

National Agromet Advisory Service Bulletin

Friday 31st January 2014

(For the period 31st January to 4th February 2014)



Issued by

National Agrometeorological Advisory Service Centre,

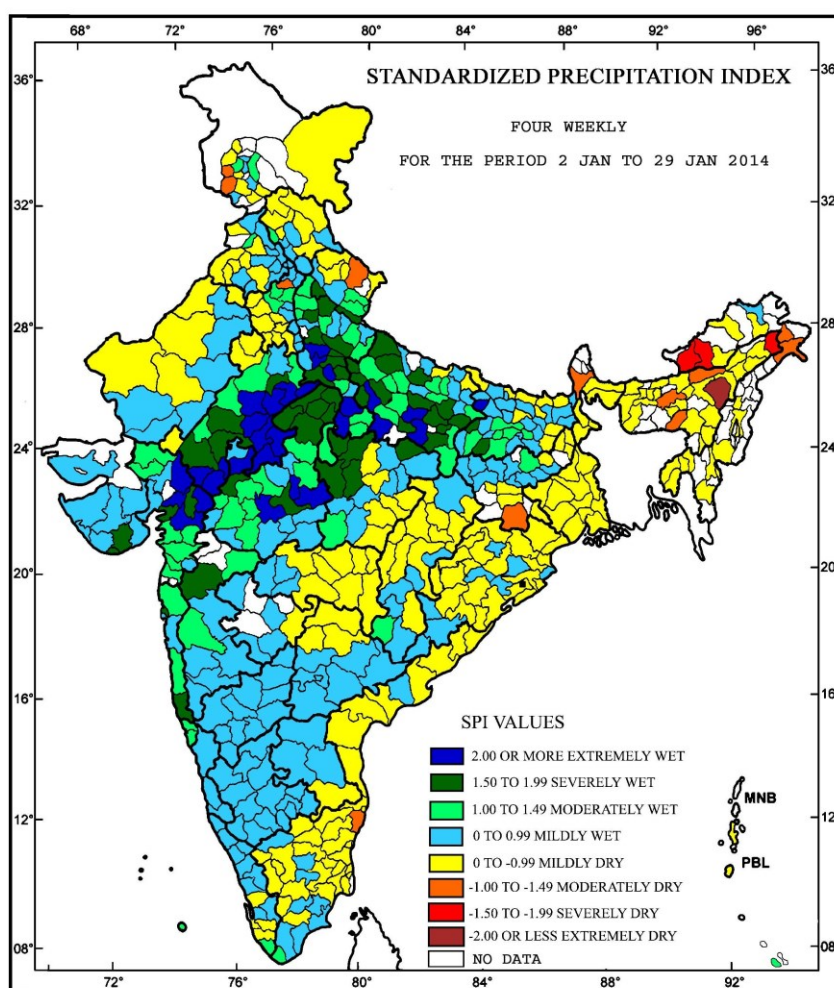
Agricultural Meteorology Division,

India Meteorological Department, Shivajinagar, Pune.



**Standardised Precipitation Index
Four Weekly
for the Period 2nd January to 29th January 2014**

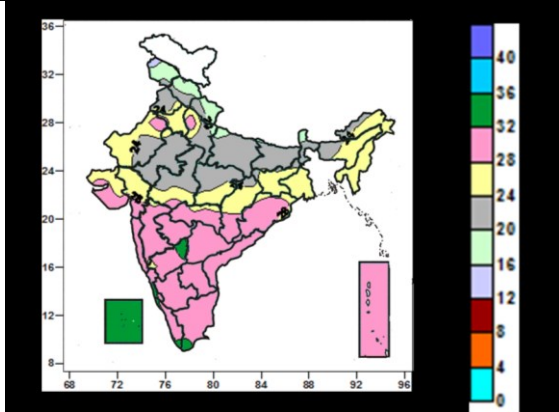
**MINISTRY OF EARTH SCIENCES
INDIA METEOROLOGICAL DEPARTMENT
HYDROMET SECTION, PUNE**



- Extremely wet/severely wet conditions experienced over many parts of Madhya Pradesh, East Rajasthan, Uttar Pradesh, Aurangabad, Buxar and Siwan districts of Bihar, Amreli district of Gujarat, Sindhudurg and Nasik district of Maharashtra
- Moderately dry/ severely dry conditions experienced over Baramula and Poonch districts of Jammu & Kashmir, Chamoli district of Uttarakhand, Kurushetra district of Haryana, Darjeeling district of West Bengal, East Khasi Hills of Meghalaya, West Kameng, East Kameng, Lohit and Changlang districts of Arunachal Pradesh, West Singhum of Jharkhand and Kancheepuram district of Tamil Nadu.
- Rest of the country experienced mild wet/dry conditions.

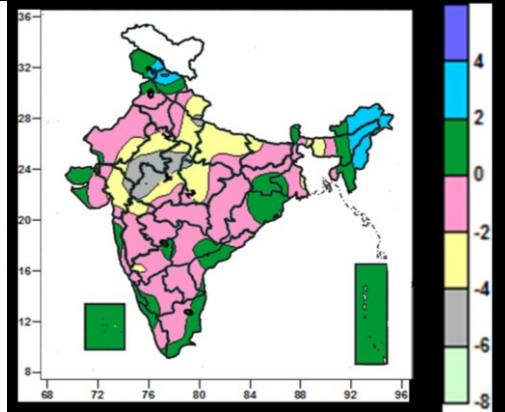
Contour maps for Mean Maximum and Minimum Temperature and their anomaly for the week ending on 29.01.2014

Actual Mean Maximum Temperature (°C) in India for the week ending 29.01.2014



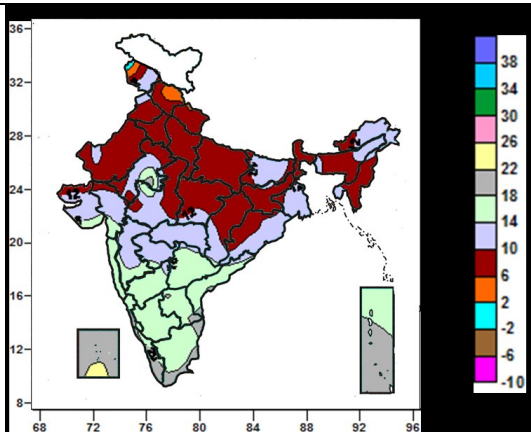
- 32 to 36°C over many parts of Lakshadweep Island, some parts of North Interior Karnataka, Tamil Nadu, Kerala.
- 28 to 32°C over many parts of West India, South India, Odhisa, some parts of East Uttar Pradesh, East Rajasthan, Gujarat, Saurashtra & Kutch, West Madhya Pradesh.
- 16 to 28°C over many parts of North India, East India (except Odhisa), North East India, Central India, Gujrata, some parts of Saurashtra & Kutch.
- 12 to 16°C over some parts of Jammu & Kashmir.

Mean Maximum Temperature (°C) Anomaly in India for the week ending 29.01.2014



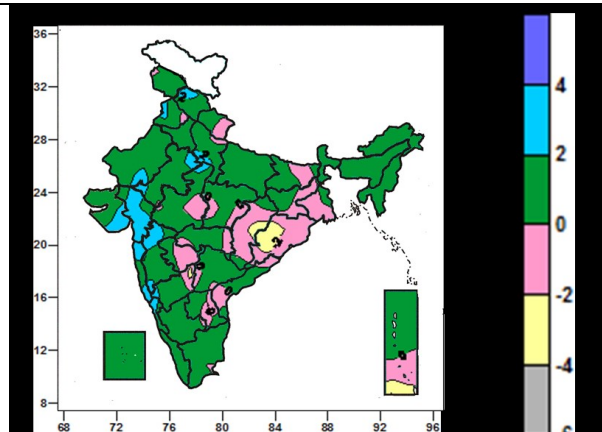
- 2 to 4°C over many parts of Arunachal Pradesh, Nagaland, Manipur, some parts of Jammu & Kashmir, Himachal Pradesh, Assam & Meghalaya, Mizoram.
- -2 to 2°C over all over country (except many parts of Uttarakhand, Uttar Pradesh, Madhya Pradesh, East Rajasthan, Gujarat, Arunachal Pradesh, Nagaland, Manipur, some parts of Jammu & Kashmir, Himachal Pradesh, Assam & Meghalaya, Mizoram, West Rajasthan, Bihar, West Bengal, Madhya Maharashtra, North Interior Karnatakas .
- -6 to -2°C over many parts of Uttarakhand, Uttar Pradesh, Madhya Pradesh, East Rajasthan, Gujarat, some parts of West Rajasthan, Bihar, West Bengal, Assam, Madhya Maharashtra, North Interior Karnatakas.

Actual Mean Minimum Temperature (°C) in India for the week ending 29.01.2014



- -2 to 2°C over some parts of Jammu & Kashmir.
- 2 to 6°C over some parts of Jammu & Kashmir, Himachal Pradesh.
- 6 to 10°C over many parts of North India, Jharkhand, Sub-Himalayan West Bengal & Sikkim, North East India (except Arunachal Pradesh), central India, some parts of Bihar, Gangetic West Bengal, Gujarat, Saurashtra & Kutch, Odhisa.
- 10 to 18°C over many parts of Jammu & Kashmir, Bihar, Arunachal Pradesh, West India, West Madhya Pradesh, Odhisa, south Gangetic West Bengal, Andhra Pradesh, Karnataka, Tamil Nadu, some parts of Punjab, Rajasthan, Assam & Meghalaya, Tripura, East Madhya Pradesh, Chattisgarh, Andhaman & Nicobar Islands.
- 18 to 26°C many parts of Kerala, Lakshadweep, Andaman & Nicobar Islands, some parts of Coastal Andhra Pradesh, Raylaseema, Tamil Nadu.

Mean Minimum Temperature (°C) Anomaly in India for the week ending 29.01.2014

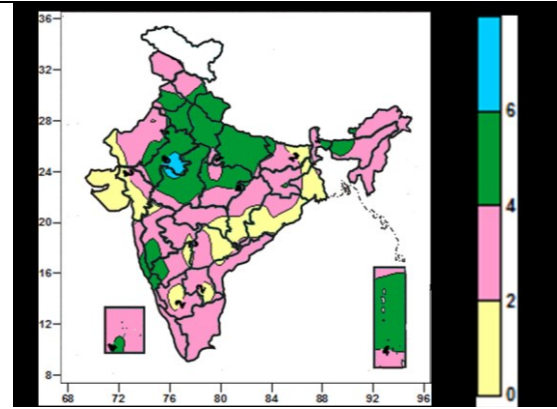
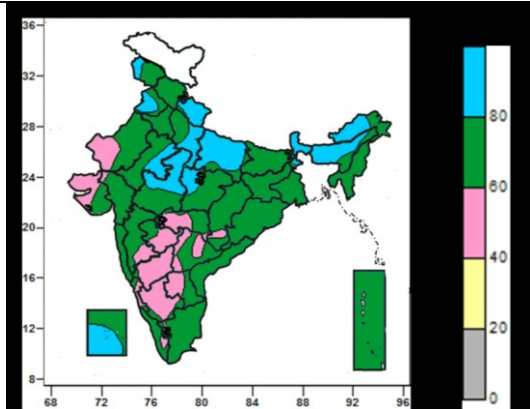


- -4 to -2°C over some parts of Punjab.
- -2 to 2°C over all parts of country (except many parts of Uttar Pradesh, East Madhya Pradesh, Vidarbha, Madhya Maharashtra, Mizoram, Tripura, Andaman & Nicobar Islands, some parts of Jammu & Kashmir, Haryana, Punjab, Delhi, East Rajasthan, West Madhya Pradesh, Chattisgarh, Bihar, Jharkhand, Sub-Himalayan West Bengal, Assam, Manipur, Marathwada, Karnataka, Telanagana, Tamil Nadu, Kerala).
- 2 to 4°C over many parts of Uttar Pradesh, East Madhya Pradesh, Vidarbha, Madhya Maharashtra, Mizoram, Tripura, Andaman & Nicobar Islands, some parts of Jammu & Kashmir, Haryana, Delhi, East Rajasthan, West Madhya Pradesh, Chattisgarh, Bihar, Jharkhand, Sub-Himalayan West Bengal, Assam, Manipur, Marathwada, Karnataka, Telanagana, Tamil Nadu, Kerala.

