

# Central Water Commission Upper Ganga Basin Organisation, Lucknow Daily Flood Situation Report Cum Advisories Date: 14 JUNE, 2021

FSR No.14 Dated: 14-06-2021

#### 1. Weather forecast by IMD

#### I. SYNOPTIC SITUATION:

- ♦ The Northern Limit of Monsoon (NLM) continues to pass through lat. 20.5°N/ Long. 60°E, Diu, Surat, Nandurbar, Bhopal, Nowgong, Hamirpur, Barabanki, Bareilly, Saharanpur, Ambala and Amritsar.
- ♦ Conditions are favourable for further advance of southwest monsoon into most parts of Madhya Pradesh; remaining parts East Uttar Pradesh; Delhi; some parts of West Uttar Pradesh, Haryana and Punjab during next 48 hours.
- ♦ The Low Pressure Area over North coastal Odisha and adjoining Gangetic West Bengal and Jharkhand now lies over south Jharkhand & neighbourhood with the associated cyclonic circulation extending upto mid-tropospheric levels tilting southwestwards with height. It is likely to move west-northwestwards.
- ♦ The trough now runs from west Rajasthan to northeast Bay of Bengal across East Rajasthan, north Madhya Pradesh, North Chattisgarh and center of Low Pressure Area over south Jharkhand & neighbourhood and north Odisha and extends upto 0.9 km above mean sea level.
- ♦ A cyclonic circulation lies over north Haryana & neighbourhood at 1.5 km above mean sea level.

#### II (a) DETERMINISTIC FORECAST (QPF):

S.	Basin	Sub-basin Name			QPF (mm)		
No.	Name	Sub-basin Name	Day-1	Day-2	Day-3	Day-4	Day-5
			(14/06) *	(15/06)	(16/06) *	(17/06) *	(18/06)
1.	Alaknanda	Alaknanda	0.1-10	0.1-10	11-25	0.1-10	0.1-10
2.	Bhagirathi	Bhagirathi	0.1-10	0.1-10	0.1-10	0.1-10	0.1-10
3.	Ganga	Chhatnag to Mirzapur	11-25	11-25	0.1-10	11-25	11-25
4.	Ganga	Narora to Phaphamau	0.1-10	0.1-10	0.1-10	0.1-10	0.1-10
5.	Ganga	Phaphamau to Ballia	26-37	11-25	11-25	0.1-10	11-25
6.	Ganga	Gomti	11-25	11-25	11-25	0.1-10	0.1-10
7.	Ganga	Sai	11-25	11-25	11-25	0.1-10	0.1-10

8.	Ganga	Upper Ganga	0.1-10	0.1-10	0.1-10	0.1-10	0.1-10
9.	Ghaghra	Lower Ghaghra	26-37	38-50	26-37	26-37	11-25
10.	Ghaghra	Middle Ghaghra	11-25	26-37	11-25	11-25	11-25
11.	Ghaghra	Upper Ghaghra	11-25	11-25	0.1-10	0.1-10	0.1-10
12.	Ramganga	Ramganga	0.1-10	0.1-10	0.1-10	0.1-10	0.1-10
13.	Rapti	Rapti	26-37	38-50	26-37	26-37	11-25
14.	Sharda	Sharda	0.1-10	0.1-10	11-25	0.1-10	0.1-10

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

					Inte	nsity (I)	and Spa	tial Dist	ribution	n (D)				
Sr.	Basin	Sub- basin	Da	y-1	Day	y-2	Day	y-3	Da	y-4	Day-5 (18/06) *			
No.	Name	Name	(14/0	06) *	(15/0	<b>)</b> 6) *	(16/0	)6) *	(17/0	)6) *				
			Ì	D	Ì	D	Ì	D	Ì	D	Ì	D		
1.	Alaknanda	Alaknanda	L	FWS	L	FWS	M	WS	L	FWS	L	FWS		
2.	Bhagirathi	Bhagirathi	L	FWS	L	FWS	L	FWS	L	FWS	L	FWS		
3.	Ganga	Chhatnag to Mirzapur	M	ws	M	WS	M	WS	M	ws	M	WS		
4.	Ganga	Narora to Phaphamau	L	SCT	L	SCT	L	ISOL	L	ISOL	L	ISOL		
5.	Ganga	Phaphamau to Ballia	M	ws	M	ws	M	ws	M	ws	M	WS		
6.	Ganga	Gomti	M	ws	M	ws	M	ws	M	WS	M	WS		
7.	Ganga	Sai	M	ws	M	ws	M	ws	M	WS	M	WS		
8.	Ganga	Upper Ganga	L	ISOL	٦	ISOL	L	ISOL	L	ISOL	٦	ISOL		
9.	Ghaghra	Lower Ghaghra	M	FWS	M	FWS	M	FWS	M	FWS	M	FWS		
10.	Ghaghra	Middle Ghaghra	M	WS	M	WS	M	WS	M	WS	M	WS		
11.	Ghaghra	Upper Ghaghra	M	ws	M	ws	M	ws	M	ws	M	WS		
12.	Ramganga	Ramganga	M	SCT	M	SCT	M	SCT	M	SCT	M	SCT		
13.	Rapti	Rapti	M	WS	M	WS	M	WS	M	WS	M	WS		
14.	Sharda	Sharda	M	SCT	M	SCT	M	SCT	M	SCT	M	SCT		

QPF in Ranges (mm)	UNLISTED	0	0.1-10	11-25	26-50	51-100	>100
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## III. HEAVY RAINFALL WARNING:

S.	Basin	Sub-basin	Da	ay-1	Da	ay-2	Da	ay-3	Da	ay-4	Da	ay-5
No.	Name	Name	(14	/06) *	(15/	<del>(06) *</del>	(16/	<del>(06)</del> *	(17/	<b>/06)</b> *	(18/	<del>(06)</del> *
140.	Name	Name	I	D	I	D	_	D	I	D	_	D
1.	Alaknanda	Alaknanda	Н	ISOL	Н	ISOL	Н	ISOL				
2.	Bhagirathi	Bhagirathi	Н	ISOL	Н	ISOL	Н	ISOL				
3.	Ganga	Chhatnag to Mirzapur	VH	ISOL	Н	ISOL	Н	ISOL	VH	ISOL	VH	ISOL
4.	Ganga	Narora to Phaphamau										
5.	Ganga	Phaphamau to Ballia	VH	ISOL	Н	ISOL	Н	ISOL	Н	ISOL	VH	ISOL
6.	Ganga	Gomti	Н	ISOL	Н	ISOL	Н	ISOL	Н	ISOL	Н	ISOL
7.	Ganga	Sai	Н	ISOL	Н	ISOL	Н	ISOL	Н	ISOL	Н	ISOL
8.	Ganga	Upper Ganga	Н	ISOL	Н	ISOL	Н	ISOL				
9.	Ghaghra	Lower Ghaghra	VH	ISOL	VH	ISOL	Η	ISOL	Н	ISOL	VH	ISOL
10.	Ghaghra	Middle Ghaghra	VH	ISOL	VH	ISOL	Ι	ISOL	Н	ISOL	VH	ISOL
11.	Ghaghra	Upper Ghaghra	VH	ISOL	VH	ISOL					H	ISOL
12.	Ramganga	Ramganga	Н	ISOL	Н	ISOL	I	ISOL	Н	ISOL	Ι	ISOL
13.	Rapti	Rapti	VH	ISOL	VH	ISOL	H	ISOL	Н	ISOL	VH	ISOL
14.	Sharda	Sharda	Н	ISOL	Н	ISOL	H	ISOL			Н	ISOL

