

INTERVENTION

I. Drought Proofing Activities

With an objective to achieve sustainable agriculture productivity and quality efficient utilization of natural resources like soil and water is planned through adoption of appropriate location specific measures.

Intercropping :

Growing of two or more crops simultaneously on the same piece of land (field). There is a crop intensification in both time and space dimensions. There is intercrop competition during all or part of crop growth. Intercropping gives higher income per unit area than sole cropping. It acts as an insurance against failure of crop in abnormal year. Intercrops maintain soil fertility as the nutrient uptake is made from both layers. Reduce soil runoff. Intercropping is proposed in an extent of 1,38,965 Ha in Kharif 2017.

Polycropping/ Mixed cropping:

Mixed cropping is cultivation of two or more crops simultaneously on the same piece of land which is also known as multiple cropping or poly cropping. This polycropping approach has multiple advantages. Planting different crops together has tended to create more ecological niches for beneficial organisms. It serves as a model for income generation and poverty alleviation.

Objective:

or ensure assured crop returns with two or more crops since the crop critical or stress periods to surely coincide with minimum rain spells during the crop period.

This system is an insurance against crop failures due to abnormal; weather conditions as any of the crop grown gives minimum yield to the farmer. These crops can address the regular nutritional disorders which are common now a days (as these millets & pulses are contains high proteins and fiber) besides assured income in any kind of unfavorable conditions. Department is promoting polycropping in an area of 2,70,539 Ha.

Moisture Conservation Furrows:

In order to conserve the rainwater and make available to the crop during crop period, conservation furrows are taken up either by using country plough/ minitractor with a spacing of 2m between rows.

These furrows help in holding water and enable supply to the plant to mitigate dry spell and help in getting sustainable productivity.

By taking up conservative furrows, weeds are also eliminated to certain extent and available moisture is used in multicropping system. Ex. Groundnut+Redgram.

Since contour bunds or any other mechanical structures could not be constructed in the field, these conservative furrows are being widely promoted by department. 25% assistance i.e Rs.238/- is provided per acre.

Lining of Farm Ponds:

In order to store the surface run-off during rains, to provide irrigation to the crop at a critical stage of the crop period Farm ponds are excavated. since water percolates through sides and bottom of the of the ponds ,there will be no water in case of long dry spells. Hence lining provides facility to hold water in the farm pond for longer time, thereby reducing infiltration of water into the soil. The stored water can effectively be utilized for irrigating the crop at dry spells through water efficient irrigation system

The lining is done with different materials 1) Reinforced Concrete lining 2) HDPE lining 3)Geo- membrane lining 4) Loose boulders with pointing 5) Laying of slabs and pointing 6) Cement + Excavated earth (1:6)

The lining is taken up by the beneficiary by any of these methods based on the availability of material. An amount of Rs. 25,000/- is provided as upper limit to the beneficiary by government for the purpose.

Labour component in the work for lining of farm pond can be met which shall be approximately 40% from MGNREGA funds and material component from departmental funds. Due to convergence, department is in a position to provide funds for more number of components.

By using Water efficient irrigation systems through pressurized floats using diesel/electric pump sets cancover larger area. In order to reduce the evaporation losses from the ponds azolla can be grown in the ponds. In some ponds, interested farmers are can rear fishes in the pond and earn additional income.

District wise Extent (Ha) proposed for Drought Proofing Activities

S.No	District	Inter cropping	Poly cropping	Moisture Conservation Furrows	Lining of farm Ponds
1	Srikakulam	0	100	0	0
2	Vizianagaram	550	575	5700	0
3	Visakapatnam	0	0	0	550
4	East Godavari	2245	970	0	0
5	West Godavari	50	0	0	0
6	Krishna	10000	200	0	0
7	Guntur	3000	0	0	0
8	Prakasam	0	4300	15000	4770
9	Nellore	7820	90	0	0
10	Chittoor	0	139669	21600	392
11	Kadapa	6000	4200	0	2000
12	Kurnool	21300	435	760	4122
13	Anantapuramu	88000	120000	50000	3377
Total		138965	270539	93060	15211

II. Increasing cropping Intensity:

Pre - Kharif crops:

Growing of short duration crops like pulses ,Oilseeds Millets utilizing pre monsoon showers before release of Canal water for cultivation of Paddy in Kharif to create additional income to farmers.1,52,388 Ha is proposed for growing of pre Kharif crops in 2017.

Second Crop in Rainfed Areas:

Promoting second crop when soil moisture is favourable for a second crop in rainfed areas and where traditional practice is growing of single crop.

Summer pulses:

With an objective to intensify the pulse cultivation , it is planned to include short duration pulse crop in summer season in traditional crop sequence/pattern of Rice –Rice cultivation in Delta system by adjusting sowing times and utilizing residual soil moisture.

Redgram on Field Bunds:

Emphasis has been laid to produce more pulses as there is shortfall in the availability of pulses across the country under National food Security Programme. Accordingly department has taken proactive steps in promoting Redgram on paddy field bunds in an extent of 1,78,000 Ha in addition to normal solo crop.

District wise Extent (Ha) proposed for Increasing Cropping Intensity

S.No	District	Pre-Kharif Crops	Second Crop in Rainfed Areas	Summer Pulses	Redgram on field Bunds
1	Srikakulam	29982	3000	6000	3000
2	Vizianagaram	10850	150	8000	20000
3	Visakapatnam	2192	692	450	25000
4	East Godavari	0	29023	37500	40000
5	West Godavari	0	200	0	40000
6	Krishna	10000	0	0	10000
7	Guntur	40000	2000	0	20000
8	Prakasam	50000	15593	0	10000
9	Nellore	4350	770	2150	3000
10	Chittoor	314	40000	1400	1000
11	Kadapa	0	5000	0	2000
12	Kurnool	0	0	0	4000
13	Anantapuramu	4700	4187	0	0
Total		152388	100615	55500	178000

III. Convergence with Line Departments:

Convergence activities like Raising of Fodder Crops for Silage making with Animal Husbandry dept, Promotion of DRIP, Sprinkler, Rain Guns and Water Carrying Pipes with APMIP and promotion of Intercrops in Orchards with Horticulture are planned to bring synergies between different government programmes/schemes for facilitating sustainable development.

District wise Extent (Ha) proposed for Convergence with Line Department

S.No	District	Animal Husbandry (Raising of Fodder Crops for silage making)	APMIP (Drip & sprinkler)	Horticulture (Promotion of Inter Crops in Orchards)
1	Srikakulam	0	500	22
2	Vizianagaram	50	1000	500
3	Visakapatnam	0	310	0
4	East Godavari	2500	3850	300
5	West Godavari	0	0	50
6	Krishna	500	1000	2500
7	Guntur	0	0	0
8	Prakasam	4700	6847	5628
9	Nellore	200	10000	4293
10	Chittoor	0	33240	1073
11	Kadapa	2000	3000	3000
12	Kurnool	2000	15000	600
13	Anantapuramu	0	610	1310
Total		11950	75357	19276