Contour maps for Relative Humidity, Cloud amount and Wind speed for the week ending on 29.01.2014

Relative Humidity (%) over India for the week ending 29.01.2014

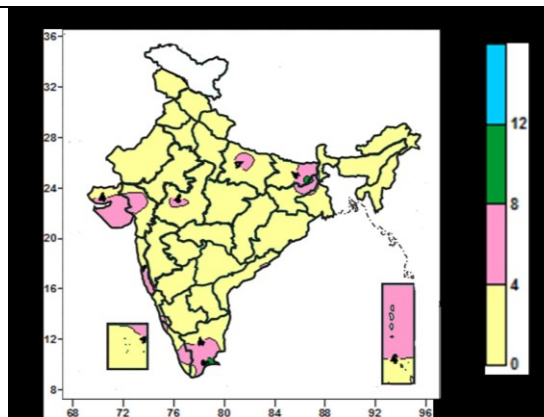
Cloud amount (okta) over India for the week ending 29.01.2014



- 80 to 100% over many parts of Uttarakhand, Uttar Pradesh, Punjab, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, West Madhya Pradesh, Lakshadweep Islands, some parts of Jammu & Kashmir, East Rajasthan, East Madhya Pradesh.
- 40 to 80% over entire country (except many parts of Uttarakhand, Uttar Pradesh, Punjab, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, West Madhya Pradesh, Lakshadweep Islands, some parts of Jammu & Kashmir, East Rajasthan, East Madhya Pradesh).

- 6 to 8 okta over some parts of, East Rajasthan, West Madhya Pradesh.
- 4 to 6 okta over many parts of Uttarakhand, Punjab, Haryana, Delhi, East Rajasthan, Uttar Pradesh, Madhya Pradesh, Andaman & Nicobar Islands, some parts of Himachal Pradesh, West Rajasthan, Bihar, Sub-Himalayan West Bengal, Assam, Konkan & Goa, Madhya Maharashtra, Coastal & North Interior Karnataka, Lakshadweep Islands.
- 0 to 4 okta over entire country (except many parts of Uttarakhand, Punjab, Haryana, Delhi, East Rajasthan, Uttar Pradesh, Madhya Pradesh, Andaman & Nicobar Islands, some parts of Himachal Pradesh, West Rajasthan, Bihar, Sub-Himalayan West Bengal, Assam, Konkan & Goa, Madhya Maharashtra, Coastal & North Interior Karnataka, Lakshadweep Islands).

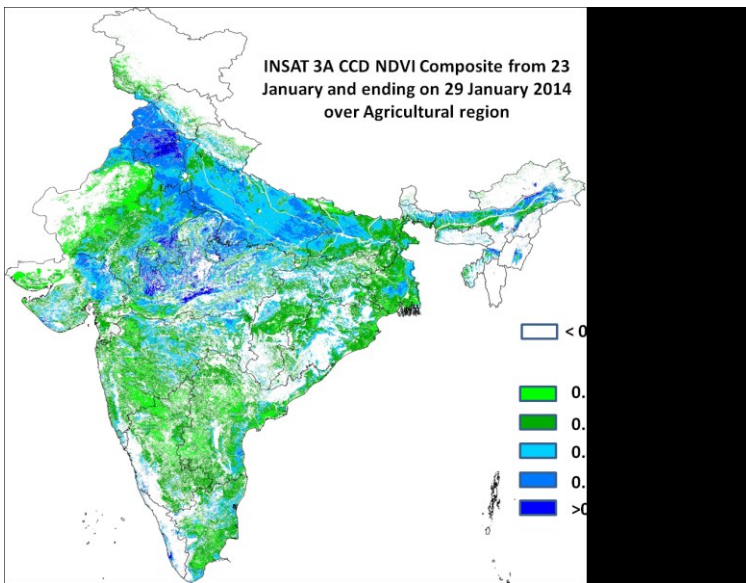
Wind speed (knots) over India for the week ending 29.01.2014



- 4 to 8 knots over many parts over Saurashtra & Kutch, Kerala, Tamil Nadu, Andaman & Nicobar Islands, some parts of East Uttar Pradesh, Bihar, Jharkhand, West Madhya Pradesh, Konkan & Goa, Coastal Karnataka, Lakshadweep.
- 0 to 4 knots over entire country (except Saurashtra & Kutch, Kerala, Tamil Nadu, Andaman & Nicobar Islands, some parts of East Uttar Pradesh, Bihar, Jharkhand, West Madhya Pradesh, Konkan & Goa, Coastal Karnataka, Lakshadweep).

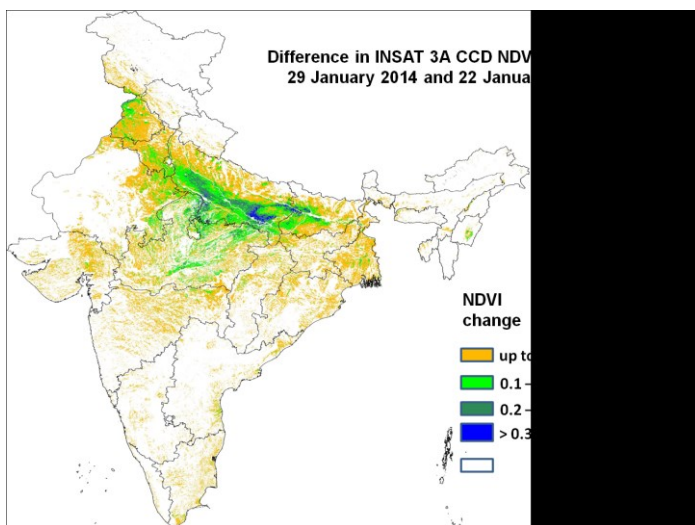
INSAT 3A CCD NDVI COMPOSITE OVER AGRICULTURAL REGION

23rd – 29th January 2014



Source: SAC, Ahmedabad

Agricultural vigour is in general very good over pockets of north Haryana and adjoining Punjab and central Punjab, central and eastern UP, pockets of Bihar, central and north MP and north Gujarat and pockets of eastern Rajasthan as NDVI exceeds 0.5. Agricultural vigour is moderate in major part of UP and MP, central and parts of western Gujarat, eastern Maharashtra, parts of central West Bengal, pockets of western Chhattisgarh, coastal belt of Tamil Nadu where NDVI is in the range of 0.4 to 0.5 upto 29th January 2014. The NDVI remains low within range of 0.2 to 0.3 over rest of India.



Source: SAC, Ahmedabad

Agricultural progress was found to be good over south-east part of UP and western Bihar, pockets of Haryana, north-west Punjab, eastern Rajasthan, pockets of central West Bengal and pockets of western Chhattisgarh where NDVI showed positive change from previous week of the order of 0.1 to 0.2. Rest of India shows moderate progress.

Weather Forecast

Weather Forecast for next 3 days (upto 0830 hours IST of 3rd February, 2014)

- Rain/snow would occur at isolated places over Jammu & Kashmir during next 24 hours and increase thereafter.
- Rain/snow would occur at isolated places over Himachal Pradesh from tomorrow.
- Rain/thundershowers would occur at isolated places over coastal Tamilnadu from today.
- Weather would be mainly dry/dry over rest parts of the country.
- No significant change in minimum temperatures over northwest, central & east India.
- Dense to moderate fog would occur at a few places over Punjab, Haryana, Uttar Pradesh, north Rajasthan, north Madhya Pradesh, Bihar, Sub-Himalayan West Bengal, Assam & Meghalaya and Tripura.

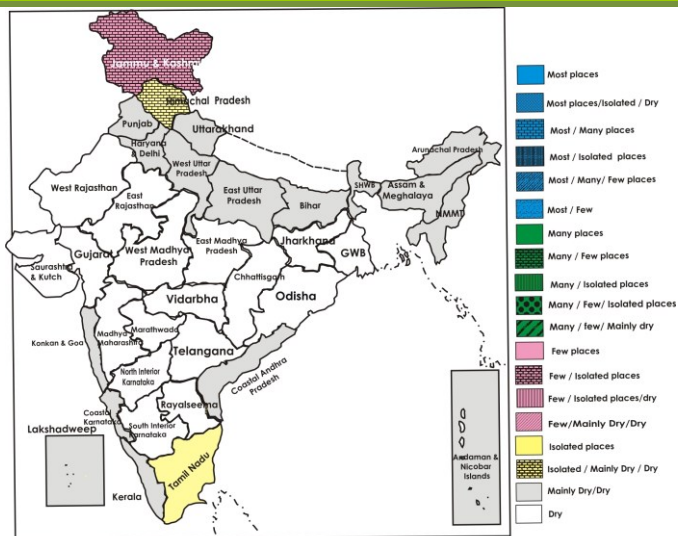
Weather Warning during next 3 days

- **31 January (Day 1):**
 - Dense fog (visibility < 200 M) would occur at a few places over Punjab, Haryana, Delhi, Chandigarh, Uttar Pradesh, north Madhya Pradesh and Bihar and at isolated places over Sub-Himalayan West Bengal & Sikkim.
 - Cold day conditions would prevail at a few places over Uttar Pradesh and at isolated places over Bihar.
- **01 February (Day 2):**
 - Dense fog (visibility < 200 M) would occur at a few places over east Uttar Pradesh, north Madhya Pradesh and Bihar and at isolated places over Sub-Himalayan West Bengal & Sikkim.
 - Cold day conditions would prevail over isolated pockets of east Uttar Pradesh and Bihar.
- **02 February (Day 3):** Dense fog (visibility < 200 M) would occur at a few places over east Uttar Pradesh, north Madhya Pradesh and Bihar.

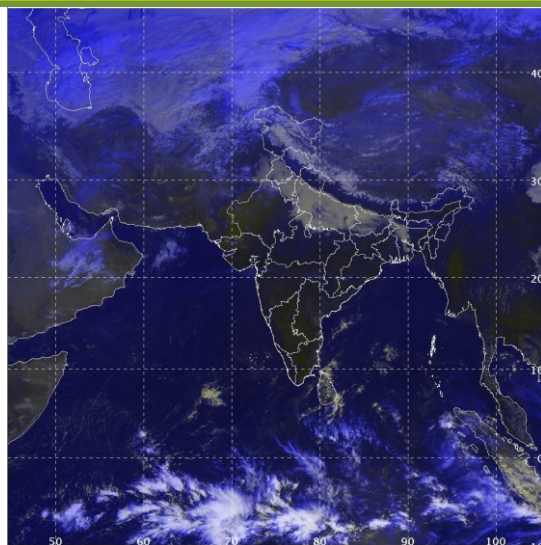
Weather Outlook for subsequent 4 days from 03rd February 2014 to 07th February, 2014:

- Increase in rain/snowfall activity over Jammu & Kashmir, Himachal Pradesh and Uttarakhand during 2nd to 4th
- February with possibility of heavy to very heavy snowfall over Jammu & Kashmir and Himachal Pradesh on 2nd & 3rd February.
- Isolated/scattered rain/thundershowers would also occur over Punjab, Haryana, Chandigarh, Delhi, west Uttar Pradesh and Rajasthan from 2nd February onwards.
- Generally dry weather would prevail over rest parts of the country.

Weather Forecast Map (Valid upto 0830 hours of 3rd February, 2014)



Satellite image dated 31.01.2014, 0600 UTC



Detailed Zonewise Agromet Advisories

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



Wheat



Sugarcane



Late blight on potato



Mustard

- **Realised Rainfall:** Significant rainfall occurred in Baran in East Rajasthan; Jalaun, Lalitpur and Saharanpur districts of West Uttar Pradesh; Haridwar district of Uttarakhand; most of the districts in Jammu & Kashmir except Baramula, Ganderwal, Kargil, Kulgam, Kupwara, Leh, Poonch, Rajouri and Samba; most of the districts in Himachal Pradesh except Kulu, Lahaul & Spiti; in Ambala, Kaithal, Karnal, Panchkula and Yamunanagar districts of Haryana; in Fategarh Sahib, Gurdaspur, Hoshiyarpur, Kapurthala, Nawansahar, Ropar and Mohali districts of Punjab. Weather remained mainly dry / dry over rest of the districts of region.
- **Weather Forecast:**
 - Rain/snow would occur at isolated places over Jammu & Kashmir during next 24 hours and increase thereafter. Rain/snow would occur at isolated places over Himachal Pradesh from tomorrow.
 - Weather would be mainly dry/dry over rest parts of the region.
 - No significant change in minimum temperatures over northwest India.
 - Dense to moderate fog would occur at a few places over Punjab, Haryana, Uttar Pradesh and north Rajasthan.
- **Weather Warning during next three days:**
 - **31 January (Day 1):** Dense fog (visibility < 200 M) would occur at a few places over Punjab, Haryana, Delhi, Chandigarh, Uttar Pradesh
 - Cold day conditions would prevail at a few places over Uttar Pradesh.
 - **01 February (Day 2):** Dense fog (visibility < 200 M) would occur at a few places over east Uttar Pradesh
 - Cold day conditions would prevail over isolated pockets of east Uttar Pradesh and Bihar.
 - **02 February (Day 3):** Dense fog (visibility < 200 M) would occur at a few places over east Uttar Pradesh, north.
- **Weather Outlook:**
 - Increase in rain/snowfall activity over Jammu & Kashmir, Himachal Pradesh and Uttarakhand during 2nd to 4th February with possibility of heavy to very heavy snowfall over Jammu & Kashmir and Himachal Pradesh on 2nd & 3rd February.
 - Isolated/scattered rain/thundershowers would also occur over Punjab, Haryana, Chandigarh, Delhi, west Uttar Pradesh and Rajasthan from 2nd February onwards.
 - Generally dry weather would prevail over rest parts of the country.
- **Advisories :**
 - **Jammu & Kashmir:**
 - In Valley Temperate Zone of Jammu & Kashmir, suspend agricultural activities for next 5 days as the fields are still not in workable condition and there is likelihood of rain/snow during next 3 days. Make/clean drainage channels to avoid water logging in fields.
 - **Himachal Pradesh:**
 - Due to prevailing low temperature conditions in some parts of Himachal Pradesh, apply light and frequent irrigation in the standing crops to safeguard from cold injury. Young plants of fruit trees and tomato should be protected by covering with polythene sheets or straw thatches.
 - In Mid-Hills Sub-Humid Zone of Himachal Pradesh, attack of aphids is expected in wheat crop due to rainfall during last week, spray 30 ml Cypermethrin 10 EC per 30 litres of water per kanal area.
 - **Uttarakhand:**
 - In Bhabar and Tarai and Hill Zone of Uttarakhand, as dry weather is expected during the week, apply light irrigation to onion and other vegetable crops like coriander, spinach, radish, methi by sprinkler method.
 - In Sub-humid sub-tropic zone of Uttarakhand, due to high humidity and minimum temperature, there is a chance to attack of mustard aphid in mustard crop, it is advised to arrange for smoke near the field to avoid the infestation. Also to control of mustard aphid, spray Phosphomidone 40% SL or Dimethoate 30 EC.
 - **Punjab, Haryana and Delhi:**
 - Due to prevailing low temperature conditions in some parts of Punjab and Haryana, apply light and frequent irrigation in the standing crops to safeguard from cold injury. Young plants of fruit trees and tomato should be protected by covering with polythene sheets or straw thatches.
 - In Western Plain Zone of Punjab, undertake harvesting of kinnow fruits and in Central Plain Zone of Punjab and undertake harvesting of mid season and late maturing variety of sugarcane as dry weather is

prevailing.

- In Delhi, as mainly dry weather is prevailing carry out the intercultural operations in carrot, radish, turnip and sweet potato and cole crops.
 - In view of high humidity and foggy weather in Punjab and Haryana, it is advised to monitor wheat for incidence of yellow rust. If symptoms observed, apply Tilt or Shine or Bumper or Folicur @ 200 ml in 200 litre of water or Bayleton @ 200 gram in 200 litres of water.
 - In Undulating Plain Zone of Punjab and Eastern Zone of Haryana, due to cloudy weather, there is chance of more spread of yellow rust in wheat, Monitor the crop and if small yellow rust postules appear on the leaves, spray Tilt/Shine 25EC @ 200 ml/200 litres of water/ acre.
 - In Western Zone of Haryana, due to high humidity and foggy weather condition, there is a possibility of white rust in the mustard crop, spray suitable fungicide.
- **Uttar Pradesh:**
 - Due to prevailing low minimum temperature in East Uttar Pradesh, arrange for smoking around the crop fields during night time to protect the crop from cold injury. Continue top dressing of nitrogen fertilizer in wheat at optimum soil moisture under prevailing weather condition.
 - In Central Plain Zone of Uttar Pradesh, due to foggy and cloudy conditions, there is possibility of white rust in mustard, it is advised to spray Redomil MZ-72@ 2.5 kg/ha dissolved in 800-1000 liters of water and fruit borer in arhar crops, it is advised to spray Indosulphine35 EC in 1.5 litre or 1 liter Imidachloropid dissolved in 800-1000 liters of water.
 - **Rajasthan:**
 - Due to prevailing low temperature conditions in some parts of Rajasthan, apply light and frequent irrigation in the standing crops to safeguard from cold injury.
 - In north Rajasthan, arrange for smoke around the standing crop fields after midnight or apply light irrigation to protect the crops from cold injury.
 - **Animal Husbandry**
 - In Sub-Tropical Zone of Jammu & Kashmir, protect the pregnant and mulch animal from cold and feed them with mineral mixture regularly. Keep the animals inside the sheds/ shelters during night hours and take them out during sunshine hours in the day time. Cover the poultry shed with gunny bags in order to protect the birds from cold weather.
 - In Western Plain Zone of Punjab, feed well chaffed berseem mixed with wheat straw to animals to avoid Aphara (Tympany). Vaccinate animals against FMD and repeat after six months or yearly as required. Deworming should be done in calves especially against Ascariasis/ Malap with piperazine liquid @ 4 ml/ 10 kg body weight. New born calves need special care in cold weather. Keep them warm by providing clean and dry bedding. Give them vitamin 'A' concentrate 1 ml daily in milk for three days to be repeated after a month.
 - In Himachal Pradesh, protect the newly born calves and animals from cold. Keep the animals inside the sheds/ shelters during night hours and take them out during sunshine hours in the day time.

CENTRAL INDIA [M.P., CHHATTISGARH]



Wheat



Sugarcane



Chilli



Mustard

- **Realised Rainfall:** Significant rainfall occurred in Tikamgarh district of east Madhya Pradesh and Ashoknagar, Bhopal, Dewas, Raisen and Vidisha districts of west Madhya Pradesh.
- **Weather forecast:** Weather would be mainly dry/dry over the region. No significant change in minimum temperatures over the region. Dense to moderate fog would occur at few places over north Madhya Pradesh.
- **Weather Warning during next three days:** Dense fog (visibility < 200 M) would occur at a few places over north Madhya Pradesh.
- **Weather Outlook:** Mainly dry weather would prevail over central India.
- **Advisories:**
 - **Madhya Pradesh:**
 - As there was no significant rainfall in the States of the region except in Tikamgarh, Ashoknagar, Bhopal, Dewas, Raisen and Vidisha districts in Madhya Pradesh, apply irrigation to the standing crops. Postpone irrigation to standing crops in the above mentioned districts as there was significant rainfall during last week.

- In Bundelkhand Zone of Madhya Pradesh, undertake weeding and hoeing in onion and garlic crops taking advantage of prevailing dry weather.
- In Jhabua Hill Zone of Madhya Pradesh there is possibility of attack of gram pod borer spray Profenofos 40EC + Cyper Methrin 4 EC @ 1.5 lit/ha. For control of termite in wheat field use Chloropyrifos 20EC @ 3.5 l/ha with irrigation water. For control of stem borer in maize, spray Chloropyrifos 20EC @ 40 ml/pump.
- In Bundelkhand Zone of Madhya Pradesh activity of stem borer is being observed in wheat and likely to continue because of increase in day temperature. Monitor the crop and spray Trizophos 40 EC @ 2.0 ml/liter of water for the effective control.

▪ **Chattisgarh:**

- In Chattisgarh Plain Zone, due to prevailing low minimum temperature conditions germination of summer rice may be affected. Hence nursery of rice may be covered with paddy straw. Also apply irrigation to wheat crop.

• **Animal Husbandry**

- In Malwa Plateau Zone of Madhya Pradesh provide clean water, balanced and nutrients rich fodder to the animals. De-worm the cattle. Protect the cattle from cold and keep them in warm environment.
- In Jhabua Hill Zone, to control of Ranikhet disease in poultry, vaccinate F-1 or Lasota strain vaccine. For maintaining temperature at 38°C close windows and door with gunny bags/ sackcloth and at night and use 100 – 200 volt bulb for heating.
- In Bundelkhand Zone of Madhya Pradesh, vaccinate buffaloes and cows against FMD. Also vaccinate Goat against P.P.R.

