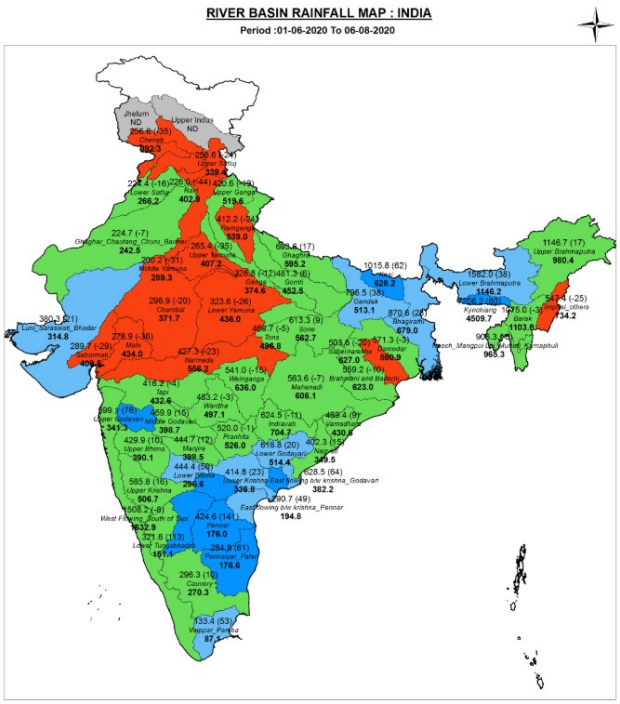
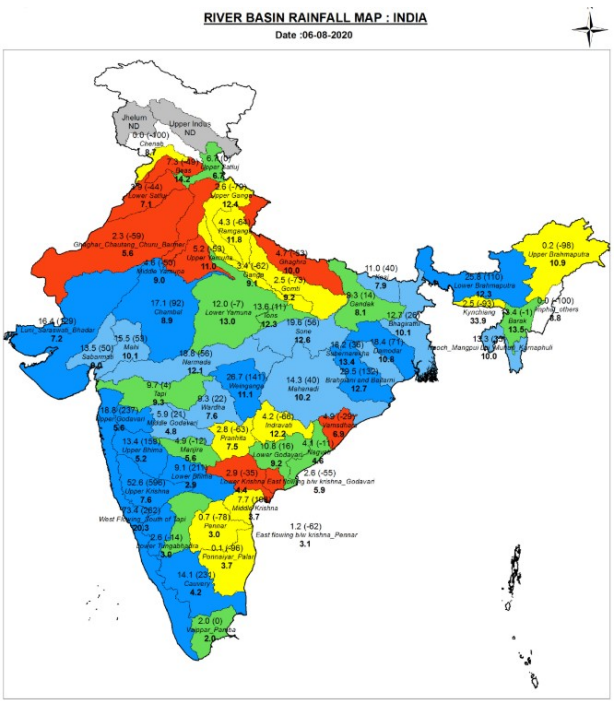
# Central Water Commission
# Daily Flood Situation Report cum Advisories
# 06-08-2020

## 1.0 IMD information

## 1.1 Basin wise departure from normal of cumulative and daily rainfall

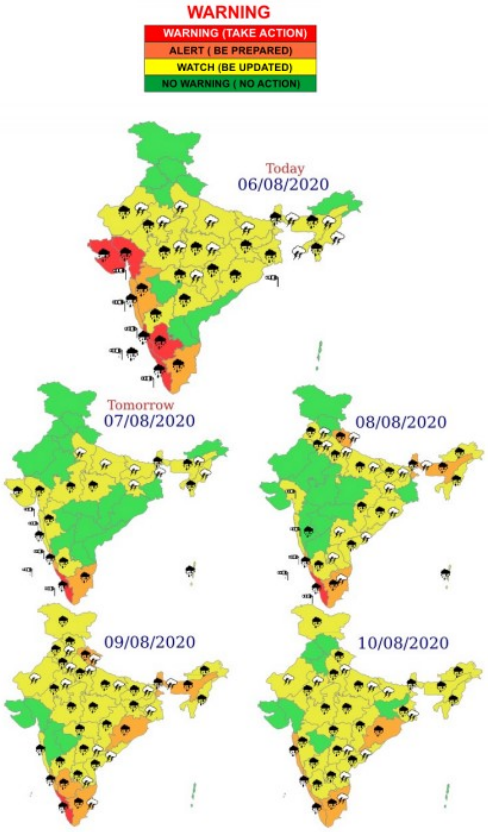



| Large Excess [60% or more] | Excess [20% to 59%] | Normal [-19% to 19%) | Deficient [-59% to -20%] | Large Deficient [-99% to -60%] | No Data [-100%] | No Rain |
|---|---|---|---|---|---|---|

Notes: a) Small figures indicate actual rainfall (mm), while bold figures indicate Normal rainfall (mm)
b) Percentage departures of rainfall are shown in brackets.

## 1.2 Rainfall forecast for next 5 days issued on 6th August 2020 (Midday) by IMD



## 2.0 CWC inferences

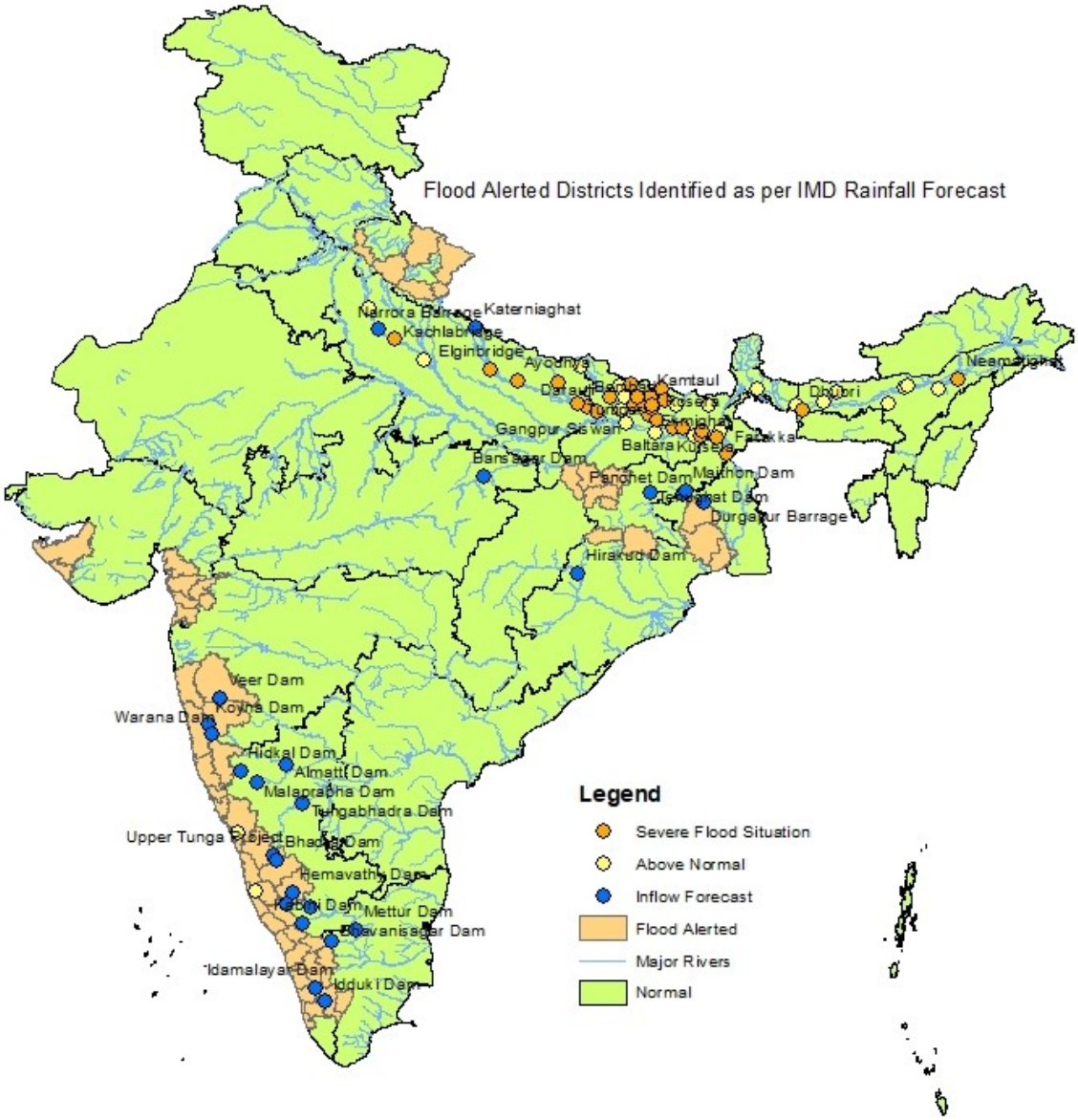
### 2.1 Flood Situation on 6th August 2020

On 6th August 2020, 26 Stations (17 in Bihar, 5 in Uttar Pradesh, 2 in Assam, and 1 each in Jharkhand and West Bengal) are flowing in Severe Flood Situation and 23 stations (10 in Bihar, 7 in Assam, 3 in Uttar Pradesh, 2 in Karnataka and 1 in West Bengal) are flowing in Above Normal Flood Situation. Inflow Forecast has been issued for 26 Barrages and Dams (11 in Karnataka, 3 in Jharkhand, 3 in Maharashtra, 2 in Kerala, 2 in Tamilnadu, 2 in Uttar Pradesh and 1 each in Madhya Pradesh, Odisha and West Bengal).

| PART - I: LEVEL FORECAST | | |
|---|---|---|
| S.No. | Flood Situations | Numbers of Forecasting Sites |
| A | Extreme Flood Situation:<br>(Site (s) where the previous Highest Flood Level (HFL) is exceeded or equalled) | 0 |
| B | Severe Flood Situation:<br>(Site (s) where water level is touching or exceeding the Danger Level but below Highest Flood Level (HFL)) | 26 |
| C | Above Normal Flood Situation:<br>(Site (s) where water level is touching or exceeding the Warning Level but below Danger Level) | 23 |
| | Total number of sites above Warning Level ( A+B+C) | 49 |
| **PART - II: INFLOW FORECAST** | | |
| Number of sites for which inflow forecasts issued:<br>(Where Inflows are equal or exceed the specified Threshold Limit for a particular reservoir / barrage) | | 26 |

Details can be seen in link :- http://cwc.gov.in/sites/default/files/cfcr-cwcdfb06082020_5.pdf

### 2.1.1 Summary of Flood Situation as per CWC Flood Forecasting Network



## 2.2 CWC Advisories

- Widespread rainfall with isolated/ scattered heavy to very heavy falls most likely to continue over Gujarat state, Konkan & Goa and Madhya Maharashtra (Ghat areas) during next 24 hours and decrease thereafter; isolated extremely heavy falls likely over Gujarat state on today, the 06th August.
- Isolated heavy to very heavy falls also likely over Tamilnadu, Kerala and South Interior & Coastal Karnataka during next 4-5 days. Isolated extremely heavy falls likely over Coastal Karnataka on today, the 06th August; over ghat areas of Tamilnadu during 06th-8th August; over Kerala & Mahe during 06-09th August, 2020.
- A low pressure area is likely to develop over West-Central & adjoining North Bay of Bengal around 09th August, 2020. Under its influence, rainfall activity is very likely to increase over East & Central India from 9th August onwards. Fairly widespread to widespread rainfall with isolated heavy to very heavy falls very likely over Odisha, Chhattisgarh, Madhya Pradesh and Vidharbha from 9th to 12th August, 2020.

Based on the above rainfall forecast the following advisories are issued by CWC for various States:

### 2.2.1 Ghat Area along West Coast

**Maharashtra**

Due to ongoing heavy rainfall in the Coastal Districts of Maharashtra, most of the west flowing rivers between Tapi and Tadri including Damanganga are rising rapidly and hence strict watch has to be maintained. Rivers Kajvi and Bav in Ratnagiri District, Kal in Raigad District and Gad in Sindhudurg District are rising rapidly. Due to Very heavy rainfall at Mahabaleshwar, Koyna Dam as well as in catchments of various other small reservoirs, there is rapid rise in inflows into the Koyna and Warna Dams.

Due to continuing heavy rainfall, Koyna is likely to get an inflow of around 2500 cumec till 2000 hrs of today. This will increase the storage to near about 65% and with continuing rainfall there is likelihood of further rise in inflows for atleast 2-3 days. Warna Dam in Satara District is also likely to get an inflow of around 900 cumec till today night 2000 hrs. This will increase the storage to almost about 75%. With further rains forecast in the catchment, there is likelihood of increase in inflows for at least 2-3 days. Similarly many of the small dams in the Satara, Kolhapur District are getting heavy inflows due to rainfall. **Major Dams such as Koyna (60% full), Warna (78% full), Doodhganga (75% full) shall monitor the intensity of rainfall and inflows using the short-range inflow forecasts provided by CWC and decide on release as per Standard Operating Procedure and Rule Curves. The releases from these dams have to be intimated to all concerned downstream Districts as well as to lower riparian States.**

**Railway/ Road movement over the bridges in the district should be regulated as there is likely to be water logging near rail track and over road bridges. All precautions have to be taken for the next 72 hours in view of the rainfall warnings given.**

**Karnataka**

There is increase in inflows in Hidkal Dam on river Ghataprabha due to high intensity rainfall in the catchment areas of Maharashtra. 66% of the capacity is filled and with increased inflows, there may be chances that the dam may get filled up till 80 to 85% due to this spell of rainfall. The combined flows from Krishna, Doodhganga, Panchganga and Ghataprabha will be realised at Almatti Dam and the inflow is rising rapidly. The dam is having storage of about 77%. Since Narayanpur Dam downstream of Almatti Dam is near its FRL, necessary pre-depletion can be done from Narayanpur Dam.

Inflows into Gajanur and Bhadra Dam in Tungabhadra Basin in its upstream due to very heavy rains in their catchments. Since the Gajanur Dam is already at FRL necessary care should be taken to regulate excess flow downstream areas. Bhadra Dam is having storage of 59% but the storage is likely to increase rapidly due to forecasted rainfall. Necessary precautions for proper gate operation should be taken in association with intense ongoing rainfall.

Due to heavy rainfall in Dakshina Kannada, Udupi, Uttara Kannada, Shivamogga, Chikmagaluru, Hassan and Kodagu Districts, most of the rivers in this district are rising. River Aghanashini at Santeguli in Uttara Kannada district and river Netravathi at Bantwal in Dakshina Kannada District are flowing in Above Normal Situation today with falling trend and close watch is to be maintained.

**Extremely Heavy rain of 49 cm has been recorded at Bhagamandala in Kodagu District which is in the source regions of river Cauvery.** River Cauvery at Napoklu in Kodagu District is rising rapidly and is 1.52 m below its Highest Flood Level. Hydrograph is appended.

Due to continuing rains in entire upstream of Cauvery, Harangi, Hemavathi and Kabini there have been increased inflows into all reservoirs.

Kabini Dam in Mysuru District which is filled upto 84% of its full capacity has been releasing an average of 1416 cumec (50000 cusec) at 1600 hrs. As the rain is continuing in catchment areas of Kabini in Wynadu District of Kerala, there is likelihood of further rise in inflows for next 2-3 days.

Harangi Dam in Cauvery Basin in Kodagu District is filled upto 85% of its full capacity and is releasing 375 cumec compared to inflow of 166 cumec. Due to heavy rainfall in Kodagu District, the Dam is expected to get increased inflows.

River Cauvery at Kudige in Kodagu District is flowing above its Danger Level with rising trend. It is expected to rise further. The combined effect of release from Harangi Dam and the rising river Cauvery upstream of Krishna Raja Sagar as well as river Lakshmanatirtha is increasing the flow into Krishna Raja Sagar. Presently, KRS Dam is having a storage of 31.82 TMC compared to 49.45 TMC at FRL. Since there is forecast of heavy to very heavy rainfall for the next 4 days, there is likelihood of dam attaining very near to its FRL by 8th August 2020. Necessary gate operations have to be done as per SOP after informing all downstream areas and lower riparian States..

Since very heavy to extreme rainfall has been forecasted to continue for another 4-5 days, proper precautions have to be taken and advance release of water may have to be resorted to in order to avoid panic discharges after dam attaining FRL in all the above Dams. **Releases from any of these reservoirs may be done as per rule curve and standard operating procedure.**

**Kerala**

Heavy to very heavy rainfall has been forecasted in the Districts of Kasargode, Kannur, Kozhikode, Wayanad, Malappuram, Palakkad, Thrissur, Ernakulam and Idukki in Kerala during the next 3-4 days. There is forecast of extremely heavy rainfall in Wynad and Idukki District on 6th August and in Malapuram District on 7th August 2020. River Bhavani at Kottathara in Palakkad District in Kerala is flowing around Danger Level due to extremely heavy rain in Nilgiris District of Tamilnadu. Due to forecasted rainfall, river levels are likely to rise depending on the intensity of rainfall. Heavy to very heavy rain is occurring in North Kerala and in Periyar Basin. There are increased inflows into Idukki and Edamalayar Dams. Since the rainfall is expected to continue for 3-4 days, the inflows are likely to continue depending on the intensity of rainfall. However, there is sufficient storage available in these dams.

**Tamilnadu**

Rivers Bhavani and Noyyal in Cauvery Basin is rising due to extremely heavy rains in Nilgiris and Coimbatore District, Nirar a tributary of Edamalayar is also getting increased lows due to very heavy rain in its catchment in Coimbatore District. Bhavanisagar Dam on river Bhavani in Erode District of Tamilnadu is getting heavy inflows and is likely to rise further. Presently the reservoir level is about 276.237 m compared to its FRL of 280.42 m. However, close watch is to be maintained.

Due to releases from Kabini Dam, river Cauvery is likely to rise in Biligundulu in Dharmapuri District of Tamilnadu. Accordingly, the inflows into Mettur Dam is likely to rise.

### 2.2.2 Bihar, Jharkhand and Gangetic West Bengal

River Adhwara Group at Bishunpur Flood Monitoring Station in Darbhanga District continues to flow in Extreme Flood Situation with almost steady trend. This is also likely to remain steady for the next 2 - 3 days before falling very slowly.

Rivers Gandak, Burhi Gandak, Bagmati, Adhwara Group, Kamla Balan, Kosi and Mahananda continue in Severe to Above Normal Flood Situation. This is likely to continue for another 2-3 days in Bihar and then slowly fall as rainfall is not forecasted in Bihar.

### 2.2.3 Impact Based Actions

Strict vigil is to be maintained in all the above States & Districts for next 4 - 5 days. Breaches in Embankment if any may aggravate further flood like situation which should be monitored and all efforts to fill any such breaches should be done at the earliest. Maximum vigil has to be maintained along the rail and road tracks and bridges on these rivers and regulate traffic suitably to avoid any incident. **Submergence of low-level cause ways along rivers and railway tracks along flashy rivers is to be monitored closely especially along Western Ghat areas.** All district administrations can take effective measures taking into account the prevailing Covid19 situation in relief camps being set up in these districts.

## 3. Flood Affected Districts

**Bihar:** Araria, Purnia, Katihar, Madhubani, Darbhanga, Muzaffarpur, Purba Champaran, Khagaria, Sitamarhi, Gopalganj, Samastipur, Siwan

**Uttar Pradesh:** Barabanki, Ayodhya, Gorakhpur, Ballia, Badaun

**Karnataka:** Uttara Kannada, Dakshina Kannada, Kodagu, Shivamogga

**Kerala:** Wynad

## 4. Flood Alerted Districts

**Maharashtra:** Districts of Palghar, Thane, Raigad, Ratnagiri, Sindhudurg along West Flowing Rivers between Tapi and Tadri, Nasik along Rivers Godavari and Damanganga, Pune along river Bhima, Satara & Kolhapur on river Krishna and its tributaries.

**Karnataka:** Along West Flowing Rivers in Uttara Kannada, Dakshina Kannada, Udupi Districts, along river Tunga in Shivamogga District, along river Cauvery in Kodagu District, along river Hemavathi in Chikmagaluru & Hassan Districts, along river Kabini in Mysuru District

**Kerala:** Districts along rivers Pamba, Achankovil, Meenachil, Periyar, Bharathapuzha, Valapatnam, Kuttyadi

**Odisha:** Districts along rivers Mahanadi, Brahmani-Baitarni

**Chhattisgarh:** Districts along river Mahanadi and its tributaries