25	21.76
Vizianagaram	0.00	12.31	13.6	0.00	3.59	0.00	1.13	0.00	6.20	5.42	0.00	1.70	0.00	0.60	30.63	13.92
Visakhapatnam	0.00	15.52	17.2	0.00	4.58	0.00	1.41	0.00	10.20	10.61	0.00	2.50	0.00	1.41	38.71	24.72
East Godavari	0.00	21.00	23.6	0.00	6.38	0.00	1.97	0.00	15.80	8.85	0.00	4.75	0.00	1.14	52.95	30.54
West Godavari	0.00	21.14	21.2	0.00	4.95	0.00	1.52	0.00	16.96	9.60	0.00	3.75	0.00	1.15	48.81	31.46
Krishna	0.00	17.93	20	0.00	5.39	0.00	1.64	0.00	15.57	11.63	0.00	4.95	0.00	1.55	44.95	33.69
Guntur	0.00	20.17	22.8	0.00	6.19	0.00	1.92	0.00	17.89	17.46	0.00	5.48	0.00	1.73	51.08	42.56
Prakasam	0.00	19.93	22.4	0.00	6.07	0.00	1.86	0.00	14.50	9.69	0.00	1.50	0.00	0.70	50.26	26.39
Nellore	0.00	16.45	18.4	0.00	4.95	0.00	1.52	0.00	14.75	14.27	0.00	2.85	0.00	0.95	41.33	32.82
Chittoor	0.00	24.51	26.4	0.00	6.81	0.00	2.09	0.00	22.50	24.84	0.00	4.81	0.00	1.09	59.81	53.23
Ananthapur	0.00	26.49	25.2	0.00	5.39	0.00	1.69	0.00	25.85	6.70	0.00	5.10	0.00	1.25	58.77	38.90
Kadapa	0.00	16.59	20	0.00	5.82	0.00	1.81	0.00	16.05	18.57	0.00	5.75	0.00	1.45	44.21	41.82
Kurnool	0.00	15.52	21.6	0.00	7.12	0.00	2.20	0.00	11.55	14.08	0.00	3.85	0.00	1.05	46.44	30.53
DA(FCO) lab, Tadepalligudem	0.00	5.50	1.63	0.00	0.00	0.00	0.00	0.00	5.50	1.63	0.00	0.00	0.00	0.00	7.13	7.13
ADA(FCO) lab, Bapatla	0.00	6.00	1.63	0.00	0.00	0.00	0.00	0.00	6.00	0.42	0.00	0.00	0.00	0.00	7.63	6.42
ADA(FCO) lab, Ananthapur	0.00	5.50	1.64	0.00	0.00	0.00	0.00	0.00	5.50	0.00	0.00	0.00	0.00	0.00	7.14	5.50
AAO(cash), O/o DA, AP, Hyd	0.00	60.00	5.1	0.00	0.00	0.00	0.00	0.00	33.85	0.00	0.00	0.00	0.00	0.00	65.10	33.85
C&DA PD A/c	2832.25	0.00	0	943.2	0.00	292.275	0.00	814.10	0.00	0.00	180.80	0.00	56.20	0.00	4067.73	4067.7
TOTAL	2832.25	317.80	277.20	943.20	71.20	292.28	22.00	814.10	250.05	161.0	180.80	49.09	56.20	15.01	4755.93	4542.9

SEEDS

General Seed distribution:-

During 2016-17 for implementation of various Central and State schemes under the component of “Supply of seeds to farmers”, a total quantity of 1123958 qtl of various crop seeds were distributed on subsidy with a subsidy amount of Rs. 30246 Lakhs .

The details of subsidy seed distribution is given below:

(Qty in Qtls & Subsidy in Rs Lakhs.)

Kharif 2017		Rabi 2017-18		Total	
Physical	Financial	Physical	Financial	Physical	Financial
742971	15996	380987	14249	1123958	30246

District wise and crop wise subsidy seed distribution details are furnished in **Annexure I&II** respectively.

Annexure I

District wise SUBSIDY SEED DISTRIBUTION 2016-17

(Qty in Qtls & Subsidy in Rs lakhs)

S. No.	District	Kharif 2016		Rabi 2016-17		TOTAL	
		Distribution	Subsidy value	Distribution	Subsidy value	Distribution	Subsidy value
1	Srikakulam	47250	301	3094	87	50344	388
2	Vizianagaram	48989	331	2800	68	51789	400
3	Visakhapatnam	21744	164	1552	43	23296	207
4	East Godavari	12907	217	2075	64	14982	281
5	West Godavari	11781	217	430	17	12211	234
6	Krishna	26536	440	2784	90	29320	530
7	Guntur	18010	399	17836	722	35846	1121
8	Prakasam	8904	263	66666	2640	75570	2902
9	Nellore	18625	414	30249	687	48874	1101
10	Kadapa	64367	1596	76273	2994	140640	4590
11	Kurnool	50694	1290	99796	3938	150490	5228
12	Anantapuramu	328716	8276	67018	2628	395734	10904
13	Chittoor	84448	2089	10413	272	94861	2361
		742971	15996	380987	14249	1123958	30246

Annexure II

Crop wise SUBSIDY SEED DISTRIBUTION 2016-17

(Qty in Qtls & Subsidy in Rs lakhs)

S. No.	Crop	Kharif 2016		Rabi 2016-17		TOTAL	
		Distribution	Subsidy	Distri bution	Subsidy value	Distri bution	Subsidy value
1	Groundnut	496704	12371.41	16078.1	397.0025	512782	12768
2	Redgram	13080	562			13080	562
3	Blackgram			6760.48	338.024	6760	338
4	Greengram	8895	425.55	742.92	22.2876	9638	448
5	Bengalgram			338998.85	13376.89	338999	13377
6	Paddy	145412	768	17451	93.885	162863	862
7	Maize	1030	25.75			1030	26
8	Jowar	105	3	553	13.825	658	16
9	Bajra	33	0.83			33	1
10	Ragi	33	0.79			33	1
11	Sessamum	83	3.42	41	1.5867	124	5
12	Castor	20	0.50			20	1
13	Korra	81	1.71			81	2
14	Soybean	1031	22.68			1031	23
15	Cowpea			166.4	3.299712	166	3
16	Horsegram			195	2.5662	195	3
17	Daincha	48618	862.96			48618	863
18	Sunhemp	14222	334			14222	334
19	Pillipesara	13625.11	613.12995			13625	613
	Total	742971	15996	380986.75	14249.37	1123958	30246

SEED VILLAGE SCHEME

The Seed Village scheme ensures supply of quality certified seed of notified varieties to the farmers in time at their places at affordable prices besides ensuring quick multiplication of new seed varieties in a shorter time in that mandal /district based on the crop situation.

Compact area approach needs to be followed under this scheme. The number of farmers for a unit of 10 ha. may be minimum of 25 and also subject to a maximum of 150.

Mode of implementation:

- Supply of Foundation seed on 50% subsidy for cereals and 60% subsidy for oilseeds and Groundnut.
- Trainings: 3 one day trainings will be conducted to the farmers on seed production technology.

Achievements during kharif 2016:

- A quantity of 11998Qtls. of foundation seed was distributed for implementation of Seed Village in 12070 ha. The No. of units grounded are 1207 covering 30175 farmers.
- The crops covered under this Programme are Paddy, Red gram , Greengram , Black gram andGroundnut .
- The certified seed production is 4.21 lakh qtls.

Rabi 2016-17:

- An area of 18160 ha. was covered by utilizing 22936qtls. of foundation/certified seed-1 during Rabi 2016-17 covering 45400 farmers.
- The crops covered are Paddy, Sesamum, Green gram, Blackgram, Bengal gram and Groundnut.
- The Certified seed production is 2.98lakh qtls.

Budget Releases & Expenditure:

- Budget released by GOI : Rs. 1508.24 lakhs
- Total Expenditure : Rs.1329.98 lakhs.

Physical:

S. No.	Component	Unit	Target				Achievement			
			Gen.	SCP	TSP	Total	Gen.	SCP	TSP	Total
			1	50% subsidy on Seed.	Qtls.	28677	6036	3018	37731	26550
2	Trainings@ Rs. 15,000/- per 100 farmers	Nos	1203	252	126	1581	1149	241	121	1511

Financial:(In Rs.lakhs)

S.No.	Component	Releases				Expenditure			
		Gen.	SCP	TSP	Total	Gen.	SCP	TSP	Total
1	50% subsidy on Seed.	964.099	251.64	125.825	964.099	Rs.1329.98 lakhs			
2	Trainings @ Rs.15,000/- per unit	91.67	50	25	91.67				
	Grand Total	1055.769	301.64	150.825	1508.234				

STATE SEED FARMS

There are 17 State Seed Farms under the control of Department of Agriculture.

The main objective of the State Seed Farms is production of Foundation Seed duly obtaining Breeder seed from Research Stations of ANGRAU. The Foundation seed produced is being utilized for organization of Seed Village Scheme.

Achievements during 2016-17:

Kharif- 16:

During the Kharif season, cropping programme was implemented in the 12 State Seed Farms in extent of 168.00 ha and 5048.90 qtls of Foundation seed produced.

- In the State Seed Farms, Amaravati (Guntur), and S.Uppalapadu (YSR Kadapa) no cropping programme was implemented during Kharif-2016 due to rainfed.
- In the State Seed Farms, Chinnapavani, generally cropping programme is being implemented based on the water source in the Rallapadu Reservoir.
- In the State Seed Farms, Thangadencha, PDDF Yemmiganoor and Edurur Seed Farms, due to non release of canal water, Paddy crop was not taken up in 57.00 ha.

Rabi 2016-17:

Cropping programme was taken up in 9 farms out of 17 seed Farms, because Farms due to adverse seasonal conditions prevailed (DRAUGH) during Rabi season. An extent of 157.16 ha was covered and 2754.40 qtls of Foundation seed produced.

- Seed production Particulars during 2016-17

S. No.	Season	Extent in ha	B/seed utilized in qtls	F/ seed Production in qtls
1.	Kharif-16	168.06	114.77	5048.90
2.	Rabi-16-17	157.16	132.55	2754.40
	Total	325.22	247.32	7803.30

District wise details are furnished in the **Annexure III , IV and V**

ANNEXURE-III
Cropping Programme in the State Seed Farms during Kharif-2016

Extent in ha & Qty in qtls

S. No	Farm	District	Paddy		Redgram		Blackgram		Groundnut		Total	
			Area	Yields	Area	Yields	Area	Yields	Area	Yields	Area	Yields
1	Peddapeta	Srikakulam	25.00	603.00							25.00	603.00
2	Samalkot	East Godavari	12.00	476.00							12.00	476.00
3	Undi	West Godavari	6.40	322.00							6.40	322.00
4	Kovvali	West Godavari	33.80	1438.00							33.80	1438.00
5	Chintalapudi	West Godavari							2.8	25.00	2.80	25.00
6	Ghantasala	Krishna	6.16	207.00							6.16	207.00
7	Amaravathi	Guntur	0.00								0.00	0.00
8	Chinnapavani	Prakasam	0.00								0.00	0.00
9	Thangadencha	Kurnool			26.00	89.00					26.00	89.00
10	Edurur	Kurnool			3.00	5.50	3.00	12.40			6.00	17.90
11	PDDF, Yemmiganoor	Kurnool	0.00	0.00							0.00	0.00
12	FTC, Nandyal	Kurnool	3.50	209.00							3.50	209.00
13	PDDF Kanekal	Ananthapur	6.00	225.00							6.00	225.00
14	SMF, Kanekal	Ananthapur	29.00	1253.00							29.00	1253.00
15	S.Uppalapadu	Kadapa									0.00	0.00
16	MD Mangalam	Chiittoor							3.00	31.00	3.00	31.00
17	Nagalapuram	Chittoor	2.00	116.00	4.00	27.50	0.40	5.00	2.00	4.50	8.40	153.00
		Grand Total	123.86	4849.00	33.00	122.00	3.40	17.40	7.80	60.50	168.06	5048.90

ANNEXURE-IV
Cropping Programme in the State Seed Farms during Rabi-2016-17
Extent in ha & Qty in qtls

S. No	Farm	District	Paddy		Greengram		Blackgram		Bengalgram		Groundnut		Total	
			Area	Yields	Area	Yields	Area	Yields	Area	Yields	Area	Yields	Area	Yields
1	Peddapeta	Srikakulam												
2	Samalkot	East Godavari	12.00	435.00									12.00	435.00
3	Undi	West Godavari	6.40	350.00									6.40	350.00
4	Kovvali	West Godavari	33.80	1388.00									33.80	1388.00
5	Chintalapudi	West Godavari									2.80	35.00	2.80	35.00
6	Ghantasala	Krishna			6.16	18.40							6.16	18.40
7	Amaravathi	Guntur	0.00										0.00	0.00
8	Chinnapavani	Prakasam	0.00										0.00	0.00
9	Thangadencha	Kurnool							62.00	89.00			62.00	89.00
10	Edurur	Kurnool							6.00	56.00			6.00	56.00
11	PDDF, Yemmiganoor	Kurnool	0.00	0.00									0.00	0.00
12	FTC, Nandyal	Kurnool											0.00	0.00
13	PDDF Kanekal	Ananthapur							14	100			14.00	100.00
14	SMF, Kanekal	Ananthapur											0.00	0.00
15	S.Uppalapadu	Kadapa							0.00	0.00			0.00	0.00
16	Mahadevaman galam	Chiittoor									0.00	0.00	0.00	0.00
17	Nagalapuram	Chiittoor					8.00	56.00			6.00	227	14.00	283.00
		Grand Total	52.20	2173.00	6.16	18.40	8.00	56.00	82.00	245.00	8.80	262.00	157.16	2754.40

ANNEXURE-V

Cropping programme during 2016-17 in the State Seed Farms

Extent in ha & seed in qtls

S.No	Crop	Kharif-2016			Rabi-2016-17			Total		
		Area	B/S	Yields	Area	B/S	Yields	Area	B/S	Yields
1	Paddy	123.86	92.97	4849.00	52.20	39.15	2173.00	176.06	132.12	7022.00
2	Redgram	33.00	3.30	122.00	0.00	0.00	0.00	33.00	3.30	122.00
3	Groundnut	7.80	17.20	60.50	8.80	20.00	262.00	16.60	37.20	322.50
4	Greengram	0.00	0.00	0.00	6.16	2.10	18.40	6.16	2.10	18.40
5	Bengalgram	0.00	0.00	0.00	82.00	66.50	245.00	82.00	66.50	245.00
6	Blackgram	3.40	1.30	17.40	8.00	4.80	56.00	11.40	6.10	73.40
	Total	168.06	114.77	5048.90	157.16	132.55	2754.40	325.22	247.32	7803.30

SEED REGULATION

- Against the focused target of 7535 seed samples for the year 2016-17, 7563 seed samples were drawn and analyzed and results were communicated achieving 100% of target allotted, out of which 182 samples were declared as not conforming to the prescribed standards (**Annexure VI**).
- There are 69 Centralized seed licenses issued during the year 2016-17.
- Central squad teams were deputed in before commencement of season as special squad on Bt cotton. In addition to this internal district squads were deputed in all the districts. As such majority of dealer premises licensed and unauthorized premises were raided. Accordingly 5077 Quintals of seed was detained worth Rs. 218 lakhs and 1418 Quintals of seed was seized worth Rs.26 lakhs and 6 no.of 6A cases and 3 Criminal cases were booked on account of indulging in illegal seed business and others 71 number of licenses were cancelled / suspended.
- Pre-release Quality Assurance Programme was launched with a view to monitor the quality of Bt cotton at storage level before release into the market. In this programme, it is targeted to draw service samples not less than 20% of the total lots to curb the flow of non-Bt cotton seed in place of Bt. cotton. Accordingly 1115 Bt cotton samples were drawn out of which 35 samples were declared sub-standard.
- As a part of new guidelines issued, instead of restricting legal action to the particular district only, the particulars of seed lots declared not conforming to prescribed standards is communicated to all the district JDAs for uniform action in respect of seed lot and to draw samples and initiate action accordingly under law enforcement.
- Single Window Diagnostic Laboratories were established in 11 districts are taking up seed testing under service category in addition to the notified labs functioning at Yemmiganur, Kurnool district, Tadepalligudem, West Godavari district and DNA lab, Malakpet, Hyderabad. A total of 7563 seed samples were analysed in these labs. Each SWD labs was provided with Rs. 2,00,000/- for purchase of chemicals and maintenance purpose.
- During Kharif 2016 a quantity of 22.50 packets of cotton seed have been distributed in Districts for sale to farmers in AP.

Statement showing Seed Regulation activities in the State during 2016-17 is furnished in the **Annexure VII**.

ANNEXURE VI

Target and Achievement of Seed Samples for the Year 2016-17

S. No.	Districts Allotted	Annual Target for all crops	Other than Cotton Samples Analyzed	Substandard (O.C.)	Annual Target for Cotton samples	Cotton samples Analyzed	Substandard (Cotton)
1	Srikakulam	260	245	10	10	10	3
2	Vizianagaram	290	281	10	10	10	1
3	Visakhapatnam	270	265	3	10	23	0
4	E. Godavari	660	642	16	20	20	0
5	W. Godavari	510	399	4	20	20	1
6	Guntur	1200	895	32	425	315	4
7	Krishna	650	598	15	70	55	1
8	Prakasam	500	378	20	125	125	3
9	Nellore	340	320	0	20	20	0
10	Ananthapuram	905	895	15	75	35	0
11	YSR Kadapa	400	382	5	30	20	2
12	Kurnool	1200	805	15	300	455	20
13	Chittoor	350	350	2	0	0	0
	Grand Total	7535	6455	147	1115	1108	35

ANNEXURE VII

Seed Regulatory Activities in the State of Andhra Pradesh during 2016-17

S. No	District	Crop	Quantity detained in Quintals	Value (Rs. In Lakhs)	Quantity Seized (Qtls)	Value (Rs in Lakhs)	Persons arrested	Cases Booked		Licenses Cancelled/ suspended
								6A	Criminal case	
1	Srikakulam									
2	Vizianagaram									
3	Visakhapatnam									
4	East Godavari	Paddy			87.51	3.8		2		1
5	West Godavari									
6	Krishna	Cotton	598	152	172.89	4.33		1		0
7	Guntur	Paddy , Cotton	891.43	29.93	95.5	0.58			2	50
8	Prakasam	Paddy , Cotton	326	5.52	1000				1	14
9	Nellore									
10	Kurnool	Paddy , Cotton	3261	30.05	0.45	0.8				
11	Ananthapuramu	Paddy , Cotton			61.27	16.47		3		3
12	Kadapa									
13	Chittoor									
	Grand Total		5076.43	217.5	1417.62	25.98	0	6	3	71

FERTILIZERS

Fertilizer Plan and Supplies:

35.31 LMT of fertilizers consumed against the plan of 38.11 LMT during the year 2016-17. Compared to the Fertilizer consumption during 2015-16 there is a quantity of 57503 MTs less consumed during 2016-17 and saved an amount of 476.13 Crores of Rupees as subsidy. The Fertilizer consumption district wise product wise and season wise as follows.

