

PRELIMS

Economy

Pradhan Mantri Kaushal Vikas Yojana (PMKVY)

Context

Parliament's Public Accounts Committee (PAC), pulled up the government over PMKVY, citing the CAG audit report which highlighted serious implementation gaps.

About PMKVY

- Nodal Ministry:** Ministry of Skill Development and Entrepreneurship (MSDE)
- Objective:** To provide free short-duration training, certify skills through Recognition of Prior Learning (RPL), and enhance youth employability across India.
- Training Delivery:** Through approved Training Centres under a standard quality framework aligned with the National Skills Qualification Framework (NSQF).

Key Concerns Raised by PAC

- Demand-Supply Mismatch:** Apparel, Electronics, and Retail = 40% of trainees; Food Processing = 0.48%; Tourism = 3.8%.
- Poor Placement Record:** Only 41% of trainees placed post-training.
- Fraudulent Certifications**
- No course-correction** despite scheme running since 2015.

- NSQF (National Skills Qualification Framework):** A nationally integrated education and competency-based framework that organises qualifications according to a series of levels of knowledge, skills and aptitude. Levels range from 1 to 10, enabling learners to progress to higher levels through formal, non-formal, or informal learning.
- Public Accounts Committee (PAC)**
 - Oldest** parliamentary financial committee, in existence since **1921**.
 - Composition:** 22 members — 15 from Lok Sabha, 7 from Rajya Sabha; **Tenure: 1 year**.
 - Chairman:** By convention, from the **Opposition**.
 - Examines** CAG's Audit Reports on Union Government accounts.
 - Checks Excess Grants** — expenditure beyond Parliament-approved limits.
 - Ensures** money was spent only for the purpose for which it was voted.
 - Can summon** Secretaries and senior government officials for questioning.
 - Issues **Action Taken Reports (ATRs):** government must formally respond to PAC findings.

ATF Price Stabilisation Fund

Context

The Union Cabinet has approved a one-time budgetary support to Oil Marketing Companies (OMCs) for creating an Aviation Turbine Fuel (ATF) Price Stabilisation Fund

About ATF Price Stabilisation Fund

- Aim:** To stabilise Aviation Turbine Fuel (ATF) prices during periods of extreme volatility in global crude oil markets and to ensure uninterrupted airline operations and protect passengers from steep airfare hikes.
- Key Features**
 - Funding:** ₹10,000 Crore one-time budgetary support

- **Interest-Free Advances:** Fund will be provided to OMCs in the form of interest-free advances.
- **Revolving Fund Mechanism:** Once international ATF prices moderate, the differential amount will be recovered from OMCs and returned to the government.
- **Implementation:** MoU-Based Implementation through an agreement between OMCs and participating airlines.
- **Conditional Procurement:** Participating airlines must procure ATF only from OMCs for up to 3 years, or until the advance amount is fully recovered.
- **Coverage:** Applicable to scheduled airlines operating domestic flights and International flights

Real effective exchange rate

Context

The Real Effective Exchange Rate of rupee fell to 90.96 in April 2026 which is lowest since Sept 2013.

About REER

- Defined as a weighted average of nominal exchange rates adjusted for relative price differential between the domestic and foreign countries, related to the purchasing power parity (PPP) hypothesis.
- Typically measured against a baseline of 100. This baseline dictates whether a currency is overvalued, undervalued, or in equilibrium:
 - **Equilibrium (~100):** A REER hovering around 100 indicates fair value. Demand and supply are balanced, and domestic prices are roughly on par with international competitors.
 - **Overvaluation (> 100):** When the REER rises above 100, the currency has become more expensive in real, inflation-adjusted terms compared to its trading partners.

- **Undervaluation (< 100):** When the REER falls below 100, the currency is weaker in real terms, meaning domestic goods are cheaper globally than those from competing nations.

Navachar Mantra

Context

The Ministry of Skill Development and Entrepreneurship (MSDE) launched 'Navachar Mantra'.

About Navachar Mantra

- **Nodal Ministry:** Ministry of Skill Development and Entrepreneurship (MSDE)
- **Aim:** to identify, nurture, and scale grassroots innovators and early-stage entrepreneurs.
- **Implementing Partners:** Executed by the National Institute for Entrepreneurship and Small Business Development (NIESBUD) alongside FITT, IIT Delhi.
- **Target Geographies:** Focuses on creating growth pathways for innovators from Tier-2/3 towns, aspirational districts, and underserved regions.
- **Industry & Investor Access:** Provides direct access to policymakers, investors, and industry leaders to refine business models and accelerate enterprise growth.

Mission Senehjori

Context

The Ministry of Development of North-East Region launched **Mission "Senehjori" – Assam Muga Silk USP**, a comprehensive cluster-based initiative to transform Assam's Muga silk sector into a globally competitive luxury textile ecosystem.

Key features of Mission Senehjori

- **GI Authentication:** enforce traceability; prevent adulteration of genuine Muga silk
- **Digital Traceability:** farm-to-market tracking for producer households

- **FPOs & CFCs:** Farmer Producer Organisations and Common Facility Centres to strengthen producer collectives
- **Branding:** unified global brand identity under "Senehjori"
- **Export Promotion:** target premium domestic and international luxury markets
- **Silk Tourism:** Muga Silk Trail, Silk Tourism Park, annual **Muga Utsav** festivals
- **Host Plant Ecology:** regeneration of Som and Soalu plantations for silkworm sustenance
- **Targets**
 - Establish **5 modernised Muga reeling units** and a Muga Spun Mill
 - Create **30 FPOs** and over **1,180 Farmer Interest Groups**
 - Regenerate **5,000 hectares** of Som and Soalu plants
 - Authenticate **80%+** of traded Muga silk through **GI-linked systems**
 - Create digital traceability for **8,000+ households**
 - Expand Muga silk exports to **2,000+ kg annually**

About Muga silk

Feature	Details
Type	Naturally golden-coloured silk
Uniqueness	World's only naturally golden silks
GI Status	India's first silk to receive a Geographical Indication (GI) tag
Production Hub	Assam produces nearly 90% of the world's Muga silk
Host Plants	Silkworms feed primarily on Som and Soalu plants
Livelihood Support	Sustains around 2.6 lakh rearer and weaver families

Khet Bachao Abhiyan

Context

The **Union Ministry of Agriculture and Farmers Welfare** will conduct the month-long '**Khet Bachao Abhiyan**' from **1–30 June 2026** across the country.

Key Features

- **Balanced Fertilizer Use:** Encourages fertilizer application based on soil testing, Integrated Nutrient Management (INM), and greater use of organic, bio-, and green manure inputs.
- **Climate-Smart Farm Advisories:** Farmers receive practical guidance on crop choices, diversification, water-scarcity management, and weather-related risks.
- **Massive Institutional Participation:** Implemented jointly by Panchayats, Krishi Vigyan Kendras (KVKs), ICAR institutes, State Governments, and Agriculture Departments.
- **Panchayat-Centric Approach:** Focuses on village-level implementation with active participation of local institutions and community leaders.
- **Scheme Convergence:** Integrates benefits of PM-KISAN, Kisan Credit Card, Pulses-Oilseeds Mission, Oil Palm Mission, Cotton Mission, mechanization support, and water conservation initiatives.

Zero Coupon Zero Principal Instrument

Context

Recently, the Ministry of Corporate Affairs (MCA) has allowed companies to deploy a portion of their Corporate Social Responsibility (CSR) spending through Zero Coupon Zero Principal (ZCZP) instruments.

About Zero Coupon Zero Principal Instrument

- It is a financial instrument issued by a not-for-profit organization which carries neither interest payments nor repayment of principal.
- These financial instruments allow non-profit organizations (NPOs) to raise funds that are listed on the social stock exchange.

- This instrument effectively makes it a philanthropic funding mechanism routed through a market framework.
- ZCZP instruments from NPOs are designated for specific projects or activities and must be completed within the timeframe outlined in the fundraising documents.
- This instrument shall be issued in dematerialized form only.
- It shall not be transferable from the original subscriber/ holder till the expiry of the tenure of the said instrument.

India's Maritime Digital Reforms

Context

The Union Minister launched the **Logistics Port Performance Index (LPPI) for FY 2024-25** alongside four major digital governance platforms during the 37th Foundation Day of the **Jawaharlal Nehru Port Authority (JNPA)**.

Core Initiatives Launched

Logistics Port Performance Index (LPPI)

- **Framework:** Developed under the national Sagar Aankalan framework and aligned with the PM Gati Shakti Master Plan.
- **Function:** Benchmarks ports across three cargo verticals: Dry Bulk, Liquid Bulk, and Container Cargo.
- **Metrics:** Evaluates real-time performance using operational indicators like vessel turnaround time, berth idle time, pre-berthing waiting time, and ship berth day output. It balances absolute performance with year-on-year improvement metrics.

24x7 e-Navik Grievance Redressal Module

- **Function:** A dedicated global welfare interface for Indian seafarers operating under high-stress conditions far from home.
- **Features:** Allows seafarers to log grievances from anywhere in the world across multi-channel streams, including the e-Navik

portal, WhatsApp, dedicated emails, and international toll-free helplines.

e-Samudra Ship Registration Module

- **Function:** A major flagging reform that fully digitizes and streamlines the complex paperwork required to register commercial vessels under the Indian flag.
- **Features:** Eliminates administrative delays, matching the ease-of-business standards maintained by top global open-registry maritime nations.

Medical Practitioner Module

- **Function:** A regulatory digital portal to securely manage, register, and verify medical professionals authorized to issue fitness certificates to maritime crews.
- **Features:** Acts as a centralized database that mitigates the risk of fraudulent health certifications, ensuring only medically fit personnel board vessels.

UnifiedShip Recycling Portal (Credit Note Module)

- **Function:** Operationalizes the government's ₹70,000-crore maritime development package to boost indigenous shipbuilding.
- **Features:** Shipowners who recycle their aging vessels at Hong Kong Convention-compliant Indian yards automatically receive a digital credit note worth 40% of the ship's scrap value, which can be directly redeemed against new shipbuilding projects within India.

Environment

Jai Prakash Narayan Bird Sanctuary- India's 100th Ramsar Site

Context

The Jai Prakash Narayan Bird Sanctuary has been designated as India's 100th Ramsar Site

About Jai Prakash Narayan Bird Sanctuary (Surha Tal)

1. **Location:** Ballia district, Uttar Pradesh, middle stretch of Ganga River Basin
2. **Type:** Freshwater; originally formed from meander of Ganga and receives freshwater inflow from three channels.
3. **Significance:** Exceptionally rich in avifaunal biodiversity, attracting numerous migratory and resident birds.

1. A **Ramsar site** is a wetland designated to be of international importance under the Ramsar Convention, an international environmental treaty signed on 2 February 1971 in Ramsar, Iran, under the auspices of UNESCO.
2. Globally, there are nearly **2,595 Ramsar sites**.
3. India has the **highest number of such wetlands in Asia** and **third highest in the world** after the UK (176) and Mexico (144).

Blue Bond

Context

Sagarmala Finance Corporation, a state-owned NBFC under the Ministry of Ports, Shipping and Waterways, has announced plans to issue India's first Blue Bond.

About Blue Bond

- A **Blue Bond** is a **debt instrument** that raises funds specifically for projects linked to: Oceans, seas, and coasts, Rivers and inland waterways, Water-based ecosystems.
- It targets investors interested in **sustainable and environmentally focused finance**.

Blue Bond Vs Green Bond

Parameter	Green Bond	Blue Bond
Focus	Broad climate and environmental projects	Ocean, marine, and water-specific projects
Scope	Renewable energy, afforestation, clean transport, waste management, etc.	Sustainable fisheries, ports, coastal resilience, waterways, marine conservation, etc.
Specificity	Wider environmental focus	Narrower, exclusively water-centric focus
Objective	Promote overall environmental sustainability and climate action	Support sustainable use and conservation of aquatic and marine resources

Significance of Blue Bonds

- Attracts **global sustainable finance** (ESG investors)
- Reduces pressure on **budgetary resources**
- Supports **coastal communities and livelihoods**
- Balances **maritime infrastructure growth** with **marine conservation**

Global Precedents

- **2018 – Seychelles:** Issued the **world's first sovereign Blue Bond**, raising funds for sustainable fisheries and marine conservation.
- **2021 – Belize:** Implemented a landmark **debt-for-ocean swap**, restructuring sovereign debt in exchange for long-term marine conservation commitments.

Yellow-Throated Marten

Context

Kaziranga National Park recorded the first-ever sighting of the Yellow-Throated Marten within its boundaries, adding to the park's rich biodiversity documentation.

About Yellow-Throated Marten

- **Family:** Mustelidae (same as otters, badgers, wolverines, weasels)
- **Habitat:** Dense forests- tropical, subtropical and temperate; highly arboreal (tree-dwelling)
- **Distribution:** South Asia, Southeast Asia, East Asia, Russian Far East, India: Northeast India, Western Ghats, Himalayas, Andaman Islands
- **Key Features**
- **Size:** Largest marten in the Old World
- **Distinctive Feature:** Bright **yellow/golden throat and chest patch**; gives it the name
- **Body:** Slender, long-bodied; dark brown back with yellow underparts
- **Tail:** Long and bushy- used for balance in trees
- **Diet:** Omnivore-small mammals, birds, eggs, fruits, honey, insects; known to hunt deer fawns in packs
- **Hunting Style:** Diurnal (active during day), unusual among mustelids
- **Social:** Often seen in pairs or small groups, rare among mustelids
- **Locomotion:** Excellent climber; moves swiftly through forest canopy
- **Conservation status**
 - **IUCN Red List:** Least Concern
 - **CITES:** Appendix III
 - **Wildlife Protection Act, 1972:** Schedule II

MAHA Water Mission

Context

The Union Minister **Dr. Jitendra Singh** and Jal Shakti Minister launched the ₹200-crore MAHA

Water Mission, to accelerate innovation in the water sector.

Organisations Involved:

- **Anusandhan National Research Foundation (ANRF):** The primary body for democratizing and streamlining research funding in India.



- **Ministry of Jal Shakti:** The nodal ministry for water resources, river development, and Ganga rejuvenation.
- **Department of Space/ISRO:** Providing satellite technologies and geospatial data for water mapping and assessment.

Key Features

- **Financial Support:** A projected outlay of ₹200 crore over five years. Selected multidisciplinary consortia can receive grants of up to ₹20 crore.
- **Multidisciplinary Consortia:** Participation is open to a mix of universities, national laboratories, research organizations, Startups, MSMEs, and industry partners.
- **Open Call for Proposals:** The mission features a dedicated Open Call for Startups and MSMEs specifically for Product and Prototype Development.
- **Five Priority Themes:**
 - Water Resource Assessment and Sustainable Management.
 - Drinking Water (Quality and Access).
 - Water Quality and Ecological Health.
 - Water Use Efficiency and Circular Economy.
 - Climate Resilience and Adaptation.

- **Digital Integration:** Complemented by the launch of the Jal Sanchay Jan Bhagidari, Citizen Tracking and Reporting (JSJB-CTR) Portal and App for real-time monitoring and public participation.

S&T

Gene-Silencing

Context

Scientists at the Agharkar Research Institute (ARI), Pune have developed an innovative, biodegradable nanocarrier platform that utilizes a dual gene-silencing strategy to effectively target and inhibit breast cancer tumors while minimizing systemic toxicity.

About Gene Silencing

- A natural cellular regulation process where an organism reduces or halts the expression of a specific gene.
- It functions by intercepting the genetic instructions encoded in DNA, stopping the translation of disease-driving proteins.

Nanomedicine

- The application of nanotechnology in healthcare that utilizes engineered nanoparticles ranging between 1 and 100 nanometers in size.
- Designed to diagnose, monitor, prevent, and treat complex diseases with enhanced cellular precision.
- E.g., Ultra-small semiconductor or magnetic nanoparticles act as high-contrast imaging probes.
- Key Advantage: By targeting specific diseased cells, it significantly reduces the off-target side effects associated with conventional medical treatments.

IR & Security

RudraM-II

Context

India's defence indigenisation drive received a major boost with the successful flight-test of RudraM-II

About RudraM-II

- **Developed by:** DRDO in collaboration with IAF
- **Class:** Air-to-Surface missile (ASM)
- **Launch Platform:** Airborne (fighter aircraft)
- **Strike Type:** Precision stand-off strike, launched from safe distance outside enemy air defence range
- **Guidance:** Multi-mode seeker for accurate target engagement
- **Propulsion:** Solid-fuel rocket motor (developed by HEMRL)
- **Range:** Medium-to-long range (exact range classified)
- **Warhead:** High-explosive; developed by ARDE
- **Target:** Ground-based and surface targets

Anti-Radiation Missile = designed to detect, track and neutralise enemy radar and air defence systems by homing onto their electromagnetic emissions.

RudraM-I → Anti-Radiation Missile (ARM); homes onto enemy radar electromagnetic emissions

Polity

Right to be Forgotten (RTBF)

Context

The Delhi High Court recently expanded the scope of privacy jurisprudence by recognizing the Right to be Forgotten as an integral element of the fundamental right protected under Article 21.

Concept

- The Right to be Forgotten (RTBF) enables individuals to seek the removal or restriction of access to their personal information, such as past criminal allegations, private disputes, or other sensitive records from online searches and publicly accessible platforms under certain conditions.
- The doctrine stems from the idea of informational self-determination, which recognizes an individual's authority over personal data.
- It seeks to ensure that outdated, irrelevant, or disproportionately harmful information does not continue to undermine a person's dignity, reputation, and ability to move forward in life, particularly when public interest in such information has diminished.

Delhi High Court's Framework

- **De-indexing of Search Results:** Online platforms may be directed to disable name-based search results in specified cases. Consequently, while judicial records remain publicly available, they cannot be easily traced through searches using an individual's name.
- **Eligible Categories for Relief:** The protection is generally available to:
 - Individuals acquitted of criminal offences.
 - Persons involved in matrimonial or private civil disputes.

- Individuals whose names appear incidentally in judicial records despite not being parties to the proceedings.
- **Redaction of Personal Details:** The court emphasized masking or removing identifying details such as names, addresses, and other personal particulars.
- **Duties of Intermediaries:** The court clarified that search engines function through automated indexing mechanisms and cannot place algorithmic processes above an individual's fundamental privacy rights. In accordance with the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, intermediaries are required to comply with lawful directions concerning the removal or restriction of access to such information.

Places in News

Lake Chad

News

A joint Nigerian-US AFRICOM operation killed 175 Islamic militants including

Abu-Bilal al-Minuki, drawing attention to the deteriorating security situation in the Lake Chad Basin.



About Lake Chad

1. Freshwater lake in **West-Central Africa**, bordered by **Nigeria, Niger, Chad, and Cameroon**.
2. Part of the **Sahel region**, transitional zone between the Sahara Desert and Sudanian Savanna.
3. Historically one of Africa's largest lakes; has **shrunk by ~90% since the 1960s** due to climate change, overuse, and desertification.
4. Fed primarily by the **Chari (Logone) River**, it has **no outlet**, making it an **endorheic basin**.

Sahel Region: A semi-arid belt stretching across Africa from Senegal to Eritrea, acting as a transition zone between the Sahara and tropical savanna. Faces a confluence of challenges: climate change, desertification, poverty, weak governance, and jihadist insurgency (Mali, Burkina Faso, Niger -the "Sahel G5" crisis).

Kronstadt

News: Ukraine's Unmanned Systems Forces (USF) hit a Russian warship at the Kronstadt naval base in Russia's Leningrad Oblast.

About Kronstadt

- Historic port city on Kotlin Island, part of Saint Petersburg.
- UNESCO World Heritage Site
- **Kotlin Island:** Located near the head of the Gulf of Finland, in the Baltic Sea.

Russia

- **Location:** Transcontinental country spanning Eastern



- **Location:** Europe and Northern Asia, extending from the Baltic Sea in the west to the Pacific Ocean in the east.
- **Bordering Countries:** Norway, Finland, Estonia, Latvia, Lithuania, Poland, Belarus, Ukraine, Georgia, Azerbaijan, Kazakhstan, China, Mongolia, and North Korea.
- **Major Rivers:** Volga (Europe's longest river), Ob, Yenisei, Lena, and Amur.

MAINS

India's Climate Finance Architecture: Bridging the Green Investment Gap

Context

India's bottleneck to achieve NDCs is not the absence of financial instruments, but the institutional architecture needed to deploy capital at scale.

What Is the Scale of India's Climate Financing Gap?

1. **Overall Investment Gap:** India requires ₹162.5 trillion (~\$2.5 trillion) by 2030 to fulfill its NDCs, while the long-term target of achieving net-zero emissions by 2070 is estimated to cost a massive \$10.1 trillion.
2. **Sectoral Decarbonisation Cost:** Transitioning over half of India's emissions sectors (specifically steel, cement, power, and road transport) will demand an investment of \$467 billion between 2022 and 2030 (~\$54 billion annually).
3. **RBI's Green Financing Estimates:** The Reserve Bank of India's *Report on Currency and Finance* states that the nation needs to inject an additional 2.5% of its GDP annually into green financing up to the year 2030.

What Progress Has India Already Made?

- **GSSS Debt Surge:** By end-2024, India had issued \$55.9 billion in green, social, sustainability, and sustainability-linked (GSSS) debt, a 186% rise since 2021.
 - Green debt leads at 83% of total issuances, directed primarily to clean energy and transport.
- **Sovereign Green Bonds:** Sovereign green bonds worth ₹477 billion have set market benchmarks and boosted institutional investor confidence.
- **RBI's 2025 Climate Finance Directions:** A comprehensive framework requiring

commercial banks to integrate climate risks into lending and risk management.

- Eligible green activities now qualify as Priority Sector Lending (PSL): banks must direct 40% of adjusted net bank credit to PSL.
- Investments in sovereign green bonds are also recognised under the framework.
- **Draft Climate Finance Taxonomy (May 2025):** The Department of Economic Affairs released India's Draft Climate Finance Taxonomy for public consultation
 - Covers mitigation, adaptation, and transition activities; described as a "living document" to evolve with India's NDCs and global commitments.
 - Aligns with the Energy Conservation Act, SEBI norms, and the Carbon Credit Trading Scheme.

What Are the Key Gaps in India's Climate Finance Architecture?

1. **Absence of a Legal Green Taxonomy:** The absence of a statutory definition of "green" weakens project verification, enables greenwashing and creates ambiguity in climate-related lending and investments.
2. **Lack of Credit Enhancement Mechanisms:** India has no dedicated public guarantee architecture to de-risk climate projects and crowd in large-scale private investment.
3. **Weak Secondary Market Liquidity:** Limited liquidity in the green bond market discourages participation by long-term institutional investors such as pension and insurance funds.
4. **Distorted Market Incentives:** The absence of differentiated capital norms means brown finance often remains cheaper and more attractive than green finance.
5. **Limited Climate Integration in Banking:** While RBI has integrated climate risks into Priority Sector Lending, climate stress

testing and differentiated risk weights are yet to be mandated.

6. **Constrained State-Level Climate Financing:** States undertaking adaptation projects face limited borrowing capacity and inadequate access to international green capital markets.
 - a. E.g., coastal resilience in Odisha, drought-proofing in Vidarbha is delivered at State level.

What Is the Way Forward?

- **Enact the Climate Finance Taxonomy Without Delay:** It unlocks credible bond verification, PSL eligibility, anti-greenwashing regulation, and international capital access simultaneously.
- **RBI Must Move from Enabling to Mandating:** Introduce differentiated capital requirements making brown lending more capital-intensive and green lending less so; mandate climate stress testing for all scheduled commercial banks.
 - E.g., EU's Capital Requirements Regulation incorporates climate risk into bank capital adequacy frameworks.
- **Build a Guarantee Architecture via NaBFID:** NaBFID should deploy first-loss guarantees and subordinated debt systematically to crowd in private co-investment at scale.
 - E.g., US IRA's Loan Programs Office achieves a 5:1 private leverage ratio for clean energy through loan guarantees.
- **Establish a State Climate Finance Facility:** Co-capitalised by the Union, NABARD, and international sources (e.g., Green Climate Fund) to give States and municipalities genuine access to green debt markets.
 - E.g., EU's Just Transition Fund channelled concessional finance directly to sub-national governments, bypassing central bottlenecks.
- **Scale Sovereign Green Bonds and Embed in SLR Framework:** Deepens the domestic green bond market, reduces dependence on volatile foreign capital flows, and builds a long-term institutional investor base.

- **Activate Blended Finance Systematically:** Deploy public concessional capital strategically to de-risk private investment — particularly in deep-tech climate solutions, offshore wind, and green hydrogen.
 - E.g., IFC's Blended Finance for Climate Investments report (2023) identifies India as one of the highest-potential blended finance markets globally.

Urban Fire Safety in India

Context

A deadly fire in South Delhi recently brought into focus the numerous fire safety gaps in India's urban areas

What Are the Main Challenges in Urban Fire Management?

1. **Fire Services Are a State Subject:** Fire services fall under Entry 6, State List, and Article 243(W), making them a state responsibility with no central enforcement mechanism.
2. **NBC 2016 Is Advisory, Not Binding:** The National Building Code carries no statutory force, ULBs face no legal obligation to enforce fire safety provisions at building permission or occupancy certificate stage.
 - The Delhi fire building had no NOC and no fire safety certificate, yet operated freely.
3. **Residential Buildings Outside Inspection Cycles:** Unlike commercial establishments, residential structures, especially older ones, face no routine fire safety inspection or mandatory audit requirement whatsoever.
4. **Unchecked Illegal Conversions:** Commercial properties converted into residential or hospitality use without NOCs or fire safety upgrades.
 - Unlike commercial buildings, residential structures have no mandated audit cycle to detect and rectify electrical short circuits, overloaded circuits, and LPG gas leaks

5. **Fire Services Are Grossly Underfunded:** The 15th FC noted a critical "accidental gap", fire services lack resources, trained personnel, and modern equipment, particularly in Tier-II and Tier-III cities.
- It recommended ₹5,000 crore for strengthening state fire services
- **Firefighting Infrastructure Lags Urbanisation:** As cities build upward and outward, fire station coverage, equipment capacity, and trained manpower have not kept pace
 - **Urban Density Compounds the Risk:** Narrow lanes, congested layouts, and high-rise construction make access for fire tenders increasingly difficult in rapidly urbanising Indian cities.

What Is the Way Forward?

- **Make NBC 2016 Statutorily Binding:** Convert the National Building Code from an advisory document into a legally enforceable standard with mandatory compliance at building permission, construction, and occupancy certificate stages.
 - *E.g.*, UK's Building Regulations Act makes fire safety compliance a legal prerequisite for any construction or change-of-use approval.
- **Mandatory Inspection for Residential Complexes:** Extend periodic fire safety inspections to all residential complexes above a defined floor area or height.
 - *E.g.*, Singapore's Fire Safety Act mandates annual inspections for all building classes including residential towers above four storeys.
- **Crack Down on Illegal Conversions:** Create a fast-track regularisation-or-demolition framework for illegally converted properties; link property tax records and utility connections to fire NOC compliance.
- **Outcome-Linked Disbursement of 15th FC Funds:** Release the recommended ₹5,000 crore for fire services against measurable targets: fire station density, response time

benchmarks, and equipment modernisation milestones.

- **Develop Ward-Level Urban Fire Risk Maps:** Map fire hazard zones for all cities above 5 lakh population based on building age, density, electrical load, and fire station proximity — enabling targeted resource deployment.
 - *E.g.*, Tokyo's Urban Fire Risk Assessment ranks every city block by fire risk, driving pre-emptive infrastructure investment in high-risk wards.
- **Community-Level Fire Safety Literacy:** Given 60% of deaths occur in residential buildings, community awareness around electrical overloading and LPG handling is as critical as regulatory enforcement.
 - *E.g.*, Japan's neighbourhood fire watch (*Jishu-Bo*) programme trains resident associations in fire prevention.

Fire Safety Measures in India

1. **National Building Code (NBC)**, published by the BIS in 1970 and updated in 2016- provide comprehensive guidelines for construction, maintenance, and fire safety protocols in buildings.
2. **Model Building Bye Laws 2016-** issued by the Ministry of Housing and Urban Affairs, offers guidance to states and Union Territories (UTs) in formulating building bylaws to address fire protection and safety requirements.
3. **Scheme for Expansion and Modernization of Fire Services:** Launched from earmarked allocation of Preparedness and Capacity Building Funding Window under the NDRF for strengthening fire services in the states
4. **Fire and Life Safety Guidelines (2020):** Issued by the Ministry of Health, these guidelines recommend measures such as third-party fire safety accreditation and the development of a Fire Response Plan (FRP).
5. **Other Laws:** The Factories Act of 1948's Section 37 establishes regulations to guard against fire and explosion hazards.

India-China Border Dispute

Context

The 35th meeting of the Working Mechanism for Consultation & Coordination on India-China Border Affairs (WMCC) recently reviewed the situation along the India-China border areas.

About India-China Border

- Total boundary length: **3,488 km**, India's **second longest** land boundary after Bangladesh (4,096 km)
- The boundary is **un-demarcated**, defined by the **Line of Actual Control (LAC)**, not a formal, mutually agreed border

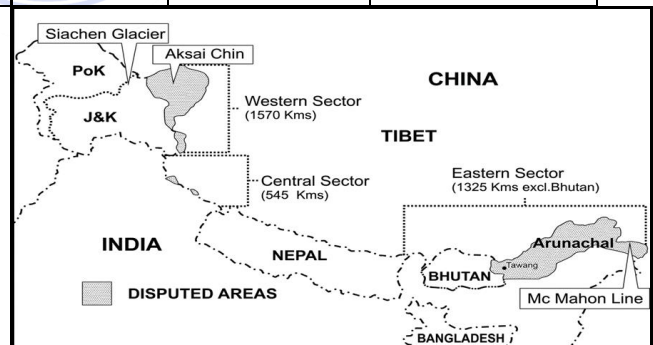
India-China Disputed Areas

Sector	Location / Key Areas	Major Issues
Western Sector	Ladakh – Aksai Chin	China controls Aksai Chin, while India claims it as part of Ladakh. It is the most strategically sensitive sector and was the site of the Galwan Valley clash (2020).
Middle Sector	Himachal Pradesh & Uttarakhand	Includes Kaurik and Lahaul-Spiti Valley (Himachal Pradesh), and Bara Hoti and Nelang Valley (Uttarakhand). It is the least contentious sector of the India–China boundary.
Eastern	Arunachal	China claims

Sector

Pradesh, Sikkim

Arunachal Pradesh as "South Tibet" (Zàng Nán), with particular emphasis on the Tawang region. The dispute is centered on the McMahon Line. **Sikkim:** Key areas include Nathu La, Naku La, Cho La, Doklam Plateau (site of the 2017 India–China standoff), Jampheri Ridge, Mount Gipmochi, and Batang La. The sector is strategically important due to its proximity to the India–Bhutan–China tri-junction.



Early Harvest Proposal

The Early Harvest concept proposes resolving **comparatively easier sectors first**, with **Sikkim** as the primary candidate, while deferring contentious disputes in Eastern Ladakh and Arunachal Pradesh to later negotiations.

- **Why China Pushes It**
 - Locks in **formal territorial recognition** in settled sectors permanently
 - **Weakens India's package-settlement leverage**, once a sector is settled, it exits the negotiating table
 - Retains China's **full flexibility** in contested areas like Aksai Chin and Arunachal Pradesh
 - Advances China's goal of **altering the tri-junction** location near Doklam favourably
 - Creates diplomatic momentum that **pressures India** toward further concessions over time
- **Why India is Wary**
 - Sikkim settlement is **not truly easy**, it involves the tri-junction dispute with profound strategic consequences
 - China has already **changed ground realities** through infrastructure and border villages, a settlement could legitimise these unilateral changes
 - **Asymmetric outcome**: China gains formal recognition; India receives only diplomatic atmosphere in return
 - Historical precedent: CBMs of 1993 and 1996 **did not prevent** Galwan 2020

India-China-Bhutan tri-junction

Significance

- The **Jampheri/Zompelri Ridge** directly overlooks the **Siliguri Corridor**, India's only land link to its eight northeastern states
- The **Siliguri Corridor ("Chicken's Neck")** is barely ~22 km wide at its narrowest; any Chinese military access near it is an existential strategic threat
 - A favourable tri-junction gives China greater **strategic depth and observation capability** from the Chumbi Valley

Boundary Dispute

- **India and Bhutan's Position**: India and Bhutan maintain that the tri-junction lies near Batang La, which is about 6.5 km north of Gimpochi.
- **China's Position**: China insists that the 1890 Convention places the tri-junction at Mount Gimpochi, which gives China a more advantageous position.

Should India Accept Sector-Wise Settlement?

- **Arguments For**
 - Incremental progress prevents complete stagnation of boundary talks
 - Reduces day-to-day friction and ambiguity in settled regions
 - Confidence-building effect may improve the broader bilateral atmosphere
 - Frees diplomatic bandwidth for trade, connectivity and people-to-people engagement
- **Arguments Against**
 - **Loss of leverage**: settled sectors permanently exit the negotiating table; India cannot revisit them
 - **Siliguri Corridor risk**: even marginal shifts in the tri-junction location threaten India's most critical strategic chokepoint
 - **Fragments 2005 framework**: abandons the comprehensive package approach India painstakingly negotiated over decades

- **Signals weakness:** may embolden China to push harder in Western and Eastern sectors
- **Bhutan dimension:** settling Sikkim without tri-junction clarity could damage India-Bhutan relations

Way Forward

- Pursue **comprehensive political settlement** rooted in the 2005 framework, resist piecemeal concessions under diplomatic pressure
- Make **full disengagement** at all friction points a firm precondition, no settlement talks should advance while Chinese troops occupy previously unpatrolled areas
- Accelerate **border infrastructure parity**—roads, tunnels, airfields, border villages under the **Border Area Development Programme (BADP)**
- Coordinate actively with **Bhutan** to ensure any tri-junction resolution protects both countries' interests
- Leverage **QUAD** and **Indo-Pacific partnerships** to raise the diplomatic cost of Chinese coercion
- Institutionalise **LAC** **monitoring mechanisms:** satellite surveillance, patrol coordination, hotlines to prevent surprise incursions

Cheap Global Money

Context

The **Reserve Bank of India Annual Report 2025–26** has highlighted the risks arising from elevated sovereign bond yields and the possible reversal of monetary easing by major central banks.

Understanding the Era of Cheap Money

- Central banks in advanced economies adopted ultra-low interest rates and Quantitative Easing (QE) to stimulate economic growth.
- Under QE, central banks created money and purchased government bonds and long-

term assets, increasing liquidity in the financial system.

- This led to:
- Abundant global liquidity.
- Historically low bond yields.
- Increased capital flows to emerging economies such as India in search of higher returns.

Why is the Era Ending?

Return of Inflation

- A series of global shocks have revived inflationary pressures such as COVID-19 supply chain disruptions, Russian invasion of Ukraine, Trade tariff measures under Donald Trump, and Ongoing tensions involving Israel and Iran.

End of Quantitative Easing

- Persistent inflation has made ultra-low interest rates unsustainable.
- Excessive government borrowing and rising public debt levels have reduced the scope for continued monetary accommodation.
- Consequently, sovereign bond yields have risen sharply:
- US Treasury yields around 4.5%.
- UK government bond yields above 5%.
- Japanese government bond yields are rising from near-zero levels to around 2.5%.

Implications for India

- **Decline in Foreign Capital Inflows:** Higher returns in advanced economies reduce the attractiveness of emerging markets. India's net capital inflows have weakened significantly, with recent periods even witnessing net outflows.
- **Foreign Portfolio Investor (FPI) Outflows:** FPIs are increasingly reallocating funds toward safer developed-market assets. Indian equity markets may experience reduced foreign participation and heightened volatility.
- **Narrowing Yield Differential:** India's 10-year government bond yield is around 7%, while the US yield is around 4.5%. The differential has narrowed to nearly 2.5

percentage points compared to a historical average exceeding 4 percentage points.

- **Pressure on the Rupee:** Lower capital inflows reduce foreign exchange availability. This may exert depreciation pressure on the Indian rupee.
- **Higher External Borrowing Costs:** Indian corporates and the government may face increased costs while raising funds from international markets.

Challenges for India

Macroeconomic Challenges

- **Managing Currency Stability:** Reduced foreign inflows can increase exchange-rate volatility.
- **Sustaining Growth Amid Costlier Capital:** Higher global interest rates can dampen investment and economic activity.
- Maintaining high growth rates becomes more challenging.
- **Inflation Management:** Imported inflation through energy and commodity prices may complicate monetary policy decisions.

Financial Sector Challenges

- **Stock Market Volatility:** Frequent FPI withdrawals can trigger sharp fluctuations in equity markets.
- **Rising Cost of Capital:** Higher global yields can increase financing costs for businesses and infrastructure projects.
- **Bond Market Competition:** Indian bonds must compete with higher-yielding and safer developed-market government securities.

Structural Challenges

- **Dependence on Foreign Capital:** Excessive reliance on volatile portfolio flows creates vulnerabilities.

Way Forward

Short-Term Measures

- RBI interventions to manage currency volatility.
- Targeted policy measures to attract FPI flows.

- Diversification of funding sources for the government and corporations.
- Strengthening forex reserves as a buffer.

Long-Term Strategy

- Boosting manufacturing exports through PLI and Make in India schemes.
- Deepening domestic savings to reduce dependence on foreign capital.
- Attracting stable FDI through structural reforms.
- Developing bond markets to provide alternatives for foreign investors.
- Enhancing competitiveness through labour, land, and capital market reforms.

Strategic Contest for Outer Space

Context:

Rapid advancement in counter-space weapons, satellite constellations, lunar exploration and military-space integration is transforming outer space into a major arena of geopolitical competition

Space as a Strategic Power Play

- **Control of Information and Intelligence:** Satellites provide real-time ISR (Intelligence, Surveillance and Reconnaissance), helping militaries track enemy movements and coordinate operations.
 - **E.g.** China operates over 400 military satellites supporting PLA surveillance.
- **Development of Counter-Space Weapons:** China is building capabilities to disable or destroy adversary satellites. (**E.g.** China's 2007 ASAT test destroyed a weather satellite, demonstrating its ability to physically target satellites in orbit.)
- **Competition Through Mega Satellite Constellations:** Large satellite networks provide communication resilience and strategic influence. (**E.g.** SpaceX's Starlink operates thousands of satellites globally, while China plans more than 36,000 LEO satellites by 2030 to build a rival network.)

- **Electronic Warfare Capabilities:** China is developing satellites capable of approaching, inspecting or interfering with other satellites.
 - **E.g.** In 2022, a Chinese spacecraft moved a defunct satellite to a graveyard orbit, showcasing advanced orbital manoeuvring capability.)
- **Laser-Based Space Warfare:** China is investing in directed-energy systems capable of temporarily blinding enemy satellites without destroying them.
- **Race for Lunar Presence:** China seeks long-term strategic presence on the Moon. (China plans a crewed Moon landing by 2036 and is developing the International Lunar Research Station (ILRS) with Russia.)
- **Competition for Space Resources:** Competition may extend to extraction of critical minerals and energy resources from celestial bodies. (**E.g.** China is exploring lunar Helium-3 and asteroid mining,)
- **Space-Based Energy Infrastructure:** China aims to harness solar power directly in space and beam energy back to Earth. (**E.g.** Target of establishing space-based solar power systems by 2050.)
- **Military-Civil Fusion in Space Sector:** Commercial space companies are integrated into China's strategic objectives. (Companies such as LandSpace, iSpace and OneSpace contribute to China's national space ecosystem)
- **Space Diplomacy and Global Influence:** Major Power uses space cooperation to build strategic partnerships and influence. (**E.g.** China's ILRS initiative is emerging as an alternative to the U.S.-led Artemis Accords)

Implications for India

- **Growing Capability Gap:** China possesses significantly greater satellite numbers and military-space assets. (India operates about 60 satellites, whereas China has over 400 military satellites alone)
- **Threat to ISR Capabilities:** India's surveillance satellites could become vulnerable during a conflict. (Targeting

- CARTOSAT or RISAT satellites may reduce India's battlefield intelligence along the LAC)
- **Risk to Navigation Systems:** Chinese jamming and electronic warfare capabilities can affect India's positioning services. (Interference with NavIC could impact military operations, aviation and navigation)
- **Vulnerability to Non-Kinetic Attacks:** Temporary satellite blinding can create intelligence gaps without triggering full-scale escalation. (Laser dazzling could prevent satellites from monitoring troop movements near the border)
- **Impact on Critical Infrastructure:** Satellite disruption may affect banking, communications, disaster management and transportation networks. (Modern digital economies are highly dependent on space-based services)
- **Pressure on India's Space Industry:** China's expanding commercial space sector may intensify global competition. (Chinese launch companies increasingly compete with global commercial providers)
- **Strategic Challenges in Lunar Governance:** China's growing presence on the Moon may influence future rules regarding lunar resources and infrastructure.

Way Forward

- **Increase Satellite Numbers:** Expand indigenous satellite manufacturing and launch capacity to create redundancy. (Larger constellations reduce vulnerability to individual satellite losses)
- **Develop Distributed Satellite Constellations:** Shift from a few large satellites to multiple smaller satellite networks. (More difficult for adversaries to disable entire systems)
- **Strengthen Counter-Space Capabilities:** Build credible deterrence beyond Mission Shakti. (Electronic warfare, cyber-space defence and co-orbital technologies)
- **Enhance Space Situational Awareness:** Improve monitoring of satellites, debris and hostile orbital activities. (Project NETRA and Defence Space Agency initiatives)

- **Promote Private Sector Participation:** Accelerate growth of India's commercial space ecosystem. (IN-SPACE reforms, Skyroot, Agnikul and Pixxel)
- **Strengthen Strategic Partnerships:** Expand cooperation with the U.S., France, Japan and Australia for data-sharing and space resilience. (Partner satellite networks can provide backup during disruptions)
- **Accelerate Deep-Space Missions:** Sustain momentum through Chandrayaan, LUPEX, Gaganyaan and future lunar exploration programmes.

The PM SVANidhi Completes Six Years of Empowering Street Vendors

Context

The Prime Minister Street Vendor's AtmaNirbhar Nidhi scheme has completed six years of public implementation since its initial launch in June 2020.

Key Features of PM SVANidhi:

- **Progressive Collateral-Free Loans:** Provides credit in three separate tranches of ₹15,000, ₹25,000, and ₹50,000. Successive higher limits are unlocked automatically upon the timely repayment of previous loans.
- **Interest Subsidy Incentive:** Incentivizes timely or early loan repayments by offering an **interest subsidy of 7 percent per annum**, which is credited directly to the vendor's account.
- **UPI-Linked RuPay Credit Cards:** Vendors who successfully repay their second tranche become eligible for special UPI-linked RuPay Credit Cards with an operating limit of **up to ₹30,000**.
- **Digital Adoption Cashback:** Offers an annual digital cashback incentive of **up to ₹1,600** to reward and encourage retail or

wholesale transactions through digital payment gateways.

- **SVANidhi se Samridhhi (SSS):** Conducts detailed socio-economic profiling of vendors and their families to seamlessly link them with **eight selected Central Government welfare schemes**, creating an institutional safety net.
- **FSSAI Food Safety Training:** Collaborates directly with the Food Safety and Standards Authority of India (FSSAI) to provide specialized capacity building in local financial literacy, digital workflows, and hygiene standards.

Current Status of PM SVANidhi:

- **Massive Loan Disbursals:** More than **75.5 lakh unique street vendors** have accessed the scheme, accounting for over **1.12 crore loan sanctions**.
- **Total Disbursed Capital:** Financial assistance totaling more than **₹17,800 crore** has been funneled directly into India's informal urban markets.
- **Massive Digital Footprint:** Over 55 lakh vendors have been digitally onboarded, executing more than **841 crore digital transactions** worth an estimated **₹8.96 lakh crore**.
- **Extensive Social Net Sanctions:** The SVANidhi se Samridhhi sub-program has profiled over 50 lakh families, resulting in **1.52 crore formal welfare benefits** being sanctioned.

Success of the Scheme:

- **First-Time Access to Institutional Credit:** The program successfully broke dependence on high-interest local informal moneylenders by opening standard bank channels for the urban poor.

- **Measurable Growth in Household Vendor Incomes:** Regular access to affordable cash allowed hawkers to expand inventory and secure better long-term earnings.
- **Deepening Gender and Social Inclusion:** The scheme has acted as a powerful tool for equity, targeting funding directly to vulnerable and marginalized urban groups.
- **Unlocking Expanded Secondary Credit Mobility:** The scheme acts as a financial stepping stone, allowing micro-entrepreneurs to build up their credit scores for larger future business goals.

Challenges Associated with the Scheme:

- **Disparities in Regional and Inter-State Outreach:** While some states have utilized the program extensively, others show lower coverage due to varying local implementation speeds.
- **Persistent Friction in Initial Turnaround Timelines:** Despite a strong end-to-end digital portal, documentation delays can still slow down fast-paced urban businesses.
- **Vulnerability of Small Vendors to Harsh Seasonal Closures:** Extreme weather and heavy monsoons cause seasonal losses that make fixed repayment schedules a burden.
- **Sustaining Long-Term Digital Literacy and Cashback Utilization:** Onboarding a vendor does not automatically mean they understand or regularly use digital accounts.

Way Forward:

- **Deploying U-WIN Style Mapping for Regional Balances:** Use advanced data dashboards to spot low-coverage urban municipal wards, helping local field teams onboard vendors in lagging states.
- **Integrating FSSAI Hygiene Training with Smart Cart Upgrades:** Expand the ongoing food safety courses for street vendors by

offering extra, low-interest micro-loans to help them buy clean, modern vending carts.

- **Automating Tranche Transitions via AI Credit Scoring:** Program the central SVANidhi app to instantly approve higher loan tranches the moment a vendor successfully settles their previous balance, skipping repetitive paperwork.
- **Introducing Flexible Repayment Windows During Peak Monsoons:** Restructure repayment models to allow lower, flexible daily terms during rainy or off-season months, helping vendors protect their credit scores when sales are low