

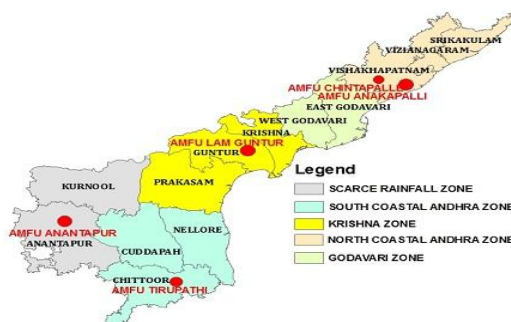
भारत सरकार
भारत मौसम विज्ञान विभाग
राज्य कृषि-मौसम विज्ञान केंद्र
हैदराबाद -500 016



Government of India
India Meteorological Department
State Agro-Meteorological Centre,
Hyderabad- 500 016

COMPOSITE AGRO-METEOROLOGICAL ADVISORY SERVICE

BULLETIN FOR THE STATE OF ANDHRA PRADESH



ISSUED ON 21.062019

BULLETIN NO: 050

From the period (22.06.2019 to 26.06.2019)
(5 days from Saturday to Wednesday)

State Agro-meteorological Services Center (SAMC), Hyderabad
राज्य कृषि-मौसम विज्ञान केंद्र

Six Agro-climatic Zones of Andhra Pradesh (high altitude zone not shown)

Agro-climatic Zone	Districts	In-charge stations
North Coastal	Srikakulam, Vizianagaram &	RARS, Anakapalle
South Coastal	Nellore, Chittoor & Kadapa	RARS, Tirupathi
Godavari	East & West Godavari	RARS, Chintapalle
Krishna	Guntur, Krishna & Prakasam	RARS, Guntur
Scarce Rainfall	Anantapur & Kurnool	RARS, Anantapur
High Altitude	Srikakulam, Vizianagaram,	RARS, Chintapalle

Part A: Weather

A.1. Synoptic situation during last 3 days from 18.06.2019 to 20.06.2019

18.06.2019 : Heat wave conditions prevailed at isolated pockets in the district of Visakhapatnam of Coastal Andhra Pradesh & Yanam. Conditions are becoming favourable for further advance of Southwest Monsoon into some more parts of Central Arabian Sea, Karnataka, some parts of south Konkan & Goa, Andhra Pradesh, remaining parts of Tamilnadu, some more parts of Bay of Bengal, remaining parts of northeast India, some parts of Sub-Himalayan West Bengal & Sikkim and Odisha in the next 3-4 days. Northern Limit of Monsoon (NLM) continues to pass through Lat. 13°N/Long. 60°E, Lat. 13°N/Long. 70°E, Mangaluru, Mysuru, Salem, Cuddalore, Lat. 14°N/Long. 86°E, Goalpara, Alipurduar, Gangtok and Lat. 28°N/Long. 88°E. The Upper air cyclonic circulation between 4.5 and 5.8 km above mean sea level over westcentral Bay of Bengal off north Andhra Pradesh coast persists.

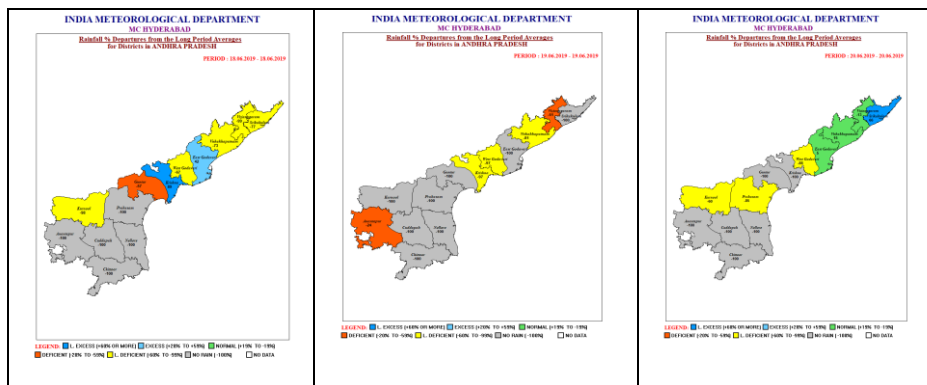
19.06.2019 : Heat wave conditions prevailed at isolated pockets in the district of Guntur, Krishna, Visakhapatnam of Coastal Andhra Pradesh & Yanam. Northern Limit of Monsoon (NLM) continues to pass through Lat. 13°N/Long. 60°E, Lat. 13°N/Long. 70°E, Mangaluru, Mysuru, Salem, Cuddalore, Lat. 14°N/Long. 86°E, Goalpara, Alipurduar, Gangtok and Lat. 28°N/Long. 88°E. Conditions are becoming favourable for further advance of Southwest Monsoon into some more parts of Central Arabian Sea, Karnataka, some parts of south Konkan & Goa, Andhra Pradesh, Telangana and remaining parts of Tamilnadu, some more parts of Bay of Bengal, remaining parts of northeast India, some parts of West Bengal & Sikkim, Bihar, Jharkhand and Odisha in the next 2 to 3 days. The Upper Air cyclonic circulation over west central Bay of Bengal off north Andhra Pradesh coast now lies over east central & adjoining northeast Bay of Bengal between 3.6 & 5.8 km above mean sea level. A low pressure area is likely to develop over North Bay of Bengal & neighborhood

