

Prime Minister of India Slams Pakistan on Use of Proxy War against India

PM also highlighted that use of terrorism by Pakistan against India is not merely a proxy war now but a direct war with India.

- ▶ Pakistan uses proxy warfare against India by **funding, training, and arming militant groups like LeT and JeM** to destabilize Jammu and Kashmir.

What is a proxy war?

- ▶ It is a conflict fought by one or more states that do not themselves become directly involved but **support non-state actors (e.g., militants, spies)** against other states.
 - ⊕ It is a **subset of Hybrid Warfare** that combines **conventional military tactics with unconventional methods**, often including **cyber warfare, terrorism (proxy war)**, etc.
- ▶ **Tools:** Military aid and training non-state actors, economic assistance, intelligence sharing, non-kinetic measures (e.g., disinformation), cyber tools etc.
- ▶ **Impact on India:**
 - ⊕ **Challenge to sovereignty:** E.g. Pakistan's support to **insurgency in Jammu and Kashmir**.
 - ⊕ **Violence and loss of life:** E.g. China's indirect backing of **militant groups in Northeastern states**, causing significant civilian and military casualties.
 - ⊕ **Economic Burden:** Due to Higher spending on **security, strained social infrastructure**.

Steps Taken by India

- ▶ **New 3 Pillared Security Doctrine:** Announced recently by Prime Minister which includes treating proxy war as direct war against India.
- ▶ **Modernizing Border Management:** E.g. **Comprehensive Integrated Border Management System (CIBMS)**, which includes smart fencing, thermal imaging, and motion sensors along the LoC.
- ▶ **Strengthening Cyber Security:** E.g. Establishing Cert-in and NTRO
- ▶ **International:** E.g. Use of **UNSC's 1267 committee** to sanction Pakistan based terrorists.

Reasons Behind Proxy War

- ▶ **Plausible Deniability:** Evading direct blame and international consequences.
- ▶ **Strategic Depth:** To **gather intelligence** and **influence events** remotely without direct involvement, e.g. Using **sleeper cells (OGWs)** and **social media influencers** as seen recently.
- ▶ **Cost Avoidance:** **Minimizing own casualties** and **low investment in militants** while increasing adversaries' war costs, e.g., Pakistan's **"thousand cuts" strategy** against India.





PRADHAN MANTRI KISAN SAMPADA YOJANA (PMKSY) revised operational guidelines for Cold Chain scheme

Ministry of Food Processing Industries (MoFPI) has been implementing the umbrella scheme since 2016-17 (refer to the infographic)

About Integrated Cold Chain and Value Addition Infrastructure

- ▶ **Objective**
 - ⊕ Build a **seamless cold chain and value addition infrastructure from farm to consumer**.
 - ⊕ **Reduce post-harvest losses of non-horticulture produce**, dairy, meat, poultry, and marine/ fish (except shrimp).
 - ⊕ Link farmers with processors and markets, **ensuring fair prices for farmers** and **year-round food** availability for consumers
- ▶ **Key Components**
 - ⊕ **Farm Level Infrastructure (FLI)**
 - ⊕ **Processing Centre (Mandatory)**
 - ⊕ **Distribution Hub**
 - ⊕ **Transport** (Refrigerated vans / refrigerated trucks / insulated vans / mobile insulated tankers).
- ▶ **Eligible Entities:** Individuals, PSUs (Central/State), NGOs, Cooperatives, SHGs, FPOs, LLPs, etc.
- ▶ **Grants-in-aid/Subsidy:**
 - ⊕ **35% of the eligible project cost** for projects in the **General Areas**
 - ⊕ **50% of the eligible project cost** for projects in **Difficult Areas**, and for projects of **SC/ST, FPOs and SHGs**, subject to a **maximum of Rs. 10 crore per project**.

About PMKSY

-  **Type:** Central Sector Umbrella Scheme
-  **Purpose:** Post-harvest infrastructure, processing facilities, reduce losses, and boost the food processing sector
-  **Funding:** Demand-driven, no state/crop-specific financing
-  **Tenure:** 2021-22 to 2025-26
- Operational Components:**
 - Integrated Cold Chain & Value Addition Infrastructure
 - Agro Processing Clusters
 - Food Processing & Preservation Capacities
 - Operation Greens

Conclusion

The **UNEP's Food Waste Index Report 2024** shows that in 2022, **20% of all food was wasted globally**. India ranked **second** in food waste after China, with **10%-12% of its municipal waste being food waste**, contributing to methane emissions. The Scheme offers a promising solution to these alarming issues.

