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Vol. 4 • No.

HARSHER PENALTIES
LS passes paper leak Bill amid protests
NEWS » PAGE 5

PARLIAMENT INFORMED
'No defect in grounded AI Boeing 787 fuel switch'
NEWS » PAGE 6

COAL BLOCK SCAM
SC closes case against Manmohan Singh
NEWS » PAGE 4

REGULATING FUNDS
A threat to civil society organisation
2026 FCRA Bill expands state control over NGOs
EDITORIAL » PAGE 8

BOOSTING THE TALLY
Gulveer, Harjinder bag silver medals
SPORT » PAGE 16

SC restricts 'retrospective' green clearances

- 2021 order envisages perpetual environmental clearance for projects without prior EC, it says
- SC says amnesty can be given, backed by proper notification, not through administrative orders
- Court also bars the use of administrative orders to grant *ex post facto* clearances in the future

Krishnadas Rajagopal
NEW DELHI

The Supreme Court on Wednesday quashed, with prospective effect, a 2021 Office Memorandum (OM) granting *ex post facto* environmental clearances to infrastructure projects, holding that the Union government cannot substantially alter protective environmental checks by issuing mere administrative instructions.

"The 2021 OM is an administrative order, and envisages a perpetual regime for grant of environmental clearance to projects undertaken without prior environmental clearance. It substantially alters the nature of enquiry and criteria for grant of environmental clearance under the 2006 notification. It supplants an earlier delegated legislation [2006 notification] through an administrative instruction, which is impermissible in law," the court noted in an 80-page judgment.

'No parallel route'

An 'amnesty' measure cannot become a permanent, parallel route which circumvents the prior environmental clearance (EC) regime under the 2006 notification of the Environment Ministry. A valid amnesty measure should be used as a rare exception, must be finite in duration and confined to its class, a Bench headed by Chief Justice of India Surya Kant observed.

The court said the prior EC regime of the 2006 notification, spanning across various sectors like highways, airports, real estate and township developments, and mining and resource extraction, was mandatory in nature.

The 2006 notification's mandate could have only been amended through a subsequent and appropriate amnesty notification for select, deserving projects whose continuation was of "supervening public interest", Justice Joymalya Bagchi, who authored the judgment, held.

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> SUPREME COURT JUDGMENT

The court barred the Centre from passing administrative orders to grant *ex post facto* clearances in the future. Justice Bagchi added that the present judgment would not, however, stand in the way of the top court granting *ex post facto* clearances in exercise of its plenary powers under Article 142 of the Constitution.

"The 2021 OM, as a perpetual amnesty scheme applicable to all permissive projects, failed to lay down an intelligible differentia for selection of projects for grant of *post facto* environmental clearance having rational nexus with supervening public interest, and is thereby *ultra vires* of the objectives of the Environmental Protection Act of 1986, namely preservation of the environment through a balanced approach through precautionary principle and sustainable development... The OM does not satisfy the threshold of reasonableness and proportionality and is violative of Articles 14 and 21," Justice Bagchi said.

The court held that an amnesty-regularisation scheme was not a right. A project proponent who had built in breach stood upon no footing of entitlement. The 2021 OM had indiscriminately allowed every permissible industry to be regularised for a meagre compensation. It had yielded to a principle of 'pollute and then pay', rather than to sustainable development.

The decriminalisation of the offence of breaching the prior clearance regime through the Jan Vishwas (Amendment of Provisions) Act of 2023 did not help matters either. Before the 2023 Act altered the offence into a civil liability, violators faced imprisonment of up to five years, or with fine of up to ₹1 lakh, or both.

"A lax implementation regime, coupled with a regularisation scheme unlimited in time and subject to capped environmental compensation at a flea-bite level, rendered the prior EC regime otiose both in fact and in law," Justice Bagchi wrote.

The court said there were cases in which the state, the preserver of the rule of law, has violated the law of the prior EC regime.

"Future amnesty schemes, if any, should provide effective deterrent measures against individual public servants, including disciplinary action and personal liability for environmental damage, wherever the state or its instrumentalities, as project proponents, violate the prior EC regime," the Bench ordered.

