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Title: WHY THE WORLD'S WETTEST PLACE GETS THIRSTY

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Residents of Mawsynram, a village in Meghalaya which gets a record-breaking 11,861 mm of rain a year, are used to clouds floating right into their homes. But once the monsoon is over, they have to queue up at taps and fight for water

It was the kind of rain you wouldn't see anywhere else.

We could barely see four feet ahead of us. We could touch the clouds, smell the clouds, taste the clouds."

We're sitting in a government building in the heart of Shillong but Social Welfare director HM Shangpliang's thoughts are elsewhere. Sixty-five kilometres away, to be precise, in the tiny rain-swept village of Mawsynram, where he grew up. It's a place where residents use grass to soften the sound of the deafening rain on their roofs, dry their drenched clothes on chulhas as often as thrice a day, and won't bat an eye when a mass of clouds floats right into their homes.

They follow us too, those clouds, as we drive up the winding, pot-holed road to Mawsynram on a rainy afternoon. Nestled in Meghalaya's East Khasi Hills, the cluster of about 1,000 homes is the custodian of a rather grand title. It holds the Guinness Record for "the wettest place on earth", having nudged long-time champion Cherrapunji from the podium. Around June, when most of India begins to look forward to the first weak drizzles, Mawsynram locals are already well into their monsoon. The average annual rainfall is 467 inches (11,861mm), according to the Guinness website. And this year, the rains began even earlier in April.

As we move closer to Mawsynram, the gentler, intermittent showers that this Mumbai-based reporter had begun getting used to since arriving in Shillong, soon give way to an insistent, noisy downpour. It makes car chatter difficult, drops visibility to around five feet and gets the driver grumbling about how the government "needs to fix these damn roads already".

In Mawsynram, however, this is a "good weather" day. Less than an hour later, when we arrive at the village's fringe, the rain has paused. It's bazaar day, and vendors from Shillong and the surrounding region are fast setting up their stalls. "Slap khyndai sngi. It means the `nine-day rain' in Khasi," says the appropriately named Barisha, as she restocks the shelves at her kirana store. She's seen 67 monsoons, and her grandson, who's translating, says she is very tired of them. Mawsynram experienced the slap khyndai sngi recently. Terms for sevenday and 12-day rain too find their way into casual conversation on a regular basis. "Everything is damp inside the house, all the time. And so noisy. My head hurts," Barisha adds, grabbing her forehead for effect, and summarily shooing us out so she can get back to her work.

For the kids of Mawsynram, though, the monsoons mean two kinds of holidays. "There are times when it has been raining a great deal for a week or more at a stretch so we decide to give the students a couple of days off," says former village-headman and now grammar teacher RW Rapsang, who teaches at the Mawsynram HSC School. "And then, there are times when the rain stops for a bit, and we want the kids to enjoy the good weather. So, too much rain -holiday. No rain -also holiday!" Classes are cancelled on days when the sound of deafening rain on the tin roof makes it impossible to hear the teacher. "So you can say this is quite a happy place for students!" Rapsang adds, laughing.

Rapsang, who's in his fifties, grew up in Mawsynram. Over rice cakes and chai, he talks about growing up in a home where the kids went about barefoot in the rains because plastic slippers were too expensive to afford. "We say here that when the leaves start turning inside out, the monsoons are over."

He is referring to the time when the kyrtih or wind begins blowing from east to west, and makes the leaves blow in the opposite direction. "Our elders would ask us to observe if we could see the white inside of the leaves. Once we could, we knew dry weather was on its way ."

A rare spell of good weather sends local optimism off the charts. An open-air congregation planned by a local church had to be moved inside a building when the downpour knocked the pandal down. "They rebuilt it, and

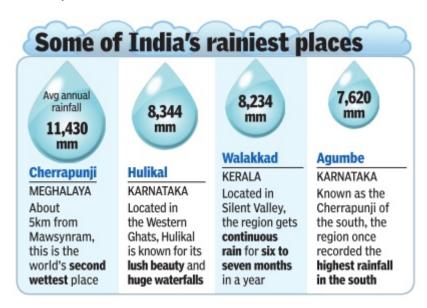
that same night, it was destroyed again," says assistant headmaster PW Shangpliang, tutting. "What they were thinking, I don't know. The rain hits the ground almost horizontally here. That and the winds lash out at houses from the sides."

Houses used to be built "more sensibly" here, he says. The architecture involved rocks weighing down the roof, resting at the sides of the limestone structure. Today, most homes are made of concrete, with tin roofs. A couple have the 'knup', the turtle shell-shaped rain shield of bamboo and grass, propped up outside. They're mostly used by farmers who work in the fields around Mawsynram.

Aside from potatoes and turnips that a handful of the residents cultivate for their kitchens, produce is sourced from outside. The soil in the limestone plateau doesn't absorb water. "There is barely any forest cover, so a lot of erosion of top soil happens. All of it flows down into Bangladesh next door," says village headman Moonstar Marbaniang, laughing. The irony is that like its neighbour Cherrapunji (or `Sohra' as locals call it), the "wettest place on earth" grapples with an acute water shortage after monsoon ends around October. The few reservoirs in the area run dry in winter and residents get water supply for just two hours in the morning, and two in the evening. Former headman Rapsang recalls how most of his earlier work load involved placating residents engaged in battles at the water-taps. "We very much need an initiative that solves our water crisis. Mawsynram is the wettest desert," he says. "Sohra next door has faced a similar problem."

Because it is better-known and hence, gets more tourism, Cherrapunji's water crisis is less acute today. The Sohra Eco-Restoration Project was launched in 2010, with the support of the Planning Commission. Trees were planted, locals got involved in the campaign and gradually, Cherrapunji's forest cover has increased considerably. "Our plan is to gradually expand the project to Mawsynram and other places in the Khasi Hills," says Barkos Warjri, who is among those spearheading the initiative.

While resident Betty Mardaniang, 33, hopes her hometown's water woes get resolved soon, she is unsure if she wants to wait around until that happens. "Do you know how long it rained last week?" she mutters, as we traipse around the village, making the most of a dry afternoon. "My god, I can still hear the noise in my head. I want to move to Shillong as soon as I can. What's the Mumbai rain like?" She listens, unimpressed, to this reporter's descriptions of floods and overflowing drains. "Hmm, that is bad. No, our rains definitely don't have any of that."



Slap khyndai sngi is 9-day rain in Khasi. Terms for 7-day and 12-day-rain too find their way into casual conversation



their Maximum Water Level

mer BWSSB Chief Engineer

Thippeswamy informs, once

the water flows over the MWL,

it gets onto the roads and low-

lying residential areas. "Houses

should be built above the

Roads could be redesigned

in such a way that the stormwa-

groundwater where the rain

falls instead of flooding the

area. An urban infrastructure

expert contends that this will

boost groundwater level in the

city centre particularly, since

Before every

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That explains why

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are publicly

contractors. Big

Waterlogged Roads

POINT BLANK

Swales to retain water. prevent flooding

tormwater drains are inadequate to take the heavy inflow of rainwater beyond a particular intensity. But why let all that water to get out of the area. Why not dig swales along roads to retain/impound the water and also recharge the groundwater?

Simply put, swales are ditches with flat bottoms that collect water. They are usually dug out on the outer contours of a particular landscape to hold and sink the water. This helps hydrate the soil, while preventing water from just running down, often dragging soil with it and filling stormwater drains with silt.

Reasons for flooding

- ➤ Change in land use pattern
- ➤ Inappropriate design approach, construction methodology for structures and maintenance procedures adopted in newly formed layouts
- ➤ Development of land in tank bed areas.
- ➤ Modification of original drain alignment during formation
- Non-existence of service roads on either side for laying service lines and routine maintenance.
- ➤ Indiscriminate dumping of debris and solid wastes into





Swales to retain rainwater.



stormwater and to minimize flooding in critical flood prone areas.

To ensure free flow of

Dense vegetation growth

➤ Encroachment / Modifi-

Lack of access for rou-

Services lines laid in-

location of water bodies

and across storm water

Why should SWDs be

➤ To minimise flood

runoff.

➤ Sewage flow in

stormwater drains

➤ Blockage of inlet/outlet

➤ Water bodies not func-

tioning as retention basins Sewer lines laid inside

side and across drains

cation of original drain

tine maintenance

alignment

- To improve the health and environmental sanitation conditions in the surrounding vicinity of SWDs and water bodies.
- To protect the existing waterways and water bodies from environmental degradation.
- To improve groundwater level by holding rain water in water bodies.
- ➤ To provide alternative water source in case of emergencies by rainwater harvesting.

Benefits from remodeling

- A properly designed drainage system will ensure reduction in flood incidences which in turn reduces flood damage and traffic hold ups.
- ➤ A properly maintained drainage system with controls on sewage connections and solid waste dumping will reduce pollution of water bodies and groundwater.
- > Proper maintenance of facilities such as rainwater detention ponds and retention basins will attenuate the peak runoffs and recharge groundwater.
- ➤ Proper maintenance of localised sewage treatment plants and using the treated sewage will reduce the stress on fresh

3D terrain maps to predict urban floods

ndian Institute of Science (IISc) scientists are developing high resolution 3D terrain maps to visualise how water flows when it rains, triggering floods on roads and low-lying areas in cities. The project, which uses Geographic Informaiton Systems (GIS), could eventually help civic agencies smartly redesign their drainage infrastructure.

Equipped with real-time data, the 3D terrain maps are also expected to forecast floods, aid preparation of action plans to mitigate floods and make changes in city planning. The BBMP and the Karnataka State Natural Disaster Monitoring Centre are also part of this collaborative project funded by the Information Technology Research Academy.

Floored by floods in a flash

Is stop-gap desilting the only way to free the city's roads of perennial waterlogging every time it rains? As long-term solutions such as a comprehensive redesign of the stormwater drains take the backseat, the desilting contractors thrive.

rapped in peak-hour city centre traffic, Jayanth Rao dreaded that impending drive back home. The drizzle had quickly morphed into a downpour, engulfing the roads ahead in vast sheets of water. Rao knew the water, already knee-deep, wouldn't drain out in a hurry. As dusk dawned on Bengaluru, and the streetlights went dark in the rains, the dreaded nightmare unfurled its fury.

The big showers are just round the corner. But the recent rains have already exposed the city's acute inability to quickly drain out the water

from its roads and low-lying areas aplenty. As motorists struggled to negotiate the waterlogged streets, the civic agencies fumbled for excuses. Out they came with their standard statements: Desilting of stormwater drains, under way.

Desilting, a scam

Stop-gap desilting is a scam, assert people well-informed about the contract system in the BBMP. "Before every monsoon, a crisis situation is created to aid the desilting contractors. Big money is hijacked," reveals an insider preferring anonymity. That explains why



the civic agencies are publicly perceived as totally unprepared to deal with the rains. The contracts are then dished out in haste.

How long should Bengalureans endure this stop-gap crisis

Kino theatre

Underpass

on Sankey Road

management? Are there no long-term solutions at all? Indeed they are. But the one obvious option -- Remodelling km of stormwater drains-has never been a priority.

DH PHOTOS: B K JANARDHAN

and developing the entire 842

Chief Minister Siddaramaly saturated during rains as iah's recent statement on the city's drainage system is indica-(MWL) gets breached. As fortive of the pathetic state: Only 115 of the 842 km have been desilted and restored with concrete retaining walls. The Palike is now working on an additional 25 km at a cost of MWL. But that requires prop-Rs 200 crore. Restoring the entire network would require er planning," he points out. over Rs 4,000 crore at Rs 7 crore a kilometre. ter actually recharges the

Drain remodelling

But the remodelling of the drains has been in the pipeline for 11 long years. STUP Consultants Private Limited had completed a survey of the drains way back in August 2005. The entire project to remodel drains along the four major valleys of Koramangala, Challaghatta, Vrishabhavathi and Hebbal was to be completed in the next 18 months.

