

# Central Water Commission Upper Ganga Basin Organisation, Lucknow Daily Flood Situation Report Cum Advisories Date: 11 OCTOBER, 2020

FSR No.111 Dated: 11-10-2020

## 1. Weather forecast by IMD

## I. SYNOPTIC SITUATION:

♦ The withdrawal line of the Southwest Monsoon continues to pass through Lat. 28°N/Long.83°E, Faizabad, Fatehpur, Nowgong, Rajgarh, Ratlam, Vallabh Vidyanagar, Porbandar, Lat. 21°N/ Long.65°E and Lat. 21°N/ Long.60°.

II. a) <u>DETERMINISTIC FORECAST (QPF):</u>

| <u> </u> |            |                               | QPF (mm) |       |       |  |  |  |
|----------|------------|-------------------------------|----------|-------|-------|--|--|--|
| Sr. No.  | BASIN NAME | BASIN NAME SUBBASIN CODE/NAME |          | Day-2 | Day-3 |  |  |  |
| 1        | Alaknanda  | Alaknanda                     | 0        | 0     | 0     |  |  |  |
| 2        | Bhagirathi | Bhagirathi                    | 0        | 0     | 0     |  |  |  |
|          |            | Chhatnag to Mirzapur          | 0        | 0     | 0     |  |  |  |
| 3        |            | Narora to Phaphamau           | 0        | 0     | 0     |  |  |  |
|          |            | Phaphamau to Ballia           | 0        | 0     | 0     |  |  |  |
|          | Ganga      | Gomti                         | 0        | 0     | 0     |  |  |  |
|          |            | Sai                           | 0        | 0     | 0     |  |  |  |
|          |            | Upper Ganga                   | 0        | 0     | 0     |  |  |  |
|          |            | Lower Ghaghra                 | 0        | 0     | 0     |  |  |  |
| 4        | Ghaghra    | Middle Ghaghra                | 0        | 0     | 0     |  |  |  |
|          |            | Upper Ghaghra                 | 0        | 0     | 0     |  |  |  |
| 5        | Ramganga   | Ramganga                      | 0        | 0     | 0     |  |  |  |
| 6        | Rapti      | Rapti                         | 0        | 0     | 0     |  |  |  |
| 7.       | Sharda     | Sharda                        | 0        | 0     | 0     |  |  |  |

# II (b) <u>DETERMINISTIC FORECAST (DISTRIBUTION)</u>

|    |            |                      |       | INTENSITY (I) & SPATIAL DISTRIBUTION (D) |       |     |       |     |  |  |  |  |
|----|------------|----------------------|-------|--|-------|-----|-------|-----|--|--|--|--|
|    | BASIN NAME | SUBBASIN             |       |  |       |     | 1 /   |     |  |  |  |  |
|    | DISH WHILE | CODE/NAME            | Day-1 | l  | Day-2 |     | Day-  | 3   |  |  |  |  |
|    |            |                      | I     | D  | I     | D   | I     | D   |  |  |  |  |
| 1  | Alaknanda  | Alaknanda            | M.Dry | DRY                                      | M.Dry | DRY | M.Dry | DRY |  |  |  |  |
| 2  | Bhagirathi | Bhagirathi           | M.Dry | DRY                                      | M.Dry | DRY | M.Dry | DRY |  |  |  |  |
|    |            | Chhatnag to Mirzapur | M.Dry | DRY                                      | M.Dry | DRY | M.Dry | DRY |  |  |  |  |
|    |            | Narora to Phaphamau  | M.Dry | DRY                                      | M.Dry | DRY | M.Dry | DRY |  |  |  |  |
|    | Ganga      | Phaphamau to Ballia  | M.Dry | DRY                                      | M.Dry | DRY | M.Dry | DRY |  |  |  |  |
| 3  |            | Gomti                | M.Dry | DRY                                      | M.Dry | DRY | M.Dry | DRY |  |  |  |  |
|    |            | Sai                  | M.Dry | DRY                                      | M.Dry | DRY | M.Dry | DRY |  |  |  |  |
|    |            | Upper Ganga          | M.Dry | DRY                                      | M.Dry | DRY | M.Dry | DRY |  |  |  |  |
|    |            | Lower Ghaghra        | M.Dry | DRY                                      | M.Dry | DRY | M.Dry | DRY |  |  |  |  |
| 4  | Ghaghra    | Middle Ghaghra       | M.Dry | DRY                                      | M.Dry | DRY | M.Dry | DRY |  |  |  |  |
|    |            | Upper Ghaghra        | M.Dry | DRY                                      | M.Dry | DRY | M.Dry | DRY |  |  |  |  |
| 5  | Ramganga   | Ramganga             | M.Dry | DRY                                      | M.Dry | DRY | M.Dry | DRY |  |  |  |  |
| 6  | Rapti      | Rapti                | M.Dry | DRY                                      | M.Dry | DRY | M.Dry | DRY |  |  |  |  |
| 7. | Sharda     | Sharda               | M.Dry | DRY                                      | M.Dry | DRY | DRY   | DRY |  |  |  |  |

| QPF in Ranges (mm) | UNLISTED | 0 | 0.1-10 | 11-25 | 26-50 | 51-100 | >100 |
|--------------------|----------|---|--------|-------|-------|--------|------|
|--------------------|----------|---|--------|-------|-------|--------|------|

## III. HEAVY RAINFALL WARNING:

| NAME OF    | NAME OF SUB-            | Day-1 |   | Day-2 |   | Day-3 | y-3 |  |  |
|------------|-------------------------|-------|---|-------|---|-------|-----|--|--|
| BASIN      | BASIN                   | I     | D | I     | D | I     | D   |  |  |
| Alaknanda  | Alaknanda               |       |   |       |   |       |     |  |  |
| Bhagirathi | Bhagirathi              |       |   |       |   |       |     |  |  |
|            | Chhatnag to<br>Mirzapur |       |   |       |   |       |     |  |  |
|            | Narora to<br>Phaphamau  |       |   |       |   |       |     |  |  |
| Ganga      | Phaphamau to Ballia     |       |   |       |   |       |     |  |  |
|            | Gomti                   |       |   |       |   |       |     |  |  |
|            | Sai                     |       |   |       |   |       |     |  |  |
|            | Upper Ganga             |       |   |       |   |       |     |  |  |
|            | Lower Ghaghra           |       |   |       |   |       |     |  |  |
| Ghaghra    | Middle Ghaghra          |       |   |       |   |       |     |  |  |
|            | Upper Ghaghra           |       |   |       |   |       |     |  |  |
| Ramganga   | Ramganga                |       |   |       |   |       |     |  |  |
| Rapti      | Rapti                   |       |   |       |   |       |     |  |  |
| Sharda     | Sharda                  |       |   |       |   |       |     |  |  |

| Spatial Distribution of Rainfall     |                   |   |  |  |  |  |
|--------------------------------------|-------------------|---|--|--|--|--|
| DRY Dry No Station reported rainfall |                   |   |  |  |  |  |
| ISOL                                 | One or two Places | 25% or less number of stations recorded rainfall 2.5 mm |  |  |  |  |
| SCT                                  | At a few Places   | 26%-50% number of stations recorded rainfall 2.5 mm     |  |  |  |  |
| FWS                                  | At many Places    | 51%-75% number of stations recorded rainfall 2.5 mm     |  |  |  |  |
| WS                                   | At most places    | 76%-100% number of stations recorded rainfall 2.5 mm    |  |  |  |  |

|        | Intensity of Rainfall           |   |    |                     |          |  |  |  |  |
|--------|---------------------------------|---|----|---------------------|----------|--|--|--|--|
| M.Dry. | NIL                             | 0 cm  | VL | Very Light Rainfall | Trace    |  |  |  |  |
| L      | Light Rainfall                  | Upto 1 cm   | M  | Moderate rainfall   | 02-06 cm |  |  |  |  |
| H      | Heavy rainfall                  | 07-11 cm  | VH | Very Heavy rainfall | 12-20 cm |  |  |  |  |
| EH     | Extremely Heavy rainfall        | 21 cm or More   | 1  | W 2000 20           |          |  |  |  |  |
| ExH    | Exceptionally Heavy<br>Rainfall | When the amount is a value near about the highest recorded rainfall at or near the station for the month or season. However, this term will be used only when the actual rainfall amount average 12 cm. |    |                     |          |  |  |  |  |

## IV. PROBABILISTIC FORECAST

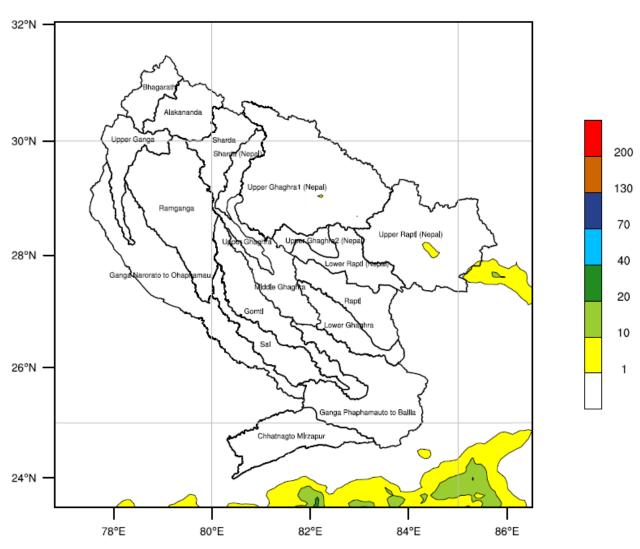
|           |               |                       | Day-   | 1         |          |          |           |         | Day-2  |           |          |          |           |         | Day-   | 3         |          |          |           |         |
|-----------|---------------|-----------------------|--------|-----------|----------|----------|-----------|---------|--------|-----------|----------|----------|-----------|---------|--------|-----------|----------|----------|-----------|---------|
| S.<br>No. | BASIN<br>NAME | SUBBASIN<br>CODE/NAME | 0 mm   | 0.1-10 mm | 11-25 mm | 26-50 mm | 51-100 mm | >100 mm | 0 mm   | 0.1-10 mm | 11-25 mm | 26-50 mm | 51-100 mm | >100 mm | uu 0   | 0.1-10 mm | 11-25 mm | 26-50 mm | 51-100 mm | >100 mm |
| 1         | Alaknanda     | Alaknanda             | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         |
| 2         | Bhagirathi    | Bhagirathi            | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         |
|           |               | Chhatnag to Mirzapur  | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         |
|           |               | Narora to Phaphamau   | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         |
| 3         | Ganga         | Phaphamau to ballia   | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         |
|           |               | Gomti                 | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         |
|           |               | Sai                   | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         |
|           |               | Upper Ganga           | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         |
|           |               | Lower Ghaghra         | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         |
| 4         | Ghaghra       | Middle Ghaghra        | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         |
|           |               | Upper Ghaghra         | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         |
| 5         | Ramganga      | Ramganga              | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         |
| 6         | Rapti         | Rapti                 | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         | 75-100 |           |          |          |           |         |
| 7.        | Sharda        | Sharda                | 75-100 |           |          |          |           | _       | 75-100 | •         | _        |          |           | •       | 75-100 |           | _        | _        |           |         |

| Probability of occurrence (%) | 0-5 | 5-25 | 25-50 | 50-75 | 75-100 |
|-------------------------------|-----|------|-------|-------|--------|

Init: 2020-10-11\_00:00:00 Valld: 2020-10-12\_03:00:00

## FLOOD MET OFFICE LUCKNOW

## IMD WRF Rainfall (mm) Forecast(24hr)



## Sub basin wise Average Rainfall Estimation

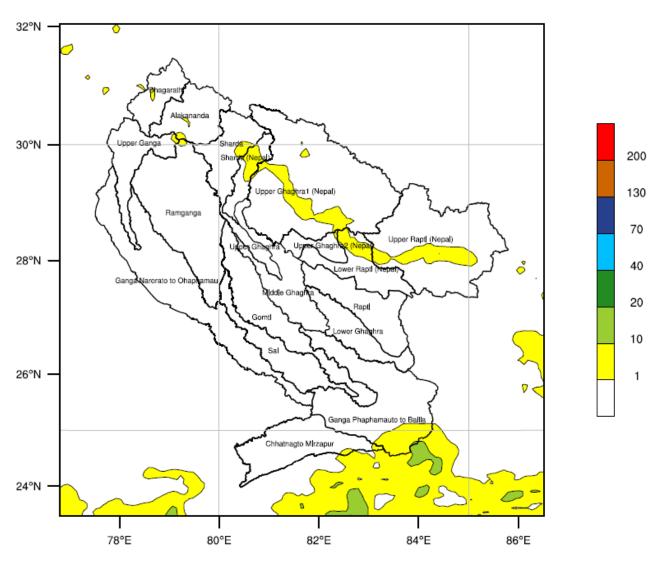
| Alaknanda =                | 0 mm | Raptl =                  | 0 mm |
|----------------------------|------|--------------------------|------|
| Bhaglrathl =               | 0 mm | Sai =                    | 0 mm |
| Chhatnagto Mirzapur =      | 0 mm | Sharda =                 | 0 mm |
| Ganga Narorato Ohaphamau = | 0 mm | Sharda (Nepal) =         | 0 mm |
| Ganga Phaphamauto Balia =  | 0 mm | Upper Ganga =            | 0 mm |
| Gomtl =                    | 0 mm | Upper Ghaghra =          | 0 mm |
| Lower Ghaghara =           | 0 mm | Upper Ghaghra1 (Nepal) = | 0 mm |
| Lower Raptl (Nepal) =      | 0 mm | Upper Ghaghra2 (Nepal) = | 0 mm |
| Mlddle Ghaghara =          | 0 mm | Upper Raptl (Nepal) =    | 0 mm |
| Bamganga -                 | 0 mm |                          |      |

WE = 1001; SN = 945; Levels = 45; Dls = 9km; Phys Opt = 16; PBL Opt = 2; Cu Opt = 5

Init: 2020-10-11\_00:00:00 Valld: 2020-10-13\_03:00:00

## FLOOD MET OFFICE LUCKNOW

# IMD WRF Rainfall (mm) Forecast(48hr)



## Sub basin wise Average Rainfall Estimation

| Alaknanda =                | 0 mm | Raptl =                  | 0 mm |
|----------------------------|------|--------------------------|------|
| Bhaglrathl =               | 0 mm | Sai =                    | 0 mm |
| Chhatnagto M rzapur =      | 0 mm | Sharda =                 | 1 mm |
| Ganga Narorato Ohaphamau = | 0 mm | Sharda (Nepal) =         | 0 mm |
| Ganga Phaphamauto Balia =  | 1 mm | Upper Ganga =            | 0 mm |
| Gomtl =                    | 0 mm | Upper Ghaghra =          | 0 mm |
| Lower Ghaghara =           | 0 mm | Upper Ghaghra1 (Nepal) = | 0 mm |
| Lower Raptl (Nepal) =      | 0 mm | Upper Ghaghra2 (Nepal) = | 0 mm |
| Mlddle Ghaghara =          | 0 mm | Upper Raptl (Nepal) =    | 1 mm |
| Ramganga =                 | 0 mm |                          |      |

#### Flood Situation on 11 OCTOBER, 2020



## 2.1 Rainfall Situation

# Amount of rainfall recorded at 8:30 hours IST of today ( $(\geq 50 \text{ mm or more})$

| Name of Place (State) | Rainfall (in mm) |
|-----------------------|------------------|
| NIL                   |                  |
|                       |                  |

Note - No Station is in this situation Dated 11.10.2020

#### 2.2 LEVEL FORECAST

|       | LEVEL FORECAST   |                             |
|-------|--|-----------------------------|
| S.No. | Flood Situations   | No. of Forecasting<br>Sites |
|       | Extreme Flood Situation:   | -                           |
| A.    | (Site (s) where the previous Highest Flood Level (HFL) is exceeded or equalized)                     | 0                           |
|       | Severe Flood Situation :   |                             |
| B.    | (Site(s) where water Level touching or exceeding the Danger Level but below Highest Flood Level(HFL) | 0                           |
|       | Above Normal Flood Situation:  | -                           |
| C.    | (Site (s) where water level touching or exceeding the warning Level but below Danger Level)          | 0                           |
|       | Total Numbers of Sites above Warning Level (A+B+C)   | 0                           |
|       | INFLOW FORECAST  |                             |
| Numbe | er of Sites for which inflow forecasts issued:   | 0                           |
| ,     | inflow are equal or exceed the specified Threshold Limit for a particular ir/ barrage)               | 0                           |

## 2.3 Above Normal (Water Level touching or exceeding the warning Level but below Danger Level)

| Name of river | Flood<br>Forecastin<br>g Sites | District | State | Danger   | Warning   | Previous<br>Highest |      | Actual Level |  |       | Forecast     |      |      |       |
|---------------|--------------------------------|----------|-------|----------|-----------|---------------------|------|--------------|--|-------|--------------|------|------|-------|
|               |                                |          |       | Level(m) | Level (m) | Level<br>(m)        | year | Level<br>(m) |  | Trend | Level<br>(m) | Date | Time | Trend |
|               |                                |          |       |          |           |                     |      |              |  |       |              |      |      |       |
|               |                                |          |       |          |           |                     |      |              |  |       |              |      |      |       |

Note - No Station is in this situation Dated 11.10.2020

## 2.4 Severe Flood Situation (Water Level touching or exceeding the Danger Level but below Highest Flood Level (HFL))

| Name of<br>river | Flood<br>Forecasting<br>Sites | District | State | Danger   | Warning   | Previous Highest |      |          |      |       | Forecast  |      |      |       |
|------------------|-------------------------------|----------|-------|----------|-----------|------------------|------|----------|------|-------|-----------|------|------|-------|
|                  |                               |          |       | Level(m) | Level (m) | Level(m)         | Date | Level(m) | Time | Trend | Level (m) | Date | Time | Trend |
|                  |                               |          |       |          |           |                  |      |          |      |       |           |      |      |       |
|                  |                               |          |       |          |           |                  |      |          |      |       |           |      |      |       |

Note - No Station is in this situation Dated 11.10.2020

## 2.5 Extreme Flood Situation (Water Level exceeded or equalized Highest Flood Level (HFL))

| Name of<br>river | Flood<br>Forecasting<br>Sites | District |       | Danger<br>Level(m) | Warning<br>Level (m) | Previous Highest |      | Actual Level |      |       | Forecast     |      |      |       |
|------------------|-------------------------------|----------|-------|--------------------|----------------------|------------------|------|--------------|------|-------|--------------|------|------|-------|
|                  |                               |          | State |                    |                      | Level(m)         | Date | Level(m)     | Time | Trend | Level<br>(m) | Date | Time | Trend |
|                  |                               |          |       |                    |                      |                  |      |              |      |       |              |      |      |       |

Note - No Station is in this situation Dated 11.10.2020

#### 2.6 Inflow Forecast

|                  |                               |          |       |        |        | Previous Highest |      | Actual Level     |      |       | Forecast |      |      |       |
|------------------|-------------------------------|----------|-------|--------|--------|------------------|------|------------------|------|-------|----------|------|------|-------|
| Name of<br>river | Flood<br>Forecasting<br>Sites | District | State | HFL(m) | FRL(m) | Discharge<br>(Q) | Date | Discharge<br>(Q) | Time | Trend | D<br>(Q) | Date | Time | Trend |
|                  |                               |          |       |        |        |                  |      |                  |      |       |          |      |      |       |
|                  |                               |          |       |        |        |                  |      |                  |      |       |          |      |      |       |

**Note - No Station is in this situation Dated 11.10.2020** 

#### Advisory on Hydro Meteorological Situation Expected from 12-10-2020 to 13-10-2020

As per rainfall pattern given in section II, Alaknanda, Bhagirathi & Ganga river basins are expected to receive nil rain in next 48 hrs. Ghaghara, Rapti, Ramganga, & Sharda river basins are expected to receive nil rain in next 48 hours. Water level at most of CWC stations are expected to steady/fall in next 48 hours. Level forecast will be issued if the level of river at stations are likely to touch or cross warning level. From the given QPF, Normal situation is expected in CWC river basins.

अधिशासीअभियंता

मध्य गंगा मण्डल -1 लखनऊ