FFM. Directorate

भारत सरकार
Government of India
केन्द्रीय जल आयोग
Central Water Commission
बाढ़ पूर्वानुमान प्रबोधन निदेशालय
Flood Forecast Monitoring Directorate
Tele/ Fax: 011-26106523, 26105274 e-mail : fmdte@nic.in, ffmcwc@gmail.com

Room No. 5th Floor(S), Sewa Bhawan,
R.K. Puram, New Delhi-110066.

विषय : दिनांक 10.09.2018 की समाचार की कतरन (News Clippings) प्रस्तुत करने के सम्बन्ध में ।

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

संलग्न : उपरोक्तानुसार

10/9/18
(सहायक निदेशक)

10/09/18
उपनिदेशक

निदेशक (बा.पू.प्र.) 10/09/2018

कृपया केन्द्रीय जल आयोग की वेब साईट पर अपलोड करने की व्यवस्था करें।

निदेशक (तकनीकी प्रलेखन)

दिनांक 08:07:2018 को निम्नलिखित समाचार पत्र में प्रकाशित मानसून/ बाढ़ सम्बन्धी समाचार

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)

तेज बारिश से भीगी दिल्ली

■ विशेष संवाददाता, नई दिल्ली

दिल्ली में सातवें दिन भी झमाझम बारिश का सिलसिला जारी रहा। शाम 3 बजे के बाद मौसम में अचानक बदलाव देखने को मिले और इसके बाद दिल्ली के हर क्षेत्र में कहीं झमाझम तो कहीं हल्की बारिश हुई। सबसे अधिक बारिश पालम में दर्ज हुई, जहां महज 3 घंटे के दौरान 37 एमएम बारिश हुई। बीते 24 घंटों के दौरान इस क्षेत्र में 61.8 एमएम बारिश हो चुकी है। कई जगहों पर बिजली गिरने की सूचनाएं भी मिलीं। सुबह के समय दिल्ली में धूप खिली। हल्की बूंदाबांदी भी हुई। इसके बाद उमस का स्तर काफी अधिक बढ़ गया।

17 फ्लाइट्स के बदले रास्ते

विस, एयरपोर्ट : शुक्रवार दोपहर बाद आई तेज बारिश और हवा की वजह से 17 फ्लाइट्स के मार्ग बदलने पड़े। यह सारी घरेलू उड़ानें थीं। डायल ने बताया कि दोपहर 3:20 से शाम 4:30 बजे के बीच 17 डोमेस्टिक फ्लाइट्स को दिल्ली की जगह अन्य हवाईअड्डों पर लैंड करने के लिए भेजा गया। इनमें जयपुर, अमृतसर, लखनऊ और देहरादून हवाईअड्डे शामिल थे।

वेलडन हंसराज और विक्रम, आप हैं गुड़गांव के सुपरकॉप

■ **वस, गुड़गांव:** बरसात के चलते सड़कों पर बने गड्ढे वाहनों की स्पीड कम कर हादसों का भी सबब बनते हैं। गुड़गांव पुलिस के एएसआई और सिपाही ने खुद मिट्टी और पत्थरों से सड़कों पर हुए ऐसे गड्ढों को भर दिया। एक शहरवासी ने पूरे घटनाक्रम का विडियो बनाकर ट्वीट किया। कुछ ही देर में विडियो वायरल हो गया। ओल्ड रेलवे रोड स्थित सेक्टर-4/7 चौक पर

तैनात ट्रैफिक पुलिस के एएसआई हंसराज ने बारिश के चलते सड़क पर बने गड्ढे को देख अनदेखा करने की बजाय खुद जिम्मेदारी उठाई। गुरुवार को वे खुद पास ही सड़क किनारे से पत्थर उठाकर गड्ढे में डालने लगे तो एक शहरवासी ने उन्हें देख लिया। पत्थर से गड्ढा भरने के बाद एएसआई ने इस पर मिट्टी भी डाली। इसका विडियो वायरल हो गया।

दिनांक 10.09.2018.. को निम्नलिखित समाचार पत्र में प्रकाशित मानसून/ बाढ़ सम्बन्धी समाचार

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The Deccan Chronical (Hyderabad)
Central Chronical (Bhopal)

No let-up in rain, more expected

TRIBUNE NEWS SERVICE

SHIMLA, SEPTEMBER 9

Several parts of Himachal, including state capital Shimla, were lashed by intermittent rains during the past 24 hours causing marginal fall in the day temperatures.

Rain and thundershowers are likely at isolated places in mid and lower hills for six days from Monday and rains and snow may occur at some places in higher hills from September 10 to 13, said Director local MeT office Manmohan Singh.

The rain related incidents have claimed 35 lives so far in the state and over two dozen roads, including Shimla- Rampur National Highway No 5, are still closed. The total loss to public property till date was over Rs 1,100 crore.

A landslide on the Sanjauli-Lakkar Bazar road in Shimla on Sunday. TRIBUNE PHOTO

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

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

Dated 10.09.2018

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.

S. Mahendran 10.9.18

SPA (Publicity)

Encl: As stated above.

Deputy Director TD Dte, & Publication Division

Director TD Dte

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

o/c

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Nav Bharat Times (Hindi)
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The Hindu
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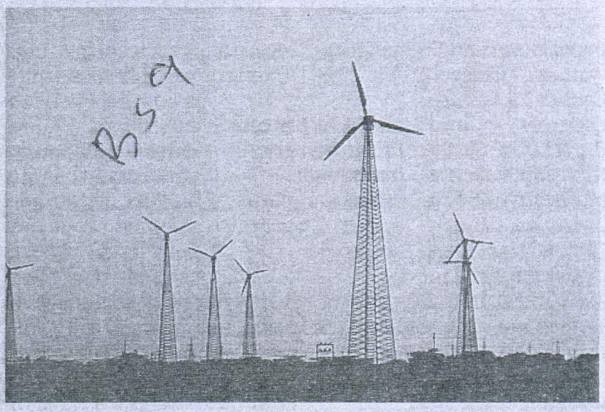
Nai Duniya (Hindi)
The Times of India (A)
Business standard

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

IEEFA ESTIMATES

India's offshore wind power capacity to match China's by '30

JAYAJIT DASH
Bhubaneswar, 8 September



India has set an offshore wind power capacity target of 5 Gw by 2022 and 30 Gw by 2030. In April, the Ministry of New & Renewable Energy had invited Expressions of Interest to develop 1 Gw offshore wind project on the western coast

India's offshore wind power generation capacity is seen climbing to 30 Gw by 2030, on a par with China's, and accounting for 30 per cent of the envisaged capacity of 100 Gw in Asian economies. According to the estimates of the Institute for Energy Economics & Financial Analysis (IEEFA), both China and India will ride the offshore wind power wave. The balance capacities will be contributed by South Korea (18 Gw), Japan (10 Gw), Taiwan (5.5 Gw) and the remaining 6.5 Gw jointly by Indonesia, the Philippines and Vietnam.

India has set an offshore wind power capacity target of 5 Gw by 2022 and 30 Gw by 2030. In April, the Ministry of New & Renewable Energy (MNRE) had invited Expressions of Interest to develop 1 Gw offshore wind project on the western coast. A total of 34 companies responded, including established domestic players like Sterlite Power Grid, Inox Wind, Suzlon Energy and Mytrah Energy. The bids also attracted foreign participants such as Orsted, Alfanar, Deep Water Structures, EON Climate & Renewable, Terraform Global, Macquarie Group, Shell and Senvion.

Offshore wind development has the potential to reach the same cost efficiencies as onshore, with prices pushed downward by the upward movement in offshore turbine generation capacity.

"Successful commercialisation of floating offshore wind will also drive the sector's development in Asia. Having said that, reaching the region's 100 Gw target by 2030 will be a mammoth undertaking. The sector is still in an embryonic state in Asia. Developers should carefully explore opportunities by doing small projects given it is a difficult task to install wind turbines offshore. Performance-related uncertainties will only disappear as more wind installation data is accumulated," Tim Buckley, director of energy finance studies (Australasia) and Kashish Shah, research associate at IEEFA, observed in the report.

Citing examples from Europe, the report points out that offshore wind power facilities can achieve capacity utilisation rates of 55 per cent. If the Asian countries noted above can install 70 per cent of the 100 Gw target, this could replace about 300-350 million tonnes of coal annually.

To date, the growth in offshore wind power has been concentrated in Europe, with 84 per cent of the total 18.8 Gw of global offshore wind capacity installed in Northern Europe.

A record 4.3 Gw of offshore wind power capacity was installed across nine markets in 2017. IEEFA, however, believes Asian countries such as China, India, Japan, South Korea, Taiwan and Vietnam are set to capitalise on Europe's lead in the coming decade.

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The Times of India (A)
Business standard

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

Kerala floods: Warning of times to come

Think of God's own country. It is a land of mountains, rivers, paddy fields and oceans. Bountiful and beautiful. But think of this same country in a world that is malignantly unsustainable. Both because people who live in this land have not cared to ensure that the environment is protected and also because our world is climate-risked. What happens is what happened in this God's own country, Kerala, in August this year. It drowned. Ravaged by swollen rivers, decimated by landslides. It is understood today that the cost of this flood will be so enormous that it is like re-building the entire state.

But when you think back, it is clear Kerala was a sitting duck — this was a disaster waiting to happen. The state has some 44 rivers, which gush from the Western Ghats — traversing short distances from their point of origin to the ocean — less than 100 km in most cases. It is also tropical, located in a high-rainfall area. So, the state has to be one big drainage system.

DOWN TO EARTH

SUNITA NARAIN

The 61 dams located in the tropical, forested mountain regions of the Western Ghats are one part of this drainage ecosystem. The dams, largely meant for generating electricity, impound rainwater, hold it and release it after the monsoon period. But this time, when it rained incessantly — Kerala received some 771 mm of rainfall just in 15-20 days, of which 75 per cent was received in just eight days — the dams became part of the disaster.

With this extreme rain, mountains collapsed, taking lives. But much, much worse, the gates of 29 dams, now filled to the brim and threatening to break, were opened. After 26 years and only the third time ever, the gates of one of the largest dams, Idduki, were opened. The fact is that the reservoirs were almost full by the end of July. Massive amounts of water had been impounded. The variability in rainfall has meant that dam managers store more when they can. They do not release and wait for the absolute end of the season — they do not have information and certainly the confidence that their reservoirs will get the rain needed to generate electricity. So, the disaster was compounded many times over.

The fact is that we do not have a semblance of a plan to deal with this changing weather system. We are totally unprepared for what is today understood to be the extreme and variable nature of the monsoon. Let's be clear about this. The Kerala floods are "manmade".

