#### File No.T-74074/10/2019-WSE DTE

भारत सरकार जल शक्ति मंत्रालय जल संसाधन नदी विकास एवं गंगा संरक्षण विभाग केंद्रीय जल आयोग जल प्रणाली अभियांत्रिकी निदेशालय



Government of India Ministry of Jal Shakti Dept. of Water Resources, RD&GR Central Water Commission Water System Engineering Directorate

विषय: समाचार पत्रों की कटिंग का प्रस्त्तीकरण-16-सितंबर-2020

जल संसाधन विकास एवं सम्बद्ध विषयों से संबन्धित समाचार पत्रों की कटिंग को केंद्रीय जल आयोग के अध्यक्ष के अवलोकन के लिए संलग्न किया गया है. इसकी साफ्ट कापी केंद्रीय जल आयोग की वेबसाइट पर भी अपलोड की जाएगी.

संलग्नक: उपरोक्त

(-/sd)

सहायक निदेशक

उप निदेशक(-/sd)

निदेशक (-/sd)

सेवा में

अध्यक्ष, केंद्रीय जल आयोग, नई दिल्ली

जानकारी हेतु: सभी संबन्धित केंद्रीय जल आयोग की वेबसाइट http://cwc.gov.in/news-clipping परदेखें



#### The Pioneer 16-September-2020

## पटना में बनेगा एशिया का पहला डॉलफिन अनुसंधान केंद्रः सुशील

भाषा। पटना

बिहार के उपमुख्यमंत्री सुशील कुमार मोदी ने प्रोजेक्ट डॉलफिन के लिए प्रधानमंत्री नरेंद्र मोदी को धन्यवाद देते हुए मंगलवार को कहा कि पटना विश्वविद्यालय के दो एकड परिसर में 30.52 करोड़ रुपए की लागत से एशिया के पहले डॉलफिन अनसंधान केन्द्र की स्थापना की जा रही।

प्रधानमंत्री नरेंद्र मोदी ने आज वीडियो कॉन्फ्रेंस के माध्यम नमामि गंगे परियोजना और अमृत मिशन के इस अवसर पर उपमुख्यमंत्री सुशील सर्वेक्षण के अनुसार पूरे देश में 3031 डॉलफिन हैं और उनमें से करीब आधी 1455 बिहार में हैं।

किमी क्षेत्र को बिक्रमशिला गांगेय करने योग्य नहीं है। डॉलफिल अभयारण्य घोषित किया और एक-एक एफ्लुएंट ट्रीटमेंट खेती की जा रही है।



प्लांट स्थापित कर औद्योगिक कचरे तहत राज्य में विभिन्न परियोजनाओं के बहाव को रोका गया है जिसके का उद्घाटन एवं शिलान्यास किया। परिणामस्वरूप गंगा बिहार में औद्योगिक प्रदूषण से मुक्त है उन्होंने कुमार मोदी ने कहा, 2018-19 के बताया कि 34 स्थलों से संग्रहित गंगा जल की जांच में उसे जलीय जीवन के अनुकुल पाया गया है मगर मल-जल व सीवेज के पानी के सुल्तानगंज-कहलगांव के 60 कारण गंगा जल पीने और स्नान

सुशील ने कहा कि 155.88 गया है। उन्होंने कहा कि गंगा किनारे करोड की लागत से गंगा किनारे के के 57 ऐसे सर्वाधिक प्रदुषण पैदा 12 जिलों... जिनमें बक्सर, भोजपुर, करने वाले उद्योगों की पहचान की वैशाली, छपरा शामिल है.... और गई हैं जहां जीरो लिक्किड डिस्चार्ज पटना में 103 कलस्टर में जैविक

#### The Pioneer 16-September-2020

# Flood forecasting, its efficacy should be evaluated by independent expert: RS panel

Rajya Sabha's Committee on Petitions has recommended that the country's entire flood forecasting network and its overall efficacy should be evaluated by an independent, third party expert. The Committee also recommended building of more flood forecasting stations, especially in States and adoption of latest technology being used in other countries to forecast floods accurately.

The Committee, headed by Prasanna Acharya, tabled its report in the Upper House, on the petition moved by Prof Raj Kachroo, a resident of Gurugram, Haryana 'praying for development of capacity to make real time forecasting of floods so as to issue timely warning to the affected people. The panel recommended both the Centre and the State government to bring an immediate end to illegal construction activities and vegetation on flood plains across the country.

The Committee has asked the Ministry of Electronics and Information Technology to encourage C-DAC to specifically develop supercomputer for flood forecasting system and implement 2D/3D distributed model on a very fine resolution grid for better prediction thereby increasing data size.

The Committee further recommends that the latest forecasting techniques presently being used by the other countries are required to be studied and a suitable method required to be adopted for purpose of the forecast

The petition highlights the issues of negligence and inattention on parts of the Ministry of Jal Shakti (erstwhile Water Resources, River Development and Ganga Rejuvenation) and Ministry of Science and Technology in developing capacity for real time forecasting of floods and management of reservoirs, lack of any significant effort made by the Central Water Commission (CWC) in developing real time flood forecasting, exigency of developing the required expertise and capacity at home by roping in Universities across the country, and necessity of having legislation on Dam Safety.

Calling for evaluation of the entire flood forecasting network, the Committee recommended resolving the shortcomings. Deccan Chronicle 16-September-2020

# Pampa reservoir gets more inflows

VADREVU SRINIVAS | DC KAKINADA, SEPT. 15

Pampa reservoir at Annavaram in Sankhavaram mandal of East Godavari received heavy inflows due to heavy rains on Tuesday.

The reservoir received 1400 cusecs of waters and the officials discharged 800 cusecs of waters into the sea by lifting three gates out of its five gates as the water levels in the reservoir reached 104 feet. Assistant engineer, A. Srinivasa Kumar, said due to excess water from upstream rivulets, water was discharged.

### RAINS DEVASTATE NANDYAL, ATMAKUR, ALLAGADDA AREAS

DC CORRESPONDENT KURNOOL, SEPT. 15

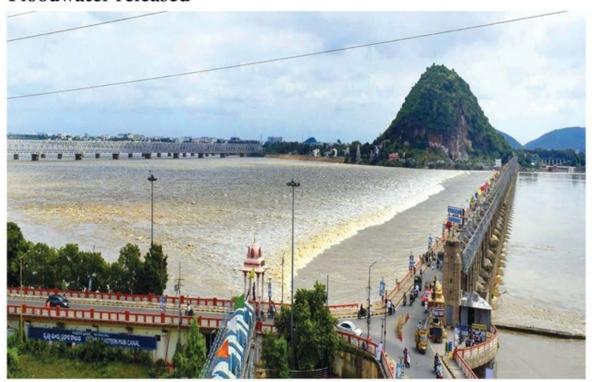
Heavy rains lashed Kurnool district as several places like Nandyal, Atmakur, Nandikotkur, Allagadda and villages on the banks of River Kundi, Mahanandi and surrounding villages have been affected.

Life is thrown out of gear as lower level bridges submerged and connectivity between villages was disturbed. Bavanasivagu, Sivapuram irrigation pond and Gundlakamma tank in Atmakur taluka limits were damaged and breached those which were joining in Telugu Ganga canal. Thousands of acres cultivated by villages adjacent to the Kundu river have been submerged and hundreds of agriculture pump sets have been totally destroyed due to Krishna waters pumped into the Kundu river. added by the rains. The district administration is collecting information on the extent of damage to crops and other properties.

#### File No.T-74074/10/2019-WSE DTE

#### **Deccan Chronicle 16-September-2020**

### Floodwater released



Nearly four lakh cuses of floodwater was released from the Prakasam Barrage into the sea at Vijayawada on Tuesday following heavy rains. - C. NARAYAN RAO

#### New Indian Express 16-September-2020

#### 'Won't allow dam at Mekedatu'

Chennai: Chief Minister Edappadi K Palaniswami on Tuesday asserted that the Tamil Nadu government would not allow the Karnataka government to build a dam across the Cauvery at Mekedatu since the Supreme Court verdict had very clearly said that the flow of water cannot be obstructed and diverted. Responding to the issue raised by Deputy Leader of Opposition Durai Murugan regarding the report that a delegation from Karnataka would be meeting Prime Minister Narendra Modi seeking permission for constructing the dam at Mekedatu, the Chief Minister said already Karnataka had unsuccessfully raised this issue before the Cauvery Water Management Authority. A case was also pending before the SC in this regard. As such, Tamil Nadu would never allow Karnataka to construct a dam at Mekedatu, he added.

#### The Statesman 16-September-2020



onsider a scenario wherein a flood forecast is issued as 'Rising' with a value above danger mark at a river point 24 hours ahead of time. The river point can be anywhere in Assam or Bihar or Karnataka or West Bengal.
In this compelling scenario, the

forecast does say where the rising water would inundate. But the district administration and municipalities that receive the flood forecast have only 24 hours to react.

Consider another scenario wherein the same flood forecast is issued 7-10 days ahead of time but with probabilities of different intensities of flood events at that river point. The probabilities 10 days ahead could be something like this: The chance of water level exceeding the danger level is 70 per cent and the chance of inundation of a nearby vil-

chance of inundation of a nearby vil-lage is 30 per cent.

Certainly, the flood forecast in the second scenario reflects higher level of confidence of the impending flood risk and enables local administrations to take better decisions and to be bet-ter prepared than in the first scenario.

The flood forecast of the time

The flood forecast of the type shown in first scenario is known as "Deterministic forecast" whereas that of second scenario is known as "Ensemble or probabilistic forecast". The length of time from issuance of forecast and occurrence of flood event is termed "lead time"

Advanced countries like USA, EU and Japan have already shifted towards "Ensemble forecast" coupled with "Inundation modelling" whereas India has recently shifted towards "Deterministic forecast". However, the shortcomings with Indian flood fore-

shortcomings with Indian flood fore-cast are glaring.

An accurate flood forecast with longer lead time is the outcome of the successful integration of meteorolog-ical and hydrological data; their tech-nological integration of computer-based modelling capabilities, advanced telemetry and deployment of advanced weather radars of ade-quate numbers, etc. quate numbers, etc. In India, the Indian Meteorologi-

cal Department (IMD) issues meteo-rological or weather forecasts whereas Central Water Commission (CWC) issues flood forecasts at various river

points.

The advancement of flood fore-

# Fighting floods with insufficient warning

casting technology therefore depends on how quickly rainfall is estimated and forecast by IMD and how quickly CWC integrates the rainfall forecast (also known as Quantitative Precipitation Forecast or QPF) with the flood forecast and how quickly CWC disseminates that to user agencies.

Reports suggest that IMD has deployed advanced 30-35 Doppler weather radars for weather forecasting. Doppler weather radars can mea-sure the likely rainfall directly from the cloud reflectivity over a large area due to which the lead time can be

extended up to 3 days.

But the advantage of deploying advanced radars or any advanced technology by IMD becomes infructechnology by IMD becomes infruc-tuous because the reality is that most of the flood forecasts at several river points across India are based on sta-tistical methods that possess lead time of less than 24 hours. Ves, just 24 hours! This is contrary to the percep-tion that India's flood forecast is driven by Google's most advanced AI techniques. These statistical methods known

as gauge to gauge correlations and multiple coaxial correlations fail to capture the hydrological response of river basins between a base station and a forecast station. They cannot be coupled with QPE Although radars extend lead time

up to three days, statistical methods limit that to just 24 hours. According to a scholarly study by NIT, Warangal, only recently, India has shifted towards using hydrological (or simply rainfall-runoff models) capa-ble of coupling with QPF. So, lead time of third days is sporadic in India and

at only select river points.

Further, the limitations of weather forecasting by IMD can also render any

advanced infrastructure deployed by flood forecasting agency infructuous. For example, USA being twice the size of India has deployed 160-180 next generation S-band Doppler weather radars called NEXRAD with a range of 250-300 km. So, India needs



at least 80-100 S-band radars to cover its entire territory for accurate QPE Else, the limitations of altitude, range and extensive maintenance enlarge

and extensive maintenance enlarge the forecast error in QPF which would ultimately shift to CWC flood forecast.

Therefore, the outdated technologies coupled with lack of technological parity between multiple agencies decreases the lead time and increases the forecast errors thus throwing the onus of intermetation. throwing the onus of interpretation on hapless end user agencies.

The outcome is increase of flood risk and disaster.

Weather phenomenon is chaot-ic. Beyond three days lead time, deter-ministic forecast becomes less and less accurate. Hence, the developed world has leapt from deterministic forecast (which gives one value of

water level for one model run with a warning like "Rising") towards ensem-ble weather models that measure uncertainty by causing perturbations in initial conditions thus reflecting the different states of the chaotic atmos-

The probabilities are computed for different flood events with a lead time beyond 10 days.

India has a long way to go to master ensemble model based flood

forecast. Although, IMD has begun testing and using ensemble models for weather forecast through its 4-6 ter-aflop supercomputers called "PRATYUSH" and "MIHIR", the flood forecasting agency has to catch up with this advanced technology and achieve technological parity with IMD

in order to couple the ensemble forecasts to its hydrological models.

It has to modernize not only the

telemetry infrastructure but also raise the technological compatibility with river basin specific hydrological, hydrodynamic and inundation mod-

Only then can the country witness probabilistic based flood forecasts with a lead time of more than 7-10 days on par with the developed world. Only then will local administrations witness scenarios of probabilistic forecasts with ample time to decide, react, prepare and undertake rescue missions so as to reduce the flood hazard.

The writer is Director, Central Water Commission, Government of India. The views expressed are personal.

#### Asian Age 16-September-2020

# 28 killed in lightning strikes in Bihar, UP as N. India stays warm

Most parts of the country likely to get rainfall over the next 3-4 days

New Delhi, Sept. 15: At least 28 people were killed in separate incidents of lightning strike in Bihar and Uttar Pradesh on Tuesday as rains lashed several parts of the country while most places in northern India experienced sultry and dry weather

According to the India M e t e o r o l o g i c a l Department (IMD), most parts of the country are likely to get rainfall over the next three to four days and there will be no significant change in the maximum and minimum temperatures.

In the national capital, lack of rain will likely push the mercury further up over the next two days, the weather department said.

IN BIHAR, Gopalganj, Bhojpur and Rohtas districts reported three deaths each, while two deaths each were witnessed in Saran, Kaimur and Vaishali, officials said.

There has been no rain in the city for the past five days.

According to the India M e t e o r o l o g i c a l Department, the maximum temperature will likely touch the 38-degrees Celsius mark over the next two days amid lack of rain. It, however, forecast light rainfall on the weekend.

There has been 75 per cent less rainfall in September in the city so ACCORDING TO the India Meteorological Department, the maximum temperature will likely touch the 38-degrees Celsius mark over the next two days amid lack of rain

far, according to the Met department data.

In Bihar, 15 people died in six districts after being struck by lightning.

Gopalganj, Bhojpur and Rohtas districts reported three deaths each, while two deaths each were reported from Saran, Kaimur and Vaishali, officials said.

Chief minister Nitish Kumar announced that the next of kin of those killed would be given ₹4 lakh each as ex-gratia amount.

Meanwhile, light to moderate rain occurred at isolated places in Uttar Pradesh on Tuesday even as at least 13 people were killed due to lightning strike at different places.

Four people died in Ghazipur, three in Kaushambi, two each in Kushinagar and Chitrakoot, one each in Jaunpur and Chandauli, Relief commissioner Sanjay Goel said in a statement.

Uttar Pradesh chief minister Yogi Adityanath directed the concerned District Magistrates to provide ₹4 lakh financial assistance to family members of those killed, he

-PTI

#### Telangana Today 16-September-2020



Following heavy rains in the catchment area, water gushing out after gates were lifted at the Srisailam project on Tuesday.

#### Rajasthan Patrika16-September-2020

बांध पुनर्वास कार्यक्रम : माही, सोम-कमला, गंभीरी, मातृकुंडिया आदि शामिल

## प्रदेश के बड़े बांधों का होगा कायाकल्प

उदयपुर. सिंचाई, पेयजल, उद्योग, भूजल और विद्युत निर्माण में अहम भूमिका निभाने वाले प्रदेश के बड़े बांधों का अब कायाकल्प होगा। राजस्थान में पहली बार वृहद स्तर पर बांधों का जीर्णोद्धार एवं सुदृढ़ीकरण कार्य कर इन्हें सौ वर्ष की मजबूती दी जाएगी। विश्व बैंक के बांध पुनर्वास और सुधार कार्यक्रम के द्वितीय चरण में राजस्थान को भी शामिल किया गया है। माही बजाज सागर, बीसलपुर, सोम कमला आम्बा, गंभीरी, मातुकुंडिया, जवाई, सूकली, छापी बांधों की निविदा प्रक्रिया जारी है।



Rajasthan Patrika16-September-2020

## लगातार बारिश से जीरावल बांध ओवरफ्लो



जीरावल. (सिरोही). पिछले करीब पांच दिनों से शाम को बारिश से नदी-नालों में पानी की अच्छी आवक हुई हैं जिससे जीरावल बांध ओवर फ्लो हो रहा है। इससे किसानों को ग्रीष्म ऋतु में पानी की समस्या का सामना नहीं करना पड़ेगा। जीरावल गांव पहाड़ी के पास बसा होने से यहां बारिश के समय झरने बहते हैं।