Year	2016						
Season	Kharif						
Districts	UREA-Qty	D.A.P-Qty	S.S.P-Qty	M.O.P-Qty	Total complex-Qty	Others	Total Fert
Srikakulam	53,163	14,759	2,247	8,980	8,538	0	87,686
Vizianagaram	40,338	11,398	3,282	9,367	9,709	0	74,095
Visakhapatnam	30,762	4,060	3,038	2,693	3,234	0	43,787
East Godavari	73,700	15,128	9,812	16,100	27,363	1,116	1,43,219
West Godavari	69,555	11,490	25,811	29,018	61,710	3,448	2,01,031
Krishna	81,524	16,638	20,116	8,442	54,199	3,501	1,84,420
Guntur	91,009	31,231	9,672	7,412	67,975	3,004	2,10,304
Prakasam	29,127	9,379	4,623	2,161	29,948	2,586	77,824
Nellore	37,288	9,562	6,156	8,142	22,732	1,568	85,449
Kurnool	88,727	36,832	3,930	11,673	1,48,489	3,980	2,93,630
Anantapur	36,441	13,705	7,250	4,128	35,052	1,649	98,226
Kadapa	30,762	6,394	7,178	4,445	35,172	781	84,733
Chittoor	29,639	6,130	2,613	3,458	14,124	846	56,810
Grand Total	6,92,034	1,86,707	1,05,729	1,16,018	5,18,247	22,478	16,41,214

Year	2016-17						
Season	Rabi						
Districts	UREA-Qty	D.A.P-Qty	S.S.P-Qty	M.O.P-Qty	Total complex-Qty	Others	Total Fert
Srikakulam	12,807	4,656	1,395	2,747	5,924	0	27,529
Vizianagaram	18,545	3,650	2,749	4,400	3,148	178	32,670
Visakhapatnam	12,087	1,644	885	1,378	1,292	0	17,284
East Godavari	1,08,398	22,519	9,060	17,161	53,627	1,990	2,12,756
West Godavari	1,22,321	20,179	28,974	31,197	1,03,983	14,027	3,20,682
Krishna	71,949	9,874	9,224	18,916	41,869	2,964	1,54,795
Guntur	1,43,445	26,840	2,940	12,986	1,52,738	8,256	3,47,205
Prakasam	53,868	20,006	5,858	11,470	54,473	10,399	1,56,073
Nellore	87,401	14,519	9,549	15,752	35,674	4,344	1,67,238
Kurnool	72,178	31,965	3,344	14,098	1,07,111	6,354	2,35,048
Anantapur	20,811	11,792	3,655	4,315	24,436	1,331	66,339
Kadapa	34,616	8,060	6,065	6,974	25,605	1,343	82,664
Chittoor	31,619	9,637	3,358	4,020	19,938	1,048	69,619
Grand Total	7,90,043	1,85,340	87,056	1,45,413	6,29,817	52,233	18,89,903

Year	2016-17						
Season	(All)						
Districts	UREA-Qty	D.A.P-Qty	S.S.P-Qty	M.O.P-Qty	Total complex-Qty	Others	Total Fert
Srikakulam	65,970	19,415	3,642	11,726	14,462	0	1,15,215
Vizianagaram	58,883	15,048	6,031	13,768	12,857	178	1,06,766
Visakhapatnam	42,849	5,703	3,923	4,070	4,526	0	61,071
East Godavari	1,82,098	37,647	18,872	33,261	80,991	3,106	3,55,975
West Godavari	1,91,876	31,669	54,785	60,215	1,65,693	17,475	5,21,713
Krishna	1,53,473	26,512	29,339	27,358	96,068	6,465	3,39,215
Guntur	2,34,454	58,070	12,613	20,398	2,20,713	11,260	5,57,508
Prakasam	82,994	29,386	10,481	13,631	84,421	12,984	2,33,897
Nellore	1,24,689	24,081	15,706	23,894	58,406	5,912	2,52,687
Kurnool	1,60,904	68,797	7,274	25,771	2,55,599	10,334	5,28,678
Anantapur	57,251	25,498	10,905	8,443	59,488	2,980	1,64,565
Kadapa	65,378	14,455	13,244	11,419	60,777	2,124	1,67,397
Chittoor	61,258	15,767	5,971	7,478	34,062	1,894	1,26,429
Grand Total	14,82,077	3,72,048	1,92,785	2,61,431	11,48,064	74,712	35,31,117

Buffer maintenance by AP Markfed

The State Govt designated the APMarkfed as state nodal agency to maintain Fertilizer buffers to meet the immediate requirement during peak season or if any lag in supply. During the year 2016-17, AP MARKFED as Nodal Agency was directed to maintain 2.00 LMT (1.50 LMT urea + 0.25 LMT DAP + 0.25 LMT complexes) of fertilizer buffers in the state. The State Government has created a sub-head under the scheme “*storage, interest and other related costs of fertilizer buffers*” and allocated Rs.6450 lakhs and an amount of Rs.4225 Lakhs was utilized for the said purpose.

DBT(Direct Benefit Transfer):

The Government of India has introduced Direct Benefit Transfer (DBT) system for fertilizer subsidy payments. Under the fertilizer DBT system, 100% subsidy on various fertilizer grades shall be released to the fertilizer companies, on the basis of actual sales made by the retailers to the beneficiaries. Sale of all subsidized fertilizers to farmers/buyers will be made through Point of Sale (PoS) devices installed at each retailer shop and the beneficiaries will be identified through Aadhaar Card, KCC, Voter Identity Card etc.

DBT implementation and current status:

The Department of fertilizers, GoI has implemented Direct Benefit Transfer System on a pilot basis w.e.f. 1.10.2016 in 17 districts in the country wide. In Andhra Pradesh it was implemented in Krishna and West Godavari districts.

(details of DBT from 1-10-16 to 31-3-17)

Row Labels	No. of Sale Transactions	Quantity Sold (MTs)
Srikakulam	0	0
Vizianagaram	0	0
Visakhapatanam	0	0
East Godavari	0	0
West Godavari	452966	187967
Krishna	213653	81884
Guntur	0	0
Prakasam	0	0
Spsr Nellore	0	0
Kurnool	0	0
Anantapur	0	0
Y.S.R.	0	0
Chittoor	0	0
Grand Total	666619	269851

FERTILIZER QUALITY CONTROL

There are (3) Fertilizer Quality Control Laboratories in the State of Andhra Pradesh, each with an annual capacity of 3500 Fertilizer samples per each laboratory. All the three laboratories ie, Tadepalligudem, Bapatla and Ananthapuramu labs have been provided with all the latest equipment including Atomic Absorption Spectrophotometer (AAS) for analyzing of all categories of fertilizers.

Objective of the Scheme:

The main objective of the scheme is to maintain the Quality Control of chemical fertilizers. The fertilizer samples drawn by the Fertilizer Inspectors are sent to Fertilizer Coding Centre, Guntur and Coding Centre will in turn send to the laboratory for analysis to confirm the guaranteed percentage of nutrient composition and other specifications of the sample as per FCO, 1985 apart from this the laboratories are also analyzing the departmental samples, (service samples sent by A.D.As, AOs which are to be distributed under subsidy schemes. Further this laboratory is also analyzing referee samples private money paid samples and farmers request samples if any, received.

Targets and Achievements:

A target of 9700 fertilizer samples was fixed to the districts based on number of manufacturers, fertilizer outlets, normal area and consumption of fertilizers. Out of the total target of 9700 samples to be drawn by the fertilizer Inspectors, 9815 samples were drawn out of which 138 samples were declared non-standard. The action on non-standards is taken by the concerned notified authorities. District wise detail of targets and achievements are as detailed bellow.

District wise fertilizer targets, Achievements and Non-standards:: 2016-17

SNO	District	Yearly Target	Received Samples	Non_std
1	Srikakulam	206	195	0
2	Vizianagaram	213	199	3
3	Vishakapatnam	303	546	1
4	East Godavari	865	853	11
5	West Godavari	1520	1444	11
6	Krishna	1248	1311	33
7	Guntur	1449	1468	24
8	Prakasam	722	723	15
9	Nellore	705	704	11
10	Kurnool	1108	1077	10
11	Anantapur	548	500	9
12	Kadapa	502	488	8
13	Chittoor	311	307	2
Total		9700	9815	138

PLANT PROTECTION

Rodent Control Programme:

During the year 2016-17, Rodent Control Programme was implemented in an area of 13.57 lakh ha incurring an expenditure of Rs.134.56 lakhs to prevent yield loss in paddy crop due to rodent infestation and to produce good quality paddy grain. This programme was implemented in five districts of East Godavari, West Godavari, Krishna, Guntur and SPSR Nellore in the state. Total quantity of 12730 kg of Bromodialone chemical (0.25%CB) distributed to the paddy growing farmers in the above five districts @ 10 gm per ha. (**Annexure I**).

Strengthening of Pesticide Testing Laboratories:

In order to ensure the supply of good quality pesticides to the farmers Five (5) Pesticide Testing Laboratories are working in the state. Total No. of 5144 pesticide and bio-pesticide samples (5132 pesticide and 12 bio-pesticide samples) have been analyzed during the year 2016-17. The total no. of pesticide samples declared substandard were 63 (58 pesticides and 5 bio-pesticides). The total budget utilized during 2016-17 is Rs. 132.00 as against release of Rs.132.00 lakhs (**Annexure II**).

Coding Centre for Pesticides:

In order to maintain the secrecy of place of analysis of pesticide samples drawn by the Insecticide Inspectors of the State and to send samples to five Pesticide Testing Laboratories in the State. The ultimate objective of the Coding Centre is to ensure the supply of good quality pesticides to the farmers. During the year 2016-17, 5144 pesticide and bio-pesticide samples were processed through Coding Centre against the allotted target of 5270 samples. An amount of Rs 4.00 lakhs was released for the maintenance of the coding centre and the same was released (**Annexure III**).

ANNEXURE I
Rodent control programme - 2016-17

(Rs. in lakhs)

Sl.No.	District	Target		Achievement	
		Physical (Lakh ha.)	Financial	Physical (Lakh ha.)	Financial
1	East Godavari	2.53	26.846	2.53	26.846
2	West Godavari	2.36	20.159	2.36	20.159
3	Krishna	2.19	23.320	2.19	23.32
4	Guntur	1.582	16.880	1.582	16.88
Kharif Total		8.66	87.205	8.66	87.20
1	East Godavari	1.76	18.363	1.76	18.363
2	West Godavari	1.85	15.451	1.85	15.451
3	SPS Nellore	1.30	13.540	1.30	13.54
Rabi Total		4.91	47.35	4.91	47.35
Grand Total		13.57	134.56	13.57	134.56

ANNEXURE II

Strengthening of PTLs - 2016-17

(Rs. in lakhs)

Sl.No.	ADA (PTLs)	Physical (No. of pesticide & bio- pesticide samples)		Financial	
		Target	Achievement	Releases	Expenditure
1	Anantapur	1200	1334	26.351	26.351
2	Guntur	1540	1554	28.35	28.35
3	Kurnool	820	830	24.35	24.35
4	Visakhapatnam	710	780	23.596	23.596
5	Tadepalligudem, West Godavari	1000	761	25.35	25.35
6	DDA(IA),PTL&Coding centre	0	0	4.00	4.00
TOTAL		5270	5259	132.00	132.00

ANNEXURE III

Statement showing the details of Pesticide Sample Targets for the year 2016-17

S. No.	District	Pesticides			Bio-Pesticides			Total samples drawn	% Achievement
		Annual Target	Achievement	Misbrand	Annual Target	Achievement	Misbrand		
1	Srikakulam	94	97	1	6	0	0	97	97
2	Vizianagaram	59	61	0	6	2	2	63	97
3	Visakhapatnam	71	78	4	8	0	0	78	99
4	East Godavari	526	533	5	14	1	0	534	99
5	West Godavari	682	672	8	14	0	0	672	97
6	Krishna	546	532	9	14	2	1	534	95
7	Guntur	1183	1179	16	17	2	2	1181	98
8	Prakasam	428	435	5	12	0	0	435	99
9	SPSR Nellore	162	160	0	8	2	0	162	95
10	Kurnool	631	623	8	14	2	0	625	97
11	Anantapuramu	294	294	2	11	0	0	294	96
12	YSR Kadapa	192	198	0	8	0	0	198	99
13	Chittoor	262	270	0	8	1	0	271	100
TOTAL		5130	5132	58	140	12	5	5144	98

POLAMBADI

Crop yields are not increasing as expected even though the cost of cultivation increased many folds due to indiscriminate use of inputs resulting in poor quality of produce leading to poor returns to the farmers.

The major constraints for production:

- Declining soil productivity and inappropriate / imbalanced nutrient use.
- Indiscriminate use of pesticides there by increased cost on crop protection.
- Poor water management resulting in low Water Use Efficiency (WUE) and soil salinity and alkalinity problems.
- Inadequate research and extension support to farmers.

Steps to increase the yield:

- Developing and using viable mechanisms to transfer latest technology and techniques from researchers to farmers and collect feedback to re-orient research on issues critical to farmers.
- Adopting integrated crop management techniques to increase the productivity and profitability of farmers.

Integrated crop Management is an approach to farming which aims to balance production with economic and environmental considerations by means of a combination of measures including crop rotation, cultivations, appropriate crop varieties and careful use of inputs.

ICP= INM+ IPM + Agronomic practices including farm mechanization.

The Integrated Crop Management includes

1. To improve soil fertility/nutrients through Integrated Nutrient Management.
2. Cost effective Weeds/Pests/Diseases management.
3. Adopting Water Management practices.
4. Following Post Harvest Technology.

All technologies and practices are included to help farmers to increase or maintain grain yields at same rate with reduced cost of cultivation and improving the quality will enhance farmers' profitability.

Farmers need adequate training and technical support to improve their decision-making capacity and properly utilize the new techniques.

Keeping in view of the above, Farmers Field School (Polambadi) were taken up during the year 2016-17 to reduce the cost of cultivation, increase the productivity, reduce the pesticide usage by adopting eco-friendly alternatives to pesticides and also creating awareness to farmers about the pesticide hazards.

Concept of Polambadi:

Empowering the farmers to take up economical decisions by adopting practices of Integrated Crop Management.

The four principles of Polambadi

- Grow a healthy crop
- Conserve natural enemies
- Conduct regular field observations
- Farmers become ICM experts

The Polambadi programme is being done from seed to seed, so that the participants can observe and analyze the dynamics of crop ecology across the season. Field observations will be done on any fixed day of the week.

Size of the Polambadi : 10 ha.
 No. of Farmers : 30

Polambadi is in the crop field and study is being done in the field of one of the trainee participant farmers in about 2 acres. In this field the trainees will conduct simple experiments/validation trials such as comparison between ICM & Farmers practice, study on plant compensation and make observations for Agro-ecosystem Analysis in crop etc., and these are usually carried out by the group.

1. The training is fully field oriented, participatory and discovery based i.e., “*learning by doing*”.
2. The training aims at teaching science to the farmer in his fields.
3. Training curriculum is based on local needs. What is relevant and meaningful is decided by the farmers.

Polambadi learning field

ICM	Field validation trails	Farmers practice
½ Acre	1.00 Acre	½ Acre

During 2016-17 the Polambadi programme was organized as detailed below:

Overall 936 Nos of polambadi were organized during 2016-17 with an amount of Rs.82.80 lakhs.

Polambadi during the year 2016-17

District wise Targets and Achievements of Polambadi during-2016-17

S.No.	District	Physical		Financial (Rs. in lakhs)	
		Tar.	Allocation	Ach.	Ach.
1	Srikakulam	58	16.68	58	3.57049
2	Vizianagaram	51	13.64	46	5.19628
3	Vishakhapatnam	28	7.31	28	3.44319
4	East Godavari	31	7.89	31	4.57472
5	West Godavari	29	7.38	29	2.69389
6	Krishna	63	15.08	58	4.36711
7	Guntur	82	21.36	78	10.24663
8	prakasam	85	24.54	84	8.86093
9	Nellore	39	14.44	38	1.81839
10	Kurnool	207	62.49	207	22.95267
11	Ananthapur	149	45.8	139	10.08375
12	Kadapa	91	30.34	67	0.63
13	Chittoor	87	27.32	73	4.36384
	Total	1000	294.27	936	82.80189

Chandranna Rythu Kshetralu (CRKs)

In Andhra Pradesh important crops like Paddy, Pulses, Coarse cereals, Oilseeds and Cotton are cultivated in considerable area. The production and productivity in majority of crops is below the possible potential. There is every need to motivate and sensitise the farmers regarding best management practices and the importance of location specific critical interventions for achieving enhanced productivity in different crops. In order to enhance the productivity of these crops, special programme involving gross root level extension functionaries and farmers is proposed to conduct **Chandranna Rythu Kshetralu**-(CRKS) on Farm demonstrations with latest technological interventions and by close monitoring of higher officials not only from the district but also from office of C&DA. The farmers will also be exposed to these interventions at different crop growth stages to realise the advantage of these interventions in enhancing the productivity. The achievable growth in terms of productivity per acre and also their performance in monitoring and controlling pests and other agronomic practices in each crop, will be fixed by the district JDAs keeping in view of the present status and definite possible increase in productivity. The concerned officers are personally responsible for implementation and achieving the targets.

Objective: Chandranna RythuKshetram is the new on farm demonstration programme implemented in the farmers field itself to promote best agronomic and farm management practices for achieving **increased productivity and Reducing Cost of cultivation**

Methodology&Subsidy pattern:

1. **CHANDRANNA RYTHU KSHETRALU (CRKS)**- It is an On Farm demonstrations of 10 ha each cluster for each of MPEO,AEO at village level, MAO in Mandal and ADA(R) in Agriculture Division.
2. The villages for conducting **CRKS**- On Farm Demonstrations will be selected based on the major crops grown in their respective jurisdiction.
3. The MPEO,AEO conducts **CRKS**-OFDs in the crop covering major area in the Village,MAO in Mandal, similarly ADA(R) in Agriculture Division.
4. While identifying the cluster, care should be taken to cover maximum number of farmers and no farmer shall be allotted more than 2 ha. Involve progressive and interested farmers willing to participate.
5. For conducting **CRKS** OFDs, an amount of **Rs.5000/ ha** was provided as input subsidy as given below.
 - a) **Green Manuring for Paddy / application of gypsum for Groundnut / Borax for Sunflower / Zn for other crops & Paddy** **Rs. 1700/ha**
 - b) Neem Cake –@ 120-150 Kgs/ha **Rs.1000/ha**
 - c) Neem Oil (2 Sprays) **Rs 500/spray** **Rs 1000/ha**
 - d) Bio agents & Bio fertilizers **Rs. 800/ha**
 - e) Conducting Field Day including crop cutting Experiment ,video recording and cost of field board **Rs.500/ha**

5126 no of CRKs were organized with a financial assistance against a target of 5500 no of CRKs with 1750.00 lakhs.