They are a result of our combined and abject inability to mitigate global emissions, which are leading to weird weather events. They are a result of our mismanagement of resources — the state has decimated its drainage systems from forests to paddy fields to ponds and streams, which would carry excess water or store and recharge it. They are also the result of the sheer incompetence of our technical agencies to plan for flood control and dam management. They are, therefore, manmade. Most importantly, they are manmade because we refuse to accept that this is the new normal — we want to believe that this is just another freak event; another one in a hundred-year event that we cannot plan for or do anything about.

This is where the reality must sink in — not just in words but practice. Kerala is going to be literally re-constructed. It cannot make the same mistake again. It must build, deliberately keeping in mind this new normal — where rain will be variable and extreme. It must, therefore, plan deliberately for drainage — every river, steam, pond, paddy field and city — should be mapped and protected at all cost. Every home, institution, village and city must be required to do rainwater harvesting so that the water can be channelised and recharged. The forest ecosystem must be built through deliberate policies that provide benefits to people. Its plantation areas must be managed so that there is soil conservation. But it must recognise that in an age of climate-change risk, even this will not be enough.

The fact is that in this new normal, governments have to plan for variability. It means doing much more to improve technical capacities to predict and inform. In this case, for instance, the only way these floods could have been prevented from becoming a deluge was through better information, prior to July 2018, of the rainfall that would be expected in the coming months. The dams would have been required to release water and increase the storage of this extreme rain event. The question is: How can this be done? What will it take for the next flood not to become a deluge? In the age of climate change, this is the question our technical agencies — from weather scientists to water and flood management institutions — must be required to answer. It is no longer business as usual. That time is over. Let's get this straight.

The writer is at the Centre for Science and Environment
sunita@cseindia.org
Twitter: @sunitanar

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Why renewable energy is so vital for India

GOPAL KRISHNA AGARWAL

Petroleum prices have always been a contentious issue in India. Historically, political expediency overrode economic considerations. The central government has some compelling reasons not to interfere with market forces, which are currently being affected by global factors.

India imported 256.32 million metric tonnes of crude oil and petroleum products in 2017-18, for which it paid ₹6.53 trillion. India's import dependence in crude oil is over 80 per cent. The Indian basket of crude oil represents a derived basket comprising of sour grade (Oman and Dubai average) and sweet grade (Brent dated) of crude oil processed in Indian refineries in the ratio of 72:28 in 2016-17. The price of the Indian crude oil basket was $106.85 per barrel (1 barrel = 159 litres) in May 2014. It declined to $39.88 per barrel in April 2016, and has gradually increased since then and is around $78 per barrel now.

It is important that we look into the tax structure and petroleum prices. On September 3, 2018, the prices of diesel and petrol in New Delhi were ₹71.15 and ₹79.15 respectively (rounded off). With every one-dollar increase in the international price of crude oil, the cost of petrol and diesel in India increases by ₹0.50 per litre, while a fall in the exchange rate of the rupee against the US dollar increases the cost of petrol and diesel by ₹0.65 per litre.

To reduce our dependence on imported oil, we need to generate more energy from coal and lignite, and also focus on electricity generation from hydro, wind and solar

The revenue generated by taxes on petroleum products is vital for both central as well as state governments — the total contribution to the central and state exchequer was ₹4.93 trillion in 2017-18.

It is important to remember that 42 per cent of the basic excise duty collection at the Centre is given to state governments for infrastructure and welfare programmes and 60 per cent of the remaining 58 per cent is spent on centrally sponsored welfare schemes in the states. The total amount transferred to the states is thus 76.8 per cent (42+34.8). Every one-rupee reduction in central duty leads to a loss of about ₹140 billion to the central exchequer.

Earlier, under the Administered Price Mechanism (APM), when petrol and diesel prices were not market-linked and prices were being modulated, the steep increase in international prices of oil exerted severe pressure on the oil marketing companies (OMCs). The retail prices of these commodities were kept below cost, resulting in large under-recoveries for OMCs. Between 2004-05 and 2013-14, total under-recoveries amounted to ₹8.53 trillion and there were significant subsidies.

Subsidies for these under recoveries during the period 2004-08, when international crude prices were increasing rapidly, proved grossly insufficient. Since the fiscal position of the government was already precarious, it could not increase the subsidy to this sector. The UPA government then resorted to issuance of "oil bonds" to the OMCs. These interest-bearing oil bonds were not even reflected in the balance sheet of the UPA Government, resulting in artificial measurement of the burgeoning fiscal deficit.

Between 2005-06 and 2009-10, oil bonds worth ₹1.42 trillion were issued by the government, with a rate of interest ranging from 7.33 per cent to 8.4 per cent per annum, repayable up to 2024-25 by successive governments. Oil companies have either sold these bonds or used them as collateral to raise cash. OMCs have sold oil bonds worth ₹1.25 trillion and had to bear a loss of around ₹50 billion in selling these bonds at discounted rates, because the bond market did not have much appetite for these bonds.

So far the government has repaid around ₹700 billion to the holders of these bonds. Of this amount, only about ₹100 billion has gone into repayment of the principal component and the rest towards the interest obligation. The outstanding principal amount on these bonds is thus ₹1.3 trillion. Most of these bonds will mature by 2024-25, imposing a heavy burden on current as well future governments.

An important part of the solution to the problem will have to be a focus on alternative energy sources. In 2015-16, coal and lignite accounted for 46.28 per cent of India's energy consumption; crude petroleum for 34.48 per cent; electricity from hydro, nuclear and other renewable sources of energy for 12.75 per cent; and natural gas for 6.49 per cent.

Therefore the policy of the NDA government is to move towards renewable sources of energy. But one cannot readily switch between them and other sources of energy. To make our economy less dependent on oil will be a long-drawn-out process, which can be accelerated by supportive government policies. The Modi government is working on this long-term solution.

It is evident than in order to reduce our dependence on imported oil, we need to generate more energy from coal and lignite, which we have in abundance, and also focus on electricity generation from hydro and other renewable sources such as wind and solar. Since the government is focussed on having one GWh of installed solar capacity by 2022, we will see an increase in its share in the source-wise energy consumption in the years ahead. Until then economic prudence should override political expediency.

The writer is national spokesperson of the BJP on economic affairs

4
Covering L.. YIS

News item/letter/article/editorial published on 10.09.2018 in the

Hindustan Times	Nav Bharat Times (Hindi)	M.P.Chronicle
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and documented at Bhagirath(English)& Publicity Section, CWC.

Power sector faces more stress

Future is uncertain for projects close to 25 Gw, across energy sources, owing to several regulations

SHREYA JAI
New Delhi, 9 September

Stress in the power sector is continuing beyond insolvency proceedings. Due to regulatory issues, it is unlikely to end in the current round of insolvency cases.

After coal-based power plants with a capacity of close to 30 gigawatt (Gw) landed in insolvency courts, there is a fresh list of cases that could fall in the stressed assets category if issues are not resolved. The list includes stranded gas power projects not receiving fuel supply, stuck hydropower projects, and privately-owned operation coal projects to which banks have refused to lend further.

According to industry calculations, the future is uncertain for power projects of close to 25 Gw, across energy sources, owing to several regulations. The first in line are gas-based power projects. Of the 24-Gw gas-based capacity in the country, 14 Gw is not receiving domestic gas supply. Last year, under the government scheme for providing subsidised gas supply to plants, plants of 8 Gw received gas supply and are running at a 40 per cent load factor.

Numerical, a data aggregation platform, estimates gas-based projects of 7.5 Gw will be stranded with a cumulative debt exposure of ₹480 billion. As against the daily supply of 13.5 million cubic metres of gas under the government scheme, the gas power plants' demand is 117 million cubic metres daily. The Centre discontinued the scheme after two rounds.

"The ones running are operating at below optimal rates to recover their fixed cost and serve their interest amount. The others which don't have any supply will end up in debt spiral soon. Some gas projects are already under strategic debt restructuring and/or landed in the National Company Law Tribunal (NCLT). There are more in line," said a senior executive of a leading power company.

Operationally and financially robust privately-owned coal-based power projects of around 15 Gw are in a quandary. According to new emission norms set for thermal power units, these projects have to install flue-gas desulfurisation (FGD) or emission control technology by 2020. Banks, however, have refused to fund this.

WIRED FOR STRESS

- **32 GW** Total coal-based stressed assets
- **20–28 GW** Expected to land in the National Company Law Tribunal from Monday
- **16 GW** Coal-based capacity which will face financing issues
- **7 GW** Gas-based stranded capacity
- **5 GW** Hydro-based stranded capacity

Sources: Ministry of Power, industry data

Power industry executives say bankers have turned down the request of future lending, citing the exposure limit to the power sector and the record of stressed assets.

"Due to regulatory changes, which impact the payment to them, banks have refused to lend further to the thermal power industry. This could create a precarious situation. While the cost is pass-through, fresh lending is needed," said an executive.

The Association of Power Producers (APP), the representative body of the thermal power sector, in its letter to banks said the FGD cost was around ₹4 million per megawatt (Mw).

Considering the case of a 1,000-Mw thermal power plant, roughly ₹4 billion would be required for FGD, where the loan required would be around ₹3 billion. "It would be unfortunate that a project with investments of around ₹70 billion would be exposed to a major risk of becoming a non-performing asset due to non-availability of financing of ₹3 billion," the APP said in its letter to the Indian Banks' Association.

The third, small in amount but with a large impact, are hydropower projects which have been languishing for several reasons — mostly delays due to protests, environment norms, change in regulations, etc. According to the data available publicly, hydropower projects of close to 5 Gw, mostly state-owned and private, are stranded. No new hydro capacity has been added in the past six years, with the sector's share being 13 per cent in the energy mix.

Sector experts point out with the rising solar and wind capacity — now a 15 per cent share in the energy pie — the need for balancing hydropower is more than needed.

Numerical says 15 projects are stranded. They include Ratle (850 Mw) of GVK, Maheshwar (400 Mw) in Madhya Pradesh, Koyna (80 Mw) in Maharashtra, and Teesta-IV (500 Mw) of Lanco. The last is in the NCLT and state-owned NHPC is expected to bid for it.

Sector executives said this put pressure on the work of the High Power Empowered Committee, set up with the Cabinet secretary as chairman. The committee is supposed to suggest ways to prevent further stress in the sector. The committee had its first meeting two weeks ago and has to submit its report by September 29.

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The Times of India (A)
Business standard

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16 WORLD

IRAN, RUSSIA, TURKEY MEET TO DECIDE FATE OF SYRIA'S IDLIB

AFRICAN SWINE FEVER IN CHINA ALMOST CERTAIN TO SPREAD IN ASIA, SAYS UN

• PAGE ONE ANCHOR

How Kerala's Largest Lake Worsened Flood: Water Panel

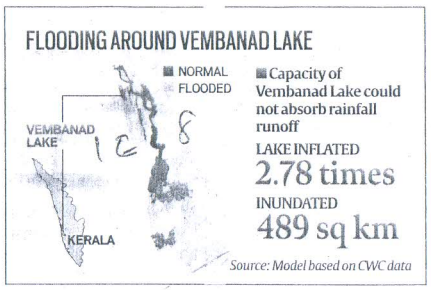
Lake's capacity shrunk due to congestion; intense rain, lack of spillways and reservoirs led to surge, says analysis by CWC; gives clean chit to dam management

SOWMIYA ASHOK
NEW DELHI, SEPTEMBER 7

CONGESTION IN the carrying capacity of the Vembanad Lake, the largest lake in Kerala, which could only absorb a fraction of the water that drained into it from overflowing rivers made the Kerala floods starker, the Central Water Commission (CWC) has found.

This severely inundated districts such as Kottayam and Allapuzha, a senior CWC official told *The Indian Express*. The Vembanad Lake was able to absorb only 0.6 billion cubic metres (BCM), of the 1.63 BCM caused due to excessive rainfall and inundated over 480 sq km and inflated to nearly three times its size.

"High rainfall during this period and lack of reservoirs in the upper reaches of the rivers that drain into the lake, worsened the flooding," the official said. The CWC has now suggested increasing the capacity of the spillway through which rivers such as Pamba, Manimala, Achenkovil and Meenachil drain into the lake and the barrage through which the lake spills into the ocean.



According to CWC sources, the situation may have been better if the capacity of the lake was larger. "The capacity of the lake might be less due to the siltation which is a natural process, and there could have been backflow because the outlet was unable to discharge as much into the ocean. This is a coastal lake which also interacts with the backwaters. One possibility was the dredging of the lake but since it is an eco-sensitive zone, dredging was not recommended," said the CWC official.

In its first analysis after the Kerala floods, which claimed at least 480 lives and caused widespread damage, the CWC has squarely put the blame on two spells of intense rainfall during the month of August — a two-day-period over August 8-9 and later a three-day-period over August 15-17.

Over 50 per cent of the rainfall received between August 1-19 fell over a three-day period, said official sources.

With management of dams in Kerala at the heart of the debate over its purported role in causing last month's floods, the CWC has suggested a review of rule curves of all large reservoirs in the state to ascertain how much water should be released when reservoirs reach certain levels. This, the CWC official said, is even more essential for dams with live storage of over 200 million cubic metres.

CONTINUED ON PAGE 2

New Delhi

Kerala's largest lake

The recommendation from the apex technical body in India for water management comes a few weeks after Ministry of Earth Sciences secretary Dr. Madhavan Nair Rajeevan had said that not just in Kerala but there was "no scientific dam water management across India." "As per my understanding, no big reservoir has a decision support system. So we don't know when to open them, how to open them. ," he had said.

According to the CWC, the dams "neither attenuated the floods nor aggravated them," the official said. Sources told *The Indian Express* that the flooding conditions may not have changed drastically even if the water in reservoirs was much below Full Reservoir Level, due to the "severe storm conditions."

Specific to the Idukki dam, CWC sources said: "Idukki dam absorbed much of the runoff and the outflow from the dam was less than inflow during the intense spell of rainfall. So, it did act as a flood cushion." Gates of 35 dams in Kerala were opened in August to deal with the massive inflow, with the Kerala State Electricity Board Limited coming under criticism for its oversight.

It is learnt that the rainfall runoff generated during these intense spells was so high that the flood moderation effect of the dams was restrained. The topography of Kerala too contributed, said official sources, with the travel time of the runoff in the catchment area barely a couple of hours long before the water reached the reservoirs.

The CWC official said that review of rule curves for reservoirs was essential based on historical data which will determine how much water should be released each month over the monsoon period. "Most of Kerala's reservoirs are small barring a few," the official said.

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Business standard

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

AFTER FLOODS

Mass deaths of earthworms deepen Kerala farmers' woes

Ramesh Babu
letters@hindustantimes.com

THIRUVANANTHAPURAM: The flood-battered north Kerala district of Wayanad is experiencing a strange phenomenon -- mass death of earthworms in many parts of the hilly district known for its rich biodiversity and spice cultivation. Thousands of earthworms are emerging from the soil and perishing everyday, according to farmers and local residents.

Agricultural and environmental scientists who visited the area attribute the phenomenon to excess heat in the earth. After the top soil was washed away by floodwaters, the new soil that replaced it doesn't work like a sponge; it is unable to absorb enough water and moisture, the farmers say.

"For the last two days, we have been experiencing this. Hundreds of worms are coming out and they break themselves up and die in the open. Initially I thought it was only confined to my cultivation area, but later many others also complained," said a small-time coffee planter, John Thomas, in Kalpetta.

> For the last two days, we have been experiencing this. Hundreds of worms are coming out and they break themselves up and die in the open.
> JOHN THOMAS, coffee planter

Soon after the rains stopped and the sun came out, the earth started drying up rapidly, leaving many cracks, he said, adding that a detailed study would establish the cause. "We can't blame top soil alone. Wayanad is part of the Deccan plateau, where the soil is sensitive and an unpredictable change is occurring in the soil structure of the district. Vanishing meadows, concrete constructions and mindless quarrying have done damage to the fragile ecology of Wayanad," said P Rajendran, associate director of Regional Agricultural Research Station in Ambalavayal.

If the situation continues, it will affect microbes in the soil which will impact crops like paddy and pepper that have feeble roots, he said.

Known for its rich aroma and flavour, the black pepper of Wayanad is considered one of the best in the world.

Climate aberrations that are rampant these days can change biological cycles easily, said P V Karunakaran, principal scientist at the Salim Ali Centre for Ornithology and Natural History.

On Friday, the Kerala government decided to conduct an assessment of biodiversity loss in the massive floods that ravaged the state last month, claiming over 400 lives.

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Heavy rain damages crops in Odisha

STAFF REPORTER
BHUBANESWAR

Incessant rain for the last three days has damaged paddy crops in coastal Odisha. The damage has been reported to be widespread in Bhadrak, Jajpur, Kendrapara, Jagatsinghpur and Puri.

Although the State government is yet to assess the damage, farmers have lost seedlings as well as crucial time in the ongoing kharif season.

Incessant rain triggered floods in the Baitarani river. Villages in Bhadrak, Tihidi, Bhandaripokhari and Dhamnagar blocks were waterlogged.

The river was flowing above the danger mark in Keonjhar and Bhadrak districts.

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looded out

Sailing to safety: Residents of Nakata village in Patna district of Bihar moving to safety on Friday as Ganga water entered many villages in the Danapur block. ▪ RANJEET KUMAR

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Give priority to disaster mgmt: SC to states

T-8

NEW DELHI, SEPTEMBER 7

The Supreme Court on Friday took note of the devastating floods in Kerala and observed that disaster management must be given "priority" by all states and Union Territories.

"There must be some urgency particularly when we are dealing with the issue of disaster management," it added. The apex court had last year said it would be advisable for the National Disaster Management Authority (NDMA) to regularly publish its annual report, to review and update all plans on the basis of experiences and to make its website multilingual so that all concerned may benefit.

> It is disheartening to know that only nine states have so far uploaded reports and plans on disaster management on the website of disaster management authority. — SC Bench

During the hearing, Additional Solicitor General ANS Nadkarni, appearing for the Centre, said nine states had uploaded reports in vernacular or local languages while 24 others were still under process. "They (states and UTs) must realise the urgency after the disaster in Kerala," the court said and directed the states and UTs to do it by October 30. The Bench has listed the matter for hearing in November.

The apex court had on May 8 last year criticised the lax approach of "many" states in taking adequate steps to prepare for disasters. — PTI

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Heavy rain hits city, 17 flights diverted

HT Correspondent
htreporters@hindustantimes.com

NEW DELHI: At least 17 flights had to be diverted within an hour as heavy rain hit parts of Delhi on Friday afternoon. Palam received the heaviest spell, registering around 42mm rainfall.

India Meteorological Department (IMD) officials said intermittent rains are likely to continue for the next 48 hours. The intensity, however, is likely to decrease from Saturday as the depression that triggered Friday's rain is weakening.

"Palam recorded the heaviest spell followed by Ayanagar (20mm rainfall). The Safdarjung observatory received 1.2 mm rainfall," an IMD official said.

Safdarjung, Aya Nagar and the Ridge area received more rain between Thursday and Friday morning. In the last 24 hours (between Thursday, 8.30 am and Friday, 8.30 am), Safdarjung received 20 mm rain. At the same time, Aya Nagar and the Ridge received around 28 mm and 21 mm rainfall respectively.

"While on the one hand there was a depression over Madhya Pradesh, the monsoon trough that triggers rain is also passing over Delhi at the moment. In the morning, we witnessed sunshine despite there being a lot of moisture in the air. The heat and the moisture resulted in the formation of thunderclouds," said BP Yadav, deputy director of IMD.

The rain resulted in waterlogging, which, in turn, caused traffic snarls. Traffic Police said jams were reported from Old Gurugram Road, Rajokri Chowk, Palam Flyover, Wazirabad Road and Bhajanpura Main Road etc.