It is clear that the delay has substantially escalated the costs. Besides, massive encroachments of the buffer on either side of the drains and unregulated inflow of raw sewage into the SWDs have played havoc with the entire network. The natural flow of stormwater from road-side shoulder drains to secondary and tertiary drains is now severely hampered. Result: Roads flood in a flash!

Bengaluru's very apparent lack of rain preparedness raises a critical question: Can it handle a flood like what Chennai experienced last year? Analysing the city's rainfall data over several years, the Karnataka State Natural Disaster Monitoring Centre is not convinced. The rainwater runoff (water that drains away) has doubled over the years. That has raised the flooding

Flood vulnerability

One analysis by the Centre shows that 20 mm rainfall for an hour could trigger flooding in many parts of Bengaluru. The capacity of SWDs is quick-

the built-up area is more. "To

ensure this, a road by road as-

sessment of the SWDs is nec-

essary," notes the expert, V Ravichandar. **Cylinderical SWDs**

In the city's central business district, roads being upgraded under TenderSURE have cylindrical underground SWDs. Explains Ravichandar: "These drains of 600mm diameter have chambers at every 30 metre. Through these chambers, stormwater enters. Since the drains are round, there is less friction and can carry silt to a great distance. Traditional drains have flat surface, which needs regular desilting."

The TenderSURE roads are designed to drain out the storm water within 20-25 minutes. However, in traditional roads without the required sloping, water collects in cavities in the poorly laid asphalt. These quickly become potholes, endangering motorist lives. This cycle repeats year after year. Concerned citizens of this city now seek a decisive shift in policv, a move away from stop-gap drainage solutions that aid only contractors to a more robust

Rasheed Kappan

lost flood-prone spots in city

- Doddanekkundi underpass
- 2 KR Puram underpass
- 3 DJ Halli
- Mear passport office, Koramangala
- 6 Ejipura
- 6 Peenya 2nd Stage
- 🔁 14th Main, Bilekahalli
- 8 Anil Kumble Circle
- 9 Shivananda Circle 🔟 KP Agrahara, Magadi Road

(Source: Complaints to BBMP

Waterlogging: A city-wide problem of plenty

rain to expose the city's poor civic infrastructure. A few important junctions and lowlying areas are especially prone • to frequent inundation, clogged roads and drains among others.

Traders on Avenue Road take additional precautions during downpours as the lane turns into a dirty cesspool with sewage water oozing out of damaged manholes and shoulder drains. When it rained last on June 4, as many as 15 to 20 • shops were inundated. Commercial activities came to a standstill for hours as the road

t takes only a few spells of turned virtually inaccessible by customers.

> AV Krishnamurthy, a senior citizen who runs Kusum General Stores on the busy Avenue Road complains that waterlogging has become a recurring problem here. He attributed the problem to non-clearance of silt from the shoulder drains and negligent attitude of the BBMP.

> Traders are unanimous in their grouse that the drainage in this area is very old and has not been upgraded for more than 20 years. The problem of waterlog-

ging is city-wide. For instance,

224 locations vulnerable

BBMP officials say they have identified 224 vulnerable points prone to flooding and waterlogging in the Palike limits. BBMP Chief Engineer (Stormwater Drain), Siddegowda informs that out of the 224, desilting of primary and secondary drains have been completed in 141 places. Work in the remaining places is to be completed by the month-end.

at the Doddanekkundi underpass, flooding during rains gives nightmares to the motorists and residents alike. Every time there is a downpour, the rainwater stands at

three feet. This slows down vehicular movement, triggering

According to Clement C Jayakumar, a member of Whitefield Rising (WR), the

unbearable traffic chaos.

derpass in recent years. He explains that there is no stormwater drain (SWD) along the neighbouring Alpine Eco Road and hence, rainwater gets accumulated at the underpass. Besides, says Jayakumar, the

frequency of waterlogging has

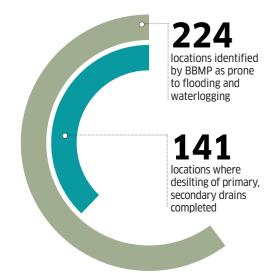
increased manifold at the un-

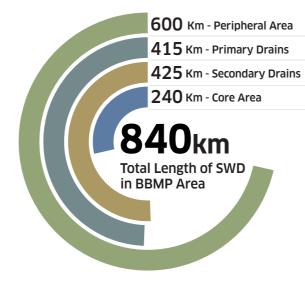
sand and debris on Outer Ring Road (ORR) at Doddanekkundi have not been cleaned from March this year due to ownership issues between the Bangalore Development Authority (BDA) and the BBMP. During rains, debris get washed away into the drains, triggering floods on roads in the vicinity.

derpass in KR Puram that leads to Hoodi side. The Palike control room staff informs that they receive plenty of complaints of choking from this underpass. A traffic police inspector attached to the KR Puram station explains that the drains connected to the underpass are filled with muck. Since it is not cleared well before the rains. the underpass tends to get waterlogged easily. However, some desilting action is now underway. But whether it will withstand a heavier downpour is another question. Niveditha Jain

Similar issues plague the un-

Drainage network at a glance





SAHITHI C Student, Marathahalli

Pedestrians and motorists have a tough time going by Marathahalli bridge area as the footpaths get inundated and drains overflow. The roads are also in an equally poor shape and need to be upgraded immediately



PREETHAM Y S Trader, Church Street

There is no proper

drainage network here. When it rains, the roads gets clogged. The water level stood at about two feet during the recent rains in the locality The condition is especial ly pathetic at certain

C H AKSHITHA Pvt firm executive, MG Road

l shifted from Hyderabad to Bengaluru a few years back. The drainage system and roads there are in better condition than here, and can withstand rains. Regular cleaning of drains is the



NANDA KUMAR Resident, Vignana Nagar Extension

Kaggadasapura Main Road and the surroundings get waterlogged during rains. In the recent days, however, the Palike has been undertaking desilting of drains and other related works, which is a good sign.



राजस्थान पत्रिका

मानसून: जिसका है सबको इंतजार, आषाढ़ 21 जून से, आसमान पर टकटकी

होते हैं। स्तान के ores of land बारह महीनों को 108 % इनमें बांत गया है। इनमें से सबसे अहम होते हैं बरखा बहार यानी मानसन के महोने। आसमान से बांवें के रूप में बरसने वाली 'मेहरबानी' जप-जप को 113% प्रभाषित करती है। 21 जून 2800 SECVE से आवाद्र का महीना हुए होता। तपती था और करोही देशवासियों को टकटकी आसमान को ओर लगे है। सबको है बादल और बूदों का इंतजार। देश के दक्खन में तो बदरा बूंदों के बाग चला रहे हैं। उत्तर भारत को आस है बृंदों से बरसने वाली बरकत की। पिछले दो साल से लगातर सुखे के हालात से देश 'कुन्हला' सा गया है। इस बार मौसम विभाग ने अच्छे मानसून को भविष्यवाणी को है। अच्छी वर्ष से खोतों को मिलेगी 'संजीवनी' और प्यासे कंठ को 'असत'। बाजर भी इन्हीं 'मुनको' को बंदों की बाट जोड़ का है। फिर छिद्ये है बात, बदरा और बृंदों की, क्यों न हम भी भीग जाएं इस बार...

फिर छिडी बात

934 n, efcore, git, aureur

'स्था स्थाः गुज्जा, महत्त्वहु, जोत्र, महत्त्वोत्त, वर्गान्यहु, जीवन ी चरित किया गय है। केर की 33 करेंड़ जनका इसमें प्रचलित के उस उसमें की अबत की किया केवल चलाएं में उस सकते हैं। मूर्व not other from parents to some other 107 eferrando : eferras dos antes, ata के कार में। सामान के बहुए तरह का चैत्र .लानी ना डफैक्ट ाव समाते हैं। हमारे देश के 55 मीमाई कोटी में मिनवाई मानिए का निर्मा है। प्रमान महामानक में रही सम्मानकों के कारण वर्ष की समाम का ताल है। वीक्सका हमार देव दुनिष भा में खावारों का सकत INDE

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ही पानी डोघ बक्षिण के जलहोती में, 09% क्ष पान स्थ ज़क्र प

10% वस बुवई हुई है खरफ क बर पिछले वर्ष की तुलना में कम बुवाई हुई है खरीफ की इस

त्वार सिंग्स् के अवस्थात्त तरे होने का राज्य कर रही है। लेकिन बानकुन इस करकारी कालावर का इंटालर की करता। चल पढ़ा है, लेकिन अपनी है चान के कुछ मेश जुड़ जुज़ाब आ मौज़ा मिशनों ने महाजु के विज्ञानों को जब्दा है है कि में अपने जोर्ज में कुछों में लेड़ बिताब करें। होसन क्लोरहानी में निजाहतक नहीं है। विकास राजांकर से जात के बामार्थर माम्बर्ग के काल दुखे के जाने की भूकतों कर करता में इसझान का टीर सुरू हो पुन्न है। लेकिन देव के अन्य हैं उसी भी अब भी प्राच्या भी ताल भने पतार या इंतरपर है। सुत्रों से कुमलाए हुए पेइ-पोर्च और तरिता इंतरी लोगों थी। मीराम विश्वा ने इस बर अर्थ समस्त की मामान का बढ़ काल अलगेने ख प्रथम था। अर्थात मातवाद में गर्न

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ल संग्रम है।

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कर्ष ग्रेकर ग्रे

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नेप्राने प्रवास महत्त्वार में ला नीन प्रचार भी भविष्यक्षणे यह हो है। यहाँ होई प्रदान बार की हैं। इसे बेहातर पानवा से लोड़बर देखा जा जा है। देख में मानसून सबसे पहले अंडमान और मिसेबर द्वीप of wax assess of his oc it was बाद में दो दिवाओं में विभावत बात के सार-वीक्स और टॉक्स-क वित्र में। योजने केरिअवित्र अनुकृत क्षणे पर पारकुत कुछी के मान तक पूर देश में जा तक है। पीजम विज्ञानियों ब अनुवान है कि आते हकी की कुरआत तक बारहुन पत्न भारत में अक्रिय है तक्ता इससे फारी देता में बारहुन कुर्र वी बारित भी वाह भागों में होती है। मार्च से पर्दे के टीडन होने बाली इस बरिता को मेंगे नामने भी बाते है। बरिता और अंबर का ने देर केतर, क्यांटक और रावित तीत है। बारतात, तेत के एक बड़े पूजा और बतेड़ी लेगे को मानहन

अन्नदाता के लिए तो अमृत है बरखा

रिका करिए पर प्रदेश जरा के निष्यं है। एवं में अवदाताओं के लिए मानकृत की करित अमृत के असान है। कमातेर काका उपनिष्ठ को से 2015 में क्रमतः 14 और 12 फीसवें कम करित हो। क्रो में इस बार मानसून that for its facult di कार है। केम विभाग ने थे अग्रे मामून वीवनवर्ष भी है। सूत्रे मे बारन वर्ष 2014 और 2015 में देश के 10 हता fic at ल रूपा स्थान आमारण पर पुन्न है। समर्थर माना के सारण ता के विश्व उन्हें के बड़े कंत्रब में किता अनेकिया की ततारा में