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



Mustard

Sugarcane

Transplanting of rice

Cole crops

Onion

- **Realised Weather:** Weather remained mainly dry/dry over the region.
- **Weather forecast:** Weather would be mainly dry/dry over the region. No significant change in minimum temperatures over east India. Dense to moderate fog would occur at a few places over Bihar and Sub-Himalayan West Bengal.
- **Weather Warning during next three days:**
 - **31 January (Day 1):** Dense fog (visibility < 200 M) would occur at a few places over Bihar and at isolated places over Sub-Himalayan West Bengal & Sikkim.
 - Cold day conditions would prevail at isolated places over Bihar.
 - **01 February (Day 2):** Dense fog (visibility < 200 M) would occur at a few places over Bihar and at isolated places over Sub-Himalayan West Bengal & Sikkim.
 - Cold day conditions would prevail over isolated pockets of Bihar.
 - **02 February (Day 3):** Dense fog (visibility < 200 M) would occur at a few places over Bihar.
- **Weather Outlook:** Dry weather would prevail over the region.
- **Advisories:**
 - **Odisha:**
 - As dry weather is prevailing, apply irrigation in sugarcane and continue picking of cotton in Western Undulating Zone and also apply irrigation to vegetables in Eastern Ghat High Land Zone of Odisha.
 - In North Eastern Plateau Zone of Odisha, due to prevailing dry weather, provide light intermittent irrigation in rice nursery to avoid yellowing of seedlings. Also apply irrigation in groundnut crop to avoid termite attack.
 - In East and South Eastern Coastal Plain Zone of Odisha, maximum and minimum temperature conditions are congenial for occurrence of termites, thrips and aphids on groundnut during the vegetative stage. For termites, treat the soil with Sevidol granules @ 20 kg or Methyl parathion 2% D dust @ 25 kg/ha and maintain moisture in the field. For thrips, apply Imidacloprid 17.8 SL @ 125 ml in 500 litres of water per hectare. For aphids, spray Dimethoate @ 1 litre / ha in 500 litres of water.
 - In North Eastern Plateau Zone Odisha, due to cloudy weather prevailed during last week, there is chance of thrips in groundnut; apply Imidachloprid 17.8 SL @ 50 ml in 200 liters of water per acre.

- **West Bengal:**
 - In New Alluvial Zone of West Bengal, as dry weather is prevailing, apply irrigation in wheat during panicle initiation stage.
 - In Terai Zone, Laterite and Red Soil Zone of West Bengal, due to prevailing foggy conditions, there is chance of occurrence of late blight and early blight in potato; spray a mixture of Cymoxnil 8% and Mancozeb 64% @ 2.5 g / litre of water in afternoon hours.
- **Bihar:**
 - In North West Alluvial Plain Zone of Bihar, as dry weather is prevailing, undertake harvesting of matured tobacco crop and apply light irrigation to potato. Apply irrigation in maize crop.
 - In North East Alluvial Plain Zone of Bihar, as dry weather is prevailing, apply irrigation to wheat and vegetables.
 - In North West Alluvial Plain Zone of Bihar, due to prevailing dense foggy conditions, there is chance of occurrence of early blight in potato; spray Endophil M-45 or mixture of Synomaxi and Mancozeb @ 2.0 gm per litre of water. Due to partial cloudy sky and prevailing temperature conditions, there are chances of aphid infestation in mustard; spray Metasystox @ 1.0 ml / litre of water.
 - In North East Alluvial Zone of Bihar, due to partially cloudy weather, attack of powdery mildew disease in green pea is likely to be more; spray Karathen @ 1 ml per litre of water or Sulfex @ 3 ml per litre of water
- **Jharkhand:**
 - In Jharkhand, as dry weather is prevailing during last few weeks, apply irrigation to wheat.
 - In South Eastern Plateau Zone of Jharkhand, dry with cool temperature may favour the attack of leaf eating insects in pigeon pea; spray Imidaclopid @ 2 ml / litre of water two times at an interval of 10-12 days. Mustard crop is at flowering stage and aphid attack is observed which is likely to be more in coming days; spray Methyl demitone or Dimethoate @ 1 ml per liter mixed with teepol @ 5 ml per liter of water. Also attack of powdery mildew disease in green pea is likely to be more prominent; spray Karathen @ 1 ml per litre of water or Sulfex @ 3 g per litre of water.

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



Chilli



Transplanting of rice



cole crops

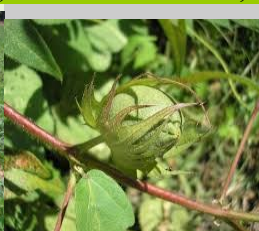


Late blight in Potato

- **Realised Rainfall:** Significant rainfall occurred in Upper Siang district in Arunachal Pradesh. Weather remained mainly dry / dry over rest part of the region.
- **Weather Forecast:** Weather would be mainly dry/dry over the region. Dense to moderate fog would occur at a few places over Assam & Meghalaya and Tripura.
- **Weather Warning during next three days :** Nil
- **Weather Outlook:** Dry weather would prevail over the region.
- **Advisories:**
 - **Assam & Meghalaya:**
 - As night temperature is low, the young seedlings in rice nurseries in Assam and Meghalaya should be applied with irrigation water during night to protect the seedlings from low temperature and drain out the water in the next morning.
 - In Meghalaya, provide light irrigation in tomato and potato as dry weather is prevailing.
 - In Upper Bramhaputra valley Zone of Assam, due to low temperature and high relative humidity, there is possibility of occurrence of late blight disease in potato. Closely monitor the leaves of potato plant and if symptom appears, apply 0.25% solution of Mancozeb 75WP (2g/l).
 - In North Bank Plain Zone, Hill Zone and lower Bramhaputra, upper Bramhaputra and central Bramhaputra valley Zone of Assam, humid and cloudy weather conditions are favourable for incidence of aphids and saw fly in rapeseed and mustard. Hence, monitor the crop and apply Dimethoate 30 EC or Chloropyrifos @ 2 ml / litre of water with a spray volume of 500-700 litres / ha for hand sprayer & 200-250 litres / ha for power sprayer. Also cloudy and foggy weather is favourable for appearance of late blight in potato; spray Mancozeb @ 2.5 g / litre of water as protective measure.
 - **Arunachal Pradesh:**
 - In Sub Tropical Hill Zone of Arunachal Pradesh, in view of prevailing dry weather condition, apply irrigation in potato and tomato except in Upper Siang district where significant rainfall occurred during last week.
 - **Nagaland, Manipur, Mizoram and Tripura:**

- As night temperature is low, the young seedlings in rice nurseries in Tripura should be applied with irrigation water during night to protect the seedlings from low temperature and drain out the water in the next morning.
 - As dry weather is prevailing in Sub Tropical Plain Zone of Manipur, apply irrigation in rapeseed, mustard and pulses and light irrigation in potato.
 - In Mild Tropical Hill Zone of Nagaland, taking the advantage of dry weather, continue harvesting of cauliflower and matured cabbage.
 - In Mild Tropical Plain Zone of Tripura, apply mulching in maize and maintain moisture in the field through irrigation at tasseling stage.
 - In Mild Tropical Plain Zone of Tripura, in cloudy and foggy weather conditions spread of late blight disease in potato and aphid attack in toria may become severe. Spray with Mancozeb @ 2.5 g / litre of water to protect from late blight and to manage aphids, spray Monocrotophos @ 2 ml per litre of water at an interval of 15 days. Due to prevailing foggy condition there may be increase of population of white flies in tomato and brinjal. Spray Monocrotophos @ 3 ml per litre of water or Imidachloroprid @ 2 g per litre of water to manage the attack.
- **Animal Husbandry**
 - In Nagaland, Mizoram and Tripura, cover or tie cattle with gunny bags during night to protect from cold. Also cover poultry house with gunny bags / polythene sheet and provide heating during night using electric bulb of 300 watt per 100 sq. ft. space.
 - In North Bank Plain Zone, Central Bramhaputra Valley and Upper Bramhaputra Valley Zone of Assam, protect poultry birds from cold by using electric bulbs (300 Watt for 100 sq. ft.) to prevent Coryza disease. Vaccination to control the ranikhet disease in poultry may be done during this period.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]



Transplanting of rice

Groundnut

Cotton

Grape vine

- **Realised Rainfall:** Mainly dry weather prevailed over the region during last week.
- **Weather Forecast:** Weather would be mainly dry / dry over the region.
- **Weather Warning during next three days:** Nil.
- **Weather Outlook:** Generally dry weather would prevail over the region.
- **Advisories:**
 - **Maharashtra:**
 - As prevailing night temperature is around 10°C in some parts of North Madhya Maharashtra, for protection of banana, apply mulch of organic material at base of trunk, apply irrigation during evening and cover the trunk with dried leaves. Also spray 0.5 % Potassium di Hydrogen phosphate plus 1% Urea on banana bunch.
 - As no significant rain occurred during last week in Konkan and mainly dry weather would prevail; apply irrigation to groundnut at 10-12 days interval, orchards, vegetable crops and pulses. Mango is at fruit formation stage (pea size), considering the crop canopy, apply 150-200 litres of water per tree at 15 days interval. Maintain 2-3 cm water level for first 8-10 days in transplanted rice field and increase the water level upto 5 cm thereafter.
 - As no significant rain occurred during last week in Madhya Maharashtra and dry weather would prevail; apply irrigation to gram at pod development stage, wheat at booting/flowering stage, jowar at grain formation stage, sugarcane, vegetable crops and maize.
 - As dry weather prevailed during last few weeks in Marathwada and dry weather would continue for next 3days; apply irrigation to gram at pod development stage, wheat at booting / flowering stage, jowar at grain formation stage, sugarcane, vegetable crops and maize. Under prevailing weather continue planting of *suru* sugarcane, sowing of summer groundnut and watermelon. Complete the harvesting of red gram.
 - As no significant rain occurred during last week in Vidarbha and dry weather would prevail; apply irrigation to gram at pod development stage, wheat at booting / flowering stage and vegetable crops. As prevailing temperature (16-20°C) is favourable, undertake sowing of summer groundnut in Central Vidarbha Zone. Also complete transplanting of 30-35 days old summer rice seedling and maintain 2-3 cm

water level in already transplanted rice field in Gondia, Bhandara, Chandrapur and Gadchiroli district. Complete harvesting of already matured red gram.

- Due to continuous cloudy weather during last fortnight in Marathwada, there may be incidence of rust in wheat; spray Mancozeb @ 20 g per 10 litres of water.
- As partly cloudy weather is expected during next 3-5 days, there is possibility of incidence of hoppers and powdery mildew in mango in Konkan; spray Imidacloprid 7.8 % @ 3 ml + Carbendazim @ 10 g per 10 litres of water. Application of Imidacloprid should be done only once in a season.
- Prevailing cold and dry weather is congenial for incidence of powdery mildew in pea, chilli and tomato in Pune; spray Sulphur 80% @ 25 g per 10 litres of water.

▪ **Gujarat:**

- As dry weather is prevailing in Saurashtra Zone, apply irrigation in wheat at booting stage in South Saurashtra Zone and milking / dough stage in North Saurashtra Zone.
- In Middle Gujarat Zone, undertake sowing of summer groundnut and mulching treatment with paddy straw or plastic. As mainly dry weather is prevailing, apply irrigation in wheat at heading stage.
- Taking advantage of clear sky and mainly dry weather in Bhal and Coastal Zone of Gujarat, carryout hand weeding and intercultural operations in *rabi* crops (wheat, mustard) and apply irrigation in mustard.
- In present weather conditions (increasing temperature), severe attack of thrips in chilli has been reported in North Saurashtra Zone; spray 3 ml Spinosad in 10 litres of water to control.
- Prevailing increasing temperature and humidity is congenial for outbreak of aphids in cumin, potato, mustard and vegetables in North Gujarat Zone and in cumin, mustard and vegetables in North West Zone of Gujarat; spray Dimethoate @ 10 ml or Monocrotophos @ 10 ml adding in 10 litres of water for managing aphids. Due to cloudy weather condition, there is outbreak of powdery mildew in mustard; spray Soluble Sulphar (50%) @ 40 kg/ha or Soluble Sulphar (80%) @ 25 kg/ha or Dinocap (48%) @ 5 ml in 10 liters of water for control.

• **Animal Husbandry**

- In Gujarat, vaccinate animals for diseases in consultation with local veterinarian. Avoid transportation of poultry birds during noon time. Put curtains on the west side of poultry house.

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



Pulses (flowering/pod formation)



Sugarcane (cane maturity)



Onion (bulb development)



Sucking pest on Groundnut

- **Realized rainfall:** Weather remained mainly dry/dry over the region.
- **Rainfall Forecast:** Rain/thundershowers would occur at isolated places over coastal Tamilnadu from today. Weather would be mainly dry/dry over the rest of the region.
- **Weather Warning during the next three days :** Nil.
- **Weather Outlook:** Dry weather would prevail over the region.
- **Advisory:**

▪ **Andhra Pradesh:**

- Warm and dry weather is congenial for incidence of stem borer on rice in North Coastal Zone of Andhra Pradesh. As a precautionary measure spray Chloripriphos @ 2.5 ml per litre of water.
- Clear skies with high relative humidity may cause powdery mild dew on Black gram and Green gram in Krishna Godavari zone of Andhra Pradesh. As a control measure spray 1 gram Carbandizm or 1 gram Thiophinate Methyl or 1 ml Carathane or 2 ml Hexaconazole 1 ml Tridomorph per liter of water.
- Due to prevailing humid conditions there is chance of incidence of sucking pest on groundnut in Southern Zone of Andhra Pradesh. Farmers are advised to spray Monochrotophos @1.6 ml per litre of water.

▪ **Karnataka:**

- In the North East Dry Zone of Karnataka, because of continuous dry weather, there are chances of increased thrips activity in onion, brinjal and bhendi. To control them spray Oxydemeton Methyl (1.5 ml) or Dimethoate (1.7 ml) with one liter of water.

▪ **Tamil Nadu:**

- As dry weather is expected in the coming days, spray 2% Magnesium Sulphate + 1% urea on rain-fed cotton in flowering and boll formation stage in order to meet the nutrient requirement during this critical growth stage and harvest matured rainfed sunflower crop in the South Zone of Tamil Nadu.

- Undertake foliar spraying of Urea 1% + DAP 2% + MOP 1% during flowering stage in thaladi paddy to increase the seed setting. Also undertake harvesting of matured samba paddy and sowing of rice fallow pulses in the Cauvery Delta Zone of Tamil Nadu.
- As dry weather is prevailing, provide irrigation to early planted sugarcane, undertake mulching by spreading the sugarcane trash uniformly using shredder cab in ratoon sugarcane crop in order to prevent evaporation in the Western Zone of Tamil Nadu. Apply fertilizer and provide irrigation to 5 months old banana and undertake staking of 7 or 8 months old with bamboo sticks or nylon ropes.
- Prevailing dry weather condition is congenial for false smut disease incidence in *thaladi* rice in the Cauvery Delta Zone of Tamil Nadu. Spray fungicides viz., Probenconazole (200 ml/acre) or Copper hydroxide (500 g/acre) at the time of panicle emergence and milky stage to manage the incidence.
- Prevailing dry weather is favourable for hopper incidence in mango, ear head bug incidence in rice in the Western Zone of Tamil Nadu. Monitor the crops and dust 5% Malathion to manage hopper incidence and spray Dichlorvos @ 2ml/liter of water to manage ear head bug incidence.
- **Kerala:**
 - Provide irrigation to banana and undertake mulching of the soils with dried leaves to conserve soil moisture in coconut basins and banana field in the Problem Area Zone of Kerala. Since dry weather is prevailing, increase frequency of irrigation in vegetables.
 - Provide sufficient quantity of water to the coconut field through drip irrigation in the Southern Zone of Kerala.
- **Animal Husbandry**
 - Ensure periodic vaccination of animals against FMD, Brucellosis, Haemorrhagic Septicaemia, Anthrax and small ruminants against PPR and Sheep and Goat Pox in the Scarce Rainfall Zone of Andhra Pradesh.
 - Vaccinate the dairy cow against the mastitis diseases in the Eastern Dry zone and Southern Dry Zone of Karnataka..
 - High day time temperature and low night time temperature prevailing in the present days may induce mild stress to poultry in the North Western Zone of Tamil Nadu. As preventive measures, add vitamin C and electrolytes in the feed.

Annexure I
Week by week Rainfall Distribution

State/Districts	15.01.14		22.01.14		29.01.14	
	Actual (mm)	% dep.	Actual (mm)	% dep.	Actual (mm)	% dep.
Arunachal Pradesh						
Anjaw	**	**	**	**	**	**
Changlang	4.6	-59	1.3	-90	0.0	-100
Dibang Valley	24.0	189	3.0	-84	0.0	-100
East Kameng	0.0	-100	0.0	-100	0.0	-100
East Siang	1.4	-74	0.0	-100	0.0	-100
Kurung Kumey	**	**	**	**	**	**
Lohit	0.3	-97	0.1	-99	0.0	-100
Lower Dibang Valley	4.2	-49	0.4	-98	0.0	-100
Lower Subansari	6.0	-75	**	**	**	**
Papumpara	0.0	-100	0.0	-100	0.0	-100
Tawang	4.0	-51	0.0	-100	12.0	35
Tirap	3.4	-62	1.1	-87	0.0	-100
Upper Siang	0.0	-100	1.8	-85	30.1	23
Upper Subansari	4.8	-32	0.0	-100	0.0	-100
West Kameng	0.0	-100	0.0	-100	0.0	-100
West Siang	11.7	276	2.7	-26	0.0	-100
Assam						
Baksa	0.0	-100	0.0	-100	0.0	-100
Barpeta	0.0	-100	0.0	-100	0.0	-100
Bongaigaon	0.0	-100	0.0	-100	0.0	-100
Cachar	0.0	-100	0.0	-100	0.0	-100
Chirang	0.0	-100	0.0	-100	0.0	-100
Darrang	0.0	-100	1.0	-69	0.0	-100
Dhemaji	0.0	-100	0.0	-100	0.0	-100
Dhubri	0.1	-98	1.3	-21	0.0	-100
Dibrugarh	0.2	-97	0.7	-91	0.0	-100
Goalpara	0.0	-100	0.0	-100	0.0	-100
Golghat	0.0	-100	3.8	-16	0.0	-100
Hailakandi	0.0	-100	0.0	-100	0.0	-100
Jorhat	0.0	-100	1.6	-76	0.0	-100
Kamrup(Rural)	0.0	-100	0.0	-100	0.0	-100
Kamrup(Metro)	0.0	-100	2.9	32	0.0	-100
Karbi Anglong	0.0	-100	0.0	-100	0.0	-100
Karimganj	0.0	-100	0.0	-100	0.0	-100
Kokrajhar	0.5	-77	0.0	-100	0.0	-100
Lakhimpur	0.2	-97	2.5	-67	0.0	-100
Morigaon	0.0	-100	1.1	-59	0.0	-100
N.C.Hills	0.0	-100	0.0	-100	0.0	-100
Nowgong	0.0	-100	2.4	-29	0.0	-100
Nalbari	0.0	-100	2.0	-26	0.0	-100
Sonitpur	0.0	-100	0.1	-99	0.0	-100

Sibsagar	0.0	-100	0.9	-79	0.0	-100
Tinsukia	0.1	-98	0.3	-97	0.0	-100
Udalgiri	0.0	-100	0.0	-100	0.0	-100
Meghalaya						
East Garo Hills	0.0	-100	0.0	-100	0.0	-100
East Khasi Hills	0.0	-100	0.0	-100	0.0	-100
Jaintia Hills	0.0	-100	0.0	-100	0.0	-100
Ribhoi	0.0	-100	0.0	-100	0.0	-100
South Garo Hills	0.0	-100	0.0	-100	0.0	-100
West Garo Hills	0.0	-100	0.0	-100	0.0	-100
West Khasi Hills	0.0	-100	0.0	-100	0.0	-100
Mizoram						
Aizwal	0.0	-100	0.0	-100	0.0	-100
Champhai	0.0	-100	0.0	-100	0.0	-100
Kolasib	0.0	-100	0.0	-100	0.0	-100
Lawngtlai	0.0	-100	0.0	-100	0.0	-100
Lunglei	0.0	-100	**	**	0.0	-100
Mamit	0.0	-100	0.0	-100	0.0	-100
Saiha	0.0	-100	0.0	-100	0.0	-100
Serchhip	0.0	-100	0.0	-100	0.0	-100
Manipur						
Bishnupur	0.0	-100	0.0	-100	0.0	-100
Chandel	0.0	-100	0.0	-100	0.0	-100
Churachandpur	0.0	-100	0.0	-100	0.0	-100
Imphal east	0.0	-100	0.0	-100	0.0	-100
Imphal west	0.0	-100	0.0	-100	0.0	-100
Senapati	0.0	-100	0.0	-100	0.0	-100
Tamenglong	**	**	**	**	**	**
Thoubal	0.0	-100	0.0	-100	0.0	-100
Ukhrul	0.0	-100	0.0	-100	0.0	-100
Nagaland						
Dimapur	0.0	-100	0.0	-100	0.0	-100
Kephire	0.0	-100	4.0	-51	0.0	-100
Kohima	0.0	-100	0.0	-100	0.0	-100
Longleng	**	**	**	**	**	**
Mokokchung	1.0	-87	23.0	115	0.0	-100
Mon	**	**	**	**	**	**
Paren	**	**	**	**	**	**
Phek	0.0	-100	0.0	-100	0.0	-100
Tuensang	**	**	**	**	**	**
Wokha	0.0	-100	18.0	150	0.0	-100
Zunheboto	**	**	**	**	**	**
Tripura						
Dhalai	0.0	-100	0.0	-100	0.0	-100
North tripura	0.0	-100	0.0	-100	0.0	-100
South tripura	0.0	-100	0.0	-100	0.0	-100
West tripura	0.0	-100	0.0	-100	0.0	-100
Himachal Pradesh						
Bilaspur	1.7	-84	7.8	-22	40.9	94

Chamba	6.9	-68	2.6	-91	24.5	-29
Hamirpur	0.0	-100	2.3	-79	35.3	60
Kangra	1.4	-93	1.4	-91	47.8	123
Kinnaur	37.5	72	1.0	-95	31.0	10
Kullu	31.4	81	1.6	-91	19.2	-29
Lahaul and Spiti	32.1	11	1.3	-95	19.0	-52
Mandi	12.7	-5	9.0	-36	31.6	38
Shimla	6.5	-56	19.3	31	25.2	30
Sirmaur	0.6	-96	45.6	274	36.9	143
Solan	1.6	-89	27.6	114	36.8	55
Una	0.0	-100	1.1	-87	73.9	487
Punjab						
Amritsar	0.0	-100	14.1	176	3.8	-55
Barnala	0.3	-83	0.0	-100	0.0	-100
Bhatinda	0.0	-100	0.0	-100	11.0	168
Faridkot	0.5	-64	2.0	-29	4.0	-34
Fatehgarh Saheb	0.0	-100	1.0	-74	33.0	197
Ferozpur	0.0	-100	0.5	-84	0.5	-88
Gurdaspur	0.4	-96	18.9	66	40.8	149
Hoshiarpur	0.0	-100	3.4	-50	28.9	154
Jalandhar	0.0	-100	4.0	1	0.0	-100
Kapurthala	0.0	-100	23.3	531	20.3	83
Ludhiana	0.0	-100	12.2	213	18.3	123
Mansa	0.0	-100	0.5	-74	16.0	233
Moga	0.4	-93	2.8	-45	8.4	45
Muktesar	0.0	-100	0.0	-100	0.0	-100
Nawashahar	0.2	-97	11.6	97	40.1	188
Patiala	0.0	-100	16.3	319	17.3	66
Ropar	0.1	-98	8.3	4	32.3	147
Sangrur	0.0	-100	6.8	105	7.3	14
Mohali	0.0	-100	26.0	420	29.5	154
TarnTaran	0.0	-100	7.0	133	5.6	-24
Haryana						
Ambala	0.0	-100	32.2	258	22.2	178
Bhiwani	0.0	-100	0.8	-38	1.8	-69
Chandigarh	0.1	-98	35.0	221	24.2	67
Faridabad	0.0	-100	11.0	279	1.5	-72
Fatehabad	0.0	-100	0.0	-100	4.0	-40
Gurgaon	0.0	-100	0.0	-100	0.0	-100
Hissar	0.0	-100	0.9	-53	0.6	-75
Jhajar	0.0	-100	0.5	-76	0.0	-100
Jind	0.0	-100	4.2	81	0.0	-100
Katihah	0.0	-100	14.5	325	20.8	230
Karnal	0.0	-100	40.8	538	22.6	148
Kurukshetra	0.0	-100	0.0	-100	0.3	-97
Mahendragarh	0.0	-100	0.0	-100	0.0	-100
Mewat	0.0	-100	0.0	-100	0.0	-100
Palwal	0.0	-100	9.0	329	1.0	-67
Panchkkula	0.2	-98	9.8	20	27.5	105

Panipat	0.0	-100	30.5	662	5.6	-16
Rewari	0.0	-100	0.0	-100	0.0	-100
Rohtak	0.0	-100	1.0	-75	1.0	-84
Sirsa	0.0	-100	0.0	-100	0.0	-100
Sonepat	0.0	-100	11.8	194	3.7	-35
Yamunanagar	0.0	-100	28.0	189	30.2	136
Delhi	0.0	-100	7.8	71	6.1	-11
Jammu & Kashmir						
Anantnag	30.1	118	40.5	144	41.7	43
Badgam	12.3	53	11.3	19	83.7	253
Bandipore	0.0	-100	0.0	-100	**	**
Baramula	27.7	73	13.5	-62	14.5	-72
Doda	5.8	-73	19.4	-30	58.6	37
Ganderwal	27.6	221	6.3	-54	18.4	-14
Jammu	0.9	-92	22.3	64	22.8	17
Kargil	2.0	-73	0.0	-100	0.0	-100
Kathua	0.0	-100	12.9	-26	62.2	231
Kistwar	0.0	-100	**	**	**	**
Kulgam	34.1	147	5.8	-65	18.5	-37
Kupwara	11.3	-13	9.2	-54	6.4	-75
Ladakh(Leh)	2.9	45	0.0	-100	0.2	-88
Poonch	0.0	-100	0.0	-100	0.0	-100
Pulwama	6.1	-3	7.7	-36	29.3	138
Rajouri	2.7	-84	8.6	-40	3.2	-74
Ramban	15.1	-29	38.7	39	38.6	-10
Reasi	2.3	-85	42.8	113	28.6	-25
Samba	0.4	-96	33.6	147	6.0	-69
Shopian	6.0	-5	0.0	-100	22.0	79
Srinagar	12.2	42	12.9	-6	39.1	82
Udhampur	3.0	-80	13.5	-33	26.0	-32
East Madhya Pradesh						
Anuppur	3.2	-67	5.3	-9	0.0	-100
Balaghat	0.0	-100	0.8	-81	0.0	-100
Chhatarpur	8.1	161	36.4	787	15.2	121
Chindwara	0.0	-100	13.3	456	12.4	235
Damoh	3.7	6	43.6	665	9.1	28
Dindori	3.0	-48	0.0	-100	0.0	-100
Jabalpur	20.6	415	5.1	12	1.7	-65
Katni	0.0	-100	0.0	-100	0.0	-100
Mandla	0.0	-100	6.0	7	0.0	-100
Narsingpur	1.8	-29	7.0	250	3.1	-23
Panna	1.1	-69	0.0	-100	0.0	-100
Rewa	31.8	1225	39.4	497	0.0	-100
Sagar	0.0	-100	38.9	783	16.1	275
Satna	10.2	162	10.7	64	1.2	-83
Seoni	0.0	-100	22.9	893	0.0	-100
Shahdol	10.8	112	13.0	73	0.0	-100
Sidhi	40.8	1175	47.2	638	0.0	-100

Singrauli	1.0	-41	14.0	324	1.0	-70
Tikamgarh	4.0	38	13.0	91	33.5	468
Umaria	5.4	0	46.4	661	1.4	-85
West Madhya Pradesh						
Alirajpur	0.0	-100	0.0	-100	0.0	-100
Asoknagar	2.0	43	0.1	-95	23.5	1708
Badwani	0.0	-100	0.0	-100	0.0	-100
Betul	0.0	-100	5.6	229	0.0	-100
Bhind	8.8	265	14.6	461	10.8	315
Bhopal	0.1	-97	3.6	71	43.1	1290
Burhanpur	0.0	-100	0.0	-100	2.3	483
Datia	1.6	-47	17.3	1344	13.0	398
Dewas	2.1	-18	0.0	-100	33.9	3662
Dhar	0.0	-100	5.0	1150	2.1	436
Guna	0.0	-100	5.2	44	13.7	356
Gwalior	1.3	-67	35.1	964	12.9	289
Harda	0.0	-100	8.5	750	1.0	-38
Hosangabad	1.6	-36	3.9	44	4.4	40
Indore	0.0	-100	0.4	-50	18.8	1463
Jhabua	0.0	-100	4.0	200	2.3	200
Khandwa	0.0	-100	0.0	-100	6.7	852
Khargone	0.0	-100	0.2	-73	11.2	2692
Mandsaur	0.0	-100	33.4	4671	1.7	83
Morena	5.0	39	27.8	1750	3.0	3
Neemuch	0.0	-100	0.0	-100	1.0	100
Raisen	1.5	-41	22.2	823	34.9	1952
Rajgarh	0.4	-87	3.0	100	1.8	-22
Ratlam	0.0	-100	19.5	200	3.8	650
Sehore	0.3	-90	0.3	-83	33.0	1471
Shajapur	0.8	-79	4.0	208	17.0	844
Sheopur Kalani	0.0	-100	34.0	2515	9.0	291
Shivpuri	2.0	-3	40.3	815	12.5	213
Ujjain	0.0	-100	4.0	567	11.6	1193
Vidisha	1.2	-78	5.1	155	31.6	1115
Chattisgarh						
Bastar	0.0	-100	0.0	-100	0.0	-100
Bijapur	0.0	-100	0.0	-100	0.0	-100
Bilaspur	1.6	-67	2.5	-18	0.0	-100
Dantewara	0.0	-100	0.0	-100	0.0	-100
Dhamtari	0.0	-100	0.0	-100	0.0	-100
Durg	0.0	-100	0.0	-100	0.0	-100
Janjgir	0.0	-100	0.0	-100	0.0	-100
Jashpurnagar	0.0	-100	0.0	-100	0.0	-100
Kanker	0.0	-100	0.0	-100	0.0	-100
Korba	0.0	-100	0.0	-100	0.0	-100
Koriya	0.0	-100	0.0	-100	0.0	-100
Kawardha	0.0	-100	0.0	-100	0.0	-100
Mahasumund	0.0	-100	0.0	-100	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	-100	0.0	-100	0.0	-100
Rajandgaon	0.0	-100	0.0	-100	0.0	-100
Surguja	0.6	-83	8.7	129	0.0	-100
East Uttar Pradesh						
Allahabad	24.0	446	56.7	1188	0.1	-99
Ambedkar Nagar	0.0	-100	38.0	709	0.0	-100
Azamgarh	10.0	270	42.4	1185	0.0	-100
Bahraich	3.5	-8	15.2	217	0.5	-91
Ballia	19.6	1204	6.0	173	0.0	-100
Balrampur	4.0	54	12.0	150	0.0	-100
Banda	13.4	361	45.3	930	5.6	-11
Barabanki	6.7	122	28.7	452	0.2	-96
Basti	11.5	283	35.0	614	0.0	-100
Chandauli	14.0	460	18.0	253	0.0	-100
Deoria	6.0	88	16.3	502	0.0	-100
Faizabad	3.6	0	29.1	348	0.0	-100
Farrukhabad	1.0	-77	32.2	1050	7.3	74
Fatehpur	12.9	267	18.8	337	4.5	-33
Gazipur	24.5	1012	22.8	660	0.0	-100
Gonda	26.0	863	39.0	539	0.0	-100
Gorakhpur	4.5	7	17.3	284	0.0	-100
Hardoi	2.7	-44	31.1	763	7.5	32
Jaunpur	15.0	370	25.1	579	0.0	-100
Kannauj	0.0	-100	59.0	1744	9.0	73
Kanpur City	27.8	768	50.8	917	10.8	126
Kanpur Dehat	6.9	177	35.2	700	13.0	261
Kaushambi	14.7	635	43.0	949	1.0	-84
Kheri	18.1	248	35.7	749	3.2	-46
Kushi nagar	0.0	-100	3.0	-30	0.0	-100
Lucknow	9.7	170	30.8	542	2.9	-44
Maharajganj	5.6	124	5.6	30	0.0	-100
Mau	10.5	150	14.0	300	0.0	-100
Mirzapur	25.0	942	20.0	292	0.0	-100
Pratapgarh	25.0	681	41.7	1057	0.7	-87
RaiBareilly	5.9	155	20.3	421	0.4	-91
Sahuji Maharajnagar	19.0	850	64.8	1195	0.0	-100
Sant Kabirnagar	2.0	100	26.0	550	0.0	-100
Sant Ravidas Nagar	29.0	1060	54.0	959	0.0	-100
Shrawasti	**	**	**	**	**	**
Sidharthnagar	1.5	-35	2.5	-47	0.0	-100
Sitapur	11.0	175	38.7	780	9.3	73
Sonbhadra	18.0	499	14.5	163	0.0	-100
Sultanpur	9.5	333	51.5	1370	0.7	-83
Unnao	8.4	211	48.5	1113	4.0	-25
Varanasi	27.9	697	28.4	530	0.0	-100
West Uttar Pradesh						

Agra	0.5	-93	29.4	1298	9.9	86
Aligarh	0.0	-100	48.2	1136	8.0	86
Auraiya	6.0	150	16.0	310	0.0	-100
Badaun	0.0	-100	28.0	803	8.6	169
Baghpat	0.0	-100	29.4	526	12.8	137
Bareilly	1.5	-66	31.6	690	4.6	-24
Bijnor	7.4	-9	81.3	1150	3.5	-67
Bulandsahar	0.0	-100	52.3	1314	3.7	-35
Etah	1.3	-65	33.3	1233	5.7	53
Etawah	5.0	43	16.0	627	7.0	56
Firozabad	2.1	-40	66.6	2120	16.6	349
GBNagar	0.0	-100	29.0	504	3.0	-46
Ghaziabad	0.0	-100	9.1	145	3.6	-51
Hamirpur	4.3	-10	26.1	692	8.3	65
Jalaun	4.0	74	61.3	1205	22.1	532
Jhansi	2.3	-10	26.9	571	16.0	290
Jotirba Phule Nagar	0.0	-100	41.0	1071	2.5	-57
Kanshiramnagar	0.0	-100	42.0	1255	8.0	54
Lalitpur	0.0	-100	18.0	186	33.0	432
Mahamaya Nagar	0.0	-100	43.5	1640	7.5	88
Mahoba	4.0	5	30.0	538	4.0	-25
Mainpuri	2.8	-22	27.5	1347	9.8	180
Mathura	0.0	-100	10.5	425	0.0	-100
Meerut	0.0	-100	57.6	929	11.7	55
Moradabad	0.1	-99	25.5	410	7.7	26
Muzzaffarnagar	0.0	-100	35.3	651	10.5	18
Pilibhit	3.7	-23	12.5	166	1.7	-66
Rampur	0.0	-100	17.1	289	11.5	83
Saharanpur	0.0	-100	42.0	589	23.0	153
Shahjahanpur	1.5	-71	30.1	760	5.1	38
Uttarakhand						
Almora	10.8	22	52.9	587	4.4	-65
Bageshwar	0.0	-100	39.8	417	2.1	-83
Chamoli	0.0	-100	9.6	-35	0.7	-95
Champawat	7.0	-5	71.0	799	0.0	-100
Dehradun	9.0	-12	34.7	218	14.5	-3
Garhwal Pauri	7.0	9	23.4	139	4.5	-62
Garhwal Tehri	2.7	-68	20.7	100	7.6	-59
Haridwar	3.1	-38	53.0	691	36.5	217
Nainital	18.1	105	64.2	655	2.2	-83
Pithoragarh	4.5	-55	35.0	297	3.5	-78
Rudraprayag	0.1	-99	5.6	-61	3.1	-81
Udham Sing Nagar	2.0	-56	91.4	1658	0.7	-93
Uttarkashi	0.3	-98	12.8	-32	16.3	-6
Bihar						
Araria	4.0	-4	1.1	-66	0.0	-100
Arwal	19.9	452	7.6	203	0.0	-100
Aurangabad	33.7	763	16.8	291	0.0	-100
Banka	3.2	68	0.0	-100	0.0	-100

Begusarai	16.0	1043	0.0	-100	0.0	-100
Bhabua	11.2	489	3.0	-76	0.0	-100
Bhagalpur	4.6	18	1.0	-85	0.0	-100
Bhojpur	6.5	210	4.3	5	0.0	-100
Buxar	35.0	846	6.8	42	0.0	-100
Darbhanga	6.3	232	3.1	-35	0.0	-100
East Champaran	2.5	7	9.4	135	0.0	-100
Gaya	27.7	793	10.9	160	0.0	-100
Gopalganj	2.8	-22	9.6	146	0.0	-100
Jahanabad	10.2	227	7.1	194	0.0	-100
Jamui	14.3	791	4.5	5	0.0	-100
Kathihar	4.1	94	1.7	-47	0.0	-100
Khagadia	6.8	224	0.0	-100	0.0	-100
Kishanganj	3.0	20	0.0	-100	0.0	-100
Lakhisarai	15.0	525	0.0	-100	0.0	-100
Madhepura	6.1	125	1.8	-53	0.0	-100
Madhubani	1.6	23	1.4	-56	0.0	-100
Monghyar	8.2	242	1.3	-69	0.0	-100
Muzaffarpur	3.4	63	12.7	153	0.0	-100
Nalanda	20.1	529	10.1	196	0.0	-100
Nawada	13.8	306	11.2	251	0.0	-100
Patna	19.6	715	5.6	33	0.0	-100
Purnea	6.2	158	0.6	-82	0.0	-100
Rohtas	27.7	1159	9.2	109	0.0	-100
Saharsha	0.0	-100	0.0	-100	0.0	-100
Samstipur	0.0	-100	5.0	39	0.0	-100
Saran	5.0	28	20.1	293	0.0	-100
Sheikpura	15.3	325	8.1	83	0.0	-100
Sheohar	3.0	88	9.6	200	0.0	-100
Sitamarhi	0.0	-100	0.0	-100	0.0	-100
Siwan	49.6	1670	13.9	209	0.0	-100
Supaul	1.0	-5	1.1	-45	0.0	-100
Vaishali	3.9	34	13.3	183	0.0	-100
West Champaran	0.0	-100	8.4	9	0.0	-100
Jharkhand						
Bokaro	11.6	205	0.0	-100	0.0	-100
Chatra	17.4	287	0.0	-100	0.0	-100
Deoghar	2.1	-37	0.0	-100	0.0	-100
Dhanbad	7.0	218	0.0	-100	0.0	-100
Dumka	**	**	**	**	**	**
East Singbhum	1.2	-64	0.0	-100	0.0	-100
Garhwa	18.0	283	10.0	127	0.0	-100
Giridih	21.1	628	0.0	-100	0.0	-100
Godda	0.0	-100	0.0	-100	0.0	-100
Gumla	**	**	**	**	**	**
Hazaribagh	23.0	995	1.7	-61	0.0	-100
Jamtara	9.1	195	0.0	-100	0.0	-100
Khunti	2.0	-57	0.0	-100	0.0	-100
Koderrna	**	**	6.2	29	0.0	-100

Latehar	5.4	26	7.0	71	0.0	-100
Lohardagga	3.4	17	0.0	-100	0.0	-100
Pakur	1.0	-82	0.0	-100	0.0	-100
Palamau	13.3	209	11.1	226	0.0	-100
Ramgarh	0.0	-100	0.6	-85	0.0	-100
Ranchi	2.9	-25	0.2	-97	0.0	-100
Sahebganj	2.0	-31	0.0	-100	0.0	-100
Saraikela	0.0	-100	0.0	-100	0.0	-100
Simdega	5.4	23	0.0	-100	0.0	-100
West Singhbhum	0.0	-100	0.0	-100	0.0	-100
East Rajasthan						
Ajmer	0.0	-100	8.7	4235	1.4	170
Alwar	0.0	-100	10.2	436	2.6	0
Banswara	0.0	-100	61.8	61687	0.8	171
Baran	0.0	-100	25.6	1014	30.4	2070
Bharatpur	0.0	-100	17.7	1080	5.6	107
Bhilwara	0.0	-100	28.2	28067	1.1	81
Bundi	0.0	-100	39.0	5471	0.7	-33
Chittorgarh	0.0	-100	32.3	10658	0.0	-100
Dausa	0.0	-100	32.2	2583	3.4	127
Dholpur	0.0	-100	42.0	2700	10.2	498
Dungarpur	0.0	-100	15.4	7608	0.0	-100
Jaipur	0.0	-100	17.0	1601	0.6	-43
Jhalawar	0.0	-100	36.6	2188	18.3	1310
Jhunjhunu	0.0	-100	0.6	-48	0.0	-100
Karauli	0.0	-100	50.3	3256	3.0	36
Kota	0.0	-100	28.3	1248	4.3	326
Pratapgarh	0.0	-100	69.2	69100	0.0	-100
Rajsamand	0.0	-100	10.0	200	0.0	-100
Sawai Madhopur	0.2	-91	37.5	6146	0.4	-77
Sikar	0.0	-100	0.0	-100	1.6	12
Sirohi	0.0	-100	0.0	-100	0.0	-100
Tonk	0.0	-100	34.0	16889	0.0	-100
Udaipur	0.0	-100	19.1	18980	0.0	-100
West Rajasthan						
Barmer	0.0	-100	0.0	-100	0.0	-100
Bikaner	0.0	-100	0.0	-100	0.0	-100
Churu	0.0	-100	0.0	-100	6.5	444
Hanumangarh	0.0	-100	1.9	-7	2.6	12
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	0.4	0	0.6	-33
Pali	0.0	-100	0.0	-100	0.0	-100
Sri Ganganagar	0.0	-100	0.0	-100	0.0	-99
Gujarat Region						
Ahmedabad	0.0	-100	1.5	200	0.0	-100
Anand	0.0	-100	9.1	9020	0.0	-100
Banaskantha	0.0	-100	3.4	200	0.0	-100

Baroda	0.0	-100	18.6	9208	0.1	200
Broach	0.0	-100	0.8	200	0.3	200
DNH	**	**	**	**	**	**
Dahod	0.0	-100	18.6	200	0.1	-38
Daman	**	**	**	**	**	**
Dangs	0.0	-100	0.0	-100	0.5	-44
Gandhinagar	0.0	-100	0.8	200	0.0	-100
Kheda	0.0	-100	22.7	22600	0.0	-100
Mehsana	0.0	-100	0.0	-100	0.0	-100
Narmada	0.0	-100	0.2	200	0.0	-100
Navsari	0.0	-100	0.2	200	0.3	200
Panchmahal	0.0	-100	5.7	5567	0.0	-100
Patan	0.0	-100	0.3	200	0.0	-100
Sabarkantha	0.0	-100	23.0	200	0.0	-100
Surat	0.0	-100	7.2	200	3.2	200
Tapi	0.0	-100	0.0	-100	0.0	-100
Valsad	0.0	-100	0.0	-100	1.2	200
S K & Diu region						
Amreli	0.0	-100	3.8	200	0.0	-100
Bhavnagar	0.0	-100	0.8	200	0.0	-100
Diu	0.0	-100	1.8	1700	0.0	-100
Jamnagar	0.0	-100	0.0	-100	0.0	-100
Junagarh	0.0	-100	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	0.0	-100	0.0	-100	0.0	-100
Surendranagar	0.0	-100	0.0	-100	0.0	-100
Maharashtra						
Konkan & Goa						
Goa	0.0	-100	0.0	-100	0.0	-100
Mumbai	0.0	-100	0.9	800	0.0	-100
Raigad	0.0	-100	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	0.3	200	0.0	-100
Madhya Maharashtra						
Ahmednagar	0.0	-100	0.0	-100	0.1	200
Dhule	**	**	0.0	-100	9.2	1050
Jalgaon	0.0	-100	0.0	-100	10.9	1713
Kolhapur	0.0	-100	0.0	-100	0.0	-100
Nandurbar	**	**	**	**	6.0	1400
Nasik	0.0	-100	0.5	146	5.2	2485
Pune	0.0	-100	0.0	-100	1.2	200
Sangli	0.0	-100	0.0	-100	0.0	-100
Satara	0.0	-100	0.0	-100	0.0	-100
Solapur	0.0	-100	0.0	-100	0.0	-100
Marathwada						
Aurangabad	0.0	-100	0.0	-100	4.4	631

