



**Government of India  
Ministry of Earth Sciences  
India Meteorological Department**

**Press Release**

**Date: 28<sup>th</sup> July, 2023**

**Time of Issue: 1315 hours IST**

**Subject: i) Enhanced rainfall activity will continue over Central India with Very heavy rainfall over Konkan & Goa, ghat areas of Madhya Maharashtra, Vidarbha, Chhattisgarh, Gujarat Region today and significant reduction thereafter.**  
**ii) Decrease in rainfall activity over south peninsular India and increase in rainfall activity over East India including Bihar, Jharkhand, Gangetic West Bengal, Odisha from today and Northeastern states with isolated heavy to very heavy rainfall during next 5 days.**

**Weather observed during past 24 hours ending at 0830 hours IST of today (Annexure I):**

**Significant Weather features:**

- ❖ Yesterday's **Low Pressure Area** over south Odisha & adjoining north Coastal Andhra Pradesh has become less marked. However, associated cyclonic circulation lies over north Odisha & adjoining areas of Gangetic West Bengal & Jharkhand upto middle tropospheric levels tilting southwards with height.
- ❖ A north-south trough runs from cyclonic circulation over north Odisha & adjoining Gangetic West Bengal & Jharkhand to west Assam in lower tropospheric levels.
- ❖ The Monsoon Trough lies to the south of its normal position and passes through Ganganagar, Narnaul, Gwalior, Sidhi, Ambikapur, Jharsuguda, Chandbali and thence southeastwards to Eastcentral Bay of Bengal and extends upto lower tropospheric levels.
- ❖ The shear zone runs roughly along Lat. 18° N in middle tropospheric levels.
- ❖ A cyclonic circulation lies over Haryana & neighbourhood in lower tropospheric levels.
- ❖ A Western Disturbance is seen as a trough in middle tropospheric westerlies roughly along Long. 65°E to the north of 30°N.

**Weather Forecast and Warning (Annexure II):**

**Northwest India:** Light/Moderate fairly widespread to widespread rainfall with isolated **heavy rainfall** is very likely over Uttarakhand, Himachal Pradesh, Haryana, Chandigarh, Delhi, East Rajasthan on 28<sup>th</sup> & 29<sup>th</sup> July; Jammu and Kashmir, Punjab, West Uttar Pradesh, West Rajasthan on 28<sup>th</sup>; over East Uttar Pradesh during 29<sup>th</sup> July-01<sup>st</sup> August, 2023.

**Central India:** Light/moderate fairly widespread to widespread rainfall with isolated **heavy rainfall** is very likely over the region on 28<sup>th</sup> & 29<sup>th</sup> July and reduction thereafter.

**Isolated very heavy rainfall also likely over Chhattisgarh and Vidarbha on 28<sup>th</sup> July.**

**West India:** Light/moderate fairly widespread to widespread rainfall with **isolated heavy rainfall** very likely to continue over Konkan & Goa and ghat areas of Madhya Maharashtra during next 5 days; over Gujarat state, Marathwada on 28<sup>th</sup> July, 2023.

**Isolated very heavy rainfall very likely over Konkan & Goa, ghat areas of Madhya Maharashtra and Gujarat Region on 28<sup>th</sup> July, 2023.**

**Isolated heavy rainfall very likely over Mumbai city & adjoining areas on 28<sup>th</sup> July.**

**South India:** Light/moderate fairly widespread to widespread rainfall with **isolated heavy rainfall** very likely over Telangana and Coastal Karnataka today and significant reduction thereafter.

**East India:** Light/moderate fairly widespread to widespread rainfall with isolated **heavy rainfall** very likely over Odisha during 28<sup>th</sup>-31<sup>st</sup>; Sub-Himalaya West Bengal & Sikkim during 27<sup>th</sup>-29<sup>th</sup> July and over Jharkhand during 30<sup>th</sup> July-01<sup>st</sup> August and over Bihar on 30<sup>th</sup> & 31<sup>st</sup> July, 2023.

