

DAILY CURRENT AFFAIRS (DCA)

Time: 45 Min

Date: 31-07-2024

Table of Content

- SC Launches Special Lok Adalat Drive
- Legal Advisory Council
- Enhanced Version of Existing CRISPR-Cas9 Technology
- State of the World's Mangroves, 2024 Report
- Kerala's Wayanad Landslides
- Ethics of Hunger Strikes as a Mode of Protest

NEWS IN SHORT

- RBI's Framework to Classify Wilful Defaulters
- Chandipura Virus (CHPV)
- E-SeHAT
- Liquidity Coverage Ratio (LCR)
- Customs Duty on Lab Chemicals
- World's first thorium molten salt nuclear power station
- Charles Darwin's Frog

SC LAUNCHES SPECIAL LOK ADALAT DRIVE

In Context

- The Supreme Court commenced special Lok Adalat drive to amicably settle long-pending disputes as a part of its 75th anniversary celebrations.
 - ♦ Cases including matrimonial disputes, property disputes, motor accident claims, land acquisition, compensation, service and labour, pending before the apex court will be listed before the Lok Adalats for speedy disposal.

What are Lok Adalats?

- Lok Adalat is one of the alternative dispute redressal mechanisms.
- It is a forum where disputes/cases pending in the court of law or at pre-litigation stage are **settled/compromised amicably**.
- **Article 39 A: With 42nd Amendment Act of Constitution of 1976**, Article 39-A, has been inserted which requires the State to secure that the operation of the legal system:
 - ♦ Promotes justice, on a basis of equal opportunity,
 - ♦ Provide free legal aid, by suitable legislation or schemes or in any other way,
 - ♦ Ensure that opportunities for securing justice are not denied to any citizen by reason of economic or other disabilities.
- **Legal status:** Lok Adalats have been given statutory status under the **Legal Services Authorities Act, 1987**.
- **Decision of the Lok Adalat:** Under the said Act, the award (decision) made by the Lok Adalats is deemed to be a **decree of a civil court** and is final and binding on all parties and no appeal against such an award lies before any court of law.
 - ♦ If the parties are not satisfied with the award of the Lok Adalat though there is no provision for an appeal against such an award, but they are **free to initiate litigation by approaching the court** of appropriate jurisdiction by filing a case by following the required procedure, in exercise of their right to litigate.
- **Court fee:** There is no court fee payable when a matter is filed in a Lok Adalat.

- ♦ If a matter pending in the court of law is referred to the Lok Adalat and is settled subsequently, the court fee originally paid in the court on the complaints/petition is also refunded back to the parties.

• Role of members of Lok Adalats:

- ♦ The persons deciding the cases in the Lok Adalats are called the Members of the Lok Adalats, they have the role of statutory conciliators only and do not have any judicial role.
- ♦ Therefore, they can only persuade the parties to come to a conclusion for settling the dispute outside the court in the Lok Adalat.
- ♦ They shall not pressurise or coerce any of the parties to compromise or settle cases or matters either directly or indirectly.

Difference between Lok Adalat and a regular Court

- The difference between Lok Adalat and law court is that the law court sits at its premises where the litigants come with their lawyers and witnesses go to the people to deliver justice at their doorstep.
- It is a forum provided by the people themselves or by interested parties including social activities or social activist legal aiders, and public-spirited people belonging to every walk of life.
- It is just a firm forum provided by the people themselves for enabling the common people to ventilate their grievances against the state agencies or against other citizens and to seek a just settlement if possible.

What are Alternate Dispute Resolution Mechanisms?

- Uses a **neutral third party** to communicate, discuss the differences and resolve the dispute.
- **Important Provisions Related To ADR:**
 - ♦ **Section 89 of the Civil Procedure Code, 1908**
 - ♦ **Acts dealing with ADR:**
 - Legal Services Authority Act, 1987 (established **Lok Adalat System**)
 - Arbitration and Conciliation Act, 1996
- **Types:** Arbitration, Conciliation, Mediation, Negotiation, Judicial Settlements



Source: TH

LEGAL ADVISORY COUNCIL

In Context

- In recent years, there has been growing discussion about establishing a **Legal Advisory Council**.

Need for Legal Advisory Council (LAC):

- Several legal issues of national and social importance have emerged from the present government's legislative and policy initiatives, for example:
 - ♦ **The Electoral Bonds Scheme** was declared unconstitutional by the Supreme Court for violating voter right to information.
 - Proactive proportionality testing could have prevented this.
 - ♦ **In the Aadhaar Act**, Supreme Court intervention could have been avoided with prior legal scrutiny.
 - ♦ **Section 106(2) of the Bharatiya Nyay Sanhita, 2023**, led to protests due to disproportionate penalties.
 - The government had to delay enforcement for amendments.
- As many such issues have arisen due to a lack of adequate examination in terms of legal viability and impact assessments.
- Therefore, a review of the government's legal consultancy process is needed for better legislative clarity.

About Legal Advisory Council (LAC):

- It will be akin to the Economic Advisory Council (EAC) but specifically focused on legal matters.
- It will provide continuous and informed legal inputs
- It would help in clarifying legislative intent and anticipating legal challenges.
- Composition**: It could comprise legal luminaries, eminent jurists, prominent academicians, and researchers with specialisations in varied fields which are frequently legislated upon by governments such as criminal law, trade law, international law, business laws, and taxation laws.

Functions

- Analyze legal issues referred by the government.
- Assess impacts and outcomes of contemplated laws.
- Conduct suo motu research on contemporary legal issues.

How is it different from the Law Commission of India ?

- LAC would work with the Prime Minister's Office, unlike the Law Commission, which operates under the Ministry of Law and Justice.
- The Law Commission is primarily reactive, recommending reforms to existing laws, whereas the LAC would be proactive, addressing potential issues in forthcoming legislation.

Do you know ?

- The Law Commission of India is a non-statutory body constituted by the Government of India from time to time.
- The Commission was originally constituted in 1955 and is re-constituted every three years.
- Criticism**: The LCI's recommendations are only partially implemented.
 - ♦ The LCI has produced a limited number of reports despite the pressing nature of legal issues.

Conclusion and Way Forward

- Establishing a dynamic LAC and leveraging national law universities can improve the government's handling of legal challenges and legislative processes.

- National law universities can assist in creating constitutionally viable and socially acceptable laws.
 - ♦ They have the expertise to conduct legal viability and impact assessments, as seen in their involvement in reform committees.
- Funding and administrative support would be crucial for the LAC's effectiveness.

Source:TH

ENHANCED VERSION OF EXISTING CRISPR-CAS9 TECHNOLOGY

Context

- Scientists have developed an enhanced genome-editing system that can modify DNA more precisely and efficiently than existing CRISPR-based technologies.

What are CRISPR-based technologies?

- The CRISPR-Cas system is a **tool to cut, delete, or add DNA sequences at precise locations**, opening different windows to treat genetic disorders, develop drought-resistant plants, and modify food crops.
- **CRISPR occurs naturally in some bacteria**, as a part of their immune system that limits infections by recognising and destroying viral DNA.

CRISPR-Cas9

- **Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR)** is a DNA sequence which is part of the bacterial defense system.
- **Cas9 (CRISPR-associated)** is the name of the protein that transfers resistance.
 - ♦ It is an enzyme that acts like a pair of **molecular scissors**, capable of cutting strands of DNA.
 - ♦ It allows researchers to easily alter DNA sequences and modify gene function.
- CRISPR-based tools rely on the ability of the system to **recognise specific single-nucleotide changes** in the DNA.

What are Nucleotides?

- Nucleotides are the **building blocks of DNA and RNA**. Each nucleotide consists of a nucleobase, a phosphate group, and a sugar.
- Each nucleotide in DNA has one of four nucleobases: **adenosine, thymine, guanine, and cytosine**.
- A single-nucleotide change is when just one nucleotide in the genome needs to be 'repaired'.

How does the CRISPR-Cas9 work?

- The CRISPR-Cas9 gene editing tool uses a **guide-RNA (gRNA)** designed to find and bind to a specific part of the target genome.
- The gRNA directs an enzyme, Cas9, to the target site, which is followed by a short DNA sequence called **protospacer adjacent motif (PAM)**.
- Cas9 recognises and binds to the PAM sequence, and acts as a molecular scissor that snips some damaged DNA.
- This automatically triggers the cell's DNA repair system, which repairs the snipped part to insert the correct DNA sequence.

How DNA defects can be edited out

The Crispr-Cas9 technique can fight sickness at its source

- 1 Scientists identify a **defective DNA strand** to be cut out and modified.



- 2 They create **guide RNA** that has the same genomic sequence as the defective DNA. This is combined in a cell with a protein called **Cas9** which acts like scissors to cut the defective DNA.



- 3 The **guide RNA** finds the matching genomic sequence.



- 4 Cells are able to detect and repair broken DNA. A **healthy strand of DNA** is inserted at the cut site and enzymes repair it.



Then the Cas9 cuts the strand making a break in the DNA helix

Cell repair systems can use a piece of complementary DNA, called a template. Scientists can add beneficial changes to the template, such as correcting a disease-causing mutation

Source: FT research © FT

CRISPR's off-target problem

- The CRISPR-Cas9 system can also recognise and cut parts of the genome other than the intended portion.
- Such "off-target" effects are more common when using the **SpCas9 enzyme** derived from **Streptococcus pyogenes bacteria**.
- To overcome these issues, researchers are exploring highly precise Cas9 enzymes from **Francisella novicida bacteria** called **FnCas9**.

Switching SpCas9 with FnCas9

- The scientist has engineered new versions of FnCas9 to enhance it without compromising its specificity.
- An enhanced FnCas9-based diagnostic could target almost twice the number of changes compared to FnCas9, increasing the scope of detecting more disease-causing genetic changes.
- Hence the enhanced FnCas9 cuts target DNA at a higher rate compared to unmodified FnCas9.

Source: TH

STATE OF THE WORLD'S MANGROVES, 2024 REPORT

Context

- The Global Mangrove Alliance (GMA) has released a report titled **'The State of the World's Mangroves, 2024'** on World Mangrove Day (26 July).

Key Highlights of the Report

- Distribution:**
 - Southeast Asia accounts for 33.6 percent of global mangrove cover with **Indonesia alone having 21 percent** of the world's mangroves.
- Area under threat:**
 - Mangrove areas of Indonesia, northeast Brazil and northwest Mexico are experiencing significant losses.
 - Mangroves in Lakshadweep archipelago and on the coast of Tamil Nadu are critically endangered.
- Reasons for Loss:**
 - Conversion to aquaculture, oil palm plantations and rice cultivation together accounts for **43 percent of mangrove losses** between 2000 and 2020.
 - Shrimp farms** that are mostly constructed within the vital intertidal zones, resulting in the total removal of mangroves.

Mangroves

- A mangrove is a **small tree or shrub** that grows along coastlines, taking root in salty sediments, often underwater.
- Mangroves are flowering trees, belonging to the families **Rhizophoraceae, Acanthaceae, Lythraceae, Combretaceae, and Arecaceae.**
- Features:**
 - Saline Environment:** A speciality of mangroves is that they can survive under extreme hostile environments such as high salt and low oxygen conditions.
 - The roots filter out 90% of the salt they come into contact with within the saline and brackish water.
 - Low oxygen:** Underground tissue of any plant needs oxygen for respiration. The mangrove root system absorbs oxygen from the atmosphere.
 - Store Freshwater:** Mangroves, like desert plants, store fresh water in thick succulent leaves.

- Mangroves are viviparous:** Their seeds germinate while still attached to the parent tree. Once germinated, the seedling grows into a propagule.
- The **Sundarbans in West Bengal** are the largest mangrove region in the world and a **UNESCO World Heritage Site.**
- The second largest mangrove forest in India is **Bhitarkanika (Ramsar site)** in Odisha created by the two river deltas of **Rivers Brahmani and Baitarani.**

Importance of Mangroves

- Act as natural barriers against storm surge, coastal flooding and sea-level rise.
- They provide habitat for a diverse array of terrestrial organisms.
- Mangroves are powerhouses when it comes to carbon storage.
- Sources of Livelihood.

Steps Taken

- Indian Initiatives:**
 - Mangrove Initiative for Shoreline Habitats & Tangible Incomes (MISHTI) Programme:** Aims to protect and revive mangrove ecosystems on the Indian coast while enhancing the socio-economic status of coastal communities.
 - Conservation and Management of Mangroves and Coral Reefs:** The promotional measures are being implemented through a Central Sector Scheme namely 'Conservation and Management of Mangroves and Coral Reefs' under National Coastal Mission Programme of the Ministry of Environment, Forest & Climate Change.
- Global Initiatives:**
 - Global Mangrove Alliance (GMA):** It is a joint effort of more than 30 organizations, including IUCN, working to expand the global extent of mangrove habitat 20% by the year 2030.
 - Mangrove Alliance for Climate (MAC):** It is an initiative led by the United Arab Emirates (UAE) and Indonesia, which includes India as its member, seeks to educate and spread awareness worldwide on the role of mangroves in curbing global warming and its potential as a solution for climate change.

Source: IE

KERALA'S WAYANAD LANDSLIDES

Context

- Ecologist Madhav Gadgil, has termed the disaster in Wayanad a man-made tragedy, attributing it to the Kerala government's failure to implement crucial ecological recommendations.

Background

- Massive **landslides** at Mundakkai, Chooralmala, Attamala, and Noolpuzha in **Wayanad district** buried large areas under debris, resulting in the death of at least 84 people and leaving many injured.
- **Madhav Gadgil, the chairman of the Western Ghats Ecology Expert Panel (WGEEP)**, has highlighted that the panel's report had classified the region into **three levels of ecological sensitivity**, with the areas now struck by the disaster being marked as highly sensitive.
- However, two years later, the **Kasturirangan report** had toned down the recommendations.

What is Landslide?

- Landslides are a geological phenomenon that involves the sudden and rapid movement of a mass of rock, soil, or debris down a slope under the influence of gravity.
- Landslides, usually, occur in areas having characteristics like Steep terrain such as hilly or mountainous areas, Presence of joints and fissures or areas where surface runoff is directed or land is heavily saturated with water.

Causes of Landslides

- **Natural Causes:**
 - ♦ **Heavy Rainfall:** Heavy rainfall is one of the most common triggers of landslides. It increases pore water pressure as well as the weight of soil by making it saturated.
 - ♦ **Erosion:** Clay and vegetation present within the soil or rock act as cohesive elements and help bind particles together. By removing these cohesive elements, erosion makes an area more prone to landslides.
 - ♦ **Earthquakes:** Intense ground shaking due to earthquakes causes instability in rocks and soils, thus triggering landslides.
 - ♦ **Volcanic Eruptions:** Ash and debris deposited by volcanic eruptions overload slopes while the accompanied seismic activity causes instability.

- **Anthropogenic Causes**

- ♦ **Deforestation:** By holding soils as well as obstructing the flow of falling debris, vegetation cover plays an important role in preventing landslides in any area. Deforestation takes away this preventive cover and increases vulnerability to landslides.
- ♦ **Encroachment in Vulnerable Terrains:** Of late, humans have been encroaching in landslide-prone areas such as hilly terrains. This has led to increased construction activities in these areas and increased chances of landslides.
- ♦ **Uncontrolled Excavation:** Unauthorized or poorly planned excavation activities, such as mining, quarrying, etc destabilize slopes and increase the chances of landslides.
- ♦ **Climate Change:** Climate change caused by various anthropogenic activities has led to abrupt alterations in precipitation patterns and increased frequency of extreme weather events.

Why is Kerala prone to landslides?

- Kerala is prone to heavy rains and flooding, with an estimated **14.5 percent** of land area seen as vulnerable.
- The Kerala State Disaster Management Authority (KSDMA) has identified **1,848 square kilometers, 4.75 percent of the state's total area**, as High Landslide Hazard Zone.
- The State lies in **seismic zone III** which corresponds to **Moderate Damage Risk Zone (MSK VII)**.

Gadgil committee recommendation

- **Ecologically Sensitive Zones:** The report recommended classifying 64 percent of the Western Ghats into Ecologically Sensitive Zones called ESZ 1, ESZ 2 and ESZ 3.
 - ♦ It also recommended designating the entire region as an Ecologically Sensitive Area (ESA).
- Almost all developmental activities like mining, construction of thermal power plants, and dams were to stop along with the decommissioning of similar projects that have completed their shelf life in ESZ 1.
- **Bottom-to-top approach** in governance of the environment, indicating decentralization and more powers to local authorities.

- **Western Ghats Ecology Authority:** Under the **Environment (Protection) Act, 1986**, a professional body to manage the ecology of the region and to ensure its sustainable development was recommended by the committee.
- **Ban on growing single commercial crops:** Crops like tea, coffee, cardamom, rubber, banana and pineapple, which have led to “fragmentation of forest, soil erosion, degradation of river ecosystems and toxic contamination of the environment” should be curtailed.
- **Community participation:** The panel had urged the Ministry of Environment and Forests to take critical steps to involve citizens, including proactive and sympathetic implementation of the provisions of the Community Forest Resources of the **Forest Rights Act**.

Measures taken in India

- **The Disaster Management Act, of 2005** provides a comprehensive legal and institutional framework for the management of various disasters including landslides.
- **The National Landslide Risk Management Strategy (2019)** covers all aspects of landslide disaster risk reduction and management, such as hazard mapping, monitoring, and early warning systems.
- **The National Disaster Management Authority (NDMA)** has issued Guidelines on Landslide Hazard Management (2009) that outline the steps that should be taken to reduce the risk of landslides.
- **The National Institute of Disaster Management (NIDM)** has been providing capacity building and other support to various national and state-level disaster management authorities.
- **Early Warning system:** Efforts have been made towards better prediction of weather. E.g. Ensemble Prediction System. This will help predict disasters like landslides.

Western Ghat

- The Western Ghats are a **1,600-km** long mountain chain along the west coast of India running from the river Tapi in the north to Kanyakumari in the south.
- It covers **six states** — Gujarat, Maharashtra, Goa, Tamil Nadu, Karnataka and Kerala. About 60 percent of the mountain range is in Karnataka.

- **Significance:** These Ghats are home to high mountain forests, which moderate the tropical climate of the region. They are home to 325 globally threatened flora, fauna, bird, amphibian, reptile and fish species.
- Western Ghats were accorded the **World Heritage Status by UNESCO in 2012**.

Source: TH

ETHICS OF HUNGER STRIKES AS A MODE OF PROTEST

Context

- Recent tragic accident at an IAS coaching centre in New Delhi led to an **indefinite hunger strike of students**, seeking ₹1 crore compensation for each victim’s family, transparency in the probe, and the resolution of the drainage issues.

About

- Hunger strikes—often used as a form of nonviolent resistance—are powerful expressions of dissent. Participants voluntarily abstain from food, using their bodies as a canvas to draw attention to their cause.

Hunger Strike as a Tool of Protest

- Hunger strikes—those powerful acts of protest where individuals willingly deprive themselves of sustenance—have a long and complex history.
- The use of hunger strike as a tool of protest has **three notable features**.
 - ◆ The strike summons the **human body’s physiological processes**, and is the most immediate form of defiance against authority.
 - ◆ It is the **foci for organising a protest** in a time and place where other forms of protest may have become unavailable to a people.
 - ◆ The **self-starvation** of the striking prisoner is intended to move those of **human dignity and common sense outside**, if word of the same reaches beyond the prison walls.

Historical Context

- Hunger strikes have been used as a form of protest throughout history. From **suffragettes demanding voting rights to political prisoners fighting for justice**, hunger strikes have often been a last resort—a desperate cry when other avenues seem closed.

- Throughout history, hunger strikes have been employed by **activists, political leaders, and marginalised communities** to demand **justice, rights, and policy changes**.
- **Mahatma Gandhi**, the leader of India's independence movement, famously used hunger strikes as a tool for civil disobedience.
 - ♦ His fasts were meticulously planned and strategically executed to draw attention to specific issues.
- One notable example is **Irom Sharmila, the 'Iron Lady' from Manipur, India**. She conducted a 16-year hunger strike (2000–2016) to protest against the **Armed Forces (Special Powers) Act (AFSPA)** in her state.
 - ♦ Her unwavering commitment brought attention to the draconian law and its impact on civilians.

Moral Dilemmas

- **Force-Feeding:** When a hunger striker's health deteriorates dangerously, authorities face a moral dilemma. Is it acceptable to force-feed someone against their will? Doing so may save their life, but it also violates their autonomy.
- **Providing Medicine:** Similarly, should medicine be administered to a hunger striker who refuses it?
- The tension lies between **respecting an individual's autonomy and ensuring their well-being**. Balancing these concerns is challenging for authorities and healthcare professionals.

Bioethical Considerations

- Hunger strikes raise fundamental questions about human rights and self-determination. A person's right to express themselves non-violently through a hunger strike must be respected.
- In contrast to suicide bombers or other forms of violent resistance, hunger strikers intentionally harm themselves to draw attention to their cause. It's a form of **'necropolitical' resistance**, where the body becomes a weapon of protest.

Legal and Medical Perspectives

- **Legally**, hunger strikes often fall into a grey area. While authorities may have a duty to preserve life, they must also respect an individual's autonomy.
- **Medically**, hunger strikes can lead to irreversible damage or death. Balancing medical intervention

with respect for the protester's intent is a delicate task.

- In many countries, force-feeding hunger strikers is considered **a violation of human rights**.
 - ♦ The United Nations considers it a **form of torture**.
- Medical professionals grapple with their duty to preserve life while respecting a person's right to protest.
 - ♦ The Hippocratic Oath emphasises healing, but hunger strikes test these principles.

Effectiveness and Symbolism

- Hunger strikes can galvanise public opinion, drawing attention to otherwise overlooked issues.
 - ♦ However, their effectiveness varies. Some hunger strikes achieve their goals, while others do not. Factors include media coverage, public sympathy, and government responsiveness.

Contemporary Examples

- In 2021, Indian farmers staged a daylong hunger strike to protest the government's new agriculture reforms. They argued that these reforms favoured large corporations over smaller producers.
- Activists worldwide continue to use hunger strikes to advocate for climate action, human rights, and social justice.

Conclusion

- Hunger strikes remain a potent tool for those who feel unheard, but they come with ethical dilemmas. As we grapple with the ethical complexities, we must recognize that these acts are born out of desperation—a plea for justice and change.

Source: TH

NEWS IN SHORT

RBI'S FRAMEWORK TO CLASSIFY WILFUL DEFAULTERS

In News

The Reserve Bank of India (RBI) issued final guidelines on the classification of **wilful defaulters**.

- As of March 31, the total outstanding wilful defaults stood at ₹3.6 trillion.

About guidelines

- **Applicability** : The guidelines apply to banks, non-banking financial companies (NBFCs), and financial institutions like Exim Bank and Nabard.
 - ♦ Lenders must check bad loans of ₹25 lakh and above for signs of wilful default.
 - ♦ Lenders must identify and tag wilful defaulters within six months of a loan turning bad.
- **Procedure** : Before transferring defaulted loans of 25 lakh or more to other lenders or asset reconstruction companies (ARCs), a comprehensive internal investigation for wilful default must be conducted.
- **Credit Facilities**: No additional credit will be granted to wilful defaulters or entities associated with them for one year after their removal from the List of Wilful Defaulters (LWD).
 - ♦ Entities associated with a wilful defaulter (as promoter, director, or in management) are also penalized.
- **Purpose**: Aims to standardize the identification process, ensure transparency, and uphold principles of natural justice.