Defence Minister Approves Fifth-Generation Fighter Jet Execution Model Through Industry Tie-Up

Under the approved model **HAL will compete with private industry** to manufacture the indigenous 5th generation fighter jet aircraft named Advanced Medium Combat Aircraft (AMCA).

- Currently **only the US (F-22 and F-35), Russia (Sukhoi Su-57), and China (Chengdu J-20) have developed** operational fifth generation aircraft.

AMCA Programme Overview: Indigenous Generation Fighters Aircraft

- **Background:** Received approval from the Cabinet Committee on Security (CCS) in **2024**.
 - ⊕ CCS is headed by the Prime Minister and typically comprises the **Home Minister, Defence Minister, Finance Minister and External Affairs Minister** as members.
- **Lead Agency:** Aeronautical Development Agency (ADA) under DRDO.
- **Core Capabilities:** Supercruise, internal weapons bays, sensor fusion, AI-driven avionics, radar-absorbing structures.
- **Timeline:** Prototype expected by 2028-29; induction targeted by 2034
- **Variants:** AMCA Mk1 with GE-F414 engines; Mk2 planned with indigenous engines.

Key Features of 5th Generation Fighters

- **Twin-engine powered:** A twin-engine platform provides higher level of air safety and survivability in the event of failure of one engine especially at night.
- **Stealth Capabilities:** They have **Low-Probability-of-Intercept Radar (LPIR)** and are harder to detect by enemy radar.
- **Agile Airframes with Supercruise:** High maneuverability and the ability to fly at supersonic speeds without afterburners.
- **Advanced Avionics:** High-tech electronic communication, targeting, and control systems.
- **Integrated Computer Systems:** Enables networking with other systems, giving pilots a 360-degree battlefield view without maneuvering.

Strategic Importance & Regional Relevance of Indigenous 5th Generation Aircraft

- **IAF Modernisation:** Fills critical capability gap post-MiG-29/Mirage phaseout, helps restore IAF's depleted squadron strength (31 vs. approved 42).
- **Regional Threat Dynamics:** Counters China's J-20 and Pakistan's J-10C (procured from China) deployments.
- **Technological Sovereignty:** Reduces dependency on foreign platforms, enhances long-term defence autonomy through Make in India.

India's First Gene-Edited Sheep Produced By Researchers From Kashmir University In Collaboration With ICAR

Following the release of India's first gene-edited rice variety recently, India's first gene-edited sheep was developed using **CRISPR-Cas9 technology**.

- CRISPR-Cas9 works on a **cut-and-paste mechanism for DNA Strands**.
 - ⊕ The **2020 Nobel Prize for Chemistry** was awarded for their discovery.

About the research

- **Myostatin gene** in a lamb was edited boosting muscle growth by **30%** (a trait found in some European breeds, such as the Texel, but absent in Indian breeds).
- **No foreign DNA** was added, making it **different from transgenic animals**.
 - ⊕ Thus, this technique makes the process efficient, safe, and potentially acceptable to both regulators and consumers.
- Earlier the **National Dairy Research Institute (NDRI)** had developed a **gene-edited buffalo embryo**.

Ethical Concerns in Gene Editing Animals

- Editing traits like intelligence, sex, or appearance may lead to **the creation of designer babies**, potentially creating a divide between the wealthy and others.
- It risks **eugenics**, promoting the idea of "improving" humans and increasing discrimination.
- Gene editing may cause **off-target effects** and **mosaicism**, which refers to mixed changes in cells.
- There are **unknown risks**, such as new diseases or ecosystem damage.
- **Animal welfare** is a concern, as creating genetically edited animals often involves **sacrificing some animals** and performing **surgical procedures**.

The **International Bioethics Committee** of UNESCO explores the ethical implications of genome editing.