20.06.2019 : Severe Heat wave conditions prevailed at isolated pockets in the districts of Krishna & West Godavari and Heat wave conditions prevailed at Many parts in the districts of East Godavari, Guntur and Nellore of Coastal Andhra Pradesh & Yanam. Northern Limit of Monsoon (NLM) continues to pass through Lat. 17°N/Long. 60°E, Lat. 17°N/Long. 77°E, Ratnagiri, Kolhapur, Shivamogga, Salem, Cuddalore, Lat. 16°N/Long. 86°E, Lat. 20°N/Long. 88°E, Kolkata, Lat. 25°N/Long. 89°E, Gangtok and Lat. 28°N/Long. 88°E. Conditions are becoming favorable for further advance of Southwest Monsoon into some more parts of Central Arabian Sea, Karnataka, Maharashtra, some parts of Andhra Pradesh, Telangana, remaining parts of Tamilnadu, Bay of Bengal, and some more parts of West Bengal & Sikkim, some parts of Bihar, Jharkhand and Odisha during next 72 hours. The trough at mean sea level now runs from Punjab to the center of low pressure area over northeast Bay of Bengal and neighbourhood across Haryana, north Madhya Pradesh, north Chhattisgarh, Jharkhand and north Odisha. Under the influence of the Upper Air cyclonic circulation over east central & adjoining northeast Bay of Bengal, a low pressure area has formed over northeast Bay of Bengal and neighbourhood. Associated cyclonic circulation extends upto 7.6 km above mean sea level tilting southwestwards with height. The shear zone is now seen between 3.6 & 7.6 km above mean sea level roughly along Lat. 14°N across Peninsular India.

A.2.Realized Rainfall distribution during last three days from 18.06.2019 to 20.06.2019

	11.06.2019	12.06.2019	13.06.2019
Coastal Andhra Pradesh	Few places	Isolated rain	Isolated rain
Rayalseema	Isolated rain	Isolated rain	Isolated rain

A.3 Rainfall Distribution for the Period of 18.06.2019 to 20.06.2019 (for Three days)



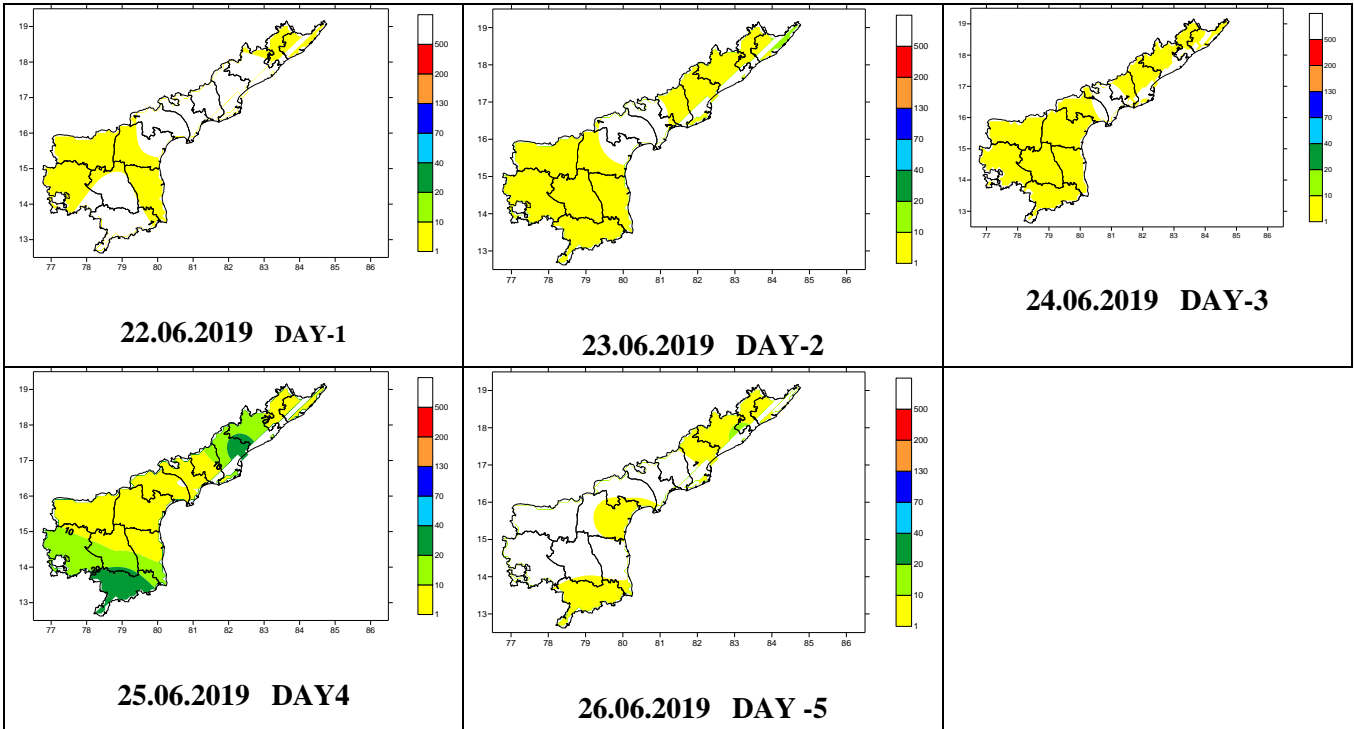
A.4 Description of Past Weather for the last three days (18.06.2019 to 20.06.2019)

WEATHER PARAMETER	Coastal Andhra Pradesh	Rayalseema
Max Temperature (deg C):	35-41	38-40
Dep from normal	Appreciably above normal	Appreciably above normal
Min Temperature (deg C):	28-32	26-29
Dep from normal	Appreciably above normal at few places	Above Normal
Total cloud cover (Okta):	5-7	4-5
Max Relative Humidity (%)	49-84	54-62
Min Relative Humidity (%)	35-86	31-40
Wind Speed (Kmph):	7-2	5-7

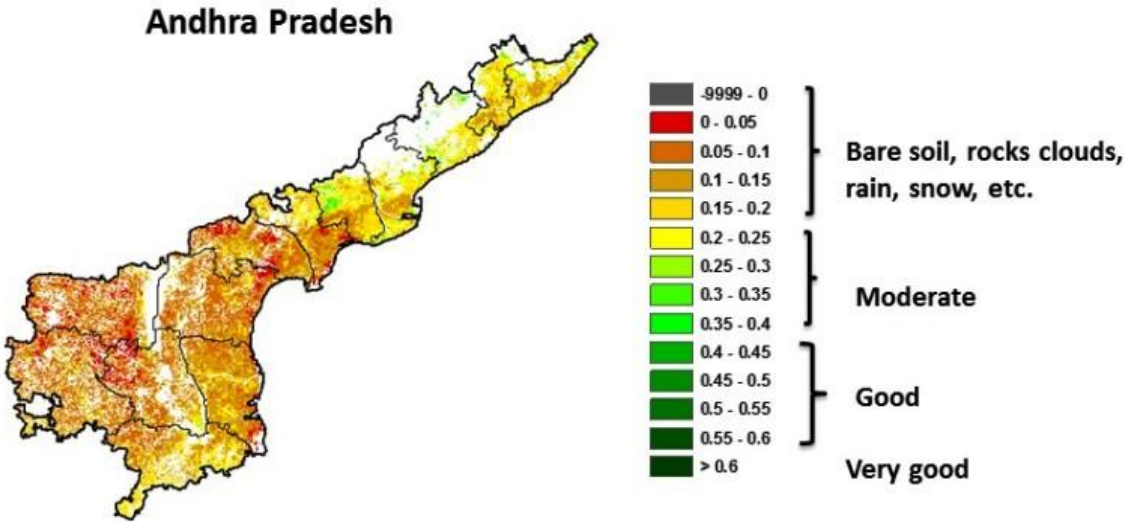
A.5 Weather parameters distribution for the next five days in range (Period 22.06.2019 to 26.06.2019)

ZONES	N.COASTAL	GODAVARI	KRISHNA	SOUTHERN	SCARCE RAINFALL
Rainfall(mm)	178-5	178-5	103-6	38-4	40-4
TempMax(°C)	36.5-31.8	36.5-31.8	40.2-36.5	40.2-37.5	38.3-35.5
TempMin(°C)	28.8-25.5	28.8-25.5	28.5-27.4	30-28.5	27.5-26.5
HumidityI(%)	91-81	91-81	87-69	80-67	81-72
HumidityII(%)	86-79	86-79	80-56	66-48	63-51
WindSpeed(m/s)	15.8-9.5	15.8-9.5	17.7-12.3	18.4-14.4	21.3-15.6
WindDirection(degree)	269-183	269-183	286-219	270-260	276-261
CloudCover(octa)	8-6	8-6	8-5	8-7	8-5

A.6 Rainfall distribution for the next five days (Period 22.06.2019 to 26.06.2019)



**NOAA/VIIRS/BLENDED NDVI Composite ending on Week no 23
(03.06.2019 to 09.06.2019) over Agricultural region**



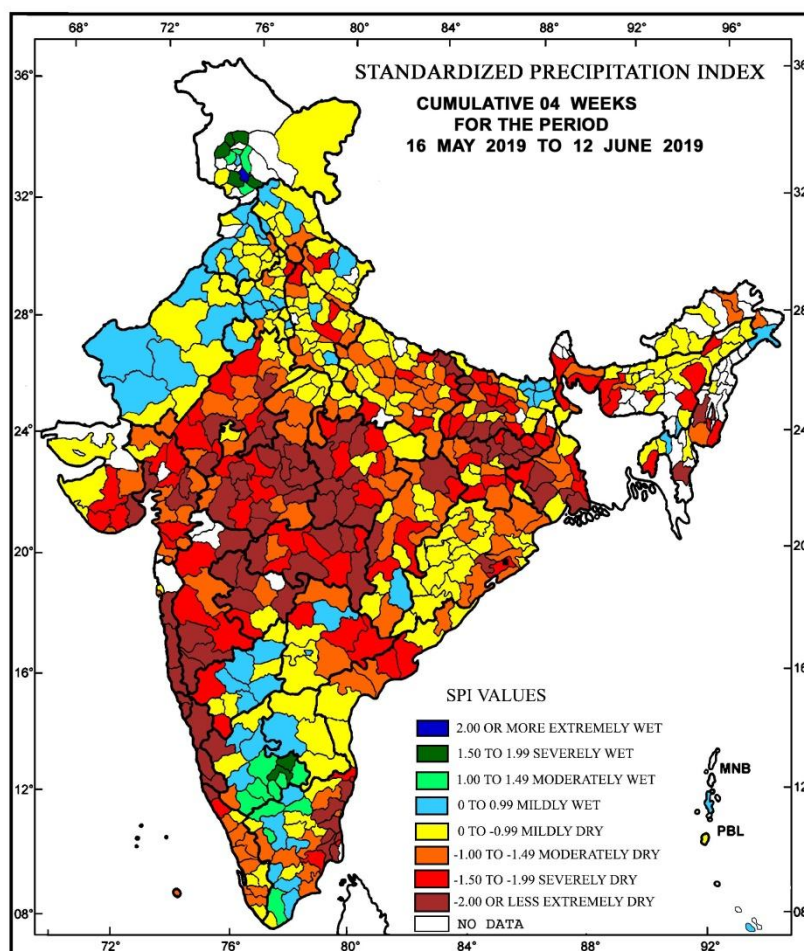
Agriculture vigour is moderate over isolated parts of North Andhra Pradesh.

Extended Range Rainfall Forecast ((10 th May to 23 rd May 2019)		
Met Subdivisions	Week 1 (14.06.2019 to 20.06.2019)	Week 2 (21.06.2019 to 27.06.2019)
Coastal Andhra Pradesh	Below Normal	Above Normal
Rayalaseema	Below Normal	Normal

Standardised Precipitation Index

Cumulative 4 weeks for the period 16th May to 12th June 2019

MINISTRY OF EARTH SCIENCES
INDIA METEOROLOGICAL DEPARTMENT
HYDROMET SECTION, PUNE



- Extremely/Severely dry conditions experienced in East Godavari, West Godavari districts of Andhra Pradesh.
- Moderately dry conditions experienced at a few districts of Guntur, Krishna, Vizianagaram districts of Andhra Pradesh.

PART B: *Detailed District/Zone wise Agro met Advisories*

AGRO METEOROLOGICAL ADVISORY FOR SRIKAKULAM DISTRICT, A P

- Procure paddy seed and green manure seed.
- Procure seeds of rainfed crops for sowing in subsequent rains.
- Apply Urea 50kg/ac after drain out excess water.
- Go for land preparation for rainfed sugarcane. Varieties suitable for rainfed conditions are 87A298 and 20009A107.
- Ready to sow early pulses by using ensuing rainfall.

AGRO METEOROLOGICAL ADVISORY FOR VIZIANAGARAM DISTRICT, A P

- Procure paddy seed and green manure seed.
- Procure seeds of rainfed crops for sowing in subsequent rains.
- Apply Urea 50kg/ac after drain out excess water.
- Go for land preparation for rainfed sugarcane. Varieties suitable for rainfed conditions are 87A298 and 20009A107.
- Ready to sow early pulses by using ensuing rainfall.
-

AGRO METEOROLOGICAL ADVISORY FOR VISAKHAPATNAM DISTRICT, AP

- Procure paddy seed and green manure seed.
- Procure seeds of rainfed crops for sowing in subsequent rains.
- For control of early shoot borer in sugarcane spray cloranthriniprole @ 0.3 g/l or release of temperature tolerant trichogramma egg parasitoid (one card per acre)
- For control of whip smut in sugarcane spray propiconazole @ 1 ml/l.
- Go for land preparation for rainfed sugarcane. Varieties suitable for rainfed conditions are 87A298 and 20009A107.
- Ready to sow early pulses by using ensuing rainfall.

AGRO METEOROLOGICAL ADVISORY FOR NELLORE DISTRICT, A P

Crop	Stage of the crop	Problem	Remedial measures
Kharif crops and Groundnut	Sowing time	Precautions	<ul style="list-style-type: none"> • June 15th to July 15th is the optimum sowing window for sowing rainfed groundnut. Farmers are advised to take up groundnut only when there is enough sowing moisture in the soil. • In view of rainfall forecast farmers are advised not to take up groundnut sowing. If 50-60 mm rainfall in light soils and 60-70 mm in heavy soils got accumulated, then only the farmers can take up groundnut sowing.
Deep Ploughings		Deep Ploughing	<ul style="list-style-type: none"> • As there is forecast of rainfall for coming 5 days farmers are advised to take up deep ploughings • After deep ploughing use sub soiler for every 2 mt. so as to make deep furrow to absorb rain water during rainy season. • Remove the weeds and clean the bunds around the fields.
Paddy	Nurseries	Seed treatment and plant protection in nursery	The farmers who are taking up paddy nurseries are advised to select should select varieties like MTU 1010 nellore masuri and go for seed treatment with carbendizum @ 3g. per kg seed and apply carbofuran 3g granules @ 150 g. Per cent nursery before 1 week prior to pulling of the nursery.
Chillies	Flowering to Fruit stage	Thrips	<p>The present weather conditions are favourable for thrips and mite in chillies.</p> <ul style="list-style-type: none"> • To control Thrips spray fipronil 2 ml. or spinosad 0.25 ml. or dimethoate 2 ml./L of water.
Vegetable crops	Flowering – Fruit stage	Mite and sucking pests	To control spray phasalon 2 ml. or omite 1.5 ml./5 L of water.

