### Consolidated Bulletin No. 021/2024

Consolidated Agro-Meteorological Advisory for the farmers of Uttarakhand issued by Meteorological Centre, Dehradun with the cooperation of A.M.F.U. Ranichauri, Pantnagar and Roorkee valid from 12-03-2024 (08:30 IST) till 17-03-2024 (08:30 IST):

### PART -I: WEATHER INFORMATION

Past weather from 07-03-2024 to 11-03-2024

Weather forecast valid from 12-03-2024 (08:30 IST) till 17-03-2024 (08:30 IST)

Date: 12.03.2024

### HILLY REGION: A.M.F.U. RANICHAURI

During the period, sky conditions remained generally cloudy to generally cloudy sky. As per the meteorological data received from A.M.F.U. Ranichauri, dry weather prevailed during the period. Maximum temperature was between 15.6°C to 18.6°C. The minimum temperature was between 4.7°C to 9.4°C. Relative humidity was between 37% and 73%. Average wind speed was between 5 km/hour to 6 km/hour.

Very light rain likely to occur at isolated places on 13<sup>th</sup> & 14<sup>th</sup> March, 2024 Dry weather likely to prevail during rest of the period.

<u>Note</u>: Very light to light snowfall likely to occur at isolated places with height of 3200 m and above on 12<sup>th</sup> to 14<sup>th</sup> March, 2024.

# A.M.F.U-PANTNAGAR (UDHAM SINGH NAGAR AND NAINITAL DISTRICT)

During the period, sky conditions remained mainly clear to generally cloudy sky. As per the meteorological data of departmental observatory Pantnagar, dry weather prevailed during the period. Maximum temperature was between 25.5°C to 28.8°C and the departure from the normal was between 2°C and 1°C. The minimum temperature was between 7.4°C to 14.6°C and departure from the normal was between -3°C and 5°C. Relative humidity was between 33% and 90%. Average wind speed was between 2 km/hour to 14 km/hour.

Very light rain likely to occur at isolated places on 13<sup>th</sup> March, 2024 and at isolated places in Nainital district on 14<sup>th</sup> March, 2024. Dry weather likely to prevail during rest of the period.

### A.M.F.U-ROORKEE (HARIDWAR, HILLY AREAS OF DEHRADUN AND PAURI DISTRICTS)

During the period, sky conditions remained mainly clear to generally cloudy sky. As per the meteorological data of departmental observatory Dehradun, dry weather prevailed during the period. Maximum temperature was between 25.8°C to 28.0°C and the departure from the normal was between -1°C and 2°C. The minimum temperature was between 9.8°C to 15.1°C and departure from the normal was between -2°C and 4°C. Relative humidity was between 40% and 89%. Average wind speed was between 2 km/hour to 5 km/hour.

Very light rain likely to occur at a few places in Dehradun district & at isolated places in Pauri and Haridwar districts on 13<sup>th</sup> March, 2024 and at isolated places in Dehradun and Pauri districts on 14<sup>th</sup> March, 2024. Dry weather likely to prevail during rest of the period.

नोट: -पूर्वानुमान घटित होने की संभावना: Very likely (51-75%)

- दिनांक 12.03.2024 से 14.03.2024 को राज्य के उपरोक्त उल्लेखित जनपदों के **3**2**00** मीटर व उससे अधिक ऊँचाई वाले क्षेत्रों में बहुत हल्की से हल्की बर्फ़बारी होने की संभावना है ।

# Outlook for next two days: No large change.

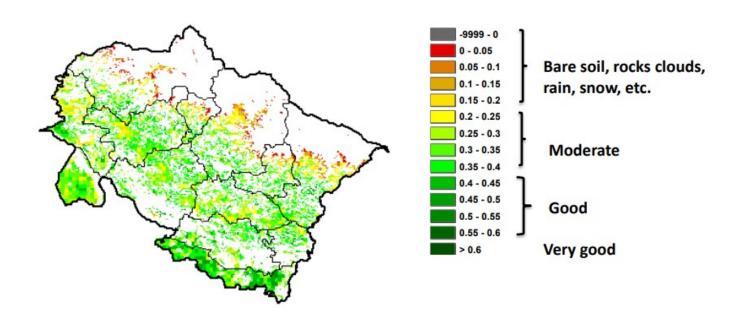
# **WARNING:**

जनपद / Districts	12.03.2024	13.03.2024	14.03.2024	15.03.2024	16.03.2024
उत्तरकाशी/ U‡tarkashi	कुछ नहीं ।	»कहीं−कहीं गर्जन के साथ आकाशीय बिजली चमकने / ओलावृष्टि	»कहीं–कहीं गर्जन के साथ आकाशीय बिजली चमकने	कुछ नहीं ।	कुछ नहीं ।

