Subject: i) Intense spell of rainfall activity over Northwest India & Madhya Pradesh likely to continue till today, the 18th October, 2021 and reduction thereafter.

ii) Intense spell of rainfall activity very likely over East India till 20th and over Northeast India till 21st October, 2021.

iii) Fresh spell of rainfall activity over south peninsular likely from 20th October, 2021.

Significant Rainfall amount recorded (from 0830 hours IST of yesterday to 0830 hours IST of today):

- **West Madhya Pradesh**: Sheopur-31, Datia-17, Shivpuri-15, Bhind-14; Agar-Malwa, Rajgarh, Sehore-11 Each; Guna, Gwalior-10 Each; Indore, Ujjain, Shajapur-8 Each; Vidisha, Harda-7 Each; Barwani-6;
- **Odisha**: Balasore-21, Mayurbhanj-13, Cuttack-11, Keonjhar-7;
- **Uttarakhand**: Champawat-16, Nainital-10, Pithoragarh-9, Udham Singh Nagar-8, Almora-7;
- **East Rajasthan**: Baran-16, Karauli-13, Bhilwara-7;
- **Kerala & Mahe**: Thrissur-13, Ernakulam-11, Kozhikode-7;
- **Gangetic West Bengal**: East Midnapore-12; South 24 Parganas, West Midnapore-11 Each.
- **Tamilnadu**: Coimbatore-11;
- **East Madhya Pradesh**: Tikamgarh-10;
- **Haryana**: Palwal-9; Delhi: Safdarjung-9, Aya Nagar-7;
- **Telangana**: B. Kothagudem-7;

Weather Systems, Forecast and Warnings:

i) A Low Pressure Area lies over southwest Madhya Pradesh & neighborhood. A Western Disturbance lies over east Afghanistan & adjoining Pakistan and it is interacting with easterlies at lower levels from Bay of Bengal. It is very likely to continue during next 2 days. Under their influence; fairly wide spread to wide spread light to moderate rainfall with heavy to very heavy falls at isolated places is very likely over Uttarakhand and Uttar Pradesh on 18th & and heavy falls on 19th October; with isolated heavy to very heavy falls over West Madhya Pradesh and isolated heavy rainfall over Himachal Pradesh, Haryana & Chandigarh, northeast Rajasthan and East Madhya Pradesh on 18th October. Isolated extremely heavy falls are also likely over Uttarakhand and West Uttar Pradesh on 18th October.
ii) A Low Pressure Area lies over Gangetic West Bengal & adjoining north Odisha. Also due to strong easterly winds from Bay of Bengal, heavy spell of rainfall activity very likely to continue over east India till 20th October with Fairly wide spread to wide spread light to moderate rainfall with heavy rainfall with thunderstorms and lightning at isolated places is very likely over Odisha and Jharkhand on 18th & 19th; over West Bengal & Sikkim and Bihar during 18th-20th. Isolated Very heavy falls also very likely over Gangetic West Bengal and Odisha on 18th; over Bihar on 19th and over Sub-Himalayan West Bengal & Sikkim on 20th October. Isolated extremely heavy falls are also likely over Sub-Himalayan West Bengal & Sikkim on 19th October.

iii) Due to strong southerly/southeasterly from Bay of Bengal over northeast India during 19th - 21st October, 2021 Fairly wide spread to wide spread light to moderate rainfall with heavy rainfall very likely over northeast India during 18th-21st. Isolated Very heavy falls also very likely over Arunachal Pradesh and Assam & Meghalaya on 19th & 20th October.

iv) A fresh spell of easterly wave is likely to affect south Peninsular India from 20th October and cause fairly widespread to wide spread rainfall with isolated heavy falls likely over Kerala & Mahe and Tamilnadu Puducherry & Karaikal during 20th-22nd, over Rayalaseema, coastal & South Interior Karnataka on 21st & 22nd. Isolated very heavy falls also very likely over Kerala & Mahe and Tamilnadu Puducherry & Karaikal on 21st & 22nd October.

For detailed forecast and warning refer following page:

https://mausam.imd.gov.in/imd_latest/contents/all_india_forecast_bulletin.php
EXPECTED IMPACT & ACTION SUGGESTED due to

(i) Extremely heavy falls over Uttarakhand and West Uttar Pradesh on 18th and over Sub-Himalayan West Bengal on 19th October, 2021.
(ii) Very Heavy Rainfall over East Uttar Pradesh, West Madhya Pradesh, Gangetic West Bengal and Odisha on 18th; over Uttarakhand and Bihar on 19th; Sub-Himalayan West Bengal on 20th, Arunachal Pradesh, Assam & Meghalaya on 19th & 20th October, 2021.

A. Impact Expected

- Localized Flooding of roads, inundation and 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 Mudslides/Landslides.
- 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.
Forecasted Flash Flood Threat (PFFT) Till 1730 IST of 18.10.2021:

Moderate to High Threat likely over few watersheds and neighborhoods in the Nainital, Champawat, Almora, Pauri Garwal, Teri Garwal, Rudraprayag, Uttarkashi, Pitoragarh, Chamoli Bageshwar, districts of Uttarakhand in next 6 hours.

Surface runoff/Inundation may occur at some fully saturated watersheds & low-lying areas due to continuous persistent rainfall for next 6 hours.

24 hours Flash Flood Risk Outlook Till 1130 IST of 19.10.2021:

High Risk likely over few watersheds and neighborhoods of Uttarakhand met subdivisions in next 24 hours.

Surface runoff/Inundation may occur at some fully saturated soils & low-lying areas over AoC as depicted in map due to expected rainfall occurrence in next 24 hours.
Legends:

Heavy Rain: 64.5 to 115.5 mm; Very Heavy Rain: 115.6 to 204.4 mm; Extremely Heavy Rain > 204.4 mm.

Region wise classification of meteorological Sub-Divisions:

1) **Northwest India**: Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad; Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.

2) **Central India**: West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.

3) **East India**: Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.

4) **Northeast India**: Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

5) **West India**: Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathwada.

6) **South India**: Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

Kindly download MAUSAM APP for location specific forecast & warning, MEGHDOOT APP for Agromet advisory and DAMINI APP for Lightning Warning & visit state MC/RMC websites for district wise warning.