Districts wise Particulars of Chandranna Rythu Kshethram (CRKs) during 2016-17

(Rs. in lakhs)

S. No.	District	Physical		Financial	
		Tar.	Ach.	Tar.	Ach.
1	Srikakulam	231	231	51.50	48.04
2	Vizianagaram	259	259	58.00	41.03
3	Vishakhapatnam	273	273	58.50	24.78
4	East Godavari	358	358	78.00	26.83
5	West Godavari	374	374	70.50	55.33
6	Krishna	418	418	92.00	68.63
7	Guntur	532	532	154.00	89.03
8	prakasam	503	503	176.05	57.73
9	Nellore	324	267	143.95	17.67
10	Kurnool	818	818	295.00	152.22
11	Ananthapuramu	724	434	271.00	100.44
12	Kadapa	332	315	143.00	37.72
13	Chittoor	354	344	158.50	37.66
Total		5500	5126	1750.00	757.11

FARM MECHANIZATION

Farm Mechanisation has become one of the important inputs to reduce the cost of cultivation for major crops. Availability of mechanical power and improved equipment has enabled many farmers to achieve high levels of productivity.

Objectives:

The main objectives of Farm Mechanisation are :

1. To complete farm operations on time.
2. Reduction in cost of cultivation.
3. Improvement in the quality of produce for better marketability.
4. Efficient utilization of inputs.
5. Reduction in drudgery to farmers.

Mechanisation in Farm operations for various crops :

In our state majority of the farming community are still lagging behind in the knowledge of latest developments in Mechanization of farm operations and in adopting modern farming technology. However, Farm Mechanization is gaining importance in the last five years for carrying out various farm activities effectively in less time and with less effort. This has resulted due to timeliness of field operations and achievement of reduction in the cost of cultivation and improvement in the quality of produce.

Depending on the types of crops grown, soil conditions, local situations and requirements in the Districts, various farm equipments are being made available on subsidy basis with subsidy limitation on certain equipment to accelerate the pace of Farm Mechanization in the state.

Qualitative equipments are being made available through the Department of Agriculture on subsidy by approved suppliers.

Farm equipment to do different operations from land preparation, sowing, plant protection, intercultivation, harvest, post harvest operations are available under subsidy.

Impact of the implementation of the Farm Mechanisation Scheme:

1. There is considerable increase in number of farmers coming forward to adopt modern machinery for field operations, as they can own improved farm implements at subsidized rates, which reduce their drudgery on the field.
2. There is increased awareness in the farmers and many of them have come forward to suggest for the manufacture of suitable implements as per their farm requirements.
3. The implementation of mechanization programme has improved the Farm Power of the State to 1.53 kw/Ha.

4. Impact on Revenue>Returns to the Farmers : On an average the net returns to the farmers have improved from 10 to 30% due to timely operations, saving of labour cost, saving in inputs like seed and fertilizers, good quality produce etc.,

Targets and Achievements during 2016-17:

A) State Development Plan (SDP) :

(Phy in No. & Fin Rs. in Lakhs)

S. No.	Districts	Target		Achievement	
		Phy	Fin	Phy	Fin
1	Srikakulam	2903	641.50	1288	641.25
2	Vizianagaram	3027	553.50	1862	522.59
3	Visakhapatnam	9831	561.50	1393	322.03
4	East Godavari	3646	1110.50	11672	1110.52
5	West Godavari	4297	1430.50	8130	1364.92
6	Krishna	7233	930.50	4473	930.51
7	Guntur	5452	1303.50	5567	1303.50
8	Prakasam	4353	839.30	2385	735.24
9	Nellore	4452	809.30	5037	809.30
10	Kurnool	4296	1374.95	2579	1214.77
11	Ananthapur	5000	1891.90	2703	1673.77
12	Kadapa	3877	1271.75	1479	1265.31
13	Chittoor	4472	1944.41	2302	1297.91
Total		62839	14663.11	50870	13191.61

B) Sub Mission on agriculture Mechanization (SMAM) :

(Phy in No. & Fin Rs. in Lakhs)

S. No.	Districts	Target		Achievement	
		Phy	Fin	Phy	Fin
1	Srikakulam	1410	384.68	1614	267.19
2	Vizianagaram	1855	516.67	1641	274.37
3	Visakhapatnam	1895	710.50	420	201.37
4	East Godavari	4005	918.58	1539	822.74
5	West Godavari	5085	1151.81	2645	839.12
6	Krishna	2925	548.48	2654	418.32
7	Guntur	7455	1120.59	6040	1064.59
8	Prakasam	3355	545.20	4029	524.61
9	Nellore	1650	373.61	1774	316.83
10	Kurnool	1890	460.94	1825	260.86
11	Ananthapur	1890	460.94	1893	394.41
12	Kadapa	1855	437.04	1739	306.43
13	Chittoor	1960	575.47	2401	541.06
Total		37230	8204.51	30214	6231.89

C) **Rastriya Krishi Vikas Yojana (RKVY):**

(Phy in No. & Fin Rs. in Lakhs)

S. No.	Districts	Target		Achievement	
		Phy	Fin	Phy	Fin
1	Srikakulam	3069	436.00	516	231.15
2	Vizianagaram	2054	295.00	94	105.35
3	Visakhapatnam	860	95.62	284	17.31
4	East Godavari	4032	520.00	4042	494.63
5	West Godavari	1447	656.88	213	498.23
6	Krishna	4017	342.50	38	272.77
7	Guntur	4037	717.50	64	660.00
8	Prakasam	767	156.87	10	106.50
9	Nellore	4016	257.50	4007	118.25
10	Kurnool	1625	514.27	90	381.45
11	Ananthapur	4160	850.00	194	790.07
12	Kadapa	4321	1072.86	2774	1072.82
13	Chittor	5150	875.00	156	875.65
Total		39555	6790.00	12482	5624.18

Budget Releases and expenditure during 2016-17:

(Rs. in Lakhs)

Sl. No.	Scheme	Component	Budget Released	Bills already paid as on 31.03.2017	Balance available as on 31.03.2017
1	NSP	General	10704.00	9316.10	1387.90
		SCSP	2933.00	3000.87	(-)67.87
		TSP	1026.00	874.64	151.36
		Total	14663.00	13191.61	1471.39
2	SMAM	General	6739.00	4440.73	2298.27
		SCSP	1326.00	1376.47	(-)50.47
		TSP	100.00	414.69	(-)314.69
		Total	8165.00	6231.89	1933.81
3	RKVY	General	4106.12	3777.20	328.92
		SCSP	1068.00	1329.60	(-)261.60
		TSP	450.00	517.32	(-)67.32
		Total	5624.12	5624.12	0.00
		Grand Total	28452.12	25042.62	3404.50

Note: Under NSP 3rd quarter budget was released in March, 2017 and budget restrictions were imposed by the State Government on all payments and the bills from 25th March were not accepted. Rs.1471.39 lakhs worth bills are available for payment was not passed in March, 2015.

SOIL AND WATER CONSERVATION PROGRAM

The Soil and Water Conservation Program was introduced under State Development Plan for activities proposed on Climate resilience and water conservation activities to improve the Productivity from Rainfed areas and to take up the activities through our Departmental officers.

The major objective of the program is

1. To improve in-situ soil moisture in the cropped area dependent on Rainfed Agriculture.
2. To conserve water, a precious natural resource to make it available during the critical stages of crop growth through construction of Water Harvesting Structures.
3. To improve the livelihood status of the farmer in rainfed areas by reducing crop failures, reducing cost of cultivation through suitable approach.

The following activities are proposed to be covered under SWC:

The Soil and Water Conservation activities pertinent to Climate Resilient Agriculture by improving soil fertility and soil health in rainfed agriculture for increasing incomes of farmers, it is proposed to take up in clusters in Kurnool, Kadapa, Chittoor, Ananthapuramu Nellore and Prakasam districts through Department of Agriculture under this program. Each cluster will be of an area of 500-1000 ha or village as a unit. Besides, the activities can also be taken up in the villages which were already covered under MGNREGS/ IWMP watersheds and RAD in complimentary with the activities taken up under these schemes.

a. Enhancing soil health, conservation and biomass development:

- Deep ploughing with Sub Soiler in rainfed lands for breaking the hard pan in the soil and for better moisture conservation thereby improved crop productivity
- Improving water holding capacity of light red soils by Tank silt application
- Growing green manure crops and incorporation with rotovators, by supplying green manure seed for improving soil organic matter content
- Shredding of crop residues and incorporation into soil

b. Bio Mass Development on farm & agro forestry

- Promotion of Bund Plantation for soil biomass (% of rainfed area)@50 Plants per ha/**agro forestry**

c. Managing Climate Risk for rainfed Crops through Protective irrigation

- Farm Ponds with lining(soil+cement) 10x10x 2 M size @ one per farmer with machine use
- Increasing the incomes of farmers by promoting high value crops of vegetables and fruit crops under borewells by using micro irrigation systems

d. Climate Resilient Crop Production Systems

- Promotion of location specific poly cropping - including millets, pulses and oil seeds.
- Promoting intensive vegetable cultivation under shade nets including off season Promoting sustainable and low risk agriculture/ Natural Farming practices
- Promotion of NPM & input enterprises (including small risk fund and promotional cost); costs include establishing the fermentation chambers/drums.

e. Ground Water Governance

- Promotion of soak pits around borewells for recharge of ground water (10'x10'x10')

Activities taken up under Soil and Water Conservation (SWC) Program

S. No.	Details
A	Enhancing soil health, Conservation and Biomass development
I	Deep ploughing with Sub Soiler (Chistle Plough) in rainfed lands for breaking the hard pan in the soil and for better moisture conservation thereby improved crop productivity (owned by dept)
Ii	Improving water holding capacity of light red soils by Tank silt application
Iii	Growing green manure crops by supplying green manure seed for improving soil organic matter content and incorporation with rotovators,
Iv	Shredding of crop residues and incorporation into soil
B	Bio Mass Development on farm & agro forestry / silvipasture
I	Promotion of Bund Plantation for soil biomass(% of rainfed area)@50 Plants per ha & agro forestry
C	Managing Climate Risk for rainfed Crops through Protective irrigation
I	Farm Ponds with lining (soil+cement) 10x10x 2 Mt size @ one per farmer with machine use
Ii	Increasing the incomes of farmers by promoting high value crops of vegetables and fruit crops under borewells by using micro irrigation systems
D	Climate Resilient Crop Production Systems
I	Promotion of location specific poly cropping - including millets, pulses and oil seeds.
Ii	Promoting intensive vegetable cultivation under shade nets including off season
Iii	Promotion of NPM & input enterprises (including small risk fund and promotional cost); costs include establishing the fermentation chambers/drums,
E	Ground Water Governance
I	Promotion of soak pits around borewells for recharge of ground water

Budget Allocation, Releases and Expenditure during 2016-17 - Soil and Water Conservation Programme (SWCP)

(Financial Rs. in lakhs)

S. No.	Name of the District	2016-17			
		Allocation	Released	Expenditure incurred	%
1	Prakasam	90.00	90.00	90.00	100
2	Nellore	45	45.00	26.21	58
3	Chittoor	190.00	190.00	190.00	100
4	Anantapuramu	195.1	140	130.80	93
5	Kadapa	223.02	223.02	223.02	100
6	Kurnool	60	60.00	42.89	71
	Total	803.12	748.02	702.92	94

National Mission for Sustainable Agriculture (NMSA) –

Rainfed Area Development (RAD) component

Government of India had introduced National Mission for Sustainable Agriculture (NMSA) during 2014-15. Under this mission, **Rainfed Area Development (RAD) component is being taken up in convergence with other schemes to promote Integrated farming system and to provide Value added developmental activities to the rainfed farmers to improve their economic status, inspite of the failure of crop due to insufficient rains or drought.**

Implementation Strategy: The following strategy shall be followed. The financial pattern for implementation of RAD program is shared at 60:40 between Central and State Government.

As indicated in the GoI Guidelines the program shall be implemented in cluster mode, focusing on true spirit of the mission with integrated farming system as the core approach of development. While implementing the program, following issues need to be addressed:

- The cost norms, pattern of assistance and other Procedural requirements as prescribed in the guidelines be adhered in implementation of the Mission Activities.
- Identification /selection of clusters and the cluster based on farming system model be developed. Detailed project reports for each cluster need to be developed based on SWOT analysis and farmer specific requirements and on integrated approach
- The cluster plan needs to be substantiated with detailed information of village, block, districts, number and name of beneficiaries. These information are required to be uploaded on Bhuvan platform.
- Convergence of activities form other programs/schemes be ensured for holistic development of cluster

- Peripheral plantation of shrubs /trees/fruits etc may be encouraged along with the farm boundary and on the bunds of farm pond to provide additional income to the farmer and make the cropping system diversified into farming system.

Adoption of Cluster based approach:–

A Cluster shall be of minimum 100 to 150 ha rainfed area the cluster area shall be demarcated preferably from one or two villages. A specific cluster may have a predominant acceptance for a particular integrated farming system. It is a fact that complete coverage of a particular farming system in a cluster is not feasible, yet considering the social and cultural similarity there will be a predominance of a particular integrated farming system in a specific cluster. Depending on the largest coverage under particular type of IFS, the cluster may be considered as the development model for those IFS. The annual action plan is arrived in such a way.

Indicative List of Activities under RAD

Sl.No	Item
A. Rainfed Area Development (RAD)	
A (I) 1. Sub Component: Integrated Farming System	
1	Cropping system (CS)
	a. Rice/ wheat based
	b. Coarse cereal based
	c. Oil-seed based
	d. Fibre based
	e. Pulse based
2	Horticulture Based farming system (Plantation + Crops/cropping System)
3	Tree/SilviPastural/insitu/ex-situ conservation of Non Timber Forest Produce (NTFP) (Plantation + grass/Crops/ Cropping System)
4	Livestock based farming system
5	Fishery based farming system
A (II) Sub Component: Value addition and Farm development activities	
6	Apiculture (Bee Keeping)
7	Silage making for increased availability of green fodder round the year
8	Green house
	(i) Naturally ventilated Tubular Structure
	(ii) Naturally ventilated wooden Structure
	(iii) Naturally ventilated bamboo Structure
	(iv) Plastic Tunnels
9	Water Harvesting and Management
10	Last Mile connectivity
11	Resource Conservation
12	Vermi compost – Units/organic input production unit, green manuring
13	Post harvest & Storage/value addition of NTFP
14	Formation of Farmer Producers Organizations (FPOs) and their training
15	Reclamation of Problem soil
16	Concept of Integrated Farming, Climate change adaptation, Good agriculture practices on soil, water and crop management

- Any other activity can be taken up which shall be suitable for drought proofing, mitigation , adaptation relevant to the district with the permission from District Mission Committee. Nearly 70-75% of the allocated funds shall be used for IFS activities, which shall help in income generation to the farmer.

Budget Allocation, Releases and Expenditure during 2016-17- Rainfed Area Development

(Financial Rs. in lakhs)

S. No.	District	2016-17			
		Allocation	Released	Expenditure in curred	%
1	Srikakulam	103.00	103.00	31.98	31
2	Vizianagaram	98.00	98.00	61.85	63
3	Visakhapatnam	63.87	63.87	55.22	86
4	East Godavari	84.00	84.00	66.00	79
5	Prakasam	291.00	291.00	137.32	47
6	Nellore	210.00	210.00	100.00	48
7	Chittoor	610.00	610.00	610.00	100
8	Anantapuramu	566.00	566.00	394.77	70
9	Kadapa	566.50	514.00	385.00	75
10	Kurnool	393.49	393.49	393.49	100
Total		2985.86	2933.36	2235.63	76

Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) – Other Interventions:

Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) – Other Interventions a centrally assisted State Program is being implemented in the state through the Department of Agriculture since 2016-17 for improving the water use efficiency (Per Drop More Crop).

PMKSY Per Drop More Crop is implemented for water Conservation works, drought Proofing measures in complementarily and supplementation of Watershed interventions undertaken through MGNREGS and IWMP for water conservation/ Management related works ground water recharge.

The **objective** of the scheme is to provide **assured irrigation to each and every cultivable land to increase the productivity through convergence of funds** earmarked by various Ministries involved in Water resources development and to increase the assured irrigated area and to improve the farmers' income.

The following is the indicative list of activities under Other Interventions Pradhan Mantri Krishi Sinchayee Yojana-Per Drop More Crop:

S. No.	Type /Group of activities	Name of the Activity
1	Construction of individual water storage/ harvesting activities	Farm Ponds (Lined/Un-Lined), Dug Out pond (L/UL), Lining of ponds constructed through other programmes and Traditional & Secondary Storage Structure (Examples- Diggi, Gokatte, Khadin, Tankas etc.)
2	Community water storage activities	Community ponds, Village Ponds, Irrigation Pond, Percolation Ponds and Water Tanks
3	Water harvesting / relating activities	Check dam, Check wall, Earthen dam and vented dam etc.
4	Ground water development and recharge activities	Construction of tube wells (Shallow/Deep) and open or dug wells (in areas not notified by CGWB for ground water regulation) and recharge structure such as dug well recharge.
5	Renovation of existing water bodies	Renovation of existing water bodies for reestablishing their capacities such as repair, renovation and desilting etc.
6	Enhancing water conveyance efficiency and water lifting devices	Construction of piped irrigation channels, precast field distribution channels and Diesel/Electric/Solar pumpsets for synchronizing use of water for efficient use through micro irrigation

Budget Allocation, Releases and Expenditure During 2016-17 - Pradhan Mantri Krishi Sinchayee Yojana-Other Interventions(PMKSJ-OI)

(Financial Rs. in lakhs)

S. No.	Name of the District	2016-17			
		Allocation	Released	Expenditure in currend	% Ach
1	Srikakulam	0.00	0.00	0.00	0
2	Vizianagaram	0.00	0.00	0.00	0
3	Visakhapatnam	0.00	0.00	0.00	0
4	East Godavari	0.00	0.00	0.00	0
5	West Godavari	0.00	0.00	0.00	0
6	Krishna	0.00	0.00	0.00	0
7	Guntur	0.00	0.00	0.00	0
8	Prakasam	533.00	533.00	215.65	40
9	Nellore	0.00	0.00	0.00	0
10	Chittoor	398.00	398.00	398.00	100
11	Anantapuramu	878.00	878.00	878.00	0
12	Kadapa	360.00	360.00	265.00	74
13	Kurnool	611.00	611.00	611.00	32
	Total	2780.00	2780.00	2367.65	85

MEDIA PRODUCTION

The Media Production Section mainly deals with giving wide publicity on various aspects of transfer of latest scientific technology by means of Advertisements, film shows, Banners, exhibitions, short films, films slides, documentary films, erecting of hoardings, Posters and pamphlets etc. For quick mass communications and serving large-scale of farming community Radio, T.V and Press are being utilized. Two tableaux's are being presenting every year on Independence Day and Republic day celebrations duly highlighting the various departmental activities.

Advertisements & Publicity:

The Media Production section is giving wide publicity on various aspects on latest scientific technology to the farmers by Advertisement, TV scrolls through print and electronic media.

Printing of Padipantalu and Literature Books for the year 2016-17

Transfer of improved Agricultural technology through printing and distribution of booklets in an adaptive manner in the farmers' field is of prime important for enhancing agricultural productivity and profitability. The Department of Agriculture is focusing mainly on Integrated Crop Management Practices to restore soil fertility, reduce cost of cultivation, increase productivity and ensure high returns on investment to the farmers leading to sustainable agriculture. Printing and distribution of booklets, pamphlets etc., to the farmers on various aspects highlighting Integrated Pest Management, Integrated Nutrient Management and publicizing various important aspects like soil testing, usage of soil amendments, post harvest management play a key role in helping the farmers to take decision on usage of quality and appropriate inputs in reducing the cost of cultivation.

Padipantalu Monthly Magazine

The PadiPantalu Telugu Monthly Magazine is being printed every month by the Department of Agriculture and distributing to farmers, model farmers etc. Every month 29,689 number of copies are being printed and distributed. The Magazine comprises 48 pages; all are in multi colour including a district edition special supplement of 6 pages for 13 districts. The articles covered in the magazine are pertaining to the Agricultural and allied departments like Animal husbandry, Horticulture, Sericulture, Fisheries, Co-operative & Marketing, Irrigation, A.P Transco, AP Dairy Development Corporation, AP. Seed Development Corporation and A.P. Agros, etc., and department wise latest technical information on the various schemes, their aims and objectives, guide lines, subsidy pattern and suggestions to the farmers related to the concerned season / month are also published.

Preparation and Presentation of Tableaux :

Preparation and presentation of tableaux for Independence Day and Republic Day celebrations showing various developmental activities in the Agriculture.

“MASS MEDIA SUPPORT TO AGRICULTURE EXTENSION” – A Central Sector Scheme

The Government of India (Ministry of Agriculture) in collaboration with Prasar Bharathi has formulated a Scheme “Mass Media Support to Agriculture Extension”.

The scheme envisages utilizing existing infrastructure of Doordarshan (DD) and All India Radio (AIR) to produce and transmit programmes covering wide spectrum of topics in Agriculture and allied Departments for bringing latest information and knowledge to the farming community.

In the state of Andhra Pradesh Agricultural programmes are being broadcast through **Doordarshan & All India Radio, FM (Kisanvani Stations)** under this scheme.

DOORDARSHAN:

Under this scheme, the Doordarshan Regional Kendra, Vijayawada and Narrowcasting station at Rajahmundry is telecasting **following Agricultural programmes:**

Station	Name of the programme	Timings of the telecast	Days of telecast
Doordarshan Regional Kendra, Saptagiri, Vijayawada	Pasidipantalu	5.30 PM to 6.00 PM	Monday, Wednesday Friday
		5.30 PM to 6.25 PM Phone-in-Live Programme	Monday and Thursday
Doordarshan Narrowcasting Station Nellore, Ongole, Kavali	Kisan	6.30 PM to 7.00 PM	Monday to Friday
Doordarshan Narrowcasting station Rajamundry cluster	Kisan	6.30 PM to 7.00 PM	Monday to Friday

Kisan Programmes in Narrowcasting from Rajahmundry Cluster are repeated by Doordarshan Kendra, Vijayawada through satellite mode from Monday to Friday at 6.30 AM.

ALL INDIA RADIO, (KISAN VANI STATIONS):

Agricultural programmes are being broadcast at 7.15 p.m to 7.45 p.m through **(4) All India Radio, FM Kisan Vani stations** located at **Markapur (Prakasam), Anantapur, Kurnool, Tirupati (Chittoor).** **All India Radio, Hyderabad are being broadcasted the programmes for 1 Hour.**

MEEKOSAM GRIEVANCES:

The Government of Andhra Pradesh with a view to expeditiously resolve Grievances of its citizen launched meekosam grievances portal since functioning with state. Accordingly, all the Grievances which are received in the login of HOD are resolved at state level after forwarding and examining by the personnel of the section concerned.

Where as for the grievances which are received in the login of LMF, they are pursued day by day in this section to coordinate the field level officials to resolve them in the prescribed SLAs.

Budget released, expenditure incurred under Work Plan and Normal State Plan during the year 2016-17 are shown below :-

Budget Released, Expenditure Booked and Balance during 2016-17 Component wise under N.S.P (A.P State)

(Rupees in Lakhs only)

S. No.	Head of A/c.	Component	Allocation	Released QI, QII, QIII & Q IV	Expenditure Booked	Balance
1.	260- Advts. & SPE (*)	General	38.00	38.00	34.75	3.25
		SCP	8.50	8.50	4.32	4.18
		TSP	3.50	3.50	2.21	1.29
		Total	50.00	50.00	41.28	8.72
2.	160- Publications	General	68.40	68.40	67.93	0.47
		SCP	15.30	15.30	15.30	0
		TSP	6.30	6.30	6.13	0.17
		Total	90.00	90.00	89.36	0.64
3	500/503 O.E	General	10.00	5.00	6.00	4.00

AGRICULTURAL CREDIT

Credit is one of the most important input for promoting sustainable and equitable agriculture and rural prospects. Therefore, Government of Andhra Pradesh (GoAP) always lays emphasis on timely and adequate credit support to the farmers with particular focus on small and marginal farmers, women farmers and tenant farmers to enable them to adopt latest technology and improve crop production and productivity and increase their income.

A large number of formal institutional agencies like Co-operatives, Regional Rural Banks (RRBs), Scheduled Commercial Banks (SCBs), etc. are involved in meeting the short and long term needs of the farmers.

Credit Flow to Agriculture:

It is proposed to issue **Rs. 83003.39 Crores** towards Agricultural Credit for the year 2016-17. The targets and disbursements are as follows:

(Rs. In Crores)

S. No.	Item	Target 2016-17	Achievement	% Achmt.
1.	Crop Loans	60000	58840	98
2.	Agri.Term Loans	23003	19274	84
TOTAL AGRICULTURE		83003	78114	94

District wise Targets and Achievements during 2016-17 are furnished in the **Annexure I**.

Issue of Loan Eligibility Cards to Licensed cultivators and issue of Loans:

During 2016-17, LECs were issued to 6,00,717 Land licensed cultivators (Fresh – 1,91,289 and Renewed – 4,09,428). An amount of Rs. 218.88 crores have been issued under Crop loans to 82,837 LEC holders. During 2016-17, COCs were issued to 31,518 farmers. An amount of Rs. 9.18 crores have been issued under Crop loans to 2097 COC holders. Particulars of Loan and Other Eligibility Cards issued and Credit extended to Licensed Cultivators during 2016-17 are furnished in the **Annexure II**.

Annexure I
Agriculture Credit - District wise Targets and Achievements in the state during 2016-17
(Rs. in Crores)

S. No.	District	Crop Loans				Agricultural Term Loans including Allied sectors				Total Agriculture			Total No. of accounts
		Target	Achv.	%	No. of accounts	Total Target	Total Achv.	%	No. of accounts	Total Target	Achv.	%	
1	Srikakulam	2409.98	2297.26	95	344897	1164.14	788.84	68	48712	3574.12	3086.10	86	393609
2	Vizianagaram	1747.00	1489.87	85	277309	634.38	476.07	75	32393	2381.38	1965.94	83	309702
3	Visakhapatnam	2113.00	2046.44	97	320048	1402.18	1120.19	80	48106	3515.18	3166.63	90	368154
4	East Godavari	7084.15	7101.00	100	708344	3420.53	3108.72	91	63121	10504.68	10209.72	97	771465
5	West Godavari	6585.18	6069.00	92	628106	3152.38	2016.60	64	50631	9737.56	8085.60	83	678737
6	Krishna	4853.52	5715.12	118	765197	2531.49	2203.65	87	67971	7385.01	7918.77	107	833168
7	Guntur	9061.40	8126.42	90	774443	2214.90	1835.34	83	73371	11276.30	9961.76	88	847814
8	Prakasam	4793.84	5572.43	116	508618	1844.93	1455.66	79	73332	6638.77	7028.09	106	581950
9	Nellore	3580.62	2940.87	82	286399	1405.28	1333.74	95	65862	4985.90	4274.61	86	352261
10	Kurnool	4166.17	4081.37	98	547163	1408.84	1070.31	76	61637	5575.01	5151.68	92	684574
11	Ananthapur	5217.00	5132.99	98	681354	1303.87	1055.64	81	48983	6520.87	6188.63	95	449946
12	Kadapa	3607.00	3141.77	87	401936	1280.90	1357.93	106	48010	4887.90	4499.70	92	730337
13	Chittoor	4781.09	5125.30	107	627480	1239.62	1451.44	117	57094	6020.71	6576.74	109	608800
	Total	59999.95	58839.84	98	6871294	23003.44	19274.13	84	739223	83003.39	78113.97	94	7610517

Annexure II
Particulars of Loan and Other Eligibility Cards issued and Credit extended to Licensed
Cultivators in Andhra Pradesh during 2016-17

(Rs. in Crores)

Sl. No	District	Target	No.of LECs issued			No.of Licensed Cultivators Sanctioned Crop Loans		No.of COCs issued	COCs updated online as on 31-03-2017	COC Loaning	No of farmer s benefited
			Renewal of old LECs	Fresh	Total	Total					
						Number	Amount				
1	Srikakulam	28867	9683	7656	17339	478	1.04	46	46	0.01	8
2	Vizianagaram	24807	11104	2869	13973	1120	3.36	2980	2980	0.78	460
3	Visakhapatnam	15000	10039	2856	12895	825	1.65	3104	3104	0.27	75
4	East Godavari	178241	104367	33555	137922	53129	116.00	5393	5393	0.18	105
5	West Godavari	300117	222716	75420	298136	17841	41.48	2496	2496	0.45	133
6	Krishna	131870	11623	6363	17986	2391	8.98	2845	2845	0.34	94
7	Guntur	160000	5663	15853	21516	1250	8.97	1164	1164	0.00	0
8	Prakasam	24231	2311	0	2311	1667	10.22	2076	2076	5.22	839
9	Nellore	61003	8676	8950	17626	1007	7.41	2489	2489	1.86	353
10	Kurnool	84923	7910	11588	19498	1569	9.91	1183	1183	0.00	0
11	Anantapur	45000	7657	21726	29383	815	7.20	6284	6284	0.00	0
12	Kadapa	13350	3907	4363	8270	547	1.84	6	6	0.01	4
13	Chittoor	32000	3772	90	3862	198	0.82	1452	1452	0.06	26
	Total	1099409	409428	191289	600717	82837	218.88	31518	31518	9.18	2097

Note: All the above mentioned LEC,COC loans were sanctioned to the tenant farmers @ less than one lakh rupees only.

Pavala Vaddi scheme on Crop Loan:

The Government of AP is implementing Pavala Vaddi Scheme (at 3% interest) on Crop loans from the year 2008-09.

All the loanee farmers who have availed crop loans from Scheduled Commercial Banks/Cooperatives/RRBs and repaid within the due date (i.e. 31st March for kharif loans and 30th June for Rabi loans) are eligible for the scheme.

During 2016-17, an amount of Rs.495.12 lakhs was reimbursed to 76,195 farmers under Pavala Vaddi scheme. The District Wise Expenditure under Pavalavaddi is furnished in the **Annexure III**.

Zero percent Interest on Crop Loans:

Vide G.O.Ms.No.270, dt.22.11.2011 the Government of Andhra Pradesh has issued orders for waiving of the interest on all crop loans repaid by the farmers in time beginning with Rabi season of 2011-12 (i.e., for crop loans granted w.e.f. 01.10.2011).

The interest on all crop loans up to Rs 1.00 lakh is waived 100% and on the amount exceeding Rs 1.00 lakh, Pavala Vaddi only will be applicable up to Rs. 3.00 lakhs if repaid in time.

During 2016-17, an amount of Rs.25265.59 lakhs was reimbursed under Interest Free Loans to 21,02,228 Farmers (Vaddi Leni Runalu). The District Wise Expenditure under Vaddileni Runalu is furnished in the **Annexure IV**

Annexure III District Wise Report from 01 April 2016 - 31 March 2017

(Amount in Rs.)

District	Pavalavaddi							
	SCP Component		TSP Component		GENERAL		TOTAL	
	No of Farmers	Interest Amount	No of Farmers	Interest Amount	No of Farmers	Interest Amount	No of Farmers	Interest Amount
Anantapur	75	28955.99	0	48.66	4270	2038075.99	4345	2067080.64
Chittoor	8	5047.62	0	63	1714	1280703.84	1722	1285814.46
East Godavari	40	60143.49	0	11.74	9039	7261091.79	9079	7321247.02
Guntur	150	154023.2	11	10993.06	22728	12274601.38	22889	12439617.62
Kadapa	11	3933.95	0	1.61	444	289807.99	455	293743.55
Krishna	39	20173.44	3	3409.46	6873	5313574.55	6915	5337157.45
Kurnool	41	18986.01	0	2.18	5331	2760065.97	5372	2779054.16
Nellore	24	21693.62	1	940.42	2001	1931769.58	2026	1954403.62
Prakasam	65	50779.51	6	6288.02	12381	7995564.11	12452	8052631.64
Srikakulam	6	5225.35	1	416.6	958	522921.76	965	528563.71
Visakhapatnam	0	151.22	0	714.54	1161	337185.84	1161	338051.6
Vizianagaram	5	1073.06	5	1546.2	448	359601.89	458	362221.15
West Godavari	75	76811.09	0	13.78	8281	6676014.28	8356	6752839.15
Total	539	446997.5	27	24449.27	75629	49040978.97	76195	49512425.77

Annexure IV
District Wise Report from 01 April 2016 - 31 March 2017

(Amount in Rs.)

District	Vaddileni Runalu							
	SCP Component		TSP Component		GENERAL		TOTAL	
	No of Farmers	Interest Amount	No of Farmers	Interest Amount	No of Farmers	Interest Amount	No of Farmers	Interest Amount
Anantapuramu	6272	7460042	672	501845.28	203639	190710870	210583	198672757
Chittoor	976	1844123.2	141	167891.83	73836	121997548	74953	124009563
East Godavari	665	1239558.5	42	45469	272844	340617729	273551	341902756
Guntur	1280	3235013.9	100	257636.61	199594	280289880	200974	283782531
Kadapa	1152	2187392.5	14	17386.75	107972	97425762.2	109138	99630541.4
Krishna	741	1476266	102	213842.18	161964	240402813	162807	242092921
Kurnool	990	1910084.7	4	7569	223440	172988959	224434	174906613
Nellore	740	1205020.8	67	101316.31	109798	119030025	110605	120336363
Prakasam	840	1576721.5	35	78082.09	130819	215888316	131694	217543119
Srikakulam	1224	1535948.4	380	446137	216273	188464907	217877	190446992
Visakhapatnam	191	329271	1269	1102742	60577	60442624.5	62037	61874637.5
Vizianagaram	338	522275	372	503452	84648	70454559.1	85358	71480286.1
West Godavari	740	1697456.7	34	51786	237443	398131129	238217	399880372
Total	16149	26219174	3232	3495156.05	2082847	2496845122	2102228	2526559452

EXTENSION

POLAM PILUSTHONDI

Polam Pilusthondhi programme was launched as one of the Five Campaigns by the Hon'ble Chief Minister on *8th Aug. 2014 at Visakhapatnam district* with a main objective to strengthen the extension reach to the farmers doorstep for increasing productivity in agriculture and allied sectors and to increase income of the farmers.

STRATEGIES:

- Providing effective extension services
- Promoting farmer led extension
- Improved use of Technologies
- Updating the status of crops
- Continuous interaction with farmers
- Promoting scientific approach
- Use of Information Technology in Agriculture
- Strengthening local service providers
- Community participation in these sectors.

Outcome

- Increase in farm productivity
- Increase in production and farmers' income
- Water Use Efficiency including methods such as Micro-Irrigation
- Post Harvest Improvements and Value Additions
- Drought Proofing in Dry land Agriculture
- Improving soil health

ACTION PLAN :

- The Polam Pilusthondhi programme will be conducted for two days in a week by the Agricultural Department i.e, on Tuesday and Wednesday along with the officials of the allied departments and scientists of the Agricultural, Horticultural and Veterinary universities with the consent of the people representatives.
- Each day two villages will be covered.
- Visit schedule to be intimated in advance to the concerned peoples' representatives.
- The peoples' representatives viz., Hon'ble Ministers, MPs, MLAs, ZPTC, MPP, MPTC, Gram sarpanch, AMC chairman and Bankers will be invited to participate in the programme.
- Wide publicity will be given in local print and electronic media.
- The schedule will be finalized in advance and all concerned villages, officials and non-officials will be intimated about the same.
- Budget for logistic arrangements will be provided to Mandal Agricultural officer.

During the Polam Pilusthondhi Programme 2016-17, the focus was given on creating awareness to 22.59 lakh farmers on different issues like

- e- crop booking
- Bio-metric Seed distribution
- Pest Management through PIMS APP
- Drought Mitigation through Rain guns
- Direct Benefit Transfer in Fertilisers and Farm Mechanisation schemes.
- Promotion of the Farmers towards the application of Fertilisers based on Soil Health Cards results
- Correction of Micro nutrient deficiency in 8.26 lakh ha
- Promoting Poly cropping in 0.36 lakh ha and Summer Pulses was also taken up during the programme.

During the year 2016-17, the programme was organized for a period of eight months i.e., @ 4 months each in Kharif and Rabi seasons with a financial release of **Rs.958.780 lakhs. 76043 village visits** were conducted during the programme creating awareness to **22.59 lakh farmers** on different Government priority issues.

District wise releases and expenditure particulars under Polampilusthondi are furnished in **Annexure I.**

FARMERS' TRAININGS:

The basic objective of the Trainings is to transfer latest agricultural technologies, upgrade the skills and knowledge to the farmers for capacity building in agriculture activities, promoting women's participation in the over all development of Agriculture thereby increasing their levels of income.

Objectives:

- To impart necessary technology, skills and new practices to the farmers in an understandable manner to suit their literacy levels.
- To disseminate the latest crop production technologies.
- To create a favourable attitude in farmers towards modern cultivation practices and maximizing their potential.
- To build-up their confidence levels for better decision making capacity.

Training programmes are imparted to the farmers/ Farm Women/ RMGs on the latest production technologies on various crops with the main focus on the major crop. District specific topics for trainings will be selected as per the location specific/Crop specific situations. The trainings will cover all the aspects based on the Critical interventions identified in the villages as per the Village Action Plan. The Trainings are organized covering 30% trainings to the Farm women, 10% trainings to RMGs and remaining to the farmers out of the total budget allocated.

