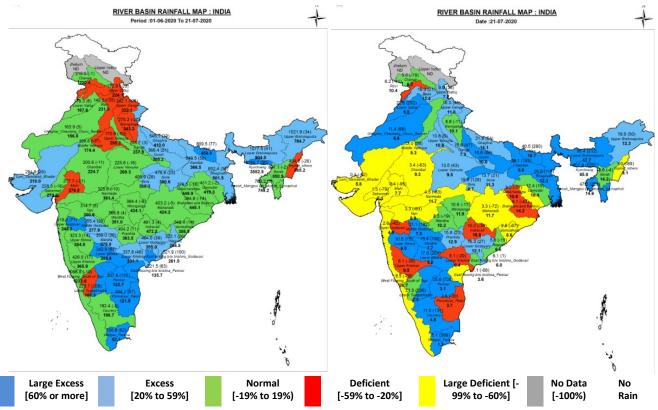


Central Water Commission Daily Flood Situation Report cum Advisories 21-07-2020

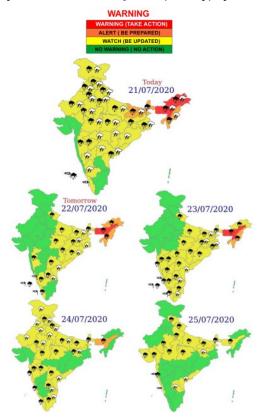
1.0 IMD information

1.1 Basin wise departure from normal of cumulative and daily rainfall



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 21st July 2020 (Midday) by IMD



2.0 CWC inferences

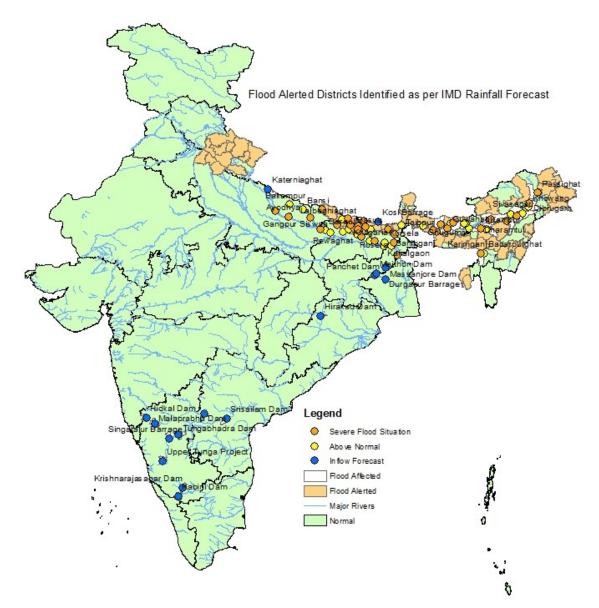
2.1 Flood Situation on 21st July 2020

On 21st July 2020, 33 stations (14 in Bihar, 12 in Assam, 5 in Uttar Pradesh, 1 in Arunachal Pradesh and 1 in West Bengal) are flowing in Severe Flood Situation and 24 stations (11 in Bihar, 9 in Assam, 2 in Uttar Pradesh, 1 in Jharkhand and 1 in West Bengal) are flowing in Above Normal Flood Situation. Inflow Forecast has been issued for 17 Barrages and Dams (7 in Karnataka, 3 in Jharkhand, 2 in Bihar, 1 each in Uttar Pradesh, Telangana, Andhra Pradesh, West Bengal and Odisha).

| PART | T - I: LEVEL FORECAST | 1 |
|---|--|---------------------------------|
| S.No. | Flood Situations | Numbers of Forecasting Sites |
| Α | Extreme Flood Situation: (Site (s) where the previous Highest Flood Level (HFL) is exceeded or equalled) | 0 |
| В | Severe Flood Situation: (Site (s) where water level is touching or exceeding the Danger Level but below Highest Flood Level (HFL)) | 33 |
| С | Above Normal Flood Situation: (Site (s) where water level is touching or exceeding the Warning Level but below Danger Level) | 24 |
| Total number of sites above Warning Level (A+B+C) | | 57 |
| PART | - II: INFLOW FORECAST | 184 |
| Number of sites for which inflow forecasts issued: (Where Inflows are equal or exceed the specified Threshold Limit for a particular reservoir / barrage) | | 17 |

Details can be seen in link- http://cwc.gov.in/sites/default/files/cfcr-cwcdfb21072020_5.pdf

2.1.1 Summary of Flood Situation as per CWC Flood Forecasting Network



2.2 CWC Advisories

- The western part of monsoon trough lies near its normal position and eastern part is along the foothills of the Himalayas. In addition, the convergence of moist southerly/southwesterly winds from Bay of Bengal over Northeast & adjoining East India and from Arabian Sea over northwest India at lower tropospheric levels very likely to continue during next 2 days.
- Under the influence of the above meteorological conditions: i) Widespread rainfall activity with isolated heavy to very heavy falls very likely over Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 3-4 days and rainfall intensity very likely to decrease thereafter. Isolated extremely heavy falls also very likely over Assam & Meghalaya on 21st July. ii) Fairly widespread to widespread rainfall with isolated heavy to very heavy falls very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh during next 24 hours and rainfall intensity & distribution very likely to decrease thereafter.
- Intense thunderstorm & lightning potential zone: Moderate to severe thunderstorm & lightning at isolated places very likely over Haryana, Chandigarh & Delhi, East Uttar Pradesh, Bihar, East Madhya Pradesh, Vidarbha, Jharkhand and north Odisha during next 12 hours.

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

2.2.1 North Eastern States, Sub-Himalayan West Bengal& Sikkim and Bihar

It is seen from the Map showing Departure from Normal rainfall both Cumulative and Daily, that North Eastern States, West Bengal and Bihar have received Excess rainfall cumulatively from 1st June to 21st July as well as for today. This is likely to continue in view of the forecasted rainfall. Since the catchment is already wet, the excess rainfall is likely to generate quick runoff. Accordingly, a Statewise advisories regarding likely flood situation is given under:

Arunachal Pradesh

River Siang at Passighat in East Siang District continues to flow in Severe Flood Situation with heavy rainfall in its catchment. Due to Widespread rainfall activity with isolated heavy to very heavy falls during next 2 days, there is likelihood of rapid rise in Water Levels in Rivers Siang, Lohit, Dibang, Subansiri, Kameng and Noa-Dehing in the districts of East and West Siang, Lohit, Anjaw, Changlang, Lower Dibang, Dibang Valley, Papumpare, East & West Kameng and Subansiri Districts. There are chances of flash floods also in association with cloud burst in Hilly regions.

Assam & Meghalaya

Widespread rainfall activity with isolated heavy to very heavy falls is very likely over Assam during next 2-3 days and rainfall intensity very likely to decrease thereafter. Isolated extremely heavy falls are also very likely over Assam on 21st July. There has

Brahmaputra

River Brahmaputra is in Severe Flood Situation all along its course from Dibrugarh to Dhubri except in Guwahati where it is flowing in Above Normal Flood situation with rising trend. It is flowing in Severe Flood Situation with rising trend in Goalpara, Dhubri and Sonitpur Districts and with falling trend in Dibrugarh and Jorhat Districts. Due to forecasted heavy to very heavy rainfall, there is likelihood of Severe to Extreme Flood Situation in main Brahmaputra from Dibrugarh to Dhubri Districts.

Tributaries of Brahmaputra

Rivers Jia-Bharali in Sonitpur District, Sankosh in Dhubri district, Gaurang in Kokrajhar District, Kopili in Morigaon District, Beki in Barpeta District, Dhansiri (South) in Golaghat District in Brahmaputra Basin and river Kushiyara in Karimganj District in Barak Basin are flowing in Severe Flood Situation. In view of the forecasted rainfall most of the North & South bank tributaries are expected to rise rapidly during the next 2 days affecting most of the districts in Brahmaputra Basin in Assam. There has been report of floods in West Garo Hills and parts of Khasi Hills Districts of Meghalaya.

West Bengal & Sikkim

Due to forecasted widespread rainfall activity with isolated heavy to very heavy rainfall in Sub Himalayan West Bengal & Sikkim as well as in catchment of trans-boundary rivers coming from Bhutan, rivers Teesta, Jaldhaka, Torsa, Raidak are expected to rise rapidly during the next 2 days. There is possibility of Severe to extreme flooding in these rivers in the Districts of Jalpaiguri, Coochbehar & Alipurduar of West Bengal and in all the Districts of Sikkim during the same period. Further, due to forecasted rainfall, there is likelihood of rise in levels of Mahananda and its tributaries in Malda District.

2.2.2 Bihar, Jharkhand and Gangetic West Bengal

Rivers Parman at Araria District, Mahananda in Purnia & Katihar Districts, Kosi in Khagaria District, Adhwara in Darbhanga District, River Bagmati in Darbhanga, Sitamarhi and Muzaffarpur Districts, River Kamla and River Kamlabalan in Madhubani District, River Burhi Gandak in Samastipur District and Gandak in Gopalganj District are flowing in Severe Flood Situation. Above rivers are flowing in Above Normal flood situation in many of the downstream location with rising trend. Besides this, River Ganga is in Above Normal Flood Situation from Patna to Bhagalpur Districts.

Due to forecasted rainfall in Bihar & in catchment areas of Mahananda in Sub-Himalayan West Bengal as well as in catchment of trans-boundary rivers coming from Nepal, rivers Mahananda, Kosi, Kamlabalan, Adhwara Group, Bagmati, Buri Gandak, Gandak and Ghaghra are likely to rise further and is expected to flow in Severe to Extreme Flood Situation in most of the Northern Districts of Bihar. Due to combined effect of all North Bank Tributaries, river Ganga is expected to flow in Above Normal to Severe Flooding from Patna to Bhagalpur in Bihar and Sahebganj District in Jharkhand and Murshidabad District in West Bengal.

2.2.3 Uttar Pradesh, Uttarakhand, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi

Fairly widespread to widespread rainfall with isolated heavy to very heavy falls very likely over Uttarakhand in the Districts of Uttarkashi, Chamoli, Rudraprayag, Pithoragarh, Dehradun, Nainital, Bageshwar, Haridwar, Tehri Garhwal and Pauri Garhwal in the next 2-3 days. Due to forecasted heavy to very heavy rainfall during next 24 hours, there is likelihood of sudden rise in water levels in Sutlej, Yamuna, Alaknanda, Bhagirathi, Ramganga, Ghaghra, Sharda and Rapti rivers. Since this is the first spell of heavy rainfall, the likelihood of Severe Flooding is less probable and depends on the intensity of rainfall and its spread. However, there is likelihood of flash floods in Himalayan regions of HP and Uttarakhand. River Ghaghra in the Districts of Barabanki, Ayodhya and Ballia, River Gandak in Kushinagar District and River Rapti in Gorakhpur District are flowing in Severe Flood Situation.

Impact Based Actions

Strict vigil is to be maintained in all the above States & Districts for next 3-4 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. 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

Arunachal Pradesh: East Siang

Assam: Jorhat, Golaghat, Sonitpur, Morigaon, Barpeta, Goalpara, Dhubri, Dibrugarh, Karimganj

Meghalaya: West Garo Hills, Khasi Hills

Bihar: Purnia, Katihar, Araria, Madhubani, Darbhanga, Muzaffarpur, Kishangani, Khagaria, Sitamarhi, Gopalgani

Uttar Pradesh: Ayodhya, Gorakhpur, Barabanki, Ballia, Kushinagar

4. Flood Alerted Districts

Arunachal Pradesh: Districts along river reaches of Siang, Lohit, Kameng, Manas

Assam: Districts along river reaches of Brahmaputra, Manas, Beki, Gaurang, Aie, Sankosh

West Bengal: Districts along river reaches of Teesta, Torsa, Raidak, Jaldhaka

Sikkim: Districts along river reaches of Teesta

Bihar: Districts along North Bank Tributaries of river Ganga **Uttar Pradesh:** Districts along North Bank Tributaries of River Ganga

Uttarakhand: Districts along river Yamuna, Alaknanda, Bhagirathi and Ramganga. Flash Floods in association with

cloud burst in Hilly regions and in Glaciers

Himachal Pradesh: Districts along Sutlej, Yamuna and its tributaries. Flash Floods in association with cloud burst in Hilly

regions and in Glaciers