Central Water Commission
Upper Ganga Basin Organisation, Lucknow
Daily Flood Situation Report Cum Advisories
Date: 21 OCTOBER, 2020

FSR No.121 **Dated: 21-10-2020**

1.Weather forecast by IMD

I. SYNOPTIC SITUATION:

♦Southwest monsoon has withdrawn today the 21st October,2020 from remaining parts of Uttar Pradesh, entire Bihar, northern parts of West Bengal and Sikkim, northern parts of Jharkhand, north Chattisgarh, some parts of East Madhya Pradesh and more parts of West Madhya Pradesh.

♦ The withdrawal line of the Southwest Monsoon passed through Lat. 27°N/Long.90°E, Cooch Bihar, Sriniketan, Ranchi, Pendra Road, Mandla, Narsinghpur, Indore, Vallabh Vidyanagar, Porbandar, Lat. 21°N/ Long.65°E and Lat. 21°N/ Long.60°.

♦ Conditions are continuing to become favourable for further withdrawal of Southwest Monsoon from remaining parts of Jharkhand, Madhya Pradesh and Gujarat, some parts of Chhattisgarh, some parts of Odisha and north Maharashtra during next 3-4 days.

II. a) DETERMINISTIC FORECAST (QPF):

Sr. No.	BASIN NAME	SUBBASIN CODE/NAME	QPF (mm)		
			Day-1	**Day-2**	**Day-3**
1	Alaknanda	Alaknanda	**0**	**0**	**0**
2	Bhagirathi	Bhagirathi	**0**	**0**	**0**
3	Ganga	Chhatnag to Mirzapur	**0**	**0**	**0**
		Narora to Phaphamau	**0**	**0**	**0**
		Phaphamau to Ballia	**0**	**0**	**0**
		Gomti	**0**	**0**	**0**
		Sai	**0**	**0**	**0**
		Upper Ganga	**0**	**0**	**0**
4	Ghaghra	Lower Ghaghra	**0**	**0**	**0**
		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) DETERMINISTIC FORECAST (DISTRIBUTION)

	BASIN NAME	SUBBASIN CODE/NAME	INTENSITY (I) & SPATIAL DISTRIBUTION (D)					
			Day-1		**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
3	Ganga	Chhatnag to Mirzapur	M.Dry	DRY	M.Dry	DRY	M.Dry	DRY
		Narora to Phaphamau	M.Dry	DRY	M.Dry	DRY	M.Dry	DRY
		Phaphamau to Ballia	M.Dry	DRY	M.Dry	DRY	M.Dry	DRY
		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
4	Ghaghra	Lower Ghaghra	M.Dry	DRY	M.Dry	DRY	M.Dry	DRY
		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 BASIN	NAME OF SUB-BASIN	Day-1		Day-2		Day-3	
		I	D	I	D	I	D
Alaknanda	Alaknanda						
Bhagirathi	Bhagirathi						
Ganga	Chhatnag to Mirzapur						
	Narora to Phaphamau						
	Phaphamau to Ballia						
	Gomti						
	Sai						
	Upper Ganga						
Ghaghra	Lower 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			
ExH	Exceptionally Heavy 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 exceeds 12 cm			

