

Date: 01-07-2024

Special Press Release

Sub: Active to vigorous monsoon conditions over Uttarakhand from 02nd to 07th July 2024.

Current Meteorological analysis :

Numerical Weather Prediction models indicate existence of an east-west trough in lower levels from north Punjab to northeast India across north Haryana & Uttar Pradesh, Bihar, Sub-Himalayan West Bengal from 02nd to 07th July 2024.

Monsoon watch:

- Monsoon has covered the entire state of Uttarakhand on 28th June 2024.
- The Northern Limit of Monsoon passes through 26°N/65°E, Jaisalmer, Sirsa, Kurukshetra, Rajpura, Ludhiana and 31.2°N/74.5°E. (Map attached).

Rainfall forecast:

Light to moderate rain/ thundershowers are very likely to occur at most places in Uttarakhand from 02^{nd} to 07^{th} July 2024.

Weather Warning for Uttarakhand:

- <u>Warning:</u> Heavy to very heavy rainfall at a few places with extremely heavy rainfall at isolated places likely to occur in districts of Kumaun region of Uttarakhand.
- Thunderstorm accompanied with lightning and very intense to extremely intense spells very likely to occur at isolated places in districts of Kumaun region of Uttarakhand.

 $02^{nd}\ to\ 04^{th}\ July$ 2024

- <u>Alert</u>: Heavy to very heavy rainfall very likely to occur at isolated places in Dehradun, Pauri, Tehri & Haridwar districts of Uttarakhand.
- Thunderstorm accompanied with lightning and very intense to extremely intense spells very likely to occur at isolated places in Dehradun, Pauri, Tehri & Haridwar districts of Uttarakhand.
- Watch: Heavy rainfall very likely to occur at isolated places in Uttarkashi, Rudraprayag & Chamoli districts of Uttarakhand.

	• Thunderstorm accompanied with lightning and intense to very intense spells very likely to occur at isolated places in Uttarkashi, Rudraprayag & Chamoli districts of Uttarakhand.
05 th to 07 th July 2024	 Alert: Heavy to very heavy rainfall very likely to occur at isolated places in districts of Uttarakhand. Thunderstorm accompanied with lightning and very intense to extremely intense spells very likely to occur at isolated places in districts of Uttarakhand.

↓ Impact/Advisory:

Date	Region	weather warning	Impact	Suggested Actions	
02 nd to 04 th July 2024	Few places in districts mentioned above	 Heavy to very heavy at a few places with Extremely heavy at isolated places. Thunderstorm accompanied with lightning / very intense to extremely intense spell of rain at isolated places. 	 Minor to medium landslide, rock fall and mudslides due to heavy rain or intense rainfall spell at a few places. Blocking/washout of roads/highways/bridges due to rock fall/ landslide and floods at a few places. Community services like electricity, water etc. will be affected at large. Supply and transportation will be affected at a few places for a few days. Few instances of damage to life and property. Continuous heavy rainfall may cause Dams/Barrages to increase the discharge causing rise in the river water level. Large increase in water level of major rivers and their tributaries. Heavy rains falling on melting snowpack can produce sudden increase in water flow in rivulets and rainwater streams that may result in bank erosion/overflow/flash floods also likely at a few places. Very intense/extremely intense rainfall can produce flash flooding, inundation in low lying areas, mountains and steep hills produce rapid runoff, which can cause streams to rise quickly at a few places. Few instances of damage to the 	 People residing in vulnerable areas prone to landslides are adviced to move to safer places. Pilgrims/tourists travelling to Chardham/other pilgrim places or other locations to remain alert and are advised to avoid travelling. Settlements/People residing near major rivers and their tributaries; rivulets/streams and low lying areas and flood plains are to remain alert and ready to move to safer places (Higher places). Dam/barrage management/Hydroelectric power plants management/control authorities are advised to take necessary precautionary measures and keep the water in reservoir to minimum levels. Mountaineering expeditions may be halted and the expedition members are advised to move to the safe places. State government authorities are advised to take all necessary precautionary measures and facilitate the safe movement of people. District authorities are advised to close schools during the period. Commuters or people travelling with vehicle need to be alert and avoid travelling. Stay indoors during heavy rains/flash flood. Do not try to cross an 	

			vulnerable structures like Kutcha houses/roads/walls, huts and under-construction buildings, bridges, tunnels etc. • Difficult driving conditions due to slippery roads and low visibility due to fog/low clouds leading to greatly increased travel time. • Moderate to extensive damage to horticulture crop, plantation and Kharif crops like rice, maize, millet, beans, grams etc. • Flight operations to/from airports will be disrupted. Helicopter operations to/from different helipads in the district likely to be affected. • Railway operations may be distrupted. • District headquarters, private & Government institutions, schools, hospitals, pilgrim places, tourist places may be affected by heavy rain. • Damage of life and property due to lightning at isolated places.	
02 nd to 07 th July 2024	Isolated places in districts mentioned above	•Heavy to very heavy rainfall •Thunderstorm accompanied with lightning, very intense /extremely intense spells	 Landslide, rock fall and mudslides due to heavy rain or intense rainfall spell at isolated places. Blocking/washout of roads/highways/bridges due to rock fall/ landslide and floods at isolated places. Community services like electricity, water etc. will be affected at isolated places. Supply and transportation will be affected at isolated places for a few days. Isolated instances of damage to life and property. Continuous heavy rainfall may cause Dams/Barrages to increase the discharge causing rise in the river water level. Moderate increase in water level of major rivers and their tributaries. Heavy rains falling on melting snowpack can produce sudden 	 People residing in vulnerable areas prone to landslides are to remain alert. Pilgrims/tourists travelling to Chardham or other locations to remain alert and travel only if necessary. During continuous / heavy rains keep a watch on steep slopes while travelling. Settlements/People residing near major rivers and their tributaries; rivulets/streams and low lying areas and flood plains are to remain alert. Dam/barrage management/Hydroelectric power plants management/control authorities are advised to take necessary precautionary measures. Mountaineering expeditions may be halted and the expedition members are advised to move to the safe places. State government authorities are

			increase in water flow in rivulets and rainwater streams that may result in bank erosion/overflow/flash floods also likely at isolated places. • Very/extremely intense rainfall can produce flash flooding, inundation in low lying areas, mountains and steep hills produce rapid runoff, which can cause streams to rise quickly at isolated places. • Isolated instances of damage to the vulnerable structures like Kutcha houses/roads/walls, huts and under-construction buildings, bridges, tunnels etc. • Difficult driving conditions due to slippery roads and low visibility due to fog/low clouds leading to moderately increased travel time. • Moderate damage to horticulture crop, plantation and Kharif crops like rice, maize, millet, beans, grams etc. • Flight operations to/from airports may be disrupted. Helicopter operations to/from different helipads in the district may be affected. • Railway operations may be affected. • District headquarters, private & Government institutions, schools, hospitals, pilgrim places, tourist places may be affected by heavy	advised to take all necessary precautionary measures for smooth movement of people. • Commuters or people travelling with vehicle need to be alert and travel only if necessary. • Stay indoors during heavy rains/ flash flood. Do not try to cross an active landslide area. • Monitor media reports for updates. Listen up for weather forecasts on local media. Keep an eye on social media • Avoid visiting fragile hilly terrain and steep slopes. • Don't try to walk through a flooded area. Avoid flooded areas if you are in a vehicle. • Do not go swimming or boating in swollen rivulets, streams, rivers and their tributaries during heavy rains. • Military and Para-military establishments/posts in remote/far-flung areas vulnerable to landslide, flash-flood are to remain alert. • Construction activities of houses, building, bridges, dam, tunnels etc. may be halted during heavy rainfall period. • Farmers are advised to make necessary arrangements for drainage of excess water from the fields. The harvested produce may be kept in safe & dry place.
			rain. • Damage of life and property due to lightning at isolated places.	be kept in safe & dry place.
2 nd to 04 th July 2024	Isolated places in some districts	 Heavy rainfall Thunderstorm accompanied with lightning, intense to very intense spells. 	 Rock fall and mudslides due to heavy rain or intense rainfall at isolated places. Blocking of roads/highways due to rock fall at isolated places. Isolated instances of damage to life and property. Heavy rains falling on melting snowpack can produce sudden increase in water flow in rivulets and rainwater streams that may result in bank erosion/overflow/flash floods also likely at isolated places. 	 People residing in vulnerable areas prone to landslides are to remain cautious. Pilgrims/tourists travelling to Chardha or other locations in state to remain cautious and keep a watch on steep slopes while travelling. Settlements/People residing near rivulets/streams and low lying areas and flood plains are to remain cautious. Mountaineering expeditions may take precautionary measures

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• Very intense rainfall can	
produce flooding, mountains and	• Commuters or people travelling
steep hills produce rapid runoff,	with vehicle need to be cautious.
which can cause streams to rise	• Monitor media reports for
quickly at isolated places.	-
• Difficult driving conditions due	_
to slippery roads and low	media.
	 Do not go swimming or boating
leading to slightly increased travel	
time.	rains.
	• Farmers are advised to make
agriculture crop (like rice, maize,	keep the harvested produce in safe
millet, beans, grams etc.) &	& dry place.
plantation and quality of grain	
may also be affected.	
• Flight operations to/from	
airports may get affected.	
Helicopter operations to/from	
different helipads in the district	
may get affected.	
Damage of life and property	
due to lightning at isolated places.	

Note: *Kindly login to Meteorological Centre, Dehradun's Website (https://mausam.imd.gov.in/dehradun/) for regular & detailed updates of forecasts and warnings.

-ह०-(बिक्रम सिंह) हेड/वैज्ञानिक-'एफ' मौसम विज्ञान केंद्र, देहरादून

LEGENDS:

WARNING (TAKE ACTION)			WATCH (BE UPDATED)				
ALERT (BE PREPARED)			NO WARNING (NO ACTION)				
INTENSITY (INSTY)		DIST	DISTRIBUTION (DISTR)		PROBABILITY OF OCCURRENCE		
VERY LIGHT/बहुत हल्की	/ERY LIGHT/बहुत हल्की TRACE - 2.4 mm		ISOLATED (UPTO 25% AREA)	UNLIKELY	Up to 25%		
LIGHT/हल्की	2.5- 15.5 mm	FEW /कुछ स्थान	SCATTERED (BETWEEN 25-50% AREA)	LIKELY	26 to 50%		
MODERATE /मध्यम	15.6 – 64.4 mm	MANY /अनेक स्थान	FAIRLY WIDE SPREAD (BETWEEN 50-75% AREA)	VERY LIKELY	51 to 75%		
HEAVY /भारी 64.5- 115.5 mm		MOST /अधिकांश स्थान	WIDE SPREAD (MORE THAN 75% AREA)	MOST LIKELY	Above 75%		
VERY HEAVY /बहुत भारी	115.6- 204.4 mm						
EXTREMELY HEAVY /अत्यंत भारी	> 204.4 mm						
Intense rainfall spell		20-30 mm/hour					
Very intense rainfall spell			30-50 mm/hour				

50-100 mm/hour

>100 mm/hour

Extremely intense rainfall spell

Cloud Burst