AGRO METEOROLOGICAL ADVISORY FOR CHITTOOR DISTRICT, A P

Crop	Stage of the crop	Problem	Remedial measures
Kharif crops and Groundnut	Sowing time	Precautions	<ul style="list-style-type: none"> June 15th to July 15th is the optimum sowing window for sowing rainfed groundnut. Farmers are advised to take up groundnut only when there is enough sowing moisture in the soil. In view of light rainfall forecast farmers are advised not to take up groundnut sowing. If 50-60 mm rainfall in light soils and 60-70 mm in heavy soils got accumulated, then only the farmers can take up groundnut sowing. In view of summer temperatures farmers who preserved rabi groundnut seed for Kharif sowings are advised to test the germination percentage and safeguard the seed as per their requirement.
Paddy	Nurseries	Leaf folder	The present weather conditions are congenial for Leaf folder and stem borer attack in paddy which is at nursery to tillering stage. To control spray cartaphydrochloride @ 2 g/L of water.
Sugarcane	Tillering stage	Sucking pests	To control spray dimethoate @ 2 ml./L of water.
		Early shoot borer	In sugarcane crop there is possibility of incidence of early shoot borer. To control go for frequent irrigation at regular intervals and spray Chloripyriphos @ 2.5 ml./lt. of water.
Mango		Fruit Fly	The present weather conditions are highly favorable for occurrence of fruit fly in mango orchards. To control erect pheromon traps or IHR traps @ 8-10/acre at 3-6 feet from ground level.
Brinjal		Stem and Fruit borer	The present weather conditions are favourable for occurrence of stem and fruit borer in brinjal. To control discard attacked stems and fruits, and go for spray of quinalphos @ 2 ml./lt. or monocrotophos @ 1.6 ml. or thiodicarb @ 1g/lt. of water.

AGRO METEOROLOGICAL ADVISORY FOR KADAPA DISTRICT, A P

Crop	Stage of the crop	Problem	Remedial measures
Kharif crops and Groundnut	Sowing time	Precautions	<ul style="list-style-type: none"> June 15th to July 15th is the optimum sowing window for sowing rainfed groundnut. Farmers are advised to take up groundnut only when there is enough sowing moisture in the soil. In view of light rainfall forecast farmers are advised not to take up groundnut sowing. If 50-60 mm rainfall in light soils and 60-70 mm in heavy soils got accumulated, then only the farmers can take up groundnut sowing. In view of summer temperatures farmers who preserved rabi groundnut seed for Kharif sowings are advised to test the germination percentage and safeguard the seed as per their requirement.
Paddy	Nurseries	Leaf folder	The present weather conditions are congenial for Leaf folder and stem borer attack in paddy which is at nursery to tillering stage. To control spray cartaphydrochloride @ 2 g/L of water.
	Nurseries	Seed treatment and plant protection in nursery	<ul style="list-style-type: none"> The farmers who are taking up paddy nurseries are advised to apply carbofuran 3g granules @ 150 g. per cent nursery before 1 week prior to pulling of the nursery. Farmers are advised to apply gypsum @ 4 to 6 kg per cent nursery 1 week before pulling of the nursery to protect the seedlings from root damage while pulling.
Mango	Fruiting stage	Fruit Fly	The present weather conditions are highly favorable for occurrence of fruit fly in mango orchards. To control erect plastic trays with 2 ml. methyl uzinal and 3g carbofuran 3G granules mixed with 1L of water in mango orchards.
Jasmine		Mite and Red mite	To control spray dicophol @ 3 ml./L of water.
Sheep, goat and Cattle		High temperatures and heat waves	<ul style="list-style-type: none"> As there is forecast of high temperature, thunderstorm accompanied with gusty winds farmers are advised to protect the animals from this abnormal conditions. Save cattle and goats from high temperature and heat waves by keeping in shelters during afternoons and providing ventilation, feed and cool drinking water atleast 4-5 times a day. Graze the animals in the evening times and supplement the food and water with mineral mixtures in view of loss of salts during high temperatures.

AGRO METEOROLOGICAL ADVISORY FOR WEST GODAVARI DISTRICT, A P

Name of Crop	Stage/ Condition of the crop	Weather based Management suggestion	Weather based Agro advisories
Sugar cane	Planting Stage	Wooly aphid	Spray Malathion @ 2.0 ml/l or Monochrotophos @1.6 ml /l
Domestic animals	As per the forecast there is an increase in temperatures to overcome from the high temperature provide proper drinking water facility, and Hang the gunny bags around the cattle shed to provide the ambient conditions in the sheds are advisable.		
Field management during Summer	Remove and clean the plant debris from the fields Plough the soil once or twice in middle summer prior to main field preparation, it will help in checking the weed growth by exposing the root system of weeds. It also exposes egg masses and hibernated stages of different pests and disease to the hot sun and helps soil to retain moisture received during summer.		

AGRO METEOROLOGICAL ADVISORY FOR GUNTUR DISTRICT, A P

Name of Crop	Stage/ Condition of the crop	Weather based Management suggestion	Weather based Agro advisories
Domestic animals	As per the forecast there is an increase in temperatures to overcome from the high temperature provide proper drinking water facility, and Hang the gunny bags around the cattle shed to provide the ambient conditions in the sheds are advisable.		
Field management during Summer	Remove and clean the plant debris from the fields Plough the soil once or twice in middle summer prior to main field preparation, it will help in checking the weed growth by exposing the root system of weeds. It also exposes egg masses and hibernated stages of different pests and disease to the hot sun and helps soil to retain moisture received during summer.		

AGRO METEOROLOGICAL ADVISORY FOR KRISHNA DISTRICT, A P

Name of Crop	Stage/ Condition of the crop	Weather based Management suggestion	Weather based Agro advisories
Sugarcane	Planting Stage	Wooly aphid	Spray Malathion @ 2.0 ml/l or Monochrotophos @1.6 ml /l
Domestic animals	As per the forecast there is an increase in temperatures to overcome from the high temperature provide proper drinking water facility, and Hang the gunny bags around the cattle shed to provide the ambient conditions in the sheds are advisable.		
Field management during Summer	Remove and clean the plant debris from the fields Plough the soil once or twice in middle summer prior to main field preparation, it will help in checking the weed growth by exposing the root system of weeds. It also exposes egg masses and hibernated stages of different pests and disease to the hot sun and helps soil to retain moisture received during summer.		

AGRO METEOROLOGICAL ADVISORY FOR PRAKASAM DISTRICT, A P

Name of Crop	Stage/ Condition of the crop	Weather based Management suggestion	Weather based Agro advisories
Domestic animals	As per the forecast there is an increase in temperatures to overcome from the high temperature provide proper drinking water facility, and Hang the gunny bags around the cattle shed to provide the ambient conditions in the sheds are advisable.		
Field management during Summer	Remove and clean the plant debris from the fields Plough the soil once or twice in middle summer prior to main field preparation, it will help in checking the weed growth by exposing the root system of weeds. It also exposes egg masses and hibernated stages of different pests and disease to the hot sun and helps soil to retain moisture received during summer.		

AGRO METEOROLOGICAL ADVISORY FOR ANANTHAPURAM DISTRICT, A P

Land Preparation

- Farmers are advised to take up land preparation and keep the fields ready for sowing of Kharif crops.
- Keep the fields free of weeds and clean the eater channels connected to farm ponds for conservation of rainwater.
- Farmers are advised to go for application of FYM to increase the organic matter, nutrient uptake and water holding capacity of soil.
- From the information received from IMD Hyderabad, South West Monsoon has entered in Andhra Pradesh. So farmers advised to procure the seed and fertilizers from the reliable dealers/shops with bill and keep the inputs ready to take up sowing only after receiving sufficient rainfall after onset of monsoon.
- Farmers are advised to take up sowing only after receiving 50mm rainfall for red soils and 75 mm rainfall for black soils.

Fruit Crops

- After harvest of sweet oranges allow the trees to stress.
- Newly establishing orchards applied with 25 kg FYM+ 1 kg SSP+ 100 grams 10 % Lindane should be applied per pit.
- For sweet orange orchards in the first year 60 grams of urea, 2kg SSP, 500 grams of MOP should applied. Every year the fertilizer dose should be increased.

Those plants of 5 years age should be applied with 3 kg of urea, 2kg SSP, 500 grams of MOP.

AGRO METEOROLOGICAL ADVISORY FOR KURNOOL DISTRICT, A P

Land Preparation

- Farmers are advised to take up land preparation with the rainfall received during the past 5 days keep the fields for sowing of Kharif crops.
- Keep the fields free of weeds and clean the eater channels connected to farm ponds for conservation of rainwater.
- Farmers are advised to go for application of FYM to increase the organic matter, nutrient uptake and water holding capacity of soil.
- From the information received from IMD Hyderabad, South West Monsoon has entered in Andhra Pradesh. So farmers advised to procure the seed and fertilizers from the reliable dealers/shops with bill and keep the inputs ready to take up sowing only after receiving sufficient rainfall after onset of monsoon.
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