

# NEWS TODAY

## CDSCO waives local clinical trials for new drugs approved in developed countries

Waiver has been granted under **Rule 101 of New Drugs and Clinical Trials Rules, 2019**, which allows **Drugs Controller General of India (DCGI aka Central Licencing Authority)** to specify certain countries for considering waiver of local clinical trials for approval of new drugs.

- Now countries like USA, UK, Japan, Australia, Canada, and EU can supply drugs to India **without requiring local trials**.
  - ⊖ Waiver covers **five categories: Orphan drugs** for rare diseases; **Gene and cellular therapy products**; **New drugs used in pandemic situations**; **New drugs for special defense purposes**; and **New drugs having significant therapeutic advances** over current standard of care.
    - ◆ **Orphan drug** means a drug intended to treat a condition which **affects not more than 5 lakh persons in India**.
- However, **final phase IV clinical trials for these drugs** will still be **mandatory**.
- **DCGI** (head of CDSCO) is **final regulatory authority for approval of clinical trials** in country.

### Significance of Current Waiver

- **Ensure availability of latest medicines** to treat diseases like cancer, rare and autoimmune disease, etc.
- **Reduce costs of public procurement** by governments under various schemes like Ayushman Bharat etc.
- **Reduce cost incurred by pharmaceutical companies** in conducting local trials.

### About Central Drugs Standard Control Organisation (CDSCO)

- CDSCO under **Ministry of Health & Family Welfare** is **National Regulatory Authority** of India.
- Under **Drugs and Cosmetics Act 1940**, CDSCO is responsible for **approval of Drugs, Conduct of Clinical Trials, laying down the standards for Drugs, etc.**
- **Four phases of Clinical Trials**
  - ⊖ **Phase I:** Small group of volunteers to **evaluate drug's safe dosage range** and **identify side effects**.
  - ⊖ **Phase II:** Drug given to larger group (100 to 300), including patients with particular disease to see its effectiveness.
  - ⊖ **Phase III:** Drug given to large groups (1,000 to 3,000), including patients to compare it to other commonly used treatments, etc.
  - ⊖ **Phase IV:** Drug/Treatment has been **approved by DCGI** and marketed for public use.

## Centre introduces Waqf (Amendment) Bill, 2024 in Parliament

It will amend **the Waqf Act, 1995** and the word Waqf has been substituted with **"Unified Waqf Management, Empowerment, Efficiency and Development"**.

- Earlier, amendments were made in 2013 based on the recommendations of the **High-Level Committee under the chairmanship of Justice (Retired) Rajinder Sachar and the Report of the Joint Parliamentary Committee**.

### Key features of the bill

- **Database of waqf and the property dedicated to the waqf to be registered on the portal** within a period of six months from commencement of the act.
- **Define "waqf"** as waqf by any person practicing Islam for at least five years and having ownership of such property.
- **Ensure women's and non-muslim representation** on the Central Waqf Council and state boards.
- **The Central Government may direct the audit of any waqf** at any time by an auditor appointed by the **Comptroller and Auditor-General of India or by any officer designated by the Central Government for that purpose**.
- **The District Collector** will decide whether a disputed property is Waqf or government land.

### Objectives of the bill

- To effectively address issues related to the **powers of the State Waqf Boards, registration and survey of waqf properties, etc.**
- To enhance the efficiency of the **administration and management of the waqf properties**.

### About Waqf Properties

- They refer to moveable or immovable properties dedicated in the name of god for charitable purposes by a deed or an instrument.
- They are managed by a legal entity with nominated members known as **Waqf board**.
- **Central Waqf Council (CWC)**, a **statutory body** established in 1964, oversees and advises state-level Waqf Boards across India.

## Highest Ocean Heat in Four Centuries places Great Barrier Reef (GBR) in danger: Study

Study published in Nature journal highlighted that **repeated mass coral bleaching on GBR** driven by **high sea surface temperatures** are **threatening the survival of coral colonies** which are backbone of reef.

- From 2016- 2024, there were **five mass coral bleaching** events on GBR.
- **Coral Bleaching:** When corals are **stressed by changes in conditions** such as temperature, light, or nutrients, they expel symbiotic algae, causing them to turn **completely white**.
- **Factors Responsible for Coral Bleaching:** Heat stress from raised water temperatures; Increased UV radiation, Runoff and Pollution, Extreme low tides, Ocean acidification etc.

### About GBR

- **Largest coral reef system** in world. The reef is **located off the coast of Queensland, Australia, in Coral Sea**.
- Inscribed on **UNESCO World Heritage List** in 1981.

### About Coral Reefs

- **Invertebrate animals** belonging to a large group of animals called **Cnidaria**.
- **Coral reefs** are created by millions of tiny polyps forming large carbonate structures.
- Most of world's coral reefs **found in tropical waters**.
- **More than one-third of world's coral reefs** are located in territories of **Australia, Indonesia and Philippines**.
- In India, they are found in **Gulf of Kutch, Gulf of Mannar, Andaman & Nicobar, Lakshadweep and Malvan**.

### Importance of Corals Reefs

- **Highest biodiversity of any ecosystem** on planet—even more than tropical rainforest.
- **Protect coastlines** from storms and erosion.
- **Act as carbon sink**.

### Steps taken for conserving coral reefs

- **Global:** Global Fund for Coral Reefs, Global Coral Reef Monitoring Network, **Coral Triangle Initiative**, etc.
- **Coral Triangle** is a marine area located in **western Pacific Ocean**. It includes waters of Indonesia, Malaysia, Philippines, Papua New Guinea, Timor Leste and Solomon Islands.
- **India:** Marine Protected Areas, Coral restoration through Biorock technology, etc.

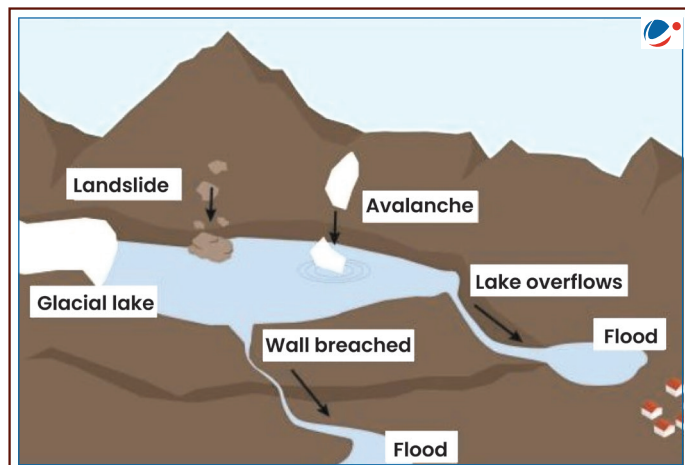
## Dam designs to be assessed by government for vulnerability to GLOFs

The Ministry of Power has identified 47 dams, **including 38 commissioned and nine under-construction dams**, as potentially affected by GLOFs from glacial lakes.

- Subsequent to Teesta-III dam collapse last year, the Central Water Commission (CWC) has decided to **review the design flood of all the existing and under construction dams** vulnerable to GLOFs.

### About Glacial Lake Outburst Flooding (GLOFs)

- It occurs when the water levels of **glacial lakes breach their boundaries causing large amounts** of water to flow into nearby streams and rivers
- **Reasons for GLOFs**
  - **Geological:** Earthquake, breach of moraine dams, etc.
  - **Morphological:** Mass movement into glacial lakes, water seepage through glacial structures, etc.
  - **Physical:** Excessive precipitation, Cryoseism (non-tectonic seismic event of the glacial cryosphere), etc.
  - **Anthropogenic:** Climate Change and global warming, etc.
- **Challenges of GLOFs**
  - **Unpredictable:** can occur suddenly with little warning.
  - **Loss of lives:** E.g-Lake outburst in **Kedarnath valley in 2013** led to around 6,000 deaths.
  - **Remote areas:** like **Chamoli's Rishighanga valley GLOFs in 2021**.
- **Strategies to manage GLOFs risks:** Hazard risk zonation and mapping, monitoring of glacial lakes using technology, restrictions and regulations of construction activities in hazard-prone areas, etc.



## Boilers Bill, 2024 introduced in Rajya Sabha

It will **repeal Boilers Act, 1923** which was enacted with to ensure uniformity throughout India in all technical aspects pertaining to regulation of boiler.

