

DAILY CURRENT AFFAIRS (DCA)

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GST COLLECTIONS RISE TO A RECORD OF ₹2.43 LAKH CRORE IN APRIL

Context

- The government's **Goods and Services Tax (GST) revenue** in April 2026 surged to an all-time high of Rs 2.43 lakh crore, up 8.7% over April last year.

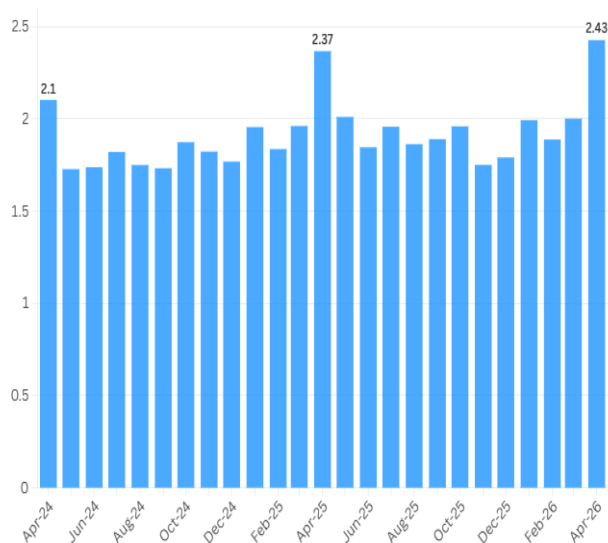
About

- The growth was once again driven **by collections on imports, with revenue from domestic sales growing slower.**
- Collections in April typically come in higher as both industry and the tax administration make a final push to achieve the financial year-end targets.

April Highs

Gross GST collections followed an established pattern in April 2026 by hitting an all-time high

In Rs lakh crore



Goods and Services Tax

- The GST was introduced in **2017** by the **101st Constitutional Amendment Act, 2016** as a **comprehensive indirect tax** for the entire country.
- It is a destination based tax on **consumption of goods and services.**
- It is levied at **all stages** right from manufacture up to final consumption.
 - Only value addition** will be taxed and the burden of tax is to be borne by the final consumer.



- It accrues to the State or the Union Territory where the consumption takes place. It is of 3 types:
 - Central GST (CGST):** Levied by the Center.
 - State/Union Territory GST (SGST/UTGST):** Levied by States or UTs.
 - Integrated GST (IGST):** Tax levied and collected by the Center on all inter-state supplies of goods and/or services.
 - The Center settles accounts with the States/UTs by transferring the SGST/UTGST portion of IGST to the destination state where goods/services were consumed.
- Three slabs for taxes for both goods and services: 5%, 18% and 40%.**
 - Different tax slabs were introduced because daily necessities could not be subject to the same rate as luxury items.
- The GST Council** is a constitutional body **under Article 279A.**
 - It is a federal body comprising the Union Finance Minister as its Chairman and Finance Ministers of all States as members.
 - The GST Council members take almost all decisions on GST with consensus.

- **Exempted Items:** The GST applies to all goods other than alcoholic liquor for human consumption and five petroleum products (common for the Center and the States): petroleum crude, motor spirit (petrol), high speed diesel, natural gas, aviation turbine fuel.

GST 2.0 Reforms

- **Simpler Tax Structure:** The move to a **three-slab GST regime (5%, 18% and 40%)** reduces complexity, classification disputes, and compliance costs.
- **MSME and Startup Enablement:** Faster refunds, simplified registration and returns, and lower input costs aim is to boost the present businesses and startups and incentivise the youth to enter into businesses and initiate startups.
- **Wider Tax Base and Revenue Stability:** Simpler rates and improved compliance have expanded the GST taxpayer base to over 1.5 crore, while gross collections also increased, reinforcing fiscal sustainability.

Conclusion

- The 2025 GST reforms mark a transformative chapter in India's journey toward inclusive economic growth and youth empowerment.
- By rationalising rates across diverse industries, the government has not only eased the cost of living but also fostered new opportunities for startups, MSMEs, and job seekers.
- Collectively, the reforms reaffirm India's commitment to making taxation simpler, fairer, and more growth-oriented - ensuring that young citizens are at the heart of the nation's economic future.

Source: TH

FISCAL POSITION OF STATES

In News

- The Ministry of Finance, in its Monthly Economic Review has cautioned that several Indian states with high revenue deficits and heavy debt burdens will struggle to handle fiscal shocks.

Do you know?

- **Revenue deficit:** It occurs when a government's regular spending (like salaries, pensions, subsidies, and interest payments) is higher than its regular income from taxes and fees.
- **Revenue-surplus:** It implies that states are able to meet their revenue expenditure—salaries, pensions, subsidies—through their own receipts, reducing reliance on borrowings for day-to-day spending, thereby improving fiscal sustainability.

Fiscal stress

- It refers to a situation where there is a persistent or temporary mismatch between government revenues and expenditures, forcing policymakers to adjust spending, raise revenue, or increase borrowing.

Causes of Fiscal Stress

- **Structural Factors:** Narrow tax base, uneven GST collections, and dependence on indirect taxes.
 - ♦ **Rising subsidies** (food, fertilizer, fuel) and welfare commitments.
- **Debt Burden:** High borrowing and interest payments crowd out development spending.
- **Economic Shocks:** Pandemic-related expenditure, global commodity price volatility, and climate-related disasters.
- **Compliance Gaps:** Tax evasion, weak enforcement, and underperformance in capital expenditure.

Impacts

- **Rising debt burden:** Fiscal stress increases debt, raises interest burden, and reduces development spending, risking credit rating downgrades.
- **Reduced fiscal space:** Fiscal stress reduces government flexibility and limits investment in infrastructure and social sectors.
- **Macroeconomic instability:** Heavy government borrowing raises interest rates, restricting private sector investment.
- **Weak social and development outcomes:** Fiscal stress can limit spending on health, education, and welfare, potentially increasing inequality across regions.
- **Inter-generational burden:** Higher borrowing shifts repayment to future generations, raising long-term debt sustainability risks, especially if growth slows.

Data on fiscal position of states

• Revenue surplus vs deficit states

- ♦ **Revenue-surplus states:** Jharkhand, Uttar Pradesh, Telangana (among others)
 - Able to fund regular expenses (salaries, pensions, subsidies) from own revenue.
 - Eight Indian states—Gujarat, Jharkhand, Uttar Pradesh, Telangana, Odisha, Uttarakhand, Bihar, and Goa—have kept their fiscal deficit at or below 3% of GSDP.
- This aligns with the Finance Commission's recommended benchmark for fiscal discipline.
 - ♦ The 16th Finance Commission (2026–31), chaired by Arvind Panagariya, also recommends a 3% fiscal deficit cap for states.
- ♦ **Revenue-deficit states:** Punjab, Kerala, West Bengal, Andhra Pradesh, Rajasthan, Himachal Pradesh
 - Struggle due to high committed spending like pensions and interest payments.
- **Debt levels across states:** Punjab is the most indebted (45.1% of GSDP), followed by Himachal Pradesh (40.5%), Rajasthan, and Andhra Pradesh (36%).
 - ♦ Odisha and Gujarat have relatively low debt, indicating stronger fiscal health.

State	Fiscal Deficit inclusive of SASCI loans (as % GSDP)	Outstanding Liabilities (% GSDP)	Revenue Balance (% GSDP)	Interest Payments (% Revenue Receipts)	Capital Outlay (% GSDP)@	Rev. Exp. to Capital Outlay (ratio)	Own Revenue Receipts (% Total RR)
Revenue Surplus States							
Odisha	3.50%	14.10%	3.00%	3.30%	6.50%	2.99	56.70%
Jharkhand	2.20%	25.80%	2.50%	4.80%	4.00%	4.87	49.00%
Uttar Pradesh	3.00%	23.10%	1.60%	9.50%	4.50%	3.74	49.60%
Goa	3.40%	29.30%	1.30%	9.70%	4.70%	3.61	70.70%
Gujarat	2.00%	14.70%	0.80%	12.20%	3.30%	2.30	71.40%
Uttarakhand	3.40%	28.5%	0.59%	11.70%	4.24%	3.58	46.80%
Telangana	3.00%	28.70%	0.30%	8.80%	2.40%	4.96	76.20%
Bihar	3.00%	34.00%	0.10%	8.90%	3.00%	7.22	26.40%
Average	2.94%	24.24%	1.27%	8.61%	4.08%	4.16	55.85%
Near-Balanced States							
MP	3.90%	32.50%	0	10.90%	4.30%	3.91	46.00%
Revenue Deficit States							
Chhattisgarh	4.10%	21.40%	-0.30%	7.70%	3.80%	5.47	54.00%
Maharashtra	2.80%	20.40%	-0.70%	11.40%	1.80%	6.74	73.30%
Karnataka	2.90%	25.00%	-0.70%	16.90%	2.10%	4.70	74.90%
Haryana	2.70%	25.80%	-0.90%	20.00%	1.50%	7.32	79.00%
Rajasthan	3.70%	36.80%	-1.10%	13.40%	2.50%	6.49	58.70%
AP	3.80%	36.00%	-1.10%	15.90%	2.50%	5.26	58.60%
Kerala	3.40%	33.40%	-2.10%	18.80%	1.20%	11.18	63.00%
Punjab	4.10%	45.10%	-2.20%	22.80%	1.90%	8.06	68.60%
HP	3.50%	40.50%	-2.40%	18.00%	1.10%	15.19	47.70%
Average	3.44%	31.60%	-1.28%	16.10%	2.04%	8.31	64.20%

Repercussions

- Revenue-surplus states are in a relatively stronger fiscal position because lower interest payments free up resources for higher capital spending.

- Revenue-deficit states face tighter constraints since a larger share of their revenue goes toward debt servicing—often exceeding 15% of total revenue receipts—and they also carry higher outstanding debt.
- States that combine revenue deficits with high debt levels have limited flexibility to respond to economic or fiscal shocks.
 - ♦ They are often forced to cut or restructure spending, or seek additional financial support from the Centre.
 - ♦ However, this can create tension, as such demands arise while the Centre itself is focused on fiscal consolidation.

Conclusion and Way Forward

- High state-level debt (around 35–45% of GSDP in some cases) significantly contributes to India's overall public debt burden. States that are unable to maintain a "golden rule" of zero revenue deficit face higher vulnerability to fiscal stress, especially during periods of rising expenditure.
- Maintaining fiscal discipline is therefore essential for long-term macroeconomic stability and effective shock management.
- Fiscal consolidation efforts must be pursued jointly by both the Centre and the States.
- India's fiscal stress reflects the balance between welfare commitments and fiscal prudence. While the Centre has followed a credible consolidation path, state finances remain a key concern.
 - ♦ Sustainable fiscal health requires discipline, transparency, and stronger cooperative federalism.

Source : [TH](#).

BETWEEN POLLING AND COUNTING, HOW EVMS ARE STORED IN STRONGROOM

Context

- Days before the counting of votes in the West Bengal Assembly elections, Chief Minister Mamata Banerjee claimed they received **reports of manipulation concerning the storage of EVMS.**

Procedure of Handling EVMS

- The ECI's procedure for handling EVMS before, during and after polling is laid out in its **Manual on Electronic Voting Machines, 2023.**

- **Before the election**, EVMs are stored in a warehouse under the control of the District Election Officer (DEO), who is the District Magistrate.
- **Once elections are underway**, the EVMs are randomised in the presence of representatives of national and state-recognised parties and sent to the respective strongrooms in each Assembly constituency.
- The entire process is to be **conducted under 24/7 CCTV coverage**, it is from these strongrooms that the EVMs are dispatched to the polling booths.
- **After polls close on voting day**, the **EVMs are to be sealed and escorted back** to the strongrooms by the poll officials and security personnel.

What are Electronic Voting Machines (EVMs)?

- It is a device used to **electronically record and count votes** cast in elections.
- EVMs were first used in **1982** in the Assembly constituency of Paravur in Kerala in 50 out of 123 booths.
- EVM has two parts, it consists of a **'control unit'** and a **'balloting unit'**, connected by a **5-meter cable**.
- The control unit is with the **Election Commission-appointed polling officer** and it is the brain of the EVM.
- The balloting unit is in the voting compartment into which the voter enters to cast the vote in secret by pressing the button against the name and symbol of the candidate of her choice.
 - ♦ **The balloting unit** is turned on only after the polling officer presses the 'Ballot' button on it.

Voter Verified Paper Audit Trail (VVPAT)

- When a vote is cast, the VVPAT machine, which is attached to the ballot unit (BU) of the EVM, **prints out a slip of paper with the voter's choice indicated on it**.
 - ♦ Though it remains behind glass, the printed slip is visible for seven seconds so the voter can see that the vote has been recorded correctly, before it falls into a box underneath.
- It contains the **name of the candidate** (for whom vote has been cast) and symbol of the party/individual candidate.
- The idea of the VVPAT machine **first emerged in 2010**. However it was used for the first time in the **Noksen Assembly constituency of Nagaland in 2013**.

- ♦ **The Conduct of Elections Rules, 1961** were amended in **2013** to allow for a printer with a drop box to be attached to the EVM.
- From 2017, 100% of VVPATs began to be used in polls, and the **2019 Lok Sabha elections became the first general election to have 100% of EVMs being attached to VVPATs**.

Significance of EVMs

- **Speed:** EVMs can facilitate quicker counting of votes compared to manual counting.
- **Accuracy:** They are designed to minimize errors in vote counting and reduce instances of invalid or spoiled ballots.
- **Cost-effectiveness:** Over time, EVMs save money compared to traditional paper-based voting systems by reducing the need for printing and storing paper ballots.

Conclusion

- Overall, while the VVPAT system in India represents a significant step towards **enhancing transparency and accountability in elections**, it continues to face criticism and scrutiny regarding its **effectiveness, cost, and implementation challenges**.
 - Addressing these concerns requires **efforts to improve the reliability, accessibility, and public acceptance of the VVPAT system**.

Source: IE

INDIA'S STRESSED ASSET RESOLUTION FRAMEWORK & NARCL

Context

- National Asset Reconstruction Company Limited (NARCL) strengthens India's Stressed Asset Resolution Framework, and accelerates recoveries in FY 2025–26.

Evolution of India's Stressed Asset Resolution Framework

- **Early Mechanisms: Debt Recovery Tribunals (DRTs)**, 1993; **SARFAESI Act**, 2002; and **Asset Reconstruction Companies (ARCs)**.
 - ♦ However, these mechanisms suffered from **delays, low recovery rates, and coordination issues**.

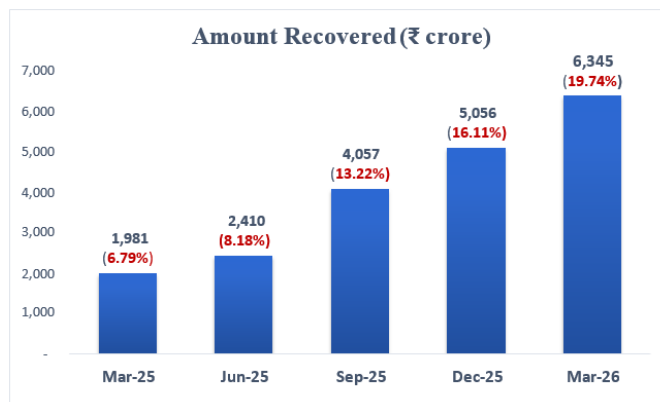
- **Structural Reform: Insolvency and Bankruptcy Code (IBC), 2016:** It introduced a **time-bound insolvency resolution process**; shifted control from promoters to creditors; and improved recovery rates and credit discipline.
 - ♦ It created a '**creditor-in-control model**' and marked a paradigm shift in India's resolution ecosystem.
- **Asset Quality Review (AQR) By RBI & Banking Reforms:** These improved **transparency in NPAs**; and resulted in recapitalisation of banks strengthened balance sheets.
- **Need for a 'Bad Bank' Model:** Despite IBC success, large, complex NPAs remained unresolved, multiple lenders led to **coordination failures**; and ARCs faced **capital constraints**.
 - ♦ It led to the creation of a centralized 'bad bank' structure.
 - ♦ Bad banks help by aggregating stressed assets, enabling professional resolution, and improving price discovery.

National Asset Reconstruction Company Limited (NARCL)

- **Institutional Structure:** Government-backed ARC ('bad bank'), that works with **India Debt Resolution Company Ltd. (IDRCL)** focusing on **large-value stressed assets**.
- **Key Functions:** Acquisition of stressed assets from banks; aggregation of exposures across lenders; and resolution via IBC process, market-based sale, and restructuring mechanisms.

Role in the Resolution Ecosystem

- **Balance Sheet Cleansing:** Removes legacy NPAs from bank books and enhances **credit capacity of banks**.
- **Value Maximisation:** Consolidation improves bargaining power, and professional management enhances recovery outcomes.
- **Complementing IBC:** IBC is a legal resolution framework; and NARCL is an institutional execution mechanism.
 - ♦ NARCL reduces **coordination failures and delays** inherent in multi-creditor systems.



Performance and Emerging Trends

- NARCL has accelerated **recovery momentum** in recent years, focusing on **large-ticket NPAs** improves systemic efficiency.
- It helps in the development of a **secondary market for stressed assets**.
- Target acquisition: **12 lakh crore stressed assets**; continued focus on **large-value resolutions**; and strengthening of **secondary market for distressed assets**.
- NARCL is expected to play a pivotal role in enhancing **financial sector resilience**, supporting **India's credit growth cycle**; and enabling **efficient capital allocation**.

Role in Strengthening Banking Sector

- **Balance Sheet Cleansing:** NARCL enables banks to transfer legacy NPAs, improve asset quality, and focus on fresh lending.
 - ♦ It aligns with RBI's emphasis on **capital adequacy and credit flow**.
- **Capital Recycling:** Recovery of stressed assets releases locked capital; and facilitates **credit expansion in productive sectors**.
- **Improved Recovery Ecosystem:** Works alongside **IBC, DRTs, and SARFAESI Act**; and reduces delays and coordination issues among multiple lenders.

Challenges in the Framework

- **Legal and Procedural Delays:** IBC timelines often breached due to litigation.
- **Valuation Issues:** Difficulty in pricing distressed assets.
- **Moral Hazard:** Banks may rely excessively on transfers to NARCL.

- **Capacity Constraints:** Need for deeper distressed asset markets and investors.

Way Forward

- Strengthen **IBC infrastructure and judicial capacity**
- Improve **secondary market liquidity for stressed assets**
- Enhance **transparency in asset valuation**
- Promote **private sector participation**
- Integrate **technology and data analytics in resolution.**

[Source: PIB](#)

RECALIBRATING FOOD SYSTEMS TO HYDROLOGICAL REALITIES

Context

- The **World Bank**, in its report “**Nourish and Flourish: Water Solutions to Feed 10 Billion People on a Livable Planet,**” has highlighted a structural concern that the global food system is fundamentally misaligned with hydrological realities.

Key Findings of the report

- The World Bank estimates that current agricultural water systems can sustainably support food production for only about **one-third of the global population by 2050** if inefficiencies persist.
 - ♦ The crisis is primarily one of mismanagement rather than absolute water scarcity.
- **India represents a paradox** as it is a water-stressed country exporting water-intensive crops, thereby exporting “**virtual water.**”
- **Groundwater depletion** in major agricultural regions such as Punjab and Haryana is occurring at rates exceeding **one metre annually.**

Energy–Water–Food Nexus

- **The International Energy Agency (IEA)**, through its 2026 plan “**Sheltering from Oil Shocks,**” has emphasised that energy disruptions can rapidly cascade into food and water crises.
 - ♦ **India imports** nearly **85–90% of its crude oil**, making it vulnerable to global energy shocks.
- **Groundwater irrigation** is an energy-intensive process, dependent on electricity and diesel.
 - ♦ **Rising fuel prices** can increase the cost of Irrigation, Transportation and Food distribution.

- Thus, inefficiencies in water use directly **increase energy demand**, while energy shocks exacerbate **food insecurity and inflation.**

Drivers of the Crisis in India

- **Distorted Incentive Structure:** Free or highly subsidised electricity for irrigation reduces the marginal cost of groundwater extraction to near zero. **This leads to unsustainable and excessive groundwater pumping.**
- **Cropping Pattern Imbalance:** Policy support mechanisms encourage cultivation of water-intensive crops such as **rice and sugarcane** in ecologically unsuitable regions.
- **Fragmented Policy Framework:** Water, energy, and agriculture are governed in silos, leading to policy incoherence and inefficiency.
- **Impact of Climate Change:**
 - ♦ Increasing frequency of **erratic monsoons, droughts, and extreme rainfall** events is disrupting agricultural cycles.
 - ♦ Climate stress, when combined with energy shocks, creates compound risks for food security.

Government Initiatives for Sustainable Management

- **National Water Mission:** The mission focuses on conservation, minimising wastage, and ensuring equitable distribution of water resources.
- **Pradhan Mantri Krishi Sinchai Yojana (PMKSY):** The scheme aims to enhance irrigation coverage and improve water-use efficiency through the principle of “Per Drop More Crop.”
- **Micro-Irrigation Fund:** The fund supports states in expanding drip and sprinkler irrigation systems to improve water efficiency.
- **Atal Bhujal Yojana:** This scheme focuses on community-led groundwater management in water-stressed regions and promotes sustainable groundwater usage through behavioural change and local participation.
- **PM-KUSUM Scheme:** The scheme promotes solar-powered irrigation pumps, reduces dependence on diesel, and enhances farmers’ energy security.

Way Ahead

- **Crop diversification** away from water-intensive crops must be actively encouraged in water-stressed regions through targeted incentives and procurement support.
- **The adoption of precision irrigation technologies**, including drip and sprinkler systems, must be scaled up to improve water-use efficiency in agriculture.
- **Government initiatives such as PM-KUSUM** should be integrated with safeguards like water accounting mechanisms and smart usage controls to prevent overuse arising from low or zero marginal energy costs.
- **Strengthened institutional coordination** across ministries, along with integrated data systems and planning processes, will be essential to ensure long-term sustainability and effective policy implementation.

Source: [TH](#)

NEWS IN SHORT

TATYA TOPE

Context

- A rare handwritten and signed letter of Tatya Tope dating back to **1857** has been discovered in the archives of Madhya Pradesh.

About Tatya Tope

- **Early Life:** Tatya Tope, originally named **Ramachandra Pandurang Tope**, was born in 1814 in Nashik, Maharashtra.
 - ♦ His father served as a noble in the court of **Baji Rao II**, the last Maratha Peshwa.
 - ♦ He shared a close association with **Nana Sahib**, the adopted son of Baji Rao II, which later shaped his role in the revolt.
- **Role in the Revolt of 1857:** He emerged as one of the **most capable military commanders** during the Revolt of 1857.
 - ♦ He played a key role in major centres of resistance such as **Kanpur and Gwalior**.
 - ♦ He worked closely with leaders like **Rani Lakshmibai**, helping sustain the rebellion against British forces.

- **Military Tactics:** He was known for his effective use of **guerrilla warfare, rapid mobility, and surprise attacks**.

- ♦ He was eventually captured by the British and executed in **Shivpuri** in **1859** after a formal trial.

Source: [TOI](#)

CHANGES TO CITIZENSHIP RULES NOTIFIED BY CENTRE

Context

- The government has notified the **Citizenship (Amendment) Rules, 2026**, introducing **revised provisions** related to **Overseas Citizen of India (OCI)** cardholders and citizenship applications.

About

- **The Ministry of Home Affairs** has made changes to the **Citizenship Rules, 2009**.
- It has introduced a **digital shift** across **various processes** for Overseas Citizen of India (OCI) cardholders and citizenship applications.

Provisions

- A minor child cannot, at any time, hold the passport of any other country while also holding an Indian passport.
- **All applications for OCI card registration and renunciation** will now be submitted electronically through the official portal.
- **On the declaration of renunciation of OCI status**, individuals must surrender the original physical card to the nearest Indian Mission, Post, or Foreigners Regional Registration Officer.
- The government has also removed the previous requirement for applicants to **submit documents in duplicate and introduced electronic OCI (e-OCI)**, under which registered individuals may now be issued **either a physical OCI card or an electronic OCI registration**.
- OCI applicants will now have to sign a **new consent form** to opt into the Fast Track Immigration Programme by agreeing to the collection of their biometric information during registration.

The OCI Scheme

- The OCI scheme was introduced through an amendment to the Citizenship Act, 1955, in **2005**.

- The scheme provides for the **registration of Persons of Indian Origin as Overseas Citizens of India**, provided they were citizens of India **on or after 26th January 1950**, or were eligible to become citizens on that date.
- However, individuals who are or have been or whose parent, grandparent or great-grandparent was a **citizen of Pakistan or Bangladesh are not eligible**.

Source: [AIR](#)

SIKKIM BECOMES INDIA'S FIRST PAPERLESS JUDICIARY STATE

Context

- The Chief Justice of India, Surya Kant, declared Sikkim as the first paperless judiciary state in India.

About

- It marks a shift towards a faster, transparent, and technology-driven justice system, where e-filing and digital case management enhance efficiency and access to justice, especially in remote areas, aligning with the vision of Viksit Bharat 2047.

High Courts in India

- The institution of the High Court originated in India in **1862** when the high courts were set up at **Calcutta, Bombay and Madras**.
- At present, there are 25 High Courts in India, with some having jurisdiction over more than one State/UT. Union Territories like Delhi, Jammu & Kashmir, and Ladakh have their own High Courts.
- **Articles 214 to 231 (Part VI)** of the Constitution deal with their organisation, powers, and jurisdiction.

Source: [AIR](#)

CURATEQ SECURES REGULATORY NOD FOR BEVACIZUMAB BIOSIMILAR

Context

- Aurobindo Pharma's subsidiary CuraTeQ Biologics has received a Notice of Compliance (NOC) from Health Canada for its bevacizumab biosimilar Bevqolva.

What is Notice of Compliance (NOC)?

- A Notice of Compliance (NOC) is a **formal regulatory approval** granted after evaluating a drug's safety, efficacy, and quality.
- The issuance of an NOC allows a pharmaceutical company to **legally market and distribute the drug** within the concerned jurisdiction.
- The NOC reflects **adherence to stringent regulatory standards** comparable to those followed in advanced pharmaceutical markets.

What are Biosimilars?

- Biosimilars are biological products that are **highly similar to an already approved reference biologic medicine** in terms of safety, efficacy, and quality.
- Biosimilars are **not entirely new drugs** but are developed as **equivalent versions of well-established biologic medicines** that have been used for years in treating various diseases.
- Biosimilars are **complex biologic products** developed using **similar living cell systems as reference biologics**, ensuring close similarity in structure and function while being more technically challenging to produce than generic drugs.

Biosimilars	Generics
Generally made from living sources	Generally made from chemicals
Require a specialized process to produce	Have a simpler process to copy
Nearly identical to original biologics	Copy of brand-name drugs
Faster development process	Faster development process
Usually less expensive than original biologics	Usually less expensive than brand-name drugs

MS Credit: U.S. Food and Drug Administration

Source: [ET](#)

CENTRE EYES NEW E-BUS SCHEME

Context

- The Centre may roll out a **fresh electric bus scheme for States** after completing the tendering and allocation of all **14,000 buses under the PM E-DRIVE programme**.

About PM E-DRIVE Scheme

- The scheme was launched in **2024** by The Ministry of Heavy Industry.
- The scheme duration was from October, 2024 till 31st March, 2026 and is now **extended to March 31, 2028**.
- **The EMPS-2024 (Electric Mobility Promotion Scheme)** was also subsumed under the PM E-DRIVE scheme.
- The PM E-DRIVE scheme is proposed to be implemented through the following components:
 - ♦ **Subsidies:** Demand Incentives for e-2W, e-3W, e-ambulances, e-trucks and other new emerging EV categories.
 - ♦ **Grants for creation of capital assets:** e-buses, establishment of network of charging stations & upgradation of testing agencies of MHI, and;
 - ♦ Administration of the Scheme including IEC (Information, Education & Communication) activities and fee for project management agency (PMA).
- **The following categories of vehicles are eligible for support:**
 - ♦ Buses (only electric buses) (e-bus);
 - ♦ Three-Wheelers (electric) including registered e-rickshaws & e-carts and L5 (e-3W);
 - ♦ Two wheelers (electric) – e-2W;
 - ♦ e-ambulances (electric, plug in hybrid & strong hybrid); and
 - ♦ e-trucks and other new emerging EV categories (to be notified subsequently).
- **Charging Stations:** The scheme addresses range anxiety of EV buyers by promoting in a big way the **installation of electric vehicle public charging stations (EVPCS)**.

Source: TH

CYBORG BOTANY

Context

- Scientists have advanced the field of **cyborg botany**, which enables plants to communicate their internal health in real time by **converting biological signals into electronic data**.

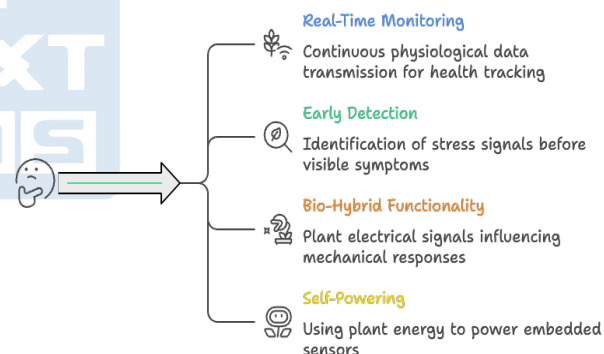
About Cyborg Botany

- Cyborg botany is an **emerging interdisciplinary field** that integrates **living plants with electronic components**, creating hybrid systems at the intersection of **biology, materials science, and engineering**.
- The term “cyborg” refers to a **cybernetic organism**, highlighting the fusion of natural biological processes with artificial electronic functionality.
- The objective is to **transform plants into living circuit boards** capable of sensing, processing, and transmitting information.

Working Mechanism

- **Embedding Nanowires and Transistors:** Scientists insert nanowires and electronic transistors into plant cell walls, where they function as **biosensors that detect biochemical changes in real time**.

Key Features of Cyborg Plants



- **Conductive Polymers as Living Wires:** Materials such as **PEDOT** (a biodegradable, electrically conductive polymer) act as internal wiring, carrying signals from plant cells to external devices.
- **Signal Conversion:** The system captures plant responses to **light, moisture, nutrients, and pests**, and converts these biochemical signals into **digital data**.

Source: TH

SACRED GROVES IN INDIA

Context

- The Kerala State Biodiversity Board has launched a **pilot programme to restore sacred groves**.

About Sacred Groves



- Sacred groves are patches of forest or natural vegetation **protected by local communities due to religious beliefs and traditional practices**.
- They function as **community-conserved ecosystems**, often associated with temples, rituals, and indigenous traditions.

- India has an estimated **100,000–150,000 sacred groves**, reflecting their widespread cultural and ecological significance.
- Suitable groves may be notified as **Biodiversity Heritage Sites under the Biological Diversity Act, 2002**.

Significance

- Sacred groves act as **biodiversity hotspots**, preserving rare, endemic, and medicinal plant species.
- They contribute to **soil conservation and prevent erosion**, especially in fragile ecosystems like the Western Ghats and Himalayas.
- Culturally, they are **centres of rituals, festivals, and community identity**, reinforcing conservation through belief systems.

Source: TH