What is Gene Editing

Unlocking the Code of Life

Gene Editing = Precise modification of an organism's DNA

- Purpose: Add | Remove | Alter genes
- Enable targeted changes in genetic makeup

Tools Used: CRISPR-Cas9, TALENs, Zinc Finger Nucleases

A. Somatic Cell Editing (Non-Heritable)



Targets Body cells (eg., skin, liver)

- **Affects:** Only the treated person
- **Changes** don't pass to offspring
 - Used for Treating cancers Genetic disorders like sickle cell anemia

B. Germline Cell Editing (Heritable)



- **Affects:** Every cell of the resulting individual
- **Changes are inherited by future generations**
 - Used for: Preventing inherited diseases (experimental stage)

	Somatic Editing	Germline Editing
Cell Type	Body (non-reproductive) cells	Reproductive cells or embryo
Heritability	Not heritable	Heritable
Scope of impact	Localized (specific organs)	Whole organism & descendants
Ethical Concerns	Fewer	High
Clinical Use	Active in trials	Mostly restricted/experimental

Why It Matters: Gene editing holds immense promise—from curing diseases to improving agriculture. But ethics and safety must guide

France's National Assembly Adopts Bill Legalizing Assisted Dying

Bill allows **adults with incurable illness to take lethal medication**, as public demands grow across Europe for legal end-of-life options.

- The proposed measure on **lethal medication** introduces a framework for **assisted dying** under specific conditions.

What is Assisted Dying?

- Assisted dying can take two forms: **Euthanasia or Assisted suicide**.
 - ⊕ **Euthanasia**: A third party actively ends a patient's life to relieve suffering; called voluntary euthanasia if done with the patient's consent.
 - ◆ **Active Euthanasia**: A deliberate act (E.g. **lethal injection**) by a medical professional or another person that directly causes a patient's death.
 - ◆ **Passive Euthanasia**: Letting a patient die by **withholding or withdrawing life-sustaining treatment** (E.g. switching off a ventilator, not administering life-extending drugs).
 - ⊕ **Assisted Suicide**: Medical practitioner will prescribe a lethal drug which patients take themselves in order to die.

Ethical issues involved in Assisted Dying

- **Risk of Coercion**: Fear of pressure on the non-terminally ill or disabled to opt for euthanasia.
- **Allegations of Malpractice**: Eg. Countries like Netherlands and Belgium have investigated cases (psychiatric patients especially).
- **Sanctity of Life**: Devalues human life as taking life is inherently wrong and immoral.
- **Against medical ethics**: of nursing, care giving and healing

Legal Status of Euthanasia/Right to die in India:

- Currently, there is **no law on Euthanasia**.
- Only **passive Euthanasia** is allowed in India by the Supreme Court (SC).
- **Important Judicial Pronouncements**:
 - ⊕ **Common Cause vs. Union of India & Anr. (2018) case**: Recognized right to die with dignity as a **fundamental right under Article 21** and upheld legal validity of passive euthanasia.
 - ⊕ **Aruna Shanbaug v. Union of India (2011)**: Permitted passive euthanasia in cases of patients in a permanent vegetative state.
 - ◆ Required **High Court approval under Article 226**.

Government successfully auctioned potash & Halite Mining blocks for the first time

India successfully auctioned **10 out of 15 critical mineral blocks** in its fifth tranche.

- Auction achieved a historic first step by successfully auctioning **potash and halite blocks** aimed at **reducing fertilizer imports and boosting agriculture self-reliance**.
 - ⊕ Mining will begin in **Rajasthan at Jhandawali-Satipura & Jorkian-Satipura- Khunja** Amalgamated Potash & Halite Blocks.
- This also marked the **first-ever successful auction** of a **critical & strategic mineral block in Rajasthan**.

About Potash

- **Definition**: Potash is the general name given to various inorganic compounds that contain **potassium in a water-soluble form**.
 - ⊕ It is an impure **combination of potassium carbonate & potassium (K) salts**.
- **Principal ore**: Sylvinite (A mixture of sylvite (KCl) and halite (NaCl)).
- **Occurrence**: Major part (91%) is located in Nagaur district of Rajasthan, followed by Panna district, Madhya Pradesh (5%) and in Sonbhadra & Chitrakoot districts, Uttar Pradesh (4%).
- **Import**: India meets 100% of its Potash requirement through imports (**Indian Mineral yearbook 2022**).

Usage

- **Agriculture**: Potash as fertilizer improves **crop yield, disease resistance, texture, color, nutrient value, and taste**.
- **Purification of water**: Potash alum **removes hardness of water** & has anti-bacterial properties.
- **Others**: Manufacturing of glass, ceramics, soap & detergent, dye, synthetic rubber and chemicals.
 - ⊕ **Potassium nitrate** is used in **explosive manufacture**.

About Halite

- Halite, commonly known as table salt or rock salt, is composed of sodium chloride (NaCl).
 - ⊕ It is a **sedimentary mineral** that usually forms in arid climates where **ocean water evaporates**.
- **Usage**: Halite is widely used in **road safety (De-icer in winter)**, **chemical industry** (mainly for the preparation of sodium hydroxide, soda ash, hydrochloric acid, chlorine and metallic sodium), **water softening, etc.**

Also In News



National Skill Development Corporation (NSDC)

Board of Directors of NSDC has **terminated the services** of its **Chief Executive Officer**.

About NSDC

- **Established**: In 2008, as a **not-for-profit public limited company** under section 25 of the **Companies Act, 1956** (now corresponding to **section 8 of the Companies Act, 2013**).
- **Objective**: To catalyse the **skilling ecosystem** for private sector participation and be knowledge partner to Skill India Mission to build efficient vocational training initiatives, empowering India's youth.
- **Ministry**: It operates as a unique **Public Private Partnership (PPP) model** under the **Ministry of Skill Development & Entrepreneurship (MSDE)**.
 - ⊕ It has **49% of the share capital held by the government and 51% by the private sector**.



Emblems and Names (Prevention of Improper Use) Act, 1950

Recently, the Supreme Court dismissed a plea with respect to honoring legacy of a freedom fighter under **Emblems and Names (Prevention of Improper Use) Act, 1950**.

About Emblems Act:

- It aims to **safeguard national symbols** like the **Indian National Flag, the State Emblem, seal of President or Governor, names or pictorial representations of national figures** (like Mahatma Gandhi), etc. from any misuse or commercial use.
- **Defines Emblems**: "emblem" means any emblem, seal, flag, insignia, coat-of-arms or pictorial representation specified in act;
- **Application**: It extends to the whole of India and also applies to citizens of India outside India.
- **Penalty**: Violation is punishable with fine which may extend to five hundred rupees.



Remission of Duties and Taxes on Export Products (RoDTEP)

Government restored the **RoDTEP scheme** for exporters done by **Advance Authorization (AA) holders**, **Export-Oriented Units (EOUs)**, and units in **Special Economic Zones (SEZs)**.

About RoDTEP Scheme:

- **Introduced:** In 2021.
- **Ministry:** Ministry of **Commerce and Industry**.
 - ⊕ It replaced the existing **MEIS (Merchandise Exports from India Scheme)**.
- **Objective:** To reimburse exporters for any **embedded duties, taxes, or levies** that are not otherwise reimbursed under any other existing scheme.
 - ⊕ So to make **Indian exports more competitive**.
- It is compliant with **World Trade Organization (WTO) norms**.
- The scheme ensures that the **taxes, duties, and levies at the central, state and local levels on the exported products are refunded**.



FCRA (Foreign Contribution Regulation Act), 2010

Centre amended the FCRA and henceforth, NGOs engaged in publication-related activities and receiving foreign contributions will

- not be able to publish any newsletter and
- must get a certificate from the Registrar of Newspapers for India that it does not circulate any news content.

About FCRA

- **Nodal Ministry:** Ministry of **Home Affairs**
- **About registration:** a mandatory certification for organisations in India, enabling them to receive foreign contributions legally.
- **Applicability:**
 - ⊕ FCRA, 2010 regulates acceptance and utilisation of foreign contributions by person in India wearing person include
 - ◆ an individual;
 - ◆ a Hindu undivided family;
 - ◆ an association; and
 - ◆ a company registered under section 25 of the Companies Act, 1956
 - ⊕ However, contributions made by **Non-Resident Indian**, from his **personal savings**, through the normal banking channels, is **not treated as foreign contribution**.



