

# National Agromet Advisory Service Bulletin

**Friday 30<sup>th</sup> May 2014**

**(For the period 30<sup>th</sup> May to 3<sup>rd</sup> June 2014)**



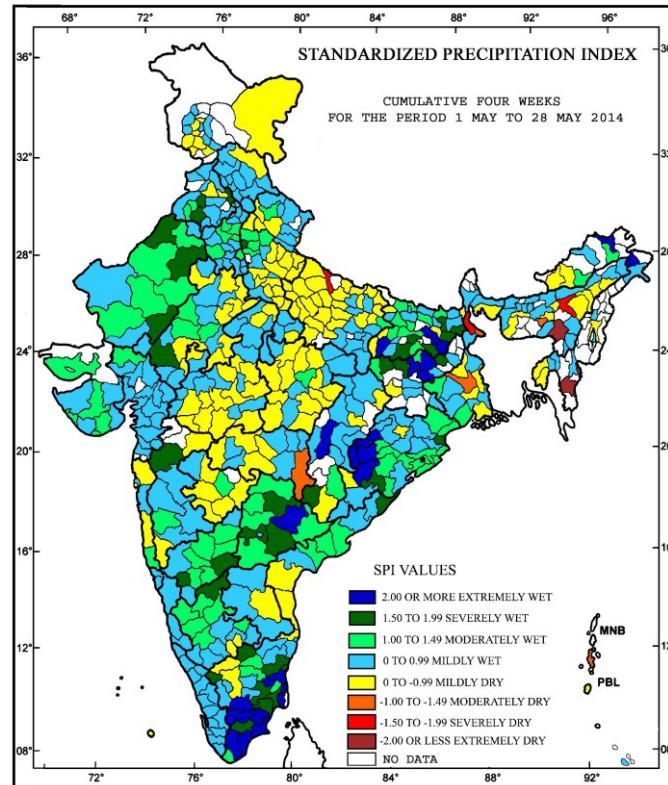
**Issued by**

**National Agrometeorological Advisory Service Centre,  
Agricultural Meteorology Division,  
India Meteorological Department, Shivajinagar, Pune.**



**Standardised Precipitation Index  
Four Weekly  
for the Period 1<sup>st</sup> to 28<sup>th</sup> May 2014**

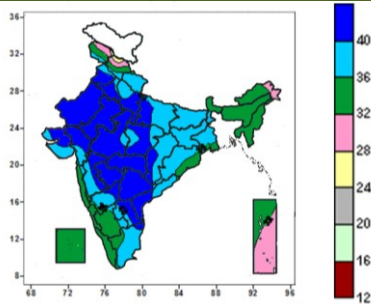
MINISTRY OF EARTH SCIENCES  
INDIA METEOROLOGICAL DEPARTMENT  
HYDROMET SECTION, PUNE



- Extremely wet/severely wet conditions experienced over many parts of Tamil Nadu, Bihar, Jharkhand; some parts of Odisha and Andhra Pradesh; Bhatinda, Moga, Mohali districts of Punjab; Sri Ganganagar, Churu, Pali and Udaipur districts of Rajasthan; Upper Siang and Lohit districts of Arunachal Pradesh; Raichur, Dharwad, Bellary districts of Interior Karnataka; Nasik district of Maharashtra; Durg district of Chhattisgarh; Baghpat district of Uttar Pradesh.
- Moderately/ severely dry conditions experienced in Bahraich district of Uttar Pradesh; Nagaon district of Assam ; Ri-bhoi district of Meghalaya; Burdwan, South Dinajpur, North Dinajpur districts of West Bengal; Gadchiroli district of Maharashtra.
- Rest of the country experienced mild wet/dry conditions.

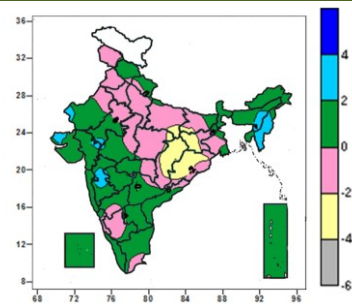
**Contour maps for Mean Maximum and Minimum Temperature and their anomaly for the week ending on 28.05.2014**

**Actual Mean Maximum Temperature ( $^{\circ}$ C) in India for the week ending 28.05.2014**



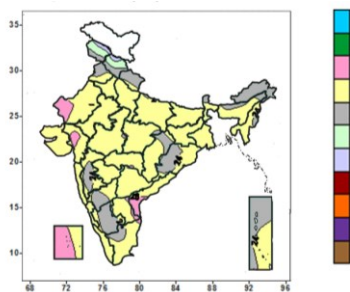
- 40 to 44 $^{\circ}$ C over many parts of Punjab, Haryana, Delhi, West Uttar Pradesh, Rajasthan, Madhya Pradesh, Andhra Pradesh, Vidarbha, Marathwada and Gujarat, some parts of East Uttar Pradesh, Chhattisgarh, Tamil Nadu, North Interior Karnataka and Madhya Maharashtra.
- 36 to 40 $^{\circ}$ C over many parts of Uttarakhand, East Uttar Pradesh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Chhattisgarh, Tamil Nadu and North Interior Karnataka, some parts of Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, West Uttar Pradesh, Sub-Himalayan West Bengal, Coastal Andhra Pradesh, Rayalaseema, North Interior Karnataka, Konkan, Gujarat, Madhya Pradesh, Madhya Maharashtra and Konkan.
- 32 to 36 $^{\circ}$ C over many parts of Sub-Himalayan West Bengal & Sikkim, Northeast India, Kerala, Coastal & South Interior Karnataka, Konkan & Goa and Lakshadweep Islands, some parts of Jammu & Kashmir, Himachal Pradesh, Gangetic West Bengal, Odisha, Tamil Nadu, North Interior Karnataka, Madhya Maharashtra, Andaman & Nicobar Islands.
- 24 to 32 $^{\circ}$ C over many parts of Andaman & Nicobar Islands, some parts of Jammu & Kashmir, Himachal Pradesh and Arunachal Pradesh.

**Mean Maximum Temperature ( $^{\circ}$ C) Anomaly in India for the week ending 28.05.2014**



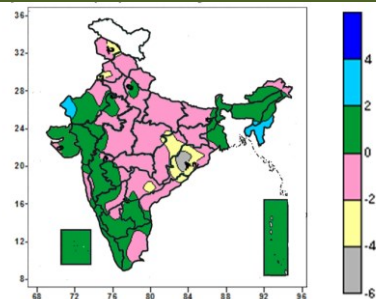
- 2 to 4 $^{\circ}$ C over many parts of Manipur, Mizoram and Tripura, some parts of Rajasthan, Assam & Meghalaya, Manipur, Madhya Maharashtra and Gujarat.
- 0 to 2 $^{\circ}$ C over many parts of Himachal Pradesh, Uttarakhand, Rajasthan, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Arunachal Pradesh, Nagaland, Andhra Pradesh, Tamil Nadu, Kerala, North Interior Karnataka, Maharashtra, Gujarat, West Madhya Pradesh, Lakshadweep, Andaman & Nicobar Islands, some parts of East Uttar Pradesh, Bihar, Jharkhand, Gangetic West Bengal and South Interior Karnataka.
- -2 to 0 $^{\circ}$ C over many parts of Jammu & Kashmir, Punjab, Haryana, Delhi, Uttar Pradesh, Bihar, Gangetic West Bengal, East Madhya Pradesh, Coastal & South Interior Karnataka, some parts of Himachal Pradesh, Uttarakhand, Odisha, Chhattisgarh, West Madhya Pradesh, Coastal Andhra Pradesh, Telangana, Tamil Nadu, North Interior Karnataka and Rajasthan.
- -4 to -2 $^{\circ}$ C over many parts of Chhattisgarh, Odisha and Jharkhand, some parts of East Uttar Pradesh, Bihar and East Madhya Pradesh.

**Actual Mean Minimum Temperature ( $^{\circ}$ C) in India for the week ending 28.05.2014**



- 28 to 32 $^{\circ}$ C over many parts of Lakshadweep Islands, some parts of West Rajasthan, Gujarat region and Coastal Andhra Pradesh.
- 24 to 28 $^{\circ}$ C over entire country except many parts of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Sikkim, Arunachal Pradesh, Nagaland, Odisha, Interior Karnataka, Lakshadweep, Andaman & Nicobar Islands, some parts of West Rajasthan, Assam & Meghalaya, Manipur, Central India, Coastal Andhra

**Mean Minimum Temperature ( $^{\circ}$ C) Anomaly in India for the week ending 28.05.2014**



- 2 to 4 $^{\circ}$ C over many parts of Mizoram and Tripura, some parts of Assam and West Rajasthan.
- 0 to 2 $^{\circ}$ C over many parts of Rajasthan, West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Rayalaseema, Kerala, Karnataka, Goa, Madhya Maharashtra, Marathwada, Gujarat, Lakshadweep, Andaman & Nicobar Islands, some parts of West Uttar Pradesh, Bihar, Jharkhand, Telangana, Coastal Andhra Pradesh, Tamil Nadu, Konkan,



Pradesh, Rayalaseema, Tamil Nadu, Konkan, Madhya Maharashtra and Chhattisgarh.

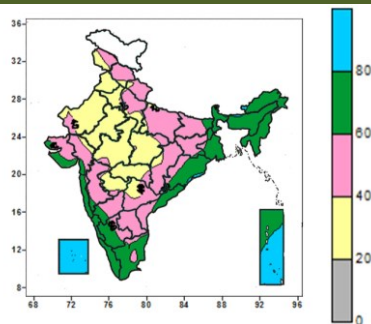
- 20 to 24<sup>0</sup>C over many parts of Uttarakhand, Punjab, Sikkim, Arunachal Pradesh, Nagaland, Odisha, Interior Karnataka, Andaman & Nicobar Islands, some parts of Jammu & Kashmir, Himachal Pradesh, Assam & Meghalaya, Manipur, Central India, Tamil Nadu and Madhya Maharashtra.
- 12 to 20<sup>0</sup>C over many parts of Jammu & Kashmir, Himachal Pradesh.

Vidarbha and West Madhya Pradesh.

- -2 to 0<sup>0</sup>C over many parts of North India except some parts of Rajasthan, Bihar, Jharkhand, Central India, Vidarbha, Konkan, Telangana, Coastal Andhra Pradesh and Tamil Nadu, some parts of Gangetic West Bengal Arunachal Pradesh, Odisha, Rayalaseema, Interior Karnataka, Madhya Maharashtra, Marathwada and Saurashtra.
- -6 to -2<sup>0</sup>C over many parts of Odisha, some parts of Jammu & Kashmir, Punjab, Chhattisgarh, East Madhya Pradesh, Coastal Andhra Pradesh and Telangana.

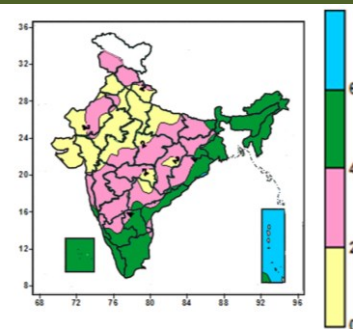
### Contour maps for Relative Humidity, Cloud amount and Wind speed for the week ending on 28.05.2014

**Relative Humidity (%) over India for the week ending 28.05.2014**



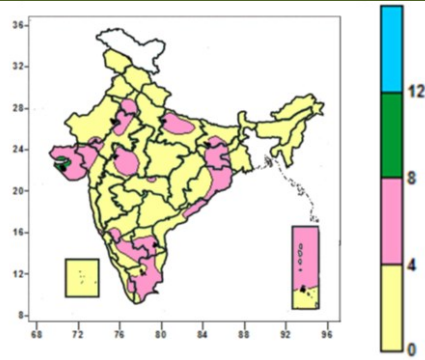
- 80 to 100% over many parts of Lakshadweep, Andaman & Nicobar Islands.
- 60 to 80% over many parts of West Bengal & Sikkim, Northeast India, Odisha, Tamil Nadu, Kerala, Coastal & South Interior Karnataka, Konkan & Goa, some parts of Bihar, Jharkhand, Coastal Andhra Pradesh, North Interior Karnataka, Madhya Maharashtra, Gujarat, Andaman & Nicobar Islands.
- 40 to 60% over many parts Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, Chhattisgarh, Andhra Pradesh, North Interior Karnataka, Madhya Maharashtra and Gujarat, some parts of West Rajasthan, Gangetic West Bengal, Madhya Pradesh, Marathwada, Vidarbha, Tamil Nadu and South Interior Karnataka.
- 20 to 40% over many parts of Punjab, Haryana, Delhi, Rajasthan, Madhya Pradesh, Vidarbha and Marathwada, some parts of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Chhattisgarh, Telangana and Gujarat region.