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चमोली में ग्लेशियर टूटने से बनी झील घाटी के लिए खतरा

उत्तराखंड

देहरादून | कार्यालय संवाददाता

चमोली जिले की नीति घाटी ग्लेशियर टूटने से एक झील बन गई है। इस झील में लगातार पानी जमा हो रहा है। अगर झील में जमा पानी को निकाला नहीं गया तो निचली घाटी में बसे इलाकों के लिए खतरनाक हो सकती है। झील बनने की पूरी रिपोर्ट उत्तराखंड अंतरिक्ष उपयोग केंद्र (यूसैक) ने राज्य के आपदा न्यूनीकरण केंद्र को दे दी है।

यूसैक ने अपनी रिपोर्ट में कहा है कि यह झील नीति गांव से 14 किलोमीटर ऊपर रायकांडा और पश्चिमी कामेट ग्लेशियर के संगम पर बनी है। झील की सेटेलाइट इमेज भी सरकार को सौंपी है। रिपोर्ट में सरकार से कहा गया है कि फिलहाल झील से खतरा नहीं है। लेकिन अगर झील से पानी नहीं निकाला गया तो तो यह खतरनाक हो सकती है।

झील की नापजोख : देहरादून स्थित वाडिया इंस्टीट्यूट ही ऐसी झीलों या ग्लेशियरों की नापजोख करता है। राज्य को झील की नापजोख को वाडिया से आग्रह करना होगा।

केदारनाथ त्रासदी भी झील से ही हुई थी : जून 2013 में आयी केदारनाथ आपदा का कारण चौराबाड़ी ग्लेशियर के टूटने के कारण बनी झील ही थी। यह झील टूटने से हुई अब तक की सबसे बड़ी घटना थी। इस घटना में करीब 4300 लोग मारे गए और निचली घाटियों में भारी नुकसान हुआ था।

चमोली जिले की नीति घाटी का सेटेलाइट चित्र।

क्यों टूटते हैं ग्लेशियर : वाडिया इंस्टीट्यूट के वरिष्ठ भूवैज्ञानिक डॉ. पीएस नेगी का कहना है कि बर्फ पिघलने के कारण कई बार ग्लेशियरों के मलबे से जलधाराओं का प्रवाह रुक जाता है। इस कारण मौके पर झील बन जाती है। ग्लोबल वार्मिंग या प्राकृतिक दोनों कारणों से ऐसी झीलें बन सकती है।

यूसैक 2001 से रख रहा नजर

यूसैक निदेशक निदेशक डॉ. एमपीएस बिष्ट ने बताया कि रायकांडा और पश्चिमी कामेट ग्लेशियर में जहां पर यह झील बनी है, वहां से अलकनंदा की मुख्य सहायक नदी धौली गंगा निकलती है। सबसे पहले 2001 में वहां झील बनी थी। केदारनाथ आपदा के बाद झील की गहन निगरानी शुरू की गई। पता चला है कि झील का पानी बढ़ता जा रहा है और इसे निकालना जरूरी है।

ये इलाके हैं जद में

क्या एहतियात बरतें

1. झील से संभावित खतरे को टालने के लिए वैज्ञानिकों का दल तत्काल मौके पर जाए।
2. ग्लेशियर टूटने से बचाए नहीं जा सकते लेकिन ऐसी घटनाओं से सचेत करने का तंत्र मुस्तैद किया जाना चाहिए।
3. सरकार को चाहिए कि हिमालय से निकलने वाली नदियों के किनारे आबादी को बसने से रोके।

अगर इस झील का वक्त रहते ट्रीटमेंट नहीं किया गया तो, भविष्य में ये गंभीर खतरा बन सकती है। इस संबंध में रिपोर्ट तैयार शासन को सौंप दी गई है।

-डॉ. एमपीएस बिष्ट, निदेशक, यूसैक

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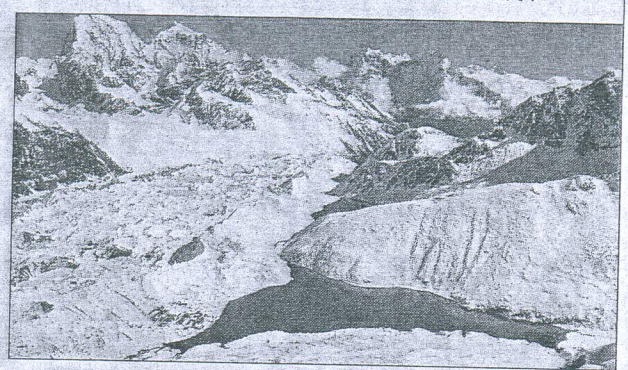
पिघल रहे ग्लेशियर

भीषण जलसंकट का खतरा मंडराया

हिमालय के क्षेत्रों में जलवायु परिवर्तन के चलते ग्लेशियर तेजी से पिघल रहे हैं। इससे आने वाले दिनों में भारत, पाक और बांग्लादेश में भीषण जल संकट का खतरा पैदा हो सकता है। रेखा पीछे खिसकती जा रही है। इससे हिमालय में बर्फ का आवरण घट रहा है। बर्फ से खाली हुई जमीन पर वनस्पतियां उग रही हैं जो ग्लेशियरों की सेहत के लिए खतरा हैं।

तापमान में वृद्धि

- पिछले 20 से 25 साल में हिमालय क्षेत्र के तापमान में 0.65 डिग्री सेल्सियस की वृद्धि हुई है
- इसकी वजह से हिमालय क्षेत्र का वातावरण काफी गर्म हो रहा है
- हिमालयी क्षेत्र में ग्लेशियरों के पिघलने की रफ्तार तेज हो गई है
- जलवायु परिवर्तन से जीवजंतु पुराने इलाके छोड़ रहे हैं
- तापमान बढ़ने से हिमालय क्षेत्र के जंगलों की नमी घट रही है



वनस्पतियों पर भी असर

- हिमालय में उगने वाली वनस्पतियां लगातार अपना स्थान बदल रही हैं
- ये हिमालय में ऊपर की ओर अपना स्थान बना रही हैं
- यानी उनके अनूकूलन का क्षेत्र बदलता जा रहा है
- तापमान वृद्धि के कारण वनस्पतियों पर असर दिखाई देने लगा है
- मार्च मध्य से खिलने वाला बुरांश अब फरवरी में खिलने लगा है

मानसून में बदलाव से बारिश और बाढ़ के हालात

- वैज्ञानिकों का कहना है कि उत्तर पश्चिम हिमालयी क्षेत्र में बारिश बढ़ी है और बर्फबारी घट गई है।
- मानसून में हुए बदलाव की वजह से क्षेत्र में ज्यादा बारिश से बाढ़ के हालात पैदा हो रहे हैं।
- मौसम चक्र में बदलाव से हिमालय के क्षेत्रों में दिसंबर और जनवरी में बर्फबारी कम हो रही है।
- गंगोत्री का भोजवासा क्षेत्र जो कभी बर्फ से ढंका लकदक रहता था, वहां वनस्पतियां उग आई हैं।
- विज्ञानियों का कहना है कि वनस्पतियां उग आने से यहां बर्फ गिरी भी तो टिक नहीं पाती।
- गंगोत्री क्षेत्र में वर्ष 2017 के दिसंबर-जनवरी माह में सिर्फ 80 सेंटीमीटर बर्फबारी हुई है।
- जबकि वर्ष 2002 में इस क्षेत्र में इन दिनों 20 फुट बर्फ गिरी थी।

हिमालय क्षेत्र में सफाई के तीन बड़े अभियान

1 वेस्ट वॉरियर्स

वेस्ट वॉरियर्स एक स्वंयसेवी संगठन है जो स्वच्छ भारत अभियान से भी जुड़ा है। संगठन ने धर्मशाला और देहरादून में सफाई अभियान चलाकर कई क्षेत्रों का स्वरूप बदल दिया है। वेस्ट वॉरियर्स धर्मशाला में पिछले छह साल से काम कर रहे हैं। वॉरियर्स की टीम मैक्लोडगंज के भागसू झरने पर हर गुरुवार को जा कर सफाई करते हैं। जबकि हर सोमवार को त्रिउंड झरने की सफाई करती है।

2 इंडियाहाइक्स

इंडियाहाइक्स भारत में सबसे बड़ा पर्वतारोही संगठन है। संगठन ग्रेट लेक ऑफ कश्मीर ट्रैक के दौरान लोगों को साफ-सफाई के लिए प्रेरित करता है। इस दौरान संगठन ट्रैकिंग करने वालों को ईको-बैग देता है ताकि कचरा उसमें रख सकें।

3 हिमांशु और लोविश

हिमांशु तोमर और लोविश टेकवानी ने हिमाचल स्थित चंद्रताल झील में ट्रैकिंग के दौरन काफी गंदगी देखी। इसके बाद दोनों दोस्तों ने इसे खत्म करने की ठानी। दोनों ने स्थानीय कैफे संचालकों और कैंपिंग कराने वाले संगठनों से बात की। इसके बाद दोनों ने सफाई की नई व्यवस्था की।

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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)
Business standard

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

दिल्ली में इस बार के मानसून में अब तक 22% ज्यादा बारिश

आठ दिन की बारिश ने 7 साल का रिकॉर्ड तोड़ा

नई दिल्ली | प्रमुख संवाददाता

इस बार का मानसून सीजन दिल्ली के लिए भरपूर बारिश की सौगात लेकर आया है। दिल्ली में अभी तक सामान्य से 22 फीसदी ज्यादा बारिश हो चुकी है। वहीं, सितंबर में अब तक आठ दिनों में हुई बारिश ने तो पिछले सात साल का रिकॉर्ड तोड़ दिया है।

मौसम विभाग के मुताबिक, इस मानसून सीजन में बादलों की मेहरबानी से दिल्लीवालों को जहां उमस भरी गर्मी से राहत मिली है, वहीं हवा में घुला प्रदूषण भी लगभग पूरी तरह से साफ हो गया है। जून के अंतिम सप्ताह में मानसून के आगमन के साथ ही दिल्ली में जमकर बारिश हुई। जून और जुलाई में सामान्य से 18 फीसदी ज्यादा बारिश दर्ज हुई। जून और जुलाई में सामान्यतः 276.1 मिलीमीटर बारिश होती है, लेकिन इस बार इन दोनों महीनों में 326.3 मिलीमीटर बारिश हुई। हालांकि, अगस्त में सामान्य से कम बारिश हुई थी। अगस्त में 247.7 मिलीमीटर बारिश को सामान्य माना जाता है, लेकिन इस बार 17 फीसदी कम यानी सिर्फ 206.5 मिलीमीटर बारिश हुई।

225.8 मिलीमीटर बारिश हुई थी वर्ष 2011 में सितंबर में

173.2 मिलीमीटर बारिश हो चुकी है इस साल सितंबर में अभी तक

अभी और पानी बरसने की उम्मीद

शनिवार को भी दिल्ली के कई इलाकों मे अच्छी बारिश हुई। पालम क्षेत्र में पिछले चौबीस घंटों में 42.7 मिलीमीटर, सफदरजंग क्षेत्र में 1.8 मिलीमीटर, लोधी रोड में 1.7 मिलीमीटर, रिज क्षेत्र में 6.6, स्पोर्ट्स कांप्लेक्स क्षेत्र में 18 मिलीमीटर बारिश दर्ज की गई। दिनभर का अधिकतम तापमान 33.6 डिग्री सेल्सियस और न्यूनतम तापमान 25.5 डिग्री सेल्सियस दर्ज किया गया। मौसम विभाग के मुताबिक, रविवार और सोमवार को भी हल्की बारिश हो सकती है। रविवार को अधिकतम तापमान 34 और न्यूनतम तापमान 26 डिग्री सेल्सियस रहने का अनुमान है।

मानसूनी बारिश का भी रिकॉर्ड : दिल्ली में इस बार के मानसून सीजन में अभी तक 22 फीसदी ज्यादा बारिश हो चुकी है। आमतौर पर दिल्ली में 1 जून से 8 सितंबर तक 577.3 मिलीमीटर बारिश को सामान्य माना जाता है। मगर, इस बार अभी तक 706 मिलीमीटर बारिश हो चुकी है।

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Indian Express	Rajasthan Patrika (Hindi)	Nai Duniya (Hindi)
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and documented at Bhagirath(English)& Publicity Section, CWC

past & present

RAMACHANDRA GUHA

LESSONS INDIA MUST LEARN FROM KERALA

I first went to Kerala in 1993, in the company of the ecologist Madhav Gadgil. We had been asked to speak at a meeting organised by that remarkable peoples' science organization, the Kerala Sastra Sahitya Parishad. We were received at Ernakulam Railway Station by the zoologist M. K. Prasad, a doyen of the KSSP. Despite his high status in society, Professor Prasad had come by bus, and he dressed very simply, in bush shirt and rubber chappals.

I have been back to Kerala many times. As a historian, what has impressed me most is the state's manifest egalitarianism. This was witnessed afresh in the response to the recent floods, when, regardless of caste or religion, all came forward to help with relief and rehabilitation. Ideologues from outside the state sought to pit Hindus against Christians and Muslims, but the Malayalis would have none of it. From the wealthy expatriate in the Gulf who opened up his cheque book to the fisherfolk who worked day and night to rescue victims, everyone set aside their social and political differences in this moment of tragedy.

The first lesson of the Kerala floods, therefore, is this; earthquakes and floods do not recognise distinctions invented by crafty humans to divide, and to rule. But there is a second lesson, which may be harder to comprehend and act on. This is that if we abuse nature and disregard the limits it sets on human behaviour (and especially human greed), it will take its revenge upon us. If Kerala wishes to heed this second lesson, then the person they must listen to more attentively is the scientist I first went to that state with. Madhav Gadgil left the prospect of a dazzling career in the Western academy to join the Indian Institute of Science, where he established a Centre for Ecological Sciences. Through his own books and essays, and through the students he has nurtured and inspired, he has worked ceaselessly for ecological responsibility.

The contribution of Madhav Gadgil most relevant to the present context is the report of a committee he chaired. Commissioned by Jairam Ramesh when he was Union environment minister, this presented a comprehensive analysis of the threats posed to the Western Ghats by reckless resource extraction. The Gadgil Report noted that the Ghats had 'been torn asunder by the greed of the elite and gnawed at by the poor, striving to eke out a subsistence. This is a great tragedy, for this hill range is the backbone of the ecology and economy of south India.' Then it added: 'Yet, on the positive side, the Western Ghats region has some of the highest levels of literacy in the country, and a high level of environmental awareness. Democratic institutions are well entrenched, and Kerala leads the country in capacity building and empowering of Panchayat Raj Institutions.'

Illustration: MOHIT SUNEJA

Drawing on many decades of field experience and the latest scientific studies, the Gadgil Report sought to harmonise economic growth with environmental sustainability. Development plans, it said, 'should not be cast in a rigid framework, but ought to be tailored to prevalent locality and time-specific conditions with full participation of local communities, a process that has been termed adaptive co-management.' This 'would marry conservation to development, and not treat them as separate, incompatible objectives'.

The Gadgil Report underlined that 'ecological sensitivity is not merely a scientific, but very much a human, concern.' It argued that modern science must be enriched with the folk ecological knowledge of peasants, artisans, pastoralists, and fisherfolk. It pointed out that 'excessive centralisation of regulatory control does not, and has not worked well…'. It advocated that the political system 'strengthen resource and environmental federalism in the Western Ghats, and move towards more polycentric forms of governance, and many centres of decision-making, which will enable more innovative responses, learning, cooperation and better adaptation to ecosystem pressures and changes'. The Gadgil Report closely examined different sectors of economic activity: agriculture, animal husbandry, forests, fisheries, power, industry, roads, etc. It looked at existing practices in each of these sectors, and how, with the aid both of cutting-edge science and participatory decision-making, they could be made more efficient and sustainable. There was a particularly telling section on mining, which had destroyed forests, degraded soils, polluted the atmosphere, and depleted water sources. Mining had also gravely damaged human health, and thrown farmers, pastoralists, and fisherfolk out of work. All across India, unregulated mining runs rampant, with politicians collaborating with contractors to destroy nature and impoverish local communities. Field reports suggest that landslides, soil erosion, and deposits of debris caused by stone quarrying and sand mining had contributed substantially to the intensification of the floods in Kerala.

Commissioned by Jairam Ramesh, the Gadgil Report was junked by the person who succeeded him as Environment Minister. This Minister even sought to have it banned from circulation; fortunately, an upright Information Commissioner made sure the report was uploaded online. In the wake of the recent tragedy, it deserves to be read afresh and widely discussed. For its lessons apply not only to Kerala, but also to Karnataka, Goa, and Maharashtra, whose own Western Ghats districts have been ravaged in recent decades.

Indeed, the ideas behind the Gadgil Report apply directly to that even more vulnerable mountain system, the Himalaya. Had it not been for deforestation, mining, careless road widening and construction on river banks, the loss of life and property in the 2013 Uttarakhand floods would have not been so substantial. In the Himalaya, as in the Ghats, wise and far-sighted resource use is absolutely imperative. To bring this about, corrupt politicians and greedy contractors must be contested, and checked; by citizens' action and by scientific knowledge, working hand in hand.

Ramachandra Guha's books include Gandhi Before India
The views expressed are personal

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The Times of India (A)
Business standard

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

Fuel from air and water

Why not convert CO_2 into solid carbonate rocks?

SPEAKING OF SCIENCE

D. BALASUBRAMANIAN

Carbonate veins that formed when water containing dissolved carbon dioxide flowed through rocks.
• NYT

As we have kept on burning more and more of organic fuel, such as coal and crude oil, over the last century across the world, the amount of the oxidation product, carbon dioxide (CO_2), in the atmosphere has reached alarming levels, causing global warming and climate change.

Given this scenario, why not capture the CO_2 from the atmosphere and convert it into something inescapable, such as solid carbonate rocks? Such direct air capture (abbreviated as DAC) of the gas and converting it from the biosphere (obtained from biological sources such as burning fuel by us) to the geosphere (as rocks and minerals) has been done by a company in Switzerland, called Climeworks. They have put up a plant in Iceland, where they bury CO_2 (or sequester it) into solid calcium carbonate ($CaCO_3$) rocks, just as basalt; they also sell the CO_2 to greenhouses and beverage makers.

An even better method would be to convert it back into hydrocarbon fuel through a reverse reaction, a process termed as air to fuel or A2F. And a group of scientists led by Dr David Keith of Harvard have put together a company called "Carbon Engineering", with such a conversion of DAC into A2F. They have published their latest paper in the journal *Joule* last month (see Keith D, et al., A Process for Capturing CO_2 from the Atmosphere, *Joule*, DOI: 10.1016/j.joule.2018.05.006). Incidentally, the name of the journal is apt since a unit of energy in the international system of units is a joule, named after the English physicist James P. Joule).

The team has been working for the last several years on this problem. What is being done is to capture the undesirable product CO_2, run it through a reactor in an efficient manner and use it to combine with hydrogen (obtained through electrolysis of water) and generate the hydrocarbon fuel. The whole process is what is termed as 'carbon-neutral-fuel production' by them.

Capturing CO_2 from ambient air itself is not new. As the authors point out, this was attempted as early as the 1950s, as a pre-treatment of air; and in the 1960s, it was attempted to use as feedstock for the production of hydrocarbon fuels in mobile nuclear power plants. What Carbon Engineering has done is to describe the nuts and bolts of the process, the engineering steps, and the cost-benefit analysis. Their claim is that it should be possible to make the process as viable as anywhere between US $50-100 per ton of CO_2 captured by DAC.

As Tracy Staedter summarises it in her "Inscience" column of June 2018, "ambient air is sucked in, passed over a thin plastic surface that has a solution of potassium hydroxide (KOH). The potassium carbonate (K_2CO_3) so obtained is piped into a reactor containing calcium hydroxide ($Ca(OH)_2$), to make pellets of calcium carbonate ($CaCO_3$). The KOH released in this reaction is re-circulated for use. Now the pellets are heated, releasing CO_2 which can be sequestered (as Climeworks have done), or can be mixed with hydrogen (H_2, obtained separately through electrolysis of water), to make a hydrocarbon fuel. The company should be able to make fuels for vehicles, using their approach".

Dr. David Roberts, in his analysis of this A2F project, in his website (vox.com) also considers the approach of Carbon Engineering to become viable in the near future. And Dr. Jeff Tollefson writes about A2F in the 7 June 2018 issue of *Nature* that DAC is cheaper than what scientists had thought. It used to be thought that it would cost anywhere between $50 to $1000 per ton of CO_2. Now it appears to be anywhere between $94 and $234. And 1 million tons of CO_2 can be converted to about 30 million gallons of jet fuel, diesel or gas.

The interesting points to note in the above chemical reaction cycle are: CO_2 is pumped in step1 and comes out in step 3, where it can be captured and stored for making fuel by reacting with hydrogen in a separate reactor. Water which is a reagent in step 4 is a product in step 2. And Ca $(OH)_2$, a reagent in step 2 is released in step 4. Thus the whole process is not just carbon-neutral but appears to be inorganic-chemical-neutral as well. It is estimated that 1 million tons of CO_2 can be converted to 30 million gallons of jet fuel diesel, or gas.

This is reverse engineering at its most hopeful. Or as the wag said: whatever goes up should come down!

dbala@lvpei.org

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After floods, water level in Kerala rivers falls

Experts cite top soil run-off, siltation as reasons for depleting water level

K.P.M. BASHEER
BIJU GOVIND
KOZHIKODE

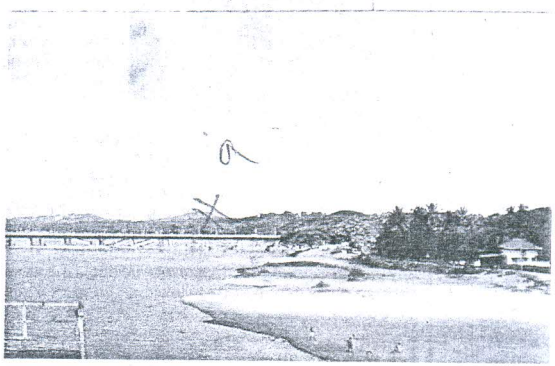
Barely three weeks after the devastating floods, Kerala is witnessing the strange phenomenon of water level in rivers that were in spate till the other day falling sharply. The bed of the Bharathapuzha has once again become visible at many places.

The falling water levels in many rivers have triggered speculation about a possible drought-like situation in the State, especially if the north-east monsoon later this year fails.

A.B. Anita, executive director, Centre for Water Resources Development Management (CWRDM), an autonomous research institution under the State government, said heavy run-off of the top soil in the upland areas and the siltation in the rivers were the reasons for the falling water level.

The top soil in the hills and upland areas had been removed in the flash floods to a depth of up to two metres in many places. As the top soil was shaved off, it ruined the hills' capacity to sponge in rainwater, she said.

Ms. Anita cited ecological destruction caused by deforestation, harmful land use in the upland areas and sand mining in the streams and rivers as having contributed to the top soil run-off and siltation. This was exacerbated by the impact of climate change at the macro level.



Cause for concern: The bed of the Bharathapuzha has become visible at many places. ▪ K.K. MUSTAFAH

Groundwater table

"A detailed, location-specific geographical investigation" is necessary to establish the exact cause for the shrinking of the rivers. The government has already tasked the CWRDM with finding the causes, and a panel of scientists has been set up. The preliminary outcome of the study would be available in a few days, she said.

Echoing her views, experts at the National Institute of Technology, Calicut, (NIT-C) said it was usual for the water level in the rivers and domestic wells to fall after fluvial floods.

"Normally, a river flows through the sand of its own bearing till the mouth. However, this time the discharge has been full, taking the sand and the rocks in the youth-stage along with the floods.

"So the water level in the rivers comes down. And when the river water level is reduced, the groundwater table also does not get replenished since the rivers and groundwater table are connected," K. Saseendran, geologist and professor at the NIT-C, told *The Hindu* on Saturday.

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'INDIA'S POWER DEFICIT FALLS MARGINALLY TO 0.5% IN JULY'

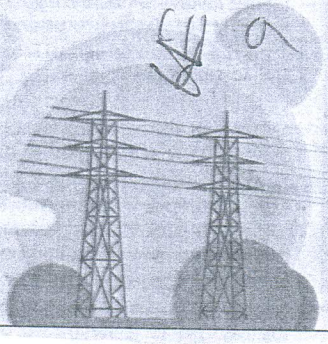
All-India energy requirements in July increased 7.4% y-o-y to 110.3 bn units and available energy rose 7.5% to 109.7 bn units, leaving a power deficit of 0.5% in July 2018 as against with 0.6% in July 2017, as per India Ratings

ELECTRICITY GENERATION

The increase in power demand was met through higher electricity generation (excluding that from renewable sources), which increased 4.5% y-o-y to 102.3 billion units in July 2018, supported by a healthy year-on-year rise in generation from all sources, including thermal (4.8%), hydro (2.4%) and nuclear (14.5%). Moreover, the thermal plant load factor (PLF) improved to 55.5% in July 2018 from 53.7% in July 2017.

RENEWABLE POWER

In June 2018, total renewable generation rose 25.5% y-o-y to 12.8 billion units, driven by an increase in solar and wind power generation. Solar power generation increased on account of higher capacity. On the other hand, improved wind capacity plant load factors (PLFs) were due to improved wind speed.



PRICES & TRADING

Short-term power prices declined to Rs 3.46/kWh in July 2018 from Rs 3.73/kWh in June 2018

- The volumes traded on the IEX declined 19.0% to 4,028 mn units in July 2018 from 4,965 mn units in June 2018

COAL OUTPUT

10.9% y-o-y jump in the monthly coal production of Coal India Ltd to 40.6 million tonnes in July 2018, supporting thermal generation growth

- The number of power stations with critical and super-critical levels declined to 11 in July 2018 from 15 in June 2018

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KERALA FLOODS

Dams cannot provide relief if it rains like this in Kerala again, says CWC director 169

SOWMIYA ASHOK
NEW DELHI, SEPTEMBER 8

IF THE intense spell of rainfall witnessed last month in Kerala was to recur, "dams cannot provide any relief," the Central Water Commission said on Saturday. The CWC's report on the floods will be released on Monday.

CWC's director hydrology (south) NN Rai, who conducted the analysis for the Kerala floods, said: "If again such type of rainfall comes, then dams cannot provide any relief."

Rai said that CWC had investigated the role of all reservoirs and concluded that dams had not aggravated or abated the situation. Speaking at an event organised by the National Institute of Disaster Management, Rai said: "Rule curves are essentially required for all the dams, that is what we are recommending in our report also. For flood moderation, we should not count all 57 dams, but those with storage greater than 200 million cubic metres." He listed seven reservoirs — Idukki, Idamalayar, Kakki, Mullaperiyar, Chaliyar, Bharathappuzzha and Valapuram — that fall under this category.

The Indian Express had reported that the CWC had given a clean chit to dam management in the state, and pegged congestion in the Vembanad Lake as one of the main reasons for worsening the flood situation.

Rai said that the lake had a capacity to store 2 billion cubic metres. "But because of encroachment in the area and rice cultivation around it, this has shrunk to 0.6 BCM," he said. "The rising water levels in the lake impacted the entire hydro-dynamics of the rivers that drain into it," he added.

"When such types of floods occur, one should try to analyse and prepare a rationale of rainfall scenario which will give you a true picture," Rai said, adding the last time Kerala witnessed such rainfall was in 1924.

Between August 15 and August 17, which CWC identified as one of the worst rainfall spells, Rai said that river basins such as Periyar received a cumulative rainfall over three days of 588 mm (compared to 604mm in 1924), Pamba 538 mm (551 mm in 1924) and Bharatppuzha received 373 mm (378 mm in 1924). "These are the storms which we call standard project storm," he said.

An SPS is the heaviest rain storm which has occurred in that region as per rainfall records. "Dams are designed for flood moderation of 25 to 100 year period only," he said.

Rai disagreed with another speaker, Himanshu Thakkar from the South Asia Network on Dams, Rivers and People, who said that Idukki reservoir could have been managed better to moderate the floods. "I disagree with this argument. 2,563 cumec was the peak recorded at Idukki, they had released 1,500 cumec, in that way they had curtailed peak of 1,000 cumec. In three days, 435 million cubic metres was the run-off that came into the dam, and out of that, 375 MCM was released, so 60 MCM was restored," Rai said.

Speaking on 'Reservoir Operation and Flood Risk Management' in the context of Kerala, Thakkar said that it was "not good enough" if authorities made the argument that outflows from dams equalled the inflow during floods. He had said that rule curves, which determine how the dams are filled up during the monsoon period, should be put in place or updated.

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Punjab Keshari (Hindi)
The Hindu
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The Times of India (A)
Business standard

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

U.S. accused of blocking UN climate talks amid protests

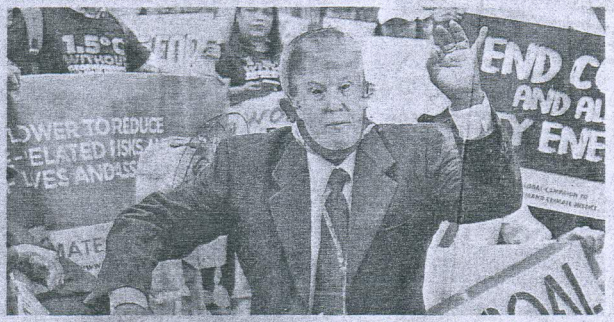
Negotiators say developed nations want to change rules on funding plans

AGENCE FRANCE-PRESSE
BANGKOK

The United States, despite withdrawing from a landmark accord aimed at curbing climate change, is stonewalling vital UN talks over how to fund poorer nations as they battle against global warming, multiple sources said on Saturday.

Protests were staged on Saturday in cities across the world to call on leaders to accelerate efforts to tackle climate change. In Bangkok, dozens of labourers and fishermen from the Gulf of Thailand, whose livelihoods are threatened by rising sea levels, joined demonstrators outside the UN.

U.S. President Donald Trump caused global outrage by withdrawing from the Paris Accord last year but his country is still committed to the deal's roadmap, giving Washington leverage over the Bangkok conference.



An activist wearing a mask depicting U.S. President Donald Trump takes part in a demonstration in Bangkok. ▪ AFP

The issue of how funds are made available to developing nations has emerged as a key sticking point at the talks, which have made little headway since they opened on Tuesday.

The Paris deal – hailed as a game-changer when struck in 2015 – promised $100 billion annually from 2020 to poor nations already coping with floods, heatwaves and rising sea levels exacerbated by climate change. But it left room for debate over how that money should be provided, as well as how donor nations would source and report their contributions.

Washington has tabled a proposal with support from Japan and Australia that seeks to remove rules on how countries account for their climate action funding, sources close to the negotiations said. This would mean that developed economies – responsible for the lion's share of carbon emissions – could still count commercial loans and pre-existing state funding as part of their finance obligations.

Lack of transparency

Observers in Bangkok said the U.S. and some other developed economies were also refusing point blank to discuss the contentious issue of how rich nations inform other states of their future funding plans.

A senior climate negotiator said that the U.S. delegation in Bangkok was "poisoning" discussions aimed at creating a clear roadmap to implementing what nations agreed in the Paris deal.

Another head negotiator accused the U.S. of seeking to move the goalposts agreed upon in Paris.

"It is clear to us that there is no goodwill and willingness to advance on matters of utmost importance to developing countries," said Majid Shafie-Pour, head of a developing country bloc that includes China.

News item/letter/article/editorial published on 9.09.2018 in the

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SYL: Abhay seeks CM's resignation

TRIBUNE NEWS SERVICE

CHANDIGARH, SEPTEMBER 8

Claiming that the INLD's call for a 'bandh' in the state was successful, Leader of Opposition Abhay Chautala on Saturday demanded the resignation of Chief Minister Manohar Lal Khattar.

He said that the BJP government had lost its moral right to govern since the bandh call was given in protest of the inability of the BJP government to complete the SYL and Dadupur-Nalvi canals, failure to implement the Swaminathan Commission report, rising prices of petrol and diesel, ill-conceived drafting and implementation of the GST and failure in maintaining law and order in the state and other allied issues.

"The success of the bandh was a vote of no-confidence against the government," Abhay said, expressing gratitude to the traders for supporting it.

He said that political leaders – state BJP president Subhash Barala and AICC media in charge Randeep Singh Surjewala — had no moral ground to comment on their protest for the SYL canal.

"In the Assembly session, I will ask Barala to repeat his statement that all this is a 'drama'. The Congress leader, too, should move beyond the Rajiv-Longowal accord. He was, during Punjab's elections, standing with its leaders and releasing a manifesto that said that not a drop of water will be given to Haryana," Abhay said.

He also announced that when voted to power, the INLD would constitute a traders' commission to address the issues of trade-related problems.

Surjewala demands Centre's intervention

AICC media in charge Randeep Singh Surjewala said that the construction of the SYL canal was neither the responsibility of Punjab nor of Haryana. Addressing a press conference, he said, "The Prime Minister is supposed to implement the court decision on the construction of the SYL canal. Let the PM depute Central forces, get the canal constructed and give Haryana its share of water which we have got after fighting a long legal battle. We filed the case and won it." He said, "What did the INLD do when the time to implement the Eradi Commission decision came. The INLD led by Devi Lal and Om Prakash Chautala waved black flags to protest against the commission and drew parallels with the Simon Commission," he added. TNS

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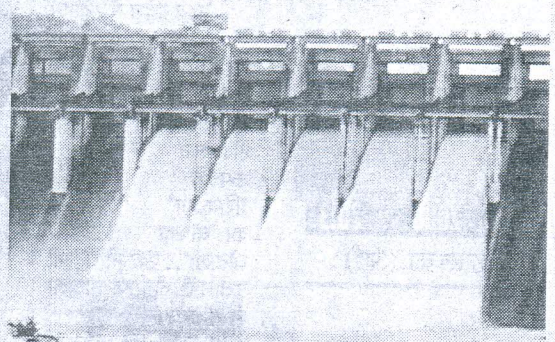
न्यूज विंडो RP-10



बांगो के पांच गेट दूसरे दिन भी खुले रहे, छोड़ रहे 26800 क्यूसेक पानी

कोरबा@ पत्रिका. बांगो बांध के 5 गेट को दूसरे दिन रविवार को भी खुला रखा गया। हालांकि अब 46 हजार से कम करके करीब 26800 क्यूसेक पानी छोड़ा जा रहा है। बांध का जल स्तर कुछ कम हुआ है। जलभराव 96 से घटकर 94 फीसदी हो गई है। इधर दर्री डेम के भी दो गेट खोलकर पानी डिस्चार्ज किया जा रहा है।

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नजरिया

दुनिया को जलवायु परिवर्तन से बचाने का अगला पड़ाव

पेरिस समझौते को तीन साल हो चुके हैं और यह तय करने का समय आ गया है कि हम लक्ष्य की ओर कितना बढ़े?

मदन जैड़ा
ब्यूरो चीफ, हिन्दुस्तान

अभी-अभी भारत ने केरल की बाढ़ और देश के अन्य हिस्सों में मानसून की तबाही के रूप में जलवायु परिवर्तन के खतरे का सामना किया है, तो अमेरिका और जापान में भयावह तूफान और बैंकॉक में समुद्र के जलस्तर की बढ़ोतरी के रूप में इसकी झलक को देखा गया। इन खतरों और चुनौतियों से निपटने की जिम्मेदारी संभालने वाली एजेंसियों के प्रमुख 12 सितंबर से अमेरिका के सैन फ्रांसिस्को में एकजुट हो रहे हैं। लेकिन अन्य जलवायु सम्मेलनों की तरह वहां भावी खतरों पर चर्चा नहीं होनी है। न ही आगे की रणनीति बनेगी। बल्कि यह चर्चा होगी कि तीन साल पूर्व हुए पेरिस समझौते के अनुरूप अब तक क्या-क्या हुआ है? इस पर भी मंथन होगा कि पेरिस समझौते के लक्ष्यों को हासिल करने के लिए ये कार्य कितने पर्याप्त हैं?

बैठक को इसी साल दिसंबर में पोलैंड में होने वाली कांफ्रेंस ऑफ पार्टीज (कॉप) की 24वीं बैठक की तैयारी भी माना जा रहा है। कॉप-24 में पेरिस समझौते की समीक्षा होनी है। संयुक्त राष्ट्र ने पोलैंड की बैठक को पेरिस 2.0 की संज्ञा दी है। यानी सैन फ्रांसिस्को सम्मेलन पोलैंड की बैठक का भी आधार बनेगा। हो सकता है कि इस बैठक के बाद राष्ट्रों को अपने उत्सर्जन के लक्ष्यों को नए सिरे से निर्धारित करने के लिए कहा जाए। जो राष्ट्र अभी तक लक्ष्यों को घोषित करने या क्रियान्वयन में देरी कर रहे हैं, उन्हें आगाह किया जा सकता है। यह सम्मेलन इसलिए भी महत्वपूर्ण है कि इसमें चर्चा करने वाले राष्ट्राध्यक्ष या नीति-निर्माता नहीं हैं, बल्कि क्रियान्वयन करने वाली एजेंसियों के प्रमुख हैं। इसमें स्थानीय प्रशासनिक इकाइयों के प्रमुख, मेयर, स्वतंत्र सरकारी और गैर सरकारी एजेंसियों के मुखिया, उद्योग जगत के लीडर, प्रबुद्ध नागरिकों और गैर-सरकारी संगठनों के प्रतिनिधियों के बीच चर्चा होनी है। एजेंसियों को यह बताना है कि जमीनी स्तर पर जलवायु परिवर्तन से निपटने के लिए क्या हो रहा है? मसलन, सौर ऊर्जा बनाने वाली एजेंसियां अपनी बात रख सकती हैं, तो शहर प्रशासन जलवायु परिवर्तन के खतरों से निपटने के उपाय बता सकते हैं। मसलन, न्यूयॉर्क के शहर प्रशासन ने समुद्र का जलस्तर बढ़ने के खतरे से निपटने के लिए समुद्री किनारों पर पानी को रोकने और बढ़ने की स्थिति में उसकी निकासी के प्रयास शुरू किए हैं। बैंकॉक भी ऐसे कदम बढ़ा रहा है। लेकिन क्या मुंबई और चेन्नई ने इस दिशा में कदम बढ़ाए हैं? जलवायु परिवर्तन से जुड़े जिन पांच बड़े मुद्दों पर इस सम्मेलन में और आगे भी चर्चा होनी है, उनमें स्वच्छ ऊर्जा, समग्र आर्थिक विकास, सतत विकास, भूमि एवं समुद्र से जुड़े मुद्दे तथा जलवायु अर्थव्यवस्था का विस्तार शामिल है। लेकिन कई मुद्दे ऐसे हैं, जिन पर अभी पर्याप्त प्रगति नहीं हुई है। कई अहम मुद्दों पर राष्ट्रों की नीतियां भी स्पष्ट नहीं हैं, जिससे उद्योग जगत अपने कदम तय नहीं कर पा रहा है। जैसे देश में आज स्वच्छ तकनीक में निवेश की बात करें, तो यह हरित ऊर्जा के क्षेत्र में तेजी से बढ़ रहा है। यहां सरकार की नीति स्पष्ट है। लेकिन हरित परिवहन क्षेत्र में उतनी तेजी नहीं दिखी। इसी प्रकार, जलवायु परिवर्तन से सबसे बड़ी चुनौती कृषि क्षेत्र के सामने है। इससे खाद्यान्न उत्पादन प्रभावित हो सकता है। लेकिन इस पर पूरी दुनिया में अपेक्षाकृत कम काम हो रहा है।

कार्बन उत्सर्जन के लिए जिम्मेदार 55 फीसदी देशों ने पेरिस समझौते के अनुरूप कार्य शुरू किया है, बाकी ने नहीं।

पेरिस समझौते को तीन साल हो चुके हैं। इसलिए यह भी तय होना है कि ये उपाय तापमान बढ़ोतरी को डेढ़ डिग्री तक रोकने में कारगर हैं या फिर नए उपायों या लक्ष्य निर्धारित करने की जरूरत है। कई रिपोर्ट कहती हैं कि जिस रफ्तार से काम हो रहा है, उससे तापमान बढ़ोतरी डेढ़ डिग्री तक सीमित नहीं रहेगी, बल्कि तीन डिग्री तक पहुंच जाएगी। एक चिंता यह है कि पेरिस समझौते से अमेरिका के बाहर होने के बाद धनी राष्ट्र वैश्विक हरित कोष के लिए धन देने में कोताही कर सकते हैं। पेरिस समझौते के अनुसार, 2020 तक इस कोष में प्रतिवर्ष सौ अरब डॉलर होना चाहिए। पेरिस समझौते पर निकरागुआ व सीरिया को छोड़ सभी 197 देशों ने हस्ताक्षर किए थे। मोटा आकलन है कि कार्बन उत्सर्जन के लिए जिम्मेदार 55 फीसदी देशों ने पेरिस समझौते के अनुरूप कार्य शुरू किया है, बाकी ने नहीं।

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2 irrigation facilities in Telangana get heritage tag

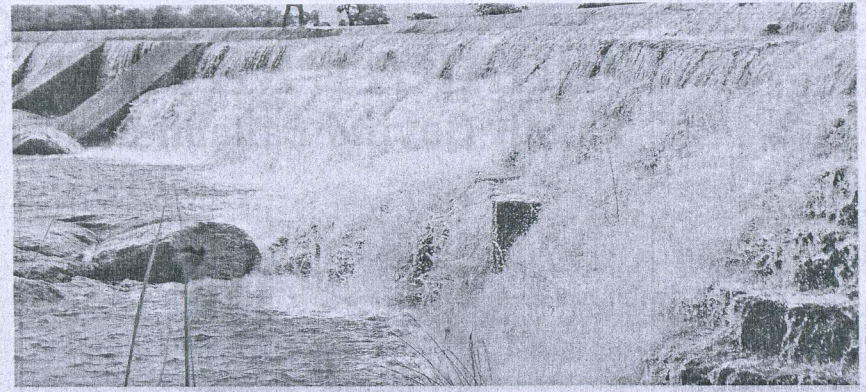
Sadarmatt anicut across river Godavari in Nirmal district and Pedda Cheruvu in Kamareddy district chosen

IX 10

S. HARPAL SINGH
P. RAM MOHAN
ADILABAD/NIZAMABAD

A meeting of the International Executive Council, the highest decision making body of International Commission on Irrigation and Drainage (ICID), at Saskatoon in Canada last month has accepted Telangana government's nomination of Sadarmatt anicut across river Godavari in Nirmal district and Pedda Cheruvu in Kamareddy district in the ICID Register of Heritage Irrigation Structures.

The plaques presented by the council for the two over-century-old irrigation facilities were received by the Member Secretary, Indian National Committee on Surface Water as Indian representative at the meeting. The chairman of the committee has invited irrigation officials from Telangana to take them in New Delhi soon.



Deserving distinction: A view of the Sadarmat anicut in Nirmal district. ▪S. HARPAL SINGH

Sadarmatt anicut

This award is a deserving recognition to Sadarmatt anicut which has provided precious water for paddy crops in its designed ayacut of 13,100 acres in present day Khanapur and Kadem mandals since its construction in 1891-92.

Picnic spot

It has also served as a picnic spot for people from an area which may not be as vast its catchment area of nearly 40,000 sq miles but is spread over old undivided Adilabad, Karimnagar and Nizamabad districts.

The anicut, which is English word for Telugu's *anakatta*, meaning a rainfall bund, was built by Nawab Ikbal-ud-Dowla who bore the tile of Vicar-ul-Umrah Bahadur in 1891-92 about 50 km downstream of the Sri Ram Sagar Project (SRSP) and is chiefly fed by Sawrnavagu stream after the construction of SRSP. C.E. Wilkinson was the Taluqdar then and J.J. Ottley was the engineer and Khanapur was a jagir of the Nawabs during the rule of the Nizam of Hyderabad.

Sadarmatt bund is 437.4 m long on its left flank and 23.8 m on its right flank.

The left canal is 21.5 km long while the right canal is 10 km and the distributory is 12 km in length irrigating 5,700 acres, 3,400 acres and 4,000 acres respectively.

The maximum flood discharge at the anicut is 7.76 lakh cusecs. Over 4 tmc ft of water is utilised.

Pedda Cheruvu

The Pedda Cheruvu (big tank in Telugu) located on the outskirts of this district headquarters town is spread over an area of 618 acres and was built in 1897 during the rule of Mir Mahaboob Ali Khan, the sixth Nizam of Hyderabad State. It has a 1.8-km-long tank bund and 145-metre weir and three sluices. It's catchment area is spread over 68.97 sq. km. and total flood flow is 8,860 cusecs.

With a capacity of 0.175 tmcft it provides water for irrigation to over 900 acres in Kamareddy, Sarampally, Narsampally and old Rajampet.

Bathukamma festival

It also provides drinking water for residents of the area. Womenfolk play Bathukamma during the Navaratrotsavalu on its bund and immerse them in its waters. It is a picnic spot for residents of the area. Consequently, the Government wanted to develop it as a tourist spot by creating the necessary infrastructure.

Moreover, this tank was taken up under the second round of Mission Kakatiya to be developed as a mini tank bund with an estimated outlay of ₹6.6 crore. Eighty per cent of work is done and the remaining will be completed very soon, according to K. Bansilal, Executive Engineer (Irrigation), Kamareddy.

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Cloudy forecast

Developed countries, especially the U.S., need to commit funds to limit climate change

The conference of the UN Framework Convention on Climate Change in Bangkok last week, that was to draft a rulebook for the Paris Agreement ahead of a crucial international conference in Poland in December, ran into predictable difficulties over the issue of raising funds to help poorer nations. Some developed countries led by the U.S. – which, under the Trump administration, has rejected the agreement – are unwilling to commit to sound rules on raising climate finance. Under the pact concluded in Paris, rich countries pledged to raise $100 billion a year by 2020 to help developing countries reduce their greenhouse gas (GHG) emissions and aid populations to cope with extreme events such as floods, droughts and storms. Obstructing the transition to a carbon-neutral pathway and preserving the status quo is short-sighted, simply because the losses caused by weather events are proving severely detrimental to all economies. By trying to stall climate justice to millions of poor people in vulnerable countries, the developed nations are refusing to accept their responsibility for historical emissions of GHGs. Those emissions raised living standards for their citizens but contributed heavily to the accumulated carbon dioxide burden, now measured at about 410 parts per million of CO_2 in the atmosphere, up from 280 ppm before the industrial revolution.

There is international pressure on China and India to cut GHG emissions. Both countries have committed themselves to a cleaner growth path. India, which reported an annual CO_2 equivalent emissions of 2.136 billion tonnes in 2010 to the UNFCCC two years ago, estimates that the GHG emissions intensity of its GDP has declined by 12% for the 2005-2010 period. As members committed to the Paris Agreement, China and India have the responsibility of climate leadership in the developing world, and have to green their growth. What developing countries need is a supportive framework in the form of a rulebook that binds the developed countries to their funding pledges, provides support for capacity building and transfer of green technologies on liberal terms. If scientific estimates are correct, the damage already done to the West Antarctic Ice Sheet is set to raise sea levels; a 2° Celsius rise will also destabilise the Greenland Ice Sheet. Failed agriculture in populous countries will drive more mass migrations of people, creating conflict. A deeper insight on all this will be available in October when the Intergovernmental Panel on Climate Change releases its scientific report on the impact of a 1.5° C rise in global average temperature. This is the time for the world's leaders to demonstrate that they are ready to go beyond expediency and take the actions needed to avert long-term catastrophe.

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Kerala dams were full up even before rains: Study

Vishwa.Mohan
@timesgroup.com

New Delhi: On the eve of torrential rains that caused widespread flooding in Kerala, the state's major dams, barring Idukki, were already full to capacity leaving little scope of containing cumulative runoff totalling more than 200% of the storage capacity of all big and small reservoirs in the state.

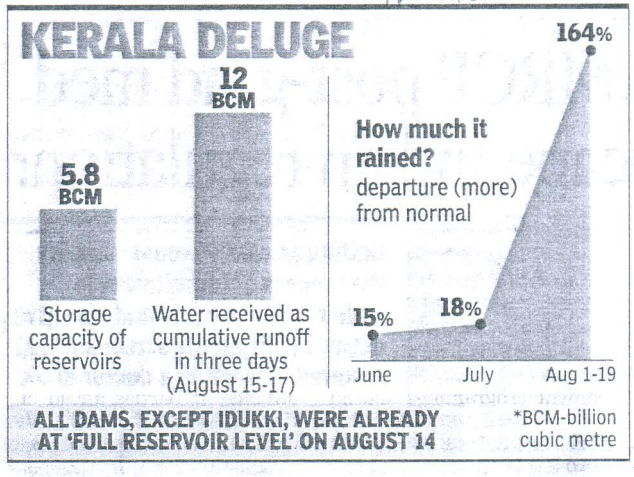
The finding is part of a detailed study on Kerala floods carried out by the Central Water Commission. It submitted its report to the water resources ministry last week.

Kerala received 12 billion cubic metre (BCM) of water in three days of exceptionally high rainfall during August 15-17, more than double the capacity of all reservoirs (5.8 BCM) in the state, presenting an impossible scenario as waters began to rise in several districts leading to mass evacuation.

▶Continued on P 11

'Kerala dams didn't release extra water'

TOI-10



▶ Continued from P 1

In view of the state's experience, the report recommended revisiting the 'rule curves' — strategic water level for planning operations of a dam — of all reservoirs. The report said the dams neither added to the flood nor helped in reducing the flow. It said "above normal" rainfall in June and July and exceptionally high rainfall in August left the state helpless despite following standard operating procedures on reservoirs. The report will be submitted to the Kerala government on Monday.

"The dams did not release anything extra of what they received. The authorities had released water in a very controlled manner. The commission has come to the conclusion after computing and analysing step by step inflow and outflow of water during the entire season," CWC director (hydrology) N N Rai said.

He told **TOI** on Sunday that the report would recommend "revisiting rule curves of all reservoirs" in view of shrinking of their water carrying capacity over the years.

A rule curve specifies storage or empty space to be maintained in a reservoir during different times of the year.

"The rule curve as such does not give the amount of water to be released from the reservoir. This amount will depend on inflow to the reservoir, or sometimes it is specified in addition to rule curves," said Sharad Jain, director of National Institute of Hydrology, Roorkee. Rule curves are derived by studying the historical data.

Though it helps in maintaining water levels, certain reports suggested that a tendency to keep back water for leaner seasons may have led to high reservoir levels.

For the full report, log on to www.timesofindia.com

News item/letter/article/editorial published on 10.09.2018 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
Aaj (Hindi)
Indian Nation
Nai Duniya (Hindi)
The Times of India (A)
Business standard

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

Break from rain: Humidity down, but temp to rise

T10-10

TIMES NEWS NETWORK

New Delhi: After recording a considerable amount of rain over the past one week, Delhi is now likely to see a relatively dry spell from Monday onwards, with monsoon activity 'weakening' over the region. While light to moderate showers are expected on Monday again, the met office said that maximum temperatures are likely to rise from Tuesday, along with a drop in humidity levels.

The capital recorded 5.8mm of rainfall till 8.30am on Sunday in a 24-hour period. After that, however, it saw clear skies during the remaining part of the day. Delhi's maximum temperature was recorded at 32.7 degrees Celsius — one degree below normal, while the humidity levels oscillated between 65 to 97% in the last 24 hours.

The capital has received almost 180mm of rainfall so far in the month of September as compared to a monthly average of 125.1mm. The monthly figure was crossed in just four days with Delhi receiving light to moderate spells of rain from September 1 onwards.

"We expect the intensity of rain and its frequency to reduce this week. While Monday could see light to moderate showers in parts, the chances of rain are going to reduce from Tuesday and we expect clear skies from 13th to 15th September. Humidity levels are also expected to drop by the end of the week with a reduction in moisture content," said a met official.

Forecast for Monday shows generally cloudy skies with chances of light to moderate thundershowers. "The maximum and minimum temperature is likely to hover between 33 and 26 degrees Celsius, respectively," a met official said.

News item/letter/article/editorial published on 10.9.2018 in the

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REPLY TO RTI

Despite NGT rap to govt, schools, offices don't have rainwater harvesting systems

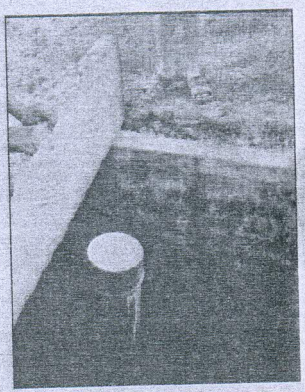
SHRADHA CHETTRI
NEW DELHI, SEPTEMBER 9

A REPLY to an RTI from the Public Works Department (PWD) has revealed that rainwater harvesting (RWHs) systems are yet to be installed, or begin operations, in government schools and office buildings in the capital.

This despite the National Green Tribunal (NGT) pulling up the Delhi government and asking it to file a response on the installation of RWH systems in schools and colleges in January.

The tribunal had given the government 30 days to file a response, following which it had ordered an inspection of areas that had not installed the systems in July.

The RTI application was filed by activist Yogesh Kumar, but the PWD stated it has "no information" on such an application.



In January, the NGT had asked govt and private schools, and colleges to install rainwater systems

In January, the NGT had sought implementation of its November 2017 order, asking government and private schools, and colleges to install rainwater harvesting systems at their own cost.

Moreover, Rule 50 of the Delhi Water and Sewer (Tariff and Metering) Regulations, 2012, makes it mandatory for all buildings on plots of 500 square metres or more to set up an RWH system.

The rainwater harvesting guidelines of the Delhi Jal Board (DJB) state that RWH systems are important to prevent a fall in groundwater levels and to increase availability of potable water.

With the Delhi government yet to notify the January order, the NGT had directed DJB to inspect all residential and commercial buildings on plots of 500 sq metres and above in July. The tribunal had also ordered a fine of Rs 5 lakh as environment compensation on buildings that haven't installed the systems.

"Yesterday (September 8), the government organised a massive plantation drive. But this government does not have a vision towards sustainable environmental solutions. In the newly constructed school buildings, the system could be easily installed, but it hasn't been done...," alleged Kumar.