FFM. Directorale

भारत सरकार

Government of India केन्द्रीय जल आयोग

Central Water Commission बाढ़ पूर्वानुमान प्रबोधन निदेशालय

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विषय : विनाकं . भू. ७, १०, ११ की समाचार की कतरन (News Clippings) प्रस्तुत करने के राज्यन्थ में ।

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

शलंबन : उपरोक्तानुसार

(सहायक जिल्हा

उपनिद्धशक

| | निद्धेशक (बा.पृ.प्र.) 210265

कृष्या केन्द्रीय जल आयोग की वेव शाईट पर अपलोड करने की व्यवस्था करें।

प निहेशक (तक**र्मा**की प्रलेखन

19 am

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

The Assam Tribune (Guwahati) The Times of India (Mumbai) The Telegraph (Kolkata) हिन्दुस्तान (पटना)

The Deccan Hearld (Bengluru) The Deccan Chronical (Hyderabad) Central Chronical (Bhopal)







MLA Appachu Ranjan inspects an uprooted electricity pole following heavy rain on Somwarpet Road in Madikeri on Saturday. A woman struggles to keep her umbrella straight while riding pillion on a scooter

Monsoon gains momentum in state; dams get good inflow

spread rains on Saturday.

gu district threw normal life elling by. out of gear. The water-level in rivers Cauvery and Laksh- dated at Napoklu and Ayyanconsiderably.

in Brahmagiri range has in- jpet taluk. creased the water level in River

Paddy fields remained inun-for tourists.

Cauvery. There are all possibil- rupted at Bettageri, Katakeri

BENGALURU, DHNS: The state cation officer and four other terfalls have come alive in the green chilli crops will start rot-afternoon. continued to receive wide- officials had a narrow escape district due to the incessant ting." when a huge tree fell down in rain. The sight of a roaring wa-

The water level in Harangi manatheertha have increased geri. Several electricity poles reservoir stood at 2,792.18 were uprooted, resulting in feet. The maximum storage ca-Bhagamandala in Madik- snapping of power supply. pacity of the reservoir is 2,859 eri taluk has been complete- Gusty winds hit Arasu Nagara feet. The inflow of water to the ly inundated. The heavy rain and Malethiruka Betta in Vira- reservoir is 1,647 cusecs. The thalli received the highest rain- venience of vehicle riders. morning. While it drizzled in the catchment area of Tunga wall of a house collapsed at Ba-Vehicular traffic was dis- savanathooruin Somwarpet.

Farming activities have mm rainfall. ities of the Talacauvery-Madik- and Arvathoklu, following the intensified in the district. Heavy rain lashed Karwarin roads in the town. eri road being flooded, affect- uprooting of electricity poles B Bhaskar, a farmer from Uttara Kannada district from Appangala, said, "If the rain morning to afternoon on Sat- lashed Bhatkal over the past witnessed across Belagavi are 3,544 cusees and 9,997 The Somwarpet block edu- Abbi, Irpu and Mallali wa- continues to lash, ginger and urday, while it drizzled post couple of days, bringing down district. Earlier this week, the cusecs, respectively.

Heavy rains lashing Koda- front of the car they were trav- terfall has become a rare spec- pound wall of an anganwadi tacle and a thrilling experience centre at Kumbooru. Several trees fell on them at Hanagallu. Four people suffered injuries when a tree fell on them at dapur taluk of the district, Rain threw life out of gear There were reports of rain Hammiyala in Madapura.

fall of of 105.5 mm. The district Continuous showers clogged Chitradurga city, Molkalmur river has increased inflow to has received an average of 47.9

A huge tree fell on the com- with rainwear on. Tourists bodies. gave the Rabindranath Tagore beach and the sculpture gar- district has been receiving houses have been damaged as den a miss, due to the down- good rain for the last three peratures down in Hosapete

Showers continued in Sid-high.

Children walked to school ty poles and filling up water rains. Rain was reported from

Sakleshpur taluk in Hassan days and the wind speed is taluk, including Hampi, in Bal-

district. Rainwater flooded erate rain was reported in Holevel is nearing the maximum. lalkere taluk.

scores of trees and electrici- district had witnessed heavy Akki Alur in Hangal taluk and

Byadgi, both in Haveri district. The showers brought temlari district.

washing away mud on the for a few hours at many places in Shivamogga and Davangere In the last 24 hours, Shan-roadside, much to the incon-in Chitradurga district in the districts too. Good showers in drains in Yellapur town of the and Hosadurga taluks, mod-the Tunga dam and the water

The inflows to the Bhadra Strong winds and heavy rain Drizzling and showers were and Linganamakki reservoirs

ाहेनाकं .<u>(१) [] . [१</u>] को निम्नलिखित समाचार पत्र में प्रकाशित मानसन/ बाढ़ सम्बन्धा समाना

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

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The Deccan Hearld (Bengluru) The Deccan Chronical (Hyderabad) Central Chronical (Bhopal)

Monsoon set to The Felegraph 10/6/18

OUR BUREAU

Calcutta: The monsoon is likely to reach Calcutta on Sunday, two days after its normal arrival date.

The city received widespread rain for the third consecutive day on Saturday under the impact of a low-pressure area over the north Bay of

The All India Weather Forecast available on the website of the Indian Meteorological Department stated on Saturday: "Southwest Monsoon has further advanced into most parts of Central Arabian Sea, most parts of Konkan, some more parts of Madhya Maharashtra, Marathawada, Vidarbha, Chhattisgarh, Odisha and Northwest Bay of Bengal."

The bulletin further stated that "conditons are becoming favourable for further advance of Southwest Monsoon into some more parts of Chhattisgarh, Odisha, some parts of West Bengal and Sikkim".

An official at the Alipore Met office said the monsoon winds "are likely to enter Cal-



A pedestrian crosses Kidderpore Road amidst showers on Saturday afternoon. (Pradip Sanyal)

cutta on Sunday".

The monsoon is declared to have arrived at a place when a large area receives frequent and widespread rain. Calcutta might have been receiving frequent rain over the past few days but the rest of south Bengal was mostly dry.

Saturday's rain led to waterlogging on stretches of Muktaram Babu Street, Bidhan Sarani, Lalbazar Street and near the CR Avenue-Muktaram Babu Street crossing and Poddar Court on Rabindra Sarani. "The waterlogging slowed down traffic for some time," a police officer said.

According to the website www.weatherkolkata.in, run by IIT Kharagpur and the Calcutta Municipal Corporation, Ratan Babu Ghat in Baranagar received 17.53mm of rain. Behala received 17.27mm, New Market 19.30mm, Chowbhaga (off EM Bypass) 25mm and Ultadanga 14.99 mm. In contrast, Ballygunge received 4.83mm and Patuli 5.59mm.

Most places received the showers between 1pm and

The rain did not qualify as monsoon showers because it was triggered by a low-pressure belt that had formed over the north Bay of Bengal.

A low-pressure zone is an area where the atmospheric pressure is lower than its surroundings. Hence, it draws air towards itself.

The location of the lowpressure zone helped it draw moisture-laden air, which rose up and formed clouds.

ाहेनाक **१/6/18**

को निम्निलिखित समाचार पत्र में प्रकाशित मानसून/ बाढ़ सम्बन्धा समाना

Hindustan Times (Delhi) ਜ਼ਬੁशाएत टाईस्स (दिल्ली) The Tribune (Chandigarh) The Hindu (Chennai) The Assam Tribune (Guwahati) The Times of India (Mumbai) The Telegraph (Kolkata) हिन्दुस्तान (पटना) The Deccan Hearld (Bengluru)
The Deccan Chronical (Hyderabad)
Central Chronical (Bhopal)

Heavy rain alert for Bengal

OUR SPECIAL CORRESPONDENT

New Delhi: The national weather agency on Friday said a low pressure system was likely to form over the northern Bay of Bengal over the next 24 hours and predicted heavy rainfall across parts of Bengal, north Odisha, Sikkim, Assam and Meghala during the weekend.

The India Meteorological Department also said squally weather with winds up to 60kmph was "very likely" along the coasts of Bengal and Odisha and advised fisherfolk not to venture into the north Bay of Bengal on Saturday and Sunday.

It said conditions were a favourable for further advance of the monsoon into more parts of the central Arabian Sea and the northern Bay of Bengal over the next 24 to 48 hours and predicted extremely heavy rainfall over parts of coastal Karnataka, Goa and Maharashtra.

The monsoon has so far advanced into the southern peninsular India, the central Arabian Sea, and most parts of north Bay of Bengal.

नाकं .9.]६].!१... को निम्नलिखित रामाचार पत्र में प्रकाशित मानसून/ बाढ़ राम्बन्धा समाना

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The Assam Tribune (Guwahati) The Times of India (Mumbai) The Telegraph (Kolkata) हिन्द्रस्तान (पटना)

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Monsoon returns with gusto, heavy rain across state DM 9/1/18

returned with gusto in Karnataka with most parts of the state getting heavy rain on Friday.

Heavy rain coupled with gusty winds lashed Basavanabagewadi and surrounding villages in Vijayapura district fore more than an hour. The rain left agricultural fields inundated.

Nidagundi and surrounding villages in Vijayapura distrct received rain for an hour on Friday morning. There was moderate rain in Almatti.

Monsoon showers have brought cheers for farmers in Raichur district. Maski and Hatti in the district received heavy rain while there was drizzle in other parts of the district. There were brisk rain in Hatti and surrounding areas. The rain gauge at Hatti gold mines recorded 94mm of rains.

Kushtagi taluk in Koppal district has been receiving copious rain for the past two days. The rain has disrupted normal life. The primary health centre in Hanumanal village near Hanumasagara was marooned following heavy rain. Basavakalyan, Aurad and Bidar taluks received heavy rain for a short duration in the early hours of Friday.

Badami and nearby towns in Bagalkot district received heavy rain for more than two hours. The picturesque waterfalls in Badami taluk have come alive with the copious rain. Nargund taluk in Gadag district received heavy rain for





The primary health centre in Hanumanal village of Kushtagi taluk in Koppal district was marooned following heavy rains on Friday. (Right) Tourists enjoy showers at Raja Seat in Madikeri, Kodagu district on Friday. DH PHOTOS

the second day on Friday.

Moderate to heavy rain had also lashed Kalaburagi district on the intervening night of Thursday and Friday. Khajuri received the highest rainfall of 140 mm followed by Aland 90 mm and Narona 40 mm in the last 24 hrs ending at 8.30 am on Friday. The inflow into the lower Mullamarri dam at Nagarala in Chincholi taluk has increased following rainfall in the catchment areas.

The Uttara Kannada district received widespread rain on Friday triggering farming activities. A temporary bridge constructed across a stream near Tattihakkal in Shirali gram panchayat of Bhatkal taluk was washed away due to heavy rain late on Thursday

Siddapur taluk has recorded a rainfall of 37.2 mm in the last 24 hours. Honnavar taluk recorded 146.80 mm of rain as on Friday morning. Sirsi and

servoir

Name of the Reservoir	Full level*	Present level*
Linganamakki	1819.00	N/
Supa	1849.92	N/A
Harangi	2859.00	NA
Hemavathi	2922.00	NA
KRS	124.80	76.20
Kabini	2284.00	2259.10
Tungabhadra	1633.00	NA
Malaprabha	2079.50	NA
Almatti	1704.81	NA

Note: Reservoir levels have not been updated on the KSNMDC website.

surrounding villages received rain for the whole day.

Hassan city and parts of the district received moderate showers on Friday morning. Arkalgud, Channarayapatna, Javagal, Sakleshpur, Shravanabelagola and Konanuru experienced normal rain.

Mysuru city experienced

drizzling since afternoon. Kollegal, Male Mahadeshwara Hill, Yalandur in Chamarajanagar district experienced mild

Heavy rain lashed Mudigere and Kadur taluks in Chikkamagaluru districts. The water level in rivers Hemavathi and Bhadra, has increased considerably due to the rains. Movement of vehicles on Charmadi Ghat was affected due to poor visibility.

The bathing ghat at Triveni Sangama in Bhagamandala of Kodagu district has been inundated due to heavy rain. Kodagu has been receiving heavy rain since Thursday night. The inflow of water to Harangi reservoir has increased. The water-level in river Cauvery went up at Siddapura, Dubare and Kushalnagar.

Moderate to heavy rains lashed Shivamogga district. Shivamogga, Hosanagara, Thirthahalli received good

spell of rains since morning. Sagar, Bhadravathi, Shikaripura and Sorab also received moderate rains.

South West Monsoon intensified across Dakshina Kannada and Udupi districts on Friday.

Anticipating heavy rains, the district administrations of Dakshina Kannada and Udupi declared holiday for schools in Dakshina Kannada and Udupi on Friday and Saturday. Inflow into Kumaradhara river has increased due to heavy rain. As a result the bathing that at Kukke Subrahmanya has been partially submerged. In the last 24 hours, DK district received an average of 120.6 mm rainfall.

Heavy rainfall is predicted in the coastal Karnataka for the next 24 hours. The district witnessed heavy downpour during on Thursday night and Friday morning.

DH News Service

ि को निम्निशिवत समाचार पत्र में प्रकाशित मानसून/ बाढ़ सम्बन्धी समाना

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

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Season's greetings: Heavy rain likely for 3 days

Thursday's Downpour Submerges Parts Of City, Puts Brakes On Commute

Richa.Pinto@timesgroup.com

Mumbai: Mumbaikars, prepareyourselves for a wet weekend. Thursday's heavy pre-monsoon showers appear to be only a prelude to what lies beyond the horizon. If one goes by the India Meteorological Department (IMD) forecast, the city is likely to witness similar thundersho wers and heavy rainfall at isolated places on Friday; Saturday could see even heavier showers.

Weathermen, though, have not yet officially declared the

WEEKEND

For Friday, June 8 Rain and thundershowers. accompanied by gusty winds

For June 9, 10 and 11 Heavy to very heavy rainfall QUANTIFYING RAINFALL (IN MM)

Light rain | 2.5-15.5 Moderate 15.6-64.4 Heavy 64.5-115.5

Very heavy 115.6-204.4 Extremely heavy Greater or equal to 204.5

onset of monsoon over Mumbai, as till Thursday, it had only reached Goa. Ajay Kumar, scientist, IMD Mumbai, said, "We expect monsoon to reach most parts of Maharashtra, including Mumbai, in the next 72 hours or before Sunday," he said.

A low pressure area is likely to form over Bay of Bengal, which will lead to heavy rainfall in Mumbai. IMD has a set of criteria to declare the onset of monsoon - south-west wind direction and the city should record

rainfall activity was likely to increase over coastal Karnataka, Goa and south Maharashtra from Thursday. "Widespread rain activity is likely to continue till June 10. It is very likely to extend to north coastal Maharashtra, including Mumbai, from June 8. Extremely heavy rainfall at isolated places is also likely," said the IMD release.

The city witnessed moderaterain in the intervening night of June 6-7, which petered out in the morning. It once again pick ed up by noon. The barely two hours of heavy rainfall on the afternoon of June 7 left several parts of the city waterlogged.

For instance, parts of Worli Seaface, Bandra Kalanagar, Sion railway station area, Gandhi Market, King's Circle, Jogeshwari-Vikhroli Link Road, Hindmata and Dadar Parsi Colony were waterlogged. This caused traffic congestion. A local said that stormwater drains around Hindmata were not cleaned even after the rain stopped.

The tracks between Sion and Matunga were submerged too. Railway officials and workers ensured the water was pumped out. But train services were not badly hit. Officials said trains operated with restricted speed on the waterlogged stretch. Western Railway ran on time; Harbour saw 15-minute delays.

Meanwhile, as on June 7, water stock in the seven lakes which supply to Mumbai stood at 2.6 lakh million litres; it was 17.7% against the required 19.2%. Tulsi and Vihar got

12mm and 18 mm, respectively. Nanded, Latur, Osmanab ad, Hingoli and a few other are as in Marathwada got considerable rain; 16 circles got more than 65mm and some 100mm.



HIGH TIDE WARNING

Mumbaikars must brace for days when tide levels will rise above 4.5m High tide of 4.5m or more is a cause for concern if it is coupled with heavy rainfall as it can lead to waterlogging

June days when tide level will rise above 4.5m 13 14 4.9m 15 16 4.9m

17

18

MONSOON ARRIVAL DATES IN PAST FEW YRS 2016 | 2015 | 2014 | 2013

June 20 June 12 June 15 June 7 WATERLOGGED AREAS Include Sion, Worli, Kalina, Bandra, Dadar TT, Hindmata. Chakala, Kalanagar Circle

Short circuit

> the capacity of most them," said an official

Officials said that 'mitigation work' like widening of drains, which was taken up helped in water receding faster. On Thursday evening, a meeting was convened at the civic headquarters to take stock of the preparations in the city as the Met department

ught a report on how the work done prior to the monsoon has helped, and how soon rainwa-

Mumbai's Achilles heel, say officials Kalina like Kolaveri village and Shastri Nagar there appe urs of rain on Thursday subared to be no respite for resimerged many parts of the city. dents. Former corporator Bri-While residents alleged that an Miranda said that at Kola

Drains remain

tion of drains helped in rainwater receding much faster compared to previous years. Low-lying parts of the city including Dadar TT, Jay Bha-

Richa.Pinto@timesgroup.com

Mumbai: Less than two ho-

the municipal corporation on-

ce again seemed ill-equipped,

civic officials said augmenta-

rat area, Gandhi Market in King's Circle, parts of Chakala, JVLR and Bandra got waterlogged.

However, civic officials said there are limitations due to carrying-capacity of drains. "The existing British-era drains have a carrying-capacity of 25mm per hour. After the 2005 deluge, work on increasing

drains was taken up. However. most of the drains are underground and hence it is not possible to widen or deepen all of

has predicted heavy rain.

The BMC chief has so

veri village up to nearly two ft of water had entered homes "Apart from it at Shastri Nagar in Kalina where water never accumulates, one saw waterlogging due to construction of a pre-casting yard that has come up for the Metro



Waterlogging at Worli Seaface

work," he said. King's Circle resident Nikhil Desai said the measures taken by the BMC's installation of pumps in parts of Gandhi Market and other areas in Dadar did not seem to help. "The road from Sion to Dadar was almost three feet under water and the pumps seemed to be of no use Illtimately the manholes had to be opened," he said. Anticipating heavy rain over the weekend, the BMC has cancelled leave of key ward-level staffers. Teams of the Navy and National Disaster Response Force are being roped in

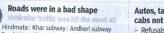
But trains services mostly unaffected A few diversions were

Tracks between Sion and Matunga stations were see 15-min delay waterlogged and trains operated at restricted speed on that stretch

> Harbour services

> Few long-distance trains delayed but not due to rain

carried out to avoid waterlogged roads and bus breakdowns at Sion, King's



Parel Hans Bhugra Junction at Santacruz East | Santacruz-Chembur Link Road | Western Express Highway | Jogeshwari to Vikhroli on JVLR | Kurla at LBS Marg | Worli Seaface | Kalina | Ambedkar Road | Pedder Road | Outside Sion Hospital | Pratiksha Nagar | S V Road Outside Plaza Cinema at Dadar Gandhi Market, Sion

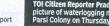


BEST bus services hit

cabs not easy to find Refusals were rampant and some autos and kaali-peeli taxis stayed off waterlogged roads

Those who booked aggregator cabs faced surge pricing; a few complained of longer wait

Jet Airways flight 9W-117 from London to Mumbai was diverted to Ahmedabad airport



Central Water Commission Technical Documentation Directorate Bhagirath(English)& Publicity Section

West Block II, Wing No-5 R K Puram, New Delhi – 66.

Dated 11 · 6 · 2018

Subject: Submission of News Clippings.

The News Clippings on Water Resources Development and allied subjects are enclosed for perusal of the Chairman, CWC, and Member (WP&P/D&R/RM), Central Water Commission. The soft copies of clippings have also been uploaded on the CWC website.

SPA (Publicity

Encl: As stated above.

Deputy Director (Publication).

Ar 1/6/16

For information of Chairman & Member (WP&P/D&R/R.M.), CWC and all concerned, uploaded at www.cwc.nic.in

e/e

News item/letter/afficle/editorial published on

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

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

M.P. Ohronicle Asj (Hillian) Indian Nation Nai Duniya (Hindi) The Times of India (A)

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

What caused Dec. 1, 2015 Chennai downpour?

IISc researcher answers this by linking the Eastern Ghats and rain-bearing clouds

SHUBASHREE DESIKAN

On December 1, 2015 Chennai and its surrounding regions experienced an unprecedented, heavy rainfall. In a region where the average rainfall during the season is expected to be 8-10 mm per day, one of the rain gauges in the city recorded an abnormally high, 494 mm, rainfall over 24 hours that day. This led to death of nearly 250 people, and Chennai was declared a 'disaster zone'. There have been attempts to explain this phenomenon of how clouds remained stationary over this region, continuously giving rain over 24 hours. In a first, Jayesh Phadtare of Centre for Atmospheric and Ocean Sciences, Indian Institute of Science, Bengaluru, links the presence of the Eastern Ghats to this phenomenon, in a paper published in Monthly Weather Review.

Cold pool

When clouds give out water droplets, the droplets evaporate mid-air, as they fall down. This cools the surrounding air, forming a cold pool of air which sinks down and flows horizontally. "The gusty cold wind that heralds an approaching thunderstorm is nothing but a cold pool, which plays a pivotal role in cloud dynamics." says Jayesh.



One of the rain gauges in Chennai recorded an abnormally high 494 mm rainfall over 24 hours. * AFP

Unlike the Western Ghats, which run close to the west coast of India, the Eastern Ghats are nearly 200 km away from the coast. Therefore, the link between the mountains' orography and the rainfall over the region is not obvious, and this is the first study to link the two. Jayesh, who is studying cloud propagation over the Indian region, could see the connection by observing satellite images: "In Kalpana-I satellite images, I saw that the clouds that gave so much rain over Chennai on 1 December 2015 moved from Bay of Bengal to the coast and became stationary there," he says. Realising that the Eastern Ghats must be having a role in this, he went on to study a model of the system. "The interaction between mountains, clouds and cold pools became clear after performing the model experiments," he adds, in an email to The Hindu.

According to the model, the cold pool was obstructed by the Eastern Ghats from flowing downward. Hence it piled up and remained stationary over the Chennai region. "The reason for the clouds remaining stationary was that there was a balance between the piling of cold pool along the mountain and the winds from the bay. This does not happen in all heavy rainfall incidences over Chennai," says Jayesh.

Sensitivity experiments were done to check this model. In the experimental model in which the orography was absent, the

winds just swept downstream and the clouds moved inland. In the model where the evaporative cooling was removed, the cold pool did not form at all and the clouds moved over the

Dust storms

Cold pools are known to play an important role in the dust storms (Aandhi) that form in northern India. They form by the evaporation of raindrops. This process is more efficient in the drier and warmer environment as there is lot of scope of evaporation. So, the cold pools that form in these conditions, are deeper and more vigorous. "As pre-monsoon conditions in north India are very dry and warm, cold pools that accompany the pre-monsoon thunderstorms there are far more destructive, causing widespread damages," says Jayesh. For the first time, this study links cold pools and the mountain structure to explain rainfall over south India.

Though the primary aim of the study is to explain the anomalous rainfall over Chennai on December 1, 2015, 'the understanding gained from this analysis can be useful for improving the general weather forecast over this region," the author writes in the paper.

News item/letter/arpicle/editorial published on

Nav Bharat Times (Hindi) Punjab Keshari (Hindi)

The Hindu

Rajasthan Patrika (Hindi)

Deccan Chronicle

Deccan Herald

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

and documented at Bhadirath(E

13 dead, over 400 houses damaged in Kerala rains

Crops destroyed in Idukki, Kozhikode, and Kannur districts

SPECIAL CORRESPONDENT THIRUVANANTHAPURAM

Hindustan Times

Indian Express

Hindustan (Hindi)

The Times of India (N.D.)

Statesman

Tribune

At least 13 people are feared killed and over 400 houses damaged in rain-related incidents over the last two days in Kerala as the southwest monsoon triggered heavy showers in parts of the State.

According to information from the State control room, four people died on Sunday, and one each in Alappuzha and Pathanamthitta districts. Widespread damage to crops and property was reported from Idukki, Kozhikode, and Kannur districts. Revenue officials said most of the deaths occurred due to drowning in rivers and lakes and falling trees. As many as 19 houses were destroyed and 408 damaged in various districts on Sunday.

Landslips and uprooted trees disrupted traffic at many places in the high ranges of Idukki district.



two in Thiruvananthapuram Risky ride: The ghat road between Mannarkkad and Attappady is in a state of disrepair. *K.K. MUSTAFAH

nat road unsafe

SPECIAL CORRESPONDENT PALAKKAD

With rain lashing the Silent Valley National Park and surrounding areas, safety issues have been raised about the ghat road that connects Mannarkkad in Palakkad with Coimbatore via the tribal heartland of Attappady.

The stretch, passing through the buffer zone of the Silent Valley, is prone to landslips and flooding.

Over 10 months ago, Attappady was cut off from the rest of Kerala for about two months after the road suffered damage in the floods. Several instances of landslips and flooding have been reported since then and the road continues to be in disrepair.

News item/letter/article/editorial published on 1006.0

Hindustan Times

Indian Express

Hindustan (Hindi)

The Times of India (N.D.)

Statesman

Tribune

Nav Bharat Times (Hindl) Puniab Keshari (Hind) The Hindu! Rajasthan Patrika (Hindi)

Deccan Chronicle Deccan Herald

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Even small dams have severe impact on river ecology >

Research shows that they alter rivers and their fish communities drastically

AATHIRA PERINCHERY

It seems to stand to reason that small dams cause less environmental problems than large ones. But the first study on small hydropower projects in India proves that they cause as severe ecological impacts as big dams, including altering fish communities and changing river flows.

Such hydroprojects, which usually generate less than 25 megawatts of power and consist of a wall that obstructs a river's flow, a large pipe that diverts the collected water to a turbine-driven powerhouse to generate electricity and a canal that releases the water back into the river, are touted to be better than large dams because they submerge fewer regions and barely impact river flow. Such projects receive financial subsidies - even carbon credits - for being 'greener'.

To see how green such small dams really are, scientists from organisations including Bengaluru's Foundation for Ecological Research, Advocacy and Learning (FERAL) compared almost 50 kilometres of three river tributaries - over one undammed and two dammed stretches - of the Netra-



An aerial view of a small hydropower plant. • KALYAN VARMA

vathi river in the Western Ghats of Karnataka.

They studied three zones in detail: above the dam (upstream), in the area between the dam's wall and the powerhouse, sometimes completely devoid of water ('de-watered') and below the powerhouse (downstream). Here, they studied differences in water depth and width; which signify how much habitat is available to the river's denizens, and habitat quality through factors including dissolved oxygen content and water temperatures.

Their results show that changes in water flow in the dammed sections re-

duced the stream's depth and width; water in these stretches was also warmer and had lower dissolved oxygen levels. These changes were most evident in the 'de-watered' zones and worsened in the dry seasons.

Habitat quality

This decrease in habitat quantity and quality showed in fish diversity too. The team found that un-dammed stretches recorded a higher diversity of fish species, including endemics (species seen only in the Western Ghats).

The upstream and downstream stretches get . disconnected and this impedes the river," says Suman Jumani, lead author of the study and researcher at

Such small hydro-projects cropping up on rivers in the Ghats is a serious worry, she adds, especially because they do not require environmental impact assessments.

"It is not a question of small versus big dams," says Jumani. "Small dams are not necessarily bad if there are proper regulations in place."

Regulations could include limiting the number of dams in a river basin or maintaining a minimum distance between dams on the same river stretch.

News item/letter/arpicle/editorial published on \mathcal{N} , \mathcal{U} ϕ .

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New route to clean wastewater

Self-propelling nanomotors can be used to do this

ASWATHI PACHA

Self-propelling nanomotors, just 200 nanometre in size, could be used for wastewater management in chemical industries. Developed by researchers from Indian Institute of Science Education and Research, Kolkata, and The Institute of Mathematical Sciences, Chennai, the nanomotor can be used for transporting catalysts needed in harsh chemical environments and removing unwanted chemicals in water.

Nanorods (rod shaped nanomotors) are made using ammonium heptamolybdate tetrahydrate and dispersed in the solution to be treated. When hydrazine sulphate is added to water, it reacts with the nanorods producing nitrogen gas. This leads to an osmotic stress in the fluid and causes the nanorods to move along the direction of the gas evolved.

The paper published in Frontiers in Chemistry says that this nanomotor is amongst the fastest reported active

nanoparticles.

"Molybdenum based soft-oxometalates are non-toxic and easy to synthesize. The complementary charge interactions on the surface trigger their motion. The speed can be increased by increasing the concentration of the fuel hydrazine on the surface of the nanorods and they were found to remain in their motile state for about three days," says Prof Soumyajit Roy from the Department of Chemical Sciences, IISER Kolkata and one of the corresponding authors of the paper.

Structure matters

The anterior end of these structures is capped like a pencil while the posterior end consists of a series of rod like protrusions. "We believe that these exposed ends of the rods provide a more accessible reaction surface than the capped end.

Therefore, the fuel hydrazine preferentially reacts at the posterior open end and generates gaseous nitrogen which

triggers motion and the propulsion speed reaches up to a maximum of 600 métres per hour." says Prof. R. Adhikari from Department of Physics at IMSc, Chennai who is one of the corresponding authors of the paper, in an email

to The Hindu.

In a paper to be published in the journal Nanoscale, the researchers have shown that another type of nanomotor in the form of a sphere (using titanium dioxide, heptamolybdate and gold) can also be used for delivering a catalyst to a particular area of interest by using visible light. The nanospheres were found to move away from visible light. "The catalyst triggers a reaction and the pollutants get adsorbed on the nanospheres leading to quickly removal of organic pollutants from water. The solution can then be filtered, dried and the nanosphere can be retrieved," says Apabrita Mallick, an Integrated PhD student at IISER Kolkata and one of the first authors of the papHindustan Times Statesman The Times of India (N.D.) Indian Express Tribune Hindustan (Hindi)

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Rains pound Rohingya camps

Last year, heavy showers killed at least 170 refugees

AGENCE FRANCE-PRESSE

The first monsoon rains have hit camps in Bangladesh housing around a million Rohingya refugees, triggering floods and landslides but no casualties or major damage so far, officials said on Sunday.

The sites in southeastern Bangladesh are predicted to be hit by powerful cyclones and by more than 2.5 metres (eight feet) of rainfall over the coming three months of monsoon.

Bangladesh's meteorological office said the Cox's Bazar area, where many of the refugees live in makeshift shelters on bare hillsides, had 138 mm of rain since Saturday evening.

"Some areas like the football field areas are flooded. Some houses have been inundated with water. There



No shield: Rohingya refugees take shelter from rains in Bangladesh's Ukhia district in October 2017. • AFP

have been a few landslides. The conditions are bad," said UN refugee agency spokesperson Caroline Gluck.

Rohingya leaders said the rains have already devastated some parts of the camps and turned some dirt roads into quagmires, hindering the movement of refugees and relief materials.

Kamal Hossain, a Rohingya community leader, said at least five shanties were destroyed by landslides or strong winds over around 12 hours of a sustained downpour beginning on Saturday evening.

Last year heavy rain triggered mudslips in Cox's Bazar and the nearby Chittagong Hill Tracts, killing at least 170 people. More than 100 died in landslides in the region in 2012, and two years earlier around 50 perished.



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City still thirsty, UP to give extra 15MGD Ganga water from today

Paras.Singh@timesgroup.com

New Delhi: With its tussle with Haryana over water sharing yet to get resolved, Delhi is now looking towards another neighbour —Uttar Pradesh—for relief. From Sunday, the capital will start getting additional 15MGD (million gallon per day) raw water from the Ganga.

DJB vice chairman Dinesh Mohania said the extra water would come from the Muradnagar canal and would be transferred towards Wazirabad. The city is trying to reduce its over-dependence on Haryana, headded. "Delhiites suffer due to whims of the Haryana administration. An agreement will be signed with the UP administration to get another 100MGD for long-term needs."

Normally, Delhi receives around 240MGD water from Uttar Pradesh through the upper Ganga canal, out of which the Sonia Vihar water treatment plant (WTP) gets 140MGD and the Bha-

TAPPING RESOURCES

Yamuna

375

➤ Delhi to get 15MGD water from Ganga from Sunday > Talks on for long-term diversification to source additional 100MGD to reduce over-dependence on Haryana

Groundwater/ ranney well/ tubewell 80

Bhakra

Total water resources in Delhi (in MGD)

storage 218 Ganga | 240 -

MORE OPTIONS

1 Sustainable extraction of water from floodplains downstream of Wazirabad and the area adjacent to Najafgarh lake

2 Groundwater recharging through abandoned Bhatti mines and canal system in northwestern region

3Zero liquid discharge system for bulk users

girathi WTP100MGD.

This additional water will be used to provide relief to the areas being covered by the Wazirabad plant and the Dwarka region will also get 5MGD, Mohania said. "The amount might not seem a

significant figure but it will bring relief to lakhs of people."

Delhi has the installed capacity of supplying 913MGD water. Each MGD unit translates into around 44 lakh litres of water, a DJB official said. The demand of

Delhi is estimated to be around 1,113MGD. Renuka Dam, Kishau Dam and Lakhwar Vyasi Dam are to be constructed so that Delhi gets its share in the Yamuna water as per Yamuna Water Sharing Agreement signed in May 1994 but the construction work is stuck.

"Dams cannot meet our shortterm demands. We are also exploring other options, including sustainable extraction of water from the floodplains downstream of Wazirabad and the area adjacent to Najafgarh lake, and groundwater recharging through the abandoned Bhatti mines and the canal system in the northwestern region," a senior official said.

DJB is going to explore zero-liquid discharge systems for bulk users to cut waste. "Rainwater harvesting systems can only function for the rainy season while zero-liquid discharge will help in recharging groundwater throughout the year," Mohania said.

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'Uranium contamination in Rajasthan groundwater'

Level exceeds drinking water safety standards, finds study

ЈАСОВ КОЅНУ

NEW DELHI

Many parts of Rajasthan may have high uranium levels in their groundwater, according to a study by researchers at the Duke University in North Carolina, United States, and the Central Groundwater Board of India.

The main source of uranium contamination was "natural," but human factors such as groundwater table decline and nitrate pollution could be worsening the problem.

"Nearly a third of all water wells we tested in one State, Rajasthan, contained uranium levels that exceed the World Health Organization (WHO) and U.S. Environmental Protection Agency's (EPA) safe drinking water standards," said Avner Vengosh, a professor of geochemistry and water quality at Duke's Nicholas School of the Environment, in a press statement.

"By analysing previous water quality studies, we also identified aquifers contaminated with similarly

Unsafe acquifers

Sixteen States show a high prevalence of uranium concentrations above the WHO provisional guideline value (30 $\mu g/L)$

- India has no standards for uranium levels in groundwater
- *There have been reports of high levels of uranium in Andhra Pradesh
- *Over-pumping of groundwater causes a decline in water levels
- This induces oxidation conditions that enhance uranium enrichment in shallow groundwater

Places where Uranium exceeds drinking water guidelines in some wells

Source:
"Large-Scale Uranium Contamination..." Rachel M. Coyte et al.

high levels of uranium in 26 other districts in north-western India and nine districts in southern or south-eastern India," he said.

While previous studies have referred to high uranium levels in some districts of India, this analysis gave a bird's eye view into the extent of such contamination. The WHO has set a provisional safe drinking water standard of 30 micrograms

of uranium per litre, a level that is consistent with the U.S. EPA standards. Despite this, uranium is not yet included in the list of contaminants monitored under the Bureau of Indian Standards' Drinking Water Specifications.

Mr. Vengosh and his colleagues published their peer-reviewed study on May 11 in Environmental Science & Technology Letters.

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IMD alerts residents on west coast about 'extremely heavy rainfall' in 2-3 days

PRESS TRUST OF INDIA

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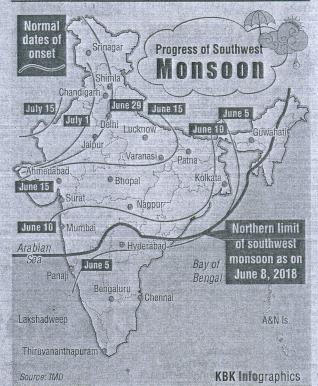
As the monsoon continued to advance from Kerala to Maharashtra, the India Meteorological Department today again alerted residents on India's West coast about the possibility of "extremely heavy rainfall" in parts of the region during next 2-3 days.

The Southwest Monsoon moves from sea to land and remains active from June to September over the Indian subcontinent. It has two branches - the Arabian sea branch and the Bay of Bengal branch.

The Southwest Monsoon moves from sea to land and remains active from June through September over the Indian subcontinent. It has two branches - the Arabian sea branch and the Bay of Bengal branch - that bring rainfall across India.

The IMD said the monsoon has advanced to parts of Central Arabian Sea, Goa, Karnataka, Rayalaseema region and Andhra Pradesh, parts of south Konkan, southcentral Maharashtra, Marathwada, Vidarbha, south Chhattisgarh, south Odisha, Telangana and Bay of Bengal.

It said the conditions are favourable for further advance of the monsoon into central Arabian Sea, Maharashtra, Chhattisgarh and Odisha and remaining parts of coastal Andhra Pradesh during next 24 hours. "Increased rainfall activity over coastal Kar-



nataka, Goa and south Maharashtra is likely to continue till June 10. It is very likely to extend to north coastal Maharashtra, including Mumbai, from tomorrow.

Extremely heavy rainfall at isolated places in these regions is very likely during this period," the IMD said. The rainfall activity over the regions is likely to reduce from 12 June.

Mumbai and its satellite cities have been alerted about the possible heavy rainfall.

The IMD said a low pressure area is "very likely" to form over north Bay of Bengal during next 24 hours and it is "very likely" to intensify into a depression in the next 48 hours and move towards the Bangladesh coast.

Due to this, the Met office said, rainfall activity will increase over north Odisha, West Bengal, Sikkim, Assam and Meghalaya, on 9 to11 June with occurrence of isolated "heavy to very heavy rainfall".

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orms, lightning kill 26 in UP; soon claims 2 in Mui

BRUNT Mumbai paralysed as downpour disrupts rail, road and air traffic

Press Trust of India

letters@hindustantimes.com

NEW DELHI: Twenty-six people were killed in dust storms and lightning that struck parts of Uttar Pradesh on Friday, while two persons died on Saturday in rain-related incidents in Maharashtra. The downpour in Mumbai caused disruptions in rail and air traffic.

There were reports of rains in Punjab, Haryana and some parts of Uttar Pradesh, which had been experiencing sweltering conditions. As many as 26 people were killed due to dust storms and lightning strikes in Uttar Pradesh, a government spokesperson said on Saturday

Dust storms and lightning hit places in 11 districts of the state last night resulting in the death of 26 people, he said.

While five deaths each were reported from Jaunpur and Sultanpur, four died in Unnao, three each died in Chandauli and Bahraich, two in Rae Bareli and one each in Mirzapur, Sitapur, Amethi and Pratapgarh, the spokes-

UP CM YOGI ADITYANATH HASDIRECTED THE DISTRICT MAGISTRATES OF THE AFFECTED AREAS TO PROVIDE **COMPENSATION TO** FAMILIES OF THOSE KILLED

person said.

Kannauj district was also affected by a dust storm but no casualty was reported from there, he said.

Uttar Pradesh Chief Minister Yogi Adityanath has directed the district magistrates of the affected areas to immediately provide compensation to families of those killed and said no laxity will be tolerated.

In Maharashtra's Thane district, fisherman Steni Admani (66) was struck by lightning at around 6 am. He died on the spot, said Shivaji Patil, chief of the District Disaster Control Cell.

Six others, who were out in the

open at that time, were also injured due to the lightning strike and have been admitted to a local hospital.

A woman, who was riding pillion on a two-wheeler died after the vehicle rammed into a truck on the GB Road. An official said heavy rains apparently led to the accident. Heavy rains pounded Mumbai, leading to a slight delay in the running of suburban trains. The India Meteorological Department declared the onset of monsoon over Mumbai, the adjoining Thane-Konkan areas, Ahmednagar, Parbhani and other parts of Maharashtra.

"Heavy to very heavy rainfall was recorded in the suburbs till 8.30 am today," IMD Deputy Director K S Hosalikar said.

Trains on the suburban section of the Central Railway (CR) were running late due to the showers, an official said, adding that there were no cancellations. Two flights had to be diverted due to the bad weather.

Over the years, heavy monsoon rains have paralysed Mumbai, flooding streets and disrupting rail, air and road traffic.

The weatherman forecast the dust storm in Ghaziabad, Meerut, Baghpat and other adjoining districts in western Uttar Pradesh.

Sultry conditions abated in Haryana and Punjab afterrains. Chandigarh, which received rainfall earlier in the day, had a high of 33.8 degrees Celsius, down five notches against normal. In Punjab, Amritsar recorded a maximum of 31.7 degrees Celsius after rains.

Haryana's Ambala, lashed by a heavy downpour, recorded a high of 31.9 degrees Celsius. However, Hisar and Bhiwani continued to brave the hot weather at 41 and 41.4 degrees Celsius. The local weather office predicted thunderstorm and gusty winds at several places in the two states.

The weatherman predicted rains in Uttarakhand, Himachal, Punjab, UP, Haryana, J&K, Rajasthan, West Bengal, Odisha, Jharkhand, Arunachal Pradesh, Assam, Meghalaya, Bihar, MP, and Chhattisgarh on Sunday.

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Watercrisis: Shimla to have additional storage tanks

CM directs civic body to check leakage of water and improve its distribution system

STATESMAN NEWS SERVICE

hief Minister Jai Ram Thakur on Friday directed the officers of Municipal Corporation Shimla to take immediate steps for checking leakage of water and completing the work on changing the main water supply line from

Craignano to Dhalli (7 KMs),
Thakur held a meeting with senior officers of various departments to review the measures being undertaken for improvement in water supply for Shimla city for various water sources. He told the civic body to improve water distribution system and said nine additional storage tanks would be constructed in Shimla town that would help in storing an extra 17 million litres of water.

The CM said the officials must put efforts to re-charge water sources around Shimla to add to daily water availability.



He directed the concerned departments to speed up or initiate work on the short and long term plans so that most of the works could be completed within a year and there should be no water crisis in Shimla during the next summer season. He also asked to

fast track the work on medium-term plans being executed for enhancing water capacity in different schemes.

The CM said that efforts were on to ensure availability of more than 10 million litres of water per day for Shimla by enhancing the capacity of

Gumma, Ashwani Khud and Giri river from where the water was being supplied to the city.

He said more tube wells would be explored in the Ashwani Khud area and check dams would be constructed upstream of Gumma and Giri water sources.

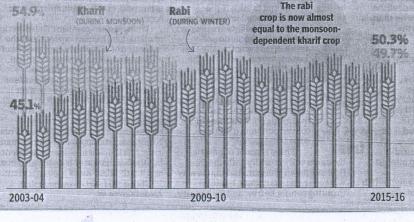
Thakur said that the work on Chaba project should be completed within a year which shall provide 10 to 15 MLD of extra water to the Gumma water source.

Thakur stressed that all the line departments should work in close co-ordination so that unwanteddelays could be avoided and the targets could be achieved within the stipulated time period.

Secretary, Irrigation and Public Health department Devesh Kumar said that ultraviolet radiation technology would be tried in Ashwani Khud water source to kill the germs and the process has been started to construct check dams on all the sources of water lifting. He also briefed about the visit of Central Water Commission team to Shimla and suggestions given by it.

Chief Secretary Vineet Chaudhary, Additional Chief Secretaries Srikant Baldi, Anil Khachi and Tarun Kapoor were also present in the meeting

News item/letter/arpicle/editorial published on 10,06,20/8 Hindustan Times Nav Bharat Times (Hindi) M.P. Chronicle Punjab Keshari (Hindi) Asj (Hindi) Statesman The Times of India (N.D.) The Hindu Indian Nation Rajasthan Patrika (Hindi) Indian Express Nai Duniya (Hindi) Deccan Chronicle The Times of India (A) Tribune Hindustan (Hindi) Deccan Herald and documented at Bhagirath(English)& Publicity Section, CWC Why Monsoon Matters Beyond The Farn Amid hopes that the projected 97% monsoon will fuel growth, here's a look at monsoon's role in India's economy 3.9 How does the monsoon affect **GDP** growth **Change from previous** year's growth rate rate 1.9 ■ The monsoon's failure is often linked to the economy's 2002-03 2009-10 1979-80 1987-88 1965-66 1972-73 overall performance. It is not the agricultural sector alone that is affected by a bad LEARNING -0.8-1.5monsoon — industry too WITH THE suffers as lower farm output -1.3decreases demand from this Monsoon rain departure sector, which employs half the country's workforce. Contrasting GDP growth (-18.2 from normal rates with drought years since 1951-52 reveals growth is sluggish in drought years. In recent years this correlation has become weaker, which may be linked to the fact that agriculture's share in GDP has also fallen. But it continues to employ half of India's workforce. -11.3 -10.7Is there a major difference What is the Indian monsoon? Tibetan plateau, which heats up The southwest monsoon is a between agricultural output in Kharif and Rabi seasons? summertime reversal in wind direction more than the atmosphere would at that provides nearly 70% of the Indian its height. Monsoon has a set pattern Over the past decade, the share of Kharif (monsoon) subcontinent's annual rainfall. Monsoon of advance and withdrawal. It arrives in southern India in May or June, and crops in the national output winds originate from the southern advances northwards and westwards, Indian Ocean. They get deflected southhave fallen, while Rabi westwards towards India after crossing reaching Pakistan by July. It retreats (winter) crops are on the rise. Crops like rice and the equator. These winds are driven by from Pakistan by September, finally maize, which grow in air pressure differences caused by the withdrawing from southern India by December. The season doesn't see a monsoon and winter, have seen a marked decline in more rapid heating up of the land in summers compared to the ocean. The continuous deluge, but has Kharif output, while the land heats up the air over it, causing it alternate wet and dry phases, What are the country's wettest and share of their Rabi output to rise and create a low-pressure zone, the timing and duration of which account for much of driest states? has risen. Exclusively Rabi which attracts winds from the highthe year-to-year variation in Mawsynram, a village in Meghalaya is the pressure regions over the ocean. In crops, such as wheat, remain world's wettest place. Meghalaya receives the unaffected by monsoons. south Asia, the effect is enhanced by the country's highest rainfall followed by Goa and Sikkim. The national capital on the other The rabi hand was among the driest states in 2016. Rabi crop is now almost (DURING WINTER) Annual Rainfall Normal Avg (mm) State equal to the monsoon-WETTEST dependent kharif crop 50.3%



India's economy?

Meghalaya 3,837 Goa 3,267 Sikkim 2.972 Arunachal 2,934 2,924 Kerala DRIEST Delhi 747 711 Guiarat 636 Punjab Haryana 555 464

Graphic: Karthic lye

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सरकार अपने संसाधनों से जल प्रबंधन करे

धरती की तिपश दिनोंदिन बढ़ रही है। हमारी मूलभूत जरूरतों के लिए भी पानी कम पड़ने लगा है। अगर हमने पर्यावरण को सहेजने के प्रयास नहीं किए तो वह दिन दूर नहीं जब हमारा वजूद ही खतरे में पड़ जाएगा। सरकारें बातें तो बड़ी-बड़ी करती हैं, लेकिन अमल के मामले में फिसड्डी साबित होती रही हैं। इसी सप्ताह पर्यावरण दिवस भी गुजरा है। इस मौके पर रमेश ठाकुर ने जलपुरुष कहलाने वाले विख्यात पर्यावरणविद राजेंद्र सिंह से बातचीत की। प्रस्तुत हैं मुख्य अंशः

■ पेय जल की समस्या लगातार विकराल होती जा रही है। इसके मुख्य कारण क्या हैं?

जिस तरह चापाकल और छोटे-बड़े बोरवेल लगाकर भूमिगत जल का अंधाधुंध दोहन किया जा रहा है, उससे जलस्तर लगातार नीचे जा रहा है। सघन रूप से छोटे-बड़े बांध, बड़े-बड़े तालाब, बड़े-बड़े कुएं और बावड़ियां बनाकर इस समस्या का निदान किया जा सकता है। इससे जलस्तर भी उचित लेवल पर बना रहेगा। हम सरकारों को उपाय बताते हैं, पर कोई माने तब तो।

जलसंकट के समुचित समाधान में वैश्विक संस्थाएं कितनी मददगार हो सकती हैं?

हमारी समस्याएं वैश्विक संस्थाएं सुलझाएंगी इसकी उम्मीद न करें। बाकी दुनिया का जलसंकट भारत से ज्यादा भयावह है। कई देशों में इसी वजह से लोग पलायन को मजबूर हो रहे हैं। भारत में अभी ऐसी स्थिति नहीं आई है कि लोग देश छोड़कर चले जाएं। इसलिए हम उनकी प्राथमिकता में नहीं हैं। भले ही यहां के लोग एक राज्य से दूसरे राज्य की ओर रोजगार के लिए पलायन कर रहे हैं, क्योंकि उनके राज्य में खेती हेतु उपयुक्त जल प्रबंधन का अभाव है। भारत को अपने जलसंकट का समाधान खुद ही करना होगा। इस दिशा में किसी भी विदेशी संस्था की अपेक्षित मदद नहीं मिलने वाली है।

पब्लिक प्राइवेट पार्टनरिंगप (पीपीपी) से कोई समाधान निकल सकता है?

पीपीपी की मौजूदा प्रवृत्ति बहुत खतरनाक है। ये साझा संपत्ति को निहित स्वार्थों के लिए निजी कंपनियों को सौपने का खेल है, और कुछ नहीं। इससे पानी के निजीकरण को बढ़ावा मिलेगा जो अनुचित होगा। हमें यह नहीं भूलना चाहिए कि पब्लिक प्राइवेट पार्टनरशिप का आदर्श उदाहरण राजतंत्र में मिलता था। तब राजा अपनी जमीन देता था और जनता अपनी कड़ी मेहनत से उस जमीन पर तालाब खोदती थीं, छोटे-बड़े कुएं और बावड़ियां बनाती थी तािक जो जलसंचय हो, उससे बाद



सप्ताह का इंटरव्य

राजेंद्र सिंह

में काम लिया जा सके। तब राजा ऐसे कार्य में सहयोग करने वाले व्यक्तियों को हलवा-पूड़ी और खीर-पूड़ी भी खिलवाता था जिसे पुण्य कार्य समझा जाता था। यही नहीं, निर्माण कार्य में लगने वाले अन्य जरूरी सामानों की कीमतें भी राजा प्रदान करता था। वह पवित्र भावना थी जो एक-दूसरे को जोड़े रखती थी, लेकिन वह नेकनीयती अब कहां? इसलिए पब्लिक प्राइवेट पार्टनरशिप की जगह सरकार को अपने संसाधनों से यह कार्य करना चाहिए। क्योंकि जल से ही सबका जीवन है।

■ जल प्रदूषण की रोकथाम के लिए क्या किया जाना चाहिए?

सिंदयों से भारत में पानी का बहुत सम्मान रहा है। लोगों ने हमेशा इस बात का ख्याल रखा कि पानी में हमारी गंदगी न मिले। भारतीय संस्कृति में नदी, तालाब और कुएं भी पूजनीय हैं। मैं जब ग्यारह साल का था तो अपनी अनपढ़ दादी के साथ गंगा स्नान के लिए गढ़मुक्तेश्वर गया था। वहां उन्होंने लोटे से पानी निकाल कर पहले मेरे हाथ-पैर धुलवाए। इसके बाद ही नदी में उतरने दिया। इतना ही नहीं दादी ने नदी में पांव रखने से पंहले अंजुिल में पानी लेकर उसे अपने सिर से लगाया। यह घटना मेरे जीवन का अहम मोड़ साबित हुई। उस दिन मुझे नदी और पानी की अहमियत का अहसास हुआ। पुराने लोग इस बात को लेकर भी सजग रहते थे

66

पब्लिक प्राइवेट पार्टनरशिप (पीपीपी) की मौजूदा प्रवृत्ति बहुत खतरनाक है। यह साझा संपत्ति निजी कंपनियों को सौंपने का खेल है, और कुछ नहीं। इससे पानी के निजीकरण को बढ़ावा मिलेगा जो अनुचित होगा। पीपीपी की जगह सरकार को अपने संसाधनों से यह कार्य करना चाहिए, क्योंकि जल से ही सबका जीवन है

कि नदियों में या उसके आसपास किसी भी प्रकार के शौच कार्य से परहेज किया जाए।

■ पर्यावरण बचाने के लिए आप केंद्र और राज्य सरकारों से क्या उम्मीदें रखते हैं?

सरकार को सबसे पहले बाढ़ और सुखाड़ की समस्या का स्थायी समाधान करने की दिशा में सार्थक पहल करनी चाहिए। मेरे विचार से वर्षा जल का संचय करके उसके विकेंद्रीकरण का कार्य करना चाहिए। इसके लिए सिर्फ ठेकेदारी प्रथा पर निर्भर रहना और पसंदीदां कंपनियों के लाभ के नजिरए से ही कार्य करना उचित नहीं है, बल्कि जल संचय की जरूरत, विशेष भौगोलिक परिस्थिति के अनुकूल डिजाइन और समुचित इंजीनियरिंग का प्रयोग इस हिसाब से करना चाहिए जो सबके लिए अनुकूल हो, क्योंकि फिलवक्त ऐसा नहीं है।

■ जल के सामुदायिक विकेंद्रीकरण में क्या कमियां या खामियां हैं?

जल के सामुदायिक विकेंद्रीकरण के कार्य को सिर्फ इंजीनियरों और ठेकेदारों के हाथों में नहीं छोड़ा जाना चाहिए। ऐसा इसलिए हुआ कि हमारे नेताओं ने कभी भी इसमें अपनी गहरी अभिरुचि नहीं दिखाई, जिससे हरेक क्षेत्र में समावेशी जल विकास कार्य संभव नहीं हो पाया। यही वजह है कि विभिन्न योजनाओं के माध्यम से बड़े-बड़े बांध (डैम) तो बनाए गए, जलविद्युत भी पैदा की गई, पेशेवर विकास के अन्य उपाय भी किए गए, लेकिन उसका पूरा लाभ देश के सभी लोगों को समान रूप से नहीं मिल पाया। क्योंकि छोटे-छोटे बांध नहीं बनाए गए। छोटे-बड़े तालाबों, कुएं, बावड़ियों की समुचित उपलब्धता पर बहुत कम ध्यान दिया गया। News item/letter/article/editorial published on 10.6.2016

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Indian Nation Nai Duniya (Hindi)

Blitz

The Times of India (A)

Hindustan Times

Statesman The Times of India (N.L.)

Indian Express

Tribune Hindustan (Hindi) Рипјав Keshari (Hindi) The Hindu Rajasthan Patrika (Hindi)

Deccan Chronicle

Deccan Herald

and documented at Bhagrath(English) & Publicity Section, CWC

यूपी में आंधी, बारिश का कहर : 26 मरे

नई दिल्ली,(भाषा) उत्तर प्रदेश के विभिन्न जिलों में कल आये आंधी-तूफान और आकाशीय बिजली गिरने से 26 लोगों की मौत हो गयी, जबकि महाराष्ट्र में आज बारिश जनित घटनाओं में दो लोगों की मौत हो गयी। पंजाब , हरियाणा और उत्तर प्रदेश के कुछ इलाकों में बारिश की रिपोर्ट है। काफी समय से इन राज्यों में भीषण गर्मी का दौर जारी है।

सरकारी प्रवक्ता ने आज बताया कि आंधी-तुफान एवं आकाशीय बिजली गिरने से प्रदेश में कम से कम 26 लोगों की मौत हो गयी।

उन्होंने बताया कि बीती रात राज्य के 11 जिलों में आंधी और बिजली गिरने से 26 लोगों की मौत हो गयी। प्रवक्ता ने बताया कि जीनपुर एवं सुल्तानपुर में पांच-पांच, उन्नाव में चार, चन्दौली एवं बहराइच में तीन-तीन, रायबरेली में दो तथा मिर्जापुर, सीतापुर, अमेठी एवं प्रतापगढ़ में एक-एक लोगों की

उन्होंने बताया कि कन्नौज जिला भी आंधी से प्रभावित हुआ हालांकि वहां किसी के हताहत होने की रिपोर्ट नहीं है। इस बीच मुख्यमंत्री योगी आदित्यनाथ ने संबंधित जिलों के जिलाधिकारियों को प्रभावित लोगों को तत्काल राहत पहुंचाने के निर्देश दिये हैं।

उन्होंने कहा कि राहत कार्य में किसी तरह की ढिलाई बर्दाश्त नहीं को जायेगी। महाराष्ट्र में जिला



आसमान में कड़कती बिजली जिसकी चपेट में आकर कई लोग मारे गए।

आपदा नियंत्रण प्रकोष्ठ के प्रमुख शिवाजी पाटिल ने बताया कि ठाणे जिले में सुबह करीब छह बजे एक मछुआरे स्टेनी अडमानी (66) आकाशीय बिजली की चपेट में आ गये। मौके पर ही उनकी मौत हो गयी। उन्होंने बताया कि उस वक्त बाहर मौजद छह अन्य भी आकाशीय बिजली की चपेट में आने से घायल हो गये। उन्हें अस्पताल में भर्ती

एक अधिकारी ने बताया कि जीबी रोड पर दपहिया वाहन के ट्रक की चपेट में आने से एक महिला की मौत हो गयी। महिला वाहन की पिछली सीट पर बैठी थी। उन्होंने बताया कि महिला की मौत भारी बारिश के चलते हुई। बारिश के बाद पंजाब के अमृतसर में अधिकतम तापमान 31.7 डिग्री बारिश का पूर्वानुमान जताया है।

सेल्सियस दर्ज किया गया। हरियाणा के अंबाला में भारी बारिश हुई। वहां अधिकतम तापमान 31.9 डिग्री सेल्सियस दर्ज किया गया। हालांकि हिसार एवं भिवानी में भीषण गर्मी जारी है। वहां अधिकतम तापमान क्रमश : 41 एवं 41.4 डिग्री सेल्सियस रहा।

स्थानीय मौसम विभाग ने दोनों राज्यों में कल कई स्थानों पर गरज के साथ छींटे पड़ने एवं आंधी का पूर्वानुमान जताया है।

मौसम विभाग के अधिकारी ने उत्तराखंड , हिमाचल प्रदेश , पंजाब , उत्तर प्रदेश , हरियाणा , जम्मू कश्मीर, राजस्थान, पश्चिम बंगाल , ओडिशा , झारखंड , अरुणाचल प्रदेश , असम , मेघालय , बिहार , मध्य प्रदेश और छत्तीसगढ़ में कल

News item/letter/arficle/editorial published on

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

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

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

मौसम ने बदला रंग, आज भी आंधी-बारिश के आसार

शाम 5 बजे ही छा गया अंधे

विशेष संवाददाता, नई दिल्ली

4.45 बजे के बाद मौसम एकाएक बदला। देखते ही देखते बादलों के अंधेरे ने दिल्ली को अपनी आगोश में ले लिया। आज भी आंधी बारिश की संभावना जताई

दिन भर लोग उमस और गर्मी से बेहाल रहे। नमी का स्तर सड़कों और पार्क में टहलते दिखाई दिए।

तापमान शनिवार को भी 40.1 डिग्री रहा। वहीं पालम का तापमान 40.9, आया नगर 40.2, लोधी रोड 37.2, अचानक शनिवार शाम को बदले मौसम ने कुछ देर रिज 38, जफरपुर 40.4, मंगेशपुर 37.6, नजफगढ़ में के लिए चुभती तपती गर्मी से राहत दी। शाम करीब 38.7 और नरेला में 38.6 डिग्री रहा। न्युनतम तापमान शनिवार को 30 डिग्री बना रहा जो सामान्य से दो डिग्री

आंधी के बाद दिल्ली के कई हिस्सों में अच्छी खासी बारिश हुई। हालांकि बारिश कितनी हुई इसका सही तेज हवाओं के साथ उड़ती धूल ने लोगों की परेशानियों आकलन रविवार को हो पाएगा, लेकिन शाम 5.30 को भी बढ़ाया। लोगों को बीच सस्ते गाड़ियां खड़ी करनी बजे तक सबसे अधिक बारिश जफरपुर में 32 एमएम, पड़ीं। मौसम विभाग के अनुसार सफदरजंग में हवाओं पालम में 23 एमएम, मंगेशपुर में 9 एमएम, रिज में 2.3 की गति 96 किलोमीटर प्रति घंटे रही और पालम में 95 एमएम, नजफगढ़ और नरेला में 1 एमएम बारिश हुई। किलोमीटर प्रति घंटे दर्ज हुई। आंधी की वजह से तापमान लोधी रोड और आया नगर में भी बूंदाबांदी दर्ज की गई। महज एक घंटे में 4 डिग्री तक कम हुआ। इससे पहले बारिश के बाद काफी लोग मौसम का मजा लेने के लिए



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

and documented at Bhagarath(English) & Publicity Section, CWC

ब्रह्मपुत्र नदी के आंकड़े साझा करेगा चीन

किंगदाओ एजेंसी

प्रधानमंत्री नरेंद्र मोदी ने शनिवार को शंघाई सहयोग संगठन (एससीओ) शिखर सम्मेलन से इतर चीन के राष्ट्रपति शी जिनपिंग के साथ द्विपक्षीय बैठक

की। इस दौरान दोनों नेताओं ने दो

चीन भारत को ब्रह्मपुत्र नदी के प्रवाह की जानकारी देगा। साथ ही भारत अब चीन को बासमती से अलग दूसरी किस्मों के चावल का भी निर्यात करेगा।

समझौते के तहत प्रति वर्ष 15 मई से 15 अक्तूबर के दौरान ब्रह्मपुत्र नदी

समझौतों परहस्ताक्षरिकए। इसके तहत के जल के प्रवाह से जुड़ी जानकारी भारत को देगा। साथ ही बारिश के मौसम में अगर इस नदी में जलस्तर परस्पर सहमति से तय सीमा से ऊपर जाता है तो उसकी भी जानकारी चीन भारत को देगा।

पिछले साल डोकाला विवाद के चलते चीन ने भारत के साथ ब्रह्मपुत्र के प्रवाह से जुड़े आंकड़े साझा करने बंद कर दिए थे। इसके साथ ही भारत गैर-बासमती चावल का चीन को निर्यात कर सकेगा। चीन दुनिया के सबसे बड़े चावल बाजारों में से एक है। अभी तक चीन भारत से केवल बासमती चावल का आयात करता है।

े जिनाविश आपन आएंगे पन

भारत-चीन के संबंध दुनिया को प्रेरणा दे सकते हैं: मोदी

मोदी एससीओं के सालाना सम्मेलन में शामिल होने के लिए दो दिवसीय दौरे पर शनिवार दोपहर किंगदाओं पहुंचे। बैठक से पहले दोनों नेताओं ने गर्मजोशी से हाथ मिलाया और फोटोग्राफरों को तस्वीर लेने का मौका दिया। प्रधानमंत्री मोदी ने इस अवसर पर कहा कि भारत और चीन के बीच मजबूत और स्थिर संबंध पूरी दुनिया को शांतिपूर्ण विश्व की प्रेरणा दे सकते हैं।

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

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

ALP Obtaine Asj (Hingi) Indian Nation Nai Duniya (Hindi) The Times of India (A)

and documented at Bhadirath(English) & Publicity Section, CWC

मानसून की पहली बारिश में ही पानी-पानी हुआ शहरः विभिन्न इलाकों में पानी भरा : लोगों को घरों में रहने की दी गई सलाह

मुंबई, (हंसराज कनौजिया) : मानसून की पहली बारिश मुंबई पर आफत बनकर टूटी है। जिधर देखो, हर तरफ पानी ही पानी है। रेंगते हुए वाहनों ने जाम लगा रखा है, वहीं रेल सेवाएं भी प्रभावित हो गई हैं। मौसम विभाग की भविष्यवाणी इस बार सच साबित हुई है जिसने मुंबई सहित महाराष्ट्र के उत्तरी तटीय क्षेत्र में 9 से 12 जून तक तेज बारिश का पूर्वानुमान जताया था, साथ ही शनिवार को मानसून के मुंबई दस्तक देने की भी संभावना जताई थी। मौजूदा हालात को देखते हुए लोगों को घरों में ही रहने की चेतावनी दी गई है। 12 जून तक मछुआरों को कोंकण और गोवा तट पर समुद्र में उतरने को भी मना किया है। मुंबई और उसके उपनगरीय शहरों को भारी बारिश की संभावना को देखते हुए अलर्ट भी जारी किया गया है और अतिरिक्त फोर्स तैनात किया

11 जून तक के संभावित तूफानी बारिश अलर्ट के बाद मुंबई पुलिस ने रिजर्व पुलिस फोर्स से 1500 से ज्यादा कर्मियों को शहर में तैनात करने को कहा है, ताकि आपात





मुंबई में भारी बारिश से जलमन्न हुई गतियों से गुजरकर सुरक्षित स्थानों की तरफ जाते स्थानीय निवासी (दाएं) बारिश से बाढ़ जैसे हालात के बीच बायकुला पुलिस स्टेशन में खड़े पुलिस कर्मचारी। (छाया : प्रे.टू.)

मदद की जा सके। जॉइंट कमिश्नर देवेन भारती के अनुसार, 'मुंबई के सभी 93 पुलिस स्टेशनों की गाड़ियों में पब्लिक अडेस सिस्टम (माइक) भी लगा दिए गए हैं, ताकि लोगों को तूफानी बारिश और उससे होने वाली मुसीबतों की स्थिति में वैकल्पिक इंतजामों के बारे में सूचना दी जा सके। लगातार हो रही बारिश के कारण मुंबई में जलभराव की समस्या आ गई है। सड़कों पर पानी भर गया

स्थिति में बारिश में फंसे लोगों की है। वाहनों की आवाजाही प्रभावित हो रखी है। लोकल ट्रेनें 10 से 12 मिनट की देरी से चल रही हैं, जिससे लोगों को मुश्किल उठानी पड़ रही है। वहीं, छत्रपति शिवाजी इंटरनेशनल एयरपोर्ट पर कई विमान सेवाओं को भी डायवर्ट करना पड़ा है। हालांकि बीएमसी खास इंतेजाम का दावा कर रही है।

उनकी मानें तो जल भराव के हालात से बचने के लिए मेनहोल और गटर की सफाई की गई है।

1400 मेनहोल की मरम्मत कर जाली लगाई है और लो लाइन इलाकों से पानी निकालने के लिए पम्प लगाए गए हैं। 225 लो लाइन इलाकों में 298 वाटर पम्प लगाए गए हैं।

वहीं सड़कों के गड़ों को भरा गया है और टूटी हुई सड़कों की मरम्मत भी की गई है। लेकिन अब भी कई ऐसे लो लाइन इलाके हैं जहां लोगों का आरोप है कि वहां बीएमसी ने कुछ काम नहीं किया। मेनहोल गटर की सफाई तो छोडिये, मेनहोल के टूटे ढक्कन की मरम्भत तक नहीं करवाई गई है। भारी बरसात के बाद मुंबई के समंदर में हाई टाइड का खतरा बना रहता है ऐसे में बीएमसी समंदर किनारे चेतावनी के बोर्ड लगाती है कि समंदर में अदंर की तरफ ना जाएं लेकिन लोगों का आरोप है इस बार अभी तक बीएमसी ने हाई टाईड को लेकर भी कोई तैयारी नहीं की है। इसके अलावा बरसात में पुरानी इमारतों के गिरने का डर भी बना रहता है।