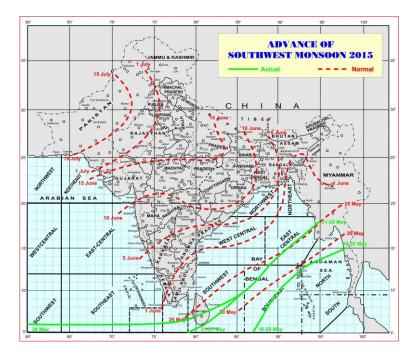
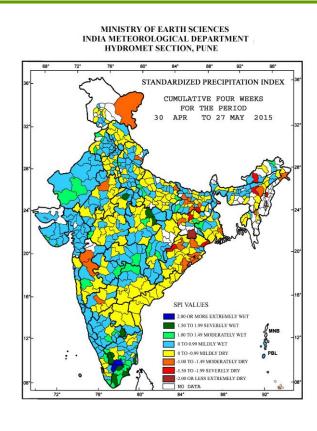


## **Monsoon Watch**



• The Northern Limit of Monsoon (NLM) continue to pass through Lat 06.0°N/ Long. 60.0°E, 06.0°N/ Long. 70.0°E, Lat. 07.0°N/ Long. 80.0°E Lat. 10.0°N/ Long. 86.0°E, Lat. 13.0°N / Long. 89.0°E and Lat. 18.0°N / Long. 95.0°E.

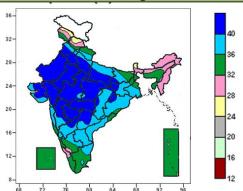
# $Standardised\ Precipitation\ Index\\ Four\ Weekly\ for\ the\ Period\ 30^{th}\ April\ to\ 27^{th}\ May\ 2015$



- Extremely/severely wet conditions experienced in few districts of Tamil Nadu; Gwalior, Satna, Shahdol districts of Madhya Pradesh; Kolar district of Karnataka.
- Extremely/Severely dry conditions experienced in Nagaon district of Assam; East Kameng district of Arunachal Pradesh; Imphal East district of Manipur; Kohima district of Nagaland; Balasore, Bargarh districts of Odisha; Hazaribagh, West Singhbhum districts of Jharkhand; Jamui district of Bihar.
- Moderately dry conditions experienced in Nicobar district of Andaman & Nicobar Islands; Changlang district of Arunachal Pradesh; Karbi Anglong district of Assam; Kolasib district of Mizoram; South Dinajpur, North 24 Parganas districts of West Bengal; Cuttack, Ganjam, Keonjhargarh, Khurda, Puri, Sambalpur districts of Odisha; Latehar district of Jharkhand; Monghyr, Nawada, Patna, Saran, Vaishali districts of Bihar; Kushi Nagar district of Uttar Pradesh; Almora district of Uttarakhand; Ladakh district of Jammu & Kashmir; Jaipur district of Rajasthan; Ahmednagar and Nashik districts of Maharashtra; Bagalkote district of Karnataka.
- Rest of the country experienced moderately wet/mildly dry/wet conditions.

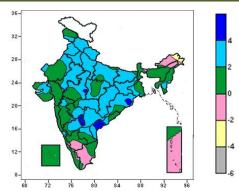
# Contour maps for Mean Maximum and Minimum Temperature and their anomaly for the week ending on 27.05.2015

# Actual Mean Maximum Temperature (°C) in India for the week ending 27.05.2015



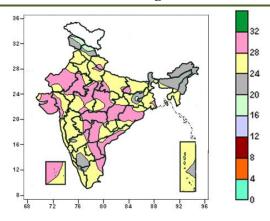
- Mean maximum temperature was above 40°C over Rajasthan, Marathwada, Vidarbha, many parts of Punjab, Haryana, Delhi, Uttar Pradesh, Madhya Pradesh, Telangana, Madhya Maharashtra, Gujarat, some parts of Bihar, Jharkhand, North Interior Karnataka and isolated pockets of Odisha and Chhattisgarh.
- Mean maximum temperature ranged between 36 to 40°C over Rayalaseema, many parts of Bihar, Jharkhand, Gangetic West Bengal, Odisha, Chhattisgarh, Coastal Andhra Pradesh, Konkan, North Interior Karnataka, some parts of Uttarakhand, Punjab, Haryana & Delhi, Uttar Pradesh, Telangana, South Interior Karnataka, Saurashtra & Kutch, Tamil Nadu and isolated pockets of Himachal Pradesh, Madhya Pradesh, Coastal Karnataka and Gujarat region.
- It was below 36<sup>o</sup>C over remaining parts of the country.

# Mean Maximum Temperature (°C) Anomaly in India for the week ending 27.05.2015



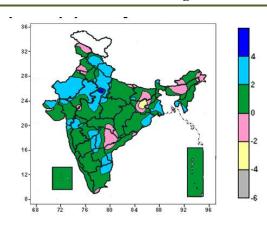
- Mean maximum temperature were above normal by more than 4°C over some parts of Odisha, North Interior Karnataka, Telangana, Coastal Andhra Pradesh and isolated pockets of West Madhya Pradesh.
- Mean maximum temperature were above normal by 2 to  $4^0$ C over Himachal Pradesh, Uttarakhand, Punjab, Haryana & Delhi, West Uttar Pradesh, Chhattisgarh, many parts of East Rajasthan, East Uttar Pradesh, Bihar, Jharkhand, West Madhya Pradesh, Odisha, Vidarbha, Marathwada, Telangana and North Interior Karnataka, some parts of West Rajasthan, Gangetic West Bengal, Coastal Andhra Pradesh, Rayalaseema, Saurashtra & Kutch and isolated pockets of Jammu & Kashmir, Mizoram, Manipur, Madhya Maharashtra, Gujarat region, Coastal Karnataka.
- Mean maximum temperature were below normal by 2 to  $4^{\circ}$ C over some parts of Arunachal Pradesh.
- It was normal to near normal in remaining parts of the country.

# Actual Mean Minimum Temperature (°C) in India for the week ending 27.05.2015



- Mean minimum temperature was 16 to 20<sup>o</sup>C over some parts of Jammu & Kashmir, Himachal Pradesh and isolated pockets of Jharkhand.
- Mean minimum temperature was 20 to 24°C over Arunachal Pradesh, Nagaland, Manipur, many parts of Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, South Interior Karnataka, some parts of Jammu & Kashmir, Himachal Pradesh, Jharkhand and isolated pockets of Kerala, North Interior Karnataka, Tamil Nadu, Andaman & Nicobar Islands.

# Mean Minimum Temperature (°C) Anomaly in India for the week ending 27.05.2015



- Mean minimum temperature was below normal by 2 to  $4^{\circ}$ C over some parts of Jharkhand.
- Mean minimum temperature was above normal by more than 4°C over isolated pockets of West Madhya Pradesh.
- Mean minimum temperature was above normal by 2 to 4°C over Uttarakhand, many parts of Himachal Pradesh, Rajasthan, West Uttar Pradesh, Gangetic West Bengal, some parts of Odisha, Telangana, Rayalaseema, Kutch, Madhya Maharashtra, Marathwada, North Interior Karnataka, Tamil Nadu, isolated pockets of Haryana,

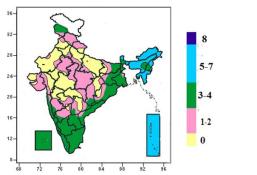
- Mean minimum temperature was above 24<sup>o</sup>C over rest of the country.
- Bihar, Gujarat region, Konkan, East Madhya Pradesh, Coastal Andhra Pradesh and Konkan.
- It was normal to near normal in remaining parts of the country.

# Contour maps for Relative Humidity, Cloud amount and Wind speed for the week ending on 27.05,2015

# Relative Humidity (%) over India for the week ending 27.05.2015

# 28-24-20-16-12-80 80 84 88 92 96

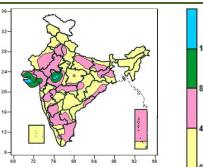
# Cloud amount (okta) over India for the week ending 27.05.2015



- Mean Relative humidity was above 80% over Arunachal Pradesh, many parts of Lakshadweep, Andaman & Nicobar Islands and some parts of Assam & Meghalaya, Nagaland and Kerala.
- Mean Relative humidity was 60 to 80% over Sub-Himalayan West Bengal & Sikkim, Manipur, Mizoram, Tripura, Goa, Coastal Karnataka, many parts of Gangetic West Bengal, Nagaland, Konkan, South Interior Karnataka, Kerala, Tamil Nadu, some parts of Assam & Meghalaya, Odisha, and isolated pockets of Bihar, Coastal Andhra Pradesh, Madhya Maharashtra, Saurashtra, Lakshadweep and Andaman & Nicobar Islands.
- Mean Relative humidity was 20 to 60% over rest of the country.

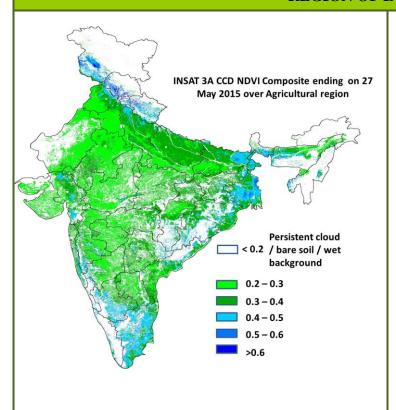
- Sky remained generally cloudy (5-7 okta) over Sikkim, Andaman & Nicobar Islands, many parts of North East India and isolated pockets of Sub-Himalayan West Bengal, Kerala.
- Sky remained partly cloudy (3 to 4 okta) over Goa, Coastal & South Interior Karnataka, Rayalaseema, Tamil Nadu, Lakshadweep, many parts of Jammu & Kashmir, Bihar, Jharkhand, West Bengal, Odisha, Rayalaseema, Konkan, Coastal Andhra Pradesh, Kerala and some parts of Assam & Meghalaya, Chhattisgarh and isolated pockets of Manipur, Tripura, Telangana, North Interior Karnataka.
- Sky remained mainly clear /clear sky (1 to 2/0 okta) over rest of the country.

# Wind speed (knots) over India for the week ending 27.05.2015



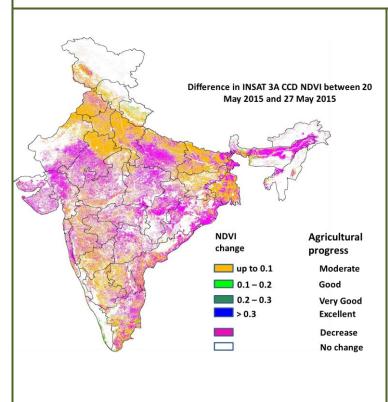
- Mean wind speed was above 12 knots over some parts of Saurashtra and isolated pockets of West Madhya Pradesh.
- Mean wind speed was 8 to 12 knots over many parts of Saurashtra & Kutch, West Madhya Pradesh, some parts of Gujarat region.
- Mean wind speed was 4 to 8 knots over many parts of Haryana, Delhi, Rajasthan, East Uttar Pradesh, Bihar, Jharkhand, Gangetic West Bengal, Gujarat region, Vidarbha, Interior Karnataka, Rayalaseema, Tamil Nadu, Andaman & Nicobar Islands, some parts of West Uttar Pradesh, West Madhya Pradesh, Odisha, Chhattisgarh, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh and isolated pockets of Punjab, Konkan, East Madhya Pradesh, Kerala.
- It was less than 4 knots over rest of the country.

# INSAT 3A CCD NDVI COMPOSITE ENDING ON 27<sup>th</sup> May 2015 OVER AGRICULTURAL REGION OF INDIA



• Agricultural vigour is very good in some parts of West Bengal, some pockets of east Bihar, Tamil Nadu and South Interior Karnataka, where NDVI varies from 0.4 to 0.6. Agricultural growth was good over most parts of Uttar Pradesh and Bihar and some parts of Punjab and Haryana (NDVI: 0.3-0.4). NDVI remains within the range of 0.2 to 0.3 over most parts of rest of India.

# Difference in INSAT 3A CCD NDVI between 20<sup>th</sup> May 2015 and 27<sup>th</sup> May 2015



• Decrease in NDVI was observed over some parts in Punjab, Rajasthan, Madhya Pradesh, west Uttar Pradesh, Maharashtra, North Interior Karnataka, Andhra Pradesh, Telangana, Rayalaseema, Gujarat, West Bengal, Chhattisgarh and Odisha. Moderate progress (up to 0.1) in NDVI was observed in east Uttar Pradesh, Punjab, Haryana and parts of Bihar and South Interior Karnataka.

 INSAT 3A CCD NDVI composite maps for the week ending on 27<sup>th</sup> May 2015 for different States are given below in Annexure II.

# Weather Forecast for next 5 days valid upto 0830 hours of 3<sup>rd</sup> June 2015

• Fall in day temperatures by about 2°C over plains of northwest India, East India, Andhra Pradesh, Telangana and Vidarbha during next 2-3 days.

# 5 Day Rainfall Forecast (MORNING) 29 May 2015

	Met. Sub-Division	29-May	30-May	31-May	1-Jun	2-Jun
1	Andaman & Nicobar Islands	FWS	SCT	FWS	SCT	SCT
2	Arunachal Pradesh	WS	WS	WS	FWS	FWS
3	Assam & Meghalaya	WS	WS	WS	FWS	WS
4	N. M. M. & T.	FWS	FWS	FWS	FWS	FWS
5	S. H. West Bengal & Sikkim	WS	WS	FWS	FWS	FWS
6	Gangetic West Bengal	ISOL	ISOL	SCT	SCT	SCT
7	Odisha	ISOL	ISOL	ISOL	ISOL	SCT
8	Jharkhand	DRY	DRY	DRY	ISOL	ISOL
9	Bihar	ISOL	ISOL	ISOL	SCT	SCT
10	East Uttar Pradesh	ISOL	ISOL	ISOL	ISOL	ISOL
11	West Uttar Pradesh	ISOL	ISOL	ISOL	ISOL	SCT
12	Uttarakhand	ISOL	ISOL	ISOL	SCT	SCT
13	Haryana, Chd. & Delhi	ISOL	ISOL	ISOL	SCT	SCT
14	Punjab	ISOL	ISOL	ISOL	ISOL	SCT
15	Himachal Pradesh	ISOL	SCT	SCT	FWS	FWS
16	Jammu & Kashmir	SCT	SCT	SCT	FWS	FWS
17	West Rajasthan	ISOL	DRY	DRY	ISOL	ISOL
18	East Rajasthan	ISOL	DRY	DRY	ISOL	ISOL
19	West Madhya Pradesh	DRY	DRY	DRY	ISOL	ISOL
20	East Madhya Pradesh	DRY	DRY	DRY	ISOL	ISOL
21	<b>Gujarat Region</b>	DRY	DRY	DRY	DRY	DRY
22	Saurashtra & Kutch	DRY	DRY	DRY	DRY	DRY
23	Konkan & Goa	DRY	ISOL	ISOL	ISOL	ISOL
24	Madhya Maharshtra	ISOL	ISOL	ISOL	ISOL	ISOL
25	Marathwada	ISOL	ISOL	ISOL	ISOL	ISOL
26	Vidarbha	ISOL	ISOL	ISOL	ISOL	ISOL
27	Chhattisgarh	ISOL	ISOL	ISOL	ISOL	ISOL
28	Coastal Andhra Pradesh	ISOL	ISOL	ISOL	ISOL	ISOL
29	Telangana	ISOL	ISOL	ISOL	ISOL	ISOL
30	Rayalaseema	ISOL	ISOL	ISOL	SCT	SCT
31	Tamilnadu & Puducherry	SCT	SCT	SCT	SCT	SCT
32	Coastal Karnataka	SCT	FWS	FWS	FWS	FWS
33	North Interior Karnataka	SCT	SCT	ISOL	ISOL	ISOL
34	South Interior Karnataka	FWS	FWS	FWS	FWS	FWS
35	Kerala	SCT	FWS	FWS	FWS	FWS
36	Lakshadweep	FWS	FWS	FWS	FWS	FWS

% Stations	Category	% Stations	Category
76-100		26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespred (FWS/ Many Places)	1-25	Isolated (ISOL)
No Rain	Dry		

# Weather Warning during next 5 days

- 29 May (Day 1): Heat wave conditions would prevail at a few places over Odisha, Vidarbha and Telangana and at isolated places over Madhya Pradesh, Jharkhand, Chhattisgarh and Coastal Andhra Pradesh. Dust/thunderstorm accompanied with squall would occur at isolated places over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Rajasthan. Thunderstorm accompanied with squall would occur at isolated places over Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya. Heavy rainfall would occur at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 30 May (Day 2): Heat wave conditions would prevail at a few places over Odisha and Vidarbha and at

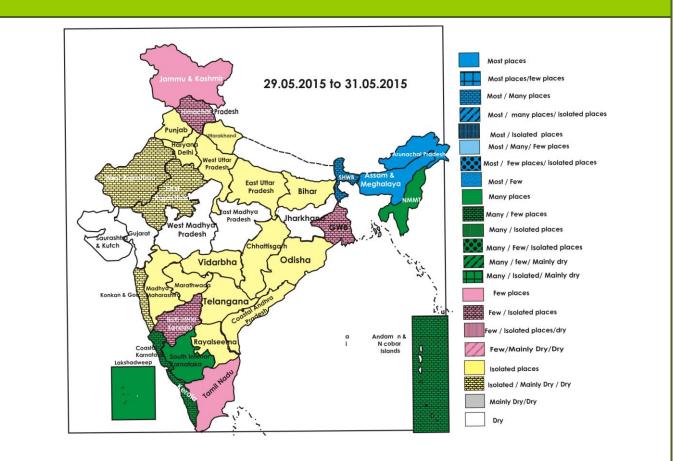
isolated places over Madhya Pradesh, Jharkhand, Chhattisgarh, Telangana and Coastal Andhra Pradesh. Dust/thunderstorm accompanied with squall would occur at isolated places over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Rajasthan. Thunderstorm accompanied with squall would occur at isolated places over Telangana, Rayalaseema, Tamilnadu & Puducherry and South Interior Karnataka. Heavy rainfall would occur at isolated places over Assam & Meghalaya.

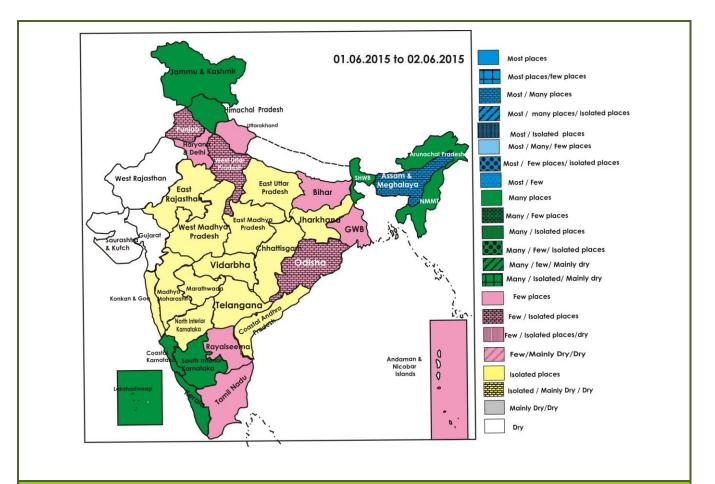
- 31 May (Day 3): Heat wave conditions would prevail at isolated places over Odisha, Jharkhand, Vidarbha and Chhattisgarh. Thunderstorm accompanied with squall would occur at isolated places over South Interior Karnataka, Tamilnadu & Puducherry and Kerala. Heavy rainfall would occur at isolated places over Sub-Himalayan West Bengal, Arunachal Pradesh and Assam& Meghalaya.
- **01 June (Day 4):** Heat wave conditions would prevail at isolated Vidarbha and Chhattisgarh. Thunderstorm accompanied with squall would occur at isolated places over Jharkhand, Gangetic West Bengal, Odisha and Telangana. Heavy rainfall would occur at isolated places over Assam & Meghalaya.
- **02 June (Day 5):** Heat wave conditions would prevail at isolated places over Vidarbha and Chhattisgarh. Dust/thunderstorm accompanied with squall would occur at isolated places over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Rajasthan. Thunderstorm accompanied with squall would occur at isolated places over Jharkhand, Gengetic West Bengal and Odisha.

# Weather Outlook for subsequent 2 days from 3<sup>rd</sup> June to 5<sup>th</sup> June 2015

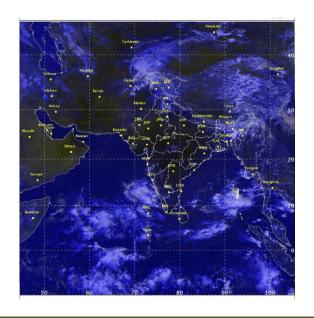
- Rain/thundershowers would occur at many places over northeastern states, West Bengal & Sikkim and Andaman & Nicobar Islands and at a few places over Bihar and Jharkhand.
- Rain/thundershowers would occur at many places over Lakshadweep area, Kerala and Coastal Karnataka.
- Rain/thundershowers would occur at a few places over Western Himalayan region and at isolated places over plains of northwest India.

# Weather Forecast Map (Valid upto 0830 hours of 3<sup>rd</sup> June, 2015)





# Satellite image dated, 29.05.2015 0600 UTC



### **Salient Advisories**

#### **Advisories for Heat wave**

- As heat wave conditions would prevail at a few places over **Telangana** on 29<sup>th</sup> May, over **Odisha** on 29<sup>th</sup> and 30<sup>th</sup> May and at isolated places over Telangana on 30<sup>th</sup> May, over **Coastal Andhra Pradesh** on 29<sup>th</sup> and 30<sup>th</sup> May, over **Odisha** on 31<sup>st</sup> May, over **Jharkhand** from 29<sup>th</sup> to 31<sup>st</sup> May, over **Madhya Pradesh** on 29<sup>th</sup> and 30<sup>th</sup> May and over **Chhattisgarh** during the period, apply light and frequent irrigation to the standing crops to cope up with the excess evaporative demand due to heat wave. Undertake soil mulching/mulching with straw/polythene in crop fields to conserve soil moisture.
- As heat wave conditions would prevail at a few/isolated places over **Vidarbha** during the period, apply light and frequent irrigation to water melon, musk melon, summer vegetables and summer groundnut in Vidarbha to cope up with the excess evaporative demand due to heat wave. Undertake soil mulching/mulching with straw/polythene in crop fields to conserve soil moisture.

# Advisories for Duststorm/Thunderstorm/Squall

- As thunderstorms accompanied with squall would occur at isolated places over **Telangana** on 30<sup>th</sup> May and 1<sup>st</sup> June, over **Rayalaseema** on 30<sup>th</sup> May, over **Tamil Nadu & Puducherry** and **South Interior Karnataka** on 30<sup>th</sup> and 31<sup>st</sup> May, over **Kerala** on 31<sup>st</sup> May, over **Sub-Himalayan West Bengal & Sikkim** on 30<sup>th</sup> May and over **Odisha**, **Jharkhand** and **Gangetic West Bengal** on 1<sup>st</sup> and 2<sup>nd</sup> June, provide mechanical support to young fruit plants, banana and vegetables and undertake propping in sugarcane to prevent the crops from lodging due to strong winds.
- As dust/ thunderstorm accompanied with squall would occur at isolated places over **Punjab**, **Haryana**, **Chandigarh** & **Delhi**, **Rajasthan** and **West Uttar Pradesh** on 29<sup>th</sup>, 30<sup>th</sup> May and 2<sup>nd</sup> June, provide mechanical support to vegetables and young fruit plants to prevent the crops from lodging due to strong winds. Also undertake propping in sugarcane.

# Advisories for Rainfall/heavy rainfall

- As rain/thundershowers would occur at most/many places over **Sub-Himalayan West Bengal** & **Sikkim** during the period along with heavy rainfall at isolated places on 31<sup>st</sup> May, postpone irrigation, intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crops to avoid water stagnation in the fields.
- As rain/thundershowers would occur at most/many places over **Arunachal Pradesh**, **Assam** & **Meghalaya** during the period along heavy rainfall at isolated places over Assam & Meghalaya from 29<sup>th</sup> May to 1<sup>st</sup> June and at many places over **Nagaland**, **Manipur**, **Mizoram** & **Tripura** along with heavy rainfall at isolated places on 29<sup>th</sup> May, postpone irrigation, intercultural operation and application of plant protection measures and fertilizers to the standing crops. Postpone harvesting of crops and keep already harvested produce at safer places. Provide adequate drainage in standing crops to avoid water stagnation in the fields.
- As rain/thundershowers would occur at many places over **South Interior Karnataka** during the period, over **Kerala** and **Coastal Karnataka** from 30<sup>th</sup> May to 2<sup>nd</sup> June, over **Himachal Pradesh** and **Jammu** & **Kashmir** on 1<sup>st</sup> and 2<sup>nd</sup> June, postpone irrigation, intercultural operation and application of plant protection measures and fertilizers to the standing crops.

# **Other Salient Advisoires**

- ➤ In **Kerala**, continue land preparation for sowing of upland rice, wet seeding of *virippu* rice and planting of coconut seedlings in the Problem Area Zone and continue nursery sowing of *virippu* rice in Southern Zone.
- ➤ In **Assam**, continue transplanting of normal *ahu* rice, land preparation for nursery sowing of *sali* rice, sowing of jute and planting of banana after current spells of heavy rain.
- Continue land preparation and nursery sowing of *kharif* rice and finger millet under irrigation and sowing of pulses in uplands in **Konkan**.

# Detailed Zonewise Agromet Advisories

# NORTH INDIA [JAMMU & KASHMIR, HIMACHAL PRADESH, UTTARAKHAND, PUNJAB, HARYANA, DELHI, UTTAR PRADESH & RAJASTHAN]









Moong Sugarcane Chilli Cabbag

• **Realised Rainfall:** Rainfall occurred in Anantnag, Baramula, Ganderbal, Kupwara and Pulwama districts of Jammu & Kashmir and Lahul & Spiti district of Himachal Pradesh. Weather remained mainly dry/dry over rest of the region.

#### Advisories

- As dust/ thunderstorm accompanied with squall would occur at isolated places over Punjab, Haryana, Chandigarh & Delhi, Rajasthan and West Uttar Pradesh on 29<sup>th</sup>, 30<sup>th</sup> May and 2<sup>nd</sup> June, provide mechanical support to vegetables and young fruit plants to prevent the crops from lodging due to strong winds. Also undertake propping in sugarcane.
- As rain/thundershowers would occur at many places over Himachal Pradesh and Jammu & Kashmir on 1<sup>st</sup> and 2<sup>nd</sup> June, postpone irrigation, intercultural operation and application of plant protection measures and fertilizers to the standing crops.

# Jammu & Kashmir:

- ➤ In Sub Tropical Zone, Valley Temperate Zone and Intermediate Zone, continue field preparation for sowing of *Kharif* maize and rice nursery and direct sowing of cucurbits, kale, knolkhol, bhindi and beans, transplanting of chilli on raised beds or on ridges may be continued.
- ➤ In Cold Arid Zone, continue transplanting of cruciferous crops, vegetables like celery, parsley, leek, tomato, capsicum and chilli and onionin the main field in middle belts. Also undertake direct sowing of spinach, carrot, beet root, coriander and fenugreek in middle and high belts.
- ➤ In Intermediate Zone of Jammu & Kashmir, due to partly cloudy condition, there may be attack of red pumpkin beetle in vegetables. To control, apply Imidachloprid @0.3 ml/ litre of water or Quinolphos @1ml/litre of water after current spells of rain.

# Uttarakhand:

- ➤ Continue nursery sowing of rice, sowing of maize and finger millets in Bhabar and Tarai Zone of Uttarakhand utilising the pre-monsoon showers.
- In Hill Zone of Uttarakhand, continue planting of turmeric, ginger, sowing of millet, lobia, French bean, and transplanting of vegetables like tomato, capsicum and brinjal.
- In Sub-humid Sub-tropic Zone, apply irrigation in green gram, cowpea, bitter guard, ridge guard, water melon, musk melon, cucumber and bhindi,
- ➤ In Hill Zone, due to increase in temperature there may be attack of termite in vegetables, to control spray the Ethin @ 1.5-2 ml in 4 litre of water or Imidacloprid @ 0.3 ml/ litre of water on a non rainy day.