The top court quashed the 2021 OM prospectively to not upset ongoing projects, including the AIIMS Medical College and Hospital building in Odisha, the Centre of Excellence for Cancer Diseases in Tamil Nadu, Vijayapura Airport in Karnataka, medical colleges, slum rehabilitation and irrigation projects for drought-prone areas.

It said retrospective clearances given under 2017 notification, which provided a 'one-time amnesty' for undertakings started without prior clearance, and the 2021 OM would remain valid unless individually assailed in accordance with law. The 2021 OM was derived from the 2017 notification, and institutionalised *ex post facto* clearances.

The case has had a roller coaster ride with a Division Bench of the apex court declaring such retrospective clearances a gross illegality and an anathema to the environment in a May 2025 judgment. In November that year, a larger Bench had diluted the judgment, reasoning that doing away with the retrospective clearance regime would have a "devastating effect" on ongoing public projects worth "thousands of crores of Rupees".

NEARBY

India preparing for visits by Xi and Putin in Sept.

NEW DELHI
India is getting ready for visits by Chinese President Xi Jinping and Russian President Vladimir Putin, with both leaders planning to attend the BRICS summit to be held in Delhi on September 12 and 13, sources said on Wednesday. » PAGE 4

RS passes Bill to criminalise insult to National Song

NEW DELHI
The Rajya Sabha has passed the Prevention of Insults to National Honour (Amendment) Bill, 2026, which proposes to extend the punishment for acts of disrespect towards national symbols to any insult to the National Song, *Vande Mataram*, as well. » PAGE 5

CWRC head for distress-sharing plan for Cauvery

CHENNAI
Amid a drought situation in the Cauvery basin, the chairperson of the Cauvery Water Regulation Committee Vineet Gupta has asked Karnataka and Tamil Nadu to come up with a distress-sharing formula. » PAGE 3

Ukraine attacks 2 of Russia's largest oil refineries

KYIV
Ukrainian forces hit two of Russia's biggest oil refineries overnight in its latest long-range strikes, officials said on Wednesday, as Kyiv deepened its military and diplomatic pressure on Moscow and extending a fuel crisis. » PAGE 14

Cubs' crusade

Roaring appeal: Children in tiger costumes take part in an awareness campaign in Bengaluru on Wednesday as part of the International Tiger Day. India is home to the world's largest wild tiger population, accounting for nearly 70% of all wild tigers globally. K. MURALI KUMAR

U.S. fast-tracks Act to impose up to 100% tariff on nations importing Russian crude oil

T.C.A. Sharad Raghavan
NEW DELHI

The U.S. Senate has voted to fast-track the passage of a legislation which could see a tariff of 100% being imposed on India for its imports of Russian oil. The Senate on Tuesday exhibited a rare display of bipartisan agreement by voting 86-12 to invoke a cloture motion to advance the 'Lindsey O. Graham Sanctioning Russia and Iran Act of 2026'.

The original version of the Act, introduced in 2025, proposed a blanket 500% tariff on those countries importing Russian oil. However, the figure was revised downwards early this month.

'To deprive Putin'

As per Senate documents, the bipartisan Act "is designed to deprive [Russian President] Vladimir Putin of the revenue financing Russia's war against Ukraine" by limiting Moscow's political leadership, financial institutions, energy sector, and sanctions-evasion networks.

The sanctions are to be implemented using "targeted tariffs to pressure the world's largest purchasers of Russian energy to reduce their dependence on Moscow".

A cloture is basically a Senate procedure that sets a time limit for the debate and related actions on an issue before it is put to a vote. That is, it is a procedure meant to hasten the vote on a particular issue.

Under the latest version of the Act, a tariff of "up to 100%" would be levied on the top five purchasers of Russian crude oil and natural gas. Currently, China accounts for about 47%-50% of Russian crude oil exports, while India accounts for another 36%-38%.

Trade troubles

The proposed U.S. sanctions seek to use targeted tariffs to pressure Russian energy purchasers to reduce their dependence on Moscow

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> The stakes for India (due to Lindsey O. Graham Sanctioning Russia and Iran Act of 2026) are substantial... Access to discounted Russian crude has significantly lowered India's import bill, supported energy security, and helped contain inflation
> AJAY SRIVASTAVA
> Global Trade Research Initiative

As per the latest Indian government data, Russian oil made up a little more than 40% of Indian oil imports in May 2026, and the Ministry of Petroleum and Natural Gas has told *The Hindu* that this rose to "more than half" in June.

"The stakes for India are substantial," Ajay Srivastava, founder of the think tank Global Trade Research Initiative said. "Access to discounted Russian crude has significantly lowered India's import bill, supported energy security, and helped contain inflation."

"Washington is steadily expanding its use of trade and economic measures to pursue strategic objectives," he added. "Reciprocal tariffs, Section 301 investigations, forced-labour measures, sector-specific duties, and now Russia-related sanctions reflect an increasingly broad toolkit of economic pressure."

Carve-out

The new version of the Act also creates a carve-out by exempting countries that are currently importing less than 15% of Russia's natural gas exports and are taking significant steps to reduce those imports.

This carve-out would benefit several European countries that currently import natural gas from Russia through pipelines or in liquefied form.

Meanwhile, Union Commerce and Industry Minister Piyush Goyal on Wednesday said the first tranche of the bilateral trade agreement between India and the U.S. will come into operation as soon as the U.S. is able to ensure that India gets a comparative advantage over its competitors.

BS-III vehicles may require some modifications to use E20 fuel: govt.

Jagriti Chandra
NEW DELHI

Some rubber parts and gaskets in BS-III vehicles may require replacement when using E20 fuel, a blend of 20% ethanol and 80% petrol, the Union government informed Parliament on Tuesday.

"In case of testing done on BS-III vehicles introduced from 1st April, 2005 and manufactured prior to 2016, some rubber parts and gaskets may require replacement, which can be easily managed during routine servicing regime of the vehicle," Union Minister of Road Transport and Highways Nitin Gadkari said in the Rajya Sabha, citing the findings of a study.

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> NITIN GADKARI
> Union Minister of Road Transport and Highways

He was responding to a question from the Communist Party of India MP A.A. Rahim on the impact of E20 on vehicle performance, fuel efficiency, engine durability, and maintenance costs.

The Centre had commissioned the study, which is yet to be made public. It was carried out by the Indian Oil Corporation Limited, the Indian Institute of Petroleum in Dehradun, the Society of Indian Automobile Manufacturers, and the Automotive Research Association of India.

Other than BS-III vehicles, the study showed there was no need to modify car and two-wheeler engines, the Minister said.

There have been complaints of vehicles misfiring or breaking down, with some blaming E20 fuel or contaminated E20 fuel.

Fuel efficiency is influenced by "a host of factors beyond just fuel type" such as driving and maintenance practices, and AC load, Mr. Gadkari said.

After a pause, the U.S. and Iran resume missile strikes

Associated Press
Agence France-Presse
CAIRO/WASHINGTON

Jordan intercepted missiles launched from Iran early on Wednesday, hours after the U.S. military said it knocked down another Iranian barrage launched against American forces in the region. The U.S. also said it worked with Saudi Arabia to fire on Iran-backed militias in Iraq that have targeted the kingdom in recent days. The militias said at least 20 of their fighters had been killed.

FULL REPORT » PAGE 14

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Aspect	Details
Judgment	The **Supreme Court of India** has struck down (prospectively) the **2021 Office Memorandum (OM)** that allowed **retrospective (ex post facto) environmental clearances** for projects that had already begun construction without obtaining prior Environmental Clearance (EC).
Bench	Chief Justice **Surya Kant** and Justice **Joymalya Bagchi** (judgment authored by Justice Bagchi).
Key Principle	Projects requiring environmental clearance **must obtain approval before construction starts**. The government cannot permanently relax this requirement through administrative orders.

What is Environmental Clearance (EC)?

Environmental Clearance is the government's approval before a project that may affect the environment (such as mines, highways, airports, industries, dams, ports, etc.) begins construction.

Purpose:

- Assess environmental impact.
- Protect forests, wildlife, water and air.
- Consult affected communities.
- Impose mitigation conditions.

What was the 2021 Office Memorandum?

The Ministry of Environment issued an **Office Memorandum (OM) in 2021**.

It allowed projects that had **already started without obtaining EC** to later apply and obtain permission.

This is called **Ex Post Facto Environmental Clearance**.

Instead of:

> Approval → Construction

it allowed

> Construction → Approval

Why did the Supreme Court strike it down?

The Court held that the 2021 OM was illegal for several reasons.

Reason	Court's Observation
Administrative overreach	An Office Memorandum cannot change the law created under the 2006 Environmental Clearance Notification.
Prior clearance mandatory	Environmental assessment must happen before work begins.
Violates precautionary principle	Environmental law focuses on preventing damage, not merely compensating after damage occurs.
Encourages violations	Industries may intentionally ignore environmental laws knowing they can obtain approval later.
Weakens rule of law	Honest companies suffer while violators benefit.

Why is the 2021 OM unconstitutional?

Justice Bagchi observed that the OM:

- created a **permanent amnesty scheme**
- fundamentally changed the EC regime
- bypassed statutory safeguards
- violated Articles **14** (Equality) and **21** (Right to Life, including environmental protection)

The Court said it **failed the tests of reasonableness and proportionality**.

Court's criticism of "Pollute and Pay"

The Court strongly criticised the idea behind the OM.

Instead of preventing pollution,

the system effectively became

> Pollute first → Pay compensation later → Continue operating

The Court said this promotes **"pollute and pay"**, not **sustainable development**.

What is an Amnesty Scheme?

An amnesty scheme forgives earlier legal violations under certain conditions.

The Court clarified:

Valid Amnesty	**Invalid Amnesty**
One-time, limited, backed by law	Permanent, open-ended administrative scheme
Exceptional circumstances	Regular route for violators
Proper notification	Office Memorandum

Court's Important Observation

The Bench said:

A violator **does not have a legal right** to obtain environmental clearance after breaking the law.

Regularisation should remain an **exception**, not become the rule.

Difference between 2017 and 2021 Schemes

2017 Notification	2021 Office Memorandum
One-time amnesty	Permanent mechanism
Limited projects	All eligible sectors
Statutory notification	Administrative order
Temporary	Continuous

The Court found the **2017 notification distinguishable**, whereas the **2021 OM institutionalised ex post facto clearances**.

Administrative Orders Barred

The Supreme Court has prohibited the Central Government from issuing future **administrative orders** granting retrospective environmental clearances.

If any relaxation is needed:

- it must be legally authorised,
- limited,
- justified by public interest,
- and issued through proper statutory procedures.

Impact on Existing Projects

The Court avoided disrupting major public infrastructure projects.

Therefore:

- Ongoing projects will **not automatically stop**.
- Previously granted clearances under the 2021 OM remain valid **unless individually challenged court**.

Examples mentioned include:

- AIIMS Medical College & Hospital project (Odisha)
- Centre of Excellence for Cancer Diseases (Tamil Nadu)
- Vijayapura Airport (Karnataka)
- Medical colleges
- Slum rehabilitation projects
- Irrigation projects

YEAR	EVENT
2006	Environmental Clearance Notification made prior EC mandatory.
2017	One-time notification allowed limited regularisation of past violations.
2021	Government issued Office Memorandum creating permanent retrospective clearance mechanism.
May 2025	Supreme Court Division Bench declared retrospective clearances illegal.
Nov 2025	Larger Bench modified the decision to protect ongoing public projects.
July 2026	Final judgment quashed the 2021 OM prospectively and laid down future rules.

IN BRIEF

LIC pays ₹12,207.25 crore dividend to government

Life Insurance Corporation of India (LIC) on Wednesday paid ₹12,207.25 crore dividend to the Centre. CEO and MD R. Doraiswamy presented the dividend cheque, for ₹12,207.25 crore, to Union Minister of Finance Nirmala Sitharaman as the government of India's share of dividend, LIC said. The shareholders had given their approval at the annual general meeting on July 27. LIC said it