IV. PROBABILISTIC FORECAST

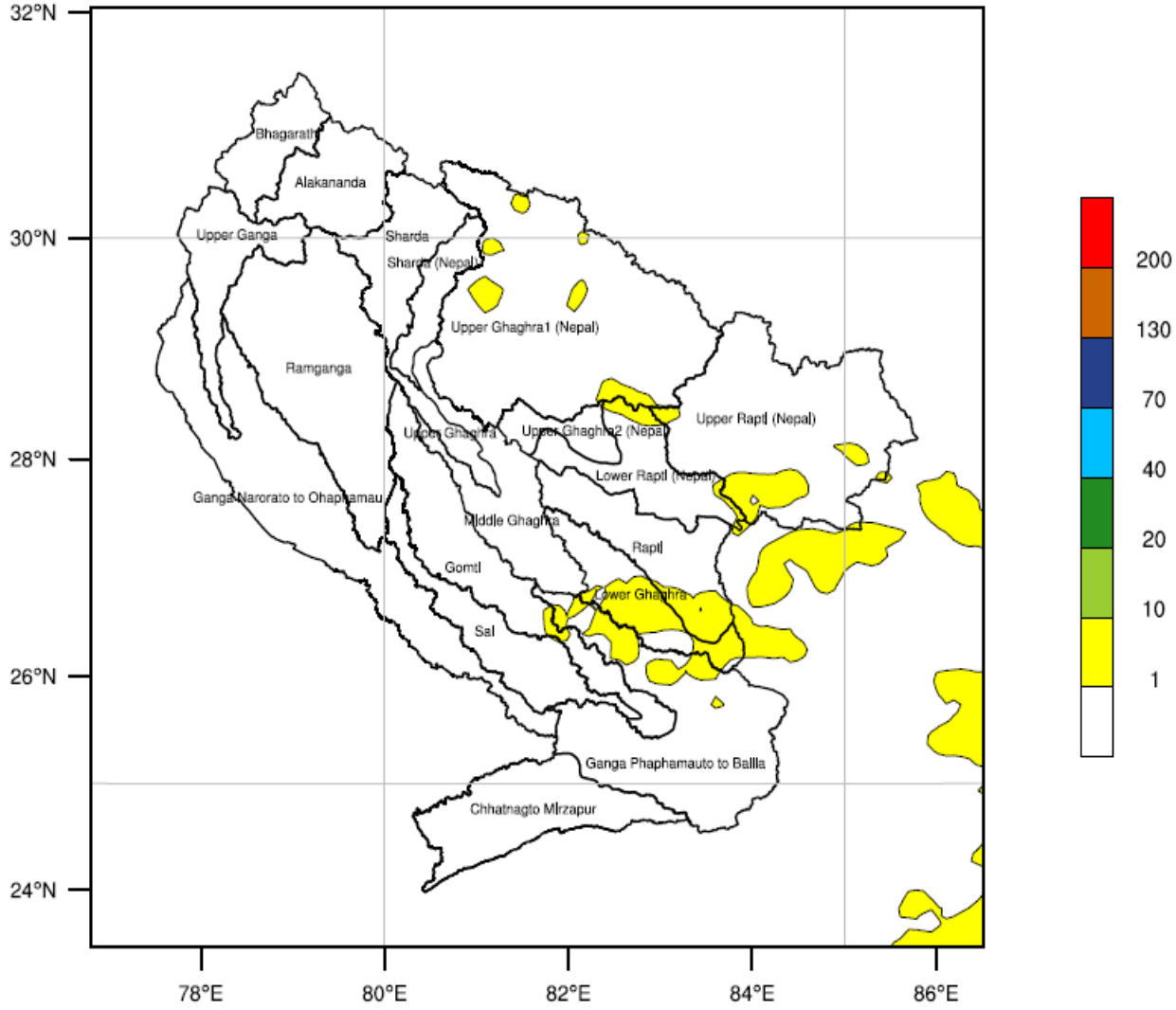
S. No.	BASIN NAME	SUBBASIN CODE/NAME	Day-1						Day-2						Day-3					
			0 mm	0.1-10 mm	11-25 mm	26-50 mm	51-100 mm	>100 mm	0 mm	0.1-10 mm	11-25 mm	26-50 mm	51-100 mm	>100 mm	0 mm	0.1-10 mm	11-25 mm	26-50 mm	51-100 mm	>100 mm
1	**Alaknanda**	Alaknanda	75-100						75-100						75-100					
2	**Bhagirathi**	Bhagirathi	75-100						75-100						75-100					
3	**Ganga**	Chhatnag to Mirzapur	75-100						75-100						75-100					
		Narora to Phaphamau	75-100						75-100						75-100					
		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					
4	**Ghaghra**	Lower Ghaghra	75-100						75-100						75-100					
		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: 2020-10-21_00:00:00
Valid: 2020-10-22_03:00:00

FLOOD MET OFFICE LUCKNOW

IMD WRF Rainfall (mm) Forecast(24hr)



Sub basin wise Average Rainfall Estimation

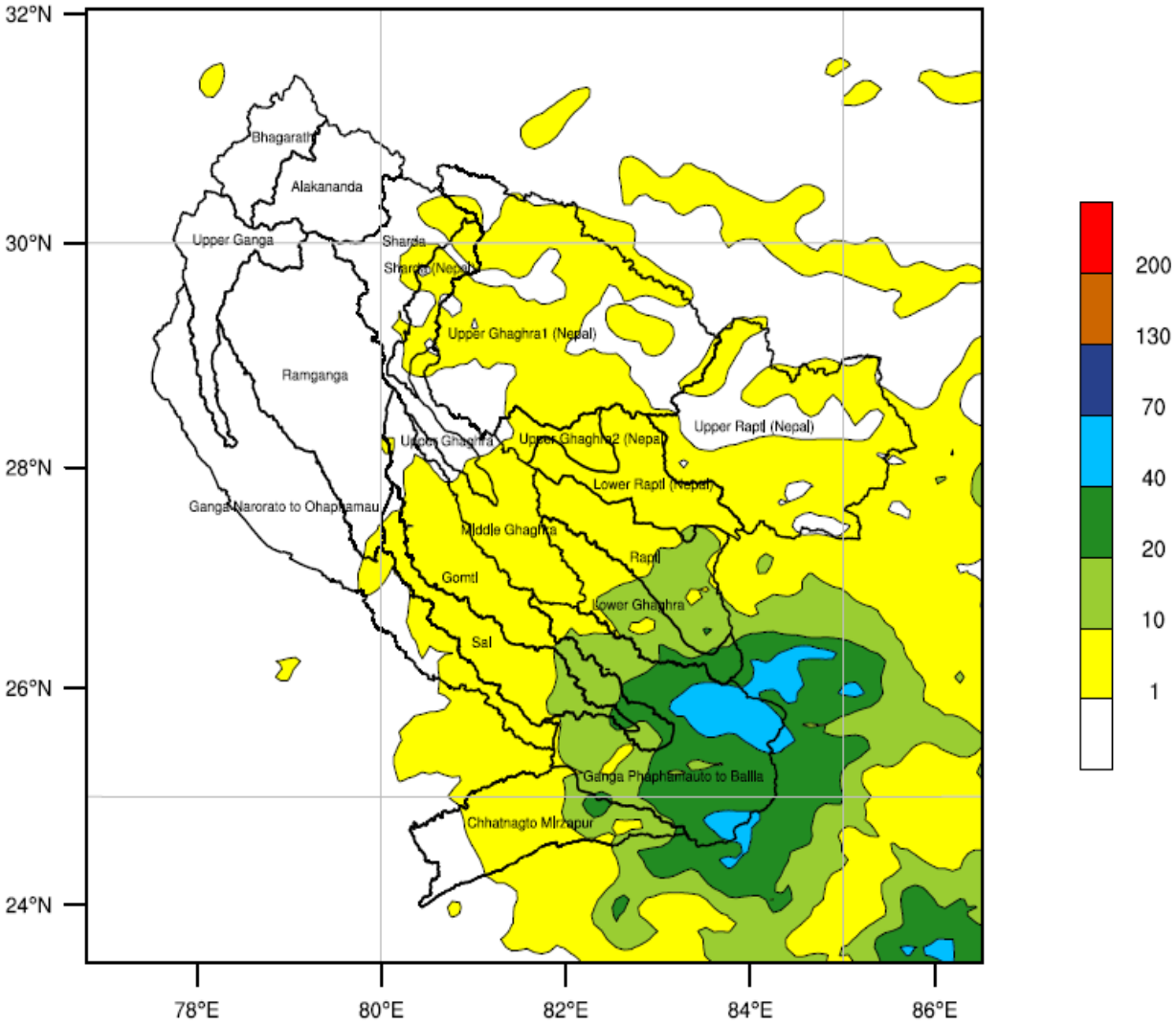
Alaknanda =	0 mm	Rapti =	1 mm
Bhagirathi =	0 mm	Sai =	0 mm
Chhatnagto Mirzapur =	0 mm	Sharda =	0 mm
Ganga Narorato Ohaphamau =	0 mm	Sharda (Nepal) =	0 mm
Ganga Phaphamauto Balia =	0 mm	Upper Ganga =	0 mm
Gomti =	0 mm	Upper Ghaghra =	0 mm
Lower Ghaghara =	1 mm	Upper Ghaghra1 (Nepal) =	0 mm
Lower Rapti (Nepal) =	0 mm	Upper Ghaghra2 (Nepal) =	0 mm
Middle Ghaghara =	0 mm	Upper Rapti (Nepal) =	0 mm
Ramganga =	0 mm		

OUTPUT FROM WRF V3.6.1 MODEL
WE = 1001 ; SN = 945 ; Levels = 45 ; Dis = 9km ; Phys Opt = 16 ; PBL Opt = 2 ; Cu Opt = 5

Init: 2020-10-21_00:00:00
Valid: 2020-10-23_03:00:00

FLOOD MET OFFICE LUCKNOW

IMD WRF Rainfall (mm) Forecast(48hr)



Sub basin wise Average Rainfall Estimation

Alaknanda =	0 mm	Raptl =	9 mm
Bhagirathi =	0 mm	Sai =	6 mm
Chhatnagto Mirzapur =	6 mm	Sharda =	2 mm
Ganga Narorato Ohaphamau =	1 mm	Sharda (Nepal) =	1 mm
Ganga Phaphamauto Balia =	26 mm	Upper Ganga =	0 mm
Gomtl =	6 mm	Upper Ghaghra =	2 mm
Lower Ghaghara =	13 mm	Upper Ghaghra1 (Nepal) =	3 mm
Lower Raptl (Nepal) =	4 mm	Upper Ghaghra2 (Nepal) =	1 mm
Middle Ghaghara =	4 mm	Upper Raptl (Nepal) =	2 mm
Ramganga =	0 mm		

OUTPUT FROM WRF V3.6.1 MODEL
WE = 1001 ; SN = 945 ; Levels = 45 ; Dis = 9km ; Phys Opt = 16 ; PBL Opt = 2 ; Cu Opt = 5

2. Summary of flood situation as per CWC flood forecasting network

Flood Situation on 21 OCTOBER, 2020

Note - No Station is in flood situation Dated 21.10.2020

2.1 Rainfall Situation

Amount of rainfall recorded at 8:30 hours IST of today ((≥ 50 mm or more)

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

Note - No Station is in this situation Dated 21.10.2020

2.2 LEVEL FORECAST

LEVEL FORECAST		
S.No.	Flood Situations	No. of Forecasting Sites
A.	**Extreme Flood Situation:**	
	(Site (s) where the previous Highest Flood Level (HFL) is exceeded or equalized**)**	0
B.	**Severe Flood Situation :**	
	(Site(s) where water Level touching or exceeding the Danger Level but below Highest Flood Level(HFL)	0
C.	**Above Normal Flood Situation:**	
	(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		
Number of Sites for which inflow forecasts issued:		0
(Where inflow are equal or exceed the specified Threshold Limit for a particular reservoir/ barrage)		0

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

Name of river	Flood Forecasting Sites	District	State	Danger Level(m)	Warning Level (m)	Previous Highest		Actual Level			Forecast			
						Level (m)	year	Level (m)	Time	Trend	Level (m)	Date	Time	Trend

Note - No Station is in this situation Dated 21.10.2020

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

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

Note - No Station is in this situation Dated 21.10.2020

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

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

Note - No Station is in this situation Dated 21.10.2020

2.6 Inflow Forecast

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

Note - No Station is in this situation Dated 21.10.2020

Advisory on Hydro Meteorological Situation Expected from 22-10-2020 to 23-10-2020

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