During the year 2016-17, the total Budget Allocated for these trainings is **Rs.100.00 lakhs** and it is proposed to conduct **2000 trainings** in the districts @ Rs.5,000/- per training.

The Deputy Directors of Agriculture (Farmers Training Centers) will organize and monitor the conduct of training programmes duly co-ordinating with the MAOs on the topics to be trained. The Training must emphasize on Experiential sharing basis rather than the lectures.

Expected Outcome:

- Farmer's knowledge on latest farming technologies will be improved.
- Productivity and production will be enhanced.
- Improving the productivity of small farms
- Awareness will be created on entrepreneurial opportunities in agricultural sector and the trainings on value addition related to agri-products is useful in getting alternate income in off-season thereby generating extra income.

District wise releases and expenditure particulars under Farmers Trainings are furnished in **Annexure II.**

Multi Purpose Extension Officers (MPEOs):

The Government vide G.O.Rt.No.43, dt.19-09-2014 and G.O.RT.No. 693, dt.16-12-2014 ordered for abolition of Adarsha Rythus and to replace it with well organized agriculture extension network with qualified Multi Purpose Extension System. It is ordered to place one Multipurpose Extension Officer for every 1000 hectares cultivable area with a total of 6354 Multipurpose Extension Officers for net cropped area of 63.54 lakh hectares on contract basis under the control of ATMA in each district to be placed on contract basis.

Out of the said 6354 posts, 4354 MPEOs were placed through Agricultural department. The placement of 1200 MPEOs through Horticulture Department, 500 MPEOs through Animal Husbandry Department and 300 MPEOs through Fisheries Department are being taken by the respective departments.

The MPEOs were placed at village level to fulfill the following objectives

1. To facilitate the effective extension reach to the farming community.
 2. To address the immediate needs of the farmers during the season in case of unfavorable seasonal conditions.
 3. Sensitize the farmers on measures to be taken up to enhance the productivity Levels.
- As on date 3936 MPEOs are working with department and involved in extending the needy services to the farming community in different districts.
 - The Performance of MPEOs is being assessed on Monthly basis duly fixing the Key Performance Indicators and comprehensive performance evaluation is taken up after

completion of each season. Based on the Performance assessment, the least performing MPEOs will be terminated.

- The Performance of MPEOs is being assessed on Monthly basis based on the Key Performance Indicators and MPEOs are graded based on the marks obtained viz. “A” grade (more than 80 marks) “B” grade (60-80 marks), “C” grade (50-60 marks) & “D” grade (less than 50 marks). Further, the MPEOs who have obtained Grade C & D are provided with an opportunity time of 4 months and 3 months respectively to improve the performance and in case of non improvement the concerned MPEO will be terminated from service.
- The consolidated honorarium of MPEOs has been enhanced from Rs. 8,000/- to Rs. 12,000/- per month from January,2017 onwards.
- For the encouragement of MPEOs efficiency, an amount of Rs. 3,000/- & Rs. 1,000/- has been paid as incentive for MPEOs obtaining Grade A & B grades respectively from January 2017 onwards.
- For regular monitoring and capacity building of the MPEOs, a three day evaluation and capacity building programme is taken up on monthly basis, wherein the performance is being reviewed on first day and capacity building training is taken up in the next two days.
- The budget allocated for MPEOs during the year 2016-17 is Rs.4179.84 lakhs and Rs.757.60 lakhs towards honorarium and monthly capacity building programmes respectively.

District wise releases and expenditure particulars under MPEO honorarium and Trainings are furnished in **Annexure III & IV**.

Annexure – I

Component: Polampilusthondi

(Rs.in lakhs)

S. No	District	Unit	Physical			Financial		% Exp over Release
			Target	Ach.	%	Release	Exp	
1	Srikakulam	No of Village Visits	3648	3728	102	55.92	46.82	84
2	Vizianagaram		3264	4337	133	50.56	43.95	87
3	Visakhapatnam		4128	5214	126	62.62	48.93	78
4	Eastgodavari		5952	8029	135	88.08	60.11	68
5	Westgodavari		4608	4724	103	69.32	52.17	75
6	Krishna		4800	6300	131	72.00	52.83	73
7	Guntur		5472	3534	65	81.38	66.45	82
8	Prakasam		5376	5531	103	80.04	65.03	81
9	Nellore		4416	5888	133	66.64	53.80	81
10	Kurnool		5088	6588	129	76.02	42.77	56
11	Anantapur		6048	7056	117	89.42	85.14	95
12	Kadapa		4896	7010	143	73.34	66.38	91
13	Chittoor		6336	8104	128	93.44	72.05	77
	Total		64032	76043	119	958.78	756.43	79

Annexure – II

Component: Trainings

(Rs.in lakhs)

S. No	District	Unit	Physical			Financial		% Exp over Release
			Target	Ach.	%	Release	Exp	
1	Srikakulam	No of Trainings	154	154	100	7.70	7.70	100
2	Vizianagaram		154	154	100	7.70	7.70	100
3	Visakhapatnam		154	154	100	7.70	7.70	100
4	Eastgodavari		154	98	63	7.70	4.89	64
5	Westgodavari		154	154	100	7.70	7.70	100
6	Krishna		154	154	100	7.70	7.70	100
7	Guntur		154	146	95	7.70	7.31	95
8	Prakasam		154	101	65	7.70	5.03	65
9	Nellore		152	146	96	7.60	7.28	96
10	Kurnool		154	137	89	7.70	6.85	89
11	Anantapur		154	154	100	7.70	7.70	100
12	Kadapa		154	154	100	7.70	7.70	100
13	Chittoor		154	154	100	7.70	7.70	100
Total			2000	1860	93	100.00	92.96	93

Annexure – III

Component: MPEOs Honorarium

(Rs.in lakhs)

S.No	District	Unit	Physical			Financial		% Exp over Release
			Target	Ach.	%	Release	Exp	
1	Srikakulam	No of MPEOs	210	194	92	201.60	146.07	72
2	Vizianagaram		190	176	93	182.40	128.92	71
3	Visakhapatnam		195	169	87	187.20	125.81	67
4	Eastgodavari		285	259	91	273.60	214.05	78
5	Westgodavari		290	255	88	278.40	242.52	87
6	Krishna		315	283	90	302.40	253.63	84
7	Guntur		390	367	94	374.40	313.74	84
8	Prakasam		415	403	97	398.40	336.46	84
9	Nellore		245	213	87	235.20	209.76	89
10	Kurnool		630	504	80	604.80	398.52	66
11	Anantapur		700	652	93	672.00	544.60	81
12	Kadapa		245	235	96	235.20	192.09	82
13	Chittoor		244	226	93	234.24	162.78	69
Total			4354	3936	90	4179.84	3268.95	78

Annexure – IV

Component: MPEOs Trainings

(Rs.in lakhs)

S. No	District	Unit	Physical			Financial		% Exp over Release
			Target	Ach.	%	Release	Exp	
1	Srikakulam	No of MPEOs	81	27	33	36.54	12.21	33
2	Vizianagaram		72	27	38	33.06	12.67	38
3	Visakhapatnam		90	54	60	33.93	4.74	14
4	Eastgodavari		162	95	59	49.59	17.98	36
5	Westgodavari		108	62	57	50.46	27.47	54
6	Krishna		144	97	67	54.81	19.23	35
7	Guntur		108	6	6	67.86	16.51	24
8	Prakasam		108	5	5	72.21	11.84	16
9	Nellore		108	0	0	42.63	0.00	0
10	Kurnool		99	51	52	109.62	20.98	19
11	Anantapuramu		99	48	48	121.80	44.31	36
12	Kadapa		108	104	96	42.63	34.88	82
13	Chittoor		99	122	123	42.46	8.07	19
Total			1386	665	48	757.60	230.88	30

INFORMATION CELL

Department of Agriculture, Government of Andhra Pradesh has made progress in leaps and bounds for the past three years in IT sector with the development of software applications for delivery of services through Mee Seva like subsidized seed distribution, payment of crop insurance premium of non-loanee farmers under NAIS and end to end process flow development under Farm Mechanization. Agriculture Department ranked number one in position under Farm Mechanization transactions in India. Apart from Mee Seva many software's are under development for delivery of quality services to farmers through the use of IT in Agriculture.

AGRISNET www.apagrisnet.gov.in: The Government has promulgated the **Agricultural Resources Information Systems NETwork**. (AGRISNET) in the country. AGRISNET envisages promotion of e-Governance by use of Information & Technology. The Government of India has decided to launch a Central sector scheme titled, "Strengthening / Promoting Agricultural Informatics & Communications" of which one component is AGRISNET. The portal was launched in February, 2009 and till date it has recorded nearly 49 lakh hits. The objective of AGRISNET is to provide improved services with technical information, schemes & subsidies and other services provided by the department of Agriculture for farming community in Telugu.

Photos and videos are included for most of the concepts for good understanding. It is enriched with Package of practices of 18 important crops grown in AP, schemes & subsidies of the department & other related technical and agricultural information. Latest information on events in the department, misbranded pesticides and weather based agro-advisories will be regularly updated in the portal and make available to farming community.

Single sign On Application e-Rythu Sevalu-<http://www.agrionline.ap.gov.in:8080/OLMS/>

Online Soil Health Card Generation System: <http://45.127.101.32:8080/OLMS/>

The flag ship program of GoI in the farm sector aimed at improving soil health and reducing input costs for farmers. The soil Health Card is a printed report generated online available to farmers at any time that will be useful for farmer once for three years for his land holdings. It contains crucial information on macro Nutrients (N,P,K) status of the soil, Secondary nutrients (Sulphar) status, Secondary Nutrients (Zinc, Boran, Iron, Copper, Magenesium) and soil physical parameters. The card will be accompanied by an advisory on the corrective measures that a farmer should take to improved soil health and better yield.

Farmers can download soil health card online using unique No. allotted to each sample. The upgrade of existing system has been done wherein the soil test based recommendations are given to six suitable crops based on the soil test results for all the farmers including those available in Webland portal. The GPS co-ordinates of points of soil test samples collected from farmers' fields are captured using GPS instruments. All the results are plotted on Google map at GPS co-ordinates. By clicking on the tag, Soil Health Card can be viewed on Google map.

A facility is provided to send the soil test based fertilizers recommendation as SMS to the farmers' mobile phone, as and when the analysis results are entered by Soil Testing Lab officers. During this current year also, the SMS messages will be sent to farmers mobile.

The soil Health card portal allows for registration for collection of soil samples along with testing in the approved Soil Testing Labs. The important aspect of the portal is that not only gives an assessment to a farmer about use of major fertilizers but also micro nutrients which are deficient in his fields and which must be added for a balanced soil health. The information is given for different crops.

More than 6 lakh main sample farmers and over 20 lakh grid farmers were covered and Soil Health Cards made available online during 2016-17. Laminated soil health cards are being distributed to all the farmers during the year.

Online Input Licence Management System of Seeds, Fertilizers & Pesticides
<http://137.59.201.87:8080/OLMS/>

This is an application to provide licenses online to the input dealers/ manufacturers of Seeds/Fertilizers/Pesticides. Thereby the Dealers/Manufacturers can apply for license freshly or renew and amend online. All licenses will be generated or amended online.

The Fertilizer services 31 in no. are already made available through Mee Seva Service from 2013. Further the remaining services under seeds and pesticides will also be made available through Mee Seva fold.

Mee Seva Services : <http://ap.meeseva.gov.in/DeptPortal/UserInterface/LoginForm.aspx>

The following services of the department of Agriculture are delivered through these Mee-seva centers

- a. Application for subsidy implements under Farm Mechanization (2 services)
- b. Online Licence Management System - Fertilizers Dealers/ Manufacturers (33 services)
- c. Further the services under seed and pesticides will be made available to dealers through Mee Seva.

e-Seed Distribution: (D-Krishi):

Simple, Sustainable, Secure and Standard Solution for farmers welfare through Digitization. It is unique user friendly mobile based DBT solution. Farmers or any one of the farmers family members are the main Beneficiaries.

Land Records, Aadhaar and Family Database (Ration Card) are integrated. Based on the land ownership data of the farmers linked to his Aadhaar id, the area of land and associated eligible seed quantity shall be calculated by the system. The farmer gets the seeds. The system keeps records of each farmer wise seed distributed and the stock.

The Department has been distributing subsidized seed through biometric system using these Aadhar, webland and ration card databases with the technical support from NIC.

Through this project, department has distributed Bengal Gram seed in Anantapuram in Kharif-2016 and in Kurnool, Kadapa, prakasam Guntur in Rabi-2016 successfully. Based on this experience department is planning to use all subsidized seed distribution through this Android application.

Village Action Plan Software: www.agrivap.com

Village action Plan is the collection of information on Village level statistics, requirement of inputs, identification of agricultural problems, analysis, identifying suitable measures and creating awareness in understanding the growth in state agriculture, and a capable tool for decision making.

The software has been developed in a view of the farming situations in the villages and provides information on village profile, farming situation, types of soils, crop area, production and productivity, seed requirement, cropping pattern, nutrient requirements, consumption, Good Agriculture Practices, availability of farm machinery and GVA.

Through this software the department has collected all villages' basic statistical information and made possible to view data as ready-reckoner of a particular village.

e-Agriculture-Crop Booking Android Application: <http://45.114.143.89/E-Agriculture>

The Department has been doing crop booking using e-Agriculture tab based android application since Rabi-2015. Based on the experiences in Rabi, department is planning to add some more features to the software to essence the work quality like addition of survey number wise soil health report, micro nutrients supplied, subsidy seed availed position, fertilizers supplied, category of the farmer, status of the farmer, source of irrigation etc. This software was integrated with CM Dash board to show the real time dynamic crop coverage area of the state. In kharif Season 40 lakh ha crop was booked through this Software application and created 32 lakh farmer data base for the department.

- **Processing & Grounding of all schemes & inputs distribution (Crop Schemes)**

For effective monitoring and grounding of all schemes and inputs distribution an Android application was developed for officers to update various crop scheme beneficiaries through tabs.

- **Polam pilustondi**

The Polam Pilusthondi programme is conducted for two days in a week by the Agricultural Department i.e., on Tuesday and Wednesday along with the officials of the allied departments and scientists of the Agricultural, Horticultural and Veterinary universities with the consent of the people representatives. Visit schedule to be intimated in advance to the concerned peoples' representatives is made available online. There are Grama sabhas followed by Farmer-Scientist Interaction programme and field visit. These proceedings of Polam

pilusthondi are captured through Tablets by the Extension Functionaries to address the same on priority basis.

- **Mobile Application on Agricultural Information “*m-Sedyam*”:**

To facilitate farmers to access information & for strengthening technical knowledge to the field functionaries, a mobile application is under development. In this application, package of practices of major crops, other technical information, guidelines of schemes of the department etc. are incorporated in the concisely.

Agriculture Videos:

A Tab based application used as a repository of all agriculture related videos in one site. Field staff also can upload videos on latest technology implemented in their jurisdiction. Users can give their reviews, comments, rating on the uploaded videos.

Vaddi Leni Panta Runaalu (Online Waiving of interest to Farmers Crop Loans)
<http://vragri.ap.gov.in:8080/VLR/>

The process of payment of interest amount waived off on farmers’ crop loans directly to banks from the department of Agriculture is automated & is implemented. The interest amount is credited from the account of Commissioner & Director of Agriculture to respective banks through Nodal branches based on details of principal loan amount repaid by the farmers.

e-Agrilabs application using barcode scanners.

An application to automate Fertilizers & Pesticides Testing Laboratories and Coding Centers through bar coding mechanism is initiated. The allocation of lab & testing of samples will be kept confidential under this application. Integration of SEEDNET – Automation of Seed Labs is under progress. The process will be implemented fully

During the second phase, the same will be integrated with e-Rythu sevalu to ensure the samples are taken from the all the license holders. The stock reports will also be retrieved from the online Fertilizer Monitoring System which automatically gives details such as batch no., stock available etc.

HRMIS:

Human Resource Management System (HRMS) refers to the systems and processes at the intersection between human resource management (HRM) and information technology. It merges HRM as a discipline and in particular its basic HR activities and processes with the information technology field, whereas the programming of data processing systems evolved into standardized routines and packages of enterprise resource planning (ERP) software. On the whole, these ERP systems have their origin from software that integrates information from different applications into one universal database. The linkage of its financial and human resources modules through one

database is the most important distinction to the individually and proprietary developed predecessors, which makes this software application both rigid and flexible. Through this portal all the employees Service particulars will be captured.

MPEO Performance Evaluation Software:

MPEO Evaluation software is intended to be developed to monitor the performance evaluation of each MPEO which will be evaluated by MAO, ADA(R) & JDA based on the marks and grading system. Evaluation based on the dynamic quantitative and qualitative criteria. For eg. if an MPEO ranked under 'D' criteria consequently for 3 months he/she will be removed from the services. MPEO's Performance & Extension system have been strengthened due to this software application.

Kisan Call Center 1551 (from BSNL Landline or Mobile)/ 1800-180-1551 (from Other Landline or Mobile) dackkms.gov.in (for escalation matrix)

The district specific escalated calls of **Kisan Call Center – 1551** related to the respective department officers registered in **Kisan Knowledge Management System**. The registration of all concerned officers will be done at district level and State level.

Farmers Portal of GoI: www.farmer.gov.in

Farmers Portal of GoI, www.farmer.gov.in is intended to be 'One Stop Shop' for all the farmers in the country.

The information on package of practices, crop/seed varieties, common pests, machineries, dealers etc. for the each Mandal of our state is updated. Various Inputs dealers/manufacturers details for seeds, fertilizers & pesticides, soil sample results of current and past five years will be updated in the portal.

Kisan SMS – mkisan.gov.in

Location specific messages will be sent to farmers either in English or Telugu on the crops selected by the registered farmers. About 4,00,000+ messages are sent to farmers through this portal. The complete registration of farmers will be taken up. The registration of all Extension Officers will be done in this portal.

NATIONAL AGRICULTURAL INSURANCE SCHEME
(CROP INSURANCE)

PRADHAN MANTRI FASAL BIMA YOJANA (PMFBY)

- To extend more benefit to the farming community Govt. of India announced new crop insurance policy namely “Pradhan Mantri Fasal Bima Yojana” in place of NAIS & MNAIS from Kharif 2016 season onwards. WBCIS is continued with new premium slabs on par with PMFBY.
- It incorporates the best features of all previous schemes and at the same time, all previous shortcomings/weaknesses have been removed. The major improvements made are:

Main features:

- More farmer friendly - Minimal contribution in premium by farmer.
- Village Insurance Unit for major crop in each District.
- Farmer’s premium Contribution in Kharif 2% and in Rabi 1.5% for Food Crops and Oilseed Crops. Annual Commercial & Horticulture crops – farmer premium share will be maximum of - 5%.
- Premium subsidy will be paid by the Central and State Governments on equal proportion (50:50).
- Cover for inundation apart from Hail storm and Post harvest crop damage.
- Use of technology for assessment of Area / Yield for quicker settlement of claims.
- On account settlement in case of mid season adversity.
- Action plan to cover 50% of the area under Crop Insurance.

KHARIF, 2016

Cluster	Districts	Implementing Agency (Insurance Company)
1	Ananthapur, Chittoor, East Godavari, Guntur, Nellore, Srikakulam, Prakasam	Agriculture Insurance Company of India Ltd.,
2	West Godavari, Kadapa, Krishna, Kurnool, Vishakapatnam, Vizianagaram	ICICI Lombard General Insurance Company Ltd.,

Crops Covered:

Paddy, Jowar, Bajra, Maize, Blackgram, Greengram, Redgram, Groundnut (I), Groundnut (UI) Sunflower, Castor, Sugarcane (Plant), Sugarcane (Ratoon) Cotton (I), Cotton (UI), Chillies (I), Chillies (UI), Turmeric, Korra.

District wise Crops notified under Pradhan Mantri Fasal Bima Yojana (PMFBY)
during Kharif 2016 season.

CLUSTER- I		
S. No.	District	Crops
1	Srikakulam	Rice (village made as insurance unit), Bajra, Groundnut(UI), sugarcane(P), sugarcane (R)
2	East Godavari	Rice (village made as insurance unit), Bajra, Cotton (UI), Sugarcane(P), Sugarcane®
3	Guntur	Rice (village made as insurance unit), Blackgram, Castor, Redgram, Sugarcane (P), Sugarcane (R), Turmeric
4	Prakasam	Rice (village made as insurance unit), Bajra, Maize, Redgram, Castor, Chillies(I), Chillies(UI),
5	Nellore	Rice (village made as insurance unit), Bajra, Groundnut(I), Sugarcane(P), Sugarcane(R)
6	Ananthapur	Redgram (village made as insurance unit)Rice, Jowar, Bajra, Maize, , sunflower, chillies(I), Cotton(UI)
7	Chittoor	Rice (village made as insurance unit), Jowar, Bajra, Redgram, Sugarcane(P), Sugarcane(R)

District wise Crops notified under Pradhan Mantri Fasal Bima Yojana (PMFBY)
during Kharif 2016 season.

CLUSTER- II		
SL. No	District	Crops
1	Vizianagaram	Rice (village made as insurance unit), Bajra, Maize, Groundnut (UI), Sugarcane (P), Sugarcane (R), Cotton (UI)
2	Vishakhapatnam	Rice (village made as insurance unit), Bajra, Maize, Redgram, Groundnut (UI), Sugarcane (P), Sugarcane (R)
3	West Godavari	Rice (village made as insurance unit), Sugarcane (P), Sugarcane ®
4	Krishna	Rice (village made as insurance unit), Maize, Greengram, Redgram, Chillies (I), Cotton (UI), Groundnut (UI), Sugarcane (P), Sugarcane (R)
5	Y.S.R(Kadapa)	Rice (village made as insurance unit), Jowar, Bajra, Redgram, Cotton (I), Cotton (UI), Sunflower, Turmeric, Sugarcane (P), Sugarcane (R)
6	Kurnool	Rice (village made as insurance unit), Jowar, Bajra, Redgram, Sunflower, Chillies (I), Chillies(UI), Cotton (I) Cotton (UI), castor, Sugarcane (P), Sugarcane (R), Korra

RABI, 2016-17

Cluster	Districts	Implementing Agency (Insurance Company)
1	1. Vizianagaram 2. Visakhapatnam 3. East Godavari 4. Guntur 5. Prakasam 6. Kurnool 7. Ananthapuramu	Agriculture Insurance Company of India Ltd.,
2	1. Srikakulam 2. West Godavari 3. Krishna 4. Nellore 5. YSR Kadapa 6. Chittoor	ICICI Lombard General Insurance Company Ltd.,

- Farmer's premium Contribution in Kharif 2% and in Rabi 1.5% for Food Crops and Oilseed Crops. Annual Commercial & Horticulture crops – farmer premium share will be maximum of - 5%.

Notification of districts along with crops notified for Pradhan Mantri Fasal Bima Yojana (PMFBY) Rabi 2016-17 season (CLUSTER-I)			
S. No.	District	No. of Crops Notified	Crops Notified
1	Vizianagaram	6	1. Rice 2. Maize 3. Greengram 4. Blackgram 5. Groundnut 6. Red Chilly
2	Vishakapatnam	2	1. Rice 2. Red Chilly
3	East Godavari	6	1. Rice (Village Insurance Unit) 2. Maize 3. Jowar (UI) 4. Red chilly 5. Blackgram 6. Greengram
4	Guntur	7	1. Rice 2. Jowar (UI) 3. Maize (Village Insurance Unit) 4. Greengram 5. Blackgram 6. Bengalgram 7. Groundnut
5	Prakasam	9	1. Rice, 2. Bengal Gram (Village Insurance Unit), 3. Black gram, 4. Red Chilly 5. Green gram, 6. Groundnut, 7. Jowar (UI), 8. Maize, 9. Sun flower
6	Ananthapuram	5	1. Rice 2. Jowar (UI) 3. Bengalgram 4. Groundnut 5. Sunflower
7	Kurnool	6	1. Rice 2. Jowar (UI) 3. Bengalgram (Village Insurance Unit) 4. Groundnut 5. Sunflower 6. Onion

Crops in bold letters are proposed under " Village Insurance Unit" in 4 districts only.

Notification of districts along with crops notified for Pradhan Mantri Fasal Bima Yojana (PMFBY) – Rabi 2016-17 season (CLUSTER-II)			
S. No.	District	No. of Crops notified	Crops Notified
1	Srikakulam	6	1. Rice 2. Blackgram 3. Greengram 4. Groundnut 5. Red Chilly 6. Onion
2	West Godavari	6	1. Rice (Village Insurance Unit) 2. Maize 3. Greengram 4. Blackgram 5. Red Chilly
3	Krishna	5	1. Rice (Village Insurance Unit) 2. Maize 3. Greengram 4. Blackgram
4	Nellore	6	1. Rice (Village Insurance Unit), 2. Black gram, 3. Red Chilly 4. Green Gram, 5. Groundnut
5	Kadapa	6	1. Rice 2. Jowar (UI) 3. Bengalgram (Village Insurance Unit) 4. Groundnut 5. Sunflower 6. Onion
6	Chittoor	3	1. Rice (Village Insurance Unit) 2. Groundnut 3. Red Chilly

Crops in bold letters are proposed under " Village Insurance Unit" in 5 districts only.

WEATHER BASED CROP INSURANCE SCHEME (WBCIS)

KHARIF, 2016

DISTRICT	CROP	IMPLEMENTING AGENCY AND ADDRESS
Ananthapur	Groundnut	BAJAJ ALLIANZ GENERAL INSURANCE COMPANY LIMITED
Kadapa	Groundnut	
Kurnool	Groundnut	
Chittoor	Groundnut	
Guntur	Red Chilly	
Guntur	Cotton	
Prakasam	Cotton	
West Godavri	Oil Palm	
Kadapa	Sweet Lime	
Chittoor	Tomato	
Kurnool	Tomato	
Prakasam	Tomato	

RABI, 2016-17

S. No.	Districts	CROP	Implementing Agency (Insurance Company)
1	Srikakulam, Vizianagaram, Visakhapatnam, East Godavari, West Godavari, Krishna, YSRKadapa, Kurnool, Chittoor & Prakasam (10 Districts)	MANGO	Bajaj Allianz General Insurance Company Limited,
2	Srikakulam, Vizianagaram, East Godavari, YSR Kadapa, Guntur, Kurnool & Ananthapuramu (7 Districts)	BANANA	
3	Srikakulam, Vizianagaram, Visakhapatnam & East Godavari (4 Districts)	CASHEW NUT	
4	SPSR Nellore (1 District)	ACIDLIME	
5	YSRKadapa, Kurnool, Chittoor, Ananthapuramu (4 Districts)	TOMATO	

COVERAGE & CLAIMS SETTLEMENT IN ANDHRA PRADESH

S. No.	Year	Scheme	Farmers covered in Lakhs	Area Covered in Lakh Ha.	Full Premium (Rs. In Lakhs)	Farmer share (Rs. In Lakhs)	Claim (Rs. In Lakhs)	No. of farmers benefited (In Lakhs)
1	2012-13	MNAIS & NAIS	12.28	15.20	23955	15272	62366	3.88
		WBCIS	7.83	14.29	33639	11992	29291	5.33
		TOTAL	20.11	29.49	57594	27264	91657	9.21
2	2013-14	MNAIS & NAIS	9.73	10.00	29557	13713	39186	3.43
		WBCIS	7.20	12.48	33678	11930	25548	5.11
		TOTAL	16.94	22.49	63235	25643	64734	8.54
3	2014-15	MNAIS & NAIS	3.59	4.67	12518	5796	3572	0.35
		WBCIS	0.96	1.72	4899	2450	4488	0.78
		TOTAL	4.55	6.39	17417	8246	8060	1.13
4	2015-16	MNAIS & NAIS	9.31	9.98	32353	18113	60	0.70
		WBCIS	16.35	22.06	64837	34951	138	3.38
		TOTAL	16.64	22.47	65197	35111	198	3.38
5	2016-17	PMFBY	9.99	8.96	40243	7259	25183	1.27
		WBCIS	7.67	11.89	39973	10703	56750	7.62
		TOTAL	17.66	20.85	80216	17962	81933	8.89

EXTENSION REFORMS - Agricultural Technology Management Agency

- Agricultural Technology Management Agency (ATMA) is under implementation in the (13) districts of Andhra Pradesh from the year **2005-06** with an objective to develop an efficient, effective, demand driven, research integrated and financially sustainable public extension system through Bottom up planning.
- In all the (13) districts ATMA has been established and registered as autonomous society. 170 Farm Information and Advisory Centers are notified in 13 districts.
- The Principal Secretary to Govt., Agril. & Coop. Department, as the Chairman, Inter Departmental Working Group and Commissioner of Agriculture, AP as State Nodal Officer are monitoring the implementation of Scheme at State level.
- At District level, under the chairmanship of the District Collector; the Governing Board of ATMA is looking after the implementation of the project activities.
- As per revised guidelines of ATMA Scheme, GOI has sanctioned 579 posts and 445 posts are filled at various levels.
- One separate Project Director in the Cadre of Joint Director and 2 Deputy Project Directors in the cadre of Deputy Director deputed from Agriculture and other allied sectors are monitoring the implementation of the ATMA project activities at District level.
- Farmers Advisory Committees (FAC) and Block Technology Teams (BTT) with support of Block Technology Managers and Subject Matter Specialists are implementing the activities as per their Block Action Plans.

State Extension Work Plan 2016-17:

- GOI has given administrative approval for the State Extension Work Plan of AP with an outlay of Rs.35.91crores and released an amount of Rs 21.91 crores and revalidated the unspent amount of Rs. 18.20 crores available with the State for implementation of the activities.
- The State has released an amount of Rs. 8.76 crores towards Matching State Share. **Status of releases and expenditure:** **(Rs. in Lakhs)**

S. No.	Year 2016-17	Opening Balance 01-04-16	Amount Received during 2016-17	Total	Expenditure	Balance
1	Central Share	831.13	1314.81	2145.94	2077.19	68.75
2	State Share	988.98	876.54	1865.52	76.14	1789.38
Total		1820.11	2191.35	4011.46	2153.33	1858.13

Details of Various programmes Organized during the year 2016-17:

(Rs. in Lakhs)

S. No.	Components	Physical		Financial	
		Target	Achievement	Target	Achievement
1	State level activities (Trgs. to Extn. functionaries)	35	6	67.50	26.03
2	District Level Activities				
	a. Trainings to Farmers	2189	2069	276.1	174.38
	b. Demonstrations	8172	10074	326.88	182.04
	c. Exposure visits	364	121	191.13	49.14
	d. Capacity building of FIGs	1000	468	50.00	23.37
	e. Kisan Melas	26	76	26.00	25.99
	f. Field Days	340	199	51.00	45.18
	g. Farmer Sci. Interactions	26	27	5.20	3.73
	h. Farm Schools	170	83	49.70	20.87
	i. Innovative Activities	170	142	85.00	27.34
	j. Other activities		158.93		30.14
	k. SNO, SAMETI and other activities		242.07		83.05
	l. Administrative and Spl. Functionary support		1941.10		1414.98
	Total	12675	13267	3591.61	2153.34

Major activities taken up during 2016-17:

- Organized (2069) Trainings on the areas like Organic Farming in vegetables, Marketing Strategies, Coco crop management, SRI cultivation, Bio fungicides, Post harvest technologies Fisheries, Calf rearing and management and covered 131478 farmers.
- Organized (10074) Demos on Varietal shift in paddy, Boran & Zinc application in Maize, Promotion of Backyard poultry, cultivation of mushroom, Trellies Tomato cultivation, Cocoa-Intercropping in Coconut Orchard, etc.
- Organized Intra State Exposure visits of farmers to Maruteru, Kovvuru, Reasearch stations on Organic Farming and Natural Farming, Dairy Management etc.

- Organized (83) Farm Schools in Agriculture and Allied sectors on critical stages of crop growth for upgrading the knowledge levels of the (4972) beneficiaries on areas like ICM in Paddy, Groundnut, Direct Sowing with Drum Seeder, Backyard poultry rearing, Fodder Cultivation, Clean Milk Production, Tissue culture Banana, Bivoltine Silk worm Rearing, Organic farming in Mulberry etc.,
- Organized (1041) Programmes such as Kisan mela, Farmer Scientist interactions and Field days on various activities at District level and Block level to update the knowledge of developments (75178) farmers on latest trends, technologies on various areas like in the field of Agricultural machinery, Direct Sowing of Paddy with Drum Seeder, BT Cotton varietal trials, Post harvest technology and value addition in Turmeric crop etc.

Innovative activities:

- Nature farming / Zero budget farming
- Integrated farming (Poultry+Fish+Vegetables)
- Mixed Farming (MF)/Annapoorna model

RASHTRIYA KRISHI VIKAS YOJANA (RKVY)

Rashtriya Krishi Vikas Yojana (RKVY) is Centrally Sponsored Scheme (CSS) aiming to achieve sustainable desired annual growth during XII plan period by ensuring holistic development of Agriculture and Allied sectors.

Objectives:

- To incentivize the states so as to increase public investment in Agriculture and allied sectors.
- To provide flexibility and autonomy to states in the process of planning and executing Agriculture and allied sector schemes.
- To ensure the preparation of agriculture plans for the districts and the states based on agro-climatic conditions, availability of technology and natural resources.
- To ensure that the local needs/crops/priorities are better reflected in the agricultural plans of the states.
- To achieve the goal of reducing the yield gaps in important crops, through focused interventions.
- To maximize returns to the farmers in Agriculture and allied sectors

Funding pattern

- 60:40 by Govt. of India & State Govt.

Departments involved

- Agriculture, ANGRAU, Horticulture, Horticultural University, Animal Husbandry, A.P. Dairy Development Corporation Ltd. Fisheries, Veterinary University, Sericulture, AP Food Processing Society, Small Farmers Agri Business Consortium (SFAC), Forest (River valley project), Spices Board & AP MARKFED

Implementation:

- State Level Sanctioning Committee (SLSC) under the Chairmanship Chief Secretary with Prl. Secretary (Agril.) as Member Secretary will approve projects proposals of different sectors for implementation under RKVY.
- Department of Agriculture is the Nodal Department.
- SAMETI is the Nodal Agency for operating funds.

Status during 2016-17

- An amount of Rs. 370.98 Crores has been released for implementation of various projects of different sector under RKVY during 2016-17 as detailed below:

S. No.	Name of the Sector	Release (Rs. in Cr.)	Utilization (Rs. in Cr.)
1	Agriculture	150.38	150.38
2	ANGRAU	10.29	10.29
3	Agri. Biotech Foundation		
4	Food and Agri Business School (FABS)		
5	Horticulture	52.97	52.97
6	Dr. YSR Horticultural University	3.51	3.51
7	Animal Husbandry	74.51	74.51
8	APDDCF	23.71	23.71
9	Fisheries	30.48	30.48
10	Sri Venkateswara Veterinary University (SVVU)	4.00	4.00
11	Sericulture	14.26	14.26
12	AP Food Processing Society	3.71	3.71
13	APSSCA	3.17	3.17
	Grand Total	370.98	370.98

Agriculture sector Projects:

- An amount of Rs. 150.38 Crores has been released to implement Agriculture Sector projects under RKVY during 2014-15 as detailed below:

S. No.	Name of the Project/component	Physical		Financial (Rs.in Cr.)	
		Target	Achievement	Allocation	Expenditure
I	Agriculture				
	Seeds				
1	Seed Contingency plan - Supply of alternate crop seed in drought affected areas)	27907	27000	8.04	8.04
2	Navadhanyalu seed supply- Distribution of seed	4814	4635	3.50	3.50
3	Breeder seed Distribution	1997.5	2000	1.50	1.50
4	Strengthening of seed testing labs	2	2	2.00	2.00
5	Strengthening of Mana Vitthana Kendralu	87	87	2.86	2.86
	Seeds			17.90	17.90
	Soils				
5	Strengthening of Soil Testing Laboratories	17	17	4.94	4.94
6	Addl. Amounts for Soil Testing Lab constructions	2	2	0.25	0.25
	Soil Management			5.19	5.19
	Fertilizers				
7	Fertilizer Management	5		2.00	2.00
	Plant protection				
8	Rodent control (Supply of rodenticide to the farmers)	15.38	13.76	1.63	1.63
9	Strengthening of Pesticide Testing labs	5		0.82	0.82
10	Establishment of Bio pesticide Testing Laboratory at Amaravathi	1		1.00	1.00
11	Establishment of Pesticide coding centre	1		0.35	0.35
12	Establishment of Pesticide Residue Testing Lab	1		1.26	1.26
	Plant protection			5.06	5.06
13	Farm Mechanisation strategies to Adopt to the Emergent situations in Agriculture	3953	2040	67.90	57.52
	Organic farming				
14	Promotion of organic farming/natural farming in 131 clusters	131	131	38.47	25.38
15	Promotion of natural farming in 100 new clusters	160	160	20.53	20.53
	Organic farming			59.00	45.91
	Admn. Expenses			1.21	1.050
	Agriculture total			158.26	134.63
II	Sub scheme				
	Crop Diversification programme	14266	9061	15.75	15.75
	GRAND TOTAL			150.38	150.38

NATIONAL FOOD SECURITY MISSION

Objectives:

- Increasing production of rice and pulses through area expansion and productivity enhancement in a sustainable manner in the identified Districts in the State.
- Restoring soil fertility and productivity at the individual farm level.
- Creation of employment opportunities and
- Enhancing farm level economy i.e. farm profits to restore confidence amongst farmers.

Strategy:

- Implementation in a mission mode through active engagement of all the stakeholders at various levels.
- Promotion and extension of improved technologies i.e., seed, Integrated Nutrient Management including micro nutrients, soil amendments, IPM and Resource Conservation Technologies along with capacity building of farmers.
- Flow of fund would be closely monitored to ensure that interventions reach the target beneficiaries on time.
- Various interventions proposed would be integrated with the district plan and targets for each identified district would be fixed.
- Constant Monitoring and Concurrent Evaluation for assessing the impact of the interventions for a result-oriented approach by the implementing agencies.

Districts identified for Implementation:

Government of India have identified eleven Districts in Andhra Pradesh for implementation of National Food Security Mission-Rice which have potential but the present productivity is less than state average. Similarly, fourteen districts for pulses were identified till 2009-10. later pulses programmewas implemented in all 22 districts from 2010-11 to 2013-14.

After bifurcation of the AP state, the NFSM Rice scheme is being implemented in 5 districts and NFSM- Pulses in all 13 districts. Technology mission on Cotton & Jute was also brought under NFSM Commercial Crops (Cotton, Mesta & Sugarcane)

NFSM-Rice (5 Districts):

1. Srikakulam
2. Vizianagaram
3. Visakhapatnam
4. Ananthapuramu
5. YSR Kadapa.

NFSM-Pulses: – All 13 districts

NFSM – Coarse cereals:

1. Srikakulam
2. Vizianagaram
3. Visakhapatnam
4. East Godavari
5. Ananthapuramu
6. Kurnool
7. Chittoor.

NFSM – Cotton:

1. Srikakulam
2. Vizianagaram
3. Krishna
4. Guntur
5. Prakasam
6. Kurnool

NFSM Mesta:

1. Srikakulam.
2. Vizianagaram.

NFSM – Sugarcane:All districts except Ananthapuramu & Prakasam.

NFSM – Additional area coverage under Pulses:

- NFSM-Addl. area coverage under pulses is another step forward for vigorous implementation of the pulse development under the NFSM – Pulses.
- NFSM-Addl. area coverage under pulses has been conceptualized to take up the active propagation of key technologies such as Integrated Nutrient Management (INM) and Integrated Pest Management (IPM) in a manner that creates catalyzing impact by assuring farmers of the higher returns from the identified pulse crops and bringing additional area during rabi/summer season.
- Each NFSM-Addl. area coverage under pulses unit form of a village level block demonstration covering an area of 100 hectares.
- Kits containing critical inputs including Seeds, Gypsum, Micronutrient, Rhizobium culture, PSB, P.P. Chemicals etc. to be given to all the farmers in each unit on subsidized cost for a maximum area of 2 hectares.
- Seeds were supplied through APSSDC and other Minikits were supplied through APSAIDC to the beneficiary farmers.

Target vs Achievement for the year 2016-17:**(Financial Rs. in Lakhs)**

S. No.	Scheme	Targets		Achievements	
		Phy.	Fin.	Phy.	Fin.
1	NFSM – Rice	361256	2920.98	101134	2410.04
2	NFSM – Pulses	845117	8382.95	689798	5611.22
3	NFSM – Coarse Cereals	13677	550.01	13677	550.01
4	NFSM – Cotton	501	41.33	501	39.44
5	NFSM – Mesta	1164	91.82	663	41.65
6	NFSM – Sugarcane	252	20.18	219	17.53
7	NFSM – Addl. area coverage of Pulses	47800	2500	32136	1500
	Total	1269767	14507.27	838128	10169.89

NATIONAL MISSION ON OILSEEDS AND OILPALM (NMOOP)

This flagship scheme was launched by Government of India during 11th plan like ISOPOM-Oilseeds, Oilpalm & Maize, are continued in 12th plan as MM-I for Oilseeds & MM-II for Oilpalm under NMOOP Scheme and Maize scheme was merged in National Food Security Mission scheme from 1st April 2014.

Objective:

The NMOOP envisages increase in Production of vegetable oils sourced from Oilseeds, Oilpalm and TBOs by the end of Twelfth Plan (2016-17).

The Mission was implemented through two Mini Missions in Andhra Pradesh with specific target as detailed below:

MM I on Oilseeds: To increase Oilseed production and productivity. This Scheme was implemented by the Department of Agriculture.

MM II on Oil Palm: Bring additional area under oil palm cultivation through area expansion approach in the State including utilization of wastelands with increase in productivity of fresh fruit bunches (FFBs). This Scheme was implemented by the Department of Horticulture.

STRATEGY:

- Increasing the certified seed availability by maintaining seed chain of recently released varieties.
- Integrated crop management by increasing area under IPM / INM / Micro irrigation and demonstrating latest production / protection technologies at farmers' field through FLD / demonstrations.
- Promotion of mechanization through distribution of improved farm implements / equipments.
- Capacity building of farmers / extension workers through inter / intra trainings including FFS.

Funding Pattern : 60:40 (Central:State)

Area of operation: MMI on Oilseeds under NMOOP was implemented in all 13 districts of Andhra Pradesh.

Budget Allocation :

Sl.No	Name of the scheme	Implementing Department	Allocation(Rs .in Lakhs)		
			Central	State	Total
1	MM I on Oilseeds	Department of Agriculture	1751.00	1167.33	2918.33

Components of the scheme:

The Components under MM-I on Oilseeds were classified broadly in three categories namely **Seed Components, Production inputs, Transfer of Technology, Farm Machineries and irrigation tool, Mission Management expenses and Flexi funds**. The Scheme was implemented with the following components during 2016-17.

Seed component

Purchase of Breeder seed :

240 quintals of K-6 Breeder seed was purchased from the university and incurred an amount of 35.520 lakhs for that.

Production of Foundation & Certified seed production :

900 qtls of K-6 foundation seed was produced with an assistance of 9.00 lakhs and 1100 qtls of K-6 Certified seed was produced with an assistance of 11.00 lakhs.

Distribution of Certified seed on subsidy :

During 2016-17, 21364 qtls of certified seed was distributed to the farmers against of a target of 32799 Qtls Certified seed with an financial assistance of 534.110 lakhs against a target of 819.965 lakhs.

Transfer of Technology programmes (33% of allocation):

Block Demonstrations of Improved Technologies:

Block demonstrations were organized in Cluster mode with a continuous area of 50 ha in a village/ mandal. The block demonstrations in Groundnut crop was conducted with an assistance of Rs.7500/- per Ha and in Sesamum/Castor/safflower with an assistance of Rs.3000/- per Ha to meet the expenses/cost of critical inputs like seed, seed treatment, micronutrients, organic/bio agents, organic/bio fertilizers, eco friendly light traps (NCIPM model) etc.

Farmer Field Schools:

Farmer Field school were organized with 30 farmers in 10 ha of area with a financial provision of Rs.26,700/-. 310 FFS were organized with an assistance of 69.40 lakhs against a target of 400 FFS with an assistance of 106.80 lakhs.

Farmers training:

Cropping system based trainings were organized on Oilseeds during Kharif and Rabi crops.26 Trainings were organized for a group of 30 farmers for 2 days and @ Rs.400/- per participant per day with a financial provision of 6.24 lakhs.

Training of Extension Officers/ workers/ Input dealers:

26 trainings were organized to the officers for 2 days and @ Rs.900/- per participant per day with a financial provision of 9.36 lakhs. The trainings for **Extension Officers** were conducted by the DDA (Farmers Training Centers) in coordination with crop experts like Principle scientist of concern crops, DAAT centre Scientist & KVKs etc.

Production Inputs (2% of allocation):

An amount of 607.50 lakhs were incurred for distribution of PP Chemicals, Insecticides, Fungicides and bio pesticides, weedicides, Rhizobium Culture, P.P. equipment, Farm Implements, sprinklers & water carrying pipes to the farmers @ 50% of the cost against a target of 726.90 lakhs.

Mission Management Expenses:

An amount of 29.08 lakhs was incurred for Monitoring & Evaluation, including operational cost, engagement of consultants, Publicity, Exposure visits to farmers, appointment of State consultant, Hiring of vehicle and contingencies.

Flexi Funds :

7233 qtls of Groundnut seed with an assistance of 242.440 lakhs was distributed to the farmers against a target of 7502 qtls of Groundnut seed with an assistance of 291.860 lakhs under Community Managed Seed System in Ananthapuram district.

The Certified seed produced under CMSS was procured by APSSDC and distributed to the farmers of the same area in the next season.

Targets & Achievement of NMOOP-2016-17:

Name of the Component	Allocation (in lakhs)			Achievement(in lakhs)
	GoI	State	Total	
	1751.000	1167.330	2918.3	
Seed	525.297	350.198	875.495	589.630
Demonstrations including FLD, IPM, Trg	570.000	380.000	950.000	547.263
Supply of inputs	27.003	18.002	45.01	45.01
Farm Machinery and irrigation tools	436.140	290.760	726.90	607.50
MME	17.450	11.630	29.08	29.08
Flexi funds	175.110	116.740	291.85	242.440
Total alloc	1751.000	1167.330	2918.330	2060.923

District wise Target & achievement under NMOOP during 2016-17

S.No.	District	Target		Achievement	
		Phy	Fin	Phy	Fin
1	Srikakulam	18805	48.246	15232	22.79
2	Vizianagaram	962	55.983	365	23.57
3	Visakhapatnam	16372	48.321	6632	18.56
4	E .Godavari	438	27.255	373	8.226
5	W.Godavari	1224	61.456	942	35.62
6	Krishna	517	31.313	191	5.516
7	Guntur	600	36.773	470	9.886
8	Prakasam	2372	129.142	2372	58.413
9	Nellore	829	56.931	803	32.96
10	Kurnool	4033	259.193	5731	277.3
11	Anantapur	8686	483.897	8321	455.23
12	Kadapa	3309	180.098	1256	30.45
13	Chittoor	3056	196.497	2668	151.85
	District Total	61203	1615.105	45356	1130.37
1	Purchase of breeder seed	240	35.520	240	35.520
2	Production of foundation seed	900	9.00	900	9.00
3	Production of certified seed	1100	11.00	1100	11.00
4	Distribution of certified seed	32799	819.965	21364	534.110
5	FFS	400	106.80	310	69.40
6	Mission Management Expenses		29.080		29.080
7	Flexy funds				
S.no	District	Target		Achievement	
		Phy	Fin	Phy	Fin
8	a) Distribution of groundnut seed	5694	142.360	6717	167.940
9	b) Community Managed Seed System(CMSS)	1808	149.500	516	74.500
	Grand Total	104144	2918.33	76503	2060.923

Zero Budget Natural Farming (ZBNF)

Govt. of A.P. (GoAP) has taken up an innovative programme ‘Zero-budget Natural Farming (ZBNF)’ for the comprehensive and long-term welfare and prosperity of farmers and to safeguard them from the adverse climate change effects. The Govt. of A.P through this initiative is also ensuring increased availability of chemical residue free, and more nutritious food. This programme was initiated in June 2015. After strong preparatory work, the field level implementation commenced from Kharif 2016. The programme is funded under Rashtriya Krishi Vikas Yojana (RKVY). GOI approved the PKVY Action plan of AP in the month of February 2017 to implement in Phase II- 268 villages covering 433 clusters.

Vision: To enhance farmer’s welfare through climate change resilient, zero budget natural farming (ZBNF).

Objectives:

- To promote climate resilient, chemical free, ecological agriculture
- To provide small and marginal farmers with profitable livelihoods form agriculture.
- To cover 500,000 farmers and 500,000 hectares in 2000 bio-villages and 50 % mandals of the State spread across all the districts and all agro climatic zones.

Background:

It is abundantly clear that without climate change resilient agriculture, future of farming is very bleak. The current external input ‘chemical agriculture’ driven models are greatly responsible for this crisis and they certainly do not have a solution. For agriculture to be profitable, reduce the impact of climate change and enhance coping mechanism of farmers especially the small and marginal farmers there is need to move away from chemical intensive agriculture. Zero Budget Natural Farming (ZBNF) being practised by thousands of farmers and yielding results across the country meets all the criteria required to achieve our vision.

Need for ZBNF:

The detailed benefits why ZBNF should be practised are listed below:

- a. Low cost or no cost: No input needs to be purchased from outside. All inputs are available within the village. All inputs can be made by the farmers themselves.
- b. Zero chemical usage: Soil fertility, soil organic matter and soil carbon are restored and this in turn increases productivity. There is a continuous improvement of soil fertility. Increasing soil microbes and healthy microbiology through ‘local cow’ dung and urine based formulations. ‘Local cow’ is less costly and more hardy. One local cow is enough for cultivation in 30 acres of land. Pest management is through natural means – both through good agronomical practices and through use of cow dung and urine and botanicals based ‘kashayams’.
- c. Use of local seeds: They are less costly, more productive under ZBNF, more hardy, and better for climate resilience compared to costly hybrids. Farmers can produce their own seeds.

- d. Less water required under ZBNF: due to mulching and ‘wapasa’. ZBNF offers an ingenious way of maximizing the usage of water vapour present in the atmosphere for plant growth, thereby significantly reducing the groundwater requirements.
- e. Poly crop models and incorporation of trees in Agriculture - provides year long income, and reduces risks. More important, the continuous green cover improves soil fertility, yields lot of mulch, and reduces water losses. The income from the intercrops provides the working capital for the farmers for the main crop, and that is the rationale for calling it ‘zero budget’.
- f. For the ultra poor, the bottom 15%, the 5 – tier, multi tiered cropping model is a good model. Through these multi tier models, a farmer with his own and with family labour can realise net incomes of Rs.12000 to Rs.16000 per 1100 sqft (2 ½ cents) for irrigated lands.
- g. Under ZBNF crops can withstand dry spells better and longer. They also revive much better – when they get irrigation. Similarly, crops can withstand heavy rains
- h. From a climate change perspective, ZBNF is the most climate friendly, carbon neutral agriculture.
- i. Consumers get healthy food. There is a huge increase in domestic demand for chemical free food (growing at more than 30% per annum).

Implementation:

- The Govt. has entrusted the implementation of the zero budget natural farming programme to the Rythu Sadhikara Samstha (RySS), with the support of the Dept of Agriculture. Sri T Vijay Kumar, IAS (Retired) has been appointed as the Co Vice Chairman of Rythu Sadhikara Samstha and has been made in-charge of implementation of Natural farming in the state. Dedicated units have been set up at the state level and in each district.
- A cluster of 4 to 6 villages covering 2000 farmers and an area of 2000 ha is the basic unit of implementation. The dedicated team at the cluster is anchored by (MPEO), supported by the Mandal Agri. Officer and the Asst Director of Agriculture.

There are 7 key USPs of the program. These are:

- I. Role of master farmers:** Farmer to farmer dissemination is the key to success of this programme. The master farmers are the best practicing ZBNF farmers in a cluster. Each cluster shall have 3 – 4 master farmers who shall train farmer’s to adopt ZBNF through intensive persuasion, household visits, Farmer Field School, video disseminations, etc. Last year, Community resource persons (CRP), 2 best practising farmers from neighbouring districts were engaged to work in cluster villages for 20 – 23 days in a month to motivate the farmers to adopt ZBNF. This is the most important reason for the quick and successful adoption of ZBNF by new farmers.
- II. Video dissemination:** Under Digital extension the program will partner with Digital Green Foundation for regular production of short videos on ZBNF package of practices. Among the farmers Video Resource Persons (VRPs) are identified and trained who in turn shall make video films from real farmers. The Master farmers and MPEOs are trained in video

dissemination and provided with pico projectors. Videos are disseminated each day in one of the villages.

III. Farmer friendly content and PoP: A comprehensive ZBNF workbook has been published by Agriculture Department and Agriculture University. 18 ZBNF primers have been developed with farmer friendly content in simple language and pictorial forms. Crop cards have also been developed with package of practices and timelines for each crop for each farmer.

IV. Strong ownership of Agriculture Department and thrust on capacity building: A dedicated state resource pool shall be created at State level with unique collaboration of farmers, civil society organizations, scientists and Agridept officials and similar pool shall be created at the district level as well. The State Resource Persons (SRPs) shall train the district resource persons (DRPs) and the DRPs shall in turn train the cluster level functionaries.

V. Accessibility of ZBNF inputs: For the farmers to avail ZBNF inputs a ZBNF input shop shall be established in each village by a ZBNF practitioner. The shops provide need based inputs like Ghanajeevamrutham, Drava jeevamrutham, panchagavya, Agni asthram, Brahma asthram etc., They also provide sprayers, seeds of border crops and trap crops, yellow and white sticky traps, pheromone traps, local vegetable seeds etc. The farmers are being supported to produce Ghana jeevamrutham through, cattleshed lining and urine collection tanks. One custom hiring centre shall be established at each cluster.

VI. Farmers Institutions: Men farmer SHGs shall be formed which shall further be federated in to Village federation, Cluster Federation and Farmer Producer Organizations. By group formation and through group meetings knowledge dissemination shall be greatly facilitated in the form video dissemination, experience sharing, primers dissemination etc. The group will also provide other key benefits like solidarity, savings and credit, vulnerability reduction, insurance, aggregation of produce, local marketing, quality assurance and traceability, etc.

VII. ICT: A comprehensive ICT support is under development for creation of farmer database, e-Tracking progress on adoption of ZBNF practices, enabling traceability of certification, monitor crop conditions and performance of functionaries, platform for e-marketing, information on climate change and geo-mapping etc. It is proposed to have an exclusive YouTube channel of the State Govt., for dissemination of content, inspiration films, etc.

Preparatory Work in the State and Achievements 2016-17:

- During 2015-16 & 2016-17, the program has been launched in 704 villages of 131 clusters, it shall reach the remaining villages in 2017-18.
- As part of the content development, a resource book for ZBNF package of practices has been published.
- A set of 18 primers in farmer friendly text has been prepared to reach the farmers.
- Multi stakeholder partnership has been created by bringing Agriculture Department, Agriculture Universities, NGOs and practising farmers under one platform.
- Most importantly, capacity building and ZBNF orientation of all stakeholders from state to field level has been done under the guidance of Sh. Subhash Palekar, regarded as the father of ZBNF.

He conducted two mega trainings covering 5,000 participants in each training (The first one was conducted in the month of January 2016 over a period of 8 days and the other in September 2016 for a period of 4 days.) 85% of the participants constituted farmers from the clusters and master farmers, the remaining were Agriculture Department Staff, Scientists from Agri Universities and representatives of ZBNF NGOs. These training had a tremendous motivational and inspirational impact on farmers and agriculture department officers.

- For effective implementation of the program a dedicated team has been/is being placed at State level and in all the districts. At the cluster level a dedicated team has been formed consisting of one MPEO (from AgriDept) and 3 master farmers (Cluster activist and CRPs).
- For video dissemination MoU with Digital Green Foundation shall be done with a focus on production of videos around ZBNF practices.
- An MOU regarding building sustainable Community Based Organizations (CBOs) for farmers in the form of Self Help Groups (RMGs), Village Level Federations and Cluster Level Federations to bring sustainable improvement in the quality of life of farmers in 131 clusters of Andhra Pradesh by OMPLIS, Orvakal (V) & (M), Kurnool District has been signed between OMPLIS and Department of Agriculture, AP.
- To meet the immediate input requirement of 300 farmers, the clusters are provided with financial assistance for the following.
 - a. Establishment of NPM shops on 50% subsidy @Rs.50,000/- unit
 - b. Procurement of Cows on 50% subsidy limited to Rs.10000/-unit.
 - c. Establishment of Custom Hiring Centers (CHCs)on 50% subsidy @ Rs.2 lakh per unit.

Results:

- During Kharif 2016 and Rabi 2016 -17, 48565 farmers have been covered as against a target of 39300 farmers. Of 48565 farmers covered, 9367 seed-to-seed farmers have been 100% ZBNF compliant, 18974 are partial ZBNF farmers and 20224 new farmers were covered during rabi 16 - 17.
- In addition to this, 704 ZBNF input shops have been promoted, 4000 potential master farmers have been identified, 800 farmer SHGs have been formed and 4000 farmer field schools are working.
- Formation of Men farmer SHGs (10 to 15 farmers in each group) in all 131 cluster villages is under progress.

Crop Cutting Experiments (CCEs): ZBNF v/s Non – ZBNF

During Kharif 2016 crop cutting experiments have established **higher yields and reduced costs for all crops in all districts**. The detailed crop wise “crop cutting experiments” results are as follows:

- I. Paddy:** Experiments in 285 sites across 13 districts have shown that the yield under ZBNF is 6416 kg/ha and under Non – ZBNF it is 5816 kg/ha which is 10% increase in the yield i.e. 9000 kg/ha. The cost of cultivation reduced by Rs. 5000 – 20,000/ha and increase in the net incomes is Rs. 14000 -29000/ha.

II. The district wise results of CCEs of paddy under ZBNF and Non- ZBNF are enlisted in the table below:

S. No	District	CCEs	ZBNF	Non - ZBNF
			Yield (Kg/Ha)	Yield (Kg/Ha)
1	Srikakulam	50	6096	5660
2	Vizianagaram	97	6092	5752
3	Vishkapatnam	19	6101	5107
4	East Godavari	70	6560	5845
5	West Godavari	5	7787	6410
6	Krishna	13	6800	6000
7	Guntur	7	6916	7392
8	Prakasam	1	7700	6460
9	Nellore	2	5718	4875
10	Kadapa	12	7813	5666
11	Kurnool	7	7802	7390
12	Chittor	2	7300	6337
Total		285		
Average			6416	5816

The program works towards income enhancement of small and marginal farmers, ultra poor i.e. working with all landless (tenant), marginal and small farm families for five years, towards at least 25% increase in net incomes and Special interventions for the ultra poor (around 20% farm families in a village) to increase their incomes by at least Rs.50,000/year per family. In order to achieve this, the program creates appropriate sets of interventions for a range of different agro climatic zones and for different crops agriculture and horticulture. The unique feature of implementation is the community-based farmer-to-farmer training. The Community resource person (CRP) model envisages 2 best practising farmers from neighbouring districts to work in cluster villages for 20 days in a month to motivate the farmers to adopt ZBNF. This is the most important reason for the quick and successful adoption of ZBNF by new farmers.

Expenditure: The Scheme is implemented with financial allocations under RKVY. An amount of Rs.45.91 Crores has been released under RKVY during 2016-17 and Rs.33.71 Crores is the expenditure which includes district releases and state level procurements and administrative expenses.

PROMOTION OF ORGANIC FARMING -RKVY (2016-17)

Natural/Organic Farming in 131 Clusters RKVY

S.No	District	Physical (No. of Farmers)		Financial (Rs. Lakhs)		
		Target	Achvt.	Allocation	Release	Expd.
1	Srikakulam	3000	3336	181.29	181.29	117.79
2	Vizianagaram	3000	2675	181.88	181.88	80.80
3	Visakhapatnam	3000	2730	179.30	179.30	53.16
4	East Godavari	3000	3544	173.35	173.35	46.61
5	West Godavari	3000	3128	170.65	170.65	109.16
6	Krishna	3000	3059	173.42	173.42	66.20
7	Guntur	3000	5428	174.46	174.46	67.60
8	Prakasam	3000	3387	173.07	173.07	27.49
9	Nellore	3000	3916	160.65	160.65	148.86
10	Kurnool	3300	4312	187.35	187.35	66.40
11	Anantapur	3000	5105	170.65	170.65	116.95
12	Kadapa	3000	5086	160.65	160.65	85.77
13	Chittoor	3000	2859	512.26	512.26	377.40
	Distrit Total			2598.97	2598.97	1364.18
	State level			1992.03	772.03	772.03
	Total	39300	48565	4591.00	3371.00	2136.21

Note: The expenditure reported is more in Chittoor is due to Subhash Palekar 4 day Statelevel TOT conducted in the month of September 2016 at Tirupathi.

STATE AGRICULTURAL MANAGEMENT AND EXTENSION TRAINING INSTITUTE **(SAMETI)**

SAMETI is registered under Societies Registration Act 1860 & functioning as an Autonomous body from the year 2000 after up-gradation of Agricultural Staff Training Institute (ASTI). At present, it is located at Gorantla, Guntur.

A BRIEF HISTORY:

It was originally established in the year 1966 as Plant Protection Training Centre (PPTC) to build up technical knowledge with latest Agricultural information to the extension staff to meet the situations of large and frequent pest outbreaks. The field workers were being trained in monitoring and identifying different pests and diseases. Hence, the institute was renamed as State Institute of Plant Protection and Pest Surveillance (SIPP & PS) in 1976.

Later on, the Soil Conservation Training Centre (SCTC) was merged with the institute and the name of institute was changed to Agricultural Staff Training Institute (ASTI) in 1989. The Institute was working under the administrative control of the Commissioner of Agriculture, Andhra Pradesh, Guntur.

The Govt. of Andhra Pradesh decided to upgrade and strengthen the existing ASTI as State Agricultural Management & Extension Training Institute (SAMETI) as an Autonomous body in order to cater the training needs and human resource development of the middle level functionaries of Agriculture, Horticulture, Animal Husbandry and other line departments. Besides, the staff of ATMA in the districts is also trained under Extension Reforms. The Institute is managed by the General & Executive Councils. The Principal Secretary, Agril & Cooperation to the Government of Andhra Pradesh is the Chairman of SAMETI, AP. The Institute is headed by a Director (in the cadre of Addl. Director of Agriculture) assisted by Asst. Directors of Agriculture and Agricultural Officers alongwith supporting ministerial staff.

AIMS AND OBJECTIVES OF SAMETI

- To provide extension management input for extension functionaries of Agricultural and allied departments.
- To develop systematic linkages between the allied departments, state universities and regional and national institutes of outstanding accomplishments in the field of Agriculture.
- To study the Agricultural Extension Management Systems and policies together with operational problems and constraints at all levels.
- To promote and develop the management tools for improving the effectiveness of Agricultural extension Services.
- To organize need based trainings for developing skills of all extension functionaries.

Academic Committee:

The Academic Committee consists of the following members:

1. The Director SAMETI : Chairman
2. The Representatives from Agriculture, Horticulture, Animal Husbandry and Fisheries Department not below the rank of Joint Director.
3. Three Faculty members of SAMETI nominated by the Director, SAMETI.
4. Principal , EEI , ANGRAU

Every meeting of the academic committee shall be presided by the Chairman and in his absence the academic committee will elect a Chairman for the specific meeting. Five members of the academic committee shall constitute the quorum.

Areas of Training:

SAMETI has been organizing different types of training programmes viz.,

- **Technical**
These trainings are meant for Departmental officers exclusively. During the year 7 trainings are organized on Water Management, Integrated Crop Management, and Quality Control and on Soil Health management etc. covering 123 officers from all the districts.
- **Managerial**
These trainings are organized for Agricultural & Allied Departmental officers on Office Management, Gender issues & other managerial skills. During the year 3 trainings are organized covering 40 officers.
- **Off campus training programmes**
These trainings are organized for Agricultural & Allied Departmental officers in collaboration with EEI, MANAGE, Rajendranagar, Hyderabad. During the year 2 trainings are organized covering 49 officers.
- **Other trainings of the Department**
State level refreshing training cum workshop on **polambadi** has been organized for Master Trainers & Technical Assistants of JDA's office from all the districts covering **26** officers.

SAMETI has been promoting the trainings based on the needs of the extension functionaries, feedback from the participants, suggestions from FTC's & suggestions of the faculty. The trainings are designed based on, need based analysis at field level.

Training programmes on Organic Farming, Polambadi and sub schemes such as Pulses & Nutri Cereals production technology trainings pertaining to soft skills, office management etc. have also been included in the Annual Training Calendar. It was also decided that the number of participants of each technical / managerial training should be 26 i.e., 2 officers/district.

It is proposed to organize every year Technical trainings for Agricultural Department and Managerial trainings for officers of Agriculture & Allied Departments. In addition to the above, need based Orientation courses for AO's & Workshops/Brain Storming Sessions will also be organized pertaining to various schemes.

Technical Trainings (for Agriculture Department Extension officers):

- Water Management of crops with special focus on micro irrigation
- Integrated Crop Management (ICM) in Major crops
- Quality Control of inputs
- Genetically Modified crops – pros & cons
- Farm Mechanization for Profitable Agriculture
- Post Harvest Technology & Value Addition in Agricultural crops
- Climate Change & adaptations in cropping pattern
- Market intelligence for sustainable Agriculture
- Crop Production Technologies in rainfed Agriculture
- Soil Health Management for Sustainability
- Management practices for dryland Agriculture
- Extension Strategies for promotion of organic farming / ZBNF
- Organic Farming & Role of Bio-Inputs in Agriculture
- Capacity Building of the Department Officers
- Seed Production Technology of Major Crops
- Crop Production Technologies in Rain-fed Agriculture
- Contingency Planning in Crop Insurance
- Bio-Diversity in Agriculture & Allied Sectors

Managerial Trainings (for Agricultural & line Departments Extension Officers):

- Work Ethics for Extension Functionaries
- E - extension Skills for better management
- Office Administration & Accounts
- Soft skills for personality development
- Managerial Skills for Extension Personnel
- Service matters & Audit
- Communication Skills & Conflict Management Skills for extension professionals
- Documentation skills for field functionaries
- Importance of ICT's for faster information in Agricultural development
- Gender Budgeting & Gender Mainstreaming in Agriculture & allied sectors
- Leadership & team building for better extension
- Time & stress management skills for extension functionaries
- Market-Led Extension
- Promotion of Post Harvest Technologies & Value Addition in Agriculture & Allied Sectors
- Public Private Partnership in Changing Agricultural Scenario

Collaborative workshops/ trainings are also being organized by SAMETI with Commissionerate of Agriculture, AP, Guntur, MANAGE and EEI, Rajendranagar, Hyderabad.

Trainings organized during the year 2016-17 :

S. No.	Name of the Training Programme	No. of Trainees Attended
1	Water management of crops	15
2	Rainfed Agriculture with ref. to NRM	15
3	Market intelligence for sustainable Agriculture	14
4	Extension Strategies for organic certification	15
5	Office Administration & Accounts	13
6	Supply chain management	8
7	Gender sensitization in Agriculture & allied sectors	12
8	Leadership & Team building	11

I. THE FOLLOWING SCHEMES IMPLEMENTED BY UTILIZING GoI FUNDS :-

1. PGDAEM:- (Post Graduate Diploma in Agricultural Extension Management)

SAMETI as Nodal Agency implementing one year **Post Graduate Diploma in Agricultural Extension Management (PGDAEM)** course through distance learning mode in collaboration with MANAGE, Hyderabad. This course was launched by MANAGE, with the following objectives.

- To enhance the techno - managerial competence of extension functionaries.
- To acquaint the extension functionaries on the latest developments in the field of Agricultural extension.
- To equip the extension functionaries with latest tools and techniques for participatory decision making.
- To develop an insight into various extension models to enrich the agri-value chain.

For the year 2016-17 No. of candidates pertaining to the Department of Agriculture & allied sectors have registered and the course was completed. The details are given below :-

S. No.	Year	No. of batches	Total No. of Persons passed under PGDAEM
1	2016-17	1	62

2. DAESI:- (Diploma in Agriculture Extension Services for input dealers)

- SAMETI as Nodal Agency implementing one year **Diploma in Agriculture Extension Services for input dealers (DAESI)** through MANAGE, Hyderabad.
- The course fee for the said Diploma Course is Rs.20,000/-(Rupees Twenty Thousand Only) out of which Rs.10,000 from the input dealers and rest of the Rs.10,000/- is given by Government of India through MANAGE and then to SAMETI and course fee for self finance is Rs.20,000/- (i.e total amount) from input dealers only.
- At State Level, SAMETI as Nodal implementing Agency and overall supervision by the Director SAMETI & at district level Project Directors ATMA.
- SAMETI will release funds to the Nodal Training Institute (NTI) in installments. A separate bank account will be opened on the name of Director, SAMETI for this programme, in which amounts collected (as fees) from input dealers will be deposited and also amount released from MANAGE will also be deposited.
- A total number of batches and input dealers trained under DAESI programmes for the year **2016-17**. The details are given below :-

S. No.	Year	Total No. of batches	Total No. of Persons trained
1	2016-17	6	237

SAMETI has been identified as nodal agency for routing of ATMA funds to PD ATMA in the districts and for providing necessary HRD support to ATMA officials.

Scheme Accounts pertains to NFSM, RKVY, AGRISNET, NRM, WTO, Soil Health Scheme & FM etc. of PD account were maintained at SAMETI.

ANDHRA PRADESH WATER SECTOR IMPROVEMENT PROJECT (APWSIP)
(Nagarjuna Sagar Project Modernization Scheme)
Irrigated Agriculture Intensification and Diversification (IAID)

Andhra Pradesh Water Sector Improvement Project (APWSIP) is aimed at modernization of Nagarjuna Sagar project with an outlay of about Rs. 4444.41/- crores. The duration of the project is 6 years starting from 10th September 2010 to July 31st 2016 and extended up to June 2017

Objective of the project:

The project aims to provide assured supply of water with equitable distribution through strengthening of Water Users Associations (WUAs) and also to provide farmers with the necessary tools to maximize the production of water resources.

The Project supports the following Components:

Component A: Improving irrigation service delivery and management in NSP

Component B: Irrigated Agriculture Intensification and Diversification.

Component C: Water Sector Institutional Restructuring and Capacity Building.

Component D: Project Management.

The components A, C&D are monitored by Irrigation and CAD Dept.

Component B - Irrigated Agriculture Intensification and Diversification (IAID) :

The main objective of IAID component is to increase farm profitability by increasing the production and returns on the produce of Irrigated Agriculture, Horticulture, Animal Husbandry, Fisheries and other related activities

The following are the Sub Components of IAID (Component B) and the total allocation for the project period.

B1 - Agriculture(Field Crops)	Rs.47.37 crores
B2 – Horticulture	Rs.12.91 crores
B3 - Livestock Development	Rs.18.34 crores
B5 - Adaptive Research	Rs. 5.39 crores
Total	Rs.84.01 crores

Sub Component B1-Agriculture:

Agricultural activities under the project are planned to improve water user efficiency (WUE), increase productivity, cropping intensity and crop diversification in the NSS command through the following major interventions.

Implementation of Action Plan during the year 2016-17

To accomplish the Project objectives of enhancing crop and water productivity, crop diversification and capacity building of WUA farmers and thereby increase incomes of farmers the following technological interventions have been initiated in the command area of 3 NSP districts Viz: Guntur, Krishna and Prakasam by organizing Demonstrations on:

Organisation of Crop Technology Demonstrations under APWSIP:

Demonstrations are one of the most effective tools for dissemination of technology to the farmers. Under Irrigated Agriculture Intensification and Diversification (IAID) the following crop oriented ICM package of practices including IPM, INM and Water Management will be demonstrated in the farmers' holdings in the NSP districts during the project period.

- Integrated Crop Management Demonstrations (ICM)
- Integrated Plant Nutrient Management Demonstrations (INM)
- Integrated Pest Management Demonstrations (IPM)
- Crop Diversification Demonstrations
- Crop Intensification Demonstrations
- Demonstrations on Efficient Water Management

The demonstrations will be organized during Kharif and Rabi. The MAOs and Agriculture Specialist will extend necessary technical guidance to the Project Program Promoters (PPPs) who are appointed under the project at mandal level in organizing the demonstrations.

i. Integrated Crop Management Demonstrations (ICM) on Paddy:

The following technological interventions are demonstrated in these demonstrations:

- Promoting SMSRI through Mechanized transplanter & Efficient Water Use
- Promoting SMSRI through Drum Seeder
- Promoting Direct Seeding of paddy
- Promoting Integrated Nutrient Management (INM)

Demonstration organized during 2016-17

S.No	District	No.of Demos Organised
1	Guntur	250
2	Krishna	690
3	Prakasam	0
	Total	940

ii. Demonstrations on Integrated Crop Management (ICM) Cotton:

- Integrated Crop Management (ICM) by reducing use of chemical pesticides and promoting bio agents for sucking pest management
- Promoting use of Micro nutrients like zinc, magnesium and boron

Demonstration organized during 2016-17

S.No	District	No.of Demos Organised
1	Guntur	3116
2	Krishna	1800
3	Prakasam	1250
	Total	6166

iii. Crop Diversification:

For using the limited water available during the Rabi season more efficiently, alternate I.D crops like maize, jowar and pulses were promoted in place of paddy and they have given very good results like:

- The net income in these crops was higher compared to paddy
- With water required for 1 acre of paddy 2 to 2.5 acres of I.D.crops could be grown
- With Zero tillage in maize the cost of cultivation could be minimized to an extent of Rs.2000/- to 2500/- per acre.

Demonstration organized during 2016-17

S.No	District	No.of Demos Organised
1	Guntur	3750
2	Krishna	1610
3	Prakasam	0
	Total	5360

iv. Crop Intensification Demonstrations:

The present cropping intensity in the districts of Guntur, Prakasam, Nalgonda, Khammam and Krishna is 1.31, 1.05, 1.23, 1.13 and 1.55 respectively (2011-12). The cropping intensity in these districts can be enhanced by judicious use of water during kharif season and by raising a second/third ID crop under the project by providing limited number of irrigations for crops like maize, jowar and pulses. These demonstrations will be conducted to show the benefits of double and triple cropping. The demonstrations will also cover aspects related to making the best use of limited water supplies due to low rainfall and delays in rehabilitation of canal systems.

v. Demonstrations on Efficient Water Management:

In the command areas due to copious water supply there is tendency of using excess water for the crops without knowing the deleterious effect of excess moisture in the root zone. Hence to demonstrate the benefits of optimum water use for the crops one WUA is selected in each district and rotational irrigation will be practiced in the total area of the WUA.