**Cloud amount (okta) over India for the week ending 28.05.2014**



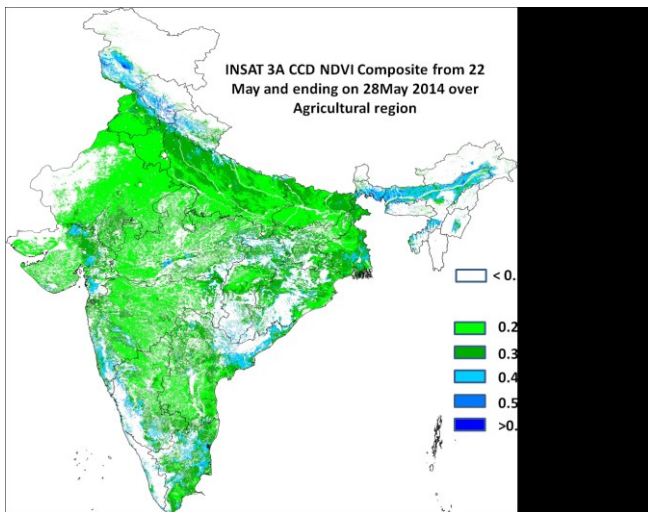
- 6 to 8 okta over many parts of Andaman & Nicobar Islands.
- 4 to 6 okta over many parts of West Bengal & Sikkim, North East India, Coastal Andhra Pradesh, Rayalaseema, Tamil Nadu, Kerala, Coastal & South Interior Karnataka and Goa, some parts of Bihar, Jharkhand, Odisha, Chhattisgarh, Telangana, Andaman & Nicobar Islands.
- 2 to 4 okta over many parts of Jammu & Kashmir, Himachal Pradesh, West Rajasthan, Bihar, Jharkhand, Odisha, Central India, Maharashtra, Telangana and North Interior Karnataka, some parts of Uttarakhand, Punjab, East Rajasthan, East Uttar Pradesh, Coastal Andhra Pradesh, Rayalaseema, Tamil Nadu, Coastal & South Interior Karnataka.
- 0 to 2 okta over many parts of Uttarakhand, Punjab, Haryana, Delhi, Uttar Pradesh, Gujarat, West Madhya Pradesh and East Rajasthan, some parts of Himachal Pradesh, , Chhattisgarh, East Madhya Pradesh, Vidarbha, Telangana, Madhya Maharashtra and West Rajasthan.

### Wind speed (knots) over India for the week ending 28.05.2014



- 8 to 12 knots over some parts of Saurashtra & Kutch.
- 4 to 8 knots over many parts of Haryana, Delhi, East Uttar Pradesh, Jharkhand, West Madhya Pradesh, Gujarat, Rayalaseema, Tamil Nadu and South Interior Karnataka, some parts of Rajasthan, Bihar, Odisha, Coastal Andhra Pradesh, Kerala, North Interior Karnataka, Goa and Vidarbha.
- 0 to 4 knots over entire country except many parts of Haryana, Delhi, East Uttar Pradesh, Jharkhand, West Madhya Pradesh, Gujarat, Rayalaseema, Tamil Nadu and South Interior Karnataka, some parts of Rajasthan, Bihar, Odisha, Coastal Andhra Pradesh, Kerala, North Interior Karnataka, Goa and Vidarbha.

### INSAT 3A CCD NDVI COMPOSITE OVER AGRICULTURAL REGION 22<sup>nd</sup> – 28<sup>th</sup> May 2014



Source: SAC, Ahmedabad

- Agricultural vigour is moderate over very few pockets of central Madhya Pradesh and south Gujarat where NDVI varies between 0.4 to 0.5 upto 28<sup>th</sup> May 2014. The NDVI remains within the range of 0.2 to 0.3 over rest of India. There is further decrease in NDVI as compared to last week.

## Monsoon Watch

- The northern limit of monsoon (NLM) continues to pass through 05.0°N/84.0°E, 10.0°N/85.0°E, 14.0°N/87.0°E, 18.0°N/90.0°E and 21.0°N/92.0°E.

## Weather Forecast

### Weather Forecast for next 3 days (upto 0830 hours IST of 2<sup>nd</sup> June, 2014)

- Rain/thundershowers would occur at a few places over Andaman & Nicobar Islands during next 24 hours and at many places thereafter.
- Rain/thundershowers would occur at a few places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram, Tripura and Sub-Himalayan West Bengal & Sikkim during the period.
- Rain/thundershowers would occur at many places over Jammu & Kashmir during next 24 hours, over Kerala during next 48 hours and at a few places thereafter.
- Rain/thundershowers would occur at many places over South Interior Karnataka during next 24 hours and decrease thereafter.
- Rain/thundershowers would occur at a few places over Coastal Karnataka during next 24 hours and over Himachal Pradesh, Tamilnadu & Pudduchery during next 48 hours and at isolated places thereafter.
- Rain/thundershowers would occur at isolated places over Uttarakhand, Bihar, Gangetic West Bengal, Coastal Andhra Pradesh, Telangana, Rayalaseema, North Interior Karnataka, and Lakshadweep during the period.
- Rain/thundershowers would occur at isolated places over west Rajasthan during next 24 hours and over Punjab, Haryana & Delhi, west Uttar Pradesh during next 48 hours and mainly dry thereafter.
- Mainly dry/dry weather would prevail over east Uttar Pradesh, east Madhya Pradesh during next 24 hours and over east Rajasthan, Chhattisgarh, Odisha and Jharkhand during next 48 hours and rain/thundershowers would occur at isolated places thereafter.
- Mainly dry/dry weather would prevail over rest of the country.
- Rise in maximum temperatures by 3-4°C likely over east India during next 48 hours and by 2-3°C over northwest India during next 24 hours.

### Weather Warning during next 3 days

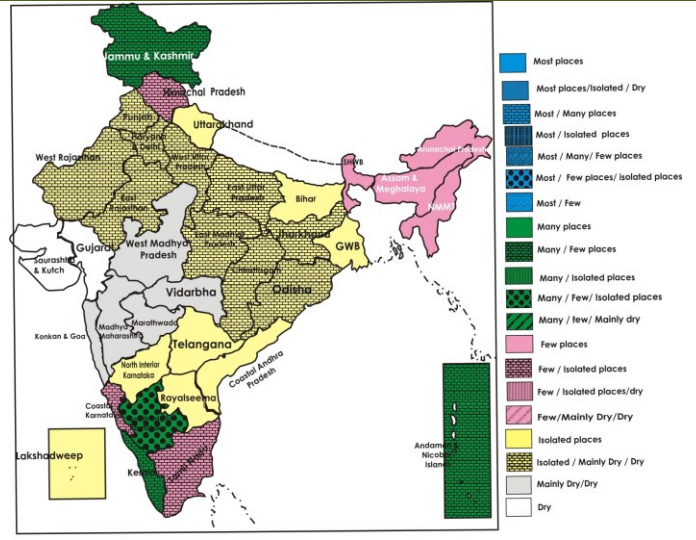
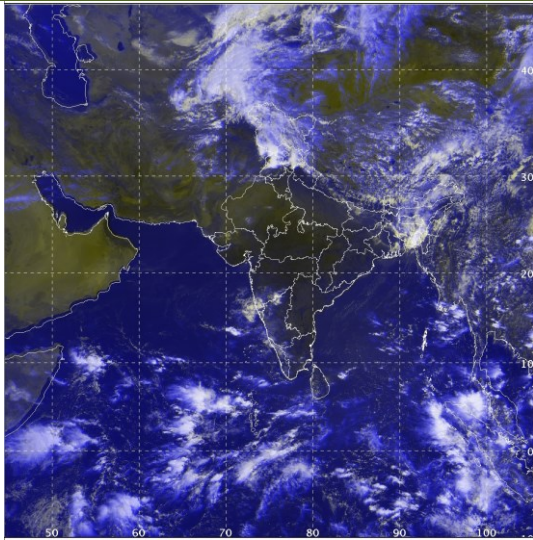
- **30 May (Day 1):** Heavy rainfall would occur at isolated places over Kerala.  
Heat wave conditions would occur at a few places over Rajasthan and at isolated places over Haryana & Delhi, Uttar Pradesh, Gujarat state, Madhya Maharashtra, Madhya Pradesh & Vidarbha.
- **31 May (Day 2):** Duststorm/thunderstorm accompanied with squall would occur at isolated places over Punjab, Haryana & Delhi, north Rajasthan and Uttar Pradesh.  
Heat wave conditions would occur at isolated places over Haryana & Delhi, Rajasthan, Uttar Pradesh, Gujarat state, Madhya Maharashtra, Madhya Pradesh and Vidarbha.
- **01 June (Day 3):** Duststorm/thunderstorm accompanied with squall would occur at isolated places over Punjab, Haryana & Delhi, north Rajasthan and Uttar Pradesh.

### Weather Outlook for subsequent 4 days from 2<sup>nd</sup> June to 6<sup>th</sup> June 2014

- Rain/thundershowers would occur at a few places over Jammu & Kashmir and at isolated places over rest western Himalayan region on 2<sup>nd</sup> June.
- Rain/thundershowers would occur at many places over northeastern states and at isolated places over adjoining east India.
- Rain/thundershowers would occur at many places over Andaman & Nicobar Islands and at a few places over south peninsular India.
- Weather would be mainly dry over rest of the country.

Satellite image dated 30.05.2014, 0600 UTC

Weather Forecast Map (Valid upto 0830 hours of 2<sup>nd</sup> June, 2014)



### Salient Advisories

- As rain/thundershowers would occur at many places over **Kerala** during next 2 days along with heavy rainfall on 30<sup>th</sup> May, postpone irrigation, intercultural operation and application of plant protection measures and fertilizers to the standing crops. Arrange for drainage facilities in crop fields to avoid water stagnation.
- Undertake nursery sowing of rice (Uma variety) from first week of June, planting of banana and coconut seedlings in Problem Area Zone of **Kerala** utilizing realised and expected rainfall. Continue land preparation for nursery sowing of *virippu* rice and transplanting of brinjal and chilli in Southern Zone of **Kerala** after current spells of rain.
- Continue nursery bed preparation and sowing of *sali* rice in Central, Upper and Lower Brahmaputra Valley Zone of **Assam** utilising the realised rainfall.
- As heat wave conditions would occur at a few places over **Rajasthan** on 30<sup>th</sup> May, at isolated places on 31<sup>st</sup> May, at isolated places over **Haryana** and **Delhi** on 30<sup>th</sup> and 31<sup>st</sup> May and over **Uttar Pradesh**, **Madhya Pradesh**, **Gujarat** State, **Madhya Maharashtra** and **Vidarbha** during the period, it is advised to apply light and frequent irrigation to the standing crops or undertake soil mulching/ mulching with straw/polythene to cope up with the excess evaporative demand due to high temperature.
- As dust storm /thunderstorm accompanied with squall would occur at isolated places over **Punjab**, **Haryana**, **Delhi**, **north Rajasthan** and **Uttar Pradesh** on 31<sup>st</sup> May and 1<sup>st</sup> June, provide mechanical support to young fruit plants, vegetables and undertake propping up in sugarcane to prevent the crops from lodging due to strong winds.

### Detailed Zonewise Agromet Advisories

#### SOUTH INDIA [TN, AP, KERALA, KARNATAKA, LAKSHADWEEP]



Land preparation



Sugarcane



Onion



Okra

- **Realised Rainfall:** Rainfall occurred in Srikakulam and Vizianagaram districts of Coastal Andhra Pradesh; Chittoor district of Rayalaseema; Mahbubnagar and Nalgonda districts of Telangana; Uttar Kannada district of Coastal Karnataka; Bagalkote and Gadag districts of North Interior Karnataka; Bangalore Rural, Bangalore Urban, Bellary, Chickballapur, Kolar and Mandya districts of South Interior Karnataka; Alapuzzha, Ernakulam, Kottayam and



Pathanamthitta districts of Kerala; Ariyalur, Cuddalore, Dharmapuri, Dindigul, Karur, Krishnagiri, Namakkal, Perambalur, Puducherry, Pudukkotai, Salem, Thanjavur, Thiruvannamalai, Thiruvarur, Trichy, Vellore and Villupuram districts of Tamilnadu. Mainly dry weather prevailed over remaining parts of the region.

- **Weather Forecast:** Rain/thundershowers would occur at many places over Kerala during next 48 hours and at a few places thereafter. Rain/thundershowers would occur at many places over South Interior Karnataka during next 24 hours and at a few places on 31<sup>st</sup> and at isolated places thereafter. Rain/thundershowers would occur at a few places over Coastal Karnataka during next 24 hours and over Tamilnadu & Pudduchery during next 48 hours and at isolated places thereafter. Rain/thundershowers would occur at isolated places over Coastal Andhra Pradesh, Telangana, Rayalaseema, North Interior Karnataka and Lakshadweep during the period.
- **Weather Warning:** Heavy rainfall would occur at isolated places over Kerala on 30<sup>th</sup> May.
- **Weather Outlook:** Rain/thundershowers would occur at few places over south peninsular India. Weather would be mainly dry over rest of the region.
- **Advisories:**
  - **Kerala:**
    - As rain/thundershowers would occur at many places over Kerala during next 2 days along with heavy rainfall on 30<sup>th</sup> May, postpone irrigation, intercultural operation and application of plant protection measures and fertilizers to the standing crops. Arrange for drainage facilities to avoid water stagnation due to heavy rainfall likely to occur on 30<sup>th</sup> May 2014.
    - Undertake nursery sowing of rice (Uma variety) from first week of June, planting of banana and coconut seedlings in Problem Area Zone of Kerala utilizing realised and expected rainfall.
    - As there are chances of high wind velocity in Problem Area Zone, provide mechanical support to banana. Care may be taken to prevent dropping of developed bunches due to high winds.
    - Continue land preparation for nursery sowing of *virippu* rice and planting of brinjal and chilli in Southern Zone of Kerala utilizing realised and expected rainfall.
    - Undertake prophylactic spraying of 1% Bordeaux mixture against bud rot disease in coconut before the onset of monsoon in the Problem Area Zone and Southern Zone of Kerala after current spells of rain.
  - **Karnataka:**
    - As rain/thundershowers would occur at many places over South Interior Karnataka during next 24 hours, postpone irrigation, intercultural operation and application of plant protection measures and fertilizers to the standing crops.
    - Deep ploughing is recommended in the rice field before onset of monsoon to destroy weed seeds and insect eggs in the Coastal Zone of Karnataka.
    - Undertake land preparation for *kharif* sowing in the Eastern Dry Zone, Central Dry Zone and North Transition Zone of Karnataka with available soil moisture.
    - Undertake planting of ginger, turmeric and banana crops in Southern Transition Zone.
    - Undertake nursery seed bed preparation for sowing of rice in the North East Transition Zone and Coastal Zone of Karnataka with realised rainfall.
    - Planting of black pepper may be continued utilizing realised rainfall in the Hill Zone of Karnataka.
  - **Andhra Pradesh:**
    - Undertake summer ploughing utilizing realised rainfall in the Scarce Rainfall Zone and Southern Telangana Zone of Andhra Pradesh in order to reduce the soil borne pests, diseases and weed and to increase the absorption of water into the soil. Undertake sowing of *Mungari* cotton in Kurnool district.
    - Prevailing partly cloudy weather condition is congenial for incidence of mites in sweet orange in Southern Telangana Zone of Andhra Pradesh. To manage, spray wettable Sulphur @ 3 g or Dicofol @ 5 ml per litre of water.
  - **Tamil Nadu:**
    - Undertake spraying of Streptocycline @ 50 g/ha + Copper Oxy Chloride @ 1250 g/ha at maximum tillering stage to manage bacterial leaf blight and bacterial leaf streak disease in rice in the North Eastern Zone of Tamil Nadu.
    - Undertake planting of coconut in Northwestern Zone of Tamilnadu utilizing the recent rainfall.
    - Due to prevailing hot and humid weather condition, leaf mite and blast incidence in summer rice and mealy bug incidence in cotton fields are noticed in the Cauvery Delta Zone of Tamil Nadu. Spray Dicofol @ 500 ml/ acre or wettable Sulphur @ 600 g/ acre to manage leaf mite incidence, Carbendazim @200 g/acre or Tricylazole @ 200 ml/acre in 200 litre of water to manage blast incidence and Profenophos 400 ml/acre. + Azadiractin 10000 ppm @ 200 ml/acre to manage mealy bug incidence.
    - Apply irrigation in cotton in order to mitigate the impact of prevailing high temperature and spray NAA 40 ppm to prevent early shedding of buds and squares in the Western Zone of Tamil Nadu.
- **Animal Husbandry**
  - Give last dose of vaccination to cattles against haemorrhagic septicaemia before the onset of monsoon in the Problem Area Zone of Kerala.
  - Vaccinate animals (cow, buffalaw, bullock) against Foot and mouth disease (FMD vaccination) and Haemorrhagic



Septicaemia and sheep and goats against Enterotoxemia before the onset of monsoon in the Southern Dry and Southern Transition Zone of Karnataka.

- Vaccinate affected animals (cow, buffalo, bullock) against Foot and mouth disease (FMD vaccination) and maintain the optimum room temperature in sericulture unit in the Eastern Dry Zone of Karnataka.

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



**Green Gram**



**Land preparation**



**Okra**



**Sugarcane**

- **Realised Rainfall:** Rainfall occurred in East Kameng, East Siang, Lohit, Lower Dibang Valley, Papumpara, Tawang, Tirap, Upper Siang and West Siang districts of Arunachal Pradesh; Baksa, Barpeta, Bongaigaon, Cachar, Chirang, Darrang, Dhemaji, Dhubri, Dibrugarh, Goalpara, Hailakandi, Jorhat, Kamrup(Rural), Kamrup(Metro), Karimganj, Kokrajhar, Lakhimpur, Nalbari, Sonitpur, Tinsukia and Udalgiri districts of Assam; East Garo Hills, East Khasi Hills, Ribhoi and West Garo Hills districts of Meghalaya; Aizwal, Saiha and Serchhip districts of Mizoram; Chandel, Churachandpur, Imphal West and Senapati districts of Manipur; Kohima district of Nagaland; all districts of Tripura.
- **Weather forecast:** Rain/thundershowers would occur at a few places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram and Tripura during the period.
- **Weather Warning:** Nil.
- **Weather Outlook:** Rain/thundershowers would occur at many places over northeastern states.
- **Advisories:**
  - **Assam & Meghalaya, Arunachal Pradesh:**
    - Continue nursery bed preparation and sowing of *sali* rice in Hill zone, Central Bramhaputra Valley Zone, Upper Bramhaputra Valley Zone and Lower Bramhaputra Valley Zone of Assam utilising the realised and expected rainfall.
    - Continue planting of fruit crops like pineapple, banana, papaya etc in Hill zone of Assam and continue sowing of pigeon pea, planting of black pepper, banana and pappya in Upper Bramhaputra Valley Zone and Lower Bramhaputra Valley Zone of Assam utilising the realised rainfall.
    - Due to cloudy weather and increase in humidity, there is chance of attack of blast disease in *ahu* rice in Hill Zone and Central Bramhaputra Valley Zone of Assam and Temperate Sub Alpine Zone of Meghalaya. Spray Bavistin @ 1g/litre of water or Carbendazim @1g/litre of water on a non rainy day.
    - Due to cloudy weather and increase in humidity, there is chance of attack of powdery mildew, red pumpkin beetle and fruit fly in cucurbitaceous crops in Hill Zone and North Bank Plain Zone of Assam. Spray Bavistin 0.1% or Karathane WP 0.05% against powdery mildew and Malathion 50 EC @ 2 ml/ litre of water against red pumpkin beetle and fruit fly on a non rainy day.
    - Due to high humidity, mite infestation may occur in chilli in Central Bramhaputra Valley Zone of Assam. Spray Ethion @ 1.5 ml or Rogor @ 2 ml/litre water on a non rainy day to reduce mite infestation
  - **Nagaland, Manipur, Mizoram and Tripura:**
    - In Sub Tropical Plain Zone of Manipur, continue sowing of soybean, groundnut and black gram in upland areas utilizing realized and expected rainfall.
    - Continue sowing of maize, cucurbits, chilli, brinjal and planting of ginger and turmeric in Mid Tropical Hill Zone of Mizoram utilizing realized and expected rainfall.
    - Warm and humid conditions may cause cercospora / sigatoka leaf spot in banana in Mid Tropical Hill Zone of Mizoram. Spray Mancozeb+ Carbendazim @ 2g/litre of water on a non rainy day.
- **Animal Husbandry**
  - In Mild Tropical Hill Zone of Tripura, vaccination for the cattle may be undertaken prior to monsoon season to protect from diseases like anthrax, black quarter, Haemorrhagic Septicaemia.
- **Pissiculture**
  - Before onset of monsoon, prepare the fingerling rearing tanks and nurseries by cleaning them and applying agricultural lime in North Bank Plain Zone, Lower Bramhaputra Valley Zone and Central Bramhaputra Valley Zone of Assam. Apply cow dung @ 500 g per sq. m. at least 15 days ahead of releasing fingerlings into the tanks.

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



**Sugarcane**

**Bottle Gourd**

**Onion**

**Mango**

- **Realised Rainfall:** Rainfall occurred in Kinnaur, Kullu and Lahaul & Spiti districts of Himachal Pradesh; in New Delhi; in Ambedkarnagar, Ballia and Gorakhpur districts of East Uttar Pradesh and in Bageshwar and Rudraprayag districts of Uttarakhand. Weather remained mainly dry over rest of the region.
- **Weather Forecast:** Rain/thundershowers would occur at many places over Jammu & Kashmir during next 24 hours and at a few places thereafter. Rain/thundershowers would occur at a few places over Himachal Pradesh during next 48 hours and at isolated places thereafter. Rain/thundershowers would occur at isolated places over Uttarakhand during the period. Rain/thundershowers would occur at isolated places over west Rajasthan during next 24 hours and over Punjab, Haryana & Delhi, west Uttar Pradesh during next 48 hours and mainly dry thereafter. Mainly dry/dry weather would prevail over east Uttar Pradesh during next 24 hours and over east Rajasthan during next 48 hours and rain/thundershowers would occur at isolated places thereafter.  
Rise in maximum temperatures by 2-3°C over northwest India during next 24 hours.
- **Weather Warning:** Heat wave conditions would occur at few places over Rajasthan on 30<sup>th</sup> May and at isolated places on 31<sup>st</sup> May; at isolated places over Haryana & Delhi, Uttar Pradesh on 30<sup>th</sup> and 31<sup>st</sup> May and at isolated places over east Uttar Pradesh on 1<sup>st</sup> June.  
Duststorm/thunderstorm accompanied with squall would occur at isolated places over Punjab, Haryana & Delhi, North Rajasthan and Uttar Pradesh on 31<sup>st</sup> May and 1<sup>st</sup> June.
- **Weather Outlook:** Rain/thundershowers would occur at a few places over Jammu & Kashmir and at isolated places over rest western Himalayan region till 2<sup>nd</sup> June. Weather would be mainly dry over rest of the region.
- **Advisories:**
  - As heat wave conditions would occur at a few places over Rajasthan on 30<sup>th</sup> May, at isolated places on 31<sup>st</sup> May, at isolated places over Haryana and Delhi on 30<sup>th</sup> and 31<sup>st</sup> May and over Uttar Pradesh during the period, it is advised to apply light and frequent irrigation to the standing crops or undertake soil mulching/ mulching with straw/polythene to cope up with the excess evaporative demand due to high temperature.
  - As dust storm /thunderstorm accompanied with squall would occur at isolated places over Punjab, Haryana, Delhi, north Rajasthan and Uttar Pradesh on 31<sup>st</sup> May and 1<sup>st</sup> June, provide mechanical support to young fruit plants, vegetables and undertake propping up in sugarcane to prevent the crops from lodging due to strong winds.
- **Jammu & Kashmir:**
  - Continue nursery preparation for sowing of rice and maize in Sub Tropical Zone of Jammu & Kashmir utilizing the expected rainfall. As rain is also likely at many places on 30<sup>th</sup> May, undertake transplanting of cruciferous crops, tomato, capsicum, chilli and onion in lower and middle belts and vegetables like celery, parsley and leek in the main field in Cold Arid Zone of Jammu & Kashmir. Also undertake direct sowing of spinach, carrot, beet root, coriander and fenugreek.
  - In Valley Temperate Zone of Jammu and Kashmir, continue sowing of maize, kale, knol khol, beans and bhindi and transplanting of seedlings of solanaceous vegetables utilizing the expected rainfall.
  - Due to partly cloudy and humid weather conditions, there are chances of attack of fruit fly in cucurbits like cucumber, bottle guard, bitter guard, squash etc. in Sub Tropical Zone of Jammu & Kashmir. For control, spray Malathion @1.5ml per litre of water after current spells of rain.
- **Himachal Pradesh:**
  - As rain is likely to occur at a few places, undertake harvesting of onion, methi, palak and turnip in Mid Hills Sub-Humid Tropical Zone of Himachal Pradesh on bright sunny days.
  - Undertake sowing of peas in High Hill Temperate Zone of Himachal Pradesh utilizing the available soil moisture.
  - Due to hot and humid weather conditions, there is chance of attack of red beetle in pumpkin in Mid-Hills Sub-Humid Zone and Sub-Montane & Low Hills Sub-Tropical Zone of Himachal Pradesh. For control, spray Malathion 50EC @ 1ml per litre of water on a non- rainy day.
  - Due to hot and humid weather conditions there may be attack of butterfly in pomegranate in Mild Hills Sub-Humid Zone of Himachal Pradesh. Spray Cypermethrin 25 % @ 80 ml or Cypermethrin 10% @ 200 ml in 200 litres of water on a non- rainy day.

▪ **Uttarakhand:**

- Due to prevailing hot weather conditions, apply irrigation in all fruit crops like litchi, mango and lemon group of orchards in Bhabar and Tarai Zone of Uttarakhand.
- As mainly dry weather would prevail in Sub Humid Sub Tropical Zone of Uttarakhand, apply light & frequent irrigation to the late planted sugarcane which is at germination stage to avoid moisture stress. Undertake intercultural operations in winter planted sugarcane which is at tillering stage to minimize the moisture loss.
- Due to hot weather conditions, there are chances of yellow mosaic disease in late sown moong & urad IN Bhabar and Tarai Zone of Uttarakhand. Spray Metasystox @ 400 ml per 400 litres of water per acre.

▪ **Punjab, Haryana and Delhi:**

- In view of prevailing hot weather conditions in Central Plain Zone of Punjab, it is advised to apply light and frequent irrigation in tomato, chilli, capsicum and cucurbit crops to encourage maximum fruit setting and development of fruits. Mulching can be practiced in widely spaced cultivated vegetable crops and sugarcane rows with the use of straw/wheat straw/rice husk etc. for conservation of moisture. Save the orchard crops from rising temperature by applying light and frequent irrigation.
- Due to prevailing dry and hot weather conditions in Western Plain Zone of Punjab, irrigate the sugarcane crop at 7-12 days interval for better growth. Apply paddy straw or rice husk or sugarcane trash between the rows of sugarcane to reduce soil temperature and moisture loss.
- As dry and hot weather conditions are prevailing, irrigate young fruit plant orchards (mango/litchi/ peach/plum/ Kinnow) twice/thrice a week in Sub Montane Undulating Zone of Punjab. Protect the young fruit plants from scorching sun by covering them with thach / sarkande leaves.
- As mainly dry weather would prevail, apply irrigation in spring maize, moong and sunflower in Sub Montane Undulating Zone of Punjab.
- In Eastern Zone of Haryana undertake nursery sowing of rice with irrigation. Increase the frequency of irrigation at critical growth stages of vegetable and horticulture crops. Young saplings may be protected from scorching sun by erecting temporary shade.
- In Western Zone of Haryana as high temperature is prevailing, give frequent irrigation in vegetable and fruit crops.
- In Delhi, in view of increasing temperature, apply light and frequent irrigation in all vegetable crops in the morning or evening hours. Optimum moisture level should be maintained in cucurbitaceous crops by applying light and frequent irrigation, as dry conditions may lead to poor pollination and thus drop in yield. Protect banana, citrus, mango and kinnow orchards against hot winds by erecting physical barriers and also by applying frequent irrigation.
- Prevailing hot weather conditions are favourable for appearance of downy mildew in cucurbits in Central plain Zone of Punjab. To control, spray Indofil M-45 or Kavach @ 300-600 g in 100-200 litres of water. Repeat the spray at weekly intervals.

▪ **Uttar Pradesh**

- As mainly dry weather would prevail, apply irrigation in vegetables, cucurbits and fruit crops in West Uttar Pradesh.
- As mainly dry weather is prevailing in Central Plain Zone of Uttar Pradesh, continue harvesting of sorghum, cucurbitaceous crops like bitter gourd, bottle gourd, khira, etc.
- Due to hot weather conditions, there is chance of incidence of yellow vein mosaic disease in moong in Central Plain Zone of Uttar Pradesh. Spray Imidacloprid @ 0.24 ml per litre of water in the morning or evening hours.
- Due to hot weather conditions, there is chance of attack of white grub in sugarcane in Western Plain Zone of Uttar Pradesh. For control, apply Buaria Basiana @ 2 kg + cow dung @ 50 kg per hectare or Metarizam @1kg + cow dung @ 28 kg per hectare.

▪ **Rajasthan:**

- As mainly dry weather is prevailing, apply light and frequent irrigation in sorghum, bajra and all vegetable crops and fruit crops in Rajasthan.
- Due to high temperature, there may be attack of fruit fly in cucurbits in Transitional Plain Zone of Rajasthan. Remove and destroy all infested fruits and spray Malathion 50 EC @ 1.25 litre or Dimethoate 30 EC @ 1 litre per hectare.
- Under prevailing hot weather condition, bark eating caterpillar may attack mango in Semi Arid Eastern Plain Zone of Rajasthan. To control this insect spray Malathion 50 EC @ 1.0 ml per litre of water.
- Due to high temperature, there may be attack of pod borer in moong in Flood Prone Eastern Plain Zone of Rajasthan. Spray 25 EC Quinolphos @ 1.25 litre per 600 -800 litres of water per hectare.

• **Horticulture**

- High temperature may cause damage to horticultural crops in Flood Prone Eastern Plain Zone of Rajasthan. Apply light and frequent irrigation or apply mulch.

• **Floriculture**

- Under prevailing dry weather condition, undertake intercultural operations and weeding in summer annual plantations in Mid Hills Sub-Humid Zone of Himachal Pradesh.

• **Animal Husbandry**

- As heat wave conditions would occur at a few places over Rajasthan, at isolated places over Haryana, Delhi and Uttar



Pradesh, grazing /feeding of cattle/goats may be done during morning/ evening hours. Keep animals under shade or in sheds during noon hours and provide plenty of water mixed with minerals for drinking. Also provide balanced feed & adopt vaccination schedule.

- Keep cattle/goats indoor during duststorm /thunderstorm period in Punjab, Haryana, Delhi, North Rajasthan and Uttar Pradesh.
- Due to prevailing high temperature in the region, Ecto and endo parasites may attack on livestock in Arid Western plain Zone of Rajasthan. To control ecto parasites like lice, mite, jock etc. apply Butox/Tikkle @ 1 ml per litre of water on the body of animal.
- Due to rise in temperature there may be attack of ticks and mites in animals in Mid Hills Sub-Humid Zone of Himachal Pradesh. For control spray Butox @ 2 ml per litre of water.
- **Poultry**
- Due to prevailing hot weather conditions, give balanced feed to the poultry birds in Central Plain Zone of Uttar Pradesh and Rajasthan. Make proper ventilation in poultry sheds and keep the sheds clean. White wash the poultry shed from outside especially the roof. This will help to reflect the sun rays.

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



*Sugarcane*



*Chilli*



*Okra*



*Green Gram*

- **Realised Rainfall:** Rainfall occurred in Durg and Surguja districts of Chhattisgarh. Weather remained mainly dry over the region
- **Weather forecast:** Mainly dry/dry weather would prevail over east Madhya Pradesh during next 24 hours and over Chhattisgarh during next 48 hours and rain/thundershowers would occur at isolated places thereafter. Mainly dry/dry weather would prevail over rest of the region.
- **Weather Warning:** Heat wave conditions would occur at isolated places over west Madhya Pradesh during next three days.
- **Weather Outlook:** Weather would be mainly dry over the region.
- **Advisories:**
  - **Madhya Pradesh:**
    - As heat wave conditions would occur at isolated places over Madhya Pradesh during the period, it is advised to apply light and frequent irrigation to the standing crops or undertake soil mulching/ mulching with straw/polythene to cope up with the excess evaporative demand due to high temperature.
    - As prevailing temperature is high, undertake soil mulching / apply mulch in young fruit plants in Jhabua Hill Zone of Madhya Pradesh.
    - As mainly dry weather and high temperature conditions are prevailing, apply irrigation to mango and jack fruit in Bundelkhand Zone of Madhya Pradesh and to protect the citrus plants from sun burn, paint the stem with lime and vlitox mixture and irrigate the plants.
    - Due to prevailing hot weather, there is possibility of attack of stem borer in sugarcane in Vindhya Plateau Zone of Madhya Pradesh; apply Phorate 10 G @ 10 kg/ha.
  - **Chhattisgarh:**
    - As mainly dry weather would prevail, apply irrigation in summer rice, maize, sugarcane and mango and litchi orchards in North Hill Zone of Chhattisgarh.
    - Farmers in North Hill Zone are advised to start land preparation and arrange for seeds to undertake nursery sowing of rice.
    - As prevailing temperature is high, apply irrigation in vegetables in Chhattisgarh Plain Zone, undertake mulching by paddy straw in summer vegetables (okra, tomato and brinjal) and soil mulching in groundnut and moong.
- **Animal Husbandry**
  - As heat wave conditions would occur over Madhya Pradesh during the period, grazing /feeding of cattle/goats may be done during morning/ evening hours. Keep animals under shade or in sheds during noon hours and provide plenty of water mixed with minerals for drinking.
  - In view of increasing temperature, cover the window and doors of poultry farms with gunny bags and keep wet with

water in Bundelkhand Zone of Madhya Pradesh.

- Due to prevailing high temperature, special attention should be given to milch animals with regard to feed and water in North Hill Zone of Chhattisgarh. Provide plenty of clean water to the animals and keep them in sheds/ under shade.

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



*Mango*



*Sugarcane*



*Green Gram*



*Onion*

- **Realised Rainfall:** Rainfall occurred in all districts of Sikkim; in all districts of Sub-Himalayan West Bengal except North Dinajpur; in all districts of Gangetic West Bengal except Burdhan; in all districts of Bihar except Arwal, Bhabua, Buxar, Gopalganj and West Champaran; in all districts of Odisha except Malkangiri and Nawarangpur; in all districts of Jharkhand except Gumla and Palamau.
- **Weather Forecast:** Rain/thundershowers would occur at a few places over Andaman & Nicobar Islands during next 24 hours and at many places thereafter. Rain/thundershowers would occur at a few places over Sub-Himalayan West Bengal & Sikkim during the period. Rain/thundershowers would occur at isolated places over Bihar and Gangetic West Bengal during the period. Mainly dry/dry weather would prevail over Odisha and Jharkhand during next 48 hours and rain/thundershowers would occur at isolated places thereafter.  
Rise in maximum temperatures by 3-4°C likely over east India during next 48 hours.
- **Weather Warning:** Nil.
- **Weather Outlook:** Rain/thundershowers would occur at isolated places over east India adjoining to northeastern states.
- **Advisories:**
  - **Odisha:**
    - In North Eastern Coastal Plain Zone of Odisha, undertake sowing of jute and direct sowing of *Kharif* rice taking advantage of realised rainfall.
    - Prevailing high temperature is congenial for early shoot borer infestation in sugarcane at grand growth stage in Western Undulating Zone of Odisha. Spray Monocrotophos 2ml/litre of water for its control.
    - Due to humid weather there is chance of occurrence of fruit & shoot borer in brinjal and tomato in North Central Plateau Zone of Odisha. Collect the infested fruit and shoot and bury it in the soil and spray Spinosad 48 EC @ 1 ml in 4 litres of water.
  - **West Bengal:**
    - In coastal Saline Zone of West Bengal, undertake land preparation in low lands for direct seeded *aman* rice by utilizing the realised rainfall.
    - In New Alluvial Zone of West Bengal, prevailing high temperature and humidity may cause stem-rot disease in pointed gourd. To control the attack of stem-rot, apply Bavistin or Benlate @1g per litre of water.
    - Due to humid weather, there is possibility of stem and fruit rot in pointed gourd in Terai Zone of West Bengal. Spray Mancozeb 64%+ Metalaxyl 8% @ 1 g per litre of water by wetting the plant and leaf on a non rainy day. Damping off may also occur in vegetable nursery, to manage the disease, spray Carbendazim 12% + Mancozeb 64% @2 g/litre of water on a non rainy day.
  - **Andaman & Nicobar Islands:**
    - Undertake transplanting of brinjal and chilli in north and middle Andaman utilizing the realized rainfall.
  - **Bihar:**
    - In North West Alluvial Plain Zone of Bihar, undertake land preparation for sowing of *kharif* crops and prepare the nursery for sowing of long duration rice varieties utilizing the realised rainfall. As mainly dry weather would prevail, undertake harvesting of lichi and maize.
    - By utilizing the realised rainfall, prepare seed bed for *kharif* onion in South Bihar Alluvial Zone.
    - Due to high temperature, there is chance of early shoot borer in sugarcane in North East Alluvial Plain Zone of Bihar; spray Chlorpyrifos 20 EC @ 2 litre/ha or Phorate 10G @ 1kg /ha.
  - **Jharkhand:**
    - In Jharkhand, undertake land preparation for planting of ginger and turmeric and elephant foot yam utilizing the realised rainfall.
    - Undertake land preparation in upland areas for sowing of *kharif* crops in South Eastern Plateau Zone of Jharkhand utilizing the realised rainfall.

- Due to hot and humid weather there is chance of anthracnose and leaf blight in cucurbitaceous vegetables in South Eastern Plateau Zone of Jharkhand, spray Blitox 50 or Copperoxychloride @ 3 g per liter of water.

- **Animal Husbandry**

- Prevailing high temperature may adversely affect the milk production of milch animals in North West Alluvial Plain Zone of Bihar. Provide plenty of clean water to animals and keep them in the shade during noon hours.

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



*Rice*

*Groundnut*

*Green Gram*

*Mango*

- **Realised Rainfall:** Rainfall occurred in North and South Goa districts of Goa during last week. Weather remained mainly dry / dry over rest of the region.
- **Weather Forecast:** Mainly dry weather would prevail over Maharashtra and dry over Gujarat State.
- **Weather Warning:** Heat wave conditions would occur at isolated places over Gujarat State, Madhya Maharashtra and Vidarbha on 30<sup>th</sup> May, 31<sup>st</sup> May and 1<sup>st</sup> June.
- **Weather Outlook:** Weather would be mainly dry over the region.
- **Advisories:**
  - As heat wave conditions would occur at isolated places over Gujarat State, Madhya Maharashtra and Vidarbha during the period, apply light and frequent irrigation in standing crops to cope up with the excessive evaporative demand due to high temperature. Undertake soil mulching / mulching with crop residues and other plant waste products / polythene to conserve soil moisture.
  - **Maharashtra:**
    - In Konkan apply irrigation in coconut and cashew orchards and vegetable crops. Undertake sowing of fresh mango stones (seed) on beds. Dig the pits for new plantation of mango, cashew, coconut, arecanut and expose them to sunlight.
    - In Madhya Maharashtra, apply irrigation to summer vegetable crops and sugarcane. Continue intercropping operations and fertilizer application in sugarcane and vegetables. As day temperature is prevailing around 40-44°C in North Madhya Maharashtra, apply mulch of crop residues and other plant waste product in the orchards and sugarcane trash in sugarcane. Apply irrigation to sugarcane by alternate furrow method in water stress condition.
    - In Marathwada, in view of prevailing dry weather and persisting high temperature, apply irrigation to summer sugarcane, orchard crops like banana, pomegranate, fig (drip irrigation) and vegetable crops in morning or evening hours. As day temperature is around 40-44°C, apply mulch of crop residues and other plant waste product in the orchards and sugarcane trash in sugarcane and reduce the duration between two irrigations. Raise temporary shed to protect the newly planted grafts and saplings from scorching sun.
    - Considering the prevailing high temperature (42-44°C) in Vidarbha, apply light and frequent irrigation as well as apply mulch of plant waste product in orange and sweet lime orchards. Newly planted fruit crops may be protected from sun burn by erecting temporary shed. As mainly dry weather is likely to prevail, apply irrigation to summer vegetables.
    - Prevailing cloudy weather in Kolhapur region is congenial for the attack of fruit fly in creeper vegetables; install 4-5 Pheromone traps per ha.
  - **Gujarat:**
    - As high temperature (max. temp. 42-43°C) is prevailing in North Saurashtra Zone, apply light and frequent irrigation in vegetable crops, in groundnut crop at pod development stage, mango orchards and in lemon orchards at regular intervals, to prevent fruit cracking and fast development of fruits. Do soil mulching / mulching with crop residues and other plant waste products / polythene in orchards to conserve soil moisture
    - In view of prevailing high temperature, protect banana bunch with plastic sheet in South Gujarat Zone. Keep orchards weed free and use suitable mulch for conservation of available soil moisture. Before monsoon spray Stomp 30 EC or Basalin 45EC @ 2.5 liter of water/ha for control of all types of weeds.
    - As dry and hot weather is prevailing in Middle Gujarat Zone, apply light irrigation in groundnut (pod development stage). Undertake mulching in sapota to maintain the temperature. Make necessary arrangements for water harvesting in fields.
    - As dry weather would prevail over South Gujarat Heavy Rainfall Zone, complete harvesting and threshing of early



varieties of summer rice and green gram crop at the earliest and store them at safe place. As there is a chance of increase in temperature, irrigate brinjal, tomato, okra, other vegetable crops and sapota orchard in morning hours. As high wind speed is prevailing, provide proper support to the fruit crops to reduce the probable damage. Collect fallen fruits and take to market after cleaning, sorting and grading.

- Under high temperature and dry condition in North Gujarat Zone, carry out harvesting and threshing of pearl millet, picking of matured pods of green gram and apply last irrigation in groundnut (pod development stage).
- In view of mainly clear sky forecast in North Gujarat Zone, make farm pond in lower region of field to harvest excess rain water during monsoon.
- Weather conditions (increasing temperature) in North Gujarat Zone are favourable for spread and infestation of mealy bug pest in bhindi, cowpea, tomato and brinjal crops. To control, spray Profenofos 50 EC @ 20 ml in 10 litre of water with desi soap solution.
- **Animal Husbandry**
- As heat wave conditions would prevail at isolated places over Gujarat State, avoid grazing /feeding of cattle/goats during noon hours. Keep animals under shade or in sheds during noon hours and provide plenty of cool water mixed with minerals for drinking. Also provide balanced feed with ample concentrates and adopt necessary vaccination schedule. Make arrangement of curtains and proper ventilation in poultry houses. Put curtains on south-west side of poultry house and sprinkle water on the curtains during noon time. Also cover the roof of the poultry house with grass or gunny bags.
- Considering the prevailing high temperature, hang gunny bags from outside the poultry shed and sprinkle it with water in Maharashtra. Cover the roof with grass or gunny bags. To reduce the effect of prevailing high temperature in animal shed, cover the roof with grass or dried jowar fodder and keep proper aeration in the shed.

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

**Annexure I**  
**Week by week Rainfall Distribution**

State/Districts	14.05.14		21.05.14		28.05.14	
	Actual (mm)	% dep.	Actual (mm)	% dep.	Actual (mm)	% dep.
<b>Arunachal Pradesh</b>						
Anjaw	**	**	**	**	**	**
Changlang	156.0	129	40.5	-52	13.3	-78
Dibang Valley	2.0	-96	40.0	-38	2.0	-97
East Kameng	30.1	-46	20.2	-64	59.9	56
East Siang	322.7	465	79.6	0	193.5	153
Kurung Kumey	**	**	**	**	**	**
Lohit	502.0	758	16.7	-77	41.8	-27
Lower Dibang Valley	621.1	1216	79.1	24	77.5	31
Lower Subansari			**	**	**	**
Papumpara	272.4	116	87.8	44	190.0	95
Tawang	98.0	45	73.0	2	34.0	-59
Tirap	57.9	7	8.8	-88	25.4	-71
Upper Siang	252.8	303	267.8	156	58.8	-49
Upper Subansari	133.2	489	19.4	-42	8.6	-80
West Kameng	80.6	19	24.4	-66	10.6	-87
West Siang	72.5	131	24.5	-66	28.5	-48
<b>Assam</b>						
Baksa	164.5	113	37.3	-56	32.5	-64
Barpeta	248.2	221	81.8	-3	57.4	-36
Bongaigaon	257.8	199	61.8	-23	78.8	-34
Cachar	365.7	337	24.5	-73	33.3	-57
Chirang	440.7	411	193.2	141	127.2	7
Darrang	138.0	101	19.0	-70	26.0	-57

Dhemaji	106.0	61	161.0	107	46.0	-44
Dhubri	132.8	61	61.2	-30	74.4	-22
Dibrugarh	236.3	276	19.0	-68	49.3	-27
Goalpara	108.5	54	15.6	-83	78.3	-14
Golghat	55.9	8	3.3	-94	9.2	-81
Hailakandi	233.8	214	21.0	-78	32.7	-66
Jorhat	63.2	4	20.5	-67	51.1	-12
Kamrup(Rural)	156.0	160	20.6	-69	51.2	-15
Kamrup(Metro)	37.8	-37	2.0	-97	42.8	-29
Karbi Anglong	16.3	-19	5.2	-85	9.9	-73
Karimganj	389.7	175	73.0	-48	53.3	-50
Kokrajhar	154.9	114	99.8	22	187.7	39
Lakhimpur	185.1	182	95.0	22	60.0	-27
Morigaon	27.4	-11	3.0	-92	14.9	-63
N.C.Hills	166.2	132	91.7	10	17.8	-66
Nowgong	30.1	-24	2.7	-91	5.8	-82
Nalbari	186.4	132	33.2	-58	58.8	-6
Sonitpur	150.5	161	34.3	-42	23.6	-64
Sibsagar	66.4	16	6.2	-88	16.8	-67
Tinsukia	215.5	228	22.9	-59	23.6	-61
Udalgiri	231.8	237	27.6	-57	21.5	-64
<b>Meghalaya</b>						
East Garo Hills	225.7	135	76.4	2	137.7	124
East Khasi Hills	438.8	172	87.0	-45	139.1	-11
Jaintia Hills	65.0	-28	1.0	-99	0.0	-100
Ribhoi	17.3	-72	4.4	-93	51.1	3
South Garo Hills	3.0	-96	4.0	-95	**	**
West Garo Hills	55.2	-30	20.4	-76	102.6	42
West Khasi Hills	2.0	-97	1.0	-99	1.0	-99
<b>Mizoram</b>						
Aizwal	262.4	315	17.9	-79	58.4	-32
Champhai	2.0	-95	0.0	-100	1.0	-98
Kolasib	1.0	-98	0.0	-100	0.0	-100
Lawngtlai	**	**	**	**	**	**
Lunglei	1.0	-98	1.0	-99	1.0	-99
Mamit	37.0	-41	11.0	-87	**	**
Saiha	67.0	3	40.0	-61	85.0	-11
Serchhip	19.0	-61	6.0	-92	36.0	-58
<b>Manipur</b>						
Bishnupur	63.0	59	27.0	-31	8.0	-64
Chandel	59.0	92	17.0	-26	40.0	-30
Churachandpur	**	**	15.0	-71	38.0	-13
Imphal east	109.1	123	27.4	-45	11.3	-69
Imphal west	72.0	126	31.7	19	76.8	473
Senapati	15.0	-68	44.0	1	32.0	-5
Tamenglong	**	**	**	**	**	**
Thoubal	6.0	-87	2.0	-93	5.0	-79
Ukhrul	5.0	-81	0.0	-100	0.0	-100
<b>Nagaland</b>						

Dimapur	10.5	-69	1.0	-97	5.0	-74
Kephire	**	**	**	**	**	**
Kohima	33.4	6	8.3	-80	26.3	-23
Longleng	**	**	**	**	**	**
Mokokchung	37.0	-53	0.0	-100	15.0	-83
Mon	**	**	**	**	**	**
Paren	**	**	**	**	**	**
Phek	1.0	-97	4.0	-90	17.0	-50
Tuensang	**	**	**	**	**	**
Wokha	**	**	**	**	1.0	-99
Zunheboto	**	**	**	**	**	**
<b>Tripura</b>						
Dhalai	333.0	228	26.0	-73	22.4	-75
North tripura	244.6	146	58.1	-39	34.7	-62
South tripura	128.8	62	3.5	-96	57.6	-15
West tripura	122.2	44	9.7	-88	31.7	-54
<b>Himachal Pradesh</b>						
Bilaspur	29.7	129	0.0	-100	1.3	-89
Chamba	56.3	155	12.4	2	18.1	102
Hamirpur	32.7	175	0.3	-97	4.6	-61
Kangra	32.0	160	4.1	-59	1.3	-85
Kinnaur	27.3	29	1.3	-91	25.2	105
Kullu	51.8	154	6.5	-60	24.2	56
Lahaul and Spiti	14.5	-49	5.7	-71	45.1	175
Mandi	37.3	93	7.8	-50	17.1	30
Shimla	32.9	64	0.0	-100	13.4	1
Sirmaur	19.1	130	0.0	-100	15.7	93
Solan	47.2	197	0.0	-100	2.4	-76
Una	22.7	229	3.9	-27	1.0	-79
<b>Punjab</b>						
Amritsar	9.9	59	0.1	-98	0.2	-89
Barnala	9.3	363	0.0	-100	0.0	-100
Bhatinda	24.5	745	4.0	122	0.0	-100
Faridkot	36.0	929	0.0	-100	0.5	-75
Fatehgarh Saheb	0.0	-100	**	**	0.0	-100
Ferozpur	8.0	29	0.7	-77	0.0	-100
Gurdaspur	32.9	399	0.6	-85	0.8	-77
Hoshiarpur	8.6	23	0.0	-100	0.0	-100
Jalandhar	1.3	-83	0.0	-100	0.0	-100
Kapurthala	8.7	77	0.0	-100	0.5	-71
Ludhiana	24.5	401	0.0	-100	1.7	-55
Mansa	6.3	184	0.5	-78	0.0	-100
Moga	47.9	771	0.0	-100	0.5	-78
Muktesar	22.0	948	10.0	108	0.0	-100
Nawashahar	5.8	-18	1.2	-76	0.0	-100
Patiala	17.8	270	0.0	-100	0.7	-76
Ropar	25.9	194	0.0	-100	0.8	-86
Sangrur	25.9	325	0.0	-100	0.0	-100
Mohali	23.5	164	0.0	-100	4.5	-13



TarnTaran	8.6	28	0.0	-100	0.0	-100
<b>Haryana</b>						
Ambala	16.2	153	0.0	-100	1.1	-69
Bhiwani	25.5	411	0.1	-97	0.0	-100
Chandigarh	23.5	133	0.0	-100	0.1	-99
Faridabad	14.6	108	0.0	-100	1.0	-57
Fatehabad	5.8	-4	2.0	0	0.0	-100
Gurgaon	24.6	447	19.0	660	2.6	-4
Hissar	20.4	271	3.9	11	0.7	-67
Jhajar	12.0	251	0.0	-100	0.0	-100
Jind	26.5	357	0.0	-100	9.8	228
Katihah	11.2	229	0.7	40	1.0	-52
Karnal	12.4	188	0.0	-100	0.0	-100
Kurukshetra	3.8	12	0.0	-100	0.0	-100
Mahendragarh	12.8	73	0.0	-100	1.6	-55
Mewat	7.3	172	0.0	-100	0.0	-100
Palwal	7.5	188	0.0	-100	0.0	-100
Panchkkula	10.3	23	0.0	-100	0.0	-100
Panipat	15.4	241	0.1	-88	5.3	252
Rewari	2.4	-29	0.0	-100	2.2	120
Rohtak	8.8	22	2.1	-33	0.3	-87
Sirsa	8.7	97	3.0	58	0.0	-100
Sonepat	10.5	62	0.0	-100	3.4	-4
Yamunanagar	14.8	125	0.0	-100	3.2	-45
<b>Delhi</b>						
Central Delhi	24.0	229	0.0	-100	11.0	144
East Delhi	2.0	-73	0.0	-100	0.0	-100
New Delhi	19.8	171	0.0	-100	21.7	382
North Delhi	25.4	247	0.0	-100	12.1	169
North East Delhi	9.0	23	0.0	-100	11.0	144
North West Delhi	0.0	-100	0.0	-100	8.5	89
South Delhi	25.1	243	0.0	-100	5.3	18
South West Delhi	25.5	249	0.0	-100	11.6	158
West Delhi	16.0	119	0.0	-100	13.0	189
<b>Jammu &amp; Kashmir</b>						
Anantnag	32.1	3	46.3	116	9.0	-61
Badgam	26.3	25	13.4	-31	5.5	-67
Bandipore	**	**	**	**	**	**
Baramula	57.8	49	33.5	45	19.5	-15
Doda	49.0	91	22.2	30	15.8	-12
Ganderbal	45.4	138	46.8	198	16.6	12
Jammu	2.8	-66	0.1	-99	0.0	-100
Kargil	0.0	-100	0.0	-100	0.0	-100
Kathua	35.2	780	0.0	-100	0.0	-100
Kistwar	**	**	**	**	**	**
Kulgam	22.9	-26	27.3	28	9.4	-59
Kupwara	100.2	263	19.6	-12	5.8	-73
Ladakh(Leh)	0.3	-81	0.0	-100	0.7	-70
Poonch	18.3	34	10.8	-54	0.3	-98

Pulwama	23.2	2	23.7	14	3.9	-75
Rajouri	31.7	264	5.6	19	0.0	-100
Ramban	34.6	35	27.5	61	9.1	-49
Reasi	12.4	-39	2.2	-71	0.6	-92
Samba	1.6	-81	10.6	126	0.0	-100
Shopian	24.0	6	27.0	29	7.0	-55
Srinagar	33.1	73	21.4	36	6.9	-53
Udhampur	20.7	1	6.0	-21	0.0	-100
<b>East Madhya Pradesh</b>						
Anuppur	0.0	-100	0.0	-100	0.0	-100
Balaghat	0.5	-68	0.0	-100	2.3	158
Chhatarpur	0.0	-100	0.0	-100	1.2	-33
Chindwara	0.0	-100	2.5	174	0.0	-100
Damoh	0.0	-100	0.0	-100	0.0	-100
Dindori	0.0	-100	0.0	-100	0.0	-100
Jabalpur	1.8	800	1.0	19	0.0	-100
Katni	0.0	-100	0.0	-100	0.0	-100
Mandla	1.1	-13	0.0	-100	0.0	-100
Narsingpur	0.0	-100	0.0	-100	0.0	-100
Panna	0.0	-100	0.0	-100	0.0	-100
Rewa	4.2	223	0.0	-100	0.0	-100
Sagar	0.2	-71	0.0	-100	0.0	-100
Satna	0.1	-93	0.0	-100	0.3	-70
Seoni	7.5	400	1.2	-50	0.0	-100
Shahdol	0.0	-100	0.0	-100	0.0	-100
Sidhi	4.4	57	0.0	-100	0.0	-100
Singrauli	0.0	-100	0.0	-100	0.0	-100
Tikamgarh	0.0	-100	0.0	-100	1.5	25
Umaria	0.0	-100	0.0	-100	0.0	-100
<b>West Madhya Pradesh</b>						
Alirajpur	0.0	-100	0.0	-100	0.0	-100
Asoknagar	0.0	-100	0.0	-100	0.0	-100
Badwani	0.0	-100	0.0	-100	0.0	-100
Betul	1.0	67	0.4	-73	0.0	-100
Bhind	0.0	-100	0.0	-100	0.0	-100
Bhopal	3.2	113	1.4	-22	3.0	43
Burhanpur	0.0	-100	0.0	-100	0.0	-100
Datia	0.0	-100	0.0	-100	0.6	-45
Dewas	0.0	-100	0.0	-100	0.0	-100
Dhar	0.0	-100	0.0	-100	0.0	-100
Guna	1.0	-17	0.0	-100	0.3	-86
Gwalior	0.0	-100	0.0	-100	2.1	-5
Harda	0.0	-100	0.0	-100	0.0	-100
Hosangabad	0.0	-100	2.7	108	0.0	-100
Indore	0.0	-100	1.5	114	0.3	-90
Jhabua	0.0	-100	0.0	-100	0.0	-100
Khandwa	0.0	-100	0.0	-100	0.0	-100
Khargone	0.0	-100	0.0	-100	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	0.0	-100	0.0	-100	0.0	-100
Rajgarh	0.0	-100	0.0	-100	1.2	71
Ratlam	0.0	-100	0.0	-100	0.0	-100
Sehore	0.0	-100	0.0	-100	0.0	-100
Shajapur	0.0	-100	3.3	150	0.3	-86
Sheopur Kalani	7.0	775	0.0	-100	0.0	-100
Shivpuri	0.0	-100	0.5	-74	0.0	-100
Ujjain	0.0	-100	0.4	-33	0.0	-100
Vidisha	0.0	-100	0.0	-100	0.0	-100
<b>Chhattisgarh</b>						
Bastar	25.8	166	57.2	557	3.0	-57
Bijapur	11.0	197	49.2	1487	0.0	-100
Bilaspur	3.7	-11	0.0	-100	13.0	306
Dantewara	0.0	-100	0.0	-100	0.0	-100
Dhamtari	3.4	48	0.0	-100	0.8	-72
Durg	0.0	-100	0.0	-100	47.6	2544
Janjgir	0.0	-100	0.0	-100	2.0	33
Jashpurnagar	0.0	-100	0.0	-100	3.5	-56
Kanker	0.0	-100	**	**	0.0	-100
Korba	6.0	161	0.0	-100	1.0	-50
Koriya	0.0	-100	0.0	-100	0.0	-100
Kawardha	**	**	0.0	-100	0.0	-100
Mahasumund	0.0	-100	0.0	-100	0.0	-100
Narayanpur	0.0	-100	**	**	0.0	-100
Raigarh	**	**	**	**	**	**
Raipur	0.0	-100	2.0	-44	11.9	285
Rajandgaon	2.2	-37	0.0	-100	4.8	66
Surguja	0.0	-100	0.0	-100	21.0	600
<b>East Uttar Pradesh</b>						
Allahabad	0.0	-100	0.0	-100	0.0	-100
Ambedkar Nagar	0.0	-100	0.0	-100	38.3	682
Azamgarh	0.0	-100	0.0	-100	0.0	-100
Bahraich	0.0	-100	0.0	-100	0.0	-100
Ballia	0.0	-100	0.0	-100	39.0	852
Balrampur	0.0	-100	0.0	-100	0.0	-100
Banda	0.0	-100	0.4	-91	0.5	-83
Barabanki	0.0	-100	0.0	-100	0.0	-100
Basti	0.0	-100	0.0	-100	12.5	150
Chandauli	0.0	-100	0.0	-100	3.0	7
Deoria	0.0	-100	0.0	-100	4.0	-49
Faizabad	0.0	-100	0.0	-100	0.0	-100
Farrukhabad	1.9	-49	0.0	-100	0.0	-100
Fatehpur	0.0	-100	0.0	-100	0.0	-100
Gazipur	2.0	-47	0.0	-100	3.3	43
Gonda	0.0	-100	0.0	-100	0.0	-100
Gorakhpur	0.0	-100	0.0	-100	20.6	311
Hardoi	0.9	-81	0.0	-100	0.5	-83



Jaunpur	0.0	-100	0.0	-100	7.6	124
Kannauj	0.0	-100	0.0	-100	0.0	-100
Kanpur City	0.0	-100	0.0	-100	0.0	-100
Kanpur Dehat	0.0	-100	0.0	-100	0.0	-100
Kaushambi	0.0	-100	0.0	-100	0.0	-100
Kheri	0.0	-100	0.0	-100	0.4	-93
Kushi nagar	0.0	-100	0.0	-100	5.0	-40
Lucknow	0.0	-100	0.0	-100	0.0	-100
Maharajganj	0.0	-100	0.0	-100	5.7	-46
Mau	0.0	-100	0.0	-100	0.0	-100
Mirzapur	0.0	-100	2.5	-17	6.0	114
Pratapgarh	0.0	-100	0.0	-100	0.0	-100
RaiBareilly	0.1	-96	0.0	-100	0.0	-100
Sahuji Maharajnagar	0.0	-100	0.0	-100	0.0	-100
Sant Kabirnagar	0.0	-100	0.0	-100	3.0	0
Sant Ravidas Nagar	0.0	-100	0.0	-100	0.0	-100
Shrawasti	**	**	**	**	**	**
Sidharthnagar	0.0	-100	0.0	-100	0.0	-100
Sitapur	0.0	-100	0.0	-100	1.1	-69
Sonbhadra	0.3	-90	2.0	-17	6.5	148
Sultanpur	0.0	-100	0.0	-100	0.0	-100
Unnao	0.0	-100	0.0	-100	0.0	-100
Varanasi	0.0	-100	2.1	17	6.4	205
<b>West Uttar Pradesh</b>						
Agra	0.0	-100	0.0	-100	0.5	-79
Aligarh	2.1	-76	0.0	-100	2.8	8
Auraiya	0.0	-100	0.0	-100	1.0	-66
Badaun	2.2	-54	0.0	-100	0.0	-100
Baghpat	27.0	630	0.0	-100	15.6	643
Bareilly	2.7	-50	0.0	-100	0.0	-100
Bijnor	15.0	213	0.0	-100	5.3	14
Bulandsahar	5.3	29	0.0	-100	1.3	-46
Etah	0.0	-100	0.0	-100	1.3	-31
Etawah	0.0	-100	0.0	-100	0.0	-100
Firozabad	0.0	-100	0.0	-100	0.0	-100
GBNagar	18.0	329	0.0	-100	9.5	3067
Ghaziabad	5.1	31	0.0	-100	9.9	397
Hamirpur	0.0	-100	0.5	-64	0.8	-75
Jalaun	0.0	-100	0.0	-100	2.7	48
Jhansi	1.4	-42	0.4	-76	0.7	-70
Jotiba Phule Nagar	4.3	-2	0.0	-100	8.0	300
Kanshiramnagar	0.0	-100	0.0	-100	5.5	162
Lalitpur	0.0	-100	0.0	-100	1.0	-14
Mahamaya Nagar	0.0	-100	0.0	-100	0.5	-76
Mahoba	0.0	-100	0.0	-100	0.0	-100
Mainpuri	0.0	-100	0.0	-100	0.0	-100
Mathura	0.0	-100	0.0	-100	0.0	-100
Meerut	7.2	67	0.0	-100	17.1	970
Moradabad	5.0	2	0.0	-100	0.7	-77

Muzaffarnagar	15.0	329	0.0	-100	2.8	8
Pilibhit	0.0	-100	0.0	-100	0.0	-100
Rampur	2.1	-62	0.0	-100	0.0	-100
Saharanpur	8.3	46	0.0	-100	1.3	-80
Shahjahanpur	0.3	-93	0.0	-100	0.0	-100
<b>Uttarakhand</b>						
Almora	5.4	-55	0.0	-100	11.1	-3
Bageshwar	8.6	-28	0.0	-100	20.1	75
Chamoli	26.3	14	0.0	-100	11.6	-18
Champawat	3.0	-78	0.0	-100	4.0	-64
Dehradun	7.8	-37	0.0	-100	10.8	-6
Garhwal Pauri	9.3	-22	0.0	-100	2.7	-73
Garhwal Tehri	30.1	92	0.0	-100	15.1	14
Haridwar	9.8	48	0.0	-100	2.5	-31
Nainital	6.3	-58	0.0	-100	8.1	-35
Pithorgarh	21.2	-16	0.0	-100	9.5	-63
Rudraprayag	19.2	-27	0.0	-100	21.6	-3
Udham Sing Nagar	3.1	-57	0.0	-100	0.0	-100
Uttarkashi	35.6	24	1.9	-92	17.5	-40
<b>Bihar</b>						
Araria	0.0	-100	0.0	-100	101.8	206
Arwal	**	**	0.0	-100	12.3	262
Aurangabad	0.0	-100	0.0	-100	21.6	516
Banka	0.0	-100	0.0	-100	155.6	1328
Begusarai	0.0	-100	0.0	-100	194.6	1094
Bhabua	0.0	-100	0.0	-100	1.5	-67
Bhagalpur	5.0	-64	0.0	-100	168.2	845
Bhojpur	0.0	-100	0.0	-100	42.1	454
Buxar	0.0	-100	0.0	-100	2.6	100
Darbhanga	0.0	-100	0.0	-100	83.1	326
East Champaran	2.4	-77	0.0	-100	70.6	390
Gaya	0.1	-97	0.0	-100	63.7	1228
Gopalganj	0.0	-100	0.0	-100	12.6	22
Jahanabad	0.0	-100	0.0	-100	36.7	312
Jamui	0.0	-100	0.0	-100	76.9	580
Kathihar	0.0	-100	0.0	-100	190.7	634
Khagadia	0.0	-100	0.0	-100	29.6	97
Kishanganj	5.8	-79	15.1	-49	63.3	25
Lakhisarai	**	**	0.0	-100	203.7	1822
Madhepura	0.0	-100	0.0	-100	192.5	808
Madhubani	0.0	-100	0.0	-100	70.5	239
Monghyar	0.2	-98	0.0	-100	255.4	2309
Muzaffarpur	0.0	-100	0.0	-100	63.8	320
Nalanda	0.3	-94	0.0	-100	92.8	991
Nawada	0.0	-100	0.0	-100	52.1	506
Patna	0.0	-100	0.0	-100	61.7	745
Purnea	0.0	-100	0.0	-100	133.0	346
Rohtas	7.3	78	0.0	-100	59.0	1744
Saharsha	0.0	-100	0.0	-100	80.4	219

Samstipur	**	**	0.0	-100	78.5	394
Saran	0.0	-100	0.0	-100	55.1	392
Sheikpura	**	**	0.0	-100	152.2	1223
Sheohar	0.0	-100	0.0	-100	54.2	156
Sitamarhi	0.0	-100	0.0	-100	127.0	499
Siwan	0.0	-100	0.0	-100	29.6	162
Supaul	0.0	-100	0.0	-100	107.7	549
Vaishali	2.1	-63	0.0	-100	67.6	735
West Champaran	0.0	-100	0.0	-100	5.8	-65
<b>Jharkhand</b>						
Bokaro	0.0	-100	0.0	-100	124.5	1941
Chatra	0.0	-100	0.0	-100	90.4	1313
Deoghar	0.0	-100	0.0	-100	11.6	603
Dhanbad	0.0	-100	0.0	-100	44.1	320
Dumka	0.0	-100	0.0	-100	89.7	428
East Singbhum	0.1	-99	0.0	-100	45.8	174
Garhwa	0.5	-90	0.0	-100	21.0	1400
Giridih	0.0	-100	0.0	-100	118.4	1362
Godda	0.0	-100	0.0	-100	158.3	795
Gumla	0.0	-100	0.0	-100	0.0	-100
Hazaribagh	0.0	-100	0.0	-100	116.7	1241
Jamtara	**	**	0.0	-100	46.6	118
Khunti	0.0	-100	0.0	-100	27.0	129
Koderna	0.0	-100	0.0	-100	54.6	452
Latehar	0.0	-100	0.0	-100	83.2	1310
Lohardagga	0.0	-100	0.0	-100	80.6	420
Pakur	0.0	-100	0.0	-100	58.6	222
Palamau	0.0	-100	0.0	-100	10.2	162
Ramgarh	**	**	0.0	-100	74.4	629
Ranchi	0.0	-100	0.0	-100	49.5	338
Sahebganj	25.4	53	0.0	-100	268.8	881
Saraikelela	0.0	-100	0.0	-100	28.5	139
Simdega	0.0	-100	0.0	-100	49.1	573
West Singbhum	0.0	-100	0.0	-100	64.8	360
<b>East Rajasthan</b>						
Ajmer	14.1	1075	0.0	-100	1.6	-58
Alwar	4.6	-20	0.2	-93	0.9	-71
Banswara	0.0	-100	0.0	-100	0.0	-100
Baran	0.0	-100	0.0	-100	0.0	-100
Bharatpur	0.0	-100	0.0	-100	0.0	-100
Bhilwara	13.8	964	0.0	-100	0.0	-100
Bundi	9.7	1281	0.0	-100	2.6	3
Chittorgarh	1.5	0	1.2	-10	0.0	-100
Dausa	0.8	-79	0.0	-100	5.8	32
Dholpur	0.0	-100	0.0	-100	0.0	-100
Dungarpur	3.0	67	0.0	-100	0.0	-100
Jaipur	8.6	121	0.5	-85	2.9	-43
Jhalawar	0.0	-100	0.5	-59	0.0	-100
Jhunjhunu	20.3	198	0.3	-95	1.5	-68

Karauli	0.0	-100	0.0	-100	0.9	-76
Kota	3.2	250	1.5	35	0.2	-92
Pratapgarh	0.0	-100	0.0	-100	0.0	-100
Rajsamand	2.3	-2	3.6	225	4.3	-11
Sawai Madhopur	0.3	-92	0.0	-100	1.5	-53
Sikar	1.0	-84	0.0	-100	0.6	-88
Sirohi	3.3	83	0.0	-100	0.5	-81
Tonk	4.5	59	0.0	-100	4.0	50
Udaipur	1.8	14	14.9	1395	0.0	-100
<b>West Rajasthan</b>						
Barmer	2.3	187	11.0	686	0.0	-100
Bikaner	31.2	845	3.4	22	0.0	-100
Churu	48.0	860	3.4	-12	0.6	-86
Hanumangarh	10.7	110	16.6	563	0.0	-100
Jaisalmer	3.1	244	7.1	374	0.0	-100
Jalore	2.0	147	3.4	1594	0.0	-100
Jodhpur	9.7	469	9.9	516	0.0	-100
Nagaur	17.1	350	1.1	-67	5.5	25
Pali	14.4	929	1.8	157	7.0	119
Sri Ganganagar	22.6	584	11.1	311	0.0	-100
<b>Gujarat Region</b>						
Ahmedabad	1.2	-39	0.2	-67	0.0	-100
Anand	2.1	112	0.0	-100	0.1	-90
Banaskantha	1.8	200	3.9	1200	0.0	-100
Baroda	0.1	-57	0.0	-67	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	0.0	-100	0.5	-89	0.0	-100
Gandhinagar	0.0	-100	0.0	-100	0.0	-100
Kheda	0.1	-89	0.0	-100	0.0	-100
Mehsana	0.0	-100	2.1	200	0.0	-100
Narmada	0.0	-100	0.0	-100	0.0	-100
Navsari	0.0	-100	0.0	-100	0.0	-100
Panchmahal	0.0	-100	0.0	-100	0.0	-100
Patan	0.3	-64	0.0	-100	0.0	-100
Sabarkantha	0.0	-100	0.7	238	0.0	-100
Surat	0.4	315	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	2.5	213	4.1	307
Bhavnagar	0.2	-74	1.7	753	0.0	-100
Diu	0.0	-100	0.0	-100	0.0	-100
Jamnagar	0.0	-100	0.0	-100	0.0	-100
Junagarh	0.0	-100	0.0	-100	0.0	-100
Kutch	2.1	590	0.0	-100	0.0	-100
Porbandar	0.0	-100	0.0	-100	0.0	-100



