

NEWS D.A.D.

100% COVERAGE OF EACH & EVERY RELEVANT NEWS

— SOURCES —

**PIB » The Hindu » Live Mint » HT » TOI
RBI » ET » Indian Express » PRS Blog** and more.....

14
leading sources for
CURRENT AFFAIRS
covered on
Daily basis.



Topic-wise
Daily News

For all those who don't
want to be left out

“Every News counts and we make sure that
you don't miss any relevant News.”



CRACKACADEMY

Index

Inland Waterways takes a giant step with IWDC towards fulfilling Maritime India Vision 2047.....	2
Iceland volcano recedes after 'black day' of town fires.....	6
Rainfall rising in over half of India's sub-districts, says four-decade study.....	8
Rapid groundwater depletion widespread around the world, study finds.....	10

INLAND WATERWAYS TAKES A GIANT STEP WITH IWDC TOWARDS FULFILLING MARITIME INDIA VISION 2047

Relevant for: Geography | Topic: Distribution of key natural resources - Water Resources incl. Rivers & related issues in world & India

The first meeting of Inland Waterways Development Council (IWDC) concluded on January 8, 2024 in Kolkata to strengthen the inland water transport system in the country. The Union Minister of Ports, Shipping and Waterways (MoPSW), Shri Sarbananda Sonowal chaired the meeting onboard vessel MV Ganga Queen showcasing the interesting possibilities waterways sector holds.

The Meeting witnessed participation from the Minister of State for Ports, Shipping and Waterways Shri Shantanu Thakur and the Ministers from six States, Andhra Pradesh, Madhya Pradesh, Uttar Pradesh, Assam, Nagaland and Manipur, Senior officials and dignitaries from 21 State Governments/Union Territories namely Assam, Nagaland, Tripura, Manipur, Mizoram, West Bengal, Odisha, Andhra Pradesh, Tamil Nadu, Kerala, Karnataka, Goa, Maharashtra, Rajasthan, Punjab, Madhya Pradesh, Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and Puducherry. A total of 124 participants from Central Government, State Government and UT Governments attended the meeting. This massive participation truly depicted the spirit of IWDC which is envisaged to function as a dedicated institutional mechanism directed towards accelerating the holistic development of inland waterways and the associated IWT ecosystem for enhanced cargo, passenger movement and river cruise tourism by enabling active dialogue and deliberation between the States, Union Territories and the Center.

The agenda of the first IWDC meeting had sessions centered around fairway development, enhancing cargo and passenger transport in IWT, potential of river cruise tourism to boost economic activity, sustainability practices in terms of non-fossil fuel-based vessel operations among others.

One of the key highlights of the meeting was the launch of Harit Nauka- Guidelines for Green Transition of Inland Vessels and River Cruise Tourism Roadmap, 2047 by Shri Sonowal.

With the Harit Nauka Guidelines, the MoPSW has put forth a strong commitment towards furthering passenger transport through waterways in an environment friendly and sustainable manner by promoting the adoption of low-emission fuel (CNG/LNG/electric/hydrogen/methanol) as propulsion fuel for inland vessel operations (Green Vessels). Chairman, IWAI and Chairman & Managing Director, Cochin Shipyard Limited apprised meeting participants on our nation's elevated capacity in building such Green Vessels and highlighted that a new state of the art facility has been set up at the Hooghly Cochin Shipyard Limited for construction of electric powered inland vessels.

The River Cruise Tourism Roadmap 2047 focuses on four vital pillars, including Infrastructure, Integration, Accessibility, and Policy for promoting river cruise tourism. As a part of the roadmap, over 30 possible routes and tourist circuits along inland waterways have been identified for further development.

The meeting served as successful platform for communicating the concerns and suggestions of the State/UT representatives to the Center and vice versa. MoPSW stressed upon the importance of State-level institutional structure and rules in ensuring that the planning and

development of the state's inland waterway ecosystem accounts for its unique characteristics and requirements. The Ministry further recommended that IWT specific institutional structures put in place by Assam, Andhra Pradesh, Uttar Pradesh among others can be looked into and adopted by other states.

States such as Nagaland and Tamil Nadu, highlighted the rivers and waterbodies (NW-101, NW-4) of the respective States, that possess the potential for supporting passenger and/or cargo movement and emphasized upon prioritizing the development of these NWs. Many of the state's highlighted opportunities of channelizing IWT for cargo movement. For instance, Madhya Pradesh highlighted the potential of the waterways in their state towards facilitating mineral movement while Andhra Pradesh highlighted ability for finished goods movements of cement and steel using waterways in their state. Similarly, multiple states brought out the scope of IWT-based tourism. For instance, Madhya Pradesh mentioned stretches of Narmada River while Assam shared ideas on religious tourism circuit development along Brahmaputra River among others.

Most states also unanimously highlighted the need for technical guidance and support from the Central Government in expediting the development of their waterway system. Meeting participants also discussed regulatory aspects of the IWT sector especially contours of the Inland Vessel Act 2021 (which replaces a century old Act) and the role of State Government agencies in ensuring its compliance.

As the participants deliberated upon infrastructure and technology interventions in the IWT space, representatives from IIT Kharagpur presented a computerized simulation of the working of an Open Pontoon system developed by the institute for enabling faster pontoon operations. Works towards deployment of two such Open Pontoon systems in Uttar Pradesh are underway.

Union Minister Shri Sonowal in his concluding remarks, assured that the Central Government shall continue to support the States/UTs in their endeavours for untapping the waterway system of their State/UT. He also stressed upon the importance of undertaking the techno-economic feasibility studies to ensure that the planning, estimation, development, and execution of any project is done in a comprehensive and prudent manner.

MJPS/NSK

The first meeting of Inland Waterways Development Council (IWDC) concluded on January 8, 2024 in Kolkata to strengthen the inland water transport system in the country. The Union Minister of Ports, Shipping and Waterways (MoPSW), Shri Sarbananda Sonowal chaired the meeting onboard vessel MV Ganga Queen showcasing the interesting possibilities waterways sector holds.

The Meeting witnessed participation from the Minister of State for Ports, Shipping and Waterways Shri Shantanu Thakur and the Ministers from six States, Andhra Pradesh, Madhya Pradesh, Uttar Pradesh, Assam, Nagaland and Manipur, Senior officials and dignitaries from 21 State Governments/Union Territories namely Assam, Nagaland, Tripura, Manipur, Mizoram, West Bengal, Odisha, Andhra Pradesh, Tamil Nadu, Kerala, Karnataka, Goa, Maharashtra, Rajasthan, Punjab, Madhya Pradesh, Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and Puducherry. A total of 124 participants from Central Government, State Government and UT Governments attended the meeting. This massive participation truly depicted the spirit of IWDC which is envisaged to function as a dedicated institutional mechanism directed towards accelerating the holistic development of inland waterways and the associated IWT ecosystem

for enhanced cargo, passenger movement and river cruise tourism by enabling active dialogue and deliberation between the States, Union Territories and the Center.

The agenda of the first IWDC meeting had sessions centered around fairway development, enhancing cargo and passenger transport in IWT, potential of river cruise tourism to boost economic activity, sustainability practices in terms of non-fossil fuel-based vessel operations among others.

One of the key highlights of the meeting was the launch of Harit Nauka- Guidelines for Green Transition of Inland Vessels and River Cruise Tourism Roadmap, 2047 by Shri Sonowal.

With the Harit Nauka Guidelines, the MoPSW has put forth a strong commitment towards furthering passenger transport through waterways in an environment friendly and sustainable manner by promoting the adoption of low-emission fuel (CNG/LNG/electric/hydrogen/methanol) as propulsion fuel for inland vessel operations (Green Vessels). Chairman, IWAI and Chairman & Managing Director, Cochin Shipyard Limited apprised meeting participants on our nation's elevated capacity in building such Green Vessels and highlighted that a new state of the art facility has been set up at the Hooghly Cochin Shipyard Limited for construction of electric powered inland vessels.

The River Cruise Tourism Roadmap 2047 focuses on four vital pillars, including Infrastructure, Integration, Accessibility, and Policy for promoting river cruise tourism. As a part of the roadmap, over 30 possible routes and tourist circuits along inland waterways have been identified for further development.

The meeting served as successful platform for communicating the concerns and suggestions of the State/UT representatives to the Center and vice versa. MoPSW stressed upon the importance of State-level institutional structure and rules in ensuring that the planning and development of the state's inland waterway ecosystem accounts for its unique characteristics and requirements. The Ministry further recommended that IWT specific institutional structures put in place by Assam, Andhra Pradesh, Uttar Pradesh among others can be looked into and adopted by other states.

States such as Nagaland and Tamil Nadu, highlighted the rivers and waterbodies (NW-101, NW-4) of the respective States, that possess the potential for supporting passenger and/or cargo movement and emphasized upon prioritizing the development of these NWs. Many of the state's highlighted opportunities of channelizing IWT for cargo movement. For instance, Madhya Pradesh highlighted the potential of the waterways in their state towards facilitating mineral movement while Andhra Pradesh highlighted ability for finished goods movements of cement and steel using waterways in their state. Similarly, multiple states brought out the scope of IWT-based tourism. For instance, Madhya Pradesh mentioned stretches of Narmada River while Assam shared ideas on religious tourism circuit development along Brahmaputra River among others.

Most states also unanimously highlighted the need for technical guidance and support from the Central Government in expediting the development of their waterway system. Meeting participants also discussed regulatory aspects of the IWT sector especially contours of the Inland Vessel Act 2021 (which replaces a century old Act) and the role of State Government agencies in ensuring its compliance.

As the participants deliberated upon infrastructure and technology interventions in the IWT space, representatives from IIT Kharagpur presented a computerized simulation of the working of an Open Pontoon system developed by the institute for enabling faster pontoon operations.

Works towards deployment of two such Open Pontoon systems in Uttar Pradesh are underway.

Union Minister Shri Sonowal in his concluding remarks, assured that the Central Government shall continue to support the States/UTs in their endeavours for untapping the waterway system of their State/UT. He also stressed upon the importance of undertaking the techno-economic feasibility studies to ensure that the planning, estimation, development, and execution of any project is done in a comprehensive and prudent manner.

MJPS/NSK

END

Downloaded from crackIAS.com

© **Zuccess App** by crackIAS.com

CrackIAS.com

ICELAND VOLCANO RECEDES AFTER 'BLACK DAY' OF TOWN FIRES

Relevant for: Geography | Topic: Mountains, changes therein and in Flora & Fauna and the Effects of such changes

To enjoy additional benefits

CONNECT WITH US

January 16, 2024 01:30 pm | Updated 01:30 pm IST

COMMENTS

SHARE

READ LATER

In this image made from video, volcanic activity is seen in Grindavik, Iceland, Sunday, Jan. 14, 2024. Iceland's president says the country is battling "tremendous forces of nature" after molten lava from a volcano consumed several houses in the evacuated town of Grindavik. | Photo Credit: AP

A volcano that erupted in southwest Iceland for the second time in less than a month appeared to be significantly less active on Monday despite indications that magma is still flowing underground.

"A black day" read the front page headline of Icelandic daily Morgunbladid across an image of bright-orange lava fountains and houses burning in the town of Grindavik, some 40 kilometres (25 miles) south-west of the capital Reykjavik.

Molten lava flows reached the outskirts of Grindavik around noon on Sunday, setting three houses alight, although the town was evacuated earlier and there was no immediate danger to people.

The crack in the earth's surface that opened close to Grindavik on Sunday was no longer active, and lava production from the larger fissure north of the town was decreasing, volcanologist Rikke Pedersen told Reuters on Monday.

"Activity has dropped significantly overnight," she said.

"It's not certain if what we're seeing is already the end of this eruption," she said, adding that GPS measurements still showed geological movements and indicated that magma continued to flow in a corridor beneath the town.

It was the second eruption on the peninsula of Reykjanes in four weeks and the fifth since 2021.

Live video footage on Monday showed glimpses of orange lava still flowing to the surface but at smaller volumes, and further away from the town.

"Unfortunately (the lava) went a little bit more south than we had hoped for," the head of

Iceland's Civil Protection and Emergency Management, Vidir Reynisson, told a press conference late on Sunday.

Nevertheless, the defensive barriers built to the north of Grindavik had helped divert the flows of lava to the west, away from the town, Reynisson said.

Residents of Grindavik, a town of some 4,000 people before it was evacuated in November, said it was difficult to watch televised images of the fires.

"This is serious, it's basically as bad as it can possibly get. Although it might get even worse, who knows," evacuated resident Jon Gauti Dagbjartsson told Reuters late on Sunday.

"I actually live in the house that I was born in and it's a tough thought to think that this town might be over, and I would have to start all over somewhere else. But if that's the case, then that's exactly what we'll do," he said.

The Icelandic government will meet on Monday to decide on support for the people of Grindavik.

"We need to put a lot of extra efforts into finding more housing, suitable housing," Prime Minister Katrin Jakobsdottir said.

COMMENTS

SHARE

[volcanic eruption / Iceland](#)

BACK TO TOP

[Terms & conditions](#) | [Institutional Subscriber](#)

Comments have to be in English, and in full sentences. They cannot be abusive or personal. Please abide by our [community guidelines](#) for posting your comments.

We have migrated to a new commenting platform. If you are already a registered user of The Hindu and logged in, you may continue to engage with our articles. If you do not have an account please register and login to post comments. Users can access their older comments by logging into their accounts on Vuukle.

END

Downloaded from **crackIAS.com**

© **Zuccess App** by crackIAS.com

RAINFALL RISING IN OVER HALF OF INDIA'S SUB-DISTRICTS, SAYS FOUR-DECADE STUDY

Relevant for: Geography | Topic: Climate and Weather & Changes in Climate

To enjoy additional benefits

CONNECT WITH US

January 17, 2024 10:39 pm | Updated January 18, 2024 07:59 am IST - NEW DELHI

COMMENTS

SHARE

READ LATER

Travelers enjoying the spectacular view of Western Ghats mountain ranges in monsoon rains at Bisle viewpoint, located in Hassan District's Sakleshpur (Sakaleshpura) Taluk, Karnataka. | Photo Credit: The Hindu

Rainfall is increasing in more than half of India's 4,400-odd tehsils or sub-districts, according to a granular analysis of changes in the [Indian monsoon](#), conducted for the first time at the tehsil level. While 55% of tehsils have seen a rise in rainfall, about 11% of them have experienced decreasing rainfall.

More worryingly, this decrease occurred largely during the critical southwest monsoon. In fact, of the tehsils experiencing lower rainfall, about 68% saw reduced rainfall in all the monsoon months from June to September, while 87% showed a decline during the initial monsoon months of June and July, which are crucial for the sowing phase of kharif crops. Most of these tehsils are in the Indo-Gangetic plains — which contribute to more than half of India's agricultural production — as well as in northeastern India, and the Indian Himalayan region.

Also Read | [Monsoon rains swing from 10% deficit to surplus in 8 days](#)

The study — authored by Shravan Prabhu and Vishwas Chitale of the Council on Energy, Environment and Water (CEEW), a research and policy think-tank — analyses high resolution meteorological data spanning four decades, from 1982 to 2022, which has been recorded by the India Meteorological Department (IMD).

India collectively experienced 29 'normal', eight 'above-normal', and three 'below-normal' monsoon years during that period. But an analysis at the district level reveals that 30% of India's districts witnessed several more years of deficient rainfall and 38% saw many years of excessive rainfall. In fact, 23 districts — including New Delhi, Bengaluru, Nilgiris, Jaipur, Kachchh, and Indore — experienced both extremes, with a higher number of both deficient as well as excessive rainfall years.

Several tehsils in Rajasthan, Gujarat, central Maharashtra, and parts of Tamil Nadu, that have historically been dry regions have also been getting wetter, tying in with the finding that a majority of tehsils reported increasing rainfall.

Watch | [Why was the monsoon in North India so destructive?](#)

“In our study of localised wet rainfall extremes, we found that nearly 64% of Indian tehsils experienced an increase in the frequency of heavy rainfall days by 1-15 days per year in the past decade during the southwest monsoon. This pattern is prominent in the tehsils of States with the highest GDPs — Maharashtra, Tamil Nadu, Gujarat, and Karnataka. Furthermore, we found that in the tehsils experiencing an increase in rainfall during the southwest monsoon, the excess is coming from short-duration, heavy rainfall events,” the authors note.

Rainfall from the northeast monsoon — that sets in during October, November and December, primarily in peninsular India — has increased by more than 10% over the last decade (2012-2022) in approximately 80% of tehsils in Tamil Nadu, 44% in Telangana, and 39% in Andhra Pradesh, respectively.

Explained | [How a changing monsoon is challenging forecasters and disaster managers](#)

The southwest monsoon accounts for nearly 76% of India’s annual rainfall, with about 11% coming from the northeast monsoon. While the remaining Indian States are usually dry during this period, several tehsils of Maharashtra and Goa on the west coast and Odisha and West Bengal on the east coast have also been reporting increasing rainfall during these winter months. This increase could partly be attributed to cyclonic activity in the Arabian Sea and the Bay of Bengal.

“As India readies for the Union Budget, it will be crucial to focus on future-proofing the economy against increasingly erratic rainfall patterns. The monsoons impact the food we eat, the water we drink and also our energy transition. With increasing extreme weather events, hyper-local climate risk assessments and action plans are the way to go for India to keep leading in climate action and disaster risk reduction. This will help save lives, livelihoods and infrastructure,” Dr. Chitale said in a statement.

COMMENTS

SHARE

[Monsoon](#) / [rains](#) / [weather](#)

BACK TO TOP

[Terms & conditions](#) | [Institutional Subscriber](#)

Comments have to be in English, and in full sentences. They cannot be abusive or personal. Please abide by our [community guidelines](#) for posting your comments.

We have migrated to a new commenting platform. If you are already a registered user of The Hindu and logged in, you may continue to engage with our articles. If you do not have an account please register and login to post comments. Users can access their older comments by logging into their accounts on Vuukle.

ENDDownloaded from [crackIAS.com](#)© **Zuccess App** by crackIAS.com

RAPID GROUNDWATER DEPLETION WIDESPREAD AROUND THE WORLD, STUDY FINDS

Relevant for: Geography | Topic: Important Geophysical phenomena - Weathering, Mass Movement & Groundwater

To enjoy additional benefits

CONNECT WITH US

January 25, 2024 06:55 pm | Updated 06:55 pm IST

COMMENTS

SHARE

READ LATER

A farmer walks through his paddy field in Konaseema, Andhra Pradesh, March 21, 2020, as a bore well extracts groundwater in the foreground. | Photo Credit: Rambabu S./The Hindu

If you stand at practically any point on the earth, there is water moving through the ground beneath your feet. Groundwater provides about half of the world's population with drinking water and nearly half of all water used to irrigate crops. It sustains rivers, lakes and wetlands during droughts.

Groundwater is a renewable resource, but it can take decades or even centuries for some aquifers to recover after they are depleted. Current understanding of this challenge is based mainly on where and how frequently people record measurements of water levels in wells.

In a newly [published study](#), our team of data scientists, water specialists and policy experts compiled the first global-scale dataset of these levels. We analysed millions of groundwater level measurements in 170,000 wells located in over 40 countries and mapped how groundwater levels have changed over time.

Our study has two main findings. First, we show that rapid groundwater depletion is widespread around the world and that rates of decline have accelerated in recent decades, with levels falling by 20 inches or more yearly in some locations. Second, however, our research also reveals many cases where deliberate actions halted groundwater depletion. These results show that societies are not inevitably doomed to drain their groundwater supplies, and that with timely interventions, this important resource can recover.

Many factors determine groundwater levels, including geology, climate and land use. But groundwater levels that are dropping deeper and deeper in a particular location often signal that people are pumping it out faster than nature can replenish it.

Some of the 300 million measurements we compiled were recorded by automated measuring devices. Many others were made in the field by people around the globe. And these measurements paint a worrying picture.

They show that groundwater levels have declined since the year 2000 in far more places than

they rose. In many locations, especially arid zones that are heavily farmed and irrigated, groundwater levels are falling by more than 20 inches (0.5 meters) per year. Examples include Afghanistan, Chile, China, Peninsular India, Iran, Mexico, Morocco, Saudi Arabia, Spain and the U.S. Southwest.

Our second and more concerning finding is that in about one-third of the areas where we compiled measurements, the rate of groundwater decline is accelerating. Accelerated groundwater decline is common in dry climates where large swaths of land are used for agriculture. This suggests a potential link between groundwater-fed irrigation and intensifying groundwater depletion.

Rapid and accelerating groundwater-level declines have many harmful effects.

Drinking-water supplies from wells and springs can run dry when groundwater levels decline. People and communities who rely on those wells can lose access to what may be their sole source of accessible fresh water for drinking.

For example, wells that supply fresh water to homes are running dry in California's San Joaquin Valley, where groundwater depletion has accelerated since the early 2000s. This problem is likely to continue and worsen unless action is taken to stabilize groundwater reserves.

Wells that run dry can also threaten crop production. Groundwater depletion has long been viewed as one of the greatest threats to global irrigated agriculture, because wells supply nearly half of the water used for irrigation globally.

In areas where groundwater typically drains to rivers, falling groundwater levels can reverse this flow and cause rivers to leak into the subsurface. This affects the river's ecology and reduces water supplies downstream. In the U.S., leaky streams are more common where groundwater withdrawal rates are high, highlighting how groundwater pumping can directly reduce the amount of water that flows underground into nearby rivers.

Groundwater declines can also cause land surfaces to sink. Land subsidence has increased flood risks in dozens of coastal cities worldwide, including Jakarta, Tokyo, Istanbul, Mumbai, Auckland and the Tampa Bay area of Florida.

Farther from the coast, land subsidence can damage infrastructure. It poses a critical challenge in areas where groundwater levels have declined, including Tehran and Mexico City. In many cases, the main culprit is excessive groundwater pumping.

Finally, falling groundwater can cause seawater to move inland underground and contaminate coastal groundwater systems – a process known as seawater intrusion. When seawater intrudes, coastal aquifers can become too saline to use for drinking water without energy-intensive desalination.

We also found places where groundwater levels are recovering. The strategies that communities used to replenish their groundwater sources included developing new alternative water supplies, such as local rivers; adopting policies to reduce demand for groundwater; and intentionally replenishing aquifers with surface water.

The town of El Dorado, Arkansas, saw its groundwater levels drop by roughly 200 feet (60 meters) from 1940 through 2000 as local industries pumped water from the aquifer. In 1999, a new policy established a pumping fee structure, giving businesses an incentive to find a new water supply. By 2005, a pipeline had been built to divert water from the Ouachita River to El

Dorado. This new source reduced demand for groundwater, and groundwater levels have risen in the area since 2005.

In Bangkok, so many private wells were drilled for domestic, industrial or commercial purposes between 1980 and 2000 that groundwater pumping doubled and groundwater levels fell. Officials responded by quadrupling groundwater extraction fees between 2000 and 2006. Total groundwater pumping declined, and levels began to recover as users found other water sources.

In a valley near Tucson, Arizona, groundwater levels declined by 100 feet (30 meters) as withdrawals for irrigation increased after the 1940s. To help replenish the depleted groundwater, leaky ponds were constructed. These ponds are filled with water from the Colorado River that is moved hundreds of miles to the area via canals. As these ponds leak, they refill the depleted aquifer. Because of these leaky ponds, groundwater levels in the valley have risen by about 200 feet (60 meters) in places.

Our analysis shows how important it is to monitor groundwater levels in many locations. With groundwater levels declining in many places, communities and businesses that depend on it need accurate information about their water supplies so they can act in time to protect them.

Scott Jasechko is associate professor of water resources, University of California, Santa Barbara. Debra Perrone is associate professor of environmental studies, University of California, Santa Barbara. Richard Taylor is professor of hydrogeology, UCL. This article is republished from [The Conversation](#).

COMMENTS

SHARE

BACK TO TOP

[Terms & conditions](#) | [Institutional Subscriber](#)

Comments have to be in English, and in full sentences. They cannot be abusive or personal. Please abide by our [community guidelines](#) for posting your comments.

We have migrated to a new commenting platform. If you are already a registered user of The Hindu and logged in, you may continue to engage with our articles. If you do not have an account please register and login to post comments. Users can access their older comments by logging into their accounts on Vuukle.

END

Downloaded from **crackIAS.com**

© **Zuccess App** by crackIAS.com