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						

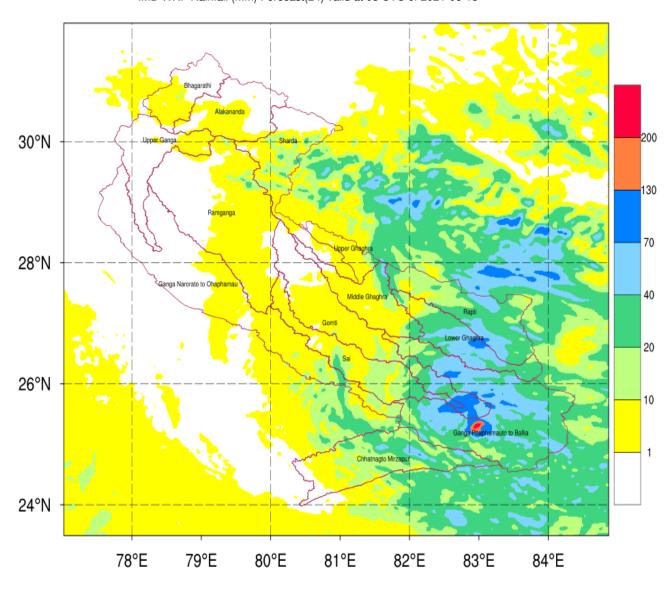
		Intensity	of Rainfa	II					
M.Dry.	NIL	0 cm	VL	Very Light Rainfall	Trace				
L	Light Rainfall	Upto 1 cm	M	Moderate rainfall	02-06 cm				
H	Heavy rainfall	07-11 cm	VH	Very Heavy rainfall	12-20 cm				
EH	Extremely Heavy rainfall	21 cm or More	11/1						
ExH	Exceptionally Heavy Rainfall	the station for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

# IV. PROBABILISTIC FORECAST:

		QF	PF P	roba	bilit	y (%	ó)																								
		Da	y-1					Da	y-2					Da	y-3					Da	y-4					Da	y-5				
ъ .	0.1.1.		1/06)					`	5/06)						(06)					_	7/06)						3/06)				
Basin Name	Sub-basin Name	(Q	PF c	ateg	gorie	s)		(Q	PF c	ateg	orie	s)		(Q)	PF c	ateg	orie	s)		(Q	PF c	ateg	orie	s)		(Q	PF c	ateg	orie	s)	
Name	Ivallie																														
						0			(			0						0						0			(			0	
			0.1-10	11-25	26-50	51-100	>100		0.1-10	11-25	26-50	51-100	>100		0.1-10	11-25	26-50	51-100	>100		0.1-10	11-25	26-50	51-100	>100		0.1-10	11-25	26-50	51-100	>100
Alaknanda	Alaknanda	0	0	1	2	5		0	0	1	2	5	^	0	0	1	2	5		0	0	1	2	5		0	0	1	2	5	
Bhagirathi	Bhagirathi																														
Ganga	Chhatnag to Mirzapur																														
Ganga	Narora to Phaphamau																														
Ganga	Phaphamau to Ballia																														
Ganga	Gomti																														
Ganga	Sai																														
Ganga	Upper Ganga																														
Ghaghra	Lower Ghaghra																														
Ghaghra	Middle Ghaghra																														
Ghaghra	Upper Ghaghra																														
Ramganga	Ramganga	_				_							_							_										_	
Rapti	Rapti																														
Sharda	Sharda																														

# FLOOD METEOROLOGICAL OFFICE, LUCKNOW

IMD WRF Rainfall (mm) Forecast(24) valid at 03 UTC of 2021-06-15

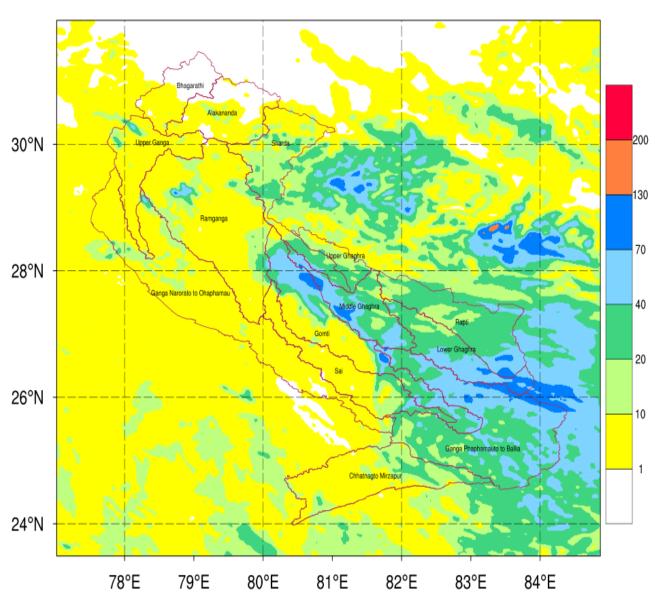


# Sub basin wise Average Rainfall Estimation

Alaknanda =	2.0 mm	Middle Ghaghara =	10.3 mm
Bhagirathi =	1.7 mm	Ramganga =	2.2 mm
Chhatnagto Mirzapur =	22.0 mm	Rapti =	25.6 mm
Ganga Narorato Ohaphamau =	11.9 mm	Sai =	23.9 mm
Ganga Phaphamauto Balia =	34.3 mm	Sharada =	7.1 mm
Gomti =	37.0 mm	Upper Ganga =	0.9 mm
Lower Ghaghara =	33.8 mm	Upper Ghaghara =	8.4 mm

# FLOOD METEOROLOGICAL OFFICE, LUCKNOW

IMD WRF Rainfall (mm) Forecast(48) valid at 03 UTC of 2021-06-16



# Sub basin wise Average Rainfall Estimation

Alaknanda =	3.6 mm	Middle Ghaghara =	27.1 mm
Bhagirathi =	2.5 mm	Ramganga =	9.4 mm
Chhatnagto Mirzapur =	14.4 mm	Rapti =	34.6 mm
Ganga Narorato Ohaphamau =	23.5 mm	Sai =	32.4 mm
Ganga Phaphamauto Balia =	35.3 mm	Sharada =	10.8 mm
Gomti =	30.4 mm	Upper Ganga =	7.2 mm
Lower Ghaghara =	45.7 mm	Upper Ghaghara =	30.7 mm

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

#### Flood Situation on 14 June, 2021



## 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)
Rishikesh (U.K)	50.6
Dalmau (U.P)	68.6
Naini (U.P)	58.8
Bhat Purwaghat (U.P)	62.4
Lucknow (U.P)	56.8
Elginbridge (U.P)	74.4
Ayodhya (U.P)	60.0
Bhinga (U.P)	62.4
Balrampur (U.P)	70.6
Chandradeepghat (U.P)	109.0

## 2.2 LEVEL FORECAST

Flood Situations  Extreme Flood Situation: re the previous Highest Flood Level (HFL) is exceeded or  Severe Flood Situation:	No. of Forecasting Sites					
Extreme Flood Situation: re the previous Highest Flood Level (HFL) is exceeded or						
re the previous Highest Flood Level (HFL) is exceeded or	0					
	0					
Severe Flood Situation :	0					
Severe Flood Situation :	0					
Severe 1 lood Situation .						
water Level touching or exceeding the Danger Level but below	0					
Level(HFL)						
Above Normal Flood Situation:						
(Site (s) where water level touching or exceeding the warning Level but below						
Numbers of Sites above Warning Level (A+B+C)	0					
INELOW FODECAST						
	0					
ual or exceed the specified Threshold Limit for a particular	0					
,	INFLOW FORECAST which inflow forecasts issued:					

## 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		Actı	ıal Leve		Forecast			
						Level (m)	year	Level (m)	Time	Trend	Level (m)	Date	Time	Trend
*	*													

Note - No station is in this situation Dated 14.06.2021

## 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)	Level (m)	•		Actu	al Level		Forecast			
						Level(m)	Date	Level(m)	Time	Trend	Level (m)	Date	Time	Trend
*	*													

Note - No station is in this situation Dated 14.06.2021

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

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

Note - No station is in this situation Dated 14.06.2021

### 2.6 Inflow Forecast

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

Note - No station is in this situation Dated 14.06.2021

# Advisory on Hydro Meteorological Situation Expected from 15-06-2021 to 16-06-2021

As per rainfall pattern given in section II, Alaknanda, Bhagirathi & Ganga river basins are expected to receive moderate rainfall at widespread places in next 48 hrs. Ghaghara, Rapti, Ramganga, & Sharda river basins are expected to receive moderate rainfall at fairly widespread places in next 48 hours. Water level at most of CWC stations are expected to rising 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.

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अधिशासीअभियंता

मध्य गंगा मण्डल -1 लखनऊ