Rajkot	0.6	50	8.1	3932	0.0	-100
Surendranagar	0.0	-100	0.0	-100	0.0	-99
<b>Maharashtra</b>						
<b>Konkan &amp; Goa</b>						
Goa	38.6	962	50.1	156	26.6	-21
Mumbai	0.0	-100	0.0	-100	0.0	-100
Raigad	0.3	-58	0.0	-100	6.2	-10
Ratnagiri	3.8	245	1.5	-74	0.2	-98
Sindhudurg	66.0	2438	19.7	80	2.7	-89
Thane	0.5	0	0.0	-100	0.0	-100
<b>Madhya Maharashtra</b>						
Ahmednagar	2.6	30	3.8	-19	0.5	-95
Dhule	**	**	0.0	-100	0.0	-100
Jalgaon	0.0	-100	0.0	-100	0.2	-92
Kolhapur	2.0	-72	3.3	-79	9.6	-54
Nandurbar	**	**	0.0	-100	0.2	-96
Nasik	3.8	241	25.7	1017	9.6	47
Pune	2.3	-27	6.4	7	5.6	-49
Sangli	13.3	105	1.3	-87	11.7	-42
Satara	12.4	175	10.1	44	13.3	-7
Solapur	25.6	630	6.4	12	7.9	-40
<b>Marathwada</b>						
Aurangabad	7.4	576	0.0	-100	0.0	-100
Beed	0.3	-88	0.0	-100	0.0	-100
Hingoli	0.0	-100	0.0	-100	0.0	-100
Jalna	0.0	-100	0.0	-100	0.0	-100
Latur	1.3	-53	2.2	-52	0.0	-100
Nanded	0.1	-98	0.3	-87	0.0	-100
Usmanabad	6.5	55	1.7	-67	0.0	-100
Parbhani	0.5	-68	22.2	1135	0.0	-100
<b>Vidarbha</b>						
Akola	1.4	60	0.2	-85	0.2	-96
Amraoti	0.0	-100	0.0	-100	0.1	-93
Bhandara	0.0	-100	0.0	-100	0.0	-100
Buldhana	0.0	-100	0.2	-85	0.0	-100
Chandrapur	6.4	64	0.0	-100	0.1	-94
Gadchiroli	0.3	-94	0.0	-100	0.0	-100
Gondia	0.0	-100	0.0	-100	0.7	-35
Nagpur	0.0	-100	1.6	-19	0.5	-80
Wardha	0.0	-100	2.9	-33	0.0	-100
Washim	2.3	56	0.0	-100	0.0	-100
Yeotmal	0.1	-96	0.1	-94	0.1	-98
<b>Odisha</b>						
Angul	4.1	-75	2.6	-78	58.6	358
Balasore	1.7	-94	1.0	-95	203.2	477
Bargarh	5.2	36	0.0	-100	93.3	1694
Bhadrak	6.1	-81	4.6	-80	171.7	640
Bolangir	5.3	-51	0.0	-100	133.9	1594
Boudh	27.7	24	8.3	-56	66.5	571

Cuttack	4.6	-79	0.8	-94	137.5	594
Deogarh	6.2	-16	0.5	-92	20.7	173
Dhenkanal	11.6	-30	0.4	-97	71.9	333
Gajapati	28.6	-43	10.8	-59	177.7	708
Ganjam	5.7	-84	0.9	-94	71.9	336
Jagatsingpur	0.8	-98	0.0	-100	152.6	367
Jajpur	7.9	-72	1.6	-91	130.9	426
Jharsuguda	3.6	-54	0.0	-100	33.8	463
Kalahandi	4.0	-72	0.6	-92	174.9	1598
Kandhamal	6.5	-71	1.8	-90	76.4	672
Kendrapara	0.8	-96	8.5	-48	187.2	498
Keonjhar	1.9	-93	0.0	-99	60.4	129
Khurda	3.0	-86	7.5	-58	104.1	590
Koraput	19.9	-22	2.0	-88	59.4	288
Malkangiri	50.4	198	3.2	-74	2.0	-84
Mayurbhanj	6.8	-75	0.0	-100	121.7	302
Nawapara	13.7	56	0.0	-100	139.4	1949
Nawarangpur	18.3	17	0.1	-99	19.0	-31
Nayagarh	8.7	-18	22.5	120	97.2	724
Puri	0.8	-97	0.0	-100	126.6	773
Rayagada	18.9	-49	15.8	4	160.5	732
Sambalpur	5.3	-28	0.0	-100	24.1	217
Sonepur	0.7	-90	0.0	-100	63.6	614
Sundargarh	0.8	-88	0.0	-100	50.0	303
<b>West Bengal</b>						
<b>GWB</b>						
Bankura	0.1	-99	0.0	-100	23.7	76
Birbhum	9.3	-51	0.0	-100	30.3	67
Burdwan	0.0	-100	0.0	-100	13.6	-27
East Midnapore	0.6	-97	0.0	-100	139.0	362
Hooghly	5.0	-75	0.0	-100	43.1	65
Howrah	0.5	-98	0.5	-98	58.8	63
Kolkata	0.1	-99	0.0	-100	77.0	143
Murshidabad	16.0	14	0.0	-100	45.0	62
Nadia	6.2	-68	0.0	-100	26.0	7
24 Pargana (N)	1.2	-94	0.0	-100	48.0	75
Purulia	0.0	-100	0.0	-100	51.9	303
24 Pargana (S)	0.0	-100	0.0	-100	97.6	239
West Midnapore	1.4	-94	0.0	-100	59.1	83
<b>SHWB &amp; Sikkim</b>						
Cooch Behar	45.1	-34	38.2	-40	102.4	-10
Darjeeling	57.2	13	32.5	-48	79.1	13
East Sikkim	66.6	-6	88.7	22	114.9	75
Jalpaiguri	128.3	88	54.4	-13	96.9	-11
Malda	6.0	-75	0.0	-100	81.3	211
North Dinajpur	0.0	-100	0.0	-100	3.0	-90
North Sikkim	79.7	12	72.2	-12	77.5	5
South Dinajpur	0.0	-100	0.0	-100	33.4	-30
South Sikkim	11.7	-84	23.8	-67	52.4	-20

West Sikkim	26.7	-62	20.8	-75	71.3	-3
<b>Karnataka</b>						
<b>Coastal Karnataka</b>						
Dakshin Kannada	91.0	382	13.7	46.3	12.6	-78
Udupi	67.5	304	20.8	53.5	12.0	-82
Uttar Kannada	66.1	626	13.6	32.7	24.4	-37
<b>N I Karnataka</b>						
Bagalkote	38.2	416	18.5	12.9	21.4	0
Belgaum	42.0	296	24.4	19.2	12.5	-38
Bidar	10.5	59	12.1	6.1	0.4	-95
Bijapur	38.0	556	8.1	11.1	12.4	-35
Dharwad	62.0	340	29.4	20.8	19.2	-14
Gadag	51.3	354	14.4	18.7	28.7	31
Gulbarga	28.8	306	7.7	7.2	9.5	-27
Haveri	67.8	430	9.4	20.1	12.0	-43
Koppal	62.9	640	2.9	15.5	17.2	1
Raichur	60.9	592	7.5	10.4	15.8	8
Yadgir	43.2	409	5.3	7.3	12.3	-6
<b>S I Karnataka</b>						
Bangalore Rural	14.1	-17	30.2	24.1	42.6	102
Bangalore Urban	14.9	-34	28.8	26	31.1	18
Bellary	55.6	504	19.1	16.2	20.7	24
Chamarajnagar	35.9	31	16.8	34.2	18.1	-41
Chichballapur	11.9	-2	41.0	20.8	50.3	205
Chickmagalur	84.0	439	17.2	33.7	2.5	-90
Chitradurga	42.5	251	33.1	18.8	10.4	-36
Davangere	74.7	401	19.7	21.7	3.3	-80
Hassan	62.6	192	16.3	26.8	16.6	-28
Kodagu	94.6	233	11.4	39.5	2.7	-93
Kolar	8.9	-42	23.9	22	46.0	154
Mandya	34.6	63	19.4	26.8	30.8	5
Mysore	44.6	54	16.2	31.6	19.3	-39
Ramnagara	16.9	-28	41.3	26.6	13.7	-59
Shimoga	68.8	488	11.1	23	4.2	-78
Tumkur	14.5	-14	40.5	24.6	15.4	-20
<b>Kerala</b>						
Alappuzha	115.9	128	4.9	-94	23.1	-71
Kannur	171.5	383	7.5	-89	5.4	-92
Ernakulam	183.3	286	12.3	-85	40.4	-54
Idukki	117.6	175	3.5	-94	14.0	-78
Kasaragod	79.9	185	14.0	-78	12.0	-84
Kollam	68.1	30	23.7	-61	1.5	-97
Kottayam	97.2	111	12.6	-82	44.9	-40
Kozhikode	175.7	384	12.1	-84	9.3	-87
Malappuram	161.9	269	8.1	-87	15.0	-72
Palakkad	115.3	343	5.6	-87	4.4	-89
Pathanamthitta	86.1	49	22.2	-68	27.8	-60
Thiruvananthapuram	60.1	67	0.0	-100	9.0	-83
Thrissur	175.1	255	0.6	-99	8.2	-90

Wayanad	100.7	286	19.6	-63	17.1	-64
<b>Tamil Nadu</b>						
Ariyalur	41.8	166	1.5	-91	22.0	39
Chennai	4.7	-34	0.0	-100	0.0	-100
Coimbatore	38.7	153	4.7	-80	9.9	-27
Cuddalore	42.9	324	1.9	-87	27.5	217
Dharmapuri	27.0	44	15.0	-45	76.7	199
Dindigul	76.6	295	13.8	-32	31.2	77
Erode	21.1	18	1.9	-92	11.8	-25
Kanchipuram	10.3	10	0.6	-95	6.4	-28
Kanyakumari	95.2	254	0.2	-99	12.3	-60
Karikal	39.2	1533	0.8	-93	0.0	-100
Karur	31.6	161	2.4	-87	21.4	83
Krishnagiri	18.7	-7	25.2	-5	107.8	331
Madurai	60.2	220	1.2	-92	13.4	5
Nagapattinam	38.7	372	0.0	-99	3.4	-65
Namakkal	22.7	12	1.4	-94	21.3	1
Nilgiris	145.0	520	8.5	-75	17.7	-36
Perambalur	62.7	393	7.0	-69	77.3	490
Puducherry	36.1	276	14.9	59	38.7	445
Pudukottai	43.8	334	3.5	-73	25.7	149
Ramanathapuram	61.8	387	0.0	-100	3.0	-50
Salem	29.7	45	11.7	-58	49.7	112
Sivaganga	66.4	312	0.0	-100	12.3	20
Thanjavur	39.4	218	0.1	-99	27.6	109
Theni	55.6	312	0.0	-100	8.5	-18
Tirunelveli	43.7	206	1.1	-88	0.4	-92
Tirupur	22.8	61	2.7	-88	10.2	-25
Tiruvallur	14.1	38	0.1	-99	3.2	-74
Tiruvannamalai	22.3	70	12.2	-41	43.7	182
Tiruvarur	89.7	694	0.0	-100	25.4	114
Toothukudi	43.3	342	5.5	-9	0.0	-100
Trichy	58.0	368	9.0	-45	27.4	111
Vellore	17.9	29	6.7	-68	49.7	159
Villupuram	34.8	223	23.4	34	27.2	212
Virudhunagar	32.4	91	6.3	-58	10.9	8
<b>Andhra Pradesh</b>						
<b>Coastal Andhra Pradesh</b>						
East Godavari	87.5	180	10.0	-39	11.5	-17
Guntur	33.8	49	0.7	-95	19.4	48
Krishna	76.4	453	0.6	-96	1.1	-87
Nellore	6.1	-56	0.2	-98	12.6	-5
Prakasam	7.5	-49	2.7	-77	5.8	-60
Sirkakulam	25.5	13	0.0	-100	132.4	968
Visakhapatnam	48.1	40	10.9	-43	16.5	-5
Vizianagram	38.2	23	10.0	-43	72.1	290
West Godavari	95.6	314	8.3	-38	3.4	-67
<b>Telangana</b>						
Adilabad	22.1	343	6.0	57	1.2	-71



Hyderabad	34.4	304	5.1	-20	0.6	-94
Karimnagar	30.6	293	1.8	-59	13.6	127
Khammam	56.6	267	6.2	-58	1.8	-83
Mehabubnagar	52.3	385	2.5	-65	22.5	125
Medak	38.3	373	4.2	-17	1.5	-80
Nalgonda	35.3	605	0.6	-92	35.3	330
Nizamabad	25.6	204	20.0	456	0.5	-92
Rangareddy	37.1	290	7.3	13	3.9	-56
Warangal	55.0	547	20.1	182	9.1	54
<b>Rayalaseema</b>						
Anantapur	19.7	97	28.5	108	12.5	-22
Chittoor	18.0	36	9.8	-49	28.1	61
Cuddapah	8.4	-13	3.5	-72	9.6	-33
Kurnool	18.7	54	14.0	33	8.5	-46

**Legends**

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