Who's a wilful defaulter?

- A borrower will be classified as a wilful defaulter if they default on loans despite having the capacity to repay.
- The tag would also apply to those who have diverted funds taken from lenders or "syphoned off the funds availed under the credit facility from the lender".
- The default amount must be ₹25 lakh or more.
- An identification committee examines evidence of wilful default and issues a show-cause notice to the borrower or responsible parties.

Source:TH

Chandipura Virus (CHPV)

In News

- The Ministry of Health reviewed the situation in Gujarat, Rajasthan and Madhya Pradesh after the States reported cases of **Chandipura virus and Acute Encephalitis Syndrome (AES)**.

About

- **Chandipura Virus (CHPV)**: It is a member of the Rhabdoviridae family known to cause sporadic

cases and outbreaks in western, central, and southern parts of the Country, especially during the monsoon season.

- ♦ It is transmitted by vectors such as sand flies and ticks and it affects mostly children under 15 years of age
- ♦ It can be present with a febrile illness that may in some cases result in death.
- ♦ There is currently no specific antiviral treatment or vaccine for the Chandipura virus. Early diagnosis and supportive treatment are crucial.
- **Acute Encephalitis Syndrome (AES)**: It is a group of clinically similar neurologic manifestations caused by several different viruses, bacteria, fungus, parasites, spirochetes, chemical/ toxins, etc.
 - ♦ The known viral causes of AES include JE, Dengue, HSV, CHPV, West Nile, etc.

Source:IE

E-SEHAT

Context

- The **Ex-Servicemen Contributory Health Scheme (ECHS)** has launched the **Electronic Services e-Health Assistance and Tele-consultation (E-SeHAT)** module.

About

- The E-SeHAT Tele-consultancy would enable ECHS beneficiaries in obtaining online Tele-consultation for medical treatment from their homes without visiting the ECHS Polyclinic.
- The module aims to provide health care services through safe and structured video based clinical consultations.
- The E-SeHAT initiative aligns with the Digital India vision of the Government of India aimed at promoting digital inclusivity and efficiency in public services.

Source: PIB

LIQUIDITY COVERAGE RATIO (LCR)

Context

- Recently, the RBI proposed new norms that tighten the Liquidity Coverage Ratio (LCR), a critical metric for banks.

Understanding the LCR and Proposed Changes

- It measures a bank's ability to meet short-term liquidity needs during a crisis. It mandates that banks **hold a certain percentage of High-quality Liquid Assets (HQLA)** relative to their short-term liabilities.
- In the fourth quarter of FY24, the LCR stood at 130%. However, the proposed changes would reduce this to a range of 113% to 116% once implemented, likely from April 1, 2025.
- If successful, that could prevent the crisis from spreading and causing greater economic harm.

Short-Term Impact: Credit Growth and NIM

- **Credit Growth:** The immediate effect of tighter LCR norms could be a short-term slowdown in credit growth.
 - ♦ Banks may need to be more cautious in extending credit, given the need to maintain higher liquidity buffers.
 - ♦ Borrowers might experience a slightly tighter lending environment.
- **Net Interest Margins (NIM):** NIM, which represents the difference between interest earned on loans and interest paid on deposits, could also take a hit.
 - ♦ Banks may face pressure to maintain profitability while complying with the new norms. Reduced lending opportunities and the need to hold more liquid assets could squeeze NIM.

Long-Term Resilience and Business Strategies

- **Banks' Resilience:** Despite the initial challenges, the new norms are likely to enhance banks' resilience. By ensuring a strong liquidity position, banks can weather financial storms more effectively.
- **Private Sector Banks:** The impact is expected to be more pronounced for private sector banks. They might need to rethink their business strategies, possibly reducing reliance on wholesale funding and adjusting credit growth targets.
- **Deposit Mobilisation:** Banks with lower LCR (around 120%) may need to attract additional deposits to bolster their HQLA. Alternatively, they

could slow down credit expansion temporarily to manage liquidity.

Source: TH

CUSTOMS DUTY ON LAB CHEMICALS

Context

- Recent Union Budget (2024-25) highlighted the **Basic Customs Duty** on laboratory chemicals, a critical component of research, has been hiked to **150% from the existing 10%**.

Basic Customs Duty

- It means the customs duty levied under the **Customs Act 1962**. It differs from item to item, and the Union government has the right to exempt or reduce any item from being taxed the basic customs duty.

Issues Surrounding?

- **Import Dependency:** India relies on global suppliers for fine chemicals and pure compounds used in drug development, biotech research, and more. The sudden duty hike threatens to disrupt this delicate supply chain.
 - ♦ **Almost 95% of research labs in India** use **imported lab chemicals**. And often, these experiments need to be reproduced globally.
- **Rising Import Value:** The value of lab chemical imports has been climbing steadily. In FY21, it was ₹104 crore; by FY24, it had zoomed to ₹701 crore. Clearly, these substances are in high demand.
 - ♦ Lab chemicals are already pricey. The duty hike threatens to make them unaffordable for research and development (R&D) purposes.
- **Smuggling and Misclassification:** The government's move aims to curb smuggling and misclassification. Some importers were allegedly using this route to bring in chemicals at lower rates and diverting them to pharmaceutical companies and distilleries. The customs duty increase is a countermeasure against such practices.
- **Niche Nature:** Direct Indian alternatives aren't always available. These chemicals are niche—unique compounds that don't have easy substitutes. So, researchers might find themselves in a tight spot.

Source: TH

WORLD'S FIRST THORIUM MOLTEN SALT NUCLEAR POWER STATION

Context

- China plans to start building the world's first molten salt reactor power station next year in the Gobi Desert.

About

- The Thorium Reactor** is scheduled to be completed in **2029**, generating heat at a maximum power of **60 megawatts**.
- Currently, the only **operating thorium reactor on Earth is located in the Gobi Desert**.
 - This experimental reactor can only produce **2 MW** of thermal power and does not generate electricity.
- Applications:** The reactors have some potential military applications due to their compact structure and safety, such as powering naval ships, submarines and even aircraft.

Working of the Reactor?

- Molten salt carrying thorium fuel enters the reactor** core through pipes to undergo a chain reaction.
- After the temperature rises, it flows out the other side and transfers heat to the molten salt without thorium that is circulating in a separate loop.
- The hot but **non-radioactive molten salt flows into the electricity plant** next to the reactor to drive a **carbon dioxide-based gas turbine for power generation**.
- The reactor **does not need water for cooling** because it uses liquid salt and carbon dioxide to transfer heat and generate electricity.

Advantage

- Currently, most **Uranium Fuel Reactors** using water for cooling have the risk of explosion if the pumps malfunction.
- But in the **Thorium Reactor**, the molten salt can drop into a container below the reactor, posing no threat to the surrounding environment.

Source: CS

CHARLES DARWIN'S FROG

In Context

- As per the researchers, the **Charles Darwin's frog** is displaying a curious mating, as well as egg-laying behavior, which is concerning in the context of climate change.

About

- They are named after Darwin, but Darwin did not study or describe this species.
- Scientifically known as **Minervarya charlesdarwini**, Charles Darwin's frogs are **endemic to the Andaman Islands**.
- Researchers found both male and female Charles Darwins adopting an **inverted position** on the walls of tree cavities, keeping their bodies completely above the water while mating as well as laying eggs.
- Due to fragmented forest habitats, they now use artificial objects like plastic bags as breeding sites.
- Listed as **vulnerable** on the International Union for Conservation (IUCN) of Nature Red List.

Source: DTE