क्रमि लेप में 4 परिवासी की विक्रे वर का तकता. ्र वर्ष कर्ता हो। विकर्त कर 2. कृते के समान के

चलते असंवाते कि का 9049-47 Å 40**500** की वृद्धि पर भी जीगी

and hi for an faculti मत्त्र हा एवं का हाजन मत्त्रु का जा है। बहे रहते के पुरुषक और ब्रुगियों में ऑस्ट्राट अकत जनाती हैं। कमतोर कारते हैं। समर्थर मासून के काल खंडानें ये वर्षे में भी उन्हार आर जिलाहा के दाम मानाम को भी पहुंच से बहर हो रही है। अस्पन्नकों को अस्प है का बार के प्रकारता है।

बाजार को 'मनाफे' की फुहारों की आस

व्यवस्थाति व विक्री 25 फीर वी यामित होते मेहोती है

2. वैंड को 10 फीकी ऋग वृत्ति शंत्र को देख वरूदै, उन्हों सारवृत्त वे पुरवार। कामल गर्छ मी।

को 20 15-16 में हेक्सी भी विभी में 125 प्रीपने प्रकार उपने बत जना को एक्स्परीते

1. Tracket many

अपने वक्त बन्द्र वी पुत्रते मुक्ता को पुत्रते की अस है। अंकी कहा है वि अक्षे मास्त् के को में बातर में भी खरेर का क्षप अपर जाता है मोटो मोन हा ल बात बिसी या 20 पीतरी हिस्सा मधीष क्षेत्री के हरिस्सा करती है। क्ये t wante कासून के बारण ऑटोनीबद्दल कंपीनां व्यक्तित शेषी में १८ प्रतिक्री

काना का एकएनता क्षेत्र में भी अनके मानस्त से किसी में इताफ सी संबंध नाईहै।

समुची चंदमी ३५ चीवरी को किको सम्बोध क्षेत्रे में चरते है। चूर्रिय आराजी में अहम ट्रेक्ट ची find if of first are

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वर्ति क्या करते हैं काम बदल भी प्रति, भूत करी लाए पहों का पानी करने की, विक्रीय किही में महाते तो अन्यूनी पर्व-दिरापूरी अने करता पर और है तो अपनी बरिक के हैं असत उन्हों और जो बोरी खड़र (बैहरत), रही अपने बजो बज़

oost जेवड केरो ने राज्य करिने ्यातम हो नहीं दे जीता वा कुछ समाचार हो হিন নত ভাই 1600 (82 तो अस्तर है कर को अस्य क NIFE

दक्षिण-पश्चिमी मानकुन दुनिया भर से मौजन तोत्र का जबने नायब उदाहरण है। पर श्रोज बदलाय भी नका-बद्ध पैवाकर नकता है।

मानकुन केरल, और, प बंजाल, वेदिला खारकोट विकार में लिकरा हो। तीनदिन में पूर्वी मध्र छन में भी असार। Fritz: short willow

घबराएं नहीं

मानसून की देरी

बरित के औरत पर कोई फर्क नहीं पड़ने कल

भी के क्रांच्या के बाद इस वर्ष सम्पन्न में देश के आग्रहात की में सारसून से क्या उम्मीई हैं? इस का सम्बन्ध के बहुन के अपना खारी उप्पेरितें। केशन में मानहर दास्क दे कुछ है। मानहर हकारीत है। आईएमडी ने अर्थत में कृत्य-कृत्यों साम्बन्द के औरता से को रक्ता कोलंबर धार्थपनीसर १८६ कीमर्ट अधिक रात्रे की विद्याप विश्वाप (अर्थकारी) में आराजसमूचकारी में अन्तर विदेश মেনেত সকা থী। তথাই है জি 23 সুৰ জন্মত জৈ জতাত থক विवास में सालपा खपाल की में असिन के अस्तर और सर्वतः

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29-29 तुर तक समाम की दाराक के असरा है।

Q. इक्तिः स्थितं स्टब्स् औ श्रीमें स्थारमं अस्य पहेला ये वार्त है कि किए के उद्देश्यों हैं जाते में इस का सम्बद्ध की से कुंचा है। तककि सम्बन्ध सन से कहा स्पन्तः । जुरुका गुरुष जावारी। विते जावान् कृति वितास



पानी नहीं मोती

धरती के नर्भ में दीत रहे जलस्तर की हो भरपाई

केच बड़ो

भू में काम है की का नात क शारी समस्य ज्यादा है। देश में दो-दीन जात से सम यार्गे काल। तेषित पने या इत्तेमात कमनाविक्रण है ना सा है। एक अन्तरम के मुत्रक्ति देव के कुछ हिस्सों में भूगतीन तरा कर एक मेरेट प्रति वर्ष की दर के हिर कृत्यीय पार्ची है। लेकिन इसके पुत्रशंख को कोई सुरत करती गरार पुत्रसम्बद्धाः च्या स्थानितः स्था स्था नहीं आ जी है। पुत्रसम्बद्धाः स्थानितः मत्र तरिव बन्ति स पने है। केवने में जिल्ला की विशाह की हम को जीवनों की नहीं fruit or raise do bifun है पाने को समाम से निका नि

संस्थान देश चुने हैं। ताल-पेक्टे-कुंग को कार्य की उन्हेंगने के कम के मिट चुके हैं। ये ताल-तालीय में मताल नहीं थे। चार महिनी तम असीम के पड़ते को उत्तरत के तक भारती बाजो महीने हर्व-भावे कर्ता natural. e dans

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दिनाकं २०५१,२०६ को निम्नालिखित्वल समाचार पत्र में प्रकाशित सममञ्जून/खाढ़ सम्बन्धी समाचार

Hindustan Times (Delhi) ਜ਼ਰभारत टाईਸ्स (दिल्ली) The Tribune (Chandigarh) The Hindu (Chennai) The Assamu Tribune (Guwahati)

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The Dayse Deccan Chronical (Hyderabad)

Centracentral Chronical (Bhopal)

Met predicts heavy rain today

TRIBUNE NEWS SERVICE

SHIMLA, JUNE 19

The Meteorological Department has warned of a heavy rainfall in isolated areas in lower and middle hills on Monday and Tuesday. It has also predicted rain and thundershowers in the region from June 20 to 25.

Dharamshala received 27 mm of rainfall today, followed by 23 mm in Bilaspur, 21 mm in Nahan, 11mm in Kasauli, and 6mm in Dalhousie. However, there was no appreciable change in the minimum and maximum temperatures.

Una was the hottest in day with a maximum temperature of 37°C, while Keylong in Lahaul and Spiti was coldest last night with a minimum temperature of 12.5°C.

दिनाकं . १० प्रिक्त को निम्निकिवित समाचार पत्र में प्रकाशित मानाशून/ बाढ़ सम्बन्धी समाचार

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35 dead in Indonesian landslides

BANJARNEGARA, JUNE 19

The death toll from flash floods and landslides in Indonesia has risen to 35, an official said today, as search crews scour devastated villages in the hope of finding survivors.

Nineteen people remain missing following torrential rain and widespread flooding in Central Java, where thousands of homes have been swamped in water.

Areas prone to landslides in the densely-populated province have been worst hit, with drivers swept off roads and dozens of homes completely destroyed by fast-moving walls of mud, rock and water.

Disaster agency spokesman Sutopo Purwo Nugroho said the number of victims rose after seven people believed missing were found dead.

"So far we've recovered 31 bodies. Nineteen people are still missing," Sutopo



Villagers and rescue team members clear debris after a landslide hit Gumelem Kulon village in Banjarnegara on Sunday. AFP

told AFP in a text message.

In Banjarnegara, where six people were killed in an avalanche of mud, residents were bracing for the prospect of further floods. Emergency crews were trying to clear roads of felled trees and rocks

dumped by huge landslides, a journalist at the scene said.

Elsewhere victims were swept away by floodwaters and buried in their homes as landslides swept through villages. In one district, nine people were killed as they

attempted to clear rubble from a blocked road.

"Suddenly a huge landslide struck the cars and people on the street. Nine bodies were retrieved," Sutopo said earlier in a statement.

Evacuation centres, equipped with temporary shelters and kitchens, have been erected near the disaster zones for those escaping the worst-hit areas.

Footage aired by local broadcasters showed villagers sitting on their roofs to escape the rising water, their cars and homes submerged in brown water.

Landslides are not uncommon in Indonesia, a vast tropical archipelago prone to natural disasters and torrential downpours.

Last month, 15 students holidaying at a popular tourist spot in western Indonesia were killed when a landslide swept through their camp ground.—AFP

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दिनाकं 19:37.20 को निम्निकिसिन्त समाचार पत्र में प्रकाशित मंजारून/ बाढ़ सम्बन्धी समाचार

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Heavy rains batter state with gusto

BENGALURU, DHNS: Monsoon has gained momentum with heavy rains lashing several parts of the state on Saturday.

It rained heavily in Dharwad after a gap of five days. The rains which began at 1.30 pm pounded the city till evening. Farmers were awaiting rains as they have prepared the lands for sowing. Dharwad district has received an average of 37 mm of rain till June 10, according to sources. However, there was only a drizzle in Hubballi.

Ramdurg town in Belagavi district received heavy rains for three hours towards evening. Normal life was disrupted as in low-lying areas. There were reports of waterlogging on several roads.

Rains lashed Haveri after a lull on Saturday. Several villages around the town received rains for about 45 minutes towards noon. Hosapete and surrounding areas received rains for more than 30 minutes.

Rains reappeared in Bagalkot after a gap of three days. The sky remained overcast in the town since morning and it started to rain towards noon. It rained for more than an hour in the twin towns of Gadag and Betageri. Nargund town also received good show-

Parts of Mysuru have been receiving good rains for the past two days. HD Kote taluk,



A woman crosses MG Road as heavy rain lashed Mangaluru on Saturday. DH PHOTO

rainwater gushed into houses Hunsur, Nanjangud, Varuna and Sargur have received good rainfall. Normal life in area was affected as the roads leading to Nanjangud and H D Kote were waterlogged.

Shivamogga

After a lull, moderate rains lashed various parts of Shivamogga district on Saturday. Shivamogga, Thirthahalli, Sagar, Hosanagar, Shikaripur and Bhadravathi received moderate rains for a short period.

Heavy rains battered Mangaluru and suburbs since morning. A 36-year-old man fishing in a stream near Subhashnagara was washed away. The deceased has been identified as Anil, a resident of Vamanjoor.

The Dakshina Kannada dis-

trict recorded 22.1 mm of rains in the last 24 hours.

Heavy rains lashed Kodagu district. With an inflow of 726 cusecs, the water level in Harangi reservoir stood at 2803.53 feet.

Nine injured

As many as nine agricultural workers were injured after lightning struck them in Hanehalli village of Kumta taluk in Uttara Kannada district. They were loading mangoes into a vehicle when the incident occurred.

Bhatkal received intermittent rains since Friday night. **DH News Service**

Bengaluru to get rain in 2 days

Bengaluru is expected to get one or two spells of rains along with thundershowers in the next 48 hours. The weather department has also forecast monsoon to pick up after a week. The weatherman said the offshore trough over coastal Karnataka to Kerala coast is not active and hence, monsoon has not picked up. "The trough is expected to become strong in the coming days and following that, the monsoon is expected to get intense," the Met department said.

According to the Met department, southwest monsoon has advanced into more parts of north interior Karnataka and rainfall has occurred at a few places over south interior Karnataka and at isolated places over north interior Karnataka in the last 48 hours.

Meanwhile, G Srinivas Reddy, director, Karnataka Natural Disaster Management Centre, said that compared to last year, this time, sowing activity has dropped.

"Last time, during the same period, about 14 lakh hectares were covered as against only 8.47 lakh hectares this time. We are hoping for increased sowing activity over next few weeks."

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बिनाकं १६.द्रो. २०१६ व्यक्ति विक्रिकिरिक्त समाचार पत्र में प्रकाशित्सा नश्व विव सम्बन्धी समाचार

Hindustan Times (Delhi) नवभारत टाईम्स (दिल्ली) The Tribune (Chandigarh) The Hindu (Chennai)

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Just 15% water left in 91 major reservoirs

Vishwa.Mohan @timesgroup.com .

New Delhi: The slow progress of the monsoon has meant water storage in 91 major reservoirs has dipped further and the overall availability stands at just 15% of capacity. This has not only hit initial kharif sowing but also the availability of drinking water.

Though the area under kharif will increase once rains sweep the entire country over the next few weeks, the current water shortage has shrunk the total area under rice, pulses, oilseeds and other crops, except sugarcane. As on Friday, the sown

area under kharif crops was 10% lesser than that in the same period last year.

Water levels in key reservoirs have dipped from 26.81 billion cubic metres on May 26, to 23.78 BCM on June 16. The situation could turn desperate if the monsoon fails to pick up in the next four-five days.

Reservoirs in south India are the worst affected. Central Water Commission figures, released on Friday, show that water availability in 31 reservoirs in the south was 4.86 BCM on June 16—just 9% of capacity.

Sugarcane favourite, P 19

Sugarcane occupies over 50% of sown area

▶ From P 1

omparatively, the situation in the north is much better with water levels in the region's six major reservoirs at 23% of the capacity. Of the 91 big reservoirs monitored by the CWC, 27 are in the west, 15 in east and 12 in central India. Besides supplying drinking water to many cities and providing water for irrigation, 37 out of these 91 reservoirs have hydro-power facilities with installed capacities of more than 60 MW.

The total kharif sown area stood at 84.21 lakh hectares on Friday as compared to 93.63 lakh hectares at the same time last year. Surprisingly, the sown area under water-guzzling sugarcane as on June 17 was higher than its acerage last year—signalling farmers' preference for the crop that invariably gives better returns than pulses and oilseeds. In fact, sugarcane has already occupied more than 50% of the total sown area.

The NDA government's move to substantially reduce the dues of sugarcane farmers in the past two years also seems to have

SOWN AREA DOWN 9.42 LAKH HECTARES

KHARIF SOWN AREA (As on June 17) Water availability in 91 major reservoirs (as on Total sown area in 2015-16 June 16): 23.78 BCM, which is 15% of total Total sown area in 2016-17 93.63 lakh hectares storage capacity of these reservoirs 84.21 lakh hectares Sown area (2016-17) Rice 9.17 157.79 Billion Total water storage capacity Sown area (2015-16) Cubic Metre (BCM) of 91 major reservoirs (Sown area in lakh hectares) Pulses 3.32 4.53 (1 cubic metre = 1000 litres) Distribution of reservoirs Oilseeds 1.88 15 **-31** Sugarcane 41.58 water availability 8.59 4.12 4.86 BCM Cotton 19.66 3.25 2.96 North Central East Jute & mesta 7.56 South India India India 23 Coarse cereals 7.19 % of storage capacity of these reservoirs DECLINING TREND Water availability in these reservoirs 26.81 BCM 26.61 26 23,78 24 23 June 16 June 9 June 2 May 26

played a role in tilting the cropping pattern in favour of sugarcane. About 87% of the dues have already been paid for the 2015-16 season,

indicating how the crop remains remunerative despite delays in payment by sugar units.

The decline in water stor-

age in the big reservoirs can be attributed to two consecutive drought years. The country had recorded monsoon deficits of 12% and 14%

in 2014 and 2015, respectively.

Though it is normal for water bodies to deplete sharply in the pre-monsoon summer months, the CWC has been keeping a close watch on the storage of these reservoirs so that the available water can be distributed properly till the country gets monsoon rain. Most of these reservoirs get water during the June-September southwest monsoon, while reservoirs in Tamil Nadu get water during the October-December northeast monsoon.

Reservoirs being monitored by the CWC include Gobind Sagar (Bhakra) and Pong Dam in Himachal Pradesh, Thein in Punjab, Rana Pratap Sagar in Rajasthan, Panchet Hill in Jharkhand, Hirakud and upper Indravati in Odisha, Ukai and Sardar Sarovar in Gujarat, Koyana and upper Vaitarna in Maharashtra, Rihand in Uttar Pradesh, Gandhi Sagar and Indira Sagar in Madhya Pradesh, Nagarjuna Sagar in Andhra Pradesh, Almati and Tungbhadra in Karnataka, Idukki and Periyar in Kerala and Mettur and Sholayar in Tamil Nadu.

बिनाकं । ६ हो ? १ विने निनेनिनिकिरियत समाचार पत्र में प्रकाशित मानसून विने सम्बन्धी समाचार

Hindustan Times (Delhi) ਕਰभਾ ਦਰ ਟਾਡਿਸ਼ (ਫਿਲੀ) The Tribune (Chandigarh) The Hindu (Chennai)

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The Dephe Deccan Chronical (Hyderabad)
Central Chronical (Bhopal)

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THE ASSAM TRIBUNE, GUWAHATI 11



A water-logged road at Anil Nagar following heavy rains, in Guwahati on Friday. - AT photo

18 June 2018

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दिनाकं । दिने १.१.१. को निम्नलिखित समाचार पत्र में प्रकाशित मानसून | बाढ़ सम्बन्धी समाचार

Hindustan Times (Delhi) नवभारत टाईम्स (दिल्ली) The Tribune (Chandigarh) The Hindu (Chennai)

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Rains bring misery to city again STAFF REPORTER

GUWAHATI, June 17: Rainfall since last night led to massive flooding at many localities around the city today disrupting normal life and causing discomfort to citizens of Guwahati.

While some localities suffered from artificial flood since late last night, others were affected by water-logging this afternoon after another round of heavy showers.

Many localities like Anil Nagar, Nabin Nagar, Tarun

Jatia, Six Mile and Sarumataria were affected by the flooding with many roads and bylanes under many inches of rain-water which had got accumulated due to the intermittent showers.

Officials from the Kamrup Metro district administration said that pumps have been pressed into service at various areas and workers are working round-the-clock to flush out the excess water.

They added that an incident of landslide has also been reinjured in the incident.

"A survey has been ordered in the area to find out if there is a need to evacuate families from any danger-prone area," said an official.

Students and office-goers of the flood-affected areas faced major problem during the morning hours. Students and teachers of the Ulubari Higher Secondary school came out to protest in the GS Road after rain-waters entered their school's compound.

Mud and slush also caused Nagar, Panjabari, Kahilipara, hills. However, nobody was two-wheeler drivers and

people on foot.

At many places, rickshaw pullers were seen charging in excess of regular fares to transport commuters through water-inundated streets.

An elephant that was swept away by the turbulent waters of the Brahmaputra was seen swimming desperately in a bid to get to the banks in the city. The elephant which was first noticed near Panikhaiti area, was seen further west near Sualkuchi, still struggling to keep afloat. Forest personported from the Kahilipara inconvenience, especially to nel were monitoring the animal on boats.

दिनाकं . 18. स्र १.२: १६ वो निम्नलिध्वित समाचार पत्र में प्रकाशित मानसून बाढ़ सम्बन्धी समाचार

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- हिन्दूश्तान (पटना)
- The Deccan Hearld (Bengluru)
- The Deathe Deccan Chronical (Hyderabad)
- Central Chronical (Bhogail)

Assam to take a lear out or China's flood control measures

Ratnadip Choudhury

GUWAHATI: The Assam government has decided to take aid of scientific study through experts about the hydrological character of the River Brahmaputra to develop a new strategy to fight the annual floods and erosion caused by the mighty river.

For this purpose the state government has decided to constitute an expert committee to be sent to China to study the Yellow River (Huwang He) management strategies, to replicate the same in Assam for taming River Brahmaputra and use it as a deterrent for flood and erosion, official pointed strategy to act on sources added.



Rickshaw-pullers wade through a waterlogged road after a downpour in Guwahati on Friday. PTI

Department would prepare a "River Atlas" with the expertise plications Centre in Shillong, this would help devise pinvolatile flood and erosion af- Department on Friday. The state Water Resources fected areas in both up and DH News Service

down stream of the river..

These decisions were deof the North Eastern Space Ap- clared by Assam Chief Minister Sarbananda Sonowal who chaired a high-level review meeting of the Water Resource

दिनाकं ! निर्म को निम्नलिखित समाचार पत्र में प्रकाकित मानसून बाढ़ सम्बन्धी समाचार

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The Deccan Chronical (Hyderabad)

Centra Central Chronical (Bhopal)

Research project to predict future flooding and erosion at Majuli

STAFF REPORTER

GUWAHATI, June 16: The University of Nottingham, United Kingdom and IIT Roorkee, India have undertaken a joint research project on the prediction of future flooding and erosion in river island Majuli.

With around 1.5 lakh population, Majuli is one of the ten large inhabited river islands. It is facing the wrath of the Brahmaputra and losing its land mass since the 1950s.

The research project undertaken by the University of Nottingham and IIT Roorkee is applying CAESAR Lisflood modeling tools to provide new insights into how flooding and erosion on Majuli island are likely to change over the coming decades.

The research project is expected to provide valuable information for future engineering and management practices. CASEAR Lisflood model is a software used to model long-term landscape evolution, flood and erosion. It has been developed by Professor Tom Coulthard in the Univer-

sity of Hull, said Prasujya Gogoi, PhD student, School of Geography, University of Nottingham.

Prasujya is carrying out the research under the supervision of Prof Colin Thorne and Dr Nick Mount of the University of Nottingham and Prof Nayan Sarma of the Department of Water Resource Development and Management of IIT, Roorkee.

Prof Throne is internationally renowned for his contribution to the field of river hydraulics. Recently, he was awarded the prestigious Back Award by the Royal Geographical Society for his outstanding contribution towards shaping national and international policy on rivers and flood management. Dr Nick Mount is an expert in the field of hydroinformatics. Prof Nayan Sarma is internationally known for his work on fluvial systems in general, and research on the monsoon-affected 'mega-rivers' of India, the Brahmaputra in particular.

tion, flood and erosion. It has been developed by Professor Tom Coulthard in the Univer-

history of Majuli island as well as helping in forecasting the future developments in the island and also to assess the impact of physical processes of erosion and sedimentation on the island, among others, said Prasujya.

The research is carried out as part of a prestigious Vice-Chancellor's Scholarship of Research Excellence (International) 2014 award of the University of Nottingham. Prasujya has also won the prestigious Newton Bhabha Fund 2015-2016 of the British Coun-

cil and the Indian Department of Biotechnology for carrying out this collaborative research work.

Speaking about the targeted outcome of the project, Prof Nayan Sarma said the end product of the work is expected to provide incontrovertible scientific evidence on the prognosis of the chronic malaise afflicting Majuli.

Evidently, such an objective multidisciplinary applied research will help replace the present conjectural ad-hoc approach, he said.

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Central Chronical (Bhopal)

Flood protection plan soon: Governor

SPECIAL CORRESPONDENT

CHENNAI: The State government will soon prepare comprehensive flood protection plans for Chennai and vulnerable coastal districts to mitigate the impact of floods, said Governor K. Rosaiah.

Addressing the 15th Tamil Nadu Assembly, Mr. Rosaiah said the devastating floods in December had caused heavy damage in several parts of the State, especially in Chennai and some coastal districts. The concerted efforts of various government agencies enabled the speedy restoration of normal life, bringing great relief to the large number of affected people. The government had secured Asian Development



DISASTER MITIGATION: The plans are aimed at protecting Tamil Nadu's capital and coastal districts from floods. A scene in Mudichur in Chennai during the December floods. — FILE PHOTO

Bank funding for 'Climate Adaptation Programme' aimed at reducing the impact of climate change in the Cauvery Delta. Preliminary work has already commenced in the Vennar subbasin, he said.

With an emphasis on effective management of water resources, the government secured funding from the World Bank for Phase-II of the Irrigated Agriculture Modernisation and Water Bodies Restoration and Man-

agement project. This would rejuvenate water bodies and tanks, and increase their storage capacity, he said.

Urban infrastructure

On urban infrastructure, he said the thrust would be on providing better roads, storm water drains, solid waste management, sewerage management and street lights.

The successful initiatives by the State — Integrated Urban Development Mission and the Chennai Mega City Development Mission — would be synergised with the Centre's Smart Cities Programme and the Atal Mission for Rejuvenation and Urban Transformation scheme.

tenda - 10 June

News item/letter/article/editorial published on 1200 (-19.66 201 in the

Hindustan Times Statesman The Times of India (N.D.) Indian Express Tribune Hindustan (Hindi)

Nav Bharat Times (Hindi) Punjab Keshari (Hindi) The Hindu Rajasthan Patrika (Hindi) Deccan Chronicle Deccan Herald

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and documented at Bhagirath(English) & Publicity Section, CWC.

Defining Aravallis may reduce forest area in state'

LOBBYING Environmentalists say the move is planned textelp builders

Ipsita Pati

ipsta.pati@hindustantimes.com

GURGAON: Environmentalists have welcomed Haryana's move to notify a 500-metre no-construction zone around the Mangar Bani forest in Faridabad. But they are against the decision to redefine what constitutes the Aravallis.

The Aravallis, the oldest mountain range of the world, is the national capital region's green lungs and crucial for its eco-system.

The decisions were taken in a recent meeting of the National Capital Region Planning Board (NCRPB).

Members from the Union ministry of environment, forest and climate change (MoEF), NCRPB and the Union ministry of urban development will soon define the Aravallis in Haryana.

Environmentalists have opposed the move; saying this will reduce Haryana's forest cover, which is less than 4% of total area now.

Activists say the entire process



The Aravallis, the oldest mountain range of the world, is crucial for the NCR's eco-system. PARVEEN KUMAR / HT FILE

is well planned to help the builder lobby. "How can the government and higher authorities suddenly be not clear about the Aravallis? A forest range is a geographical division, how can the government define it?" Vivek Kamboj, an environmentalist, said.

At a time when the groundwater table is falling at an alarming rate, it is shocking that government officials are busy planning to reduce the forest cover, they said.

Haryana's forest cover is much less than the national average of 33%.

Though the NCRPB meeting was supposed to identify more areas that can be considered as forest so that the natural conservation zones (NCZs) can be defined, officials ended up forming a committee to define the Aravallis, environmentalists said.

News item/letter/article/editorial published on 1/10 6-19.6.2016 in the

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3D terrain maps to predict urban floods

ndian Institute of Science (IISc) scientists are developing high resolution 3D terrain maps to visualise how water flows when it rains, triggering floods on roads and low-lying areas in cities. The project, which uses Geographic Information Systems (GIS), could eventually help civic agencies smartly redesign their drainage infrastructure.

Equipped with real-time data, the 3D terrain maps are also expected to forecast floods, aid preparation of action plans to mitigate floods and make changes in city planning. The BBMP and the Karnataka State Natural Disaster Monitoring Centre are also part of this collaborative project funded by the Information Technology Research Academy.

News item/letter/article/editorial published on <u>Jane - 19.6.21/6</u> in the

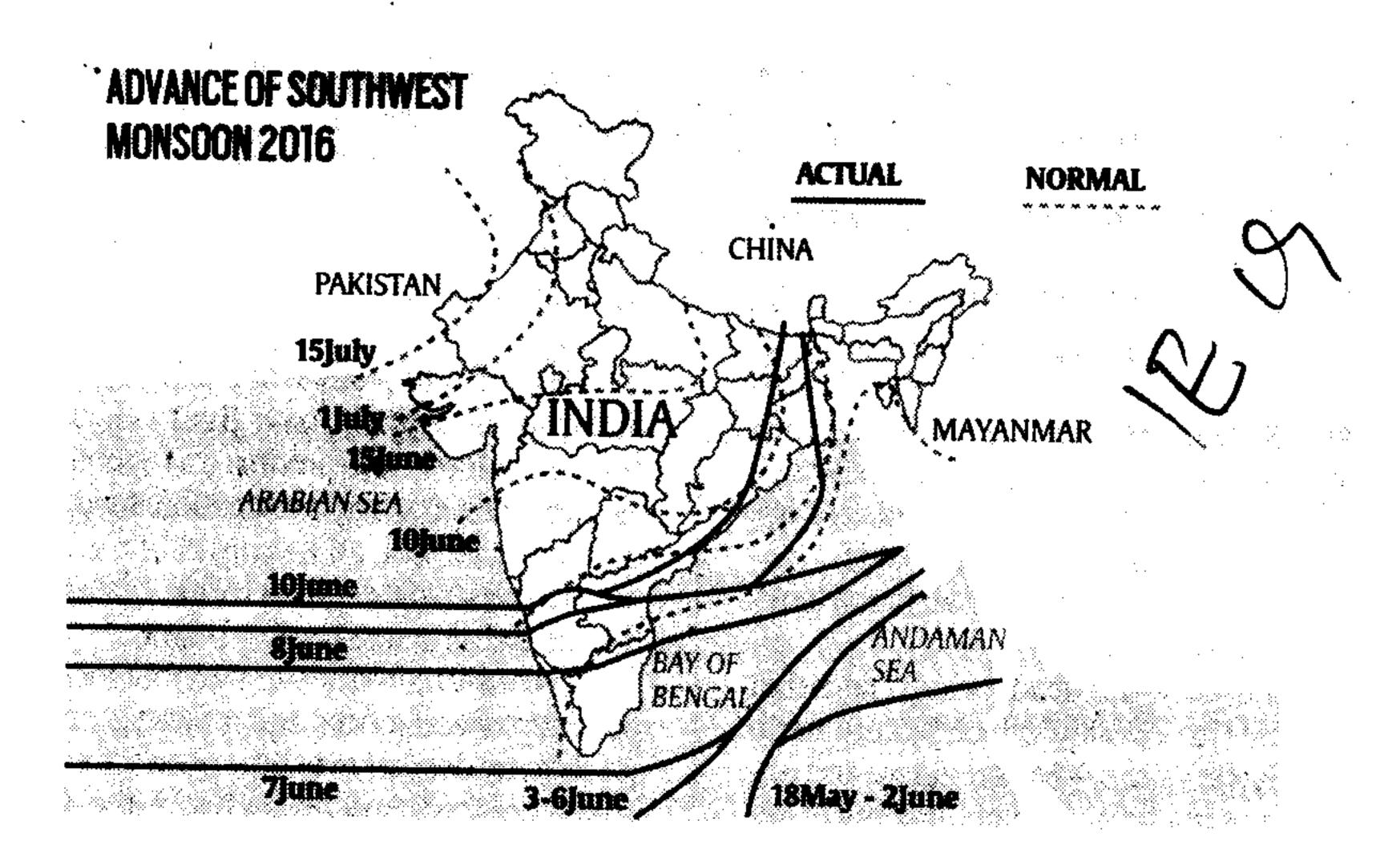
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Met predicts swift northward movement



States in the north, including Delhi, expected to witness widespread rainfall from June 26

TRACKING THE

MONSOON

AFTER THE first two weeks of the monsoon season, India has received about 25 per cent below normal rainfall. Instead of the 61.4 mm rainfall it should have got till now, there has only been 46.2 mm rains till June 15, primarily because of the one-week delay in the arrival of the monsoon.

The progress of the monsoon has also been sluggish since its arrival. The northern limit of the monsoon on the western coast has now been almost stationary for a few days, located around northern coastal

Karnataka and southern Maharashtra. On the eastern side, most parts of Rayalseema, sub-Himalayan West Bengal and Sikkim have been covered. The entire north-eastern region has also received rains.

Normally, by this time, the monsoon should have moved northwards to cover

the whole of Gujarat, MP, Chhattisgarh, Bihar, Odisha, West Bengal, and even eastern Uttar Pradesh.

On Friday, the Met department said that conditions were favourable for the northward movement of the monsoon to reach Konkan and Goa, some parts of Chhattisgarh and Maharashtra, remaining parts of Karnataka, some parts of Odisha and Gangetic West

Bengal, and Jharkhand by Sunday. By the end of the coming week, it is likely to advance further into more parts of east India and some parts of central India.

The Met department also said that rainfall was likely to increase over many parts of eastern, central and southern peninsular India from June 21. Central India and the western coast is likely to get above normal rainfall during the time. Northwest India, including states in the north and Delhi, are expected to witness fairly widespread rainfall from June 26.

After a week of slow progress, atmospheric conditions are favourable for a swift northward movement of the monsoon, the Met department said. A trough has formed at the mean sea-level extending from northern Rajasthan to west central Bay of Bengal. This is likely to pull the monsoon winds north-

wards. A strong Madden Julian Oscillation (MJO), a tropical disturbance, is also nearing the Indian sub-continent and this could result in a period of intense rainfall.

Interior Karnataka, Telangana and Rayalaseema have so far recorded excess rainfall, while Kerala, Tamil Nadu and parts of West Bengal, have had normal rainfall.

AMITABH SINHA

Monsoon slow

Zia Haq

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NEW DELHI: The June-September monsoon has been slow and 25% below average until June 15, delaying sowing, but forecasters say that's just a temporary glitch.

A rainfall surge is on the cards in the second half of June, after which rains are expected to quicken its spread across the rest

of the country state-run Ind Department s soon was exp

The rainfa start on Jun progressed o However, in o country, it is t

In the firs rainy season, recorded a su 12%, while sh

Monsoon slow but will pick up

For Asia's third-largest economy, the rains are vital as it is an important source of drinking water, power generation and agriculture. That aside, two-thirds of Indians depend on farm-linked income.

A monsoon-boosting, windcloud weather pattern known as the Madden-Julian Oscillation, one which sweeps the tropics and dramatically enhances precipitation, is likely to push rains across India.

"The Madden-Julian Oscillation has already arrived, so we expect a third monsoon surge, which will then cover the whole of the country," BP Yadav, the Meteorological Department's deputy director-general, told HT.

After hitting Kerala, the rains branch off into two streams: One takes the Arabian Sea route to soak the southern states, while the Bay of Bengal arm covers the rest of the mainland. The Bay of Bengal branch has been sluggish, affecting the monsoon's speed.

Till June 11, farmers planted 7.1 million hectares, lower than last year's 7.7 million hectares. The area under rice lags too: 0.57 million hectares, compared to last year's 0.64 million hectares around this time.

So far, the monsoon has penetrated only up till Andhra Pradesh in the south and Gangtok in the northeast.

News item/letter/article/editorial published on 1/2

Hindustan Times
Statesman
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Indian Express
Tribune
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Nav Bharat Times (Hindi)
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Late rains impacting kharif sowing

VIBHA SHARMA
TRIBUNE NEWS SERVICE
NEW DELHI, JUNE 17

Running late, a sluggish monsoon is affecting summer crops' sowing. Preliminary reports of crop coverage in the ongoing kharif season indicates that total sown area as on June 17 is 84.21 lakh hectare. Last year 93.63 lakh hectare had been implanted this time in 2015-16 — a bad monsoon year.

As per the government records, rice has been sown/transplanted in 9.17 lakh hectare as against 10.19 lakh hectare last year; pulses in 3.32 lakh hectare (last year it was 4.53 lakh hectare); coarse cereals in 6.01 lakh

84.21 lakh hectare sown as compared to 93.63 lakh hectare last year

hectare (it was 7.19 lakh hectare in 2015-16); oil seeds in 1.88 lakh hectare in comparison to 2.92 lakh hectare last year; and cotton in 12.25 lakh hectare as compared to 19.66 lakh hectare in 2015-16.

Only sugarcane has covered more area, largely in Uttar Pradesh. It has sown in 44.38 lakh hectare against 41.58 lakh hectare of last year.

Officials assure that situation will start looking up once the progress of the seasonal rains picks pace. It has further

advanced into Andhra Pradesh, West Bengal and also some parts of Odisha, Jharkhand and Bihar.

While critical areas continue to wait for their share, the IMD says conditions are favourable for the further advance of monsoon into Konkan and Goa, some parts of Madhya Maharashtra, Marathawada, Vidarbha, Chhattisgarh, Karnataka and east Madhya Pradesh in the next two to three days.

Vegetables prices are rising primarily due to delayed monsoon and crop damage. The double-digit spike in vegetable prices which pushed up annual wholesale inflation for a second month in May brought the focus back on monsoon.

News item/letter/article/editorial published on Inc. 20.6.206 in the

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Statesman
The Times of India (N.D.)
Indian Express
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जलसंरक्षण के प्रयासों की दरकार

देश भर के कई इलाकों में जलसंकट है। सूखे के कारण हाहाकार मचा है। ये हालात पिछले सालों में कम वर्षा के कारण बने हैं। सरकारों और राजनीतिक दलों का रवैया जलसंकट के समाधान को लेकर काफी चिंताजनक है। सब जानते हैं कि राज्यों के बीच जल विवाद के मसले लम्बे समय से हल नहीं हो रहे। ऐसे में कहीं पानी की बर्बादी हो रही है तो कहीं लोगों को बूंद-बूंद के लिए तरसना पड़ रहा है। ऐसे हालात बताते हैं कि समय रहते जलसंखण की दिशा में ठोस कदम नहीं उठाए गए तो जलसंकट और विकट होने वाला है। जरूरत इस बात की है कि समय रहते पानी बचाने के प्रयासों के साथ-साथ जलसंखण के प्रयासों को भी गित दी जाए। इसके लिए हमें हमारे प्राचीन जलस्त्रोतों को फिर से संभालना होगा।

-देवेन्द्र राज सुथार, जालोर

News item/letter/article/editorial published on And 2006 206 in the

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खरगोन में झमाझम, 48 घंटे में भोपाल पहुंचेगा मानसून



वागदा में बिजली गिरी: नागदा में रविवार शाम झमाझम बारिश हुई। इसी दौरान बिजली गिरने से महेंद्र (21) पिता दारसिंह गेहलीत की मीत हो गई। स्तालाम में उमस: शाम 5 बजे करीब 15 मिनट बारिश के बाद लोग उमस से परेशान हो गए। जावरा, मंदसीर के भी कुछ ग्रामीण क्षेत्रों में हल्की बारिश हुई। खरगोन. खरगोन शहर और अंचल में रिववार को झमाझम बारिश ने लोगों को गर्मी की तपन से राहत दी। बहुप्रतीकित दक्षिण-पश्चिम मानसून ने पूर्वी मप्र में दस्तक दे दी है। मौसम विभाग के मुताबिक 48 घंटे में राजधानी भोपाल मानसून पहुंचने की संभावना है। क्षेत्रीय मौसम विज्ञान केंद्र भोपाल के डायरेक्टर डॉ. अनुपम काश्यपि ने बताया सीधी, छिंदवाडा, जबलपुर, सिवनी, उमरिया और शहडोल में मानसून की पहली बारिश हुई।

किसानों के चेहरे खिले

खरगोन में 45 मिनट जोरदार बारिश हुई। वहीं जिले के करही, कसरावद, महेश्वर, बिस्टान, भगवानपुरा व आसपास के क्षेत्रों में 20 से 30 मिनट बरसात हुई। इससे अन्नदाता और लोगों के चेहरे खिल गए। खंडवा में भी बादल छाए रहे। News item/letter/article/editorial published on (1000-20.6.2016 in the

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and documented at Bhagirath(English)& Publicity Section, CWC.

वाराणसी और गोरखपुर में आज दस्तक दे सकता है मानसून

उम्मीद

नई दिल्ली विशेष संवाददाता

- धीमी रफ्तार से उत्तर भारत की ओर बढ़ रहा मानसून सोमवार को पूर्वी उत्तर प्रदेश के वाराणसी और गोरखपुर में दस्तक दे सकता है। मौसम विभाग ने यह संभावना जताई है।
- उत्तराखंड, हिमाचल प्रदेश, पूर्वी उत्तर प्रदेश समेत पूर्वोत्तर के राज्यों में सोमवार को भारी बारिश की संभावना
- सामवार का भारा बाारश का सभावना है। उधर, मुंबई में मानसून के पहुंचने की सामान्य तिथि दस जून है लेकिन
- मानसून सोलापुर में ही ठिठका हुआ है।

वहां छावा मानस्नः मौसम विभाग के अनुसार रविवार को मानसून गोवा, दक्षिण कोंकण, मध्य महाराष्ट्र, मराठवाड़ा, पूर्वी मध्य प्रदेश, दक्षिण-पूर्वी यूपी, विदर्भ के कुछ हिस्सों, बिहार तथा झारखंड के कुछ हिस्सों, उत्तरी कर्नाटक, तेलंगाना तथा छत्तीसगढ़ में छा गया है। मानसून सोलापुर से लेकर नांदेड़, यवतमाल, छिंदवाड़ा, सीधी, पटना तथा रक्सौल तक पहुंच चुका है।

दो दिन में मुंबई : मौसम विभाग ने कहा कि अरब सागर की तरफ से भी मानसून के आगे बढ़ने की संभावना है। इसलिए मुंबई और गुजरात की तरफ भी अगले दो दिनों के भीतर मानसून की दस्तक पड़ सकती है।



मथुरा में रविवार को भारी बारिश से सड़कों पर पानी जमा हो गया। 🗨 प्रेट्र

लू का प्रकोप खत्म कई स्थानों पर प्री मानसूनी बारिश से लू का प्रकोप खत्म हो गया है, लेकिन हवा में नमी का स्तर बढ़ने से गर्मी की चुभन बढ़ गई है।

आज झमाझम बारिश

गोरखपुर और वाराणसी में मानसून हालांकि 14-15 जून तक पहुंच जाता है। इस बार थोड़ी देरी हुई है। मौसम विभाग ने सोमवार को दोनों स्थानों पर झमाझम मानसूनी बारिश की संभावना व्यक्त की है। सोमवार को बिहार एवं झारखंड के बाकी हिस्सों में भी मानसून पहुंचेगा। 23 जून को पूर्वी उत्तर प्रदेश में भारी बारिश हो सकती है। बंगाल की खाड़ी से चलने वाली शाखा ओडिशा के रास्ते बिहार पहुंचने के बाद अब दक्षिण पूर्वी उत्तर प्रदेश की तरफ बढ़ रही है।

उत्तराखंड में भारी बारिश

उत्तराखंड, हिप्र तथा पूर्वी उत्तर प्रदेश में भारी प्री मानसून बारिश होने की संभावना व्यक्त की गई है। इसी प्रकार पूर्वोत्तर में जहां मानसून सक्रिय है, वहां भी भारी बारिश हो सकती है। दक्षिणी राज्यों केरल और कर्नाटक के तटीय क्षेत्रों में भी बारी बारिश की आशंका जाहिर की गई है।

सामान्य से कम बारिश

मानसून के पहले 15 दिनों में सामान्य से 25 फीसदी कम बारिश हुई है। 61 मिमी के मुकाबले अभी तक 46 मिमी ही बारिश हो पाई है। इस बार सामान्य के 106 फीसदी बारिश होने की संभावना है। News item/letter/article/editorial published on 1006-19.06.206 in the

Hindustan Times Statesman The Times of India (N.D.) Indian Express Tribune Hindustan (Hindi)

Nav Bharat Times (Hindi) Punjab Keshari (Hindi) The Hindu Rajasthan Patrika (Hindi) Deccan Chronicle Deccan Herald

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महाराष्ट्र के सूखे क्षेत्रों में बारिश कराएगा चीन

बीजिंग, (भाषा): चीन सुखा प्रभावित महाराष्ट्र में बारिश करा सकने वाली प्रौद्योगिकी 'क्लाउड सीडिंग' उपलब्ध कराने और स्थानीय मौसम विभाग के कर्मचारियों को प्रशिक्षित करने के संदर्भ में भारत से बात कर रहा है। बीजिंग, शंघाई और चीन के पूर्वी अन्हुई प्रांत के वैज्ञानिकों एवं अधिकारियों के एक दल ने महाराष्ट्र की हालिया यात्रा के दौरान सहयोग की पेशकश की। महाराष्ट्र पिछले लेकिन बारिश के लिए इसे बादलों अधिकारियों को आधुनिक क्लाउड प्रणालियों में से एक प्रणाली है।

पंशकश

बारिश कराने वाली प्रोद्योगिकी 'क्लाउड सीडिंग' उपलब्ध कराने और मौसम विभाग के कर्मचारियों को प्रशिक्षित करने के लिए भारत

से की बात

सीडिंग प्रौद्योगिकी से जुड़ा प्रशिक्षण उपलब्ध कराएंगे। इसमें कहा गया कि प्रशिक्षण का उद्देश्य जरूरत पड़ने पर वर्ष 2017 की गर्मियों में महाराष्ट्र के मराठवाड़ा क्षेत्र में बारिश कराने का होगा। मई की शुरूआत में शंघाई के शीर्ष अधिकारी हान झेंग और महाराष्ट्र के मुख्यमंत्री देवेंद्र फड़नवीस के बीच मुंबई में बैठक हुई थी। अखनार में कहा गया कि हान ने फड़नबीस से पूछा था कि ंक्या चीन महाराष्ट्र में सूखे से राहत दो साल से भारी सूखे का सामना की जरूरत होती है। सरकार के लिए कुछ कर सकता है? चीन कर रहा है। चीन कई वर्षों से क्लाउड संचालित अखबार चाइना डेली ने ने वर्ष 1958 में क्लाउड सीडिंग सीडिंग राकेटों का इस्तेमाल करता अधिकारियों के हवाले से कहा कि प्रौद्योगिकी का इस्तेमाल शुरू कर रहा है, जिसमें बारिश कराने वाला यदि चर्चा सफल रहती है तो चीनी दिया था और आज उसके पास सिल्वर आयोडाइड मौजूद रहता है। विशेषज्ञ भारतीय मौसम विभाग के दुनिया की सबसे आधुनिक

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M.P.Chronicle Aaj (Hindi) Indian Nation Nai Duniya (Hindi) The Times of India (A) Blitz

and documented at Bhagirath(English) & Publicity Section, CWC.

पौने तीन कुरोड़ खर्च, फिर जयसमंद बांध खाली अलवर @ पत्रिका . जयसमन्द भरने के लिए नहर खुदाई के स्पर रहा, जयसमन्द बांध लबालब चैनल् भी खुदाई। हालांकि यह

काम सबसे जरूरी था, वह अब भरने पर संशय बना हुआ है। तक नहीं हुआ है। दरअसल, जयसमन्द के रीते रहने का सबसे बड़ा कारण बारावीयर की अप गया है।

को फिर से भरने के लिए सिंचाई साथ-साथ बारा वीयर की अप रहा। इसके धीरे-धीरे टूटने व स्पर केवल एक सीजन ही चला, 🗻 विभाग ने पौने तीन करोड़ रुपए स्ट्रीम में 'स्पर' निर्माण का विभागीय अधिकारियों के इसकी लेकिन इससे जयसमन्द में कई ج खर्च कर बारा वीयर से जयसमन्द प्रावधान तो लिया, लेकिन यह मरम्मत पर ध्यान नहीं देने का सालों बाद बहार आई और तक नहर की खुदाई तो करा दी, कार्य भी अब तक शुरू नहीं हुआ नतीजा यह रहा कि सालभर पानी जयसमन्द में करीब 11 फीट पानी लेकिन बांध को भरने के लिए जो है। इससे जयसमन्द के फिर से

पहले था स्पर

जयसमन्द को भरने के लिए बारा स्ट्रीम में अतिक्रमण हैं। इससे नदी वीयर की अप स्ट्रीम में स्टेट टाइम जयसमन्द को फिर से भरने को

से भरा रहने वाला जयसमन्द बांध अब रीता हो गया है।

कच्चे 'स्पर' से ही आई बहार

का बहाव पूरी तरह एक ओर हो में भी स्पर बना हुआ था। इस स्पर लेकर सिंचाई विभाग ने वर्ष से टकराकर रूपारेल का पानी 2012 में बारावीयर में कच्चे विभाग ने नदी के बहाव को जयसमन्द तक पहुंचता था। 'स्पर' का निर्माण कराया। साथ ही मोड़ने व जयसमन्द को फिर से हकीकत यह है कि जब तक यह अपस्ट्रीम में 10 मीटर लम्बाई की

की आवक हुई।

- बारावीयर की अप स्ट्रीम में अतिक्रमण को हटाने के लिए पैमाइश कराई जाएगी। इसके लिए राजस्व विभाग को लिखा जाएगा।

प्रकाश चंद शर्मा,

सहायक अभियंता, जलसंसाधन विभाग, अलवर।

.. . talact

* # - Lamchtra Trilldii iii 16 Pm --

News item/letter/article/editorial published on <u>www.p. 19.06.20/</u> in the

Hindustan Times
Statesman
The Times of India (N.D.)
Indian Express
Tribune
Hindustan (Hindi)

Nav Bharat Times (Hindi)
Punjab Keshari (Hindi)
The Hindu
Rajasthan Patrika (Hindi)
Deccan Chronicle
Deccan Herald

M.P.Chronicle
A a j (Hindi)
Indian Nation
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The Times of India (A)
Blitz

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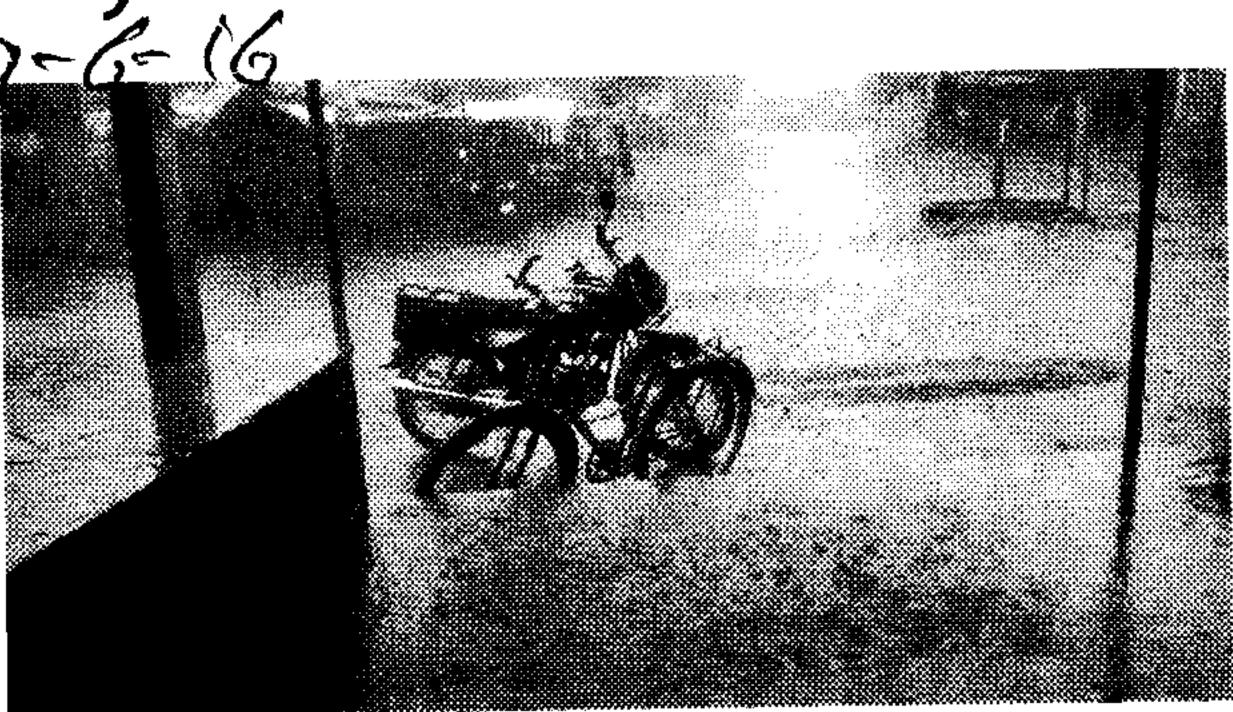
पहली बारिश, राहत के बाद उमस

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mp.patrika.com

मानसून की पहली बारिश ने क्षेत्र में शनिवार को दस्तक दी है। दोपहर 4 बजे बाद आसमान से बौछारें गिरना शुरू हुई तो लोगों के चहरे पर खुशी छा गई। पहली बारिश करीब आधा घंटे तक गिरी। इससे गर्मी से परेशान लोगों को राहत का अहसास हुआ। बारिश से मौसम में ठंडक घुल गई और मौसम सुहाना हो गया। बारिश शुरू होते ही किसानों के चेहरे पर रौनक आ गई।

वहीं शाम को चार बजे करीब ग्रामीण क्षेत्र में भी बारिश शुरू हुई। इस दौरान पंथपिपलौदा, मालाखेड़ा. थंब गुराड़िया, निपानिया लीला, शेरपुरखुर्द, हिंगड़ी, लूनी, खारुआकला व दौलतगंज में आधे घंटे तक बारिश हुई।



नीमच. अंत्रीमाता में झमाझम बारिश हुई।

गर्मी से मिली राहत

नीमच. शनिवार सुबह से ही कभी धूप-कभी छांव का मौसम बन रहा था। शाम करीब 5 बजे तेज हवा के साथ बारिश शुरू हुई। करीब 20 मिनिट तक हत्की बारिश होती रही। इसके बाद देर शाम तक बूंदाबांदी जारी थी।

झमाझम बरसे बदरा

मंदसौर. जिले में कई स्थानों पर मानसून की पहली बारिश का क्रम शुक्रवार रात से ही शुरू हो गया था। वहीं शहर में शनिवार दोपहर 3 बजे इमाझम बारिश हुई, जो करीब 15 मिनट तक जारी रही।

3 Covering L., YIS News item/letter/article/editorial published on $\frac{2006.19.6.206}{19.06.19.06}$ in the

Hindustan Times
Statesman
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Indian Express
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Nav Bharat Times (Hindi)
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आध्र से एक दिन में प्रदेश पहेंचा मानगः

19-61 - MOKIN

रायपुर @ पत्रिका. प्रदेश में मानसून ने एकाएक शुक्रवार रात में ही दस्तक दे दी। ऐसा पहली बार हुआ, जब आंध्रप्रदेश में चार दिन से अटका मानसून एक दिन में ही राज्य के आधे हिस्से पर अपना प्रभाव जमा लिया। सामान्यतः वहां से यहां तक आने में उसे 10 दिन का समय लगता है। इसी के प्रभाव से शुक्रवार रात प्रदेश के कई हिस्सों में बारिश देर रात तक होती रही। मौसम विभाग ने रायपुर में 27.3 मिमी बारिश दर्ज की। हालांकि अभी पूरे प्रदेश को अपने प्रभाव में लेने से पहले मानसून रांची की तरफ बढ़ गया है। शनिवार को अंबिकापुर, जगदलपुर, सुकमा, दंतेवाडा, गीदम, फरसगांव सहित कई इलाकों अच्छी-खासी बारिश हुई। (सिटी रिपोर्टर)

3 Covering L., YIS News item/letter/article/editorial published on (1900-1806-1806) in the

Hindustan Times
Statesman
The Times of India (N.D.)
Indian Express
Tribune
Hindustan (Hindi)

Nav Bharat Times (Hindi)
Punjab Keshari (Hindi)
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दिल्ली में आज से हो सकती

त्ति बारिश स, नई दिल्ली: मीसम विभाग ने दिल्ली

मस, नई दिल्ली: मौसम विभाग ने दिल्ली में 23 जून तक बारिश की संभावना जताई है। आज भी बादल छाए रह सकते हैं। शाम और रात के वक्त बारिश होने की संभावना है। मैक्सिमम टेंपरेचर 38 डिग्री और मिनिमम टेंपरेचर 26 डिग्री रहने का अनुमान है।

शुक्रवार सुबह दिल्ली के कई इलाकों में बारिश हुई। सुबह 8:30 बजे तक सफदरजंग में 5.2 मिमी, लोदी रोड में 2.7 मिमी, रिज में 8.6 मिमी, आया नगर में 2 मिमी, पीतमपुरा 13 मिमी, पूसा में 2 मिमी, स्पोर्ट्स कॉम्पलेक्स में 2 मिमी और अक्षरधाम में 1 मिमी बारिश दर्ज हुई। शुक्रवार को मैक्सिमम टेंपरेचर 39.5 डिग्री दर्ज हुआ, जो सामान्य रहा। मिनिमम टेंपरेचर नॉर्मल से दो डिग्री कम के साथ 25.8 डिग्री दर्ज हुआ।

Covering L., YIS

AACOF Persons

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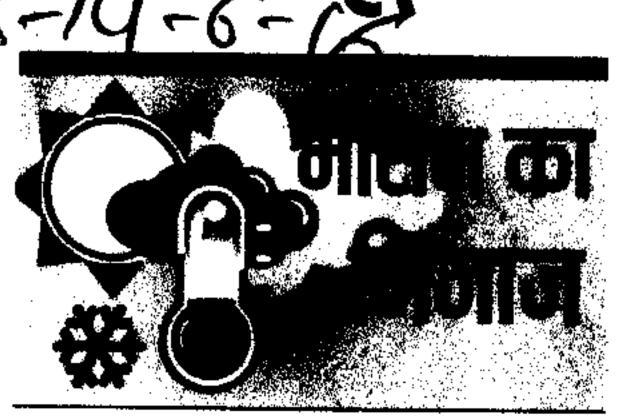
Hindustan Times
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Blitz

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मानसून धीरे-धीरे रफ्तार पकड़ेगा



नई दिल्ली एजेंसियां

धीमी रफ्तार के बाद दक्षिण-पश्चिम मानसून के गति पकड़ने और सूखा प्रभावित महाराष्ट्र तथा मध्य भारत के कई इलाकों में आगे बढ़ने की संभावना है।

मौसम विभाग ने शनिवार को बताया कि मानसून आंध्र प्रदेश, ओडिशा, पश्चिम बंगाल में गंगा के मैदानी इलाके, उत्तरी कर्नाटक के भीतरी हिस्से, विदर्भ, छत्तीसगढ़, तेलंगाना, झारखंड और बिहार में आगे बढ़ा है। पृथ्वी विज्ञान मंत्रालय में सचिव एम. राजीवन ने बताया कि जून के अंतिम सप्ताह में अच्छी बारिश होने की उम्मीद है। मौसम विभाग ने कहा कि समूचे कोंकण और गोवा, सूखा प्रभावित मध्य महाराष्ट्र, मराठवाड़ा, उत्तरी कर्नाटक के बाकी हिस्से, झारखंड, छत्तीसगढ़ और मध्य प्रदेश तथा बिहार में मानसून के आगे बढ़ने के लिए उपयुक्त हालात है। मौसम वैज्ञानिकों ने इस साल मानसून के सामान्य से ऊपर रहने की संभावना जताई है। धीमी रफ्तार ने बारिश की न्यूनता 25 प्रतिशत बढ़ा दी। जुलाई के पहले सप्ताह में इसके दिल्ली पहुंचने की संभावना है। अमूमन एक जुलाई तक मानसून राष्ट्रीय राजधानी में दस्तक देता है।

बिहार में मानसून की पहली बारिश कंगाल में शनिवार को दक्षिण-पश्चिम मानसून पहुंचा, जिससे कई इलाकों में मानसून की पहली बारिश हुई। केरल और लक्षद्वीप में हुई भारी बारिश के कारण कई घर क्षतिग्रस्त हो गए।



पटियाला में शनिवार को बारिश हुई।

मारी बारिश से कैलास मानसरोवर मार्ग बंद

पिथौरागढ़। जनपद में पिछले 24 घंटे से अधिक समय से कई क्षेत्रों में भारी बारिश हुई है। जिससे लोगों को परेशानी का सामना करना पड़ रहा है। बारिश के बाद तवाघाट –धारचूला राष्ट्रीय राजमार्ग में पिनौड़ा के समीप भारी मलबा आ गया है। जिससे यह मार्ग पूरी तरह से बंद हो गया है। यह मार्ग कैलास मानसरोवर यात्रा का भी मार्ग है। मार्ग में दोनों तरफ कई वाहन घंटों फंसे रहे। सीमांत जनपद में इस बार बारिश लोगों के लिए मुसीबत साबित हो रही है। भारी बारिश से जहां नगर के साथ ही कई क्षेत्रों में जलभराव के हालात पैदा हो रहे हैं, वहीं कई मार्गों में मलबा आ जाने से भी यातायात बाधित हो रहा है। शुक्रवार पूरी रात हुई बारिश के बाद शनिवार सुबह 5.30 बजे टनकपुर- तवाघाट मार्ग अस्कोट में पिनौड़ा के समीप भारी मलबे से बंद हो गया।

Covering L., YIS

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News item/letter/article/editorial published on (200 - 66.20) in the

Hindustan Times
Statesman
The Times of India (N.D.)
Indian Express
Tribune

Hindustan (Hindi)

Nav Bharat Times (Hindi)
Punjab Keshari (Hindi)
The Hindu
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Deccan Chronicle
Deccan Herald

M.P.Chronicle
A a j (Hindi)
Indian Nation
Nai Duniya (Hindi)
The Times of India (A)
Blitz

and documented at Bhagirath(English) & Publicity Section, CWC.

बुझ गई तपते हुए दिन की अगन...

प्रदेश में कई क्षण्ड बारिय, मजबाबी 1 शहे भीवी, जारी का स्वल्ल

भोपाल. भीषण गर्मी और सूखे से जूझ रहे प्रदेश में शुक्रवार को कई जगह आसमान से राहत बरसी जिससे पारा गिर गया। राजधानी भोपाल में कालों बादलों के बाद आई बारिश ने पूरे शहर को भिगोकर उमस से राहत दिला दी। यहां कुल 7.2 मिमी बारिश दर्ज की गई। जिससे एक घंटे में पारा 13 डिग्री गिर गया। उधर, अंचल में कई जगह बारिश के साथ आंधी भी चली जिससे कई जगह पेड़ उखड़ गए और बिजली भी गुल हो गई।



GEGEDISA

विदिशा सिरोंज, आनंदपुर, शमशाबाद, खामखेड़ा क्षेत्रों में हल्की बारिश दर्ज, साथ ही तेज रफ्तार से हवाएं चलीं।

रायतेन दोपहर बाद आंधी और उसके बाद 20 मिनट तक तेज बारिश हुई। कई जगह पेड़ उखड़े। छप्पर उड़ गए।

अशोकनमर जिले में शुक्रवार को भी बारिश जारी रही जिससे लोगों को गर्मी से कुछ राहत मिली।

सिहोर सीहोर, दोराहा में रिमझिम बारिश। नसरुक्षगंज और शुजालपुर में करीब 40 मिनट तक झमाझम हुई। शुजालपुर में आंधी से बिजली के तार टूटे।

राजगढ़ हल्की बूंदाबांदी हुई। आंधी भी चली चली।

चली जिससे कई जगह पेड़ उखड़ गए और मिनिट में 11 मिमी बारिश हुई बिजली भी गुल हो गई। ठंडक घुल गई

3 Covering L., YIS Hindustan Times Statesman The Times of India (N.D.) Indian Express Tribune Hindustan (Hindi)

Nav Bharat Times (Hindi) Punjab Keshari (Hindi) The Hindu Rajasthan Patrika (Hindi) Deccan Chronicle Deccan Herald

M.P.Chronicle Aaj (Hindi) Indian Nation Nai Duniya (Hindi) The Times of India (A) Blitz

and documented at Bhagirath(English)& Publicity Section, CWC.

25 प्रतिशत कम हुई बारिश

देश में अब तक देश भर में 46.2 मिलीमीटर बारिश हुई है जो सामान्य (61.4 मिलीमीटर) से 25 प्रतिशत कम है। मानसून अब तक पूरे रायलसीमा, तटीय आंध्र प्रदेश, पश्चिम बंगाल में पहुंच चुका है। केरल और तिमलनाडु में पूरी पश्चिम बंगाल के गंगा के दोआब वाले इलाकों तरह मानसून आ चुका है जबकि अंदरूनी के शेष भाग में एहुंचने के उम्मीद है।

नई दिल्ली, (बार्ता): दक्षिण-पश्चिम मानसून कर्नाटक का कुछ उसरी हिस्सा तथा आंध्र प्रदेश के दौरान देश में अब तक बारिश दीर्घकालीन के उसरी हिस्से को छोड़कर शेष दक्षिण भारत औसत्से 25 प्रतिशत कम रही है। मौसम विभाग में यह पहुंच चुका है। वहां 83 मिलीमीटर ने बताया कि मानसून के दौरान 15 जून तक बारिश हुई है जो सामान्य (70.5 मिलीमीटर) से 18 प्रतिशत अधिक है। मौसम विभाग ने बताया कि अगले दो-तीन दिन में मानसून के कॉकण और गोवा के पूरे हिस्से, मध्य महाराष्ट्र, मराठवाड़ा, विदर्भ, छत्तीसगढ़ और पूर्वी मध्य तथा सिविकम के अधिकतर हिस्सों और प्रदेश के कुछ हिस्सों, अंदरूनी कर्नाटक के ओडिशा, झारखंड तथा बिहार के कुछ हिस्सों उत्तरी हिस्सों, तटीय आंध्र प्रदेश, ओडिशा और

Hindustan Times
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Hindustan (Hindi)

Nav Bharat Times (Hindi)
Punjab Keshari (Hindi)
The Hindu
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Deccan Herald

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A a j (Hindi)
Indian Nation
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The Times of India (A)
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मानसून झारखंड, बिहार पहुंचा, यूपी अगला पड़ाव

नई दिल्ली विशेष संवाददाता

धीमी रफ्तार से आगे बढ़ रहे मानसून ने बिहार, झारखंड के कुछ हिस्सों में दस्तक दे दी है। मौसम विभाग ने मानसून की प्रगति में सुधार की संभावना जताई है।

बिहार में दस्तक देने के बाद मानसून का अगला पड़ाव पूर्वी उत्तर प्रदेश होगा। अगले कुछ दिनों के भीतर पूर्वांचल में मानसून दस्तक दे सकता है। मौसम विभाग के अनुसार, शुक्रवार को मानसून ने रायलसीमा, बंगाल की खाड़ी के कुछ और हिस्सों, तटीय आंध्र प्रदेश, पश्चिम बंगाल, सिक्किम, ओडिशा, झारखंड व बिहार के कुछ हिस्सों में दस्तक दी है।

मौसम

- पहले एक पखवाड़े में मानसूनी बारिश में 25 फीसदी की कमी
- धीमी गति से बढ़ रहा मानसून,
 मौसम विभाग को सुधार की उम्मीद

अरब सागर से कमजोर

मानसून जब बंगाल की खाड़ी में आगे बढ़ता है, तो वह दो हिस्सों में बंट जाता है। एक हिस्सा बंगाल की खाड़ी से आगे बढ़ता है और दूसरा, अरब सागर की तरफ से। इस बार अरब सागर की तरफ से मानसून रफ्तार नहीं पकड़ पा रहा है।

18 जून को लखनऊ पहुंचता है मानसून

आमतौर पर 18 जून को मानसून लखनऊ तक पहुंच जाता है, लेकिन इस बार शायद देरी होने की संभावना है। गोरखपुर में मानसून 14 जून, वाराणसी में 15, लखनऊ में 18, आगरा और देहरादून में 20 जून है। दिल्ली में 29 जून तक मानसून पहुंचता है। मौसम वैज्ञानिकों का कहना है कि अभी भी यदि मानसून की रफ्तार सामान्य रहती है, तो चार-पांच दिन की देरी से ज्यादा फर्क नहीं पड़ेगा।

Monsoon slow but will pick up

Zia Haq

zia.haq@hindustantimes.com

NEW DELHI: The June-September monsoon has been slow and 25% below average until June 15, delaying sowing, but forecasters say that's just a temporary glitch.

A rainfall surge is on the cards in the second half of June, after which rains are expected to quicken its spread across the rest

The state of the s

of the country. Predictions by the state-run India Meteorological Department said a surplus monsoon was expected this year.

The rainfall made a delayed start on June 8 but steadily progressed over south India. However, in other parts of the country, it is behind schedule.

In the first 15 days of the rainy season, only south India recorded a surplus rainfall of 12%, while showers in central,

Inorthwest and eastern parts have been deficient, ranging between 14% and 46%.

This means the rains have yet to sufficiently drench drought-hit areas in central and west-ern states, despite intermittent pre-monsoon showers, causing disappointment. After two years of drought that stoked rural distress, millions of farmers await the showers to start summer sowing. **CONT'D ON PAGE 8**