**Northeast India:** Light/moderate fairly widespread to widespread rainfall with **isolated heavy rainfall** very likely over the region during next 5 days.

**Isolated very heavy rainfall likely over Arunachal Pradesh and Assam & Meghalaya on 28<sup>th</sup> July, 2023.**

For more details kindly refer: [https://mausam.imd.gov.in/responsive/all\\_india\\_forecast\\_bulletin.php](https://mausam.imd.gov.in/responsive/all_india_forecast_bulletin.php)

### Rainfall Observations: (from 0830 hours IST of yesterday to 0830 hours IST of today, the 28<sup>th</sup> July 2023):

- **Heavy to very heavy rainfall with isolated extremely heavy rainfall** observed over Telangana, Gujarat Region, Konkan & Goa, Madhya Maharashtra and Marathwada.
- **Heavy to very heavy rainfall** at isolated places over Himachal Pradesh, East Rajasthan, Madhya Pradesh, Saurashtra & Kutch, Sub-Himalaya West Bengal & Sikkim, Odisha, Vidarbha and Assam & Meghalaya.
- **Heavy rainfall** at isolated places over West Rajasthan, Chhattisgarh, Uttarakhand, Punjab, Haryana and Arunachal Pradesh.

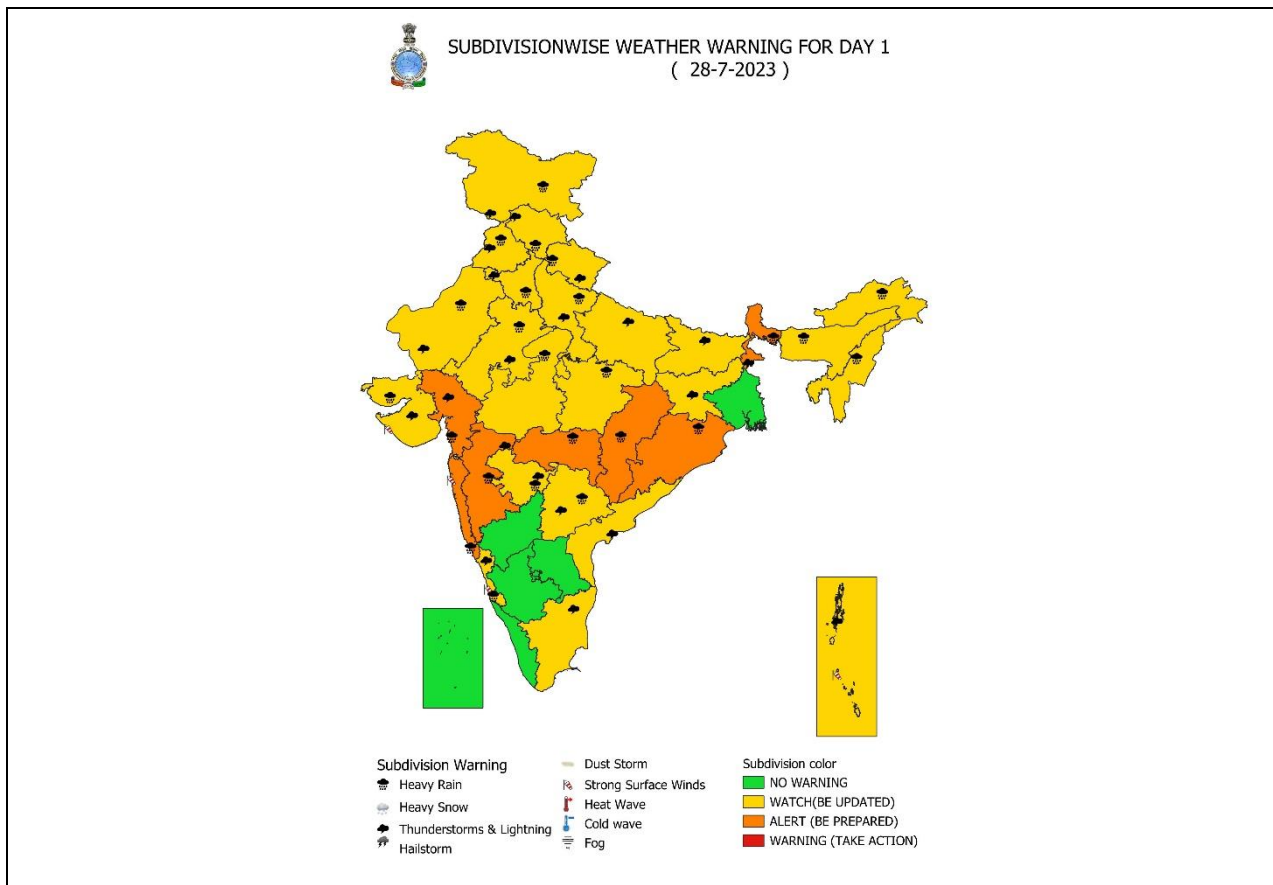
#### ➤ Significant rainfall recorded (in cm):

- **Konkan & Goa:** Jawhar (dist Palghar) 31, Mokheda - Fmo (dist Palghar) 24, Ambernath (dist Thane) 21, Dahanu - Imd Obsy (dist Palghar) 20, Matheran (dist Raigad) 20, Vasai (dist Palghar) 20, Ulhasnagar (dist Thane) 19, Bhiwandi (dist Thane) 17, Wada (dist Palghar) 16, Vikramgad (dist Palghar) 16, Lanja (dist Ratnagiri) 16, Thane (dist Thane) 15, Poladpur (dist Raigad) 15, Kalyan (dist Thane) 14, Khalapur (dist Raigad) 14, Murbad (dist Thane) 14, Vaibhavwadi (dist Sindhudurg) 13, Pen (dist Raigad) 13, Uran (dist Raigad) 13, Karjat\_agri (dist Raigad) 12, Roha (dist Raigad) 12, Santacruz - Imd Obsy (dist Mumbai Suburban) 12, Colaba - Imd Obsy (dist Mumbai City) 12, Palghar\_agri (dist Palghar) 11
- **Gujarat Region:** Nanipalson (dist Valsad) 31, Mahuva (dist Surat) 30, Navsari (dist Navsari) 27, Khanvel (dist Dadara & Nagar Haveli) 27, Subir (dist Dangs) 20, Bardoli (dist Surat) 19, Jalalpor (dist Navsari) 19, Navasari\_aws (dist Navsari) 19, Kaprada (dist Valsad) 18, Songadh (dist Tapi) 18, Vapi (dist Valsad) 17, Umergam (dist Valsad) 17, Dangs (ahwa) (dist Dangs) 16, Palsana (dist Surat) 15, Waghai (dist Dangs) 14, Choryasi (dist Surat) 13, Valod (dist Tapi) 13, Silvassa (dist Dadara & Nagar Haveli) 13, Vansda (dist Navsari) 13, Bodeli (dist Chhota Udepur) 12, Madhbun (dist Dadara & Nagar Haveli) 12,
- **Telangana:** Khanpur (dist Nirmal) 27, Navipet (dist Nizamabad) 25, Kathlapur (dist Jagtial) 18, Laxmanchanda (dist Nirmal) 17, Bheemgal (dist Nizamabad) 16, Mudhole (dist Nirmal) 16, Makloor (dist Nizamabad) 16, Mudholebasar (dist Nirmal) 15, Metpalle (dist Jagtial) 15, Mallapur (dist Jagtial) 14, Ranjal (dist Nizamabad) 14, Mortad (dist Nizamabad) 14, Chandurthi (dist Rajanna Sircilla) 13, Nandipet (dist Nizamabad) 13, Jakranpalle (dist Nizamabad) 13, Armur (dist Nizamabad) 13, Dilawarpur (dist Nirmal) 13, Dhar Palle (dist Nizamabad) 13, Velpur (dist Nizamabad) 12, Nizamabad (dist Nizamabad) 11, Kammar Palle (dist Nizamabad) 11, Mustabad (dist Rajanna Sircilla) 11, Bodhan (dist Nizamabad) 11, Sarangapur (dist Jagtial) 11, Kotgiri (dist Nizamabad) 10, Varni (dist Nizamabad) 10, Sirsilla (dist Rajanna Sircilla) 10, Rudrur(a) (dist Nizamabad) 10, Utnur (dist Adilabad) 10, Yeda Palle (dist Nizamabad) 10, Balkonda (dist Nizamabad) 10, Dich Palle (dist Nizamabad) 10,
- **Madhya Maharashtra:** Ozarkheda - Fmo (dist Nashik) 26, Gaganbawada (dist Kolhapur) 17, Peth (dist Nashik) 17, Igatpuri (dist Nashik) 14, Harsul - Fmo (dist Nashik) 13, Lonavala\_agri (dist Pune) 11, Mahabaleshwar- Imd Obsy (dist Satara) 10, Trimbakshwar (dist Nashik) 10, Akkalkuwa (dist Nandurbar) 10, Shahuwadi (dist Kolhapur) 8,
- **Marathwada:** Vasmat (dist Hingoli) 23, Nanded - Imd Parttime (dist Nanded) 19, Ardhapur (dist Nanded) 19, Dharmabad (dist Nanded) 18, Naigaon Khairgaon (dist Nanded) 16, Tondapur- Arg (dist Hingoli) 12, Bhokar (dist Nanded) 12, Billoli (dist Nanded) 11, Umari (dist Nanded) 10, Hadgaon (dist Nanded) 8, Himayatnagar (dist Nanded) 8, Degloor - Fmo (dist Nanded) 8, Loha (dist Nanded) 7, Kinwat (dist Nanded) 7, Mukhed (dist Nanded) 7, Kaij (dist Beed) 7, Udgir (dist Latur) 7,
- **Odisha:** Rajkishorenagar (dist Angul) 16, Lanjigarh (dist Kalahandi) 11, Ullunda (dist Sonepur) 10, Harichandanpur (dist Keonjhar) 8, Jhorigam (dist Nawarangpur) 7, Atabira (dist Bargarh) 7,
- **Saurashtra & Kutch:** Bhavnagar (dist Bhavnagar) 15,
- **Sub-Himalaya West Bengal & Sikkim:** Jalpaiguri-15, Darzeeling-9
- **East Rajasthan:** Mounntabu Tehsil Sr (dist Sirohi) 14, Railmagra Sr (dist Rajsamand) 12, Kotputli (dist Jaipur) 10, Behror (dist Alwar) 9, Reodar Sr (dist Sirohi) 8,
- **Himachal Pradesh:** Bhoranj (dist Hamirpur) 13, Kataula (dist Mandi) 12, Dharmsala (dist Kangra) 8, Karsog (dist Mandi) 7,
- **Assam & Meghalaya:** Mawsynram (dist East Khasi Hills) 13, Chouldhuwaghat Arg (dist Lakhimpur) 12, Cherrapunji(rkm) (dist East Khasi Hills) 12, Chauldhowaghat (dist Lakhimpur) 12, Cherrapunji (dist East Khasi Hills) 12,

Hills) 12, Ranganadi Nt Xing (dist Lakhimpur) 8, Mawkyrwat (dist South West Khasi Hills) 8, Dhemaji (dist Dhemaji) 7,

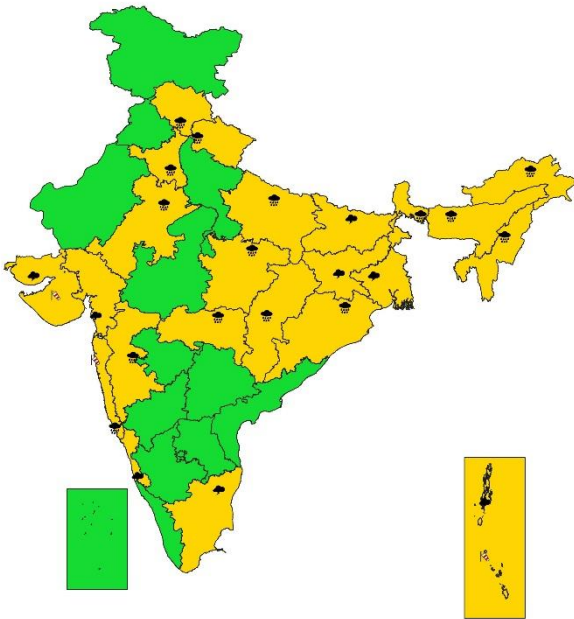
- **Madhya Pradesh:** Kesli (dist Sagar) 12, Alirajpur (dist Alirajpur) 12, Badi (dist Raisen) 12, Waraseoni (dist Balaghat) 11, Balaghat-aws (dist Balaghat) 9, Prabhat Pattan (dist Betul) 8, Sohagpur (dist Narmadapuram) 7, Multai (dist Betul) 7, Amla (dist Betul) 7, Sonkatch (dist Dewas) 7, Pipariya (dist Narmadapuram) 7, Khairlanji (dist Balaghat) 7,
- **Vidarbha:** Ballarpur (dist Chandrapur) 11, Dhamangaon Rlwy (dist Amraoti) 8, Tirora (dist Gondia) 8, Arni (dist Yeotmal) 8, Nagpur Aerodrome (dist Nagpur) 7, Saoli (dist Chandrapur) 7, Maregaon (dist Yeotmal) 7, Chandrapur (dist Chandrapur) 7,
- **West Rajasthan:** Phalodi (dist Jodhpur) 11, Phalodi Tehsil Sr (dist Jodhpur) 11, Raisingnagar (dist Sri Ganganagar) 9, Nachna / Lathi (dist Jaisalmer) 8, Ramgarh (dist Jaisalmer) 7,
- **Chhattisgarh:** Narayanpur (dist Narayanpur) 9, Nagari (dist Dhamtari) 8, Raipur (dist Raipur) 7, Rajim (dist Gariaband) 7,
- **Punjab:** Ropar (dist Rupnagar) 9, Sangrur (dist Sangrur) 7, Ludhiana (dist Ludhiana) 7, Nabha Arg (dist Patiala) 7,
- **Haryana:** Babain Rev (dist Kurukshetra) 9, Pehowa (dist Kurukshetra) 8,
- **Uttarakhand:** Bageshwar: Loharkhet, Song-8 each, Haridwar: Laksar-7, Udham Singh Nagar: Kashipur, Rudrpur-7 each
- **Arunachal Pradesh:** Itanagar (dist Papumpara) 8,

## Annexure II





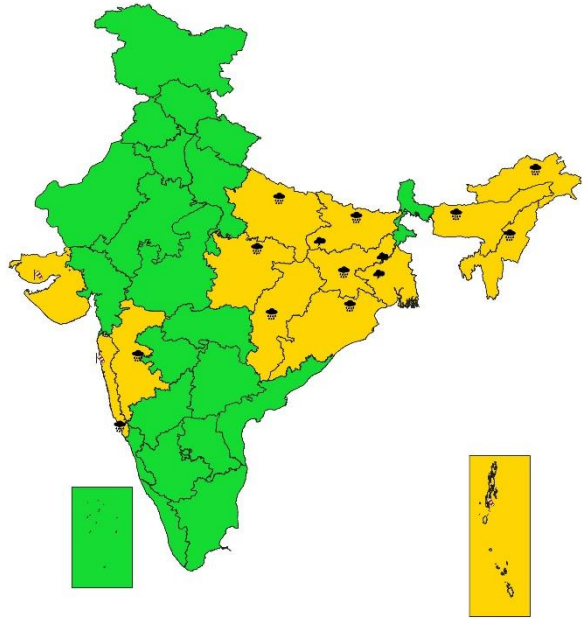
### SUBDIVISIONWISE WEATHER WARNING FOR DAY 2 ( 29-7-2023)



- |                            |                      |                          |
|----------------------------|----------------------|--------------------------|
| <b>Subdivision Warning</b> | Dust Storm           | <b>Subdivision color</b> |
| Heavy Rain                 | Strong Surface Winds | NO WARNING               |
| Heavy Snow                 | Heat Wave            | WATCH (BE UPDATED)       |
| Thunderstorms & Lightning  | Cold wave            | ALERT (BE PREPARED)      |
| Hailstorm                  | Fog                  | WARNING (TAKE ACTION)    |



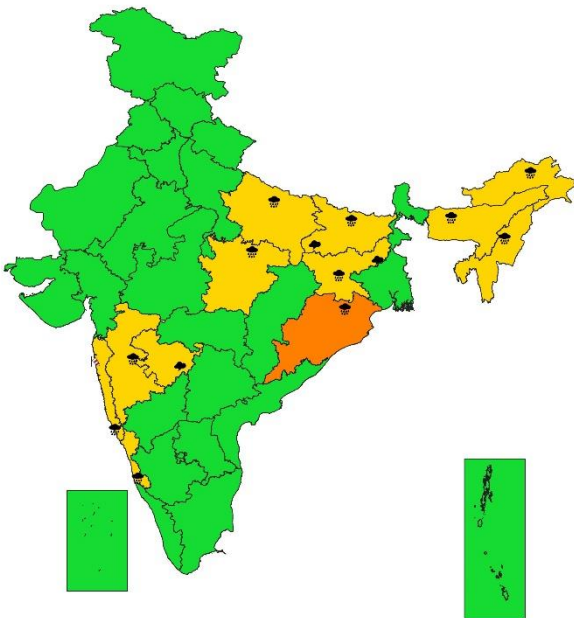
### SUBDIVISIONWISE WEATHER WARNING FOR DAY 3 ( 30-7-2023)



- |                            |                      |                          |
|----------------------------|----------------------|--------------------------|
| <b>Subdivision Warning</b> | Dust Storm           | <b>Subdivision color</b> |
| Heavy Rain                 | Strong Surface Winds | NO WARNING               |
| Heavy Snow                 | Heat Wave            | WATCH (BE UPDATED)       |
| Thunderstorms & Lightning  | Cold wave            | ALERT (BE PREPARED)      |
| Hailstorm                  | Fog                  | WARNING (TAKE ACTION)    |



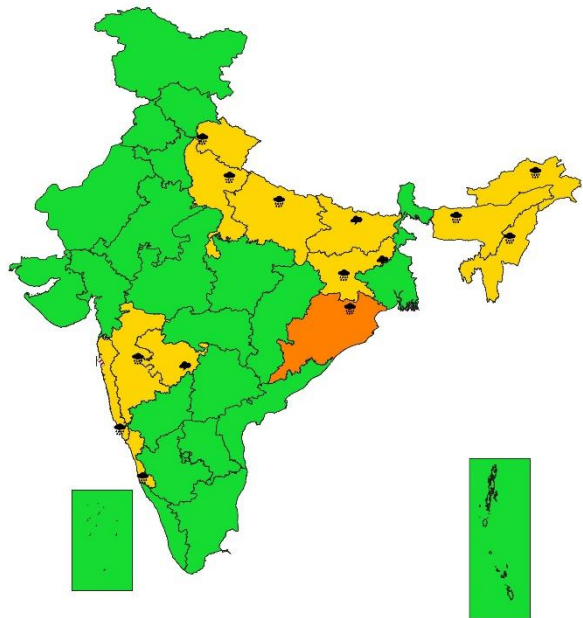
### SUBDIVISIONWISE WEATHER WARNING FOR DAY 4 ( 31-7-2023)



- |                            |                      |                          |
|----------------------------|----------------------|--------------------------|
| <b>Subdivision Warning</b> | Dust Storm           | <b>Subdivision color</b> |
| Heavy Rain                 | Strong Surface Winds | NO WARNING               |
| Heavy Snow                 | Heat Wave            | WATCH (BE UPDATED)       |
| Thunderstorms & Lightning  | Cold wave            | ALERT (BE PREPARED)      |
| Hailstorm                  | Fog                  | WARNING (TAKE ACTION)    |



### SUBDIVISIONWISE RAINFALL FORECAST FOR DAY 5 ( 1-8-2023)



- |                            |                      |                          |
|----------------------------|----------------------|--------------------------|
| <b>Subdivision Warning</b> | Dust Storm           | <b>Subdivision color</b> |
| Heavy Rain                 | Strong Surface Winds | NO WARNING               |
| Heavy Snow                 | Heat Wave            | WATCH (BE UPDATED)       |
| Thunderstorms & Lightning  | Cold wave            | ALERT (BE PREPARED)      |
| Hailstorm                  | Fog                  | WARNING (TAKE ACTION)    |

### **Agromet advisories for heavy rainfall likely over various parts of the country**

- Drain out excess water from crop fields to avoid water stagnation in Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Rajasthan, Sub Himalayan West Bengal & Sikkim, Odisha, Madhya Pradesh, Chhattisgarh, Maharashtra, Goa, Gujarat State, Karnataka, Andhra Pradesh, Rayalaseema, Telangana and North Eastern States.
- Postpone transplanting of rice and finger millet in Konkan; rice in ghat regions of Madhya Maharashtra and Telangana.
- Postpone sowing of cotton, groundnut, castor and red gram in Telangana.

### **Impact & Action Suggested**

#### **due to extremely heavy rainfall over Gujarat Region on 28<sup>th</sup> July**

#### **due to very heavy rainfall: over Konkan & Goa, Madhya Maharashtra, south Odisha, Chhattisgarh, Vidarbha on 28<sup>th</sup> July**

##### **A. Impact Expected**

- ❖ Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- ❖ Occasional reduction in visibility due to heavy rainfall.
- ❖ Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- ❖ Minor damage to kutcha roads.
- ❖ Possibilities of damage to vulnerable structure.
- ❖ Localized Landslides/Mudslides in the hilly areas.
- ❖ Damage to horticulture and standing crops in some areas due to inundation.
- ❖ It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC).














##### **B. Action Suggested**

- ❖ Check for traffic congestion on your route before leaving for your destination.
- ❖ Follow any traffic advisories that are issued in this regard.
- ❖ Avoid going to areas that face the water logging problems often.
- ❖ Avoid staying in vulnerable structure.

## Legends:

- ❖ **Heavy Rain:** 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4mm.
- ❖ **Obsy:** Observatory; **AWS:** Automatic Weather Station
- ❖ **Region wise classification of meteorological Sub-Divisions:**
  - **Northwest India:** Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand); Punjab, Haryana-Chandigarh-Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
  - **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
  - **East India:** Bihar, Jharkhand, Sub-Himalaya West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
  - **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
  - **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathwada.
  - **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

<b>SPATIAL DISTRIBUTION</b> (% of Stations reporting)			
% Stations	Category	% Stations	Category
76-100	Widespread (WS/ Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)

Subdivision Warning	 Dust Storm	Subdivision color
 Heavy Rain	 Strong Surface Winds	 NO WARNING
 Heavy Snow	 Heat Wave	 WATCH (BE UPDATED)
 Thunderstorms & Lightning	 Cold wave	 ALERT (BE PREPARED)
 Hailstorm	 Fog	 WARNING (TAKE ACTION)

<b>Probabilistic Forecast</b>	
Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75