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MK Yadav Sir

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Adani Group prepays share-backed loans

ENSECONOMIC
BUREAU
MUMBAI, MARCH 7

THE ADANI Group Tuesday said it has prepaid share-backed financing worth Rs 7,374 crore or \$902 million to various international banks and domestic financial institutions two years ahead of its latest maturity.

The step is in continuation of promoters' commitment to reduce the overall promoter leverage backed by Adani listed company shares.

"We would like to inform that we have prepaid share backed financing of Rs 7,374 crore (\$902 million) ahead of its latest maturity in April 2025," the Group said in a statement.

This repayment will help release shares of four listed companies of the Adani Group- 31 million shares (4 per cent of promoters' holding) of Adani Enterprises Ltd, 155 million shares (11.8 per cent of the promoters' holding) of Adani Ports & Special Economic Zone Ltd (APSEZ), 36 million shares (4.5 per cent of promoters' holding) of Adani Transmission Ltd and 11 million shares (1.2 per cent of promoters' holding) Adani Green Energy Ltd.

which the company has denied. The Group's stock made some recovery last week after a US-based global equity investment boutique GQG Partners bought 21.13 crore shares worth Rs 15,446 crore (\$1.87 billion) in Adani Ports and Special Economic Zone

EXPLAINED

E Adani prepayment

THE REPAYMENT will help release shares of four listed companies of the Adani Group- 4% shares of Adani Enterprises Ltd, 11.8% shares of Adani Ports & Special Economic Zone Ltd, 4.5% shares of Adani Transmission Ltd and 1.2% shares of Adani Green Energy Ltd.

Ltd, Adani Green Energy Ltd, Adani Transmission Ltd and Adani Enterprises Ltd from S B Adani Family Trust through block deals.

On Monday, Adani Enterprises' shares jumped 5.51 per cent and APSEZ rose 0.9 per cent. Adani Transmission ended 4.99 per

Context: The Adani Group had prepaid **share-backed financing** of ₹7,374 crore as the conglomerate tries to recover from U.S. based short seller Hindenburg Research's scathing report on its businesses.

Share-backed financing

- **About:** It refers to the **practice of making loans using securities as collateral**.
 - The only restrictions to this kind of **lending** are **other shared-based transactions** like buying shares or repaying a margin loan.
- **Key Features:** Securities-based lending **provides capital** to help people buy real estate, to purchase personal property, or to invest in a business.
 - These kinds of loans are generally **offered to high-net-worth individuals** by large financial institutions and private banks.
 - The lender becomes a **lienholder** after the borrower deposits their securities into a special account.
 - Borrowers benefit from **easy access to capital, lower interest rates, and greater repayment flexibility** and also avoid having to sell their securities.

Short selling

- It is a **trading strategy based on the expectation** that the price of the security will fall.
- It is an investment or trading strategy that **speculates on the decline in a stock** or other security's price.
- It occurs **when an investor borrows a security and sells it on the open market**, planning to buy it back later for less money.
- Short sellers bet on, and profit from, a drop in a security's price. This can be **contrasted with long investors** who want the price to go up.
- Short selling has a **high risk/reward ratio**: It can offer big profits, but losses can mount quickly and infinitely due to margin calls.

Govt brings crypto assets within ambit of money-laundering law

India, as G20 president, is looking to drive the narrative on dangers of cryptos

CRACKING THE WHIP

ARUP ROYCHOUDHURY
New Delhi, 8 March

■ Move will give authorities greater power to monitor the transfer of virtual digital assets beyond the country's borders

■ Under anti-money laundering law, 'reporting entities' are required to maintain KYC details of their clients and beneficial owners

■ FinMin notified on Tuesday that entities dealing in VDAs will now be considered 'reporting entities' under PMLA

■ As of Jan 31, ED attached proceeds of crime worth ₹936 crore in connection with crypto fraud

The central government has brought the trading of cryptocurrency and digital assets within the ambit of the Prevention of Money Laundering Act (PMLA) through a gazette notification. The move comes even as the legislation to govern the cryptocurrency sector is still awaited, and at a time when India — as

Group of 20 (G20) President —

is looking to drive the narrative among global leaders and regulators on the dangers of cryptocurrency.

This means that any financial wrongdoing

involving cryptocurrency assets can now be investigated by the Enforcement Directorate. In a gazette notification dated March 7, the Ministry of Finance's Department of Revenue stated that activities related to the trading of cryptocurrency and digital assets would be covered within the ambit of PMLA.

These include an exchange between virtual digital assets and fiat currencies, between one or more forms of virtual digital assets, transfer of virtual digital assets, safekeeping or administration of virtual digital assets or instruments enabling control over such assets, and participation in and provision of financial services related to an issuer's offer and sale of a virtual digital asset.

The definition of 'virtual assets' would be the same as that in the Income-Tax Act, the notification stated.

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Context: The central government has brought the trading of **cryptocurrency** and digital assets within the ambit of the **Prevention of Money Laundering Act (PMLA) 2002** through a gazette notification.

- PMLA is a criminal law to prevent money laundering and confiscate property derived from the laundered money.

Key Points

- These include an **exchange between virtual digital assets and fiat currencies**, between one or more forms of virtual digital assets, transfer of virtual digital assets, safekeeping or administration of virtual digital assets or instruments enabling control over such assets, and participation in and provision of financial services related to an issuer's offer and sale of a virtual digital asset.
- The **definition of 'virtual assets'** would be the same as that in the Income-Tax Act, the notification stated. The definition includes cryptocurrencies and non-fungible tokens.
- Move will give authorities greater power to monitor the transfer of virtual digital assets beyond the country's borders
- Under **anti-money laundering law**, 'reporting entities' are required to maintain KYC details of their clients and beneficial owners
- FinMin notified that entities dealing in VDAs will now be considered '**reporting entities**' under PMLA

Crypto Assets

- A crypto asset is a **digital asset**; but not all digital assets are crypto assets.
- The **distinguish features of crypto assets**:
 - uses cryptography
 - depends on distributed ledger technology
 - no need for a third party such as a bank to issue crypto assets
 - have three primary uses: as an investment, a medium of exchange, and to access goods and services.
- Crypto assets are commonly known as **cryptocurrencies** such as Litecoin, Ripple, Bitcoin, and Ethereum.
- Other crypto asset classifications are **utility coins, security coins, and cryptocurrencies**.

NAFED to begin procurement of Kharif Onion in Gujarat

Context: Taking stock of the situation due to **depressed prices of Onion** in late Kharif season in the State, Department of Consumer Affairs has directed National Agricultural Cooperative Marketing Federation of India Ltd (NAFED) to start procurement of Onion from three major markets in Gujarat.

Onion Cultivation

- **Cultivation and harvesting:** Farmers grow **three Onion crops** in the bulk:
 - **Kharif** (transplanted in June-July and harvested in September-October),
 - **Late-kharif** (transplanted in September-October and harvested in January-February) and
 - **Rabi** (transplanted in December-January and harvested in March-April).
- **Marketing:** The harvested crop isn't marketed in one go; farmers **usually sell in tranches**, ensuring no price collapse from a bunching of arrivals.
 - The Kharif onions are **marketed until February**, and the late-kharif onions until May-June.
 - Both Kharif and late-kharif onions have a **high moisture content**, allowing them to be stored for up to four months.
 - This is in **contrast to rabi onions**, which have a low moisture content and can be stored for at least six months when grown during the winter-spring months.
 - The rabi crop feeds the market during the summer and monsoon months, until October.
- **Reasons for prices crashed:** Prices drop because **both Kharif and late-kharif onions arrive at the same time**.
 - Onions with a high moisture content are susceptible to heat shock quality deterioration, with the abrupt drying-up causing bulb shrivelling.
 - Normally, farmers sell only the Kharif crop.
 - However, the **extreme heat force them to offload even late-kharif onions**, which cannot be stored.

National Agricultural Cooperative Marketing Federation of India (NAFED)

- **About:** It is an apex organization of **marketing cooperatives for agricultural produce** in India.
 - NAFED is one of the largest procurement as well as marketing agencies for agricultural products in India.
 - With its headquarters in **New Delhi**, NAFED has four regional offices at Delhi, Mumbai, Chennai and Kolkata, apart from 28 zonal offices in capitals of states and important cities.
- **Origin:** It was founded on the **birthday of Mahatma Gandhi on 2 October 1958** to promote the trade of agricultural produce and forest resources across the nation.
 - It is registered under **Multi State Co-operative Societies Act 2002**.

The Ministry of Tourism inaugurates a pavilion at ITB, Berlin 2023, under its “Incredible India” brand line on 7th March

Context: The Ministry of Tourism under its “**Incredible India**” brand line is participating in ITB, Berlin 2023, showcasing India’s rich & diversified tourism potential and providing a platform to the tourism stakeholders, to showcase the various tourism destinations and products including niche products.

- It also aims to promote India as a ‘Must See, Must Visit’ destination.

Key points

- The ITB is a **prestigious platform** and is among the top international travel shows, where travel professionals come together to connect and showcase destinations and tourism products.
- In view of promoting Incredible India holistically, Ministry of Tourism has developed **five thematic television commercials** on different themes that is on Adventure Tourism, Heritage Tourism, MICE Tourism, Art & Craft and Wellness Tourism.
 - The promotional films will provide the glimpse of what India has to offer to the World.
- Encouraging the inbound travel and particularly in the backdrop of India’s G20 Presidency as well as grand celebrations of India@75 ‘AzadiKaAmritMahotsav’, Ministry of Tourism has declared “**Incredible India! Visit India Year 2023**”.
 - The focus is on inbound travel to India, to **highlight varied tourism offerings of our country** and showcase them to the global tourists.
 - The priorities include highlighting the unique tourism offerings of every state by leveraging country’s richness in culture, heritage, spirituality, natural beauty and focusing on promoting diverse categories of tourism like sustainable tourism, rural tourism, medical tourism, MICE, and others.

Incredible India Campaign

- **About:** Incredible India (stylized as Incredible! ndia) is the name of an international tourism campaign maintained by the Government of India since 2002, to promote tourism in India.
 - The "Incredible India" title was officially branded and promoted since 2002.
 - **The exclamation mark forms the 'I' of India.**
- **Incredible India 2.0 Campaign:** It aims to shift from generic promotions to promotional plans specific to market and content creation with thematic creatives depending on different niche products such as spiritual, medical, and wellness tourism.
 - The Incredible India 2.0 campaign focuses on promoting **niche tourism products, including yoga, wellness, luxury, and cuisine wildlife.**
 - The “**Find the Incredible You**” Campaign mainly focuses on promoting the country’s niche tourism products on social media.
 - Incredible India 2.0 represents the **post-pandemic plan for Indians in the sector.**
 - **Schemes under Incredible India 2.0 Campaign:**
 - UDAN scheme
 - Bharatmala and Sagarmala projects
 - The Holistic Island Development plan focuses on the Andaman & Nicobar (A&N) and Lakshadweep Islands. This creates jobs for the islanders and increases connectivity through infrastructure projects.
- **Nodal Ministry:** Ministry of Tourism.

NAAC: Accreditation, assessment process is transparent, can't be compromised

EXPRESS NEWS SERVICE
NEW DELHI, MARCH 7

TWO DAYS after Bhushan Patwardhan quit as chairman of the National Assessment and Accreditation Council (NAAC), alleging that the Council was issuing "questionable grades" to higher education institutions, the agency on Tuesday said that the entire process of accreditation and assessment it carries out through teams of experts is "transparent" and "cannot be compromised".

In a statement, NAAC director SC Sharma sought to counter the red flags raised by a committee commissioned by Patwardhan to examine the functioning of NAAC, and said that the processes within the Council are "continuously being improved".

On Monday, *The Indian Express* reported on the findings of the committee, which was headed by JP Singh Joreel, director of Information and Library Network, which is also a UGC centre.

The NAAC claimed that out of

the total pool of 4,686 active assessors, "3075 assessors have accepted the peer team visit invitations, which is roughly around 67% of the database". The Joreel committee said that nearly 70% of experts from the pool of around 4,000 assessors have not received any opportunity to make site visits, while some have visited multiple times.

On the finding that the IT system of NAAC was "compromised", with people without authority also getting to make allocations of assessors, the

Council stated that "super-admins comprising advisor ICT and system analyst have been created only to manage and supervise the overall operations of the system".

"As per the mandate of NAAC, the entire process of accreditation and assessment is robust, transparent, ICT-driven and automated. The system cannot be compromised because the whole process is decentralised, transparent and accessible to the stakeholders through a user friendly portal..." it stated.

- The **National Education Policy (2020)** has set an ambitious target of getting all higher educational institutes to obtain the highest level of accreditation over the next 15 years.
- However, out of the 1,113 universities and 43,796 colleges in the All India Survey on Higher Education Report 2020-21, only 418 universities and 9,062 colleges were NAAC-accredited as on January 31, 2023.
- **Key Developments:** According to current and former officials of the NAAC, the fear of obtaining poor grades holds institutes back from applying.
 - In 2019, the UGC had launched a scheme named '**Paramarsh**' to address the issue.
 - Under the scheme, some of the best performing institutes were **identified to serve as mentors** to at least five institutes aspiring to get accredited.
 - The NAAC also explored the possibility of issuing **Provisional Accreditation for Colleges (PAC)**, under which one-year-old institutes could apply for accreditation that would be valid for two years.
 - Currently, only institutes that are at least six years old, or from where at least two batches of students have graduated, can apply.
 - The accreditation is valid for five years.

Context: The chairperson of NAAC's executive committee resigned after repeatedly demanding an independent inquiry into the functioning of the council.

Issues and Allegations

- The inquiry committee commissioned by him found that nearly 70% of experts from the pool of around 4,000 assessors have **not received any opportunity to make site visits**, while some have visited multiple times.
- Among the other lapses highlighted was individuals without authority having full access to the NAAC's internal system.

NAAC

- **About:** The National Assessment and Accreditation Council (NAAC) is an autonomous body under the **University Grants Commission (UGC)**.
- **Functions:** The NAAC, set up in 1994, is **entrusted with assessing the quality of India's higher educational institutions**.
 - Following a multi-layered assessment process, it awards grades to colleges and universities.
 - Its parameters include curriculum, faculty, infrastructure, research and financial well-being.
 - The grades issued by NAAC range from A++ to C. If an institution is graded D, it means it is not accredited.
- **Accreditation process:** The first step involves an institute approaching the NAAC for assessment.
 - Once the NAAC sets the process in motion, the applicant has to submit a **self-study report (SSR)** containing information related to quantitative and qualitative metrics.
 - The data is then validated by expert teams of the NAAC, followed by spot visits by peer teams comprising assessors drawn from universities across India.
- **Not Mandatory:** While the UGC has over the years issued many circulars directing institutes to mandatorily undergo NAAC's assessment, **the process still remains largely voluntary**.

Govt working on unified portal for drug regulatory processes

System to bring together manufacturers, distributors, agencies under a single window

SOHINI DAS
Mumbai, 8 March

Seeking to revamp India's drug regulatory system, the government is working on a unified digital portal that will bring together all stakeholders: regulators, manufacturers, distributors, state-run departments, and procurement agencies.

"This will integrate the existing IT (information technology) portal of the Central Drugs Standard Control Organisation (CDSCO)—the Sugam portal—all Central Drug Laboratories, state drug controllers, manufacturers etc," said an official source.

"This platform will be a single window and single source of truth accessible to all the stakeholders," said the source.

After controversies about India-made medicines exported to Gambia and Uzbekistan, the government has been considering how to guarantee the country's drug manufacturing and quality control mechanisms.

A two-day 'Chintan Shivir' (brainstorming conclave) late February in Hyderabad discussed problems that drug regulators and stakeholders face.



ILLUSTRATION: BINAY SINHA

IN THE WORKS

■ **Centre had formed** a committee to prepare the road map for the drug regulatory framework

■ **Govt has been** considering quality control mechanisms for manufacturers

■ **Integration of the** existing IT portal of the CDSCO (SUGAM portal) for all Central Drug Laboratories, state drug controllers, manufacturers, etc

■ **Currently, several** pharma firms are registered to make these drugs with state food and drug administrations

■ **Industry experts** have said India's fragmented regulatory system is a major challenge for procurers and quality assurance

"India follows a system where both Central and the state Governments have important roles to play in issuing manufacturing licenses and regulating the drugs sector. The Chintan Shivir recognised the need for a common set of standards and regulations accepted by both central and state

authorities," the official said, adding that steps are being taken to harmonise regulatory requirements, processes, and databases in states to ensure consistency in evaluating approving drugs.

"This requires significant collaboration from all stakeholders involved,"

said the official.

State health secretaries, drug controllers and Central Licensing authorities, drug testing laboratories, industry associations attended the Chintan Shivir and their recommendations are being compiled. A committee has been set up under the pharmaceuticals department secretary to present a road map within the next few weeks.

Government sources said the committee included the Drugs Controller General of India, joint secretary (drugs) of the Union health ministry, and nodal officers from states.

The CDSCO has a dossier approach for each drug it approves. However, when a drug becomes older by more than four years or so, then any manufacturer can seek a license to make it from the state regulator. In this case, the dossier approach is not followed.

Industry experts have said India's fragmented regulatory system is a challenge for procurers and quality assurance. "The manufacturers change the source of the active pharmaceutical ingredients (APIs) or even excipients, and these key changes are not necessarily reported to the state regulator," said an industry insider.

Context: Seeking to revamp India's drug regulatory system, the government is working on a unified digital portal that will bring together all stakeholders: regulators, manufacturers, distributors, state-run departments, and procurement agencies.

Present Drug regulations in India

- **About:** Drug regulation in India is managed by law, mainly the **Drugs and Cosmetics Act of 1940**, and by multiple ministries, including the Ministry of Health and Family Welfare.
 - The law creates a web of regulatory authorities to govern the process at both the central and the state level.
- **At Centre level:** The Drugs and Cosmetics Act, 1940 has created the **Central Drugs Standard Control Organisation (CDSCO)**, within which the Drugs Controller General of India (DCGI) is the key regulatory authority, acting under the advice of the Drug Technical Advisory Board (DTAB) and the Drug Consultative Committee (DCC).
 - CDSCO **operates through zonal offices** spread across the country, which have designated roles in drug regulation, such as inspections, recalls, and market surveillance.
 - CDSCO also has a role in overseeing the functioning of state authorities involved in drug regulation.
- **At State Level:** There exist **State Drug Regulatory Authorities (SDRAs)**, which are statutory bodies created under the Drugs and Cosmetics Act, 1940.
 - Falling under the **ambit of the respective Health Departments of each state**, SDRAs are tasked with limited aspects of drug regulation.

- SDRAs are often conjoined with the **food regulation department under the Food and Drug Administration (FDA)** in that state, which complicates the proper demarcation of regulatory responsibilities.

- **Process of drug regulation:** CDSCO has been entrusted with the responsibility for the **approval of new drugs**, and the conduct of clinical trials in the country, as well as laying down the standards for drugs.
 - It also controls the quality of imported drugs, oversight over the SDRAs and an advisory role in ensuring uniformity in the enforcement of the Drug Control Act.
 - Applications for approval of New Drugs are evaluated by the **12 Subject Expert Committee (SEC)** (formerly referred to as New Drug Advisory Committees (NDAC)), consisting of experts usually drawn from Government Medical Colleges and Institutes across India.

NITI Aayog and Asian Development Bank's Independent Evaluation Department (IED) organize Panel Discussion titled Bridge Over Troubled Waters

Context: NITI Aayog in collaboration with **Asian Development Bank's IED** organized a panel discussion, titled Bridge Over Troubled Waters, on ways to strengthen water security and reduce risks.

- The discussion touched upon the lessons learnt from IED's recently published evaluation report on **ADB's engagement in the water sector**.

ADB's Work in the Water Sector

- About:** ADB prioritizes water investments and interventions to ensure better served, healthier, resilient, and more prosperous communities.
 - Given the urgency in achieving water security and resilience amid pressing climate and water scarcity challenges, ADB has reframed and relaunched its approach to guide the organization's work through 2030.
- ADB's water sector has five guiding principles:**
 - Building resilience and adaptive capacity
 - Promoting inclusiveness and gender equality
 - Embracing environmental sustainability and circular economy
 - Improving governance and catalyzing finance
 - Fostering innovation and technological advancement
- Commitment:** ADB has committed to aligning its operations with the goals of the **Paris Agreement**, and to ensure that by 2030 at least 75% of its operations support climate action. It has also committed to deliver \$100 billion in climate financing to ADB members from 2019 to 2030.
 - Further, ADB has **adopted an energy policy** that rules out new investments in coal production and commits to support universal access to reliable and affordable energy services.
 - Implementation of ADB's water program is supported by multiple technical assistance (TA) projects, grants, and trust funds, most notably the **Water Financing Partnership Facility (WFPF)**, providing a total investment of \$25.9 billion from 2011 to 2021.
- ADB's Water Sector Group:** It is developing the **Asia and the Pacific Water Resilience Hub**.
 - The Water Resilience Hub - **an open, online platform managed by the Water Sector Group** - will be a vehicle for strengthening water security by establishing partnerships and providing training.
 - The hub will also develop and share knowledge products, innovation in the sector, tools, data, and digital technology.
- Asia and the Pacific Water Resilience Hub:** It is **part of ADB's wider commitment and investment** in climate adaptation, mitigation, and water security in the region through its Mainstreaming Water Resilience in Asia and the Pacific project.
 - The project has three components:**
 - Integrating Climate Resilience in the Water Sector (focus: all developing member countries (DMCs))
 - Improving Water Security and Resilience through Digitalization (focus: all DMCs, but prioritizing Bangladesh, Georgia, Mongolia, Pakistan, and Sri Lanka)
 - Digitalization of Water Management for Improved Resilience (focus: all DMCs, but prioritizing Nepal and Solomon Islands)

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MARCH 9

PM 2.5 POLLUTION

(Syllabus: GS Paper 3 - Env & Eco)

Delhi is India's most polluted megacity, but others are catching up: CSE report

CSE analyses winter pollution data from Delhi, Kolkata-Howrah, Mumbai, Hyderabad, Bengaluru and Chennai; only the national capital has shown improvement

By DTE Staff
Published: Tuesday 07 March 2023



New WHO Global Air Quality Guidelines

Pollutant	Time	2005 levels	New 2021 levels
PM_{2.5} Particulate matter <2.5 microns	Annual	10	5
	24-hour	25	15
PM₁₀ Particulate matter <10 microns	Annual	20	15
	24-hour	50	45
O₃ Ozone	Peak season	-	60
	8-hour	100	100
NO₂ Nitrogen dioxide	Annual	40	10
	24-hour	-	25
SO₂ Sulfur dioxide	24-hour	20	40
CO Carbon monoxide	24-hour	-	4

Context: All megacities in India, irrespective of their locations in different geo-climatic zones, faced the challenge of **worsening PM2.5 levels** during the winter season of 2022-23, according to a new analysis by the Delhi-based non-profit Centre for Science and Environment (CSE).

Key points

- While PM2.5 levels in **Delhi have been the highest**, the remaining cities have also experienced very poor to worsening trends.
- Kolkata and Mumbai are the most polluted cities after Delhi**, while air quality has worsened at the fastest rate in Bengaluru and Chennai.
- Compared to the winter of 2021-22, **only Delhi has shown an improvement** in air quality. Delhi's winter air this year was nine per cent less polluted.
- The **winter period is a special challenge** in all cities as adverse meteorological conditions trap pollution and increase concentration and exposure.

Particulate Matter 2.5 (PM2.5)

- About:** PM 2.5 is an atmospheric particulate matter of **diameter of fewer than 2.5 micrometres**, which is around 3% the diameter of a human hair.
- Sources:** Outside, fine particles primarily come from **car, truck, bus and off-road vehicle** (e.g., construction equipment, snowmobile, locomotive) exhausts, other operations that involve the burning of fuels such as wood, heating oil or coal and natural sources such as forest and grass fires. Fine particles also form from the reaction of gases or droplets in the atmosphere from sources such as power plants.
 - PM5 is also produced by **common indoor activities** like tobacco smoke, cooking (e.g., frying, sautéing, and broiling), burning candles or oil lamps, and operating fireplaces and fuel-burning space heaters (e.g., kerosene heaters).
- Effect on health:** Particles in the PM 2.5 size range are able to **travel deeply into the respiratory tract, reaching the lungs**.
 - Exposure to fine particles can cause short-term health effects such as eye, nose, throat and lung irritation, coughing, sneezing, runny nose and shortness of breath.
 - Long term exposure to fine particulate matter may be associated with **increased rates of chronic bronchitis**, reduced lung function and increased mortality from lung cancer and heart disease.

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MARCH 9

H3N2 OUTBREAK

(Syllabus: GS Paper 3 - Sci & Tech)

H3N2 outbreak: Know this strain that caused two pandemics and is now an outbreak in India

Influenza A viruses are the only influenza viruses known to cause flu pandemics



NEXT NEWS >

By DTE Staff
Published: Tuesday 07 March 2023



Types	A Subtypes	HPAI vs LPAI
Influenza A (Infects a wide range of animals including birds)	Avian (Can infect humans) H5N1 H7N3 H7N7 H7N9 H9N2 H10N8	HPAI H5N1 LPAI H5N1 HPAI H5N8 LPAI H5N8
Influenza B (Mainly infects humans)	Swine (Can infect humans) H1N1 H1N2 H3N2	Subtypes can be classified as high path or low path based on the ability of the specific virus strain to kill chickens in the lab setting.
Influenza C (Infects humans and pigs but more rare than types A and B)	Most common human H1N1 H3N2	
Influenza D (Infects cattle)		

Context: Across India, an outbreak of a respiratory illness - with symptoms of cold, sore throat and fever accompanied by fatigue - has been observed since late December 2022 and early January 2023.

- The Indian Council of Medical Research (ICMR) confirmed that **Influenza Subtype H3N2** has been causing this illness.

H3N2 Influenza

- About:** Influenza A virus subtype H3N2 (A/H3N2) is a subtype of viruses that causes influenza (flu).
 - H3N2 viruses **can infect birds and mammals**. In birds, humans, and pigs, the virus has mutated into many strains.
- Symptoms:** Cough, runny or congested nose, sore throat, headache, body aches and pains, fever, chills, fatigue, diarrhea, vomiting
- Vaccine for H3N2:** According to the CDC, the **flu vaccine** reduces the risk of flu illness in the general population by between 40 and 60 percent during most flu seasons when the vaccine strains are a good match to circulating strains.
 - The **flu vaccine tends to offer more protection** from flu that's caused by H1N1 viruses and influenza B viruses in comparison to H3N2 viruses.
- Treatment of H3N2**
 - Treatment of an uncomplicated case of seasonal flu, such as H3N2, involves **managing symptoms** while recovering.
 - Getting plenty of rest, drinking enough fluids**, taking over-the-counter medication to relieve symptoms such as fever, headache, and aches and pains.
 - Some people are at an **increased risk of developing serious complications** from the flu.
 - These complications can include pneumonia or worsening of a pre existing medical condition, such as asthma.

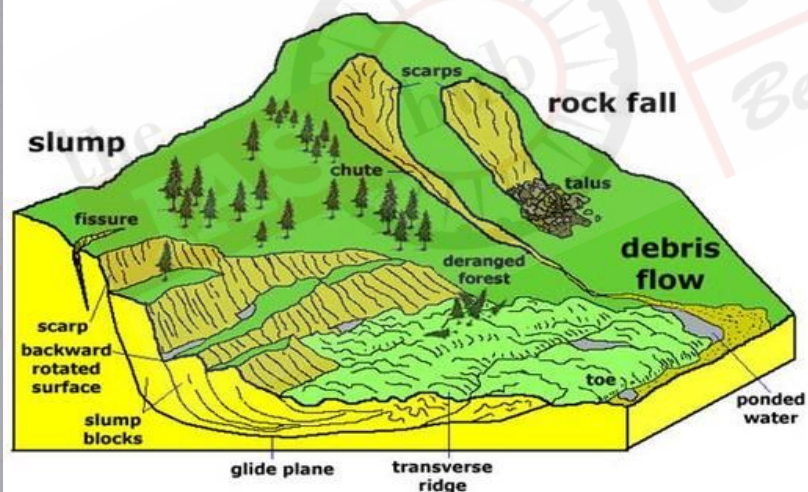
ISRO data shows Uttarakhand's Rudraprayag and Tehri Garhwal most prone to landslides in India

Mizoram saw 12,385 landslides from 1988-2022, the highest; followed by 11,219 in Uttarakhand and 8,070 in Tripura



NEXT NEWS >

By Lalit Maurya
Published: Tuesday 07 March 2023



Context: Rudraprayag and Tehri Garhwal in Uttarakhand are the most landslide-prone districts in the country, according to satellite data by the Indian Space Research Organisation (ISRO).

- The **Landslide Atlas of India** was released by **Indian Space Research Organization (ISRO)** at the “National Meet on Disaster Risk Management - Trends & Technologies” held at Hyderabad.
- Hyderabad-based National Remote Sensing Centre created the all-India database of nearly 80,000 landslides that occurred from 1998 to 2022.
- The NRSC, one of the centres of ISRO, manages data from aerial and satellite sources.

Key Points

- Globally, **landslides rank third in terms of deaths** among natural disasters.
- **India is among the four major countries** where the risk of landslides is the highest.
- **Northwest Himalayas contribute 66.5% of landslides** in India, followed by Northeast Himalayas (18.8%) and Western Ghats (14.7%).
- Top 5 districts based on their exposure to landslide: **Rudraprayag and Tehri Garhwal (Uttarakhand), Thrissur (Kerala), Rajouri (J&K), and Palakkad (Kerala).**
- All **12 districts of Himachal Pradesh** have figured on a list prepared by the National Remote Sensing Centre (NRSC) of locations prone to landslides.
- The database includes three types of landslide inventory – **seasonal, event-based and route-wise**
- Sudden heavy rains due to climate change are increasing landslides.
- Around **73 per cent of landslides in the Himalayan region** are attributed to heavy rains and reduced water-absorbing capacity of the soil.
- **Global climate change** is causing heavy rainfall that erodes steep slopes with loose soil.
- Therefore, the increasing number of landslides can no longer be termed as just natural disasters, as **human actions** have also played a major role in it.

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