## पार्वती नदी में अवैध रूप से चल रही हैं ट्यूब



छबड़ा (बारां). गुगोर स्थित पार्वती नदी में पुलिया पर से पानी का बहाव होने के कारण मध्यप्रदेश व राजस्थान का संपर्क कई दिनों से कटा हुआ है। इसका फायदा उठाते हुए अवैध नाव व ट्यूबों के जिए लोगों को नदी पार कराई जा रही है। पुलिस ने दो दिन पहले 3 लोगों के विरुद्ध मुकदमा दर्ज भी किया था, इसके बाद भी ये लोगों को नदी को ट्यूब में बैठा कर पार करवा रहे हैं।

#### Rajasthan Patrika16-September-2020

विभाग की गलत भविष्यवाणियों को लेकर सोशल मीडिया पर वायरल हो रहे मीम, कई ऐसे मामले आए जब मौसम विभाग का अंदाजा सही नहीं रहा

## मौसम के सटीक पूर्वानुमान से बार-बार चूक रहा विभाग



#### नई दिल्ली | प्रमुख संवाददाता

बीते दिनों सोशल मीडिया पर एक मीम वायरल हुआ। इसमें पुलिस एक शख्स को पकड़कर ले जा रही थी और साथ में लिखा था यही है वो शख्स जो रोज-रोज बारिश होने की भविष्यवाणी करता है और उसके चलते लोग घर में अपनी पुलियों से

### कुछ मौकों पर सटीक भी बैटा अंदाजा

कुछ मौकों पर मौसम विभाग का अंदाजा एकदम सटीक बैठा। मौसम विभाग ने नौ से 13 अगस्त के बीच दिल्ली भर में झमाझम बरसात और कहीं-कहीं भारी बरसात की संभावना जताई थी। यह भविष्यवाणी एकदम सटीक साबित हुई। 13 अगस्त के दिन सफदरजंग केन्द्र में 68 मिलीमीटर बरसात रिकॉर्ड की गई।

पकौड़े बनवाते थे। ये कटाक्ष था, मौसम विभाग की उन भविष्यवाणियों पर जो गलत साबित हुईं, चाहे वो मानसून के आने की तारीख हो या फिर बरसने और ना बरसने की संभावनाएं।

राजधानी दिल्ली को मानसून बार-बार मायूस कर रहा है। देश भर में जहां इस बार सामान्य से ज्यादा बारिश रिकॉर्ड की गई है।

वहीं, राजधानी दिल्ली में खासतौर पर सितंबर के महीने में 75 फीसदी तक कम बरसात हुई है। मानसून के बारे में किए जाने वाले पूर्वानुमान भी लगातार चूक जा रहे हैं।

## इन मामलों में गलत हुए पूर्वानुमान

1 मौसम विभाग ने 14 – 15 सितंबर को हल्की बरसात की संभावना जाहिर की थी। लेकिन, पूर्वानुमान सही साबित नहीं हुए। दिन भर धूप और गर्मी से लोग परेशान रहे। हालांकि, मौसम विभाग का कहना है कि गाजियाबाद, नोएडा और दिल्ली के कुछ हिस्सों में हल्की बरसात हुई है। लेकिन, छोटे हिस्से में होने के चलते आब्जवेटरी में नहीं आई।

विभाग ने 26 से 28 अगस्त के बीच दिल्ली के ज्यादातर हिस्सों में मध्यम बरसात का पूर्वानुमान जताया था। कहीं–कहीं भारी बारिश की भी संभावना थी। ओरेंज अलर्ट जारी किया गया था। हालांकि, सिर्फ 28 अगस्त को 23 मिलीमीटर के लगभग बरसात हुई। 3 मौसम विभाग ने इस बार 25 जून को मानसून के आने की आधिकारिक घोषणा कर दी थी। हालांकि, अच्छी मानसूनी बरसात के लिए इसके बाद भी राजधानी को लगभग दस दिन तक इंतजार करना पडा था।

### शुक्रवार-शनिवार को बरसात की संभावना

मौसम विभाग का अनुमान है कि शक्रवार और शनिवार को दिल्ली के अलग–अलग हिस्सों में हल्की बरसात हो सकती है। हालांकि, उमस पर बहुत ज्यादा असर पड़ने की संभावना नहीं है। मंगलवार को सफदरजंग मौसम केन्द्र में अधिकतम तापमान ३७ .४ डिग्री सेल्सियस रिकॉर्ड किया गया। वहीं, न्युनतम तापमान 26 डिग्री सेल्सियस रहा। अनुमान है कि अगले दो–तीन दिनों के बीच अधिकतम तापमान ३८ डिग्री सेल्सियस तक पहुंच सकता है। वहीं, वायु गुणवत्ता सूचकांक १४४ के अंक पर रहा। इस स्तर की हवा को मध्यम श्रेणी में रखा जाता है।