Green Line

Due to the ongoing Israel-Gaza war, the issue around the **Green Line** has come up again.

About Green Line

- The **Green Line** is the **1949 ceasefire boundary**, marking the separation between **Israel** and the **West Bank**.
- It was **delineated in the armistice agreements** that formally ended the war between Israel and Arab armies.
- The lines creating the boundaries of what became known as the **Gaza Strip (occupied by Egypt)** and **East Jerusalem and the West Bank (occupied by Jordan)**
 - ⊕ However, As the the surrounding Arab states refused to recognise Israel, **meaning its borders remained unset**.



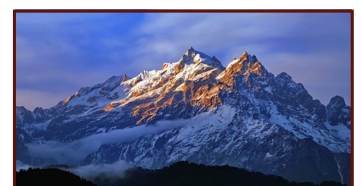
Mt. Khangchendzonga

Chief Minister of Sikkim has requested the Centre to **ban climbing** on Mt. Khangchendzonga.

- The peak is **sacred** to locals, who believe their guardian deity **Dzonga** lives there.

About Mt. Khangchendzonga

- **Location:** Sikkim, on the **India-Nepal border**, Eastern Himalaya.
- **Height:** 8,586 meters i.e. the **3rd highest peak** in the world (after Everest and K2)
- Harbours **Khangchendzonga National Park** (UNESCO World Heritage Site).
- **Rivers:** Tamur (West), Lhonak (North), Teesta (East).



Zangezur Corridor

Recently, the Zangezur Corridor was in the news as it can potentially challenge India's strategic interests in West and Central Asia.

About Zangezur Corridor

- **Location:** It is a proposed **43-kilometer transport route** through **Armenia's Syunik Province**.
- **Objective:** Connecting **Azerbaijan's Baku Port** in **Caspian Sea** to the **Nakhchivan Autonomous Region**, a western exclave of Azerbaijan separated by Armenian territory, and further to **Turkey**.
- **India's concerns:** It can undermine India's investments in **Chabahar Port** and **International North South Corridor (INSTC)** by offering a competing pathway, reducing India's regional leverage.



Stingless Bees

Two varieties of stingless bees (*Etragonula iridipennis* and *Lepidotrigona arcifera*) native to Nagaland have been found to be beneficial to farmers.

About Stingless Bees

- **Distribution:** India, Southeast Asia, Africa, Australia, and South America etc.
- **Physical characteristics**
 - ⊕ **Size:** Generally smaller while honeybees are larger.
 - ⊕ **Colour:** Usually **black**, whereas honeybees are **light brown with gold or yellow bands**.
 - ⊕ Can't sting because their stinger is **vestigial (non-functional)**.
 - ⊕ **Honey Production:** It produces **less honey overall**, but **more honey per individual bee** compared to honeybees.
- **Beaviour:** Queens mate with a single drone from another colony. Colonies are formed by worker bees and a single mated queen.
- **Hive structure:** Individual hexagonal cells are arranged in a spiral or randomly
- **Significance:** Stingless bees not only **enhance crop pollination** but also **produce high-quality medicinal honey**.



Dugong

Once abundant in Indian waters, Dugong population has now reduced to about 200.

About Dugong (Sea Cow)

- **Features**
 - ⊕ **Only marine herbivorous mammal** that depends on seagrass.
 - ⊕ **slow growing** and can live for a long time.
- **Distribution:** Highest number is found in **Australia**.
 - ⊕ India: **Palk Bay (highest)**, **Gulf of Mannar**, **Gulf of Kutch**, and **Andaman & Nicobar Islands**.
- **Threat:** **Habitat loss**
- **IUCN Redlist status:** **Vulnerable**
- **Conservation measures**
 - ⊕ Listed in **Appendix II** of the CMS Convention
 - ◆ India is a signatory to the **UNEP/CMS Dugong MoU**.
 - ⊕ Listed in **Schedule I** of the **Wild Life (Protection) Act, 1972**.
 - ⊕ **Part of India's Endangered Species Recovery Programme**
 - ⊕ **First Dugong Conservation Reserve** set up at **Palk Bay, Tamil Nadu**.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI