

DAILY CURRENT AFFAIRS (DCA)

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POLITICAL EMPOWERMENT OF WOMEN

Context

- Women's political empowerment will enhance governance and boost the economy, as per **2023 UNDP report**.

Political Empowerment

- Political empowerment refers to **women's increased capacity to influence and participate** in decision-making processes at all levels of political life.
- It is a **crucial element of achieving gender equality** and building a just and equitable society.

Current status

- In the **Global Gender Gap Report 2023**, India has achieved an overall rank of **127 out of the 146 countries** and in the **political empowerment** front, India's rank is **48**.
- In the **2019 Lok Sabha elections**, there were **only 719 women contestants**, 9% of the total, **and 78 won, making up under 14.4% of all seat winners**, a proportion that is below the South Asian average of 18.9% (World Bank).
- **In India, only 10.5% of all Members of Parliament in 2021** were women, while state assembly representation stands at an average of 9%.
- However, India's electoral landscape is **set for a transformative gender shift**. Projections show that **women's voter turnout would exceed that of men by 2029 and reach 55% of the total by 2047**.
 - ♦ Five recent state elections saw well above **70% of eligible women voting**. Rural gains stood out.
- Many social researchers specifically link these gains to **India's 33% reservation of seats in local representative bodies**, as well as **grassroots self-help group movements**.
 - ♦ Some attribute it to the **influence of development schemes** that "recognize women's agency."

Benefits of women political empowerment (WPE)

- **Governance:** As a **2023 UNDP report** underscores, women's political empowerment (WPE) leads to responsive and transparent

governance, reduces risks of civil war and political violence, and breaks down gender stereotypes.

- **Economic benefits:** A recent data-analysis over an extended time-span (from 1830) across 182 countries has assessed that **there have been clear differences in the annual GDP per capita growth** rates between countries with low and high rates of WPE.
 - ♦ A 2013 study found that WPE over a period of time can augment **women's presence in the economy, labour market and reduction in gender wage gaps**.
- **Innovation and growth:** The same analysis showed, increased WPE also brings in technological change and innovation and growth, particularly in non-Western nations, with the infusion of new and efficient ideas into the economy.
- **Multiplier effect:** A regional study in Europe and Central Asia (ECA) estimated that a **10%-point increase in women's representation in parliament is likely to yield a 0.74%-point rise in GDP growth**.
- **Sustainable Development Goals:** A meta analysis of a global data-set (2015- 2019) said that increased WPE also contributes to the realization of Sustainable Development Goals.
- **Better at role given:** In India, a study revealed that "**women legislators perform better** in their constituencies on economic indicators than their male counterparts and **are less likely to be criminal and corrupt**, more efficacious, and less vulnerable to political opportunism" (Thushyanthan Baskaran, et al).
- **Access to financial resources:** A 2020 field study in 163 villages to evaluate the uptake of India's rural jobs scheme where women helm local bodies found "**it raised women's demand for work and access to financial resources.**"

Challenges

- **Internalized patriarchy:** Deep-rooted gender biases and discriminatory practices often limit women's access to political opportunities and decision-making positions.
- **Violence and Harassment:** Women in politics face higher risks of violence, harassment, and intimidation, discouraging their participation.
- **Lack of Support:** Limited access to childcare, funding, and political networks can hinder women's ability to campaign and run for office.

- **Unequal Representation:** Existing power structures and political systems often favor men, making it difficult for women to break through and win elections.
 - ♦ **Political parties often fight shy** of fielding a fair share of women as contestants.
 - ♦ Women who do get party tickets have family political connections, said a study. In 2019, **41% of all women candidates and 30% of those who got elected were 'dynasts.'**
- **Just a vote bank:** The importance accorded to women is transactional i.e., a **"your-vote-for-my-scheme approach."**

Strategies for Progress

- **Quotas and Reserved Seats:** Affirmative action policies, like reserving seats for women in legislatures, can increase their representation in the short term.
 - ♦ **The Constitution (106th Amendment) Act, 2023**, which reserves one-third of all seats for women in Lok Sabha and State legislative assemblies is a right step in this direction.
- **Capacity Building and Training:** Empowering women with political knowledge, skills, and leadership training can enhance their confidence and abilities in political leadership.
- **Combating Gender-Based Violence:** Robust legal frameworks and comprehensive measures are needed to prevent and address violence against women in politics.
- **Raising Awareness and Advocacy:** Public education and campaigns can challenge gender stereotypes and promote social and cultural change towards greater gender equality in politics.
- **Supporting Women's Organizations:** Women's organizations and networks play a crucial role in supporting female candidates, advocating for their rights, and holding governments accountable.

Way Ahead

- The **pursuit of gender equality in politics isn't merely for justice and fair play**, but foremost for a **more stable and sustainable economy**. Trends suggest that **goal is almost 130 years away (UN Women)**.
- For accountable governance, be it in India or elsewhere, **women must pitch in as voters, poll workers, candidates and lawmakers**.

Source: **LM**

THE TELECOMMUNICATIONS ACT, 2023

Context

- According to the Union Minister for Electronics and Information Technology the Telecommunications Act, 2023, is a set of real structural reforms.

About

- The act seeks to repeal the **Indian Telegraph Act (1885), Indian Wireless Telegraphy Act (1933)** and **The Telegraph Wire (Unlawful Possession) Act, 1950**.
- It also amends the **Telecom Regulatory Authority of India (TRAI) Act, 1997**.

Key Provisions of the Act

- **Assignment of spectrum:** Spectrum will be assigned by auction, except for specified uses, where it will be allocated on an administrative basis. The Specified purposes include, national security and defense, weather forecasting etc.
- **Right of way:** Facility providers may seek a right of way over public or private property to establish telecom infrastructure. It must be provided on a non-discriminatory and non-exclusive basis to the extent possible.
- **Digital Bharat Nidhi:** It renamed the **Universal Service Obligation Fund (USOF)**, established under the **1885 Act** to provide for telecom services in underserved areas, as Digital Bharat Nidhi and allows its use for research and development.
- **Appointments to TRAI:** It amends the TRAI Act to also allow individuals with,
 - ♦ At least **30 years** of professional experience to serve as the Chairperson, and
 - ♦ At least **25 years** of professional experience to serve as members.
- **Protection of users:** The central government may provide for measures to protect users which include:
 - ♦ Prior consent to receive specified messages such as advertising messages,
 - ♦ Creation of Do Not Disturb registers, and
 - ♦ A mechanism to allow users to report malware or specified messages. Entities providing telecom services must establish an online mechanism for registration and redressal of grievances.

- **Adjudication process:** The Union government will appoint an adjudicating officer (must be of the rank of joint secretary and above) to conduct inquiries and pass orders against civil offenses under the Act.
 - ♦ Orders of the adjudicating officer may be appealed before the Designated Appeals Committee (members will be officers of the rank of at least Additional Secretary) within 30 days.
 - ♦ Appeals against the orders of the Committee, in connection to breach of terms and conditions, may be filed with the Telecom Disputes Settlement and Appellate Tribunal (TDSAT) within 30 days.
- **Legal and Regulatory Framework:** It seeks to create a legal and regulatory framework for a safe telecom network.
 - ♦ It seeks to remove Over The Top (OTT) apps like WhatsApp, Telegram etc., from the definition of telecommunication.
- Therefore, there is a need for the right legal and regulatory framework that focuses on a safe and secure telecommunication network that provides for digitally inclusive growth.
- It is important that users' sensitive personal information is not misused by any entity in the data processing lifecycle.

Source: *TH*

TURKEY FINALLY BACKS SWEDEN'S NATO BID

Context:

- **Sweden's attempt to join NATO** cleared a major hurdle recently after **Turkey's parliament supported its membership.**

About:

- This move came after **Sweden tightened its anti-terror legislation** and pledged closer cooperation with Turkey on security concerns.
- For a new country to join the North Atlantic Treaty Organization (NATO), **all the existing members have to approve it. Turkey and Hungary had been opposing Sweden's entry** for almost the past two years.

Issues and Concerns

- **Interception of communication:** The Act provides that any message or class of messages between two or more persons may be intercepted, monitored, or blocked on specified grounds such as the interest of the security of the state, friendly relations with other countries, public order etc.
- **Biometric verification:** The requirement of biometric verification for users may not be proportionate and hence, may infringe upon the fundamental right to privacy.
- **Suspension of Internet Services:** The Telecom Bill (2023) proposes to empower the government to 'take temporary possession' of the network, without clarifying the 'temporary possession'.
 - ♦ Governments have previously taken steps such as suspending internet services in areas marred by violence till peaceful conditions prevail.
- **It does not specify procedural safeguards** with respect to powers to search premises and vehicles.

Way Forward

- The telecommunication sector is a key driver of economic and social development. Security of a nation is vitally dependent on safety of telecommunication networks.

About the North Atlantic Treaty Organisation (NATO)

- It is an **intergovernmental military alliance (also called the Washington Treaty)** created by **12 countries from Europe and North America** on 4 April 1949.
 - ♦ **India is not a member** country of NATO.
- **Established in:** 1949
- **Headquarters:** Brussels, Belgium
- **Mandate:** To provide collective security against the Soviet Union.
- **Members:** 31. These countries, called **NATO Allies**, are sovereign states that come together through NATO to discuss political and security issues and make collective decisions by consensus.
 - ♦ **Finland is the latest entrant in 2023.**
 - ♦ **Article 10** of the North Atlantic Treaty sets out **how countries can join the Alliance.**

- It states that **membership is open to any "European State** in a position to further the principles of this Treaty and to contribute to the security of the North Atlantic area".
- Any decision to invite a country to join the Alliance is taken by the **North Atlantic Council, NATO's principal political decision-making body**, on the basis of consensus among all Allies.

Background

- Sweden has not fought a war in two centuries, **staying neutral through the two World Wars and the Cold War.**
 - ♦ However, this neutrality had to be abandoned **after Russia invaded Ukraine.**
- **With public opinion increasingly in favour of joining NATO**, both Sweden and Finland applied for membership in 2022.
- While Finland's bid was cleared, **Sweden ran into stiff opposition from Turkey's President Recep Tayyip Erdogan and Hungary's Prime Minister Viktor Orban.**

Reasons behind the opposition to Sweden's bid to join NATO:

- Erdogan objected to Sweden's accession, **accusing Swedish officials of being too lenient on militant groups**, including the Kurdistan Workers' Party (PKK) and being a mute spectator when Quran-burning protests were held in Sweden.
- Hungary's grievances with Sweden include **Stockholm's negative remarks about the rule of law and state of democracy** under Hungary's Prime Minister Orban. Orban is also **more friendly with Russia than other NATO nations.**
- **After Turkey's move**, Orban said recently that **he had invited Swedish Prime Minister Ulf Kristersson to Budapest to discuss future cooperation in the field of security and defence as allies and partners.**

What will Sweden bring to NATO?

- **Once a country is a NATO member, an attack on its territory is considered an attack on the US-led alliance**, and all 31 members are obliged to defend each other (**Article 5 of the North Atlantic Treaty**).

- ♦ It effectively put Sweden **under the "nuclear umbrella" of the US.**
- Once Sweden becomes a member, **almost all of the Baltic Sea coastline, except that in Russia's control, will become NATO territory.**
 - ♦ This will provide the alliance **strategic bases close to Russia**, make supply lines more streamlined, and make it easier to defend assets in the sea.
- Sweden's military, though numerically small, **is modern and experienced in past NATO missions.** Importantly, it has advanced aircraft and submarine capabilities.

Source: *IE*

PRADHAN MANTRI AWAS YOJANA-URBAN (PMAY-U)

Context

- More than 3,000 flats are likely to be allotted to slum dwellers by the Delhi Development Authority (DDA) under the PMAY-U.

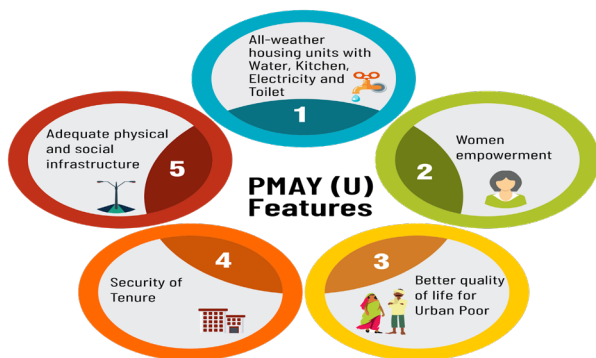
About PMAY-U

- The **Ministry of Housing and Urban Affairs (MoHUA)** launched the Pradhan Mantri Awas Yojana – Urban (PMAY-U) in **2015**, as a flagship Mission of the Government of India.
- **Objective:** It addresses urban housing shortage among the Economically Weaker Section (EWS)/ Low Income Group (LIG) category including the slum dwellers by ensuring a pucca house to eligible urban households.
- **Coverage:** The Mission covers the entire urban area consisting of Statutory Towns, Notified Planning Areas, Development Authorities, Special Area Development Authorities, Industrial Development Authorities or any such authority under State legislation which is entrusted with the functions of urban planning & regulations.
- **Implementation period:** The scheme was earlier from 25.06.2015 to 31.03.2022. Now it has been extended up to 31.12.2024, except Credit Linked Subsidy Scheme (CLSS) vertical, to complete all the houses sanctioned under the scheme.

Features

- PMAY-U adopts a demand-driven approach wherein the housing shortage is decided based on demand assessment by States/Union Territories (UTs).

- It is a **demand driven scheme** and Gol has not fixed any target for construction of houses.



Components of the scheme

- In-situ Slum Redevelopment (ISSR):** Central Assistance of Rs. 1 lakh per house is admissible for all houses built for eligible slum dwellers under the component of ISSR using land as a Resource with the participation of private developers.
- Credit Linked Subsidy Scheme (CLSS):** Beneficiaries are eligible for an interest subsidy of 6.5%, 4% and 3% on loan amounts up to Rs. 6 Lakh, Rs. 9 Lakh and Rs. 12 Lakh respectively.
- Affordable Housing in Partnership (AHP):** Under AHP, Central Assistance of Rs. 1.5 Lakh per EWS house is provided by the Government of India.
 - An affordable housing project can be a mix of houses for different categories but it will be eligible for Central Assistance, if at least 35% of the houses in the project are for the EWS category.
- Beneficiary-led Individual House Construction/ Enhancement (BLC-N/ BLC-E):** Central Assistance up to Rs. 1.5 lakh per EWS house is provided to eligible families belonging to EWS categories for individual house construction/ enhancement.
 - The Urban Local Bodies validate the information and building plan submitted by the beneficiary so that ownership of land and other details like economic status and eligibility can be ascertained.

Source: TH

CANNABIS COMPOUND HAVING ANTIBIOTIC EFFECTS

Context

- Scientists at **CSIR-Indian Institute of Integrative**

Medicine (IIM), Jammu, have found that **phytocannabinoids**, a class of compounds found in the cannabis plant, possess some hitherto unexplored **antibiotic properties**.

About the study

- The study specifically focused on **tetrahydrocannabinol (THCBD)**, a phytocannabinoid, and its efficacy against *Staphylococcus aureus*, a bacteria contributing to antibiotic resistance.
- THCBD demonstrated strong antibacterial effects against various resistant strains of **S. aureus**, including the **methicillin-resistant strain**.

Do you know?

- Cannabinoids are a **class of compounds found in the cannabis plant**.
- The **prefix 'phyto'** in phytocannabinoid means it comes from a **plant**.
- Cannabinoids bind to receptors in the bodies of animals to produce a variety of **neurological effects**.
- The researchers **extracted cannabidiol from a cannabis plant and made it react with hydrogen**, using palladium as a catalyst.
 - This process yielded a mixture of molecules with the same composition and order of atoms but different structures. One of them was **THCBD**.

Antimicrobial Resistance (AMR)

- It is a major health concern worldwide. It refers to when **bacteria, viruses, fungi, and parasites no longer respond to medicines used to treat them**.
- Bacteria have developed certain sophisticated 'shields'** to resist the effects of antibiotic medications over a period of time.
 - Biofilms:** Thin sheets of bacterial colonies that are more resistant to antibiotics than when separated.
 - Efflux pumps:** These are cellular mechanisms called efflux pumps that flush drugs out from cells.
- The resulting AMR **increases the risk of disease spread, severe illness, and death**.

Challenges and opportunities

- Legal hurdles:** Research related to cannabis comes up against legal constraints and the need to adhere to specific regulations when studying this plant.

- ♦ **Section 20 of the Narcotic Drugs and Psychotropic Substances Act 1985** restricts the use of cannabis and doesn't make exceptions for research.
- **Lack of ease of research:** Currently, many universities lack approval to conduct research on the plant. Hence, establishing a framework and transportation agreement is important.
- **Solubility challenge:** Solubility is an important consideration for a drug. Before active ingredients of antibiotics can be absorbed at a specific site in the body, the drug will need to dissolve in an aqueous solution. If it doesn't dissolve properly, the body won't be able to absorb it as intended.

Way Ahead

- Cannabis has the **potential to make a dent in India's fight against the escalating threat of antibiotic resistance.**
- Highlighting the **anti-bacterial nature of cannabis** will go a long way towards circumventing the taboo around it, and transform it into a valuable resource.
- Conducting a **comprehensive safety profile assessment**, to pave the way for its use as a drug.

Source: **TH**

VIJAY RAGHAVAN COMMITTEE

Context

- An expert committee spearheaded by the former principal scientific advisor, **Prof K Vijay Raghavan**, has recently recommended a **defence upgrade roadmap.**

About

- The **nine-member** VijayRaghavan panel was set up by the government in 2023 **to review the functioning of the Defence Research and Development Organisation (DRDO).**

Reasons for setting up of the committee

- The government's decision to review the functioning of DRDO comes **against the backdrop of several of its projects suffering from huge delays.**
 - ♦ **The Parliamentary Standing Committee on Defence**, in its report had expressed concerns that **23 of its 55 mission mode projects could not be completed in time.**

- A year before, in December 2022, **the Comptroller and Auditor General (CAG)**, in its report tabled in Parliament, had flagged that **119 (or 67%) of the 178 projects** scrutinized by it had failed to adhere to their initially proposed timelines.
 - ♦ The practice of seeking multiple extensions **defeats the very purpose of projects taken under Mission Mode category.**
- The CAG report had stated, adding these extensions were primarily sought due to factors like **persistent alterations in design specifications, delays in completing user trials, and in placing supply orders.**

Major suggestions made

- **More focus on R&D:** The DRDO should focus on its original goal of research and development for defence and **refrain from involving itself in productization, production cycles, and product management**, tasks that are more suitable for the private sector.
- **Concentrate on few sectors only:** There are numerous technologies that DRDO doesn't necessarily need to get into. It asked, why should DRDO engage in drone development?
- **Identify expertise:** There is a necessity to identify expertise within India and internationally for various technologies.
- **Creation of a separate department:** Under the Defence Ministry, the **Department of Defence Science, Technology, and Innovation** can be created.
 - ♦ This department is proposed to be **headed by a technocrat.**
 - ♦ It will **promote defence research and development** in the academic and start-up ecosystem and also **serve as the secretariat for the Defence Tech Council**, chaired by the Prime Minister.
- **Defence Tech Council:** The committee recommended a top level body called the **Defence Technology Council.**

Defence Technology Council

- **Chaired by:** Prime Minister of India, with the Defence Minister and the National Security Advisor as its **Vice Presidents.**
- **Mandate:** To determine the country's defence technology roadmap and decide on major projects and their execution, a

- **Executive committee:** Chaired by the Chief of Defence Staff.
 - ♦ The **Principal Scientific Advisor, along with the three service chiefs** and their **vice chiefs**, will also be its members.
- Furthermore, **it will include representation from academia and industry**, with two members from each sector.

Source: **IE**

RISING GAP IN INCOMES

Context

- According to a recent report by the State Bank of India (SBI), India has witnessed a significant fall in inequality over the last decade.

Key Findings

- The report claims that the Gini coefficient has fallen from **0.472 in 2014-15 to 0.402 in 2022-23**.
- The Gini coefficient falls for regular wage and casual wage workers, but rises for the self-employed. However, the changes are largely minimal.

The polarization of incomes

- The fall in the Gini coefficient is accompanied by a polarization in incomes. Incomes of the **top 10% have grown faster than the bottom 30%**, with polarization largely seen amongst self-employed workers.
- The category of the self-employed includes own-account workers, such as individual farmers, roadside hawkers, etc. and those who are self-employed but also employ other workers.

Gini Coefficient for different segments

- The Gini for the self-employed workers rises from **0.37 to 0.3765**, an increase of **1.5%**.
- For **regular and casual wage workers**, the coefficient register falls of **1.7% and 4.8%**, respectively.
- Though the Inequality has fallen, inequality among the top income earners seems to have fallen far more.

Table 1: Gini coefficients

	2017-18	2022-23
Overall	0.4297	0.4197
Self-employed	0.37077	0.3765
Regular wage workers	0.43947	0.43198
Casual wage workers	0.27619	0.263

Gini coefficient

- Gini coefficient is a gauge of **economic inequality**, measuring income distribution or wealth distribution among a population.
- The coefficient **ranges from 0 to 1**, with 0 representing perfect equality and 1 representing perfect inequality.

Concern

- The analysis is conducted on taxpayer data, and a majority of income-earners fall outside the tax net.
 - ♦ According to data from the 2022-23 Periodic Labour Force Survey (PLFS), nearly 80% of income-earners earn less than ₹2.5 lakh per annum — the minimum taxable amount.
- Only those individuals who earn income from work are considered in the report. It excludes those who work as unpaid family helpers, a large proportion of whom are women.

Source: **TH**

COAL GASIFICATION

Context:

- The Union Cabinet approves ₹8,500 crore **incentive scheme**, the **National Coal Gasification Mission**, for coal gasification projects.

About the National Coal Gasification Mission

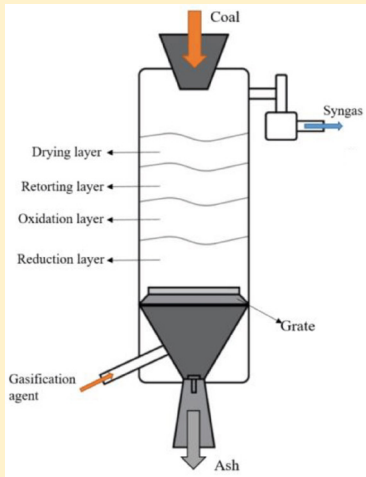
- It is an initiative by the **Union Ministry of Coal**, under the Atmanirbhar Bharat Abhiyaan.
- The mission **aims to utilise coal through coal gasification**, with the goal of achieving **100 MT coal gasification by 2030**, with investments worth over Rs 4 trillion.
 - ♦ It is expected **to reduce imports by 2030**.
- It envisions the **adoption of indigenous technologies** for the production of chemical products and their derivatives.
- It is expected to reduce the country's reliance on imports of natural gas, methanol, ammonia, and other essential products.

Significances

- **Efficiency and Environmental Impact:** Coal gasification is a cleaner option compared to burning coal.

- ♦ The SO_x and NO_x emissions are lower compared to regular combustion of coal in coal-fired boilers in thermal power plants.
- **Reduced Dependence on Imports:** The adoption of gasification technology in India will revolutionise the coal sector, reducing reliance on imports of natural gas, methanol, ammonia, and other essential products.
- **Economic Impact:** It holds the potential to alleviate the environmental burden by reducing carbon emissions and fostering sustainable practices, contributing to the country's global commitments towards a greener future.
- **Job Opportunities:** The adoption of coal gasification will contribute to job creation.

Coal Gasification



- It is a **thermo-chemical process** that converts coal primarily into carbon monoxide and hydrogen.
- Coal is **partially oxidised** by air, oxygen, steam, or carbon dioxide under **controlled conditions** to produce a liquid fuel, known as **syngas or synthesis gas, dimethyl ether, ammonium nitrate and methanol**, among others.
 - ♦ Synthetic natural gas can be used as a substitute for LPG and for electricity generation, while dimethyl ether is an alternative to be used in diesel engines.
 - ♦ Ammonium Nitrate can be used for explosives.

Concerns related to coal gasification

- **Environmental Impact:** Coal gasification **actually produces more carbon dioxide** than a conventional coal-powered thermal power plant.
 - ♦ According to the **Centre for Science and Environment (CSE)**, one unit of electricity generated by burning gasified coal generates 2.5 times more carbon dioxide than what would result when burning the coal directly.
- **Efficiency and Cost:** The **efficiency of conversion** in coal gasification is **low** because the process converts a relatively **high-quality energy source (coal) into a lower quality state (gas)**, consuming a lot of energy.
 - ♦ Moreover, coal gasification plants are costlier than conventional power plants.
- **Implementation Challenges:** There have been delays in the implementation of the latest carbon capture storage technology and the implementation of emission norms at coal-based thermal power stations.
- **Financial Viability:** The most advanced technology plants in India, such as **Mundra and Sassan in Gujarat**, are **struggling financially**, causing stakeholders to lose confidence in investing in cleaner and advanced technology.

Way forward

- **India needs to adopt new technologies and build digital infrastructure** to support the current and future requirements. There is a need to ensure **optimal use of technology** in the sector.
- **India's hydrogen demand is likely to increase to 11.7 million tonnes by 2030 from 6.7 million tonnes per year as of now.**
 - ♦ Refineries and fertiliser plants are **the largest consumers of hydrogen now**, which is being produced from natural gas.
 - ♦ It can be **produced through coal** in the processes during coal gasification.

Source: **ET**

NEWS IN SHORT

ZOMBIE VIRUS

Context:

- Scientists have warned that the **melting Arctic 'permafrost'** may start a **new disease outbreak** due to the **release of ancient viruses**.

Do you know?

- The **permafrost**, covering a fifth of the Northern Hemisphere, has acted as a *time capsule, preserving extinct creatures' remains, along with ancient viruses.*

About the Zombie Virus

- These viruses have been **preserved in the ground for thousands of years** in permafrost, live viruses demonstrating their **ability to infect single-celled organisms**.
 - One virus sample was found to be 48,500 years old.
- The risk is **heightened** due to the **escalating temperatures** caused by global warming, leading to the thawing of previously frozen ice.

Concerns

- The isolated viruses posed **no threat to humans** but pointed out the presence of **genomic traces of poxviruses and herpesviruses**, which are well-known **human pathogens**.

Source: **HT**

THREE-DRUG REGIMEN FOR TREATING LEPROSY

Context:

- The Central government has approved a **new treatment regimen for leprosy**, aiming to stop its transmission at the sub-national level **by 2027**.

Three-drug regimen

- The WHO has recommended this treatment regimen **in 2015**.
- It consists of three drugs — **dapsone, rifampicin and clofazimine**. The combination is referred to as **MDT** (multidrug therapy). MDT kills the pathogen and cures the patient.

- This regimen is known as **'Uniform MDT'**, where a **single three-pack kit** can be given to all leprosy patients. This measure facilitates ease of administration.
- The duration of treatment is **six months for PB** and **12 months for MB cases**.

Leprosy

- Leprosy, also known as **Hansen's disease**, is a chronic infectious disease caused by the slow-growing bacteria **Mycobacterium leprae bacteria**.
- It primarily affects the **skin and peripheral nerves**, leading to potential disabilities if left untreated.
- Leprosy is spread through **close and frequent contact** with untreated individuals, most commonly via **respiratory droplets** from the nose and mouth.
- Early symptoms often involve **pale, painless patches on the skin** that can lose sensation.
- Leprosy can be diagnosed through **skin smear tests**, nerve function tests, and biopsies.

Source: **TH**

OPERATION SARVASHAKTI

Context

- The Indian Army has launched **Operation Sarvashakti** in Jammu and Kashmir, deploying forces on both sides of the **Pir Panjal** range to target terrorists.

About

- The operation will focus on locating the terrorists' hideouts in the dense jungles, mountains and the caves.
- The **Chinar Corps** along with the Nagrota-headquartered **White Knight Corps** would be carrying out simultaneous operations.
- The operation is reminiscent of **Operation Sarpvishay**, which was launched in 2003 to eliminate terrorists from the same area.

Why is this area important strategically?

- The areas south of Mendhar leading to the Pir Panjal range through Hilkaka constitute among the shortest routes of access for infiltrators from across the LoC into the Kashmir valley.

- The dense forests and steep mountain slopes offer both adequate cover and visual domination of the area.

Pir Panjal range

- The Pir Panjal Range is a chain of mountains in the **Lesser Himalayan** region located in the Indian subcontinent.
- It extends between **Beas and Kishanganga rivers**, from Himachal Pradesh to Jammu and Kashmir.
- Passes:** Pir Panjal Pass, Banihal pass, Sinthan pass, Saach Pass, Rohtang La.
- The Pir Panjal Pass connects the Kashmir valley with Rajouri and Poonch via the Mughal Road.

Source: *IE*

BALTIC SEA

In News

- Russia blamed Kyiv for attack on gas terminal at Baltic Sea port



Baltic Sea

- The Baltic Sea is an **arm of the North Atlantic Ocean**. It is bound by the **Scandinavian Peninsula**, the mainland of Northern Europe, Eastern Europe and Central Europe, and the Danish islands.
- Surrounded by countries:** Denmark, Germany, Poland, Lithuania, Latvia, Estonia, Russia, Finland and Sweden.
- It is connected to St. Petersburg by the Gulf of Finland.
 - The Gulf of Riga is located between Estonia and Latvia.

Source: *TH*

