

# National Agromet Advisory Service Bulletin

**Friday 28<sup>th</sup> March 2014**

**(For the period 28<sup>th</sup> March to 1<sup>st</sup> April 2014)**

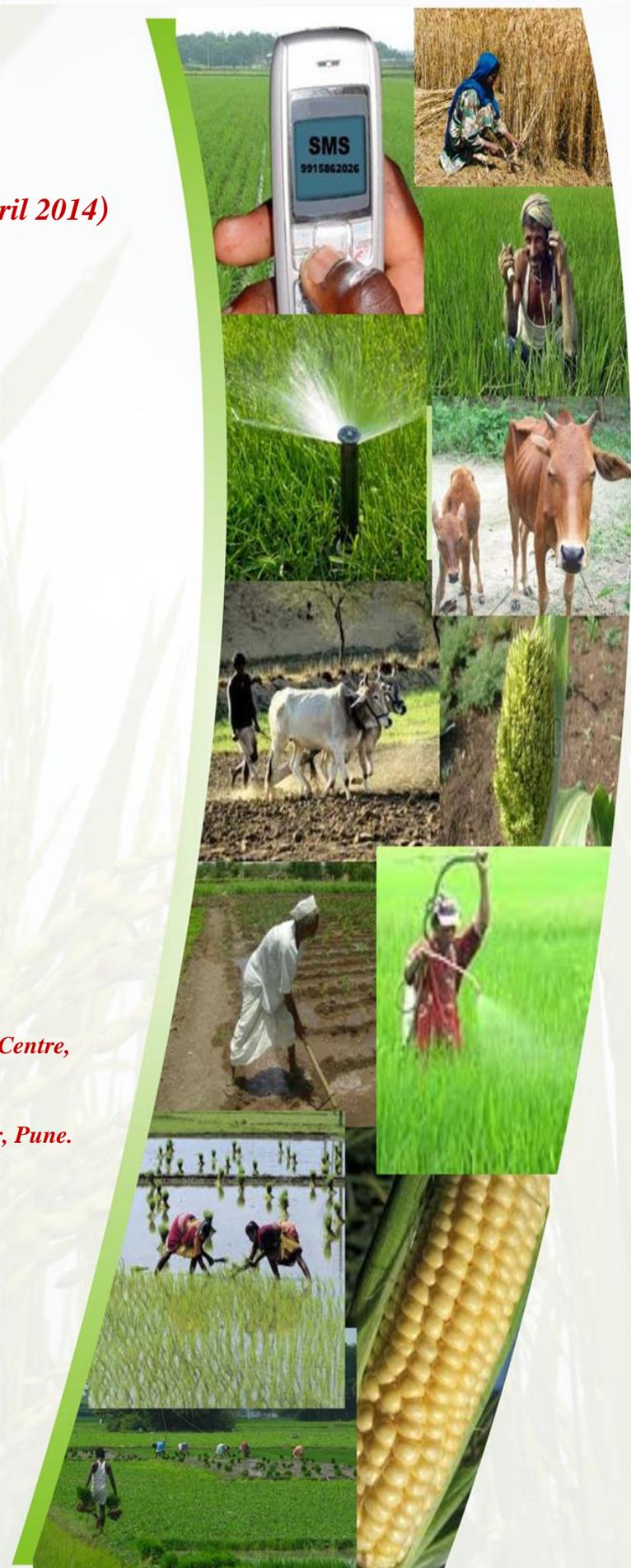


**Issued by**

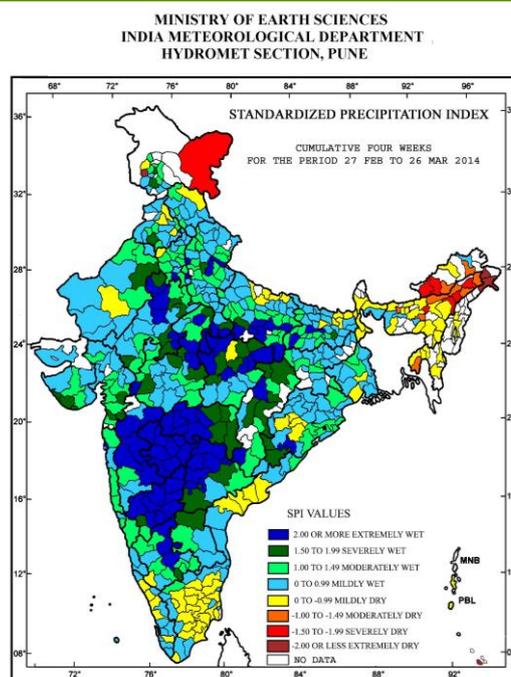
**National Agrometeorological Advisory Service Centre,**

**Agricultural Meteorology Division,**

**India Meteorological Department, Shivajinagar, Pune.**



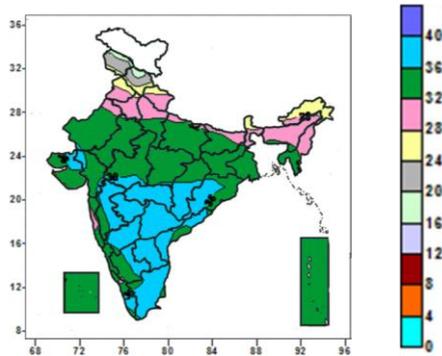
**Standardised Precipitation Index  
Four Weekly  
for the Period 27<sup>th</sup> February to 26<sup>th</sup> March 2014**



- Extremely wet/severely wet conditions experienced over most parts of Uttar Pradesh, Madhya Pradesh, Maharashtra, some parts of Andhra Pradesh, Rajasthan; Karnataka; Koraput, Nawarangpur, Rayagada districts of Odisha, Monghyr, Patna, Rohtas districts of Bihar, Udhamasinghnagar district in Uttarakhand, Gurgaon, Faridabad, Rewari, Chandigarh, Bhatinda in Punjab & Haryana; Reasi, Pulwama districts in Jammu & Kashmir; Dangs, Narmada, Navsari, Junagarh, Porbandar, Diu districts in Gujarat & Saurashtra & Kutch; Bilaspur in Himachal Pradesh, Durg, Janjgir, Koriya, Raipur, Surguja districts in Chattisgarh.
- Moderately/ severely dry conditions experienced over East Siang, Papumpara districts of Arunachal Pradesh, Lakimpur, Sibsagar, Karimganj, Sonitpur, Bongaigaon, Tinsukia, Kamrup Metro districts of Assam and South Tripura district of Tripura.
- Extremely dry conditions experienced over Changlang, East Kameng, Lohit, West Kameng districts in Arunachal Pradesh, Dibrugarh, Jorhat, Morigaon, Golaghat districts of Assam, Ladakh(Leh), Poonch districts of Jammu & Kashmir.
- Rest of the country experienced mild wet/dry conditions.

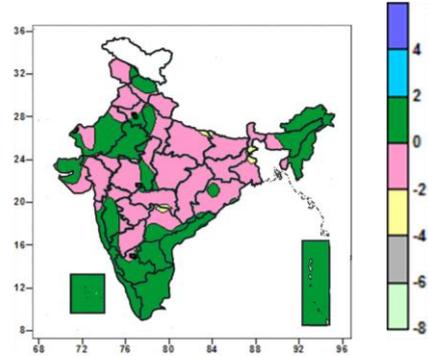
## Contour maps for Mean Maximum and Minimum Temperature and their anomaly for the week ending on 26.03.2014

**Actual Mean Maximum Temperature ( $^{\circ}\text{C}$ ) in India for the week ending 26.03.2014**



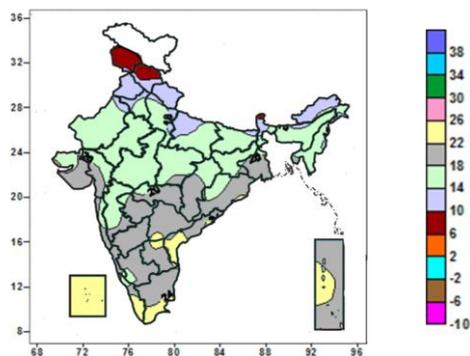
- 32 to 40 $^{\circ}\text{C}$  over all parts of country except many parts of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Delhi, North West Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur some parts of Uttar Pradesh, Bihar, Konkan and Coastal Karnataka.
- 24 to 32 $^{\circ}\text{C}$  over many parts of Uttarakhand, Punjab, Haryana, Delhi, North West Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur some parts of Uttar Pradesh, Bihar, Konkan and Coastal Karnataka.
- 20 to 24 $^{\circ}\text{C}$  over many parts of Jammu & Kashmir, Himachal Pradesh.
- 16 to 20 $^{\circ}\text{C}$  over some parts of Jammu & Kashmir, Himachal Pradesh.

**Mean Maximum Temperature ( $^{\circ}\text{C}$ ) Anomaly in India for the week ending 26.03.2014**



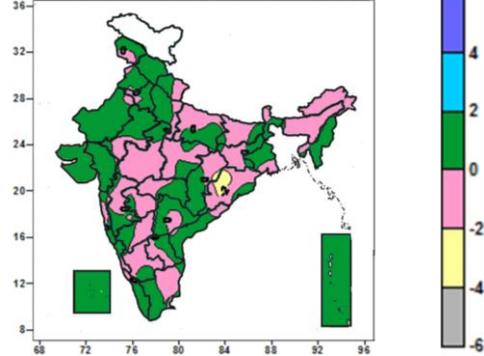
- 0 to 2 $^{\circ}\text{C}$  over many parts of Himachal Pradesh, Haryana, Delhi, Rajasthan, Saurashtra & Kutch, North East India, Coastal Andhra Pradesh, Raylaseema, Tamil Nadu, Kerala. Coastal & South Interior Karnataka, Madhya Maharashtra, Konkan & Goa, some parts of Jammu & Kashmir, Madhya Pradesh, Vidarbha, Odisha, Gujarat, Telanagana and North Interior Karnataka.
- -2 to 0 $^{\circ}\text{C}$  over over all parts of country except many parts of Himachal Pradesh, Haryana, Delhi, Rajasthan, Saurashtra & Kutch, North East India, Coastal Andhra Pradesh, Raylaseema, Tamil Nadu, Kerla. Coastal & South Interior Karnataka, Madhya Maharashtra, Konkan & Goa, some parts of Jammu & Kashmir, East Uttar Pradesh, Bihar, Madhya Pradesh, Vidarbha, Odisha, Gujarat, Telanagana and North Interior Karnataka..
- -4 to -2 $^{\circ}\text{C}$  over some parts of East Uttar Pradesh, Bihar, West Bengal, Vidarbha, Telanagana.

**Actual Mean Minimum Temperature ( $^{\circ}\text{C}$ ) in India for the week ending 26.03.2014**



- 6 to 10 $^{\circ}\text{C}$  over many parts of Jammu & Kashmir, Himachal Pradesh, some parts of Sikkim.
- 10 to 14 $^{\circ}\text{C}$  many parts of Uttarakhand, Punjab, Arunachal Pradesh, Sub-Himalayan West Bengal & Sikkim, some parts of Haryana, Uttar Pradesh, Bihar, Assam, West Rajasthan.
- 14 to 22 $^{\circ}\text{C}$  over all parts of country except many parts of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Arunachal Pradesh, Sub-Himalayan West Bengal & Sikkim, Kerala, Lakshadweep Islands, some parts of Haryana, Uttar Pradesh Bihar, Assam, West Rajasthan, Andhra Pradesh, Tamil Nadu, Andaman & Nicobar Islands.
- 22 to 26 $^{\circ}\text{C}$  over many parts of Kerala, Lakshadweep Islands, some parts of Andhra Pradesh, Tamil Nadu, Andaman & Nicobar Islands.

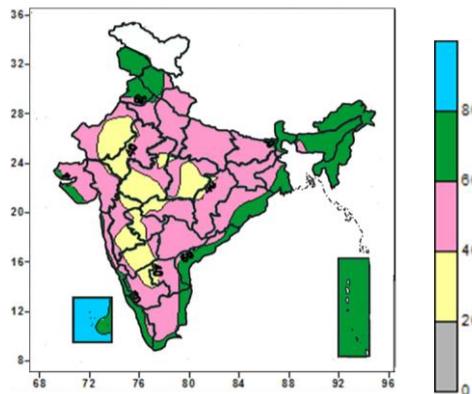
**Mean Minimum Temperature ( $^{\circ}\text{C}$ ) Anomaly in India for the week ending 26.03.2014**



- -4 to -2 $^{\circ}\text{C}$  over some parts of Chattisgarh, Odhisa.
- -2 to 2 $^{\circ}\text{C}$  over all parts of country except some parts of Chattisgarh and Odhisa.

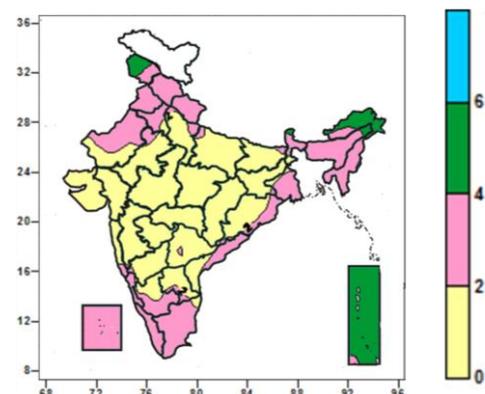
## Contour maps for Relative Humidity, Cloud amount and Wind speed for the week ending on 26.03.2014

**Relative Humidity (%) over India for the week ending 26.03.2014**



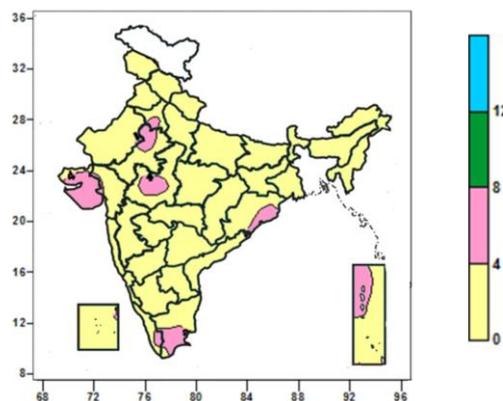
- 80 to 100% over many parts of Lakshadweep Islands.
- 40 to 80% over entire country except many parts of West Rajasthan, Madhya Pradesh, Madhya Maharashtra, Interior Karnataka, some parts of Gujarat, East Rajasthan, Marathawda, Vidarbha, Raylaseema South Interior Karnataka and Lakshadweep Islands.
- 20 to 40% over many parts of West Rajasthan, Madhya Pradesh, Madhya Maharashtra, Interior Karnataka, some parts of Gujarat, East Rajasthan, Marathawda, Vidarbha, Raylaseema and South Interior Karnataka.

**Cloud amount (okta) over India for the week ending 26.03.2014**



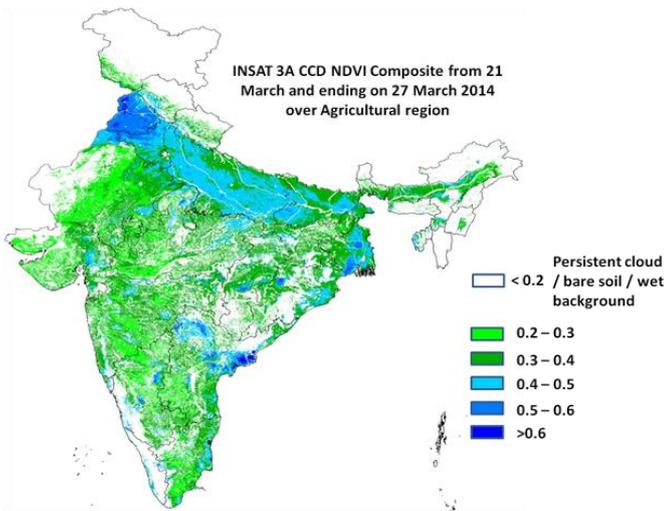
- 4 to 6 okta over many parts of Arunachal Pradesh, Andaman & Nicobar Islands, some parts of Jammu & Kashmir.
- 0 to 4 okta over entire country except many parts of Arunachal Pradesh, Andaman & Nicobar Islands, some parts of Jammu & Kashmir.

**Wind speed (knots) over India for the week ending 26.03.2014**



- 4 to 8 knots over many parts of Saurashtra & Kutch, some parts of Haryana, East Rajasthan, Coastal Odisha, West Madhya Pradesh, Tamil Nadu, Kerala, and Andaman & Nicobar Islands.
- 0 to 4 knots over entire country except many parts of Saurashtra & Kutch, some parts of Haryana, East Rajasthan, Coastal Odisha, West Madhya Pradesh, Tamil Nadu, Kerala, and Andaman & Nicobar Islands.

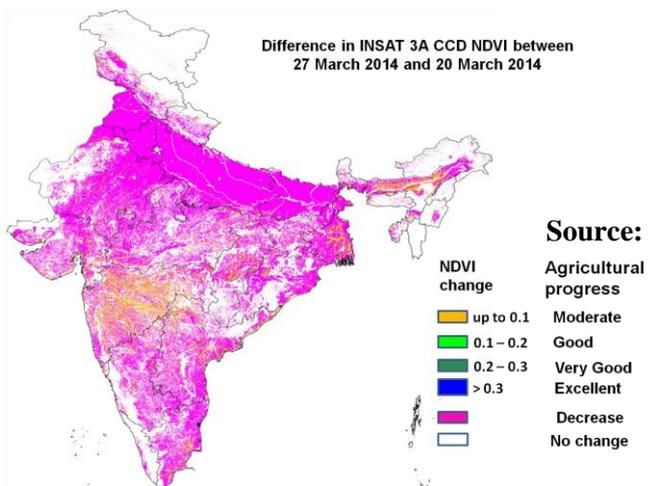
## INSAT 3A CCD NDVI COMPOSITE OVER AGRICULTURAL REGION 21<sup>st</sup> – 27<sup>th</sup> March 2014



**Source: SAC, Ahmedabad**

Agricultural vigour is in generally very good over pockets of central and north-west of Punjab and few pockets of coastal AP as NDVI exceeds 0.5. Agricultural vigour is moderate in north Haryana, major part of western, eastern and central UP and western Bihar, pockets of central Gujarat and few pockets of eastern MP, central West Bengal and north AP where, NDVI is in the range of 0.4 to 0.5 upto 27<sup>th</sup> March 2014. The NDVI remains within the range of 0.2 to 0.4 over rest of India.

## Difference in INSAT 3A CCD NDVI between 27<sup>th</sup> March and 20<sup>th</sup> March 2014



**Source: SAC, Ahmedabad**

Agricultural progress was found to be moderate over few pockets of central West Bengal and eastern Maharashtra. Major part of India showed decay in agricultural vigour as compared to past week may be due to maturity of *rabi* crop.

## Weather Forecast

### Weather Forecast for next 3 days (upto 0830 hours IST of 31st March, 2014)

- Rain/thundershowers would occur at many places over Jammu & Kashmir during next 48 hours and at a few places thereafter.
- Rain/thundershowers would occur at many places over Himachal Pradesh and Uttarakhand during next 48 hours and at isolated places thereafter.
- Rain/thundershowers would occur at isolated places over Punjab, Haryana & Delhi during next 48 hours and mainly dry thereafter.
- Rain/thundershowers would occur at isolated places over Uttar Pradesh and Rajasthan during next 48 hours and over Madhya Pradesh and Chhattisgarh during next 24 hours and mainly dry thereafter.
- Rain/thundershowers would occur at isolated places over Jharkhand, Bihar, West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- Mainly dry/dry weather would prevail over rest of the country.

### Weather Warning during next 3 days

**28 March (Day1):** Moderate thundersquall/hailstorm would occur at isolated places over Jammu division of Jammu & Kashmir, Himachal Pradesh and Uttarakhand.

Isolated thundersquall/hailstorm would occur over Punjab, Haryana & Delhi, north Rajasthan, west Uttar Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura.

**29 March (Day 2):** Moderate thundersquall/hailstorm would occur at isolated places over Jammu division of Jammu & Kashmir, Himachal Pradesh and Uttarakhand.

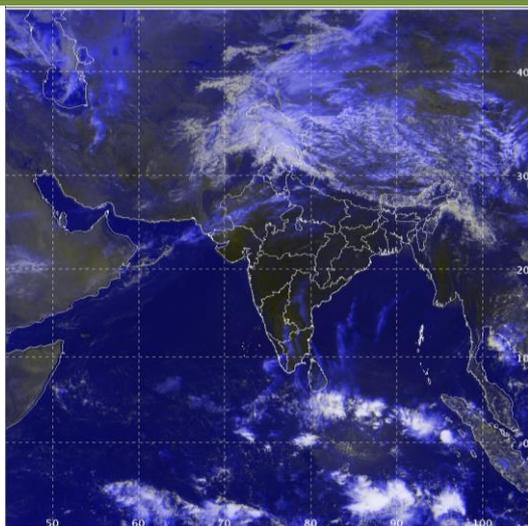
Isolated thundersquall/hailstorm would occur over Punjab, Haryana & Delhi, north Rajasthan, west Uttar Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura.

**30 March (Day 3):** No weather warning.

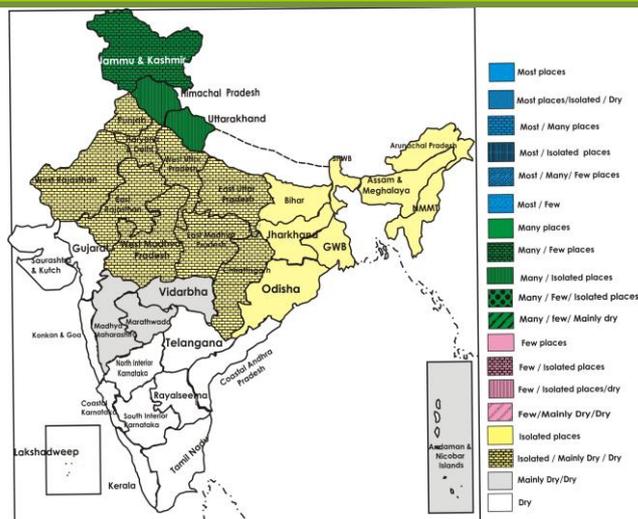
### Weather Outlook for subsequent 4 days from 31<sup>st</sup> March to 4<sup>th</sup> April, 2014

- A fresh western disturbance would affect western Himalayan region from 2nd April onwards.
- Maximum temperatures would rise by 2-4° C over parts of northwest, central and adjoining east India.
- Rain/thundershowers would occur at a few places over northeastern states.
- Weather would be mainly dry over rest of the country.

Satellite image dated 28.03.2014, 0600 UTC



Weather Forecast Map (Valid upto 0830 hours of 31<sup>st</sup> March, 2014)



## Salient Advisories

- As rain/thundershowers would occur at many places over **Jammu & Kashmir, Himachal Pradesh** and **Uttarakhand** during next 48 hours, postpone irrigation, intercultural operation and application of plant protection measures and fertilizers in the standing crops. Postpone harvesting of crops and keep already harvested produce at safe places.
- As moderate thundersquall / hailstorm would occur at isolated places over Jammu division of **Jammu & Kashmir, Himachal Pradesh** and **Uttarakhand** on 28<sup>th</sup> and 29<sup>th</sup> March, use hail net for orchard crops to protect from mechanical damage. Also provide mechanical support to fruit crops and vegetables.
- As thundersquall / hailstorm would occur at isolated places over north **Rajasthan**, west **Uttar Pradesh, Punjab, Haryana** and **Delhi** on 28<sup>th</sup> and 29<sup>th</sup> March, use hail net for orchard crops to protect from mechanical damage. Also provide mechanical support to fruit crops and vegetables.
- As isolated thundersquall / hailstorm would occur over **Assam, Meghalaya, Nagaland, Manipur, Mizoram** and **Tripura** on 28<sup>th</sup> and 29<sup>th</sup> March, use hail net for orchard crops to protect from mechanical damage. Also provide mechanical support to banana, fruit crops and vegetables.
- As mainly dry / dry weather would prevail, irrigate the bajra and green gram crop at regular intervals and continue harvesting of cumin in **North Gujarat Zone**. Provide irrigation at 5 to 9 days interval by making double ring in papaya orchard.
- As dry weather is expected, apply irrigation in early season and mid-season sugarcane crop in the Western Zone of **Tamil Nadu**.
- Due to rise in temperature, woolly aphid infestation was noticed in 4 to 6 months old sugarcane crop in the North Western Zone of **Tamil Nadu**. Spray Acephate 2 g or Monocrotophos 2 ml per litre of water two times at 15 days interval to manage the pest.

## *Detailed Zonewise Agromet Advisories*

### NORTH INDIA [Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Delhi, Uttar Pradesh & Rajasthan]



*Wheat*



*Sugarcane*



*Mustard*

- **Realised Rainfall:** Significant rainfall occurred in Chamba, Kangra, Kullu and Shimla districts in Himachal Pradesh; Bhatinda, Faridkot, Gurdaspur and Muktsar districts in Punjab; Anantnag, Baramula, Doda, Ganderbal, Kathua, Kulgam, Kupwara, Rajouri, Ramban, Reasi and Udampur districts in Jammu & Kashmir and Sri Ganganagar district in West Rajasthan. Mainly dry weather prevailed over rest of the region.
- **Weather Forecast:** Rain/thundershowers would occur at many places over Jammu & Kashmir during next 48 hours and at a few places thereafter. Rain/thundershowers would occur at many places over Himachal Pradesh and Uttarakhand during next 48 hours and at isolated places thereafter. Rain/thundershowers would occur at isolated places over Punjab, Haryana & Delhi during next 48 hours and mainly dry thereafter. Rain/thundershowers would occur at isolated places over Uttar Pradesh and Rajasthan during next 48 hours and mainly dry thereafter. Mainly dry/dry weather would prevail over rest of the region.
- **Weather Warning:** 28 March (Day1): Moderate thundersquall/hailstorm would occur at isolated places over Jammu division of Jammu & Kashmir, Himachal and Uttarakhand. Isolated thundersquall/hailstorm would occur over Punjab, Haryana & Delhi, north Rajasthan, and west Uttar Pradesh.  
29 March (Day 2): Moderate thundersquall/hailstorm would occur at isolated places over Jammu division of Jammu & Kashmir, Himachal and Uttarakhand. Isolated thundersquall/hailstorm would occur over Punjab, Haryana & Delhi, north Rajasthan and west Uttar Pradesh.  
30 March (Day 3): No weather warning.
- **Weather Outlook:** A fresh western disturbance would affect western Himalayan region from 2<sup>nd</sup> April

onwards. Maximum temperatures would rise by 2-4° C over parts of northwest India. Weather would be mainly dry over rest parts of the region.

- **Advisories:**

- **Jammu & Kashmir:**

- As rain/thundershowers would occur at many places over Jammu & Kashmir during next 48 hours, postpone irrigation, intercultural operation and application of plant protection measures and fertilizers in the standing crops. Postpone harvesting of crops and keep already harvested produce at safe places.
- As moderate thundersquall / hailstorm would occur at isolated places over Jammu division of Jammu & Kashmir on 28<sup>th</sup> and 29<sup>th</sup> March, use hail net for orchard crops to protect from mechanical damage. Also provide mechanical support to fruit crops and vegetables.
- Avoid water stagnation in wheat and maize fields in the Sub Tropical Zone of Jammu & Kashmir.

- **Himachal Pradesh:**

- As rain/thundershowers would occur at many places in Himachal Pradesh during next 48 hours, postpone irrigation, intercultural operation and application of plant protection measures and fertilizers in the standing crops. Postpone harvesting of crops and keep already harvested produce at safe places.
- As moderate thundersquall / hailstorm would occur at isolated places Himachal Pradesh on 28<sup>th</sup> and 29<sup>th</sup> March, use hail net for orchard crops to protect from mechanical damage. Also provide mechanical support to fruit crops and vegetables.
- Due to humid conditions, there may be attack of leaf miner in peas at pod formation stage in Sub-Montane & Low Hills Sub-Tropical Zone of Himachal Pradesh. For control, spray 100 ml Methyl Damiton per 100 litres of water after current spells of rain.
- Due to humid conditions, there are chances of occurrence of downey mildew in onion in Mid-Hills Sub-Humid Zone and Sub-Montane & Low Hills Sub-Tropical Zone of Himachal Pradesh. For control, spray Redomil M-Z @ 25g per 10 litres of water after current spells of rain. Dieback disease in onion is also observed in some pockets, for control spray Dithane M-453g.litres+1g Bavistin per litre of waters after current spells of rain. After 10 days, spray Redomil M-Z 2g per litres of water.
- Due to high moisture, there are chances of stalk rot in cabbage and cauliflower in Mid-Hills Sub-Humid Zone of Himachal Pradesh. Remove the diseased part (leaf/fruit) and spray Bavistin-50 (50g /100 litres of water) or Dithane M-45 (250 g /100 litres of water) after current spells of rain.

- **Uttarakhand:**

- As rain/thundershowers would occur at many places in Uttarakhand during next 48 hours, postpone irrigation, intercultural operation and application of plant protection measures and fertilizers in the standing crops. Postpone harvesting of crops and keep already harvested produce at safe places.
- As moderate thundersquall / hailstorm would occur at isolated places in Uttarakhand on 28<sup>th</sup> and 29<sup>th</sup> March, use hail net for orchard crops to protect from mechanical damage. Also provide mechanical support to fruit crops and vegetables.
- Due to prevailing high humidity, there is chance of rust infestation in wheat in Sub-Humid Sub-Tropic Zone of Uttarakhand. If brown or yellow strip/patches appear on leaf surface, spray fungicide Propiconazole 25% EC with 500-600 liter water after current spells of rain.
- Due to partly cloudy and humid weather, late sown peas are susceptible to attack of powdery mildew in Sub humid Sub Tropic Zone of Uttarakhand, for effective control spray Sulphur fungicide Karathane 40EC @ 0.05% after current spells of rain.

- **Punjab, Haryana and Delhi:**

- As thundersquall / hailstorm would occur at isolated places over Punjab, Haryana and Delhi on 28<sup>th</sup> and 29<sup>th</sup> March, use hail net for orchard crops to protect from mechanical damage. Also provide mechanical support to fruit crops and vegetables.
- Utilising the available moisture, undertake transplanting of chilli and sowing of cucurbits namely muskmelon, watermelon, bottle gourd, round gourd, sponge gourd, pumpkin, bitter gourd and other summer vegetables viz. okra, cowpea, cluster bean in Western Zone of Punjab and summer moong and summer mash in Western Plain Zone.
- Due to partly cloudy and humid weather, there is chance of attack of pod borer in green gram in Sub-Montane Undulating Zone of Punjab. To control, spray 200 ml Indoxacarb 14.5 SC or 60 ml Spinosad 45 SC in 80-100 litre of water. Repeat the spray after 15 days.
- Due to partly cloudy and humid weather, there is chance of incidence of powdery mildew disease in wheat crop in Western Zone of Punjab; spray Karathane 40EC @ 0.05% (100 ml in 200 litres of water) or Tilt 25EC @ 200ml in 200 litres of water per acre.
- As mainly dry weather would prevail in Eastern Zone of Haryana, continue harvesting of matured mustard and gram in Western Zone of Haryana.
- In Delhi, continue harvesting of the matured mustard crop in clear weather. Undertake sowing of maize, hybrid cluster bean, French bean, amaranths, vegetable lobia, okra, bottle gourd, cucumber, ridge gourd, summer

radish, green gram and black gram.

- Due to partly cloudy sky and humid weather there may be attack of pod borer in gram in Delhi. If pest population reaches above ETL, spray Spinosad 48 EC @ 1 ml. /4 litres of water.
- **Uttar Pradesh:**
- As isolated thundersquall / hailstorm would occur over west Uttar Pradesh on 28<sup>th</sup> and 29<sup>th</sup> March, use hail net for orchard crops to protect from mechanical damage. Also provide mechanical support to fruit crops and vegetables.
- Utilizing the available moisture, continue sowing of moong, urad, lobia, bhindi and cucurbits and planting of tomato, brinjal and chilli in Western Plain Zone of Uttar Pradesh.
- As mainly dry weather is prevailing, apply irrigation in wheat, in late sown barley crop at milking stage, in onion and other vegetable crops. Also undertake harvesting of matured mustard in Central Plain Zone of Uttar Pradesh.
- Due to high humidity, there is chance of attack of yellow rust in wheat. For control, spray Propiconazole 25 EC @ 1 mm per litre of water in Western Plain Zone of Uttar Pradesh.
- **Rajasthan:**
- As isolated thundersquall / hailstorm would occur over north Rajasthan on 28<sup>th</sup> and 29<sup>th</sup> March, use hail net for orchard crops to protect from mechanical damage. Also provide mechanical support to fruit crops and vegetables.
- As dry weather is prevailing, apply irrigation in the early sown summer cucurbits like bottle gourd, ridge gourd, pumpkin, bitter melon, tindora etc. in Semi Arid Eastern Plain Zone and also in late sown wheat at milk stage in Sub-Humid and Southern Plain and Aravali Hill Zone of Rajasthan.
- Due to rise in temperature, there is chance of incidence of thrips in onion and garlic in Transitional Plain Zone of Inland Drainage and Semi-Arid Eastern Plain Zone. For control, spray Methyl Demeton 25 EC or Malathion 50 EC @ 1 ml per litre of water.
- In the prevailing temperature conditions, there is chance of incidence of red pumpkin beetle in cucurbits in Transitional Plain Zone of Inland Drainage of Rajasthan. For control, dusting of Malathion 5% or Methyl Parathion 2% dust @ 25kg.
- **Animal Husbandry**
- In Jammu division of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, west Uttar Pradesh, Punjab, Haryana, Delhi, and north Rajasthan, keep cattle/goats indoor during thunder squall/ hail storm period.
- Due to prevailing hot weather, give salt and minerals in addition to dry/green fodder to the cattle in Central Plain Zone of Uttar Pradesh.
- **Poultry**
- Due to prevailing hot weather conditions, give balanced feed to the poultry birds in Central Plain Zone of Uttar Pradesh. Make proper ventilation in poultry sheds and keep the sheds clean.

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



*Wheat*



*Sugarcane*



*Chilli*



*Mustard*

- **Realised Rainfall:** Weather remained mainly dry/dry over the region.
- **Weather Forecast:** Rain/thundershowers would occur at isolated places over Madhya Pradesh and Chhattisgarh during next 24 hours and mainly dry thereafter. Mainly dry/dry weather would prevail over rest of the region.
- **Weather Warning:** No weather warning.
- **Weather Outlook:** Maximum temperatures would rise by 2-4°C over parts of central India. Weather would be mainly dry over the region.
- **Advisories:**
  - **Madhya Pradesh:**
  - As dry weather would prevail, continue harvesting of matured gram and wheat in Malwa Plateau Zone and Vindhya Plateau Zone and gram, mustard and maize in Jhabua Hill Zone of Madhya Pradesh.
  - As mainly dry weather would prevail, harvest matured mustard and potato in Grid Zone and Bundelkhand

Zone of Madhya Pradesh.

- Due to the prevailing hot weather, there is possibility of attack of stem borer in maize in Nimar Valley Zone of Madhya Pradesh. Apply Methyl- o-Demeton 25 EC 10 ml or Carbaryl 50% W.P. 40 g in 10 litre of water.
- In the prevailing temperature conditions, there is possibility of attack of sucking pest in mango in Bundelkhand Zone of Madhya Pradesh. Spray Dimethoite @ 2ml/ litre of water for control.
- **Chhattisgarh:**
- As mainly dry weather would prevail, continue harvesting of matured gram, black gram and linseed in Plain Zone of Chhattisgarh.
- As mainly dry weather is prevailing, apply irrigation in vegetables and apply mulch or paddy straw in between the rows of summer moong to reduce evapo-transpiration rate in Plain Zone of Chhattisgarh.
- In North Hill Zone of Chhattisgarh, as mainly dry weather would prevail continue harvesting of matured wheat, mustard and arhar crop. As temperature conditions are favourable, continue sowing of vegetables like pumpkin, cucumber, sponge-gourd etc. and planting of spring planted sugarcane and continue sowing of summer maize.
- As mainly dry weather would prevail, apply irrigation to summer rice, maize, sugarcane and summer vegetable crops in North Hill Zone of Chhattisgarh.
- Due to prevailing hot weather, there is possibility of attack of yellow stem borer in summer rice in Plain Zone of Chhattisgarh. Apply Cartap @ 20 kg/ha for control.

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



*Mustard*



*Sugarcane*



*Cole crops*



*Onion*

- **Realised Rainfall:** Significant rainfall occurred in all the districts of Sikkim, in Howrah and South 24 Parganas districts of Gangetic West Bengal, in Ganjam, Jagatsinghpur, Mayurbanj and Rayagada districts of Odisha. Mainly dry/dry weather prevailed over rest of the region.
- **Weather Forecast:** Rain/thundershowers would occur at isolated places over Jharkhand, Bihar, West Bengal & Sikkim. Mainly dry/dry weather would prevail over rest of the region.
- **Weather Warning:** No weather warning.
- **Weather Outlook:** Maximum temperatures would rise by 2-4°C over parts east India adjoining central India. Weather would be mainly dry over the region.
- **Advisories:**
  - **Odisha:**
  - As mainly dry weather would prevail, continue harvesting of green gram and black gram in Western Undulating Zone of Odisha.
  - As weather would be mainly dry, apply irrigation in summer rice and maintain 5 cm of water level in North Eastern Coastal Plain Zone of Odisha. Apply 50% N as top dressing at 21 days after transplanting.
  - Prevailing dry weather is conducive for occurrence of white grub and termite in groundnut in North Eastern Plateau Zone of Odisha. For control, apply Chloripyriphos @ 2 ml/litre of water.
  - Increased difference between daily maximum and minimum temperature favours incidence of blast in rice in East and South Eastern Coastal Plain Zone of Orissa. For control, spray 1 g Beam/ litre of water.
  - High day temperature is conducive for spread of powdery mildew on green gram and black gram which has been reported in sporadic patches in North Central Plateau Zone of Odisha. Spray wettable Sulphur @ 3g/litre of water for its control. Repeat the spray after 10-15 days depending on the severity.
  - **West Bengal:**
  - In Laterite and Red Soil Zone of West Bengal, as mainly dry weather would prevail, continue harvesting of potato and apply irrigation in *boro* rice.
  - In the prevailing hot and humid weather conditions, there may be occurrence of blast disease in *boro* rice at tillering stage in Laterite and Red Soil Zone and in New Alluvial Zone of West Bengal. To protect the crop, apply Hinosan @ 1ml or Hexachonazol (Contaf) 5% @ 1.5 ml/litre of water.

- In Old Alluvial Zone of West Bengal, temperature conditions are favourable for sowing of summer vegetables such as pointed gourd, lady's finger, brinjal, chilli and undertake land preparation for sowing of sesame and jute.
- In Coastal Saline Zone of West Bengal, due to rise in temperature, seedlings of *boro* rice may be attacked by brown spot; spray Carbendazim 50WP @ 1 g/litre of water.
- Warm day and cool night is congenial for incidence of downy mildew in cucumber, pointed gourd and bitter gourd in Terai Zone of West Bengal. To manage the disease, spray Mancozeb @ 2g/litre or Metalaxyl 8% and Mancozeb 64% @ 1 g/litre of water.
- **Bihar:**
- In North West Alluvial Plain Zone of Bihar, as mainly dry weather would prevail, continue harvesting of tobacco and also apply irrigation to wheat and apply irrigation at 15 days interval in mango and litchi orchards. As present temperature condition is favourable, continue sowing of green gram and black gram.
- As mainly dry weather is prevailing, apply irrigation in sugarcane and light irrigation in onion in North East Alluvial Plain Zone of Bihar. Also continue harvesting of mustard and rapeseed.
- **Jharkhand:**
- In Western Plateau Zone of Jharkhand, as mainly dry weather would prevail, continue harvesting of potato and apply irrigation to wheat crop at milk /dough stage.
- In Central & North Eastern Plateau Zone of Jharkhand, as mainly dry weather would prevail, continue harvesting of toria, potato, pigeon pea and gram and apply irrigation to wheat crop at milk /dough stage.
- As mainly dry weather would prevail, apply irrigation to wheat at grain formation stage and continue harvesting of matured chickpea, mustard and wheat crop (November sown crop) in South Eastern Plateau Zone of Jharkhand.
- In South Eastern Plateau Zone of Jharkhand, in late sown mustard (at flowering stage), there are chances of more infestation of white rust because of favourable weather condition (high night temperature); spray Bordeaux mixture or Copper Oxchloride @ 0.25 per cent or Blitox 50 @ 0.30 percent solution.
- **Animal Husbandry**
- In North West Alluvial Plain Zone of Bihar, provide lot of clean water to animals and keep them in the shade during noon hours.

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



*Chilli*



*Rice*



*cole crops*

- **Realised Rainfall:** Significant rainfall occurred in Dibang Valley, Lower Dibang Valley, Tawang, Upper Siang, Upper Subansiri and West Siang district in Arunachal Pradesh; Cachar, Dhemaji, Dhubri, Goalpara, Hailakandi, Karbi Anglong, N C Hills and Nalbari districts in Assam; East Khasi Hills, Ri-bhoi and West Khasi Hills in Meghalaya; Dhalai and North Tripura districts in Tripura; Bishnupur, Senapati and Imphal East districts in Manipur; Aizwal, Mamit and Lunglei districts in Mizoram; Dimapur, Kohima and Phek districts in Nagaland. Weather remained mainly dry/dry over rest of the region.
- **Weather Forecast:** Rain/thundershowers would occur at isolated places over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Mainly dry/dry weather would prevail over rest of the region.
- **Weather Warning:** Isolated thundersquall/hailstorm would occur over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 28<sup>th</sup> and 29<sup>th</sup> March.
- **Weather Outlook:** Rain/thundershowers would occur at a few places over northeastern states. Weather would be mainly dry over rest of the region.
- **Advisories:**
  - **Assam & Meghalaya, Arunachal Pradesh:**
  - As isolated thundersquall / hailstorm would occur over Assam and Meghalaya on 28<sup>th</sup> and 29<sup>th</sup> March, use hail net for orchard crops to protect from mechanical damage. Also provide mechanical support to banana, fruit crops and vegetables.

- Under prevailing weather conditions, continue land preparation and sowing of jute, summer sesame, *boro* paddy, pineapple, okra and planting of spring sugarcane in Lower Brahmaputra Valley Zone of Assam.
- Soil and air temperatures are favourable for attack of stem borer in *boro* rice in North Bank Plain Zone of Assam. If the pests are noticed, apply Darsban or Monocrotophos @ of 2 teaspoon per 5 litre of water. Undertake land preparation and sowing of summer pulses, okra, ridge gourd and sponge gourd utilizing the available moisture.
- In Upper Brahmaputra of Assam, as temperature conditions are favourable, continue land preparation and sowing of different summer vegetable like ridge gourd, sponge gourd, ash gourd, pumpkin, okra, bitter gourd and cucumber and sowing of green gram and black gram.
- Undertake land preparation and sowing of summer green gram and black gram, cucurbits and bhindi in the Hill Zone of Assam utilizing the expected rainfall.
- In Central Brahmaputra Valley Zone of Assam, undertake harvesting of matured wheat crop during clear weather. Under prevailing weather condition, undertake land preparation for sowing of summer vegetables, summer green gram and black gram, *capsularis* jute and *bao* paddy.
- **Nagaland, Manipur, Mizoram and Tripura:**
  - As thundersquall / hailstorm would occur at isolated places over Nagaland, Manipur, Mizoram and Tripura on 28<sup>th</sup> and 29<sup>th</sup> March, use hail net for orchard crops to protect from mechanical damage. Also provide mechanical support to banana, young fruit plants and vegetables.
  - In Temperate Sub Alpine Zone of Meghalaya, undertake sowing of direct seeded ahu rice, maize, cucurbits and bhindi utilizing the realised rainfall.
  - In Manipur, undertake land preparation for planting of ginger and turmeric utilizing the realised rainfall. Also undertake light hoeing in onion.
  - In Mild Tropical Hill Zone of Nagaland, continue sowing of summer maize, summer vegetables like lady's finger, cucurbitaceous crops like gourd, pumpkin, ridge gourd, ash gourd etc. utilizing the realised rainfall.
  - In the prevailing temperature conditions, there may be chances of attack of yellow stem borer in Boro rice in Mild Tropical Plain Zone of Tripura. Apply Fipronil @ 2g per litre of water to manage the yellow stem borer attack. Undertake land preparation for sowing of jhum rice with the help of pre-monsoon rain.
- **Animal Husbandry**
  - In Northeastern States, keep cattle/goats indoors during thunder squall/ hail storm period.
  - In Assam, Manipur and Tripura, undertake vaccination to control swine fever in pigs, FMD in cattle and ranikhet disease in poultry during this period.

### WEST INDIA [GOA, MAHARASHTRA, GUJARAT]



**Rice**



**Groundnut**



**Cotton**



**Grape vine**

- **Realised Rainfall:** Mainly dry weather prevailed over Maharashtra. Dry weather prevailed over Gujarat State during last week.
- **Weather Forecast:** Mainly dry / dry weather would prevail over the region.
- **Weather Warning:** Nil.
- **Weather Outlook:** Weather would be mainly dry over the region.
- **Advisories:**
  - **Maharashtra:**
    - In Konkan, as mainly dry / dry weather is expected, undertake intercultural operations and fertilizer application in vegetables, rice, finger millet and orchards. Apply irrigation to groundnut, orchards, vegetable crops and pulses. Mango is at fruit formation stage, considering the crop canopy, apply 150-200 litres of water per tree at 15 days interval to avoid fruit dropping due to increase in temperature. Apply irrigation to maintain around 10 cm water level in transplanted rice field before and after 10 days of panicle initiation stage.
    - In Madhya Maharashtra, as mainly dry / dry weather would prevail, complete the harvesting of already matured wheat at the earliest. Apply irrigation in summer groundnut, bajra, sugarcane and vegetable crops. Continue intercultural operations and fertilizer application in sugarcane, summer groundnut and vegetables. As

day temperature is prevailing above normal, apply mulch in vegetables for conservation of soil moisture. Cover banana bunch with white plastic (100 gauge and 6% porous) or dried banana leaves to protect from scorching sun.

- In Marathwada, as mainly dry / dry weather would prevail, complete the harvesting of already matured wheat and jowar at the earliest. Continue intercultural operations and fertilizer application in orchards (banana, fig, pomegranate, sweet lime and guava), sugarcane, summer groundnut and vegetables. Apply irrigation to summer groundnut, sugarcane, orchards (banana, pomegranate and fig) and vegetable crops.
- As mainly dry / dry weather is expected in Vidarbha, complete the harvesting of already matured wheat at the earliest. Maintain water level upto 8 cm in already transplanted rice field in Gondia, Bhandara, Chandrapur and Gadchiroli districts. Apply irrigation to water melon and summer vegetables. Continue sowing of summer green gram.
- Due to partly cloudy weather, there may be incidence of thrips and jassids in summer groundnut in Eastern Vidarbha Zone; spray Dimethoate 30% @ 10 ml per 10 litres of water.
- **Gujarat:**
- As mainly dry / dry weather would prevail, carry out weeding and intercultural operations in groundnut, green gram, bajra and cluster bean in North Gujarat Zone and in green gram in South Gujarat Heavy Rainfall Zone.
- As mainly dry / dry weather would prevail, irrigate the bajra and green gram crop at regular intervals and continue harvesting of cumin in North Gujarat Zone. Provide irrigation at 5 to 9 days interval by making double ring in papaya orchard.
- As mainly dry / dry weather would prevail, continue harvesting of matured wheat crop, matured spikes of castor in North Gujarat Zone and undertake harvesting of matured onion, garlic in South Saurashtra Zone.
- As dry weather prevailed and mainly dry / dry weather is expected, apply irrigation in vegetables and fruit crops in South Gujarat Zone. Dry weather conditions are favourable for dropping of unripe fruits of Mango. Spray NAA @ 2 gm or Gybrelic acid 1 g + 2 kgs urea /100 liters of water solution.
- As mainly dry / dry weather is prevailing and mango is in fruit formation stage in North Saurashtra Zone, apply light irrigation in mango orchard (at pea size).
- Due to increase in temperature, there may be attack of sucking pests (jassid, aphid and white fly) in green gram and cowpea in South Gujarat Heavy Rainfall Zone. Spray the crops with Diamethoate 30% or Acephate @ 15 gm /10 liters of water for control the pests. Infestation of thrips and red mites may occur in vegetables due to increase in temperature, spray 25 EC Methyl-o-Dematone 10 ml per 10 liters of water for their control.

## SOUTH INDIA [TN, AP, KERALA, KARNATAKA, LAKSHADWEEP, ANDAMAN & NICOBAR ISLANDS]



*Rice*



*Sugarcane( cane maturity)*



*Onion (bulb development)*



*Sucking pest on Groundnut*

- **Realised Weather:** Significant rainfall occurred over Alapuzha and Kottayam districts in Kerala during last week. No significant rainfall occurred over rest of the region.
- **Weather Forecast:** Mainly dry/dry weather would prevail over the region.
- **Weather Warning:** Nil.
- **Weather Outlook:** Weather would be mainly dry over the region.
- **Advisory:**
  - **Karnataka:**
    - As mainly dry weather would prevail, complete the last picking of cotton in the North Transition Zone of Karnataka.
    - As there is increase in temperature and mainly dry weather would prevail, apply irrigation in arecanut, coconut and black pepper gardens either by furrow or drip irrigation in the Hill Zone of Karnataka and als apply irrigation to groundnut which is at flowering stage.
  - **Andhra Pradesh**
    - Prevailing dry weather conditions are congenial for the incidence of thrips, hoppers and anthracnose in mango in Telangana. Spray Fipronil @ 2 ml per litre of water to manage thrips, Monocrotophos @ 1.6 ml + Carbendazim @ 1 g or Hexaconazole @ 2ml to manage hoppers and anthracnose.

- As dry weather is prevailing, provide irrigation to maize crop in order to avoid the water stress in Kurnool district in the Scarce Rainfall Zone of Andhra Pradesh.
- Prevailing dry weather conditions are congenial for incidence of thrips and Helicoverpa in tomato in the Scarce Rainfall Zone of Andhra Pradesh. Spray Acephate @1.5 g/l or Fipronil @ 2ml/l of water for thrips and Thiodicarb 1g/litre to manage Helicoverpa.
- **Tamil Nadu:**
- As mainly dry weather would prevail, continue harvesting of matured *samba* and *thaladi* rice, provide irrigation to sesame, sugarcane, banana, groundnut, summer cotton and rice fallow cotton and undertake planting of sugarcane in the Cauvery Delta Zone of Tamil Nadu.
- Due to prevailing hot weather, occurrence of aphid, thrips, mite, hoppers and white flies are being noticed in rice fallow cotton in the Cauvery Delta Zone of Tamil Nadu. Spray Azadirachtin 0.03% (3 ml/L) along with sticking agent in the morning or evening using hand sprayer to manage the pests.
- Since mainly dry weather is expected in the Western Zone of Tamil Nadu, apply irrigation in early season and mid-season sugarcane crop. Apply Monocrotophos 36 WSC 1000 ml/ha or Chlorpyrifos 1000 ml/ha if damages are noticed.
- Due to rise in temperature, woolly aphid infestation is noticed and likely to increase on 4 to 6 months old sugarcane crop in the North Western Zone of Tamil Nadu. Spray Acephate 2 g or Monocrotophos 2 ml per litre of water, two times at 15 days interval to manage the pest.
- Undertake mulching in clove, nutmeg and cinnamon trees to overcome the hot summer in the High Rainfall Zone of Tamil Nadu.
- **Kerala:**
- Due to rise in temperature, incidences of fruit fly is noticed cucurbits in the Central Zone of Kerala. Remove and destroy affected and decayed fruits and use special pheromone traps. If the attack is not reduced, apply Malathion 0.2% suspension containing sugar or jaggery at 10 g/litre at fortnightly intervals at flowering and fruit initiation stage.
- As dry weather is prevailing apply irrigation in coconut and banana plants in the Southern Zone of Kerala. Also apply mulching in banana basins to conserve moisture. Pour Sevin (50%) @ 4g /litre of water to prevent the attack of red palm weevil, especially in young palms.
- **Animal Husbandry**
- In the North Eastern Zone of Tamil Nadu, dairy animals must be protected from high temperature by sprinkling water on the body three times daily during hot part of the day. Vaccinate calves above 3 months and sheep and goat above 2 months against Foot and Mouth Disease.

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

**Annexure I**

**Week by week Rainfall Distribution**

State/Districts	12.03.14		19.03.14		26.03.14	
	Actual (mm)	% dep.	Actual (mm)	% dep.	Actual (mm)	% dep.
<b>Arunachal Pradesh</b>						
Anjaw	**	**	**	**	**	**
Changlang	0.0	-100	0.7	-99	6.4	-94
Dibang Valley	4.0	-94	7.0	-92	30.0	-46
East Kameng	0.0	-100	0.0	-100	0.5	-98
East Siang	0.2	-99	0.0	-100	19.5	-29
Kurung Kumey	**	**	**	**	**	**
Lohit	0.0	-100	5.5	-88	6.9	-86
Lower Dibang Valley	0.0	-100	0.0	-100	34.0	-39
Lower Subansari	**	**	**	**	**	**
Papumpara	0.0	-100	2.0	-95	17.0	-54
Tawang	9.0	-22	37.0	157	42.0	146
Tirap	0.2	-99	0.2	-99	1.1	-97
Upper Siang	33.5	-62	13.4	-84	77.0	-5
Upper Subansari	0.0	-100	0.0	-100	20.8	-23
West Kameng	0.0	-100	0.0	-100	2.4	-86
West Siang	1.5	-93	5.0	-73	36.0	186
<b>Assam</b>						
Baksa	0.0	-100	0.0	-100	15.0	-3
Barpeta	0.0	-100	0.0	-100	13.2	-15
Bongaigaon	0.0	-100	0.0	-100	6.8	-62
Cachar	0.0	-100	0.0	-100	32.7	-38
Chirang	0.0	-100	0.0	-100	13.5	-25
Darrang	0.0	-100	0.0	-100	15.0	-1
Dhemaji	2.0	-85	1.0	-95	40.0	83
Dhubri	0.0	-100	0.0	-100	29.1	169
Dibrugarh	4.1	-78	1.0	-97	7.2	-79
Goalpara	0.0	-100	0.0	-100	41.3	163
Golghat	0.0	-100	0.0	-100	2.9	-85
Hailakandi	0.0	-100	0.0	-100	27.7	-43
Jorhat	0.0	-100	0.0	-100	5.3	-75
Kamrup(Rural)	0.0	-100	0.0	-100	15.5	-16
Kamrup(Metro)	0.0	-100	0.0	-100	7.0	-62
Karbi Anglong	0.0	-100	0.0	-100	32.7	149
Karimganj	0.0	-100	0.0	-100	4.0	-91
Kokrajhar	0.0	-100	0.0	-100	7.7	-32
Lakhimpur	0.0	-100	1.0	-95	15.4	-29
Morigaon	0.0	-100	0.0	-100	2.3	-85
N.C.Hills	0.0	-100	0.0	-100	39.6	-45
Nowgong	0.0	-100	0.0	-100	14.5	-4
Nalbari	0.0	-100	0.0	-100	32.7	153
Sonitpur	0.0	-100	0.0	-100	6.0	-62

Sibsagar	0.0	-100	0.0	-100	5.4	-78
Tinsukia	1.3	-91	8.4	-76	7.0	-84
Udalgiri	0.0	-100	0.0	-100	5.9	-61
<b>Meghalaya</b>						
East Garo Hills	0.0	-100	0.0	-100	5.0	-36
East Khasi Hills	2.4	-92	1.1	-95	35.5	0
Jaintia Hills	0.0	-100	0.0	-100	19.0	-32
Ribhoi	0.0	-100	0.3	-97	37.2	104
South Garo Hills	0.0	-100	0.0	-100	0.0	-100
West Garo Hills	0.0	-100	0.0	-100	15.0	63
West Khasi Hills	0.0	-100	0.0	-100	56.0	160
<b>Mizoram</b>						
Aizwal	0.0	-100	0.0	-100	27.9	-25
Champhai	0.0	-100	0.0	-100	14.0	-53
Kolasib	0.0	-100	0.0	-100	1.0	-97
Lawngtlai	0.0	-100	0.0	-100	**	**
Lunglei	0.0	-100	0.0	-100	27.0	-23
Mamit	0.0	-100	0.0	-100	35.0	-6
Saiha	0.0	-100	0.0	-100	7.0	-79
Serchhip	0.0	-100	0.0	-100	10.0	-77
<b>Manipur</b>						
Bishnupur	0.0	-100	0.0	-100	23.0	6
Chandel	0.0	-100	0.0	-100	18.0	96
Churachandpur	0.0	-100	0.0	-100	**	**
Imphal east	0.0	-100	0.0	-100	29.4	28
Imphal west	0.0	-100	0.0	-100	11.5	-35
Senapati	0.0	-100	0.0	-100	23.0	59
Tamenglong	**	**	**	**	**	**
Thoubal	0.0	-100	0.0	-100	17.0	105
Ukhrul	0.0	-100	0.0	-100	2.0	-79
<b>Nagaland</b>						
Dimapur	0.0	-100	0.0	-100	21.0	64
Kephire	0.0	-100	0.0	-100	15.0	-26
Kohima	0.0	-100	0.0	-100	38.6	166
Longleng	**	**	**	**	**	**
Mokokchung	0.0	-100	0.0	-100	5.0	-81
Mon	**	**	**	**	**	**
Paran	**	**	**	**	**	**
Phek	0.0	-100	0.0	-100	33.0	128
Tuensang	**	**	**	**	**	**
Wokha	0.0	-100	0.0	-100	6.0	-75
Zunheboto	**	**	**	**	**	**
<b>Tripura</b>						
Dhalai	0.0	-100	0.0	-100	40.9	27
North tripura	0.0	-100	0.0	-100	36.8	7
South tripura	0.0	-100	0.0	-100	3.6	-88
West tripura	0.0	-100	0.0	-100	11.9	-47
<b>Himachal Pradesh</b>						
Bilaspur	12.9	16	13.1	10	8.9	-23

Chamba	64.4	165	50.3	103	44.9	37
Hamirpur	16.0	37	17.4	40	13.2	-12
Kangra	23.8	44	18.7	-17	23.9	-1
Kinnaur	29.3	25	29.0	8	6.9	-80
Kullu	40.2	30	46.8	26	35.6	3
Lahaul and Spiti	52.4	40	18.9	-59	7.4	-84
Mandi	23.5	36	28.1	27	17.0	-21
Shimla	35.6	110	19.5	-5	23.6	-1
Sirmaur	20.5	138	20.9	105	9.4	-23
Solan	30.0	120	21.7	54	16.1	-10
Una	19.9	134	13.6	54	8.0	-24
<b>Punjab</b>						
Amritsar	7.3	6	7.8	-13	10.0	-11
Barnala	0.0	-100	2.0	-35	10.1	237
Bhatinda	2.5	-26	3.0	0	21.0	377
Faridkot	1.0	-57	0.0	-100	27.5	391
Fatehgarh Sahib	2.0	-53	0.0	-100	0.0	-100
Ferozpur	2.0	-49	5.0	0	17.7	132
Gurdaspur	34.1	207	8.2	-37	24.2	49
Hoshiarpur	5.9	-37	11.0	18	7.0	-41
Jalandhar	4.9	-25	6.3	-5	4.2	-56
Kapurthala	15.3	163	6.0	2	16.0	135
Ludhiana	5.9	11	7.5	67	6.8	-22
Mansa	11.0	400	0.0	-100	12.4	300
Moga	2.8	-26	10.5	184	12.9	162
Muktesar	1.0	-63	0.0	-100	24.8	265
Nawashahar	9.1	5	11.0	72	8.6	-30
Patiala	4.4	-20	9.7	214	8.9	46
Ropar	5.2	-68	9.7	-20	6.4	-59
Sangrur	2.9	1	1.0	-72	9.9	102
Mohali	11.0	45	6.5	12	6.5	-24
TarnTaran	3.6	-22	4.6	0	11.7	79
<b>Haryana</b>						
Ambala	10.0	112	6.3	-23	7.7	24
Bhiwani	4.6	109	0.7	-33	6.2	131
Chandigarh	17.1	155	13.8	79	5.4	-49
Faridabad	43.9	1272	0.0	-100	5.0	213
Fatehabad	1.8	2	0.7	-72	2.5	-36
Gurgaon	33.4	1988	0.0	-100	0.8	-56
Hissar	9.2	385	1.4	24	11.4	225
Jhajar	4.4	77	0.0	-100	4.3	95
Jind	17.0	254	1.0	-63	10.1	529
Katihah	6.2	128	1.6	-36	8.2	122
Karnal	13.5	255	1.5	-65	6.3	-8
Kurukshetra	4.3	-11	0.0	-100	3.5	-42
Mahendragarh	8.1	238	0.0	-100	12.0	380
Mewat	15.3	800	0.0	-100	2.5	76
Palwal	11.0	633	0.0	-100	0.2	-88
Panchkkula	11.5	135	4.0	11	3.7	-61

Panipat	10.0	319	1.0	-47	5.4	55
Rewari	36.4	2500	0.6	-50	11.8	973
Rohtak	3.0	-32	0.0	-100	6.2	48
Sirsa	0.0	-100	0.0	-100	6.7	156
Sonepat	7.7	78	0.4	-84	6.1	105
Yamunanagar	18.2	142	5.8	-38	6.5	-3
<b>Delhi</b>						
Central Delhi	6.0	50	2.0	-20	2.0	-43
East Delhi	9.0	125	0.0	-100	2.0	-43
New Delhi	18.7	366	0.2	-92	1.8	-49
North Delhi	6.8	70	1.5	-40	2.6	-27
North East Delhi	0.0	-100	0.0	-100	0.0	-100
North West Delhi	1.0	-75	0.0	-100	0.5	-86
South Delhi	26.8	570	1.0	-60	8.4	140
South West Delhi	17.0	325	0.7	-72	2.5	-29
West Delhi	3.0	-25	6.0	140	4.0	14
<b>Jammu &amp; Kashmir</b>						
Anantnag	199.7	419	27.5	-24	26.3	-27
Badgam	100.8	391	53.0	139	10.3	-63
Bandipore	**	**	**	**	**	**
Baramula	65.5	40	33.7	-58	33.6	-70
Doda	139.6	169	49.2	3	30.4	-46
Ganderbal	62.7	167	63.6	162	72.2	148
Jammu	62.1	300	7.3	-38	16.2	-25
Kargil	0.0	-100	0.0	-100	0.0	-100
Kathua	44.8	95	12.2	3	30.0	73
Kistwar	**	**	**	**	**	**
Kulgam	154.8	302	26.5	-27	27.1	-25
Kupwara	119.9	118	101.9	95	88.4	75
Ladakh(Leh)	0.0	-100	0.1	-92	0.0	-100
Poonch	3.0	-95	0.0	-100	0.0	-100
Pulwama	117.9	431	46.4	112	15.3	-47
Rajouri	94.3	816	27.2	213	41.4	117
Ramban	146.5	183	39.3	-18	36.8	-35
Reasi	133.5	313	22.2	-25	51.9	16
Samba	42.7	175	9.8	-16	15.1	-30
Shopian	39.0	76	59.0	169	17.0	-41
Srinagar	140.0	496	26.9	11	15.8	-46
Udhampur	142.0	340	34.0	15	24.5	-45
<b>East Madhya Pradesh</b>						
Anuppur	0.0	-100	10.2	293	0.0	-100
Balaghat	8.0	151	0.8	-65	0.0	-100
Chhatarpur	5.2	162	0.0	-100	3.6	160
Chindwara	1.6	-64	5.7	49	0.0	-100
Damoh	1.0	-67	0.0	-100	0.0	-100
Dindori	1.0	-76	0.0	-100	0.0	-100
Jabalpur	9.2	475	0.0	-100	0.0	-100
Katni	2.0	186	0.0	-100	0.0	-100
Mandla	2.6	-48	5.5	30	0.0	-100

Narsingpur	10.0	1329	0.0	-100	0.0	-100
Panna	0.0	-100	0.0	-100	0.0	-100
Rewa	1.6	-16	1.4	-18	0.5	-83
Sagar	12.2	455	0.0	-100	0.6	-71
Satna	4.4	120	0.0	-100	0.8	-71
Seoni	11.1	108	10.4	88	0.0	-100
Shahdol	0.0	-100	10.4	593	0.0	-100
Sidhi	0.0	-100	3.6	64	0.0	-100
Singrauli	0.0	-100	8.0	471	0.0	-100
Tikamgarh	11.0	1275	0.0	-100	0.0	-100
Umaria	29.8	705	14.4	380	0.0	-100
<b>West Madhya Pradesh</b>						
Alirajpur	38.3	38233	0.0	-100	0.0	-100
Asoknagar	1.5	67	0.0	-100	0.0	-100
Badwani	0.0	-100	0.0	-100	0.0	-100
Betul	19.3	1187	0.0	-100	0.0	-100
Bhind	0.0	-100	0.0	-100	4.4	192
Bhopal	1.8	150	0.0	-100	0.0	-100
Burhanpur	0.0	-100	0.0	-100	0.0	-100
Datia	4.2	500	0.0	-100	4.0	111
Dewas	0.0	-100	0.0	-100	0.0	-100
Dhar	0.0	-100	0.0	-100	0.0	-100
Guna	8.9	536	0.0	-100	0.1	-95
Gwalior	1.2	-25	0.0	-100	4.6	360
Harda	0.0	-100	0.0	-100	0.0	-100
Hosangabad	5.9	247	0.0	-100	0.0	-100
Indore	0.0	-100	0.0	-100	0.0	-100
Jhabua	0.0	-100	0.0	-100	0.0	-100
Khandwa	7.8	767	7.9	621	0.0	-100
Khargone	1.7	767	1.1	278	0.0	-100
Mandsaur	0.0	-100	0.0	-100	0.0	-100
Morena	0.0	-100	0.0	-100	0.0	-100
Neemuch	0.0	-100	0.0	-100	0.0	-100
Raisen	3.6	355	0.0	-100	0.0	-100
Rajgarh	1.0	67	0.0	-100	0.0	-100
Ratlam	2.6	2500	0.0	-100	0.0	-100
Sehore	5.6	1767	0.0	-100	0.0	-100
Shajapur	0.0	-100	0.0	-100	0.0	-100
Sheopur Kalani	0.0	-100	0.0	-100	0.0	-100
Shivpuri	4.0	300	0.0	-100	0.0	-100
Ujjain	1.2	200	0.0	-100	0.0	-100
Vidisha	0.0	-100	0.0	-100	0.0	-100
<b>Chattisgarh</b>						
Bastar	27.4	996	0.1	-97	0.0	-100
Bijapur	38.6	3409	0.0	-100	0.0	-100
Bilaspur	7.0	49	16.3	339	0.0	-100
Dantewara	5.1	1611	0.0	-100	0.0	-100
Dhamtari	0.8	14	0.0	-100	0.0	-100
Durg	0.0	-100	2.5	47	0.0	-100

Janjgir	0.0	-100	0.0	-100	0.0	-100
Jashpurnagar	0.0	-100	1.0	-44	0.0	-100
Kanker	**	**	0.0	-100	0.0	-100
Korba	0.0	-100	8.5	400	0.0	-100
Koriya	0.0	-100	9.0	275	0.0	-100
Kawardha	0.0	-100	**	**	0.0	-100
Mahasumund	0.0	-100	**	**	0.0	-100
Narayanpur	**	**	**	**	0.0	-100
Raigarh	**	**	**	**	0.0	-100
Raipur	1.4	-28	0.0	-100	0.0	-100
Rajandgaon	0.0	-100	0.0	-100	0.0	-100
Surguja	0.2	-95	3.8	35	0.0	-100
<b>East Uttar Pradesh</b>						
Allahabad	0.0	-99	3.0	275	0.7	-70
Ambedkar Nagar	0.0	-100	0.0	-100	0.0	-100
Azamgarh	0.0	-100	0.0	-100	0.0	-100
Bahraich	1.4	-70	0.0	-100	0.0	-100
Ballia	0.0	-100	0.0	-100	0.0	-100
Balrampur	0.0	-100	0.0	-100	0.0	-100
Banda	0.0	-100	0.0	-100	2.8	10
Barabanki	0.0	-100	2.6	338	0.6	-74
Basti	0.0	-100	0.0	-100	0.0	-100
Chandauli	0.0	-100	1.2	-74	0.7	-68
Deoria	0.0	-100	0.0	-100	0.0	-100
Faizabad	0.0	-100	0.0	-100	0.0	-100
Farrukhabad	3.2	28	0.0	-100	0.0	-100
Fatehpur	0.0	-100	0.0	-100	3.5	84
Gazipur	0.0	-100	0.0	-100	0.0	-100
Gonda	0.0	-100	0.0	-100	0.0	-100
Gorakhpur	0.0	-100	0.0	-100	0.0	-100
Hardoi	5.0	85	0.0	-100	0.0	-100
Jaunpur	0.0	-100	0.0	-100	0.0	-100
Kannauj	1.0	-55	0.0	-100	0.0	-100
Kanpur City	0.0	-100	0.0	-100	8.4	425
Kanpur Dehat	0.6	-14	0.0	-100	2.4	41
Kaushambi	0.0	-100	1.1	-5	0.6	-83
Kheri	1.2	-63	0.0	-100	0.0	-100
Kushi nagar	0.0	-100	0.0	-100	0.0	-100
Lucknow	0.0	-100	0.0	-100	1.7	-21
Maharajganj	0.0	-100	0.0	-100	0.0	-100
Mau	0.0	-100	0.0	-100	0.0	-100
Mirzapur	0.0	-100	0.0	-100	0.0	-100
Pratapgarh	0.0	-100	0.0	-100	0.0	-100
RaiBareilly	0.0	-100	0.0	-100	0.0	-100
Sahuji Maharajnagar	0.0	-100	0.0	-100	0.6	-81
Sant Kabirnnagar	0.0	-100	0.0	-100	0.0	-100
Sant Ravidas Nagar	0.0	-100	6.0	30	0.0	-100
Shrawasti	**	**	0.0	-100	**	**
Sidharthnagar	0.0	-100	0.0	-100	0.0	-100

Sitapur	3.4	11	0.0	-100	0.0	-100
Sonbhadra	8.8	132	5.5	358	0.0	-100
Sultanpur	0.0	-100	0.0	-100	0.0	-100
Unnao	0.0	-100	0.0	-100	2.5	47
Varanasi	0.0	-100	1.2	-25	0.0	-100
<b>West Uttar Pradesh</b>						
Agra	6.1	111	0.0	-100	1.8	-13
Aligarh	3.4	13	0.0	-100	1.7	-51
Auraiya	0.0	-100	0.0	-100	1.0	-52
Badaun	1.6	-63	0.0	-100	0.0	-100
Baghpat	22.5	562	0.8	-60	3.7	7
Bareilly	4.2	24	0.0	-100	0.5	-90
Bijnor	7.8	34	2.0	-51	0.5	-92
Bulandsahar	15.2	253	0.0	-100	1.7	-52
Etah	1.0	-69	0.0	-100	0.7	-75
Etawah	0.0	-100	0.0	-100	3.0	-3
Firozabad	2.8	20	0.0	-100	0.7	-69
GBNagar	13.0	713	0.0	-100	0.0	-100
Ghaziabad	6.7	205	0.0	-100	0.0	-100
Hamirpur	1.1	7	0.0	-100	1.7	8
Jalaun	3.0	173	0.0	-100	1.0	-38
Jhansi	4.9	348	0.0	-100	3.0	114
Jotiba Phule Nagar	16.0	400	0.0	-100	0.3	-94
Kanshiramnagar	1.0	-68	0.0	-100	2.0	-55
Lalitpur	4.5	150	0.0	-100	0.0	-100
Mahamaya Nagar	3.0	-14	0.0	-100	0.0	-100
Mahoba	1.0	-17	0.0	-100	3.0	200
Mainpuri	2.1	-21	0.0	-100	2.0	-23
Mathura	7.0	126	0.0	-100	2.0	-38
Meerut	9.1	194	3.0	3	1.3	-71
Moradabad	16.6	452	0.0	-100	0.3	-93
Muzzaffarnagar	8.2	228	1.0	-63	3.1	-39
Pilibhit	0.5	-86	0.0	-100	0.0	-100
Rampur	7.7	92	0.0	-100	0.0	-100
Saharanpur	24.3	466	0.3	-94	0.7	-92
Shahjahanpur	0.3	-95	0.0	-100	0.0	-100
<b>Uttarakhand</b>						
Almora	25.1	122	2.4	-64	0.0	-100
Bageshwar	23.9	112	0.0	-100	0.0	-100
Chamoli	38.2	111	15.7	-19	12.7	-45
Champawat	11.0	45	2.0	-67	0.0	-100
Dehradun	18.8	63	20.4	71	4.3	-69
Garhwal Pauri	12.7	81	7.4	-3	2.7	-73
Garhwal Tehri	27.0	87	17.8	73	3.6	-73
Haridwar	17.0	136	5.0	-2	5.5	-33
Nainital	17.8	134	2.7	-56	0.1	-99
Pithorgarh	20.4	10	15.7	57	18.8	-10
Rudraprayag	31.9	47	20.9	10	6.9	-69
Udham Sing Nagar	18.4	458	0.0	-100	0.0	-100

Uttarkashi	41.7	109	22.5	7	8.8	-61
<b>Bihar</b>						
Araria	0.0	-100	0.0	-100	0.0	-100
Arwal	0.0	-100	0.0	-100	0.0	-100
Aurangabad	0.0	-100	0.0	-100	0.0	-100
Banka	0.0	-100	0.0	-100	0.0	-100
Begusarai	0.0	-100	0.0	-100	0.0	-100
Bhabua	0.0	-100	0.0	-100	0.0	-100
Bhagalpur	0.0	-100	0.0	-100	0.0	-100
Bhojpur	0.0	-100	0.0	-100	0.0	-100
Buxar	0.0	-100	0.0	-100	0.0	-100
Darbhanga	0.0	-100	0.0	-100	0.0	-100
East Champaran	0.0	-100	0.0	-100	0.0	-100
Gaya	0.0	-100	0.0	-100	0.0	-100
Gopalganj	0.0	-100	0.0	-100	0.0	-100
Jahanabad	0.0	-100	0.0	-100	0.0	-100
Jamui	0.0	-100	0.0	-100	0.0	-100
Kathihar	0.0	-100	0.0	-100	0.0	-100
Khagadia	0.0	-100	0.0	-100	0.0	-100
Kishanganj	0.0	-100	0.0	-100	0.0	-100
Lakhisarai	0.0	-100	0.0	-100	0.0	-100
Madhepura	0.0	-100	0.0	-100	0.0	-100
Madhubani	0.0	-100	0.0	-100	0.0	-100
Monghyar	0.0	-100	0.0	-100	0.0	-100
Muzaffarpur	0.0	-100	0.0	-100	0.0	-100
Nalanda	0.0	-100	0.0	-100	0.0	-100
Nawada	0.0	-100	0.0	-100	0.0	-100
Patna	0.0	-100	0.0	-100	0.0	-100
Purnea	0.0	-100	0.0	-100	0.0	-100
Rohtas	0.0	-100	0.0	-100	0.0	-100
Saharsha	0.0	-100	0.0	-100	0.0	-100
Samstipur	0.0	-100	0.0	-100	0.0	-100
Saran	0.0	-100	0.0	-100	0.0	-100
Sheikpura	0.0	-100	0.0	-100	0.0	-100
Sheohar	0.0	-100	0.0	-100	0.0	-100
Sitamarhi	0.0	-100	0.0	-100	0.0	-100
Siwan	0.0	-100	0.0	-100	0.0	-100
Supaul	0.0	-100	0.0	-100	0.0	-100
Vaishali	0.0	-100	0.0	-100	0.0	-100
West Champaran	0.0	-100	0.0	-100	0.0	-100
<b>Jharkhand</b>						
Bokaro	0.0	-100	0.0	-100	0.0	-100
Chatra	0.0	-100	0.0	-100	0.0	-100
Deoghar	0.0	-100	0.0	-100	0.0	-100
Dhanbad	0.0	-100	0.0	-100	1.6	-72
Dumka	0.0	-100	0.0	-100	0.0	-100
East Singbhum	0.0	-100	1.1	-75	1.1	-80
Garhwa	0.0	-100	0.0	-100	0.0	-100
Giridih	0.0	-100	0.4	-90	0.0	-100

Godda	0.0	-100	0.0	-100	0.0	-100
Gumla	**	**	**	**	**	**
Hazaribagh	0.0	-100	0.5	-79	0.0	-100
Jamtara	0.0	-100	**	**	0.0	-100
Khunti	0.0	-100	4.0	-33	0.0	-100
Koderrna	0.0	-100	0.0	-100	0.0	-100
Latehar	0.0	-100	18.7	484	0.0	-100
Lohardagga	0.0	-100	0.0	-100	0.0	-100
Pakur	0.0	-100	0.0	-100	**	**
Palamau	0.0	-100	1.6	13	0.0	-100
Ramgarh	0.0	-100	0.0	-100	0.0	-100
Ranchi	0.0	-100	2.8	-21	0.0	-100
Sahebganj	0.0	-100	0.0	-100	0.0	-100
Saraikela	0.0	-100	1.3	-72	0.0	-100
Simdega	0.0	-100	3.2	146	0.0	-100
West Singhbhum	0.0	-100	2.7	-12	0.0	-100
<b>East Rajasthan</b>						
Ajmer	0.4	118	0.0	-100	0.0	-99
Alwar	7.4	336	0.0	-100	0.0	-100
Banswara	0.0	-100	0.0	-100	0.0	-100
Baran	0.0	-100	0.0	-100	0.0	-100
Bharatpur	1.7	13	0.0	-100	0.0	-100
Bhilwara	0.7	567	0.0	-100	0.0	-100
Bundi	0.0	-100	0.0	-100	0.0	-100
Chittorgarh	0.0	-100	0.0	-100	0.0	-100
Dausa	0.8	-38	0.0	-100	3.4	386
Dholpur	0.9	-46	0.0	-100	0.0	-100
Dungarpur	0.0	-100	0.0	-100	0.0	-100
Jaipur	2.0	388	0.0	-100	8.8	778
Jhalawar	0.0	-100	0.0	-100	0.0	-100
Jhunjhunu	0.3	-83	0.0	-100	8.7	314
Karauli	5.4	288	0.0	-100	0.0	-100
Kota	0.0	-100	0.0	-100	0.0	-100
Pratapgarh	0.4	200	0.0	-100	0.0	-100
Rajsamand	0.3	-58	0.0	-100	0.0	-100
Sawai Madhopur	0.8	11	0.0	-100	0.0	-100
Sikar	1.7	90	0.0	-100	11.5	619
Sirohi	0.7	200	0.0	-100	0.0	-100
Tonk	10.0	2411	0.0	-100	0.2	-86
Udaipur	0.0	-100	0.0	-100	0.0	-100
<b>West Rajasthan</b>						
Barmer	0.0	-100	0.0	-100	0.0	-100
Bikaner	0.0	-100	0.0	-100	0.0	-100
Churu	4.7	288	0.3	-66	3.3	44
Hanumangarh	3.7	210	0.0	-100	12.1	331
Jaisalmer	0.0	-100	0.0	-100	0.0	-100
Jalore	0.0	-100	0.0	-100	0.0	-100
Jodhpur	0.0	-100	0.0	-100	0.0	-100
Nagaur	0.0	-100	0.0	-100	0.0	-100

Pali	0.0	-100	0.0	-100	0.0	-100
Sri Ganganagar	0.6	-65	0.5	-78	20.7	474
<b>Gujarat Region</b>						
Ahmedabad	0.0	-100	0.0	-100	0.0	-100
Anand	0.0	-100	0.0	-100	0.0	-100
Banaskantha	0.0	-100	0.0	-100	0.0	-100
Baroda	0.1	200	0.0	-100	0.0	-100
Broach	0.0	-100	0.0	-100	0.0	-100
DNH	**	**	**	**	**	**
Dahod	0.0	-100	0.0	-100	0.0	-100
Daman	**	**	**	**	**	**
Dangs	3.0	200	0.0	-100	0.0	-100
Gandhinagar	0.0	-100	0.0	-100	0.0	-100
Kheda	0.0	-100	0.0	-100	0.0	-100
Mehsana	0.0	-100	0.0	-100	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	0.0	-100	0.0	-100	0.0	-100
Sabarkantha	0.0	-100	0.0	-100	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
<b>S K &amp; Diu region</b>						
Amreli	0.0	-100	0.0	-100	0.0	-100
Bhavnagar	0.0	-100	0.0	-100	0.0	-100
Diu	0.0	-100	0.0	-100	0.0	-100
Jamnagar	0.0	-100	0.0	-100	0.0	-100
Junagarh	1.1	200	0.0	-100	0.0	-100
Kutch	0.0	-100	0.0	-100	0.0	-100
Porbandar	0.0	-100	0.0	-100	0.0	-100
Rajkot	0.3	200	0.0	-100	0.0	-100
Surendranagar	0.0	-100	0.0	-100	0.0	-100
<b>Maharashtra</b>						
<b>Konkan &amp; Goa</b>						
Goa	0.0	-100	0.0	-100	0.0	-100
Mumbai	0.0	-100	0.0	-100	0.0	-100
Raigad	0.3	200	0.0	-100	0.0	-100
Ratnagiri	0.0	-100	0.0	-100	0.0	-100
Sindhudurg	0.0	-100	0.0	-100	0.0	-100
Thane	0.0	-100	0.7	200	0.0	-100
<b>Madhya Maharashtra</b>						
Ahmednagar	8.3	1963	18.5	3605	0.0	-100
Dhule	1.2	200	2.3	150	0.0	-100
Jalgaon	28.9	3113	2.7	195	0.0	-100
Kolhapur	0.3	-72	0.7	6	0.0	-100
Nandurbar	0.2	200	0.0	-100	0.0	-100
Nasik	17.9	200	3.8	3731	0.0	-100
Pune	11.1	5429	7.1	2250	0.0	-100

Sangli	2.1	313	0.0	-100	0.0	-100
Satara	1.7	463	5.8	859	1.5	69
Solapur	27.5	13657	0.1	-92	0.0	-100
<b>Marathwada</b>						
Aurangabad	48.6	12044	10.6	1075	0.0	-100
Beed	44.7	5485	6.5	491	0.0	-100
Hingoli	60.4	5938	6.1	152	0.0	-100
Jalna	37.8	3682	14.7	819	0.0	-100
Latur	49.9	2396	1.1	-43	0.0	-100
Nanded	50.3	1297	2.8	99	0.0	-100
Usmanabad	30.7	6049	1.7	83	0.0	-100
Parbhani	72.6	3356	2.5	37	0.0	-100
<b>Vidarbha</b>						
Akola	14.4	525	13.7	755	0.0	-100
Amraoti	4.2	282	11.7	349	0.0	-100
Bhandara	3.3	-42	1.8	-45	0.0	-100
Buldhana	39.3	2359	12.3	921	0.0	-100
Chandrapur	34.5	916	0.8	-67	0.0	-99
Gadchiroli	20.3	479	0.0	-100	0.1	-97
Gondia	2.0	-54	0.3	-91	0.0	-100
Nagpur	4.2	-18	6.5	92	1.1	-42
Wardha	5.9	180	3.9	10	0.0	-100
Washim	61.9	3768	27.1	2359	0.0	-100
Yeotmal	37.2	1277	10.9	303	0.1	-97
<b>Odisha</b>						
Angul	4.2	-41	0.0	-100	0.0	-100
Balasore	0.5	-94	2.0	-39	6.0	-18
Bargarh	0.5	-78	8.4	250	0.0	-100
Bhadrak	0.5	-95	0.0	-100	0.0	-100
Bolangir	1.2	-66	4.1	24	0.0	-100
Boudh	0.0	-100	0.0	-100	0.0	-100
Cuttack	1.6	-77	0.0	-100	0.0	-100
Deogarh	7.4	45	0.0	-100	0.0	-100
Dhenkanal	0.4	-96	0.0	-100	0.0	-100
Gajapati	42.8	185	0.9	-93	3.0	-83
Ganjam	13.7	80	0.0	-100	27.7	576
Jagatsingpur	7.9	-14	0.0	-100	30.0	456
Jajpur	0.0	-100	2.4	-44	0.0	-100
Jharsuguda	0.0	-100	0.4	-81	0.0	-100
Kalahandi	4.9	52	4.3	39	0.0	-100
Kandhamal	4.3	-51	0.0	-100	0.0	-100
Kendrapara	0.0	-100	0.0	-100	0.0	-100
Keonjhar	3.4	-54	0.0	-100	0.0	-100
Khurda	5.0	-28	0.0	-100	0.0	-100
Koraput	39.6	1101	0.3	-92	0.0	-100
Malkangiri	3.4	-19	0.8	-33	0.0	-100
Mayurbhanj	0.3	-97	4.1	-20	22.8	74
Nawapara	0.0	-100	12.8	433	0.0	-100
Nawarangpur	26.6	336	7.0	438	16.0	471

Nayagarh	14.9	193	0.0	-100	0.0	-100
Puri	10.2	160	0.0	-100	0.0	-100
Rayagada	16.2	72	7.4	17	117.8	1450
Sambalpur	1.8	-64	0.9	-64	7.5	63
Sonepur	2.5	-43	0.3	-88	0.0	-100
Sundargarh	0.0	-100	1.5	-12	0.0	-100
<b>West Bengal</b>						
<b>GWB</b>						
Bankura	0.0	-100	0.0	-100	2.8	-60
Birbhum	0.0	-100	0.0	-100	14.9	166
Burdwan	0.0	-100	0.0	-100	12.8	120
East Midnapore	0.1	-99	0.2	-95	1.4	-90
Hooghly	0.0	-100	0.0	-100	13.2	6
Howrah	0.0	-100	0.0	-100	20.6	96
Kolkata	0.0	-100	0.0	-100	16.3	44
Murshidabad	0.0	-100	0.0	-100	0.0	-100
Nadia	0.0	-100	0.0	-100	15.4	117
24 Pargana (N)	0.0	-100	0.0	-100	19.4	53
Purulia	0.0	-100	0.6	-86	0.5	-93
24 Pargana (S)	0.0	-100	0.0	-100	25.6	92
West Midnapore	0.0	-100	0.0	-100	12.0	26
<b>SHWB</b>						
Cooch Behar	0.0	-100	0.0	-100	18.5	97
Darjeeling	0.0	-100	2.7	-76	13.9	-6
East Sikkim	2.6	-79	20.0	14	34.2	146
Jalpaiguri	0.1	-99	0.8	-89	12.2	16
Malda	0.0	-100	0.0	-100	0.0	-100
North Dinajpur	0.0	-100	0.0	-100	0.0	-100
North Sikkim	7.0	-83	57.9	-5	73.0	43
South Dinajpur	0.0	-100	0.0	-100	0.0	-100
South Sikkim	0.5	-96	10.1	-43	43.5	213
West Sikkim	0.0	-100	11.3	-81	26.3	-49
<b>Karnataka</b>						
<b>Coastal Karnataka</b>						
Dakshin Kannada	1.6	-16	0.0	-100	0.0	-100
Udupi	0.3	-60	0.0	-100	0.0	-100
Uttar Kannada	3.8	1168	0.0	-100	0.8	-3
<b>N I Karnataka</b>						
Bagalkote	28.4	5580	0.0	-100	0.0	-100
Belgaum	20.4	3303	0.0	-100	0.0	-100
Bidar	32.3	1098	0.7	-65	0.0	-100
Bijapur	26.9	5276	0.0	-100	0.0	-100
Dharwad	12.4	2993	0.0	-100	0.0	-100
Gadag	12.3	4001	0.0	-100	0.0	-100
Gulbarga	19.4	1841	0.0	-100	0.0	-100
Haveri	7.4	1388	0.0	-100	0.0	-100
Koppal	26.3	3662	0.0	-100	0.0	-100
Raichur	23.2	2481	0.0	-100	0.0	-100
Yadgir	36.2	4428	0.0	-100	0.0	-100

<b>S I Karnataka</b>						
Bangalore Rural	20.7	1052	0.0	-100	0.0	-100
Bangalore Urban	9.7	410	0.0	-100	0.0	-100
Bellary	16.1	1917	0.0	-100	0.0	-100
Chamarajnagar	11.4	308	0.0	-100	0.0	-100
Chichballapur	9.4	450	0.0	-100	0.0	-100
Chickmagalur	7.2	117	0.0	-100	0.7	-68
Chitradurga	16.8	1298	0.0	-100	0.0	-100
Davangere	7.6	989	0.0	-100	0.0	-100
Hassan	11.0	213	0.0	-100	0.0	-100
Kodagu	5.5	25	0.0	-100	1.9	-64
Kolar	11.9	465	0.0	-100	0.0	-100
Mandya	12.3	411	0.0	-100	0.0	-100
Mysore	11.1	343	0.0	-100	0.0	-100
Ramnagara	16.0	596	0.0	-100	0.0	-100
Shimoga	9.3	614	0.0	-100	0.0	-100
Tumkur	23.9	987	0.0	-100	0.0	-100
<b>Kerala</b>						
Alappuzha	0.0	-100	0.0	-100	30.3	180
Kannur	0.0	-100	0.0	-100	0.0	-100
Ernakulam	6.8	11	0.0	-100	13.1	47
Idukki	5.0	-27	0.0	-100	10.3	1
Kasaragod	0.0	-100	0.0	-100	0.0	-100
Kollam	20.5	69	0.9	-94	8.4	-43
Kottayam	0.8	-93	0.0	-100	40.7	311
Kozhikode	0.8	-72	0.0	-100	0.0	-100
Malappuram	0.0	-100	0.0	-100	0.0	-100
Palakkad	3.8	-7	0.0	-100	1.5	-81
Pathanamthitta	26.0	82	1.0	-93	9.4	-52
Thiruvananthapuram	1.0	-78	0.0	-100	5.3	-47
Thrissur	1.5	-45	0.0	-100	1.1	-78
Wayanad	12.6	404	0.0	-100	0.0	-100
<b>Tamil Nadu</b>						
Ariyalur	0.0	-100	0.0	-100	0.0	-100
Chennai	0.0	-100	0.0	-100	0.0	-100
Coimbatore	17.9	135	0.0	-100	0.7	-76
Cuddalore	0.0	-99	0.0	-100	0.0	-100
Dharmapuri	0.0	-100	0.0	-100	0.0	-100
Dindigul	3.3	-45	0.0	-100	2.8	-39
Erode	0.0	-100	0.0	-100	0.0	-100
Kanchipuram	0.0	-100	0.0	-100	0.0	-100
Kanyakumari	1.4	-80	0.0	-100	0.8	-92
Karikal	0.0	-100	0.0	-100	0.0	-100
Karur	0.0	-100	0.0	-100	0.0	-100
Krishnagiri	5.3	69	0.0	-100	0.0	-100
Madurai	0.0	-100	0.0	-100	0.4	-90
Nagapattinam	0.0	-100	0.0	-100	0.0	-100
Namakkal	0.0	-100	0.0	-100	0.0	-100
Nilgiris	17.6	30	0.0	-100	1.3	-75

Perambalur	0.0	-100	0.0	-100	0.0	-100
Pudukcherry	0.0	-100	0.0	-100	0.0	-100
Pudukottai	0.0	-100	0.0	-100	0.0	-100
Ramanathapuram	0.0	-99	0.0	-100	0.0	-100
Salem	5.3	76	0.0	-100	0.0	-100
Sivaganga	0.0	-100	0.0	-100	0.0	-100
Thanjavur	0.0	-100	0.0	-100	0.0	-100
Theni	2.1	-76	0.0	-100	15.9	130
Tirunelveli	4.0	-60	0.0	-100	7.6	6
Tirupur	0.0	-100	0.0	-100	0.0	-100
Tiruvallur	0.0	-100	0.0	-100	0.0	-100
Tiruvannamalai	0.0	-100	0.0	-100	0.0	-100
Tiruvarur	0.0	-100	0.0	-100	0.0	-100
Toothukudi	6.3	-6	0.0	-100	0.0	-100
Trichy	0.1	-99	0.0	-100	0.0	-100
Vellore	0.0	-100	0.0	-100	0.0	-100
Villupuram	0.0	-100	0.0	-100	0.0	-100
Virudhunagar	0.0	-100	0.0	-100	0.6	-91
<b>Andhra Pradesh</b>						
<b>Coastal Andhra Pradesh</b>						
East Godavari	0.0	-100	0.0	-100	0.0	-100
Guntur	0.0	-100	0.0	-100	0.0	-100
Krishna	0.0	-100	0.0	-100	0.0	-100
Nellore	0.0	-100	0.6	-63	0.0	-100
Prakasam	0.0	-100	3.0	87	0.0	-100
Sirkakulam	20.0	365	1.0	-66	1.5	-62
Visakhapatnam	9.6	160	5.3	43	0.3	-93
Vizianagram	21.0	401	0.0	-100	0.0	-100
West Godavari	0.0	-100	0.0	-100	0.0	-100
<b>Telangana</b>						
Adilabad	69.7	3070	0.0	-100	0.5	-75
Hyderabad	2.2	-51	0.0	-100	0.0	-100
Karimnagar	34.9	869	0.0	-100	0.0	-100
Khammam	2.4	-15	1.3	-44	0.0	-100
Mehabubnagar	18.2	910	0.0	-100	0.0	-100
Medak	32.5	1020	0.0	-100	0.0	-100
Nalgonda	0.0	-100	0.0	-100	0.0	-100
Nizamabad	52.6	1544	0.0	-98	0.0	-100
Rangareddy	12.5	494	0.0	-100	0.0	-100
Warangal	1.3	-68	0.0	-100	0.0	-100
<b>Rayalaseema</b>						
Anantapur	9.3	365	0.0	-100	0.0	-100
Chittoor	0.7	-63	0.0	-100	0.0	-100
Cuddapah	0.4	-70	0.0	-100	0.0	-100
Kurnool	7.4	252	0.0	-100	0.0	-100

	(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