चमोली/	<del></del>	»कहीं−कहीं गर्जन के साथ आकाशीय	»कहीं−कहीं गर्जन के साथ	<del></del>	
Chamoli	कुछ नहीं ।	बिजली चमकने / ओलावृष्टि	आकाशीय बिजली चमकने	कुछ नहीं ।	कुछ नहीं ।
रुद्रप्रयाग/		»कहीं-कहीं गर्जन के साथ आकाशीय	»कहीं-कहीं गर्जन के साथ		
Rudrapraya	कुछ नहीं ।	अपहा-पहा गणन के ताथ आकाशाय बिजली चमकने/ ओलावृष्टि	अकाशीय बिजली चमकने	कुछ नहीं ।	कुछ नहीं ।
g		विजला चमकन/ जालावृष्टि	आकाशाय विजला चमकन		
टिहरी					~
गढ़वाल/	कुछ नहीं ।	»कहीं-कहीं गर्जन के साथ आकाशीय	»कहीं−कहीं गर्जन के साथ	कुछ नहीं ।	कुछ नहीं ।
Tehri	उन्द्र नहा ।	बिजली चमकने / ओलावृष्टि	आकाशीय बिजली चमकने	उन्द्र नहा ।	
Garhwal					
देहरादून/	कुछ नहीं ।	»कहीं-कहीं गर्जन के साथ आकाशीय	»कहीं-कहीं गर्जन के साथ	कुछ नहीं ।	
Dehradun	ुद्ध । स्ट्रा	बिजली चमकने / ओलावृष्टि	आकाशीय बिजली चमकने	35 161 1	कुछ नहीं।
पौड़ी गढ़वाल/	0.	»कहीं−कहीं गर्जन के साथ आकाशीय	»कहीं-कहीं गर्जन के साथ	0.	<b>~</b>
Pauri	कुछ नहीं ।	बिजली चमकने/ ओलावृष्टि	आकाशीय बिजली चमकने	कुछ नहीं ।	कुछ नहीं ।
Garhwal					
पिथौरागढ़/	कुछ नहीं ।	»कहीं-कहीं गर्जन के साथ आकाशीय	»कहीं-कहीं गर्जन के साथ	कुछ नहीं ।	<del></del>
Pithoragarh	3 - 1 - (4 - 1	बिजली चमकने/ ओलावृष्टि	आकाशीय बिजली चमकने	3 3, 16, 1	कुछ नहीं ।
बागेश्वर/	कुछ नहीं ।	»कहीं-कहीं गर्जन के साथ आकाशीय	»कहीं-कहीं गर्जन के साथ	कुछ नहीं ।	~~~
Bageshwar	ुद्ध । स्ट्रा	बिजली चमकने / ओलावृष्टि	आकाशीय बिजली चमकने	उन्हर्भ । हा ।	कुछ नहीं ।
अल्मोड़ा/	कुछ नहीं ।	»कहीं-कहीं गर्जन के साथ आकाशीय	»कहीं−कहीं गर्जन के साथ	कुछ नहीं ।	~
Almora	पुष्य गहा ।	बिजली चमकने / ओलावृष्टि	आकाशीय बिजली चमकने	पुष्य गहा ।	कुछ नहीं ।
चम्पावत/	कुछ नहीं ।	»कहीं-कहीं गर्जन के साथ आकाशीय	»कहीं−कहीं गर्जन के साथ	कुछ नहीं ।	
Champawat	कुछ गहा ।	बिजली चमकने / ओलावृष्टि	आकाशीय बिजली चमकने	भुष्य गहा ।	कुछ नहीं ।
नैनीताल/	<del></del>	»कहीं−कहीं गर्जन के साथ आकाशीय	»कहीं−कहीं गर्जन के साथ	<del></del>	_
Nainital	कुछ नहीं ।	बिजली चमकने / ओलावृष्टि	आकाशीय बिजली चमकने	कुछ नहीं ।	कुछ नहीं ।
उधमसिंह					
नगर/ <sup>`</sup>	कुछ नहीं ।	<mark>≫कहीं−कहीं गर्जन के साथ आकाशीय</mark>	कुछ नहीं ।	कुछ नहीं ।	कुछ नहीं ।
Udham	पुष्य गहा ।	बिजली चमकने	पुग्य गहा ।	पुष्य गहा ।	
Singh Nagar					
हरिद्वार/	कुछ नहीं ।	<mark>≫कहीं−कहीं गर्जन के साथ आकाशीय</mark>	कुछ नहीं ।	कुछ नहीं ।	~
Haridwar	पुष्य गहा	बिजली चमकने	पुग्च गहा ।	पुष्य गरु।	कुछ नहीं ।

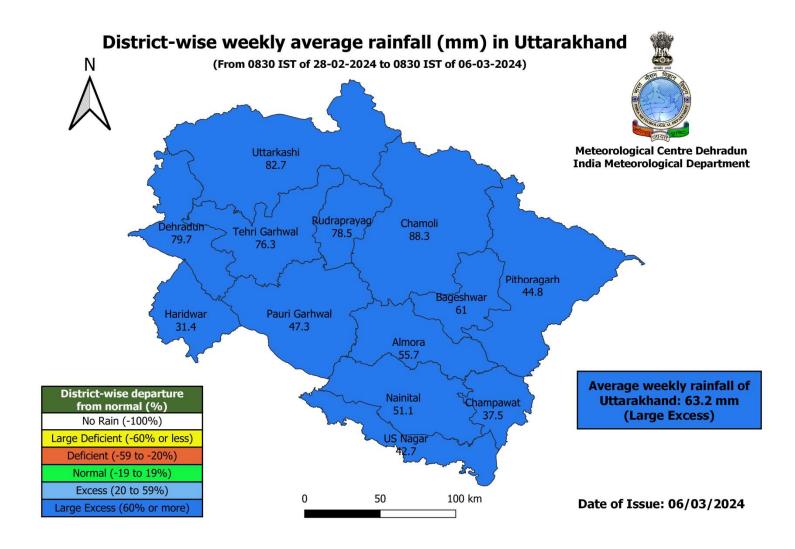
# NOAA/VIIRS/BLENDED NDVI Composite ending on Week no 09 (26.02.2024 to 03.03.2024) over Agricultural region

# Uttarakhand



Agricultural vigour is good over isolated places of the state.

Source: https://www.star.nesdis.noaa.gov



EXTENDED RANGE RAINFALL REPORT (08th March 21st March, 2024)							
Rainfall (Category) Tmax (Category) Tmin (Category)							
Week 1 (08.03.2024 to 14.03.2024)	Deficient	Normal	Below Normal				
Week 2 (15.03.2024 to 21.03.2024)	Deficient	Normal	Normal				

# PART –II: ZONAL AGRO-METEOROLOGICAL ADVISORY BASED ON THE ADVISORY ISSUED BY A.M.F.U. RANICHAURI, PANTNAGAR AND ROORKEE HILLY REGION: A.M.F.U. RANICHAURI

Crops/ Animal Husbandry	Crop stage	Agro Meteorological Advisory		
GENERAL ADVICE -		In view of weather forecast, farmers are advised to postpone irrigation and pesticide application. Install bee boxes in fruit orchards to enhance pollination. Use dry grass as mulch in vegetable crops and fruit orchards to conserve soil moisture and suppress weed growth.		
Peach/Plum/ Apricot	Flowering	Avoid pesticide application during flowering or full bloom. Install honey bee boxes in the orchards to enhance pollination.		
Potato	Sowing/ Emergence	Gap filling should be done, if necessary. Maintain proper drainage. Remove weeds from early sown potatoes.		
Onion	5-7 leaves/bulb initiation	Monitor the fields against pest infestation i.e. thrips and purple blotch disease. If thrips are observed, apply methyl demeton 25EC @1 ml/litre to control the incidence of thrips. (Weather should be clear).		
Ginger	Field preparation/ Sowing	Prepare fields for sowing of ginger. Incorporate fully decomposed FYM @ 3-5 t/ha. Select healthy rhizomes and treat it before sowing.		
Capsicum	Nursery sowing	Sowing should be done in nursery beds.		
Cucumber Nursery sowing/ Seedling		Sowing should be done in nursery beds. Planting should be done if seedlings are ready to transplanting.		
Tomato	Nursery sowing/ Seedling	Sowing should be done in nursery beds. Planting should be done if seedlings are ready to transplanting.		
Apple	Dormant/ Spur formation	Grafting should be completed in this month.		
Barnyard millet	Sowing/ Seedling	Keep continues the sowing of barnyard millet. Use FYM and fertilizers as per recommendation of soil testing.		
Mustard	Siliqua/ Maturity Harvest mature crops.			
Live stock -		For brucellosis disease calves aged 6-8 months should be vaccinated.		

### A.M.F.U-PANTNAGAR (UDHAM SINGH NAGAR AND NAINITAL DISTRICT)

A.M.F.O-I ANTINAGAR (CDIIAM SINGII NAGAR AND NAIMTAE DISTRICT)				
Crops/ Animal Husbandry	Crop stage	Agro Meteorological Advisory		
GENERAL ADVICE	-	The weather would remain dry so appropriate irrigation and chemical applications measures should be taken up at critical stages of the crop.		
Chickpea/Lentil	Flowering/pod formation	<u>U.S.Nagar</u> Regular monitoring of the crop is important and chemical application against pesticide/disease should be done while irrigation should be applied at pod initiation stage.		
Lentil	Flowering/pod formation	Nainital Irrigation application should be done at the time of flowering/pod initiation and chemical application should be done in case of disease/pest occurrence.		
Radish/carrot	Sowing	Nainital Sowing of european varieties can be done in the hilly areas.		
Sugarcane	Sowing/ vegetative	<u>U.S.Nagar</u> Spring sugarcane planting should be done with well treated and resistant varieties of ratoons or seeds and irrigation application as per requirement should be done in autumn planted sugarcane.		
Cluster bean	Sowing	U.S.Nagar		

		Sowing of recommended varieties should be done.			
Rai	pod formation/ maturity	<u>U.S.Nagar</u> Irrigation should be applied at pod formation stage and chemical application should be done against pest/diseases particularly for pod borer. Harvesting of mature pods should be done and they should be dried well before threshing.			
FRENCH BEAN Sowing		Nainital Sowing should be done and the fresh germinated seedlings should be irrigated as required.  U.S.Nagar Sowing of french bean should be done and irrigation should applied to the young seedlings.			
Tomato/chilli	Fruit formation/ maturity	<u>U.S.Nagar</u> Harvest mature crop and apply irrigation to the flowering/fruiting plants.			
Rapeseed (Lahi/Ghariya) and Vallow Mustard  Flowering  Maturity/ The mature crop should be harvested and dried well before thre		Nainital The mature crop should be harvested and dried well before threshing while appropriate irrigation measures should be taken at pod development stage.			
Vegetable Pea Flowering/pod formation		U.S.Nagar Regular monitoring of the crop is important and chemical application against pesticide/disease should be done while irrigation should be applied at pod initiation stage.  Nainital Irrigation application should be done at the time of flowering/pod initiation and chemical application should be done in case of disease/pest occurrence.			
Fodder maize	Sowing	<u>U.S.Nagar</u> Sowing of recommended fodder maize varieties should be done.			
	Vegetative/ flowering	Nainital The irrigation application should be scheduled as per the requirement and appropriate weed management measures should be taken against major			
Wheat	Flowering/ panicle initiation	competitive weeds. <u>U.S.Nagar</u> Irrigation application should be done as per requirement and chemical application against weeds, disease/pests should be scheduled.			
Animal	Cow/Buffalo	Take measures to control lice/lice, colonies and flies in animals. For adequate availability of green fodder, sow jowar, maize, etc.			
Animai Husbandry	Sheep	Provide additional balanced diet to female and male sheep used for breeding.			
	Sheep/goats	Get sheep/goats vaccinated to protect them against smallpox.			

## A.M.F.U-ROORKEE (HARIDWAR, HILLY AREAS OF DEHRADUN AND PAURI DISTRICTS)

MI.F.U-ROOKKEE (HARIDWAR, HILLI AREAS OF DEHRADUN AND LAURI DISTRICTS)				
Crops/ Animal Husbandry Crop stage		Agro Meteorological Advisory		
GENERAL ADVICE	-	Farmers are advised to do farm activities freely and irrigate crop on the basis of crop requirement.		
SUGARCANE Sowing		• Due to weather may clear and dry during coming days, farmer brothers can restart their sowing practice.		
WHEAT/ BARLEY	Tillering/ flowering	• Due to weather may clear and dry during coming days, so farmer brothers are advised to irrigate crop on the basis of crop requirement.		
MUSTARD/LAHI/ Flowering/Pod RAI formation		<ul> <li>Due to weather may clear and dry during coming days, so farmer brothers are advised to irrigate crop on the basis of crop requirement.</li> <li>Inspect regularly for attack of pest/diseases.</li> </ul>		
CHICKPEA / PEA/ LENTIL Flowering/Pod formation		• Due to weather may clear and dry during coming days, so farmer brothers are advised to irrigate crop on the basis of crop requirement.		
POULTRY - • Keep birds inside poultry house during adverse weather conditi				

		Change litter regularly to prevent infections.
	COW	Provide green fodder with dry feeds.
Animal		• Due to weather may clear and dry during coming days, Farmer brothers can field graze to animals during day time
Husbandry	GOAT/SHEEP	<ul> <li>Provide nutritious feed for reproduction.</li> <li>Do tagging among lambs.</li> <li>Vaccinate goat/sheep against chicken pox disease.</li> </ul>

(बिक्रम सिंह) हेड /वैज्ञानिक 'ऍफ़' मौसम विज्ञान केंद्र, देहरादून

### LEGENDS:

<u>LEGENDS:</u>				
WARNING (TAKE ACTION)	WATCH (BE UPDATED)			
ALERT (BE PREPARED)	NO WARNING (NO ACTION)			

RAINFALL INTENSITY / वर्षा की तीवता		RAINFALL DISTRIBUTION / वर्षा का वितरण		PROBABILITY OF OCCURRENCE / घटित होने की संभावना		SPELL OF RAINFALL / वर्षा का दौर	
VERY LIGHT RAIN / बहुत हल्की वर्षा	TRACE - 2.4 mm	ISOLATED PLACES / कहीं-कहीं	ISOLATED (UPTO 25% AREA)	UNLIKELY	Up to 25%	INTENSE SPELL	20-30
LIGHT RAIN / हल्की वर्षा	2.5- 15.5 mm	FEW PLACES / कुछ जगह	SCATTERED (BETWEEN 25-50% AREA)	LIKELY	26 to 50%	/ तीब दौर mm/	mm/hour
MODERATE RAIN / मध्यम वर्षा	15.6 – 64.4 mm	MANY PLACES /	FAIRLY WIDE SPREAD (BETWEEN 50-75% AREA)	VERY LIKELY	51 to 75%	VERY INTENSE SPELL / अति तीब	30-50
HEAVY RAIN / आरी वर्षा	64.5- 115.5 mm	अनेक जगह				दौर	mm/hour
VERY HEAVY RAIN / बहुत भारी वर्षा	115.6- 204.4 mm	MOST PLACES / अधिकांश	WIDE SPREAD (MORE THAN	************	AL 759/	EXTREMELY INTENSE SPELL	50-100
EXTREMELY HEAVY RAIN / अत्यंतभारी वर्षा	> 204.4 mm	जगह	75% AREA)	MOST LIKELY	Above 75%	/ अत्यंत तीव दौर	mm/hour

<sup>♦</sup> Heavy snow: 64.5 – 115.5 cm (in depth) & Very heavy snow: 115.6 – 204.4 cm (in depth). (As per the new guidelines w.e.f January 1, 2016). ♦ Forecast and Warning for a particular day is valid from 0830 hours IST of day till 0830 hours IST of next day.