Subject: (i) Intense spell of rainfall likely over Madhya Pradesh, Uttar Pradesh, Uttrakhand, East Rajasthan and Gujarat state till 16th September and decrease thereafter
(ii) A fresh spell of heavy rainfall likely over East India from 18th September, 2021.

Rainfall amount recorded (from 0830 hours IST of yesterday to 0830 hours IST of today) (7 cm or more): Given at annexure

Weather Systems:

✓ A Well marked Low Pressure Area lies over central parts of north Madhya Pradesh and neighborhood. It is very likely to move west-northwestwards during next 2 days and weaken thereafter.

✓ A cyclonic circulation over lies south Gujarat Region & neighbourhood in lower tropospheric levels.

✓ The monsoon trough lies south of its normal position. It is very likely to remain south of its normal position during next 3 days.

✓ A Cyclonic Circulation likely to develop over north Bay of Bengal on 17th September, 2021. It is likely to move west-northwestwards towards Odisha- West Bengal coast during subsequent 3 days.

Weather forecast and Warning:

✓ Fairly widespread to widespread rainfall with isolated heavy to very heavy falls very likely over Gujarat State, West Madhya Pradesh, East Uttar Pradesh and East Rajasthan during 15th-17th; over East Madhya Pradesh, Gangetic West Bengal, Odisha, Bihar, Jharkhand on 15th and reduction thereafter. Isolated extremely heavy falls also likely over East Uttar Pradesh on 16th September.
Scattered to fairly widespread rainfall very likely over northwest India (excluding Jammu, Kashmir & Ladakh and Himachal Pradesh) during 15th to 17th September. **Isolated heavy rainfall** over Uttarakhand, West Uttar Pradesh on 15th; Over Haryana on 16th; over West Rajasthan on 17th & 18th September. Isolated **very heavy falls** also very likely over Uttarakhand and west Uttar Pradesh on 16th, September 2021.

Rainfall activity is likely to increase over Odisha & Gangetic West Bengal with fairly widespread to widespread rainfall & isolated heavy falls over above areas on 18th & 19th September, 2021.

For detailed forecast and warning refer:
https://mausam.imd.gov.in/imd_latest/contents/all_india_forecast_bulletin.php
EXPECTED IMPACT & ACTION SUGGESTED due to very Heavy Rainfall over Gujarati State, West Madhya Pradesh and East Uttar Pradesh on 15th & 16th; East Madhya Pradesh and Gangetic West Bengal on 15th; over Uttarakhand, East Rajasthan & West Uttar Pradesh on 16th September 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 Landslides/Mudsides
- 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:** > 204.4 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.
24 hours accumulated significant realised rainfall over country during 0830 hours IST of 14th to 0830 hours IST of 15th Sep., 2021 (in cm)

**Odisha:**
Chandanpur (Mayurbhanj)-15, Ghatagaon (Keonjihgarh)-12, Bhogorai (Balasore)-12, Sundegarh-12, Kaktapur (Puri)-11, Lathikata (Sundegarh)-9, Gurundia and Lahunipara (Sundegarh)-8, Gunupur (Rayagada)-7,

**Gangetic West Bengal:**
Kharagpur-28, Mohanpur (west Mednapur), Kalaikunda-27 each, Mednapur-26, Howrah-20, Diamond Harbour, Kontai—18 each, Durgachuck-17, Dum Dum-16, Barrackpur and Salt lake-13 each, Burdwan, Lalgarh (west Mednapur)-12 each, Jhargram, Alipore-10 each, Baruipur, Harinkhola (Hooghly) and Digha-9 each, Bagati-8,

**Gujarat Region:**
Magrol (Surat)-16, Mahua (Surat)-7, Chota Udaipur (Surat)-7.

**Saurashtra & Kutch:**
Mangrol (Junaghar)-16, Vanthali (Junaghar)-10, Jamjodhpur (Jamnagar)-8, Rajkot-9, Rajula (Amreli), Dwarka, Anjar (Kutch)-7 each.

**Chhattisgarh:**
Pendra Road (Bilaspur)—18, Dhantari-15, Morwahi (Bilaspur)-13, Gurur (Balod)-12, Dondilohra (Balod)-11, Pendra (Bilaspur), Jashparnagar (Jashpur), Mungeli-10 each, Kota (Bilaspur), Gundardeh (Balod), Bemetara-8 each, Saranggarh (Rajgarh), Balodabazar (Balod) and Rajpur (Balrampur)-7 each.

**Madhya Maharashtra:** Koyna-14.

**West Madhya Pradesh:**
Khirkiya (Harda)-11, Bhimpur (Betul)-7.

**East Madhya Pradesh:**
Amarkantak-24, Lanji (Balaghat)-13, Lalburra (Balaghat) and Channodi (Shahdol)-7 each,

**Jharkhand:**
Kuru (Lohardoga)-13, Mandor (Ranchi)-13, Kunti-11, Lateghar-10, Hazaribag-8, Kurdeg (Simdega) and West Singbhum-7 each.