- Earlier, act was amended by **Indian Boilers (Amendment) Act, 2007** which introduced inspection and certification by independent third party inspecting authorities.
- Act was further reviewed to **incorporate decriminalised provisions in consonance with Jan Vishwas (Amendment of Provisions) Act, 2023.**

### Key features of Bill

- **Define competent authority** as an institution recognised in such manner as may be specified by regulations, for grant of certificate to the welders for welding of boiler and boiler component.
- **Any person who makes any structural alteration**, addition or renewal in or to a boiler **without obtaining authorisation of Chief Inspector** shall be punishable.
  - ⊕ **With imprisonment** which may extend to two years or **with fine** which may extend to one lakh rupees, or with **both.**
- **Central Government has power to remove any difficulty** in giving effect to provisions of Boilers Act, 2024 **within a period of three years** from date of commencement of this Act.
- Central Government constitute **Central Boilers Board** to regulate design, manufacture, erection and use of boiler and boiler components.

### Objective of Bill

- **Regulation** of manufacture and use of boilers, **ensuring safety of life and property of persons** from danger of explosions of boilers.
- **Prohibits the use of unregistered and uncertified boilers**, mandates reporting of accidents and promotes uniformity in registration and inspection processes throughout manufacturing, erection and use of boilers.

**Importance of Industrial Boiler:** Boiler deals with burning of fuel in large quantities, attainment of high temperature & pressure zones, handling of high energy steam etc.

## District Level Committee approves Habitat Rights for Juangs of Keonjhar, a PVTG in Odisha

Other tribes such as **Jaungs of Jajpur, Paudi Bhuyans of Deogarh** in odisha and **Bharia PVTG in Madhya Pradesh and Kamar PVTG and Baiga PVTG in Chhattisgarh** have habitat rights.

### Habitat Rights

- It was introduced under the **Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006** also known as the **Forest Rights Act (FRA).**
- **FRA defines 'habitat'** as the 'area comprising the **customary habitat and such other habitats in reserved and protected forests** of primitive tribal groups and **pre-agricultural communities**, and other forest dwelling STs'.
- **Habitat Rights** are accorded after a **sequence of consultation** with the community members, traditional leaders, women leaders, district and forest administration, etc.
- **Significance for PVTGs:** Concerned rights over their **customary territory of habitation, socio-cultural practices, intellectual knowledge, traditional knowledge, and conservation of their natural and cultural heritage.**

### About PVTGs

- Government has recognised **75 PVTGs** spread across **18 states and one UT** based on the recommendations of the **Dhebar Committee (1960-61).**
- **Odisha houses 13 PVTGs**-highest among all the states and UT.
- The **criteria** for identifying PVTG are: **Pre-agricultural level of technology, Low level of literacy, Economic backwardness, and declining or stagnant population.**

### Juang Tribe, Odisha

- **Native:** Hills of Keonjhar, Pallahara in Anugul and the plains of Dhenkanal, they are divided as Hill (Thaniya) and Plain (Bhagudia) Juang.
- **History:** Originally known as **Patuas** because of their traditional attire of **leaf skirts.**
- **Occupation:** Originally practitioners of **shifting cultivation** or toila chasa, with some now moving to settled agriculture.
  - ⊕ Skilled in the making of **decorative combs and tobacco cases.**

## Also in News



### Floating Solar Project

**SJVN Limited (Mini Ratna Schedule 'A' CPSU under Ministry of Power)** has successfully commissioned the **90 MW Omkareshwar Floating Solar Project at Khandwa, Madhya Pradesh.**

### About Floating Solar Project

- Involves **installing solar panels** on floating structures situated on water bodies such as lakes, reservoirs, and ponds.
- **As per World Bank**-India have potential capacities of **280-300 GW in floating solar power.**
- **Benefits:** Reduced water evaporation, cooler operating temperatures, and land conservation.



### Antarctica's winter heatwave

For the second time in two years, a **heatwave is sweeping through Antarctica** in the winter season.

- Ground temperatures have been **10 degrees Celsius higher than normal on average since mid-July.**

### Reason for heatwaves

- According to scientists, higher temperatures are mainly a consequence of the **weakening of the polar vortex.**
- Polar vortex is a band of **cold air and low pressure systems** that spins around the poles of the Earth in the stratosphere.
- The vortex usually keeps **cold air trapped over Antarctica** but it has been disturbed this year by **large-scale atmospheric waves.**



### Credit Information Companies (CICs)

RBI increases the frequency of reporting of credit information by lenders, including Banks and NBFCs, to CICs from monthly intervals to fortnightly basis or shorter intervals to boost transparency in system.

#### About CICs

- They collect public data, credit transactions and payment histories of individuals and companies regarding loans, credit cards, among others. E.g. TransUnion CIBIL Limited etc.
- Based on collected data, CICs form a credit report and generate a score.
- Banks, Non-Banking Financial Institutions refer to CIC's score to decide borrowers' creditworthiness before granting loan or issuing credit card.
- CICs are licensed by RBI and regulated by CIC Regulation Act, 2005 along with RBI guidelines



### Isostasy

Recent study explains the formation of new topological features like plateaus and escarpments (high steep slopes) through Isostasy.

#### Isostasy

- It is the equilibrium or balance between blocks of crust and the underlying mantle.
- It involves a line of equality at which the mass of land above sea level is supported below sea level.
- It is not a process or a force but simply a natural adjustment by blocks of crust of different thicknesses that also maintains gravity. Isostasy uses energy to balance mass.
- Processes like waning of ice sheets erosion, sedimentation, volcanism, etc. may disturb isostasy.



### Rashtriya Vigyan Puraskar

The central government announced the full list of the first-ever Rashtriya Vigyan Puraskar 2024 awardees.

#### About Rashtriya Vigyan Puraskar

- It is a new set of awards introduced by the Government of India in the field of Science, Technology, and Innovation.
- Objective: To recognize the notable and inspiring contributions made by scientists, technologists, and innovators individually or in teams in various fields of science, technology, and technology-led innovation.
- It comprises four awards – Vigyan Ratna for lifetime achievement, Vigyan Shri for scientists of all ages, Vigyan Yuva for scientists under 45 years and Vigyan Team for collaborative research work.



### Pyrocumulonimbus Cloud

Recent wildfires in US and Canada are so intense that they have created 'Pyrocumulonimbus' clouds.

#### About Pyrocumulonimbus Cloud

- Occur when there is an extremely hot wildfire and volcanic eruptions.
- Can produce lightning, they do not generate much rain.
- Not every wildfire leads to creation of pyrocumulonimbus clouds.
- Process
  - ⊖ Intense heat from fire warms surrounding air which moves upward into atmosphere.
  - ⊖ As this hot air – carrying water vapour, smoke, and ash – rises, it expands and cools down.
  - ⊖ Once it is cool enough, water vapour condenses on ash, forming a grey or brown cloud (pyrocumulonimbus cloud).
  - ⊖ If upward movement of hot air intensifies, pyrocumulonimbus clouds can evolve into pyrocumulonimbus cloud.



### Clouded Leopard

Recently International Clouded Leopard Day was observed at Aizawl, Mizoram.

#### About Clouded leopard

- Conservation Status:
  - ⊖ IUCN: Vulnerable
  - ⊖ Wild Life(Protection) Act 1976: SCHEDULE I and IV
  - ⊖ CITES: Appendix I
- Characteristics
  - ⊖ Named after the distinctive 'clouds' on its coat - ellipses partially edged in black, with the insides a darker colour than the background colour of the pelt.
  - ⊖ Its tail is the longest, in relation to body size, of any cat's tail.
  - ⊖ It is more at home in the trees than on the ground.
- Habitat: Southern China, Bhutan, Nepal, northeast India, Myanmar, Thailand, Vietnam, Malaysia, Cambodia, Laos, and Bangladesh.
- Threats: Habitat loss and defragmentation; Poaching and illegal wildlife trade, etc.



### Digital Watermarking

OpenAI is working on an AI watermarking technique that could recognize AI generated content and prevent it from being used in fraudulent activities.

#### Digital watermarking

- It is the process of embedding a digital code (watermark) into a digital content like image, audio, or video.
- It plays an important role in safeguarding copyright, integrity, ensuring the safety of digital works, protect intellectual property and combat piracy.

## Place in news



### New Zealand (Capital: Wellington)

President of India addressed the New Zealand International Education Conference, where India is the 'Country of Honour' this year.

#### Political Features

- Island country located in South Pacific Ocean, between Tropic of Capricorn and Antarctic Circle.
- Consists of two main landmasses i.e. North Island and South Island separated by Cook Strait.

#### Geographical Features

- Relief: Part of Pacific ring of Fire, houses alluvial Canterbury Plains; high central plateau called Central Otago.
- Active Volcanoes: Mount Ruapehu; White Island, etc.
- Highest Peak: Mount Cook.
- Largest Glacier: Tasman Glacier.
- Lake: Lake Taupō, largest natural lake.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI