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विषय : दिनाकं . 😘 🔍 🔼 की समाचार की कतरन ( News Clippings ) प्रस्तुत करने के सम्बन्ध में ।

मानसून/ बाढ़ सम्बन्धी सनाचारों की कतरन ( News Clippings ) अवलोकन हेतु प्रस्तुत हैं :

सलंबन : उपरोक्तानुसार

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Water level in Triveni Sangama at Bhagamandala, Kodagu, surges following heavy showers in the region in the last few days. DH PHOTO

### Cauvery river swells as rain pounds Kodagu

MADIKERI/MANGALURU/SHIV-AMOGGA/HOSAPETE, DHNS

The water levels in rivers Cauvery and Lakshmanathirtha have shot up following heavy overnight showers in Kodagu.

Torrential rain in the last few days has upped the water level at Triveni Sangama in Bhagamandala, the confluence of Cauvery, Kannike and a mythical river Suivoti

cal river Sujyoti.

Heavy showers in Talacauvery, Napoklu and surrounding areas have triggered flood fears in Siddapur and Karadigodu regions.

Lakshmanathirtha river has swollen following unrelenting showers in Brahmagiri Irpu hills, wheretheriver originates.

Meanwhile the intensity of rain has come down in coastal districts. Overcast conditions prevailed over the region throughout the day. However, Kundapur taluk continued to receive heavy rains with Kirimanjeshwar witnessing 18 cm of rain.

A compound wall of the government primary school at Manakulikeri in Bhatkal, Uttara Kannada, caved in due to heavy rains. Many parts of Chikkamagaluru also experienced good rainfall on Sunday.

Bhadra reservoir in Shivamogga district is just a foot short of reaching its full reservoir level. Water level in the dam on Sunday rose to 185.10 feet. Parts of Chitradurga and Davangere district also saw moderate spells of rain through the day.

### Damage in Hampi

The Yediru Basavanna Mantapa in Unesco world heritage site Hampi collapsed due to the persistent wet weather.

The mantapa was weakened

### Widespread rainfall predicted

BENGALURU, DHNS: Overcast conditions-which has caused maximum temperatures to drop by three to four degrees than normal in parts of Karnataka, is forecast for next week with widespread to fairly widespread rainfall. South Interior Karnataka region has received three times the normal rainfall till September 12, with Karnataka receiving twice the normal rainfall during the period.

In the month, 22 of the 30 districts have recorded 'Large Excess rainfall' - which is 60% above the normal. Chitraduraga and Davanagere districts have received 400% of the normal rainfall. In contrast, Bidar and Yadgir districts have received deficit rainfall during the month.

due to the relentless showers in the past few days. A portion of mantapa had collapsed last month, P Kalimuttu, deputy superintendent, ASI Hampi Circle, told *DH*.

Hosapete town and parts of taluk have been receiving light showers since Saturday night.

There's no let-up in rain for coastal districts and Malnad. The India Meteorological Department has declared orange alert for seven districts, predicting heavy rain for Monday.

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Torrential showers in the recent past bring back the green cover on Joaladarashi Gudda, a hillock which lies in the mineral-rich Ballari-Hosapete-Sandur sector, near Hosapete. DH PHOTO

## Bhadra dam reaches full capacity for 3rd year in a row

SHIVAMOGGA/HUBBALLI, DHNS

he Bhadra damnear Lakkavalli in Tarikere taluk of Chikkamagaluru has reached the full reservoir level (186 feet) for the third consecutive year, on Monday following copious rain in its catchment.

On Monday, 1,751 cusecs of water was discharged into the river by lifting all four crest gates by three inches. Inflow into the dam clocked 8,453 during the day.

The reservoir holds a gross storage of 71.53 tmcft. Of which, 13.832 tmcft is a dead storage while 7 tmcft of water is marked for drinking water projects and for industrial use. The dam irrigates about

1,82,818 hectares of land in Shivamogga, Chikkamagaluru and Davangere districts.

#### Rain subsides

On Monday, parts of Shivamogga received moderate rain. Thirthahalli saw 1.92 cm of rain while Agumbe recorded 1.8 cm.

Hiriyur, Molkalmur and Dharampur in Chitradurga also experienced spells of light to moderate rains.

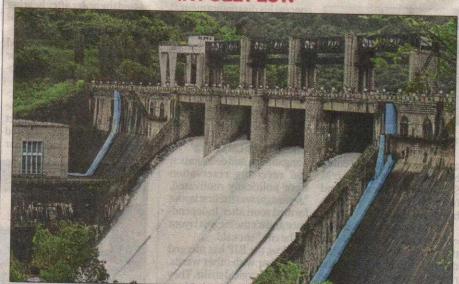
Meanwhile, rain receded in coastal districts but over-cast conditions continued to prevail over the region. However, there was no let-up in rain in Kundapur taluk, which received an average rainfall of 4.8 cm in the last 24 hours (ending 8 am on Monday).

Mangaluru taluk received an average of 3.7 cm rain on Monday. After pounding Kodagu in the past three days, rain gave some respite to the hilly district on Monday.

Belagavi, Hubballi and Sirsi in Uttara Kannada witnessed intermittent light showers through the day. Acres of agriculture fields are inundated following a breach in Ayyanakere and a check dam near Tumminakatte in Ranebennurtaluk.

Two houses weakened by the persistent wet weather collapsed in Kampli, Ballari district. Relentless showers have damaged chilli crop on vast tracts in Suggenahalli and Sriramrangapur in Kampli taluk.

### IN FULL FLOW



Water was released from the Bhadra Dam in Shivamogga district on Monday following heavy rain in the catchment areas. DH PHOTO

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# Monsoon veers off forecas

Several areas show divergence from the rain distribution predicted by IMD, highlighting the challenges and limitations of forecasting weather

#### Jayashree Nandi

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NEW DELHI: The Southwest monsoon stuck to the theme of 2020 — deviating significantly from the geographical distribution forecast by India Meteorological Department (IMD) in June.

Peninsular India has recorded 26.3% excess rain this monsoon since June 1 and 78.6% excess rain in September (till September 14). It is expecting more rain due to a well-marked low-pressure area that has developed over the Bay of Bengal.

Northwest India has seen 13.5% lower rainfall since June 1—this isn't a deficiency though because rainfall that is between 19% and +19% of the long period average is termed normal. However, there are parts within this region that have done worse — west Uttar Pradesh has seen 30% lower rains; Himachal Pradesh, 18% lower; Uttarakhand, 15% lower; Jammu and Kashmir 27% lower; and Haryana, Chandigarh and Delhi, 6% lower. Rainfall that is between -20% and -59% of the average is termed deficient. West Rajasthan, also

in the same region has seen a 30% surplus. Scientists said the north-western region is unlikely to record heavy rain between now and the end of the monsoon.

'IMD in its long-range forecast in June predicted above normal monsoon rain over northwest India at 107% of the average, and normal rains over peninsular India at about 102% of long period average (LPA; monsoon average for 50 years), central India (103%), and east and northeast India (96%). Central India has recorded 14.5% excess rain so far (it is still in the normal category, though).

This monsoon has been characterised by several unique features, such as no low-pressure areas forming in July, resulting in the monsoon trough (line of low pressure) oscillating to the Himalayan foothills very frequently bringing rains mainly to the peninsular region and northeast India in July while leaving northwest India dry.

Five low pressure systems formed in August which brought excess rains to the central and western region but not much to the north-western region again.

"Long range forecasts have a 9% error margin. They are only indicative because they are forecast several days in advance," said M Mohapatra, director general, IMD, explaining the divergence

ing the divergence.
"In the first half, particularly



Monsoon clouds hover in the sky above Raisina Hill in the national capital.

up to July northwest India had a very large rain deficiency. Low pressure areas didn't form and a couple that formed did not move up to northwest India. We are not expecting any improvement in rain deficiency over northwest India now because we are heading towards monsoon withdrawal. The long-range forecast doesn't capture these peculiar patterns that can develop during the monsoon," said DS Pai, senior scientist, IMD Pune.

The divergence highlights the challenge of forecasting weather, one expert said.

"The monsoon models usually consider parameters such as La Nina or El Nino (cold and warm currents in the southern

Pacific) and other weather parameters which may develop during the course of the monsoon. But there are years when the complete forecast goes wrong. The models also consider the impact of climate change. One of the possible impacts of climate change is the path of the low-pressure systems. They are moving west wards but are not impacting the north-western region. Forecasting geographic distribution is a bit tricky," said Mahesh Pala-wat, vice president, climate and meteorology, Skymet Weather, a private forecaster.

Both 2018 and 2019 also saw divergences. The long-range forecast for monsoon 2019 was 96% of LPA with a model error

of ± 4%. The actual recorded was 110% of I forecasts issued in May son rainfall over no India, Central India, n India and South Penins 94%, 100%, 91% and 97 LPA respectively all wire errors of ± 8%. But the rainfall recorded owergions were 98%, 12 and 116% of the LPA tively. Central India and sular India didn't meet cast. In 2018, the forenortheast India was only 76% rain was recorded.

Normally, the withor monsoon is supposed from September 17 wh begin to reduce accountry until complet drawing on October 1

drawing on October 1
But this year,
extended range foreca
extensive and head
along the west coast
September 11 and 24
until October 1 over

parts of central India "We haven't got an tion as yet of monso drawal from northw Another low-pressur likely to develop over Bengal around Augu we need to assess th further to be certain. withdrawal can be once anti-cyclonic established and moist ces significantly region," said K Sathi I national weather fo centre.