

Today's Prelims Topics

Red-eared slider

Context

Bengaluru customs intercepted a Tamil Nadu man carrying **2,547 red-eared slider turtles illegally from Singapore—over 500 died** en route and the rest were euthanized after salmonella infection was detected.

Red-Eared Slider Turtle

Origin & Habitat

- Native to **southeastern United States** and **northeastern Mexico**.
- Found in **freshwater and brackish water** habitats like ponds, lakes, swamps, and slow-moving rivers.
- Spends most of its time either **foraging in water** or **basking on rocks and logs**.

Invasive Species

- Listed among the **world's top 100 worst invasive alien species**.
- When released into non-native environments, they **compete with local turtle species**, **damage ecosystems**, and spread **diseases**.

Appearance

- Identified by a **distinct red stripe behind each eye**.
- Body colors range from **dark green to brown**, with **yellowish markings** on their limbs and shell edges.
- The shell is typically **dark olive green** in color.



Lifespan

- In the wild, they can live for **20 to 50 years**.

Diet

- Omnivorous: Eat **aquatic plants, small fish, insects, and crickets**.

Conservation Status

- **IUCN Red List:** *Least Concern* – not currently at risk of extinction globally.

Source: [TheHindu](https://www.thehindu.com)

Section 98 of the Bhartiya Nagarik Suraksha Sanhita (BNSS)

Context

The J&K government declared **25 books by noted authors** like Arundhati Roy and A.G. Noorani as **"forfeited"** for allegedly promoting secessionism and false narratives under **Section 98 of the BNSS Act 2023**.

Section 98 – Power to Forfeit Certain Publications and Issue Search Warrants

- If the State Government believes that any **newspaper, book, or document** contains material punishable under specific sections of the Bharatiya Nyaya Sanhita (BNS), 2023—namely **sections 152, 196, 197, 294, 295, or 299**—it may issue a **notification** outlining the reasons and declare such copies forfeited to the Government.
- **Definitions:** Terms are as per the **Press and Registration of Books Act, 1867**:
 - **"Newspaper"** and **"Book"** have the same definitions as in that Act.
 - **"Document"** includes:
 - Paintings
 - Drawings
 - Photographs
 - Any visible representation
- **Legal Protection:** Any **order or action** under this section **cannot be challenged in court**, except through the procedure provided in **Section 99** of BNSS.

Section	Offence Description
152	Promoting enmity between different groups on grounds of religion, race, place of birth, residence, language, etc., and doing acts prejudicial to maintenance of harmony. <i>(Replaces IPC Section 153A)</i>
196	Sedition — covers acts that bring or attempt to bring into hatred or contempt, or excite disaffection towards the Government of India. <i>(Replaces IPC Section 124A)</i>
197	Waging or attempting to wage war, or abetting the waging of war, against the Government of India. <i>(Similar to IPC Section 121)</i>
294	Obscene acts and songs — doing any obscene act in public, or singing/uttering any obscene song or words in or near public places. <i>(Replaces IPC Section 294)</i>
295	Injuring or defiling a place of worship with intent to insult the religion of any class. <i>(Replaces IPC Section 295)</i>
299	Statements, rumours, etc., with intent to cause public mischief. <i>(Replaces IPC Section 505)</i>

Source: [TheHindu](https://www.thehindu.com)

INS Guldar

Context

INS *Guldar*, a decommissioned Indian Navy warship, is set to be **sunk near Maharashtra's Sindhudurg coast** to be repurposed as **India's first artificial reef and underwater tourism attraction**.

About INS Guldar

- **Type:** Kumbhir-class landing ship (decommissioned Navy warship)
- **Function:** Designed for **amphibious warfare**, troop and cargo transport, and **beach landings**
- **Past Role:** Served in **peacekeeping missions** in **Sri Lanka**, notably during operations against the **LTTE** across Jaffna and Trincomalee
- **Reason for Recommissioning (As Artificial Reef):** To boost underwater tourism and scuba diving in Sindhudurg district, Maharashtra
 - Will serve as an **artificial reef**, helping marine biodiversity by attracting **fish and coral**
 - Aims to become a major **diving destination** in India



Source: [IndianExpress](https://www.indianexpress.com)

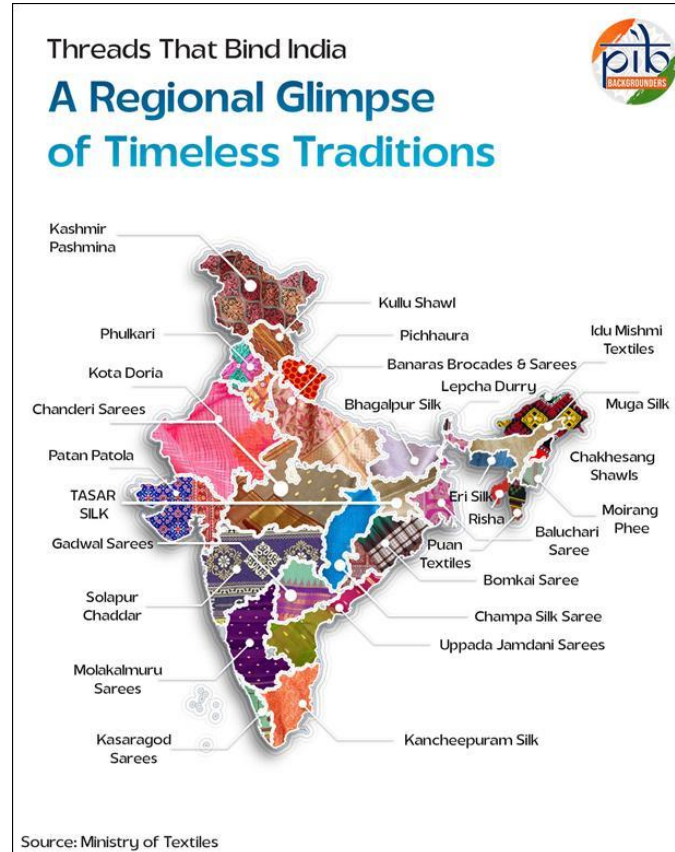


11th National Handloom Day

Context

11th National Handloom Day was celebrated in Bharat Mandappam, New Delhi on 7th August.

Why August 7 Is Significant



- Commemorates the **Swadeshi Movement** launched on **7th August 1905** as a protest against the **Partition of Bengal**.
- Marked the beginning of a movement to **boycott foreign goods** and promote **indigenous handloom products**.
- **National Handloom Day** was officially launched on **August 7, 2015**, by **Prime Minister Narendra Modi** to honor India's handloom legacy.

11th National Handloom Day

- **Theme:** "Handlooms – Empowering Women, Empowering the Nation"
 - Emphasizes the role of **women**, who make up **over 70%** of India's handloom workforce.
- Presentation of **Sant Kabir Handloom Awards** and **National Handloom Awards (2024)**.
 - **5 Sant Kabir Awardees**
 - **19 National Award winners**
- The awards honor excellence in **traditional handloom weaving techniques**.

Source: [PIB](https://pib.gov.in)

Editorial Summary

India's Financial Inclusion Gains Momentum

Context

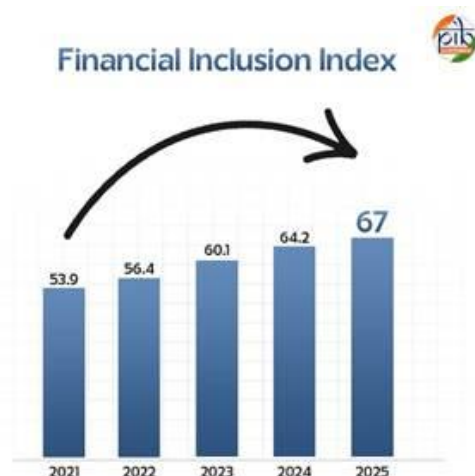
The Reserve Bank of India has reported an improvement in the Financial Inclusion Index, which has risen to **67% in FY 2025, up from 64.2% in FY 2024**.

What is Meant By Financial Inclusion?

- Financial inclusion refers to ensuring access to affordable financial products and services that cater to the needs of individuals and businesses in a responsible and sustainable manner.
- It promotes entrepreneurship, drives business expansion, empowers women, and enhances risk management—ultimately strengthening economic activity, increasing productivity, and fostering overall economic growth.

About the Financial Inclusion Index (FI-Index)

- The **FI-Index** is a **composite measure** designed to track the level of **financial inclusion** across India.
- Developed by the **Reserve Bank of India** in consultation with the **Government** and **sectoral regulators** (banking, insurance, pension, etc.).
- It covers **five key sectors**: **Banking, Investments, Insurance, Postal Services, and Pensions**.
- The FI-Index is published **annually**, every July, by the Reserve Bank of India.



Methodology of Financial Inclusion Index



Source: RBI

Strategies for Financial Inclusion in India

- **National Strategy for Financial Inclusion (NSFI) 2019–2024:** Launched in 2019, aims to remove barriers to accessing financial services and ensure inclusive participation.



- **National Strategy for Financial Education (NSFE) 2020–2025:** Aims to improve financial literacy, enabling individuals to make informed and responsible financial decisions.
 - **5-C Approach** to Achieve Strategic Objectives:
 - **Content:** Develop relevant content and integrate financial education into **school, college, and training curricula**.
 - **Capacity:** Build capabilities of intermediaries delivering financial services.
 - **Community:** Utilize **community-led models** for spreading financial awareness.
 - **Communication:** Design an effective **communication strategy** tailored to diverse audiences.
 - **Collaboration:** Strengthen synergy among all involved stakeholders.

Key Initiatives for Financial Inclusion

Initiative	Objective
Pradhan Mantri Jan Dhan Yojana (PMJDY)	To provide basic banking services (savings, deposit, remittance, credit, insurance, pension) affordably to unserved and underserved citizens, enabling financial inclusion.
Centre for Financial Literacy (CFL)	To promote financial literacy through community-led, participatory methods for widespread financial inclusion.
Digital Banking Units (DBUs)	To offer digital banking services (account opening, fund transfers, loans, etc.) through physical units at the last mile.
Pradhan Mantri Suraksha Bima Yojana (PMSBY)	To provide affordable accident insurance (death/disability) to poor and underprivileged sections of society.
Pradhan Mantri Jeevan Jyoti Bima	To provide affordable life insurance cover to broader population including poor and rural citizens.

Yojana (PMJJBY)	
Atal Pension Yojana (APY)	To ensure old-age security by providing guaranteed pension especially to workers in the unorganised sector.
Pradhan Mantri MUDRA Yojana (PMMY)	To provide easy credit (up to ₹20 lakhs) to small/micro enterprises and entrepreneurs, promoting self-employment.
Stand Up India Scheme (SUI)	To promote entrepreneurship among SC/ST and women by supporting greenfield enterprises through loans and handholding support.
Unified Payments Interface (UPI)	To enable seamless, real-time digital payments and fund transfers for individuals and merchants, accelerating digital financial inclusion.
Mahila Sammridhi Yojana (MSY)	To empower women from weaker sections by providing skill development, formation of self-help groups, and easy group loans.
Kisan Credit Card (KCC)	To provide timely and affordable credit to farmers for agricultural and allied activities, reducing dependence on informal sources.
Nationwide Campaign for Financial Inclusion (2025)	To saturate coverage of financial inclusion schemes at panchayat/urban local levels, covering new account openings, re-KYC, enrolments for insurance/pension, and awareness on digital fraud and grievance redressal.

Challenges of Financial Inclusion in India

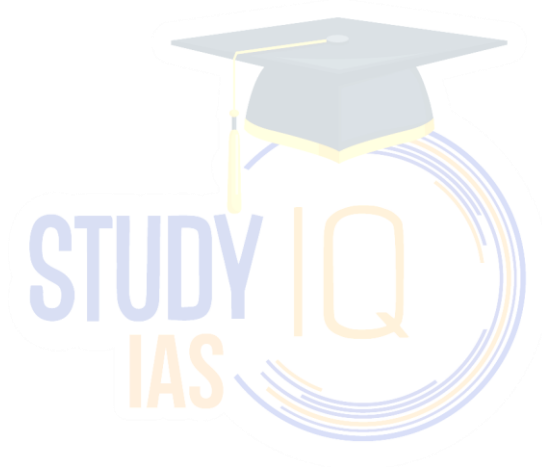
- **Digital Divide:** Limited access to smartphones, internet, and digital infrastructure in rural/remote areas restricts the reach of digital financial services.
- **Low Financial Literacy:** Many individuals, especially in rural and low-income groups, lack the knowledge to use banking and digital platforms effectively.
- **Product Inaccessibility:** Available financial products often do not match the unique needs of low-income or informal sector workers.
- **Infrastructure Bottlenecks:** Inadequate power supply, poor internet connectivity, and lack of last-mile delivery systems hinder access.
- **Dominance of Cash Economy:** A significant portion of the economy still operates in cash, especially in rural and informal sectors, resisting digital adoption.
- **Cost Barriers:** NEFT, RTGS, mobile wallet charges, and minimum balance requirements make banking costly for low-income groups.
- **Lack of Trust in Digital Platforms:** Fear of fraud, data breaches, and low awareness of grievance redressal mechanisms create hesitation in digital adoption.
- **Dependence on Physical Bank Branches:** Many banks still rely on physical presence for basic services like account opening, limiting access in rural and underserved areas.
- **Informal Lending Dominance:** A large section of the population continues to rely on unregulated moneylenders due to lack of formal credit access.

Way Forward

- **Strengthen Digital Infrastructure:** Expand internet connectivity, provide affordable smartphones, and promote public Wi-Fi in rural areas.
- **Promote Financial Literacy:** Launch targeted awareness programs using local languages, visual tools, and community-led models to improve understanding of financial services.
- **Develop Customized Products:** Design financial products tailored for informal sector workers, women, small farmers, and low-income households.

- **Subsidize Transaction Costs:** Remove or reduce charges on low-value transactions (like NEFT, UPI, wallets) and ensure no-frill, zero-balance accounts.
- **Encourage Mobile-First Banking:** Promote simple and secure mobile apps for banking, integrated with features like cash flow tracking and voice assistance.
- **Build Consumer Trust:** Enforce strong consumer protection rules, data privacy norms, and transparent grievance redressal systems.
- **Digitize Core Banking Services:** Enable full digital onboarding using Aadhaar and biometrics, reducing the need for physical branch visits.
- **Promote Open Banking Ecosystem:** Implement a well-regulated open banking framework to foster innovation, enable data portability, and increase access to credit for small borrowers.
- **Improve Credit Delivery:** Expand micro-credit and small-ticket loans through credit guarantee schemes and alternate data (like utility bills) for credit scoring.
- **Link Government Schemes with Financial Access:** Strengthen integration of DBT, PMJDY, APY, and insurance schemes with financial inclusion strategies to widen coverage.

Source: [PIB](#)



Biochar

Context

With the Indian carbon market set to be launched in 2026, CO₂ removal technologies such as biochar are expected to play a crucial role.

What is Biochar?

- **Biochar** is a **carbon-rich form of charcoal** made by heating **agricultural residues and organic municipal solid waste** in a low-oxygen environment (a process called **pyrolysis**).
- It is **stable and long-lasting**, allowing it to **store carbon** in soils for centuries.
- It serves **multiple purposes**: managing waste sustainably, improving soil quality, reducing emissions, and generating energy.

What is Biochar's Potential?

- **Waste Availability**: India produces:
 - **600+ million tonnes** of agricultural residue/year.
 - **60+ million tonnes** of municipal solid waste/year.
- **Production Potential**: Using 30–50% of surplus waste could yield **15–26 million tonnes** of biochar annually.
 - This can **remove ~0.1 gigatonnes of CO₂-equivalent emissions** per year.
- **Byproducts of Biochar Production**:
 - **Syngas** (20–30 million tonnes) → ~8–13 TWh electricity → replace 0.4–0.7 million tonnes of coal.
 - **Bio-oil** (24–40 million tonnes) → offset 8% of India's diesel/kerosene → reduce >2% of fossil-fuel-based emissions.

How is Biochar Helpful as a Carbon Sink?

- **Long-Term Carbon Storage**: Biochar remains in soil for **100–1,000 years**, acting as a **stable carbon sink**.
- **In Agriculture**:
 - Improves **soil water retention** and fertility.
 - Reduces **nitrous oxide emissions** by 30–50% (N₂O is 273x more potent than CO₂).
 - Enhances **soil organic carbon**, helping restore **degraded land**.
- **In Industry (Carbon Capture)**:
 - Modified biochar can **adsorb CO₂** from industrial emissions.
 - Currently **less efficient** than conventional carbon capture methods, but has future potential.
- **In Construction**: Adding 2–5% biochar to concrete:
 - Improves strength and heat resistance.
 - Captures **115 kg CO₂ per cubic metre of concrete**.
- **In Wastewater Treatment**: Can treat **200–500 litres** of wastewater per kg of biochar.
 - Demand potential: **2.5–6.3 million tonnes** to treat India's untreated wastewater.

What Are the Challenges in Biochar Application?

- **Lack of Market Standards**: No standardised **feedstock markets** or **carbon accounting protocols**.
- **Low Awareness & Weak Policy Integration**: Limited knowledge among stakeholders.
 - Not fully integrated into **climate or agricultural policy frameworks**.
- **Technology & Resource Gaps**: Evolving pyrolysis technologies.
 - Limited funding for R&D and infrastructure.
- **No Proven Business Models**: Uncertainty deters private investment and large-scale deployment.

- **Insufficient MRV (Monitoring, Reporting, Verification):** Makes it difficult to register biochar projects for **carbon credits**.

What Needs to Be Done?

- **Policy Recognition:** Recognise biochar as a **verifiable carbon removal method** under India's carbon market.
- **Support R&D:** Develop **region-specific feedstock standards** and optimise biomass use by **agro-climatic zone**.
- **Integrate with Government Programs:** Align with:
 - Crop residue management
 - Bioenergy schemes
 - State Action Plans on Climate Change (SAPCCs)
- **Build Village-Level Infrastructure:** Deploy pyrolysis units in rural areas → **Create ~5.2 lakh rural jobs**.
- **Strengthen Market and Carbon Credit Systems:** Enable **carbon financing** to reward carbon removal.
 - Improve **MRV frameworks** to boost transparency and investor trust.
- **Promote Multi-Sector Adoption:**
 - **Agriculture:** Better soil health, +10–25% yield, –10–20% fertiliser use.
 - **Energy:** Clean fuels (syngas/bio-oil).
 - **Construction & Wastewater sectors:** Scalable carbon sinks and treatment solutions.

Source: [The Hindu](#)