## Himachal Pradesh:

- Continue nursery sowing of rice, sowing of maize and nursery sowing of early cauliflower in Sub-Montane and Low Hills Sub-Humid Tropical Zone utilizing the expected rainfall. In High hill regions, continue sowing of improved varieties of garden pea, radish, carrot, turnip and palak and transplanting of cabbage, cauliflower, broccoli and lettuce. Also undertake sowing of red and white clover, peas, fodder maize and fodder maize + legume.
- In mid hill areas of Sub-Montane and Low Hills Sub-Humid Tropical Zone, continue transplanting of tomato, brinjal, capsicum, chilli and sowing of cucurbits like cucumber, bitter gourd, bottle gourd and summer squash. Also continue sowing of radish on flat beds. In low hill areas continue sowing of French bean, okra, moong and mash in irrigated lower areas. Continue sowing of peas in High Hill Temperate Dry Zone.
- Due to partly cloudy condition, there are chances of attack of white flies in vegetables like brinjal, capsicum and tomato in Mid Hills and Sub-Humid Zone. For control, apply Imidacloprid @ 7.5ml or Metasystox @ 15ml in 15 litres of water after current spells of rain..
- ➤ In the present temperature condition, there is chance of attack of red pumpkin beetle in cucurbitaceous vegetables in Sub-Montane and Low Hills Sub-Humid Tropical Zone. For control, spray Malathion 50 EC@1 ml per litre of water or Sevin@2g/litre of water after current spells of rain.

#### Rajasthan:

Under prevailing heat wave conditions, provide light and frequent irrigation in summer vegetables, *zaid* fodder crops and small fruit plants in Arid Western Plain Zone, Semi Arid Eastern Plain Zone, Sub Humid Southern Plain and Aravali Hill Zone.

- ➤ In Flood Prone Eastern Plain Zone, cover the fruit saplings with thatching material to protect against heat wave. Apply light and frequent irrigations in vegetables also.
- Apply drip irrigation in *kinnow* orchards and also irrigate sugarcane in Irrigated Northwestern Plain Zone. To prevent dropping of *kinnow* fruits, spray 2,4-D (horticultural grade) @ 2g/100 litres of water or Propineb 70 WP @ 2 g /litre + 20 mg Gibbralic acid /litre of water.
- Continue sowing of American cotton and Bt cotton in Irrigated Northwestern Plain Zone, continue sowing of groundnut under irrigation in Semi Arid Eastern Plain Zone of Rajasthan.
- In Sub Humid Southern Plain and Aravali Hill Zone, due to rise in temperature, there may be attack of stem and fruit borer in okra. To control, spray Malathion @2ml/litre water.
- ➤ In Flood Prone Eastern Plain Zone, due to rise in temperature, there are chances of fruit fly attack in cucurbits. To control, spray Malathion 50 EC @ 1ml/1litre of water. Also there are chances of thrips, jassids and white fly in zaid moong, spray Dimethoate 30EC @ 800 ml dissolved in 800 litre water/ ha for control.

# Punjab, Haryana and Delhi:

- In Western Semi-Arid Zone of Delhi, in view of prevailing high temperature, apply light and frequent irrigation to all vegetables and fodder crops. Continue sowing of ladies finger, cucurbitaceous crops and nursery sowing of vegetables like chilli, tomato and brinjal. Continue sowing of pigeon-pea and cotton. Undertake sowing/transplanting of crops under assured irrigation.
- ➤ Protect the orchards of young fruit plants and nursery from high temperature with the help of sarkande leaves around the plants in Undulating Plain Zone of Punjab.
- In Western and Central Plain Zones of Punjab, continue transplanting of summer vegetables viz.chilli, tomato and bell pepper, sowing of cucumber, bottle gourd, pumpkin, muskmelon, watermelon, bitter gourd and continue field preparation for nursery sowing of rice. Apply light and frequent irrigation to vegetable crops. Undertake sowing/transplanting of crops under assured irrigation.
- In Western Zone of Haryana, continue transplanting of tomato and chilli and continue sowing of desi cotton. Undertake sowing of pigeon pea. Undertake sowing / planting of crops in this region with assured irrigation.
- ➤ In Central Plain Zone of Punjab, summer moong is severely attacked by the thrips, spray the crop Rogor 30 EC @ 100 ml or Malathion 50 EC @ 120 ml in 80-100 litres of water per acre at flower bud initiation stage.

#### Uttar Pradesh:

- In Central Plain Zone, continue land preparation for sowing of maize and nursery of rice. Under prevailing high temperature condition, apply light and frequent irrigation in urad, moong (grain formation stage), maize (silking stage), cucurbitaceous crops, bitter gourd, radish, water melon and in mango, citrus, papaya, ber and litchi orchard.
- ➤ In Eastern Plain Zone, undertake nursery sowing of of rice and continue planting of sugarcane and *kharif* onion.
- ➤ Due to prevailing dry weather condition, there is chance of leaf blight in mung and urd in Central Plain Zone. Spray Copper Oxychloride @ 3 kg/ha at a interval of 2-3 days or 500 gm Carbendazim per hectare.
- ➤ In Bundelkhand Zone, there are chances of attack of hopper in mango due to prevailing temperature condition. For control, spray Phenitrothion @1ml or Dimethoate @ 1.5 ml per litre of water. For control of bacterial rot in mango in Central Plain Zone, spray Borax @8 g per litre of water.
- ➤ In the prevailing temperature condition, there are chances of attack of thrips or white fly on urad / moong in Eastern Plain Zone, to control, spray Dimethoate 30 EC @ 1 ml/1 litre in 400 500 litres of water per hector.
- Suitable varieties for sowing are given in Annexure III.

## Horticulture

➤ In Sub-Montane and Low Hills Sub Humid Zone of Himachal Pradesh, attack of fruit borer is observed in litchi fruit. For control, spray Cypermethrin 10EC@ 1 ml / litre of water at 15 days interval.

# • Animal Husbandry

- ➤ In Punjab, Haryana, Chandigarh & Delhi, west Uttar Pradesh and Rajasthan, keep cattle/goats indoor during duststorm/thunderstorm period.
- ➤ In Punjab, Haryana and Rajasthan, in view of the prevailing high temperature, grazing /feeding of cattle/goats may be done during morning/evening hours. Keep animals under shade/shed during noon hours and provide plenty of water mixed with minerals for drinking. Tie curtains on north-west side of poultry house to reduce the effect of hot winds.

## Poultry

In view of the prevailing high temperature, ensure proper ventilation in poultry houses in Sub-Montane and Low Hills Sub-Humid Tropical Zone of Himachal Pradesh. Replace the poultry houses with fresh litter and keep the houses clean and provide plenty of drinking water to the birds. Reduce feeding and increase the protein content in the feeds.

# **CENTRAL INDIA [M.P., CHHATTISGARH]**









Sugarcane Moong Okra Onion

• **Realised Rainfall:** Weather remained mainly dry/dry over the region.

#### Advisories:

As heat wave conditions would prevail at isolated places over Madhya Pradesh on 29<sup>th</sup> and 30<sup>th</sup> May and over Chhattisgarh during the period, apply light and frequent irrigation to the standing crops to cope up with the excess evaporative demand due to heat wave. Undertake soil mulching/mulching with straw/polythene in crop fields to conserve soil moisture.

# Madhya Pradesh:

- Continue nursery sowing of *kharif* onion and picking of matured vegetables in Malwa Plateau Zone and Bundelkhand Zone. Apply irrigation to mango trees by ring method or through drip irrigation method and apply light and frequent irrigation in vegetables. Keep inputs ready for sowing of *kharif* crops in Kymore Plateau and Satpura Hill Zone.
- ➤ Due to rise in temperature, there are chances of attack of sucking pest in brinjal and chilli in Satpura Plateau Zone, spray Thiomethoxam/Acetameprid @ 0.3 g/litre of water.
- ➤ In the prevailing temperature, there are chances of attack of red pumpkin beetle in cucurbits in Madhya Pradesh, spray Quinalphos 25 EC @ 1 litre/ha or Propenophos 50 EC @ 800-1000 ml/ha.

# • Chhattisgarh:

- > Continue planting of tuber crops and top dressing of urea in sugarcane in Bastar Plateau Zone under irrigation.
- ➤ In the prevailing weather, there are chances of attack of sucking pests in vegetables in Bastar Plateau Zone, spray Dimethoate 40 EC @ 1.5ml/litre of water.

# • Animal Husbandry

In view of prevailing heat wave conditions in Madhya Pradesh and Chhattisgarh, grazing /feeding of cattle/goats may be done during morning/ evening hours. Keep animals under shade/shed during noon hours and provide plenty of water mixed with minerals for drinking.

## WEST INDIA [GOA, MAHARASHTRA, GUJARAT]









Banana Sugarcane Groundnut Mango

**Realised Rainfall:** Weather remained mainly dry/dry over the region.

#### • Advisories

As heat wave conditions would prevail at a few/isolated places over Vidarbha during the period, apply light and frequent irrigation to water melon, musk melon, summer vegetables and summer groundnut in Vidarbha to cope up with the excess evaporative demand due to heat wave. Undertake soil mulching/mulching with straw/polythene in crop fields to conserve soil moisture.

### Maharashtra:

- In Konkan, complete harvesting of summer rice and finger millet. Continue land preparation and nursery sowing of *kharif* rice & finger millet with irrigation and sowing of pulses. Complete plucking of matured mango in early morning and late evening hours. Keep the harvested fruits in shade to prevent the spongy tissue disease due to heat. Transport plucked fruits during night hours.
- In Madhya Maharashtra, apply irrigation to orchard crops like banana, water melon, musk melon and vegetable crops like tomato and okra. Irrigate the sugarcane crop by drip irrigation or using alternate furrow method or apply mulch of sugarcane trash for conservation of soil moisture. Continue land preparation of *kharif* rice nursery in Kolhapur region and western ghat region. Undertake preparatory tillage operation like deep ploughing for *kharif*

crops.

- In Marathwada, apply irrigation to water melon, musk melon, sweet lime, banana, pomegranate or apply mulch with crop residue. Undertake sowing of irrigated cotton with assured irrigation. Farmers are also advised to adopt inter cropping pattern (with Bt cotton) like cotton + red gram (6:1 or 8:2), cotton + soyabean (1:1) and cotton + green gram(1:2). Undertake preparatory tillage for the sowing of green gram, black gram, red gram utilizing the pre monsoon showers
- In Vidarbha, maintain 10 cm water level in rice fields at grain filling stage in East Vidarbha.

## Gujarat:

- In North Saurashtra Zone, undertake land preparation for sowing of *kharif* groundnut and cotton. Procure good quality seeds for *kharif* sowing. Continue harvesting of groundnut. Apply irrigation in groundnut, sesame and green gram in South Saurashtra Zone. Under forecast of hot and dry weather, apply irrigation in cluster bean, green gram (pod formation stage) and mango orchard to avoid moisture stress in Bhal and Coastal Zone.
- In North Gujarat Zone and North West Zone, continue land preparation for sowing of irrigated hybrid cotton (variety: G. cot. 6, 8, 10) and B.T. cotton (Variety: Gujarat Talod Hirsutam Hybrid -49 (Bolegaurd-2) or Govt. approved varieties). Continue picking of matured pods of green gram cowpea and vegetables.
- In North Gujarat Zone, Bhal and Coastal Zone, Middle Gujarat Zone and South Gujarat Heavy Rainfall Zone, North West Zone, continue deep ploughing in harvested fields for destruction of soil pests and fungus in high intensity of solar radiation. Carry out levelling of plots to increase soil moisture holding capacity. Construct the bund in advance to reduce soil erosion in fields and plan for farm ponds to collect runoff water during monsoon season.
- ➤ Plan for sowing of cotton with assured irrigation in South Gujarat Zone. Considering the high temperature forecast, apply irrigation in sugarcane at an interval of 10 to 12 days; undertake mulching with the help of crop residues; apply irrigation to vegetables and fruit crops during morning hours in South Gujarat Heavy Rainfall Zone. Complete harvesting and threshing of early varieties of summer rice and of green gram and undertake harvesting of cowpea.
- Suitable varieties for sowing are given in Annexure III.

# Animal Husbandry

InVidarbha, under prevailing heat wave conditions, keep animals under shade/shed during noon hours and provide plenty of water mixed with minerals for drinking at least thrice a day. Cover the roof of shed with paddy straw. Put curtains on west side of poultry house and sprinkle water on curtains during noon time.

# NORTHEAST INDIA [ARUNACHAL PRADESH, NMM&T, ASSAM, MEGHALAYA]









Rice Banana Okra Cabbage

• Realised Rainfall: Rainfall occurred in all districts of Arunachal Pradesh except Dibang Valley, Anjaw, Kurung Kumey, Lower Subansiri; all districts of Assam except Darrang; all districts of Meghalaya except South Garo Hills; Kolasib, Aizwal and Saiha districts of Mizoram; Imphal West and Thoubal districts of Manipur; all districts of Tripura. Weather remained mainly dry over rest of the region.

#### • Advisories:

As rain/thundershowers would occur at most/many places over Arunachal Pradesh, Assam & Meghalaya during the period along heavy rainfall at isolated places over Assam & Meghalaya from 29<sup>th</sup> May to 1<sup>st</sup> June and at many places over Nagaland, Manipur, Mizoram & Tripura along with heavy rainfall at isolated places on 29<sup>th</sup> May, postpone irrigation, intercultural operation and application of plant protection measures and fertilizers to the standing crops. Postpone harvesting of crops and keep already harvested produce at safer places. Provide adequate drainage in standing crops to avoid water stagnation in the fields.

# Assam & Meghalaya, Arunachal Pradesh:

- ➤ In Lower Bramhaputra Valley Zone of Assam, continue sowing of *bao* rice, jute and mesta, nursery bed preparation of *Sali* rice and land preparation and sowing of groundnut after current spells of heavy rain.
- In Upper Bramhaputra Valley Zone, continue planting of banana and papaya after current spells of heavy rain. Famers are advised to keep inputs ready for sowing of *kharif* rice.
- > In Barak Valley Zone of Assam, continue sowing of *ahu* rice and planting of lemon.
- In Central Brahmaputra Valley Zone and North Bank Plain Zone of Assam, undertake nursery bed preparation for sali/kharif rice and continue planting of papaya after current spells of heavy rain.
- In Arunachal Pradesh, undertake land preparation and sowing of rice(normal) and inter cultural operation weeding should be done in *jhum* and early sown WRC rice.
- In Meghalaya, undertake nursery bed preparation/ main field preparation for sowing of sali/ kharif rice, repair old

- bunds by maintaining 20-30 cm height in lowland and 15-20 cm in upland, undertake land preparation for sowing of soybean, groundnut, black gram, green gram and red gram and continue planting of ginger/turmeric.
- ➤ In Barak Valley Zone of Assam, due to humid weather, there is chance of attack of ghandi bug in *boro* rice at milk/grain filling stage. Apply Malathion @1.5 ml/ litre of water after current spells of rain.
- ➤ In Lower Bramhaputra Valley Zone of Assam, due to humid weather, there is chance of attack of fruit and shoot borer in summer vegetable. To control apply Deltamethin (Decis 2.8 EC) @ 0.5 ml/litre or Dichlorvors 100EC @ 0.5 ml/litre or Malathion 50 EC @ 2 ml/litre of water after current spells of rain.
- In Central Bramhaputra Valley Zone of Assam, due to humid weather, there is chance of attack of pod borer and pod bug infestation in summer black gram and green gram and incidence of blast disease in *ahu* rice. Farmers are advised to spray Quinalphos @ 2.5 ml/litre against pod borer and Dimethoate @ 2ml/litre of water against pod bug and spray Bavistin @ 1 gm/ litre of water against blast after current spells of rain.
- In Arunachal Pradesh, in the humid weather condition, there is chance of attack of aphids and Red pumpkin beetle in ladies finger and cucurbits. Spraying of Imidacloprid 17.5 SL @ 1ml/ 10 litres of water for control aphids and spraying of Deltamethrin@ 4ml/10 litre of water for management of Red pumpkin beetle is advised after current spells of rain.
- ➤ In Meghalaya, high relative humidity is favourable for development of blast disease in *jhum* rice; if blast spot are seen, apply Mancozeb@ 2g/litre of water. Weather is also congenial for attack of white fly & aphids in okra. Spray Dimethoate 30 EC 2ml/litre of water combined with neem seed kernal extract 5% to manage the attack. Apply the pesticides after current spells of rain.