Beed	0.0	-100	**	**	0.0	-100
Hingoli	**	**	**	**	0.0	-100
Jalna	**	**	**	**	5.2	1622
Latur	0.0	-100	0.0	-100	0.0	-100
Nanded	0.0	-100	0.0	-100	0.0	-100
Usmanabad	0.0	-100	0.0	-100	0.0	-100
Parbhani	0.0	-100	0.0	-100	0.0	-100
Vidarbha						
Akola	0.0	-100	1.1	7	0.0	-100
Amraoti	0.0	-100	0.9	-49	0.0	-100
Bhandara	0.0	-100	0.0	-100	0.0	-100
Buldhana	0.0	-100	0.0	-100	8.9	712
Chandrapur	0.0	-100	0.0	-100	0.0	-100
Gadchiroli	0.0	-100	0.0	-100	0.0	-100
Gondia	0.0	-100	0.0	-100	0.0	-100
Nagpur	0.0	-100	0.3	-90	0.0	-100
Wardha	0.0	-100	0.0	-100	0.0	-100
Washim	0.0	-100	0.0	-100	0.9	-38
Yeotmal	0.0	-100	0.0	-100	0.0	-100
Odisha						
Angul	0.0	-100	0.0	-100	0.0	-100
Balasore	0.0	-100	0.0	-100	0.0	-100
Bargarh	0.0	-100	0.0	-100	0.0	-100
Bhadrak	0.0	-100	0.0	-100	0.0	-100
Bolangir	0.0	-100	0.0	-100	0.0	-100
Boudh	0.0	-100	0.0	-100	0.0	-100
Cuttack	0.0	-100	0.0	-100	0.0	-100
Deogarh	0.0	-100	0.0	-100	0.0	-100
Dhenkanal	0.0	-100	0.0	-100	0.0	-100
Gajapati	0.0	-100	0.0	-100	0.0	-100
Ganjam	0.0	-100	0.0	-100	0.0	-100
Jagatsingpur	0.0	-100	0.0	-100	0.0	-100
Jajpur	0.0	-100	0.0	-100	0.0	-100
Jharsuguda	0.0	-100	0.0	-100	0.0	-100
Kalahandi	0.0	-100	0.0	-100	0.0	-100
Kandhamal	0.0	-100	0.0	-100	0.0	-100
Kendrapara	0.0	-100	0.0	-100	0.0	-100
Keonjhar	0.0	-100	0.0	-100	0.0	-100
Khurda	0.0	-100	0.0	-100	0.0	-100
Koraput	0.0	-100	0.0	-100	0.0	-100
Malkangiri	0.0	-100	0.0	-100	0.0	-100
Mayurbhanj	0.0	-100	0.0	-100	0.0	-100
Nawapara	0.0	-100	0.0	-100	0.0	-100
Nawarangpur	0.0	-100	0.0	-100	0.0	-100
Nayagarh	0.0	-100	0.0	-100	0.0	-100
Puri	0.0	-100	0.0	-100	0.0	-100
Rayagada	0.0	-100	0.0	-100	0.0	-100
Sambalpur	0.0	-100	0.0	-100	0.0	-100
Sonepur	0.0	-100	0.0	-100	0.0	-100

Sundargarh	0.1	-99	0.0	-100	0.0	-100
West Bengal						
GWB						
Bankura	0.3	-81	0.0	-100	0.0	-100
Birbhum	3.5	-31	0.0	-100	0.0	-100
Burdwan	1.0	-23	0.0	-100	0.0	-100
East Midnapore	0.0	-100	0.0	-100	0.0	-100
Hooghly	0.0	-100	0.0	-100	0.0	-100
Howrah	0.1	-75	0.0	-100	0.0	-100
Kolkata	1.0	-64	0.0	-100	0.0	-100
Murshidabad	1.0	-87	0.0	-100	0.0	-100
Nadia	0.8	-56	0.0	-100	0.0	-100
24 Pargana (N)	0.0	-100	0.0	-100	0.0	-100
Purulia	1.1	-63	0.0	-100	0.0	-100
24 Pargana (S)	0.0	-100	0.0	-100	0.0	-100
West Midnapore	0.0	-100	0.0	-100	0.0	-100
SHWB						
Cooch Behar	0.4	-87	0.0	-100	0.0	-100
Darjeeling	0.1	-99	0.0	-100	0.0	-100
East Sikkim	0.0	-100	0.0	-100	0.0	-100
Jalpaiguri	0.4	-76	0.0	-100	0.0	-100
Malda	0.5	-85	0.0	-100	0.0	-100
North Dinajpur	3.0	-58	0.0	-100	0.0	-100
North Sikkim	0.0	-100	0.0	-100	0.0	-100
South Dinajpur	0.0	-100	0.0	-100	0.0	-100
South Sikkim	0.0	-100	0.0	-100	0.0	-100
West Sikkim	0.0	-100	0.0	-100	0.0	-100
Karnataka						
Coastal Karnataka						
Dakshin Kannada	0.0	-100	0.0	-100	0.0	-100
Udupi	0.0	-100	0.0	-100	0.0	-100
Uttar Kannada	0.0	-100	0.0	-100	0.0	-100
N I Karnataka						
Bagalkote	0.0	-100	0.0	-100	0.0	-100
Belgaum	0.0	-100	0.0	-100	0.0	-100
Bidar	0.0	-100	0.0	-100	0.0	-100
Bijapur	0.0	-100	0.0	-100	0.0	-100
Dharwad	0.0	-100	0.0	-100	0.0	-100
Gadag	0.0	-100	0.0	-100	0.0	-100
Gulbarga	0.0	-100	0.0	-100	0.0	-100
Haveri	0.0	-100	0.0	-100	0.0	-100
Koppal	0.0	-100	0.0	-100	0.0	-100
Raichur	0.0	-100	0.0	-100	0.0	-100
Yadgir	0.0	-100	0.0	-100	0.0	-100
S I Karnataka						
Bangalore Rural	0.0	-100	0.0	-100	0.0	-100
Bangalore Urban	0.0	-100	0.0	-100	0.0	-100
Bellary	0.0	-100	0.0	-100	0.0	-100
Chamarajnagar	0.0	-100	0.0	-100	0.0	-100

Chichballapur	0.0	-100	0.0	-100	0.0	-100
Chickmagalur	0.0	-100	0.8	62	0.0	-100
Chitradurga	0.0	-100	0.3	-37	0.0	-100
Davangere	0.0	-100	0.1	-78	0.0	-100
Hassan	0.0	-100	0.0	-100	0.0	-100
Kodagu	0.0	-100	3.6	354	0.0	-100
Kolar	0.0	-100	0.0	-100	0.0	-100
Mandya	0.0	-100	0.0	-100	0.0	-100
Mysore	0.0	-100	0.4	-58	0.0	-100
Ramnagara	0.0	-100	0.0	-100	0.0	-100
Shimoga	0.0	-100	0.0	-100	0.0	-100
Tumkur	0.0	-100	0.0	-100	0.0	-100
Kerala						
Alappuzha	0.0	-100	0.2	-94	0.0	-100
Kannur	0.0	-100	2.3	-	0.0	-100
Ernakulam	0.0	-100	0.0	-100	0.0	-100
Idukki	1.0	-67	6.6	175	0.0	-100
Kasaragod	0.0	-100	0.0	-100	0.0	-100
Kollam	0.4	-91	0.2	-92	0.0	-100
Kottayam	0.0	-100	11.1	429	0.0	-100
Kozhikode	0.0	-100	0.0	-100	0.0	-100
Malappuram	0.0	-100	1.1	267	0.0	-100
Palakkad	0.0	-100	0.0	-100	0.0	-100
Pathanamthitta	2.5	-57	0.4	-85	0.0	-100
Thiruvananthapuram	20.1	310	13.3	432	6.6	16
Thrissur	0.0	-100	0.0	-100	0.0	-100
Wyanad	0.0	-100	0.0	-100	0.0	-100
Tamil Nadu						
Ariyalur	0.0	-100	0.0	-100	0.0	-100
Chennai	0.0	-100	0.0	-100	0.0	-100
Coimbatore	0.0	-100	1.2	71	0.0	-100
Cuddalore	0.0	-100	1.9	-42	0.0	-100
Dharmapuri	0.0	-100	0.0	-100	0.0	-100
Dindigul	2.5	-67	0.0	-100	0.0	-100
Erode	0.0	-100	0.0	-100	0.0	-100
Kanchipuram	0.0	-100	0.0	-100	0.0	-100
Kanyakumari	38.8	632	0.0	-100	0.0	-100
Karikal	2.0	-86	**	**	0.0	-100
Karur	0.4	-93	0.0	-100	0.0	-100
Krishnagiri	0.0	-100	0.0	-100	0.0	-100
Madurai	3.1	-21	0.0	-100	0.0	-100
Nagapattinam	0.5	-98	0.5	-97	0.3	-94
Namakkal	0.0	-100	0.0	-100	0.0	-100
Nilgiris	0.4	-96	0.9	-81	0.0	-100
Perambalur	0.0	-100	0.0	-100	0.0	-100
Puducherry	0.0	-100	**	**	0.0	-100
Pudukottai	2.3	-78	0.0	-100	0.0	-100
Ramanathapuram	18.1	127	0.1	-99	0.2	-92
Salem	0.0	-100	0.0	-100	0.0	-100

Sivaganga	3.0	-37	0.0	-100	0.0	-100
Thanjavur	0.9	-92	0.3	-92	0.0	-100
Theni	1.7	-59	0.0	-100	0.0	-100
Tirunelveli	47.7	294	0.0	-100	0.0	-100
Tirupur	0.0	-100	0.0	-100	0.0	-100
Tiruvallur	0.0	-100	0.7	-77	0.0	-100
Tiruvannamalai	0.0	-100	0.0	-100	0.0	-100
Tiruvarur	2.7	-82	0.0	-100	0.0	-100
Toothukudi	16.7	74	0.0	-100	0.0	-100
Trichy	0.0	-100	0.0	-100	0.0	-100
Vellore	0.0	-100	0.1	-89	0.0	-100
Villupuram	0.0	-100	0.0	-100	0.0	-100
Virudhunagar	2.2	-65	0.0	-100	0.0	-100
Andhra Pradesh						
Coastal Andhra Pradesh						
East Godavari	0.3	-76	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	0.2	-93	0.0	-100
Prakasam	0.4	-89	0.3	-85	0.0	-100
Sirkakulam	0.0	-100	0.0	-100	0.0	-100
Visakhapatnam	2.0	-4	0.0	-100	0.0	-100
Vizianagram	0.0	-100	0.0	-100	0.0	-100
West Godavari	0.0	-100	2.2	16	0.0	-100
Telangana						
Adilabad	0.0	-100	0.0	-100	0.0	-100
Hyderabad	0.0	-100	0.0	-100	0.0	-100
Karimnagar	0.0	-100	0.0	-100	0.0	-100
Khammam	0.0	-100	0.0	-100	0.0	-100
Mehabubnagar	0.0	-100	0.0	-100	0.0	-100
Medak	0.0	-100	0.0	-100	0.0	-100
Nalgonda	0.0	-100	0.7	79	0.0	-100
Nizamabad	0.0	-100	0.0	-100	0.0	-100
Rangareddy	0.0	-100	0.0	-100	0.0	-100
Warangal	0.0	-100	0.5	-69	0.0	-100
Rayalaseema						
Anantapur	0.0	-100	0.0	-100	0.0	-100
Chittoor	0.0	-100	0.5	-64	0.0	-100
Cuddapah	0.0	-100	0.0	-100	0.0	-100
Kurnool	0.0	-100	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