# Manipur, Mizoram, Nagaland and Tripura:

- ➤ In Manipur, continue nursery bed preparation for *kharif* rice, sowing of *kharif* maize, soybean, groundnut and black gram and nursery raising of cauliflower after current spells of heavy rain.
- ➤ In Nagaland, undertake land preparation for sowing of maize after current spells of heavy rain
- In Mizoram, continue land preparation for planting of ginger and turmeric, nursery preparation for khasi mandarin and passion fruit and sowing of rice, maize okra, colocasia and transplanting of brinjal and tomato after current spells of heavy rain.
- ➤ In Tripura, undertake land preparation for sowing of groundnut in upland and medium upland and undertake harvesting of *boro* rice, mango, cowpea, summer brinjal and tomato after current spells of heavy rain.
- Suitable varieties are given in Annexure III.

# • Animal Husbandry

- In Arunachal Pradesh, Assam & Meghalaya, keep animals indoor during heavy rainfall period. Also keep animal sheds dry and avoid dampness during rainy days.
- In Meghalaya, due to humid weather, keep the poultry house well ventilated during day time and provide clean and fresh drinking water every day. Rainy and cloudy weather is congenial for development of diseases like Coccidiosis in poultry. As a preventive measures give Amprolium @ 25-65 mg/kg of feed once a day.

# EAST INDIA [JHARKHAND, BIHAR, ODISHA, WEST BENGAL & SIKKIM, ANDAMAN & NICOBAR ISLANDS]









Sugarcane Jute Rice Onion

• Realised Rainfall: Rainfall occurred in all districts of Andaman & Nicobar Islands; all districts of West Bengal & Sikkim except Malda and South Dinajpur; Araria, Kishanganj, Purnea, Supaul and Saharsa districts of Bihar; Sahibganj districts of Jharkhand. Weather remained mainly dry over rest of the region.

### • Advisories:

- As heat wave conditions would prevail at a few places over Odisha on 29<sup>th</sup> and 30<sup>th</sup> May and at isolated places on 31<sup>st</sup> May and at isolated places over Jharkhand from 29<sup>th</sup> to 31<sup>st</sup> May, apply light and frequent irrigation to the standing crops to cope up with the excess evaporative demand due to heat wave. Undertake soil mulching/mulching with straw/polythene in crop fields to conserve soil moisture.
- As thunderstorm accompanied with squall would occur at isolated places over Sub-Himalayan West Bengal & Sikkim on 30<sup>th</sup> May and over Odisha, Jharkhand and Gangetic West Bengal on 1<sup>st</sup> and 2<sup>nd</sup> June, provide mechanical support to vegetables and young fruit plants to prevent the crops from lodging due to strong winds. Also undertake propping in sugarcane in Jharkhand and Odisha.

# West Bengal:

- As rain/thundershowers would occur at most/many places over Sub-Himalayan West Bengal & Sikkim during the period along with heavy rainfall at isolated places on 31<sup>st</sup> May, postpone irrigation, intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crops to avoid water stagnation in the fields.
- ➤ In Hill Zone of West Bengal, continue planting of ginger after current spells of heavy rain and apply mulch in ginger fields with mixed leaves @ 10 ton/ha at the time of planting. Repeat it after 40 days and 90 days after planting.
- In Laterite and Red soil Zone of West Bengal, undertake land preparation for sowing of *aus* rice in upland and nursery preparation for *aus* rice in lowland. In Coastal Saline Zone, continue harvesting of matured *boro* rice on bright sunny days.
- ➤ In New Alluvial Zone of West Bengal, continue intercultural operations (weeding & thinning) and top dressing in jute.
- ➤ Present weather condition is congenial for attack of fruit borer in okra in Laterite and Red Soil Zone. Remove and destroy the borer affected okra. If the pest attack is severe, spray Cypermethrin 25 EC @ 200g a.i/ha on a non rainy day.
- ➤ In Terai Zone, high humidity may cause stem rot in jute and root rot in vegetables. Apply Carbendazim @1gm/litre of water after current spells of rain.

## Andaman and Nicobar Islands:

- As rain/thundershowers would occur at many places over Andaman & Nicobar islands on 29<sup>th</sup> and 31<sup>st</sup> May, postpone irrigation, intercultural operation and application of plant protection measures and fertilizers to the standing crops.
- In South, North & Middle Andaman, undertake land preparation for sowing of cowpea and nursery sowing of rice. Apply FYM or compost after weeding in cucurbits like bottle guard and Pumpkin @ 15 to 20 t/ha.

#### Odisha:

- ➤ In East and South Eastern Coastal Plain Zone, continue sowing of jute and planting of turmeric. Continue planting of ginger and turmeric in North Eastern Plateatu Zone.
- In West Central Table Land Zone, continue harvesting of the summer rice and bring the harvested paddy to the threshing floor or to safer places.
- ➤ In East and South Eastern Coastal Plain Zone, Mid Central Table Land Zone and West Central Table Land Zone of Odisha, prevailing high temperature is favorable for attack of fruit and shoot borer in brinjal, spray Spinosad 48EC @ 1ml in 4 litres of water for control. Also install 10 Pheromone traps per acre for effective control of the insects.
- ➤ In East and South Eastern Coastal Plain Zone of Odisha, white ant and white grub attack has been found on summer groundnut and likely to increase in the present temperature. Thorough soil drenching with Chloropyriphos @ 2ml/litre of water is advised.
- In Mid Central Table Land Zone of Odisha, due to rise in temperature with wide variation in humidity. there may be white fly problem in summer green gram crop. To control it use 10-12 yellow sticky traps per acre in the crop field. The YMV affected plants should be destroyed and spray Imidacloprid @ 5ml/litre of water.

#### • Bihar:

- ➤ In North East Alluvial Zone and North West Alluvial Plain Zone, continue nursery preparation for *kharif* onion and rice. Continue the harvesting of matured summer maize & boro rice.
- ➤ In North West Alluvial Plain Zone, undertake harvesting of matured green gram and apply irrigation in maize.
- ➤ In South Bihar Alluvial Zone, due to high temperature, apply irrigation at regular intervals in sugarcane, summer maize, green gram and summer vegetables. Continue summer ploughing in the fallow fields to control weeds, pests and diseases.
- In North East Alluvial Zone of Bihar, continue thinning in early sown jute crop and continue planting of foot yam and turmeric.
- North East Alluvial Zone of Bihar, due to strong winds, farmers are advised to provide mechanical support to young fruit plants and vegetable crops to prevent from lodging.
- In North West Alluvial Plain Zone, present weather is congenial for infestation of pod borer/leaf feeder in mung/urd, to control, spray Trizophos@ 1ml/litre of water on a non rainy day.
- ➤ In South Bihar Alluvial Zone, present weather is congenial for infestation of thrips and white fly in chilli; for control, spray Malathion 50 E.C. @ 400 ml with 250 litres of water per acre on a non rainy day.

## • Jharkhand:

- In South Eastern Plateau Zone, continue harvesting of matured summer moong and summer rice.
- In South Eastern Plateau Zone, as no significant rainfall is expected, apply irrigation in summer okra which is at fruit developing stage. Undertake land preparation for direct seeded upland rice.
- In Western Plateau and South Eastern Plateau Zone, continue planting of ginger and turmeric and undertake mulching with straw / leaves etc. to control weeds and to conserve soil moisture.
- In Western Plateau Zone, present weather is congenial for infestation of mites on cucurbitaceous crops, bean, okra and brinjal. To control the mites, spray Dycofol (@3 ml per litre of water.
- In South Eastern Plateau Zone, present weather is congenial for infestation of fruit borer in summer okra, tomato and chilli, to control, spray Trizophos or Prophenphos @ 1ml per litre of water.
- Suitable varieties for sowing are given in Annexure III.

## • Animal Husbandry

In Gangetic West Bengal, Bihar, Jharkhand and Odisha, keep cattle/goats indoor during thunderstorm / squall period. Give lots of clean water to the animals and keep them in the shaded place during noon hours. Special attention should be given to milch animals with regard to feed and provide the poultry animals, water mixed with electrolyte powder.

# SOUTH INDIA [TAMIL NADU, TELANGANA, ANDHRA PRADESH, KARNATAKA, KERALA]









Sorghum Sugarcane Chilli

• **Realised Rainfall:** Rainfall occurred in Thiruvananthapuram district of Kerala; Kanyakumari district of Tamil Nadu. Weather remained mainly dry over rest of the region.

#### Advisories:

- As heat wave conditions would prevail at a few places over Telangana on 29<sup>th</sup> May and at isolated places on 30<sup>th</sup> May and over Coastal Andhra Pradesh on 29<sup>th</sup> and 30<sup>th</sup> May, apply light and frequent irrigation to the standing crops to cope up with the excess evaporative demand due to heat wave. Undertake soil mulching/mulching with straw/polythene in crop fields to conserve soil moisture.
- As thunderstorms accompanied with squall would occur at isolated places over Telangana on 30<sup>th</sup> May and 1<sup>st</sup> June, over Rayalaseema on 30<sup>th</sup> May, over Tamil Nadu & Puducherry and South Interior Karnataka on 30<sup>th</sup> and 31<sup>st</sup> May and over Kerala on 31<sup>st</sup> May, provide mechanical support to young fruit plants, banana and vegetables and undertake propping in sugarcane to prevent the crops from lodging due to strong winds.
- As rain/thundershowers would occur at many places over South Interior Karnataka during the period and over Kerala and Coastal Karnataka from 30<sup>th</sup> May to 2<sup>nd</sup> June, postpone irrigation, intercultural operation and application of plant protection measures and fertilizers to the standing crops. Postpone harvesting of crops and keep already harvested produce at safer places.

### Andhra Pradesh:

- ➤ In the North Coastal Zone, continue summer ploughings for planting of rain-fed sugarcane, land preparation for sowing of sesame.
- In the High Altitude Tribal Zone, undertake land preparation for sowing of maize and finger millet and land preparation for nursery sowing of rice. Continue summer ploughing and sowing of green manure crops like sunnhemp and daincha to improve soil fertility and to reduce insect pests in the *kharif* season.
- ➤ Undertake nursery sowing of rice in Ananthpur district and sowing of *mungeri* cotton and maize in Kurnool district under assured irrigation in Scarce Rainfall zone.
- ➤ Due to prevailing dry weather, incidence of smut in ratoon sugarcane has been noticed and likely to continue in North Coastal Andhra Pradesh. Spray Propiconazole @ 1 ml per litre of water twice at the time of ratooning and 30 days after ratooning.
- ➤ Prevailing high temperature conditions are highly congenial for attack of thrips in groundnut which is in pod-seed development stage in the Southern Zone. To control spray Monocrotophos @ 1.6 ml or Imidachloprid @ 0.3 ml. per litre of water.
- Mealy bug incidence was noticed in Bt cotton and chilli in some parts of Kurnool district of Scarce Rainfall Zone and likely to continue due to dry weather. For control, spray Profenophos @ 1.5 ml + soap solution (1%) in cotton and Methyl Dematon @400 ml or Acephate @300 g per acre in chilli on a non rainy day.

# Telangana:

- ➤ Undertake summer ploughing to control weeds, hibernating pests and disease spores that may damage *kharif* crops and undertake digging of pits for planting new orchards in the Northern and Southern Telangana Zone.
- ➤ Prevailing high temperatures may lead to fruit drop in mango in Northern Telangana zone. For the control spraying of 2-4-D @ 1g/ 100 litres of water in early morning is recommended. Apply irrigation at regular interval to prevent the fruit drop. Also spraying of Multi-K (13-0-45) @ 10 g/litre is recommended to increase the fruit size.
- ➤ Incidence of fruit fly is noticed in mango in Southern Telangana and likely to continue in the prevailing weather. To trap the flies in the container, hang the plastic containers with mixture of Methyl Eugenol @ 2 ml + Carbofuran 3G @ 3g per litre of water in the orchards.

# Karnataka:

- Continue land preparation and sowing of ragi the Eastern Dry Zone and land preparation for sowing of sorghum in Central Dry Zone.
- Continue summer ploughings to control of weeds, soil borne pest and disease and land preparation for the next sowing season in the North East Transition Zone, North East Dry Zone, North Dry Zone and Coastal Zone.
- ▶ Blast disease was noticed in rice crop in Southern Dry Zone due to large difference in Day and night temperatures.

- To manage the disease, remove the weed hosts around the fields and spray with Carbendazim @ 1gm/ litre of water after current spells of rain.
- In the prevailing high temperature, leaf spot/Sigatoka and Panama wilt incidence may occur on Banana in Southern Transition Zone. As a precautionary measure, drench with Carbandizim 0.2% or Propiconezole 0.5 ml/ litre after current spells of rain and repeat once in a month.

#### Kerala:

- Continue land preparation for wet seeding of rice (Uma variety), planting of coconut seedlings and Poovan, Robusta and Kannan varieties of Banana in the Problem Area Zone.
- Continue land preparation for sowing of upland rice, wet seeding of *virippu* rice and planting of coconut seedlings in the Problem Area Zone and continue nursery sowing of *virippu* rice in Southern Zone.
- > Continue planting of turmeric and planting of robusta, palayankodan, njalipoovan varieties of banana in Southern and Northern Zone.
- ➤ Prevailing temperature and humidity is congenial for incidence of Erwinia rot and Panama wilt diseases on Banana in Problem Area Zone. For control, drench the pit with Steptocycline @ 2 g with 10 litres of water for Erwina rot and for Panama Wilt mix Copper Oxy Chloride @ 3 g with 1 litre water and drench the pit after current spells of rain.

### ■ Tamil Nadu:

- Continue sowing of green manure crops like daincha, sunhemp and kolangi in the Cauvery Delta Zone and Southern Zone
- Early season sugarcane and five months old banana crop may be propped against lodging against due to high wind in the Western Zone.
- In Karaikal and Puducherry, to prevent early shedding of buds and squares in cotton, spray NAA 40 ppm (40 mg of Naphthaleic Acetic Acid in one litre of water) at 60 and 90 DAS on the crops and Nipping may be done at 15th node for local variety and 20th node for hybrid cotton to induce sympodial branches development.
- ➤ Incidence of rhinoceros beetle is noticed in coconut in Southern Zone. Soak Castor cake 1 kg in 5 litre of water in small mud pots and keep them in the coconut gardens to attract and kill the adults.
- Suitable varieties for sowing are given in Annexure III.

# • Animal Husbandry

- ➤ Prevailing high temperatures may cause sun stroke in livestock in Andhra Pradesh and Telangana. Keep the animals under shade during noon hours and provide more water to livestock for drinking. Cover the sheds with paddy straw and arrange sprinklers and Feed poultry birds with wet mash to increase the feed intake.
- Due to high day temperature, there is a possibility of drop in feed intake in poultry, optimum temperature should be maintained in poultry house by applying 4-6 inch thick hay thatch as a roofing material in the North East Dry Zone of Karnataka
- Due to prevailing high day temperatures following precautions may be taken in cattle /sheds in North Transition Zone of Karnataka; for milch animals regularly follow schedule of 1 kg feed + 50 g mineral mixture per 2 litres of milk yield. Feed animals with a mixture of green grass + hay + minerals + dry feed like a khichri. It is advisable to leave the animals in ponds during afternoon hours or sprinkle the cold water 2-3 times a day on the body of the animal to overcome the heat. Apply 4-6 inch thick hay thatch as a roofing material. Spraying of water on the floor and roof of sheds periodically during peak hot hours. Proper ventilation should be maintained for free circulation of air in the sheds.

# Districtwise realised rainfall and % departure for past three weeks is given below in Annexure I

# Annexure I Week by week Rainfall Distribution

	13.0	13.05.15 20.05.15		27.05.15		
Sub-Divisions	Actual (mm)	% dep.	Actual (mm)	% dep.	Actual (mm)	% dep.
Arunachal Pradesh						
Anjaw	**	**	**	**	**	**
Changlang	6.0	-91	34.0	-58	35.8	-27
Dibang Valley	**	**	**	**	**	**
East Kameng	2.4	-96	19.1	-66	27.4	-29
East Siang	1.2	-98	88.5	12	222.8	250
Kurung Kumey	**	**	**	**	**	**
Lohit	30.1	-47	84.4	20	51.5	-12
Lower Dibang Valley	8.2	-82	67.5	9	184.4	566

Lower Subansari	**	**	**	**		
Papumpara	1.5	-99	167.8	116	186.1	140
Tawang	11.0	-83	58.0	-24	34.0	-54
Tirap	13.2	-77	52.8	-31	41.2	-40
Upper Siang	17.4	-70	133.4	24	153.1	60
Upper Subansari	48.8	153	16.8	-48	41.0	-12
West Kameng	42.3	-33	75.8	0	163.6	119
West Siang	5.0	-84	28.0	-62	107.0	167
Assam&Meghalaya						
Assam						
Baksa	27.7	-61	93.1	9	146.5	82
Barpeta	29.1	-59	68.0	-20	110.0	36
Bongaigaon	24.0	-72	58.4	-31	118.2	18
Cachar	22.0	-75	87.4	-3	77.1	6
Chirang	60.6	-30	328.0	286	521.8	420
Darrang	**	**	**	**	**	**
Dhemaji	0.0	-100	98.0	26	84.0	7
Dhubri	33.9	-56	95.6	11	209.2	130
Dibrugarh	9.6	-85	102.9	77	112.0	73
Goalpara	30.2	-57	130.9	45	127.7	65
Golghat	40.3	-19	37.3	-35	58.2	34
Hailakandi	38.4	-53	33.6	-63	55.7	-41
Jorhat	69.7	17	96.7	54	48.2	-19
Kamrup(Rural)	32.6	-45	160.3	134	102.9	88
Kamrup(Metro)	11.1	-81	76.4	12	71.1	30
Karbi Anglong	8.1	-62	12.2	-64	23.8	-33
Karimganj	61.6	-60	105.1	-20	99.4	-10
Kokrajhar	44.2	-42	162.5	91	123.8	8
Lakhimpur	2.0	-97	78.5	1	110.4	41
Morigaon	52.0	62	12.2	-66	80.6	128
N.C.Hills	10.3	-86	60.5	-25	99.8	104
Nowgong	19.4	-53	6.1	-79	32.5	12
Nalbari	18.1	-77	112.0	59	151.3	118
Sonitpur	12.6	-77	71.9	19	129.2	110
Sibsagar	16.8	-70	86.6	55	86.0	84
Tinsukia	15.8	-74	73.4	25	89.8	53
Udalgiri	19.3	-72	47.7	-29	90.5	67
Meghalaya						
East Garo Hills	81.0	-8	73.9	1	243.6	326
East Khasi Hills	28.5	-82	97.7	-41	194.6	33
Jaintia Hills	**	**	37.0	-70	62.0	-61
Ribhoi	49.9	-22	35.6	-43	52.9	26
South Garo Hills	**	**	**	**	**	**
West Garo Hills	36.6	-52	105.0	24	148.8	104
West Khasi Hills	20.0	-67	46.0	-46	105.0	28
NMMT	20.0	0,	10.0			
Mizoram						
Aizwal	9.8	-85	86.4	5	48.8	-42
Champhai	**	**	**	**	**	**
Kolasib	22.0	-65	29.0	-60	102.0	56
Lawngtlai	**	**	**	**	**	**
Lawnguai		<u> </u>				

Lunglei	**	**	**	**	**	**
Mamit	**	**	**	**	**	**
Saiha	1.0	-99	21.0	-79	66.0	-30
Serchhip	**	**	6.2	-92	**	**
Manipur						
Bishnupur	**	**	**	**	**	**
Chandel	**	**	**	**	**	**
Churachandpur	**	**	**	**	**	**
Imphal east	1.9	-96	12.4	-72	19.4	-50
Imphal west	24.2	-30	79.2	212	21.4	106
Senapati	**	**	**	**	**	**
Tamenglong	**	**	**	**	**	**
Thoubal	14.0	-72	14.0	-44	54.0	120
Ukhrul	**	**	**	**	**	**
Nagaland						
Dimapur	17.9	-50	8.9	-77	19.1	3
Kephire	**	**	**	**	**	**
Kohima	0.0	-100	3.4	-92	19.2	-43
Longleng	**	**	**	**	**	**
Mokokchung	**	**	**	**	**	**
Mon	**	**	**	**	**	**
Paren	**	**	**	**	**	**
Phek	**	**	**	**	**	**
Tuensang	**	**	**	**	**	**
Wokha	**	**	**	**	**	**
Zunheboto	**	**	**	**	**	**
Tripura						
Dhalai	53.0	-48	75.5	-26	53.2	-35
North Tripura	78.6	-24	111.9	23	106.1	11
South Tripura	64.1	-20	42.1	-46	65.6	3
West Tripura	69.9	-18	37.8	-54	60.2	-14
Himachal Pradesh	03.5	10	27.0	0.1	00.2	
Bilaspur	17.2	38	3.5	-49	0.9	-93
Chamba	11.2	-45	6.8	-46	3.8	-63
Hamirpur	19.4	70	3.4	-63	0.5	-96
Kangra	19.6	62	4.8	-52	2.9	-67
Kinnaur	2.3	-88	5.9	-63	14.4	12
Kullu	7.2	-62	16.9	-2	12.1	-28
Lahaul and Spiti	2.5	-90	10.0	-58	21.0	29
Mandi	13.0	-30	12.7	-15	4.1	-72
Shimla	7.3	-63	13.9	3	3.6	-74
Sirmaur	15.2	90	10.8	77	0.4	-96
Solan	7.6	-50	10.1	-5	0.4	-100
Una	18.3	191	0.0	-100	1.8	-63
Punjab	10.5	1/1	0.0	-100	1.0	-05
Amritsar	14.2	154	5.4	49	0.0	-100
Barnala	0.0	-100	11.0	424	0.0	-100
Bhatinda	4.5		8.5			
Faridkot	2.0	-51		286	0.0	-100 -100
Faridkot Fatehgarh Saheb			0.0	-100		
	6.0	30 52	19.0	604	0.0	-100
Ferozpur	2.7	-52	0.3	-93	0.0	-100

Gurdaspur	7.2	10	3.6	-3	0.0	-100
Hoshiarpur	11.6	71	2.0	-37	0.0	-100
Jalandhar	16.6	163	7.4	71	0.4	-89
Kapurthala	27.6	475	16.3	410	0.0	-100
Ludhiana	8.9	82	9.2	208	1.3	-67
Mansa	0.0	-100	2.5	-7	0.0	-100
Moga	3.0	-25	13.7	154	0.0	-100
Muktesar	27.3	1263	0.0	-100	0.0	-100
Nawashahar	17.8	126	2.8	-14	0.0	-100
Patiala	2.5	-48	7.4	186	0.0	-100
Ropar	10.1	31	8.3	21	0.0	-100
Sangrur	2.9	-50	15.4	296	0.0	-100
Mohali	4.0	-52	5.3	24	0.0	-100
TarnTaran	8.0	45	32.7	717	0.0	-100
	0.0	45	32.1	/1/	0.0	-100
Haryana,Chd,Delhi						
Haryana	5.4	17	2.4	-56	0.4	00
Ambala	-	-17	2.4		0.4	-90
Bhiwani	0.1	-97	1.2	-63	0.0	-100
Chandigarh	8.6	-12	5.0	-17	1.1	-88
Faridabad	2.2	-65	5.0	56	0.0	-100
Fatehabad	1.5	-68	2.3	56	0.0	-100
Gurgaon	0.2	-95	5.0	72	0.0	-100
Hissar	0.7	-88	1.8	-42	0.0	-100
Jhajar	0.0	-100	14.3	1333	0.0	-100
Jind	0.9	-83	6.4	138	0.0	-100
Katihal	0.0	-100	5.8	625	0.0	-100
Karnal	0.3	-93	4.5	150	0.0	-100
Kurukshetra	0.0	-100	3.3	117	0.0	-100
Mahendragarh	0.0	-100	0.3	-94	0.0	-100
Mewat	0.0	-100	3.0	25	0.0	-100
Palwal	0.0	-100	1.3	-4	0.0	-100
Panchkkula	1.5	-82	2.2	-58	0.3	-95
Panipat	0.0	-100	23.8	2544	0.0	-100
Rewari	0.0	-100	2.8	-7	0.0	-100
Rohtak	0.0	-100	4.4	83	0.0	-100
Sirsa	1.5	-59	10.0	335	0.0	-100
Sonepat	0.0	-100	18.7	790	0.0	-100
Yamunanagar	13.0	49	1.4	-68	0.0	-100
Delhi						
Central Delhi	0.0	-100	0.0	-100	0.0	-100
East Delhi	0.0	-100	2.0	-37	0.0	-100
New Delhi	0.0	-100	4.6	42	0.0	-100
North Delhi	0.0	-100	1.5	-53	0.0	-100
North East Delhi	0.0	-100	**	**	**	**
North West Delhi	0.0	-100	4.0	25	0.0	-100
South Delhi	0.9	-89	9.9	208	0.0	-100
South West Delhi	0.2	-97	8.6	169	0.0	-100
West Delhi	0.0	-100	29.0	806	0.0	-100
Jammu & Kashmir						
Anantnag	15.2	-46	24.5	11	29.6	17
Badgam	15.7	-17	25.3	21	16.5	-13

Bandipore	**	**	**	**	**	**
Baramula	35.4	-10	25.6	17	21.6	-19
Doda	6.6	-71	8.7	-47	10.0	-55
Ganderbal	4.6	-75	12.8	-24	34.4	118
Jammu	7.6	-8	10.9	147	0.1	-99
Kargil	**	**	**	**	**	**
Kathua	3.2	-16	3.9	-13	0.0	-100
Kistwar	**	**	**	**	**	**
Kulgam	14.5	-48	11.2	-50	18.6	-26
Kupwara	36.2	46	41.3	80	23.5	-5
Ladakh(Leh)	0.2	-85	0.0	-100	0.0	-100
Poonch	**	**	**	**	**	**
Pulwama	15.6	-27	22.3	3	22.8	24
Rajouri	19.3			141		
Ramban	+	197	16.6		0.0	-100
	17.8	-22	21.9	35	11.7	-47
Reasi	23.6	22	7.9	5	2.6	-69
Samba	9.3	13	19.1	333	0.1	-99
Shopian	**	**	**	**	**	**
Srinagar	23.6	30	22.0	31	17.6	12
Udhampur	12.9	-34	9.8	30	0.0	-100
East Madhya Pradesh						
Anuppur	0.0	-100	0.0	-100	0.0	-100
Balaghat	1.5	18	0.1	-94	0.0	-100
Chhatarpur	0.0	-100	1.0	-25	0.1	-92
Chindwara	3.9	544	5.7	617	0.0	-100
Damoh	0.0	-100	0.5	-44	0.0	-100
Dindori	0.0	-100	8.2	382	1.0	-74
Jabalpur	0.3	200	0.2	-71	1.5	15
Katni	0.0	-100	0.0	-100	0.0	-100
Mandla	0.0	-100	3.6	71	1.9	-3
Narsingpur	0.0	-100	0.0	-100	0.0	-100
Panna	0.0	-100	0.0	-100	0.0	-100
Rewa	0.0	-100	1.7	24	0.0	-100
Sagar	0.0	-100	0.9	-32	2.0	5
Satna	0.0	-100	22.5	1152	0.0	-100
Seoni	2.1	48	12.9	378	2.0	18
Shahdol	0.0	-100	40.0	1233	0.0	-100
Sidhi	0.0	-100	1.4	-30	0.0	-100
Singrauli	0.0	-100	3.0	58	0.0	-100
Tikamgarh	0.0	-100	0.0	-100	0.0	-100
Umaria	0.0	-100	0.8	-50	0.0	-100
West Madhya Pradesh						
Agar	0.0	-100	0.0	-100	0.0	-100
Alirajpur	0.0	-100	6.4	156	0.0	-100
Asoknagar	0.0	-100	0.0	-100	0.0	-100
Badwani	0.0	-100	0.0	-100	0.0	-100
Betul	0.2	-53	2.0	40	0.0	-100
Bhind	0.0	-100	3.0	58	0.0	-100
Bhopal	2.0	122	0.7	-63	0.0	-100
Burhanpur	0.0	-100	5.3	778	0.0	-100
Datia	0.0	-100	0.0	-100	0.0	-100
Duilu	0.0	-100	1 0.0	-100	0.0	-100

Dewas	0.0	-100	0.0	-100	0.0	-100
Dhar	0.0	-100	0.0	-100	0.0	-100
Guna	0.0	-100	1.7	21	0.0	-100
Gwalior	17.8	1269	8.8	386	0.0	-100
Harda	2.3	1050	0.0	-100	0.0	-100
Hosangabad	2.2	450	1.8	64	0.0	-100
Indore	0.0	-100	0.2	-67	0.0	-100
Jhabua	0.0	-100	0.0	-100	0.0	-100
Khandwa	1.3	233	0.0	-100	0.0	-100
Khargone	0.0	-100	1.2	-12	0.0	-100
Mandsaur	0.0	-100	0.0	-100	0.0	-100
Morena	2.6	82	0.0	-100	0.0	-100
Neemuch	0.0	-100	0.0	-100	0.0	-100
Raisen	0.0	-100	2.8	77	0.0	-100
Rajgarh	0.4	-60	0.0	-100	0.0	-100
Ratlam	0.0	-100	0.0	-100	0.0	-100
Sehore	0.0	-100	0.0	-80	0.0	-100
Shajapur	0.0	-100	1.0	-9	0.0	-100
Sheopur Kalani	0.0	-100	0.0	-100	0.0	-100
Shivpuri	0.0	-100	0.4	-78	0.0	-100
Ujjain	0.0	-100	1.4	133	0.0	-100
Vidisha	0.0	-100	0.0	-100	0.0	-100
Chhattisgarh	0.0	-100	0.0	-100	0.0	-100
Bastar	2.4	-70	3.6	-67	0.2	-97
Bijapur	0.0	-100	15.9	413	0.2	-100
Bilaspur	2.0	-46	0.8	-84	0.0	-100
Dantewara	0.0	-100	16.7	188	0.0	-100
Dhamtari	0.0	-95	7.6	29	9.0	233
Durg	0.0	-100	3.6	100	1.0	-41
Janjgir	0.0	-100	0.0	-100	0.0	-100
Jashpurnagar	0.0	-100	0.0	-100	0.0	-100
Kanker	0.0	-100	7.1	39	0.0	-100
Korba	0.0	-100	0.0	-100	0.0	-100
Koriya	0.0	-100	0.9	-42	0.0	-100
Kawardha	0.0	-100	19.0	304	0.0	-100
Mahasumund	0.0	-100	11.2	229	0.0	-100
Narayanpur	0.0	-100	0.0	-100	0.0	-100
Raigarh	0.0	-100	0.0	-100	0.0	-100
Raipur	0.0	-94	14.5	254	0.0	-100
Rajandgaon	0.2	-100	37.0	900	0.0	-100
Surguja	0.0	-100 -98	1.7	-44	0.0	-100
East Uttar Pradesh	0.1	70	4.7		<b></b>	100
Allahabad	0.0	-100	0.0	-100	0.0	-100
Ambedkar Nagar	2.5	-4	0.0	-100	0.0	-100
Azamgarh	1.0	-60	0.0	-100	0.0	-100
Bahraich	22.2	122	0.7	-89	0.0	-100
Ballia	0.0	-100	35.1	737	0.0	-100
Balrampur	9.0	32	0.0	-100	0.0	-100
Banda	0.0	-100	0.0	-100	0.0	-100
Barabanki	1.3	-70	1.5	-62	0.0	-100
Basti	14.6	161	5.6	56	0.8	-84
Dasti	14.0	101	5.0	30	V.0	-04

Chandauli	1.9	-42	0.0	-100	0.0	-100
Deoria	4.0	-18	11.0	124	0.0	-100
Faizabad	3.3	4	0.3	-91	0.0	-100
Farrukhabad	0.5	-85	1.3	-71	0.0	-100
Fatehpur	0.0	-100	0.0	-100	0.0	-100
Gazipur	0.8	-76	1.3	-42	0.0	-100
Gonda	7.0	56	8.3	103	0.9	-87
Gorakhpur	19.1	145	10.8	89	0.0	-100
Hardoi	4.1	-11	1.1	-77	0.0	-100
Jaunpur	0.4	-81	0.0	-100	0.0	-100
Kannauj	24.0	471	5.0	-18	0.0	-100
Kanpur City	2.3	1	10.8	622	0.0	-100
Kanpur City  Kanpur Dehat						
-	3.2	146	1.4	-7	0.0	-100
Kaushambi	0.0	-100	0.0	-100	0.0	-100
Kheri	0.0	-100	4.2	-41	0.0	-100
Kushi nagar	2.0	-79	0.0	-100	0.0	-100
Lucknow	0.0	-100	1.4	-25	0.0	-100
Maharajganj	19.8	127	0.0	-100	0.0	-100
Mau	0.0	-100	0.0	-100	0.0	-100
Mirzapur	0.0	-100	0.7	-81	0.0	-100
Pratapgarh	0.0	-100	0.0	-100	0.0	-100
RaiBarelly	0.0	-100	4.2	183	0.0	-100
Sahuji Maharajnagar	0.0	-100	0.0	-100	0.0	-100
Sant Kabirnnagar	14.0	324	0.0	-100	1.8	-68
Sant Ravidas Nagar	2.0	-39	0.0	-100	0.0	-100
Shrawasti	**	**	0.0	-100	**	**
Sidharthnagar	3.0	-27	0.0	-100	0.0	-100
Sitapur	0.0	-100	0.0	-100	0.0	-100
Sonbhadra	0.0	-100	20.5	688	0.0	-100
Sultanpur	0.0	-100	0.0	-100	0.0	-100
Unnao	4.4	63	6.5	400	0.0	-100
Varanasi	0.0	-100	0.0	-100	0.0	-100
West Uttar Pradesh						
Agra	0.3	-89	14.4	932	0.3	-86
Aligarh	0.0	-100	3.7	46	1.1	-61
Auraiya	0.0	-100	2.0	-23	0.0	-100
Badaun	1.0	-76	6.0	71	0.0	-100
Baghpat	0.0	-100	14.4	205	0.0	-100
Bareilly	2.8	-44	0.9	-83	0.7	-82
Bijnor	0.7	-84	7.8	85	0.0	-100
Bulandsahar	0.0	-100	0.8	-75	0.0	-100
Etah	0.8	-83	2.3	18	0.0	-100
Etawah	2.3	-17	0.0	-100	0.0	-100
Firozabad	1.5	-46	11.1	383	0.0	-100
GBNagar	0.0	-100	2.0	122	0.0	-100
Ghaziabad	0.0	-100	4.9	95	0.0	-100
Hamirpur	0.0	-100	1.3	-5	0.0	-100
Jalaun	1.7	52	1.5	-38	0.8	-56
Jhansi	0.0	-100	10.6	-38 486	0.3	-56 -86
Jotiba Phule Nagar	0.3	-92	6.0	71	0.0	-100
Kanshiramnagar	6.0	107	0.0	-100	0.0	-100

Lalitpur	0.0	-100	0.0	-100	0.0	-100
Mahamaya Nagar	0.0	-100	4.0	167	0.0	-100
Mahoba	0.0				0.0	
		-100	0.0	-100		-100
Mainpuri	0.0	-100	10.1	288	0.0	-100
Mathura	0.0	-100	1.0	0	0.0	-100
Meerut	0.0	-100	18.2	405	0.5	-77
Moradabad	20.4	373	0.8	-82	0.0	-100
Muzzaffarnagar	0.0	-100	13.7	211	0.0	-100
Pilibhit	3.2	-43	0.0	-100	0.0	-100
Rampur	5.7	26	0.0	-100	0.0	-100
Saharanpur	4.3	-31	3.0	-32	0.0	-100
Shahjahanpur	0.0	-100	8.3	30	0.0	-100
Uttarakhand						
Almora	1.5	-87	5.2	-45	0.0	-100
Bageshwar	0.0	-100	20.5	118	0.3	-98
Chamoli	2.3	-90	7.3	-57	5.4	-63
Champawat	2.5	-79	1.5	-91	0.0	-100
Dehradun	2.1	-84	0.5	-96	0.0	-100
Garhwal Pauri	10.3	-3	9.4	57	0.0	-100
Garhwal Tehri	21.7	41	6.7	-45	0.7	-95
Haridwar	1.2	-84	2.4	-41	0.0	-100
Nainital	14.0	-3	13.6	16	0.0	-100
Pithorgarh	7.0	-68	35.1	42	6.1	-74
Rudraprayag	16.9	-28	23.9	4	2.6	-87
Udham Sing Nagar	4.8	-27	0.9	-85	0.0	-100
Uttarkashi	12.5	-54	26.3	17	2.9	-89
Bihar						
Araria	5.9	-72	50.9	97	72.2	133
Arwal	0.0	-100	0.6	-54	0.0	-100
Aurangabad	0.0	-100	14.0	241	0.0	-100
Banka	12.0	27	7.0	-23	0.0	-100
Begusarai	9.6	-20	7.3	-25	0.0	-100
Bhabua	0.0	-100	8.9	-12	0.0	-100
Bhagalpur	37.5	196	2.6	-84	7.2	-55
Bhojpur	0.0	-100	16.0	176	0.0	-100
Buxar	0.0	-100	**	**	**	**
Darbhanga	14.4	29	10.9	-1	6.7	-58
East Champaran	23.1	138	18.2	102	6.6	-55
Gaya	0.0	-100	13.0	183	0.0	-100
Gopalganj	13.8	229	11.8	76	0.0	-100
Jahanabad	0.0	-100	4.6	-22	0.0	-100
Jamui	0.6	-100 -92	1.5	-22 -76	0.0	-100
Kathihar	51.6	125	0.0			-100
Khagadia	19.5			-100	16.0 3.5	
	-	56	0.0	-100		-73
Kishanganj	16.1	-33	85.9	203	78.6	73
Lakhisarai	4.8	-60	17.2	98	0.0	-100
Madhepura	28.7	52	0.7	-96	20.0	-3
Madhubani	12.3	-26	0.0	-100	12.6	-43
Monghyar	0.0	-100	0.0	-100	0.0	-100
Muzaffarpur	16.6	37	5.8	-54	2.5	-83
Nalanda	0.0	-100	2.6	-47	0.0	-100

Nawada	0.0	-100	0.0	-100	0.0	-100
Patna	0.0	-100	1.4	-74	0.0	-100
Purnea	20.8	-10	0.0	-100	23.7	-20
Rohtas	0.0	-100	33.3	658	0.0	-100
Saharsha	11.0	-41	0.0	-100	25.0	-12
Samstipur	13.9	53	12.3	71	6.1	-63
Saran	0.0	-100	1.1	-82	0.0	-100
Sheikpura	10.1	58	0.0	-100	0.0	-100
Sheohar	0.0	-100	0.0	-100	0.0	-100
Sitamarhi	15.2	-2	12.3	-14	10.0	-49
Siwan	12.3	208	0.0	-100	0.0	-100
Supaul	16.4	-20	24.3	16	35.0	101
Vaishali	0.0	-100	1.7	-70	0.0	-100
West Champaran	13.2	31	36.0	210	1.7	-89
Jharkhand	10.2	<b>01</b>	20.0	210	1.,	0,
Bokaro	0.0	-100	49.5	526	0.0	-100
Chatra	0.0	-100	2.5	-29	0.0	-100
Deoghar	2.5	-71	44.6	479	1.9	-87
Dhanbad	0.2	-99	11.9	11	3.8	-61
Dumka	0.0	-100	17.0	21	0.0	-100
East Singbhum	0.0	-100	35.3	142	2.7	-82
Garhwa	0.0	-100	0.0	-100	0.0	-100
Giridih	0.0	-97	12.7			
Godda	21.7	112	1.5	50	0.0	-100
				-88	0.0	-100
Gumla	0.1	-99	25.2	145	0.0	-100
Hazaribagh	0.0	-100	0.1	-99	0.0	-100
Jamtara	0.0	-100	19.4	76	0.0	-100
Khunti	1.5	-83	4.9	-64	2.0	-85
Koderrna	0.0	-100	3.1	210	0.0	-100
Latehar	0.0	-100	1.0	-79	0.0	-100
Lohardagga	0.0	-100	12.1	61	0.0	-100
Pakur	11.1	-40	33.7	93	0.0	-100
Palamau	0.1	-97	3.2	52	0.0	-100
Ramgarh	0.0	-100	10.8	-20	0.0	-100
Ranchi	22.1	127	7.9	-36	0.4	-97
Sahebganj	75.4	346	0.0	-100	31.4	21
Saraikela	0.8	-94	8.7	-27	7.1	-31
Simdega	**	**	**	**	**	**
West Singbhum	0.0	-100	0.0	-100	2.2	-82
East Rajasthan						
Ajmer	0.1	-90	0.0	-100	0.0	-100
Alwar	0.2	-96	3.5	-12	0.0	-100
Banswara	0.0	-100	0.0	-100	0.0	-100
Baran	0.1	-79	1.3	56	0.0	-100
Bharatpur	0.0	-100	11.9	376	0.0	-100
Bhilwara	4.3	261	0.0	-100	0.0	-100
Bundi	0.0	-100	2.3	94	0.0	-100
Chittorgarh	0.0	-100	0.9	-24	2.6	-15
Dausa	0.0	-100	0.6	-78	0.0	-100
Dholpur	0.0	-100	2.0	43	0.0	-100
Dungarpur	0.0	-100	0.0	-100	0.0	-100

Jaipur	0.1	-96	0.0	-100	0.0	-99
Jhalawar	0.0	-100	0.0	-100	0.0	-100
Jhunjhunu	2.9	-56	10.9	126	0.0	-100
Karauli	2.5	-4	0.0	-100	0.0	-100
Kota	0.0	-100	0.1	-96	0.0	-100
Pratapgarh	0.0	-100	0.0	-100	0.0	-100
Rajsamand	3.4	63	1.6	21	0.4	-87
Sawai Madhopur	0.5	-78	0.0	-100	0.4	-86
Sikar	3.0	-44	11.6	146	1.7	-61
Sirohi	0.6	-71	0.2	-57	0.0	-100
Tonk	5.4	107	1.9	-9	0.2	-92
Udaipur	0.0	-100	0.0	-100	0.0	-100
West Rajasthan						
Barmer	6.2	467	6.8	466	0.0	-100
Bikaner	11.1	281	6.5	124	1.7	-65
Churu	2.7	-43	13.2	256	0.0	-100
Hanumangarh	0.0	-100	5.4	81	0.0	-100
Jaisalmer	7.8	763	0.0	-100	0.0	-100
Jalore	0.0	-100	0.5	400	0.0	-100
Jodhpur	15.7	684	0.0	-100	0.0	-100
Nagaur	7.5	103	1.9	-34	4.2	-13
Pali	1.0	-41	0.0	-100	0.3	-86
Sri Ganganagar	2.0	-47	2.6	-6	0.0	-100
Gujarat Region						
Ahmedabad	0.0	-100	2.0	309	0.0	-100
Anand	0.0	-100	0.0	-100	0.0	-100
Banaskantha	0.0	-100	0.0	-100	0.0	-100
Baroda	0.0	-100	0.9	782	0.0	-100
Broach	0.0	-100	1.3	63	0.0	-100
DNH	**	**	**	**	**	**
Dahod	0.0	-100	0.0	-100	0.0	-100
Daman	0.0	-100	0.0	-100	**	**
Dangs	0.0	-100	2.0	-55	0.0	-100
Gandhinagar	0.0	-100	3.4	127	0.0	-100
Kheda	0.0	-100	5.4	5300	0.0	-100
Mehsana	0.4	-43	2.2	200	0.0	-100
Narmada	0.0	-100	0.0	-100	0.0	-100
Navsari	0.0	-100	0.0	-100	0.0	-100
Panchmahal	0.0	-100	0.0	-100	0.0	-100
Patan	1.0	0	0.1	43	0.0	-100
Sabarkantha	0.0	-100	0.8	293	0.0	-100
Surat	0.0	-100	0.0	-100	0.0	-100
Tapi	0.0	-100	0.0	-100	0.0	-100
Valsad	0.0	-100	0.0	-100	0.0	-100
S K & Diu region						
Amreli	0.0	-100	3.3	271	0.0	-100
Bhavnagar	0.0	-100	1.2	200	0.0	-100
Diu	0.0	-100	0.0	-100	0.0	-100
Jamnagar	0.0	-100	0.0	-100	0.0	-100
Junagarh	0.0	-100	0.0	-100	0.0	-100
Kutch	1.2	131	0.0	-100	0.0	-100
Ixutell	1,4	131	0.0	-100	0.0	-100

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Porbandar	0.0	-100	0.0	-100	0.0	-100
Rajkot	0.4	-43	0.0	-100	0.0	-100
Surendranagar	0.0	-100	0.0	-100	0.0	-100
Maharashtra & Goa						
Konkan & Goa						
Mumbai City	0.0	-100	0.0	-100	0.0	-100
Mumbai Suburban	0.0	-100	0.0	-100	0.0	-100
North Goa	6.8	144	21.7	24	0.0	-100
Raigad	0.0	-100	8.5	137	0.0	-100
Ratnagiri	3.2	252	0.2	-97	0.0	-100
Sindhudurg	20.2	622	2.9	-62	0.0	-100
South Goa	9.7	149	19.2	43	1.3	-95
Thane	0.0	-100	0.0	-100	0.0	-100
Madhya Maharashtra						
Ahmednagar	0.5	-72	0.1	-97	0.0	-100
Dhule	**	**	**	**	**	**
Jalgaon	0.1	-86	7.1	792	0.0	-100
Kolhapur	19.0	188	8.2	-46	0.1	-99
Nandurbar	**	**	**	**	**	**
Nasik	0.0	-96	0.0	-100	0.0	-100
Pune	2.3	-8	18.3	221	0.0	-100
Sangli	15.7	208	4.1	-64	0.6	-97
Satara	18.6	377	12.8	74	0.0	-99
Solapur	0.6	-78	2.8	-53	0.0	-100
Marathwada	0.0	70	2.0		0.0	100
Aurangabad	1.3	43	3.7	70	0.0	-100
Beed	0.5	-75	3.1	-13	0.0	-100
Hingoli	5.2	333	1.2	-59	0.0	-100
Jalna	1.2	52	0.0	-100	0.0	-100
Latur	7.3	567	2.4	-58	0.0	-100
Nanded	11.6	382	6.2	123	0.0	-100
Usmanabad	0.3	-92	5.8	22	0.0	-100
Parbhani	1.5	22	0.0	-100	0.0	-100
Vidarbha	1.5	22	0.0	-100	0.0	-100
Akola	1.7	136	0.0	-100	0.0	-100
Amraoti	1.7	46	0.5	-38	0.0	-100
Bhandara	4.6	60	1.5	-36	0.0	-100
Buldhana	4.9	512	4.7	370	0.0	-100
Chandrapur	5.4	512	16.3	715	0.0	-100
Gadchiroli						
	0.0	-100	12.3	232	0.0	-100
Gondia	9.4	309	4.2	112	0.0	-100
Nagpur	0.8	-40	8.9	424	0.1	-95
Washim	0.4	-77	1.5	-74	0.9	-68
Washim	0.0	-100	2.0	25	0.0	-100
Yeotmal	0.0	-99	4.0	54	0.0	-100
Odisha	10	0.0	444	- 22	0.4	0.0
Angul	1.8	-89	14.4	22	0.2	-99
Balasore	1.4	-95	5.0	-79	1.5	-95
Bargarh	0.0	-100	0.0	-100	0.0	-100
Bhadrak	23.0	-21	43.5	83	0.8	-96
Bolangir	1.7	-82	7.8	-20	0.0	-100

D 11	2.5	0.2	15.0	1=		100
Boudh	3.7	-83	15.2	-15	0.0	-100
Cuttack	7.7	-63	1.0	-92	0.1	-99
Deogarh	0.0	-100	24.7	263	0.0	-100
Dhenkanal	0.0	-100	33.1	136	0.0	-100
Gajapati	9.2	-81	13.2	-57	5.9	-72
Ganjam	0.1	-99	1.7	-91	0.3	-98
Jagatsingpur	9.9	-69	11.7	-51	0.0	-99
Jajpur	2.2	-92	45.1	169	8.9	-64
Jharsuguda	0.0	-100	7.3	-18	0.0	-100
Kalahandi	0.0	-100	22.5	106	0.5	-93
Kandhamal	8.2	-62	8.9	-50	0.0	-100
Kendrapara	2.7	-84	20.3	4	0.0	-100
Keonjhar	1.4	-94	19.0	-22	1.7	-93
Khurda	5.2	-73	0.2	-99	0.0	-99
Koraput	9.9	-64	22.9	32	3.5	-79
Malkangiri	0.0	-100	48.0	281	0.0	-100
Mayurbhanj	3.3	-85	25.4	-19	9.7	-68
Nawapara	5.0	-32	12.4	77	0.0	-100
Nawarangpur	15.3	-2	9.4	-70	0.3	-99
Nayagarh	1.2	-88	18.1	97	0.0	-100
Puri	2.4	-86	0.4	-98	0.0	-100
Rayagada	8.7	-75	14.1	-19	0.1	-99
Sambalpur	0.0	-100	2.5	-63	0.0	-100
Sonepur	0.0	-100	3.3	-48	0.0	-100
Sundargarh	0.0	-100	13.1	48	0.0	-100
West Bengal & Andaman Nicobar Islands	0.0	100	10.1	10	0.0	100
A & N ISLAND						
Nicobar	37.5	-47	33.2	-60	57.5	-45
North & Middle Andaman	28.3	-41	86.7	5	237.2	129
South Andaman	30.4	-51	103.4	15	145.9	41
GWB						
Bankura	0.0	-100	24.0	78	4.1	-69
Birbhum	0.6	-97	32.6	92	4.2	-74
Burdwan	0.3	-98	53.9	213	4.8	-78
East Midnapore	0.1	-99	4.5	-73	8.4	-63
Hooghly	0.0	-100	35.1	35	1.1	-96
Howrah	0.0	-100	60.5	105	0.0	-100
Kolkata	0.0	-100	47.8	106	7.6	-75
Murshidabad	37.0	130	38.0	133	5.0	-81
Nadia	1.4	-92	52.9	202	1.0	-96
24 Pargana (N)	0.7	-96	26.1	50	1.0	-97
Purulia	0.0	-100	52.4	264	2.8	-80
24 Pargana (S)	0.0	-100	22.6	-30	1.8	-94
West Midnapore	0.0	-100	44.0	120	16.5	-44
SHWB & Sikkim	0.0	-100	77.0	120	10.5	
	26.6	57	172.7	170	05 (	10
Cooch Behar	26.6	-57	173.7	178	85.6	-19
Darjeeling	52.1	-1	103.7	77	51.4	-21
East Sikkim	41.1	-42	92.6	31	114.4	102
Jalpaiguri	34.6	-41	150.1	123	74.0	-23
Malda	64.8	221	59.4	200	2.5	-90

North Dinajpur	35.0	25	92.5	118	30.5	46
North Sikkim	40.0	-43	76.4	4	129.7	70
South Dinajpur	29.5	-15	0.0	-100	19.7	-59
South Sikkim	40.6	-43	72.8	3	100.5	78
West Sikkim	66.0	-7	56.5	-23	42.0	-45
Karnataka						
Coastal Karnataka						
Dakshina Kannada	67.4	270	87.5	119	0.6	-99
Udupi	15.4	0	69.0	53	0.6	-99
Uttara Kannada	32.2	236	39.5	50	0.4	-99
N I Karnataka						
Bagalkote	5.5	-14	5.6	-58	0.6	-97
Belagavi	41.6	338	18.2	-3	0.7	-97
Bidar	1.9	-57	8.3	13	0.0	-100
Dharwad	27.1	105	18.9	-3	0.2	-99
Gadag	8.4	-11	12.4	-36	1.0	-95
Haveri	24.8	94	33.5	68	0.0	-100
Kalaburgi	2.8	-55	2.1	-72	0.4	-96
Koppal	0.1	-98	14.0	-9	3.6	-78
Raichur	2.3	-67	14.0	32	1.0	-93
Vijayapura	9.6	84	3.1	-68	0.7	-96
Yadgir	11.2	81	7.0	-15	0.0	-100
S I Karnataka						
Ballari	8.3	-8	14.2	0	0.0	-100
Bangalore Rural	4.3	-70	79.0	224	1.7	-92
Bangalore Urban	3.9	-80	69.1	148	1.3	-95
Chamarajanagar	38.1	51	63.9	76	0.4	-99
Chikaballapur	8.0	-20	61.2	182	0.0	-100
Chikkamagaluru	34.2	152	61.5	90	0.1	-99
Chitradurga	12.7	26	40.1	112	0.0	-100
Davangere	19.5	46	46.9	129	0.0	-100
Hassan	32.2	69	55.3	93	0.5	-98
Kodagu	40.9	51	88.6	129	0.0	-100
Kolar	6.5	-53	87.3	299	3.6	-81
Mandya	33.0	<b>79</b>	84.6	195	1.5	-95
Mysuru	31.7	21	85.5	157	5.2	-84
Ramanagara	28.8	35	50.2	80	1.5	-95
Shivamogga	37.1	264	54.6	142	0.2	-99
Tumakuru	12.1	-10	31.1	17	1.4	-93
Kerala						
Alappuzha	49.0	-6	93.0	26	18.1	-77
Kannur	70.9	130	38.5	-40	1.9	-97
Ernakulam	61.1	46	22.7	-71	5.3	-94
Idukki	49.0	20	66.8	21	1.2	-98
Kasaragod	50.7	117	56.2	-8	3.8	-95
Kollam	31.7	-36	135.2	135	14.1	-76
Kottayam	100.3	109	65.3	-3	0.7	-99
Kozhikode	69.7	101	77.1	11	10.9	-85
Malappuram	45.6	9	96.5	72	3.6	-94

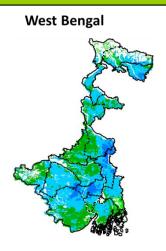
Palakkad	73.5	197	114.2	189	0.7	-98
Pathanamthitta	52.2	-12	81.1	22	0.4	-99
Thiruvanantapuram	55.5	49	225.8	287	32.3	-38
Thrissur	100.0	117	48.3	-38	2.4	-97
Wynad	64.7	153	82.0	77	0.3	-99
Tamil Nadu						
Ariyalur	9.3	-46	27.3	62	0.0	-100
Chennai	0.6	-94	5.8	-46	0.0	-100
Coimbatore	46.9	191	119.7	425	0.0	-100
Cuddalore	12.3	-3	47.1	254	0.2	-98
Dharmapuri	38.7	133	66.9	125	0.0	-100
Dindigul	31.6	63	142.2	622	0.0	-99
Erode	18.5	6	43.7	88	0.0	-100
Kanchipuram	0.9	-93	37.8	247	0.1	-99
Kanyakumari	43.0	52	181.9	410	29.9	4
Karikal	23.0	297	57.0	438	0.0	-100
Karur	18.5	52	67.0	289	0.0	-100
Krishnagiri	18.1	-6	63.6	127	0.0	-100
Madurai	49.5	159	59.6	277	0.0	-100
Nagapattinam	13.6	61	88.7	744	0.0	-100
Namakkal	18.7	4	31.8	32	0.0	-100
Nilgiris	75.8	229	100.9	211	0.6	-98
Perambalur	23.0	80	35.9	71	0.0	-100
Puducherry	16.2	-7	110.6	974	0.0	-100
Pudukottai	37.9	261	64.7	453	0.0	-100
Ramanathapuram	48.5	294	56.7	430	0.0	-100
Salem	27.3	45	59.3	102	0.0	-100
Sivaganga	26.8	58	67.3	426	0.0	-100
Thanjavur	41.6	197	33.3	178	0.0	-100
Theni	79.3	530	73.3	486	0.0	-100
Tirunelveli	28.4	112	51.4	385	0.0	-100
Tirupur	40.6	188	108.0	388	0.0	-100
Tiruvallur	0.2	-98	24.2	105	0.0	-100
Tiruvannamalai	0.4	-98	42.7	105	5.3	-65
Tiruvarur	39.1	221	71.6	575	0.0	-100
Toothukudi	38.3	321	27.4	256	0.0	-100
Trichy	16.4	25	44.2	182	0.0	-100
Vellore	0.7	-96	28.6	43	1.5	-93
Villupuram	7.2	-41	42.0	149	0.0	-100
Virudhunagar	50.8	199	52.3	219	0.0	-100
Andhra Pradesh						
Coastal Andhra Pradesh						
East Godavari	0.0	-100	23.7	72	0.0	-100
Guntur	0.0	-100	14.6	11	1.8	-87
Krishna	0.0	-100	20.4	39	0.0	-100
Nellore	0.0	-100	9.1	-15	1.8	-87
Prakasam	0.0	-100	7.6	-27	1.5	-91
Sirkakulam	4.9	-78	3.0	-78	0.6	-96
Visakhapatnam	10.2	-70	15.3	-26	1.1	-94

Vizianagram	8.9	-72	22.8	25	0.9	-95
West Godavari	0.4	-98	21.8	54	0.4	-96
Rayalaseema						
Anantapur	0.8	-90	29.7	109	0.0	-100
Chittoor	3.2	-76	27.5	49	0.7	-96
Cuddapah	0.0	-100	10.9	-6	0.0	-100
Kurnool	0.6	-94	15.3	39	0.0	-100
Telangana						
Adilabad	6.2	48	17.9	347	0.0	-100
Hyderabad	0.1	-98	3.6	-55	0.0	-100
Karimnagar	1.9	-73	12.8	151	0.0	-100
Khammam	8.6	-38	20.3	36	0.0	-100
Mehabubnagar	0.7	-90	10.5	10	1.8	-83
Medak	0.0	-100	16.1	133	0.0	-100
Nalgonda	0.0	-100	14.8	95	0.5	-94
Nizamabad	0.3	-96	22.2	326	0.4	-94
Rangareddy	0.1	-98	10.4	9	0.1	-99
Warangal	1.3	-79	14.5	63	0.0	-100

# Legends

	(20% or more) excess rainfall		(-60 to -99 %) scanty rainfall
	(-19 to +19%) normal rainfall		(-100%) no rainfall
	(-20 to -59%) deficient rainfall	**	Data not available

# INSAT 3A CCD NDVI COMPOSITE MAPS FOR THE WEEK ENDING ON 27<sup>th</sup> May 2015 FOR DIFFERENT STATES



Agricultural vigour is very good over the parts of West Bengal, whereas central and northern parts of West Bengal shows dominantly higher values of NDVI varying from 0.4-0.6. NDVI values are normal over remaining part of state.



Agricultural vigour is normal over the entire state of Uttar Pradesh where NDVI value varies from 0.2 -0.4.

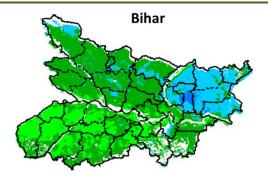
Uttarakhand



Agriculture vigour is very good over central parts of Uttarakhand with NDVI value varying between 0.4-0.6, whereas isolated patches with normal value of NDVI are observed over remaining parts of the state.



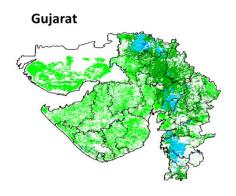
NDVI values vary from 0.2 - 0.5 over Telangana. Higher (> 0.4) values are seen over central and eastern parts of Telangana.



Eastern part of Bihar shows comparatively a high value (0.4-0.5) of NDVI, whereas normal value of NDVI is observed over the remaining parts of the state.



Agriculture vigour is normal all over Delhi where NDVI value lies between 0.2-0.3.

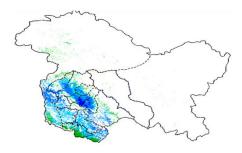


Agriculture vigour is good over central part of Gujarat where NDVI value lies between 0.4-0.5, whereas normal NDVI is observed in Kutch and Saurashtra.

# Himachal Pradesh

Agriculture vigour is very good over south and south western parts of Himachal Pradesh with NDVI value varying between 0.5-0.6, whereas isolated patches of normal NDVI are observed over remaining parts of the state.

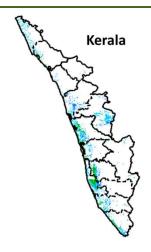
# Jammu & Kashmir



Agriculture vigour is normal all over Jammu and Kashmir. NDVI value varies in between 0.4-0.6 in south western parts.



Agriculture vigour is normal (0.2-0.3) over entire state of Jharkhand except the south east and north east districts that show increased NDVI value from 0.4-0.5.

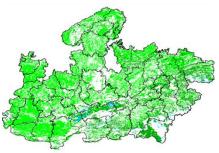


Central and coastal regions of Kerala show NDVI value varying from 0.3 to 0.5, whereas rest of agricultural vigour of Kerala shows good values of NDVI.



Agriculture vigour is normal over the state of Haryana. NDVI value varies between 0.2–0.3 over the state. Except in few patches in northern region with NDVI values between 0.4-0.5.

# Madhya Pradesh



Agriculture vigour is normal (0.2-0.3) over entire state Madhya Pradesh.

# Punjab



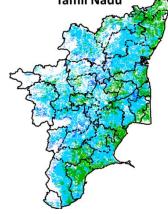
Agricultural vigour is normal over entire state of Punjab except North Eastern part, showing comparatively high NDVI value ranges from 0.4-0.6.

# Odisha



Agricultural vigour is good in eastern coastal and few pockets in western parts of Odisha with NDVI value ranging between 0.4 - 0.6. The remaining parts shows normal NDVI values.

# **Tamil Nadu**



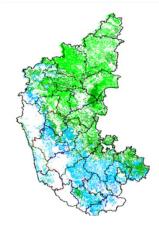
Agricultural vigour is normal over Tamil Nadu with NDVI values varying from 0.3 - 0.5. In western parts of Tamil Nadu NDVI show comparatively high values varying between 0.4-0.5 in some patches.

# Chhattisgarh



Agriculture vigour is good in central part of Chhattisgarh where NDVI value lies in between 0.2-0.3. South of state shows increased NDVI values in some pockets.

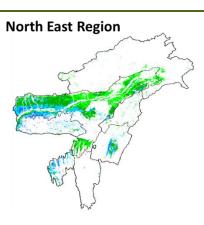
# Karnataka



Agriculture vigour is good over some pockets of south interior of Karnataka between 0.4-0.6. Rest of the parts shows normal NDVI values up to 0.2-0.3



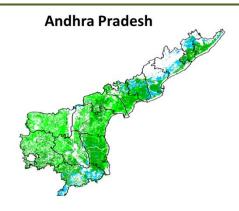
Agricultural vigour is good over south west part with NDVI values from 0.4 - 0.5, whereas NDVI is moderate over parts of Marathwada, Vidarbha and Madhya Maharashtra region .



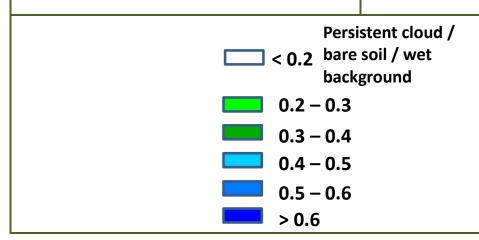
Agriculture vigour is good in valleys of North-East states which cover parts of Assam. NDVI values vary from 0.3-0.5. Normal NDVI conditions are observed all over NE region.



Agriculture vigour is normal (0.2-0.3) over entire state of Rajasthan.



Agriculture vigour vary from 0.3 - 0.4 over central and coastal parts of Andhra Pradesh whereas south of state shows dominantly increased NDVI values up to 0.5. The NDVI is normal over remaining parts of the state.



# Annexure III List of varieties

Karnataka

**Ragi:** GPU- 28,MR -01, 02 and 06, KMR-301. **Redgram:** TTB -7, BRG -01, BRG- 02,HYD -3C.

Tamil Nadu:

**Banana:** poovan, rasthali, monthan, karpooravalli and neypoovan.

Andhra Pradesh:

Rice: MTU-1010, Nellore masuri, Dharani, Shwetha. Sannalu, Swarna, Vasundhara, Suraksha, Vijetha.

Varieties for Early Kharif Rice Plantings - Pushkala, Rasi, IR64.

Assam

**Bau rice:** Maguri, Panikekua, Amona, Negheri, Kekua, Pani Kekua, Padmapani. **Summer green gram**: T-44, AAU-34, AAU-39, Pratap, Kopergaon, K-85, ML-55.

Summer black gram: T-9, Pant U-19, JU-78.

Okra: Pusa Sawani, Arka Anamika, Parbhdani Kranti.

Capsularis Jute: JRC 212, JRC 321(Sonali), JRC 7447 (Shyamali) and UPC 94(Reshma).

Olitorius Jute: JRO 524 (Navin), JRO 785 (Basudev), JRO 632(Baisakhtissa), Set-2 (Bahagi) and Tarun.

Kharif Maize: Hybrid variety: Ganga 5, Hi starch.

Composite variety like NLD, Dhawal, Naviot, Diara.

Normal hybrids: Ganga 11, Deccan 107, Deccan 109, Vivek 9.

Quality Protein Hybrid: HQPM-1.

Normal Composite variety: NLD, Parbhat, Novjot, Pusa Comp 1 & 2.

Quality Protein composite: Shakti-1.

Cucumber: Pusa Sanyog, Chinese Green etc.

Ridge Gourd: Pusa Nasdar and selected local varieties.

Sugarcane: Kolong, Luhit, Dhansiri, Co 1148, Co 6315, Co 997, 80/77 (Co BLN 9104), 43/83 (Co BLN 9605).

Summer sesame: TC 25, Vinayak.

Ginger: Rio-de-Generio, Nadia, Moran, Jorhat, Karkai, Chaina.

Summer sesame: TC 25 and Vinayak.

Turmeric: Shillong Type, Tall clone, CL-24, PTS-38, PCT-13, PCT-13, VK-145.

Banana: Dwarf Cavendish (Dwarf Cultivar), Cheni Champa, Malbhog (Medium Tall cultivars).

Sword sucker of dwarf variety: Jahaji.

Medium tall variety: Chenichampa, Malbhog, Barjahaji.

Papaya: Ranchi, Washington, Halflong, Coorg Honeydew.

Mesta: HC 583 and AMC 108.

**Arunachal Pradesh** 

**Jhum rice**: Bhalum1,2,3 & 4.

**Manipur** 

Okra: Pusa Sawani, Arka Anamika.

Turmeric: Megha turmeric.

Ginger: Nadia. Soybean: JS-335. Groundnut: ICGS-76.

Tripura:

Urad: T-9, PanthUrd 35.

Green Gram: PDM 139 (Samrat), TMV 37. Cowpea: Maharaja, Kasi Kanchan.

Jhum rice: Garo Malati, Binnietc.

Meghalava

Jhum rice: Bhalum 1, 2, 3; IRAT 109, IR 50.

**Ginger**: Nadia, Poona, Riodegenerio. **Turmeric**: Lakadong, RCT-1.

Odisha

Sunflower: Morden, Sunrise, Surya and Hybrid varieties like KBSH-1, KBSH-3 and MSFH.

Onion: Nasik Red, Patna Red, Pune Red, Bellary Red, Pusa Ratnar, Pusa Madhavi, Arka Niketan ,Arka Pragati.

Ragi: HYVs. like Subhra, Vairabi, Dibyasingh, Nilachala, Subhra, Godavari and Chilka...

Sesame: Uma, Kalika, Kanak, Nirmala, Prachi, Usha.T.

Turmeric: Roma, Surama, Rang, Rashmi

Jute:JRO-524(Naveen)

#### Bihar

Moong: Pusa Vishal, Samrat, SML-668, Sona varieties are recommended for moong.

**Urad:** Pant U-19 and Pant U-31, Uttra and Type-9 for Urad.

Maize: Suwan, Deevki, Ganga-11, Shaktiman-1 and Shaktiman-2.

## Jharkhand:

Summer rice: IR-36, IR-64, Naveen, lalat, Parijat (80-85 days).

Summer maize: Birsa Makka-1, Birsa Makka-2, Suwan-1(Hybrid), HQPM (Hybrid).

Green gram: mung S.M.L.- 668.

Sugarcane: BO 147.

## Jammu & Kashmir

Onion: Agrifound Parvati, Pusa red, N-53.

Rice: IET-1410, K-39, Ratna, PC-19, Jaya, China-1039and Giza-14.

Maize: Vijay, Mansar, Him - 123, C 6 & C 8

## Uttarakhand

Tomato: VL Tomato-3, Pant T-3, Him Sona, Him Shikhar.

Capsicum: California Vander, Pus Dipti, Anupam. Heera, Indira, Supriya & Bharat.

Potato: Kufri- Jyoti, Ashok, Anand.

Moong: Pant Moong-2, Pant Moong-4, Pant Moong-5, Pant Moong-6, Narendra Moong-1

#### **Himachal Pradesh**

Late variety of Cauliflower: broccoli.

Cauliflower: Pusa-snowwall.

Radish: Japanese white, Chinese pink and mino early white.

Capsicum: solan hyb-1,california wonder,yolo wonder ,vl shimla mirch-2.

Brinjal:plr-1,azad (hybrid), Arka Nidhi, Arka Keshav, Hisar Shaymal, PPC, F1 Chhaya, F1 Sandhya.

Tomato: solan gola, Palam Pink, Palam Pride, F1 Avtar, F1 Rakshita.

Chilli: Surajmukhi. Sunflower: EC-68415. Moong: Pusa Baishakhi.

Mash:UG-218.

Garden pea: PalamPriya, Azad P-1, PB-89, PalamSamool and Lincoln.

**Carrot:**Nantes and Chantenay. **Palak:**PusaHarit. Pusa Bharti.

## East Uttar Pradesh

Moong: samrat,hum-2, hum-12, malviyajanchetana, malviyajoyti, neredra moong-1.

**Urad:** T-9, azad urd-1, azadurd-2, shekher-2.

**Sugar cane:** coj-64, cos-96268, cos-98231, cos-767, cos-84, cos-32, copant-84212 ,etc.

Maize: pusa, agatishanker, makka-2, azad, uttam, sweta, Prakash.

# West Uttar Pradesh

Ladies finger: VRO-6, VRO-5

Rice:PRH 10, PB1, Pusa 1509, Sugandha5

Pigeon pea:T-21, UPAS 120

Cotton: H777, Dhanalakshami, HD107 For fodder Jowar: JS 120, Lobia 88

#### Punjab

Sugarcane: CoJ-85, CoJ-83, CoJ-64 (early maturing), COH-119, CoJ-88, CoS-8436 for and CoJ-89.

## Rajasthan

Sugarcane (late sown): COL8001.

# <u>Gujarat</u>

**Groundnut:** GG-20, GG-11. **Hybrid cotton:** G. cot. 6, 8, 10.

B.T. Cotton: Gujarat Talod Hirsutam Hybrid -49 (Bolegaurd-2) or Govt. approved varieties.

**Sweet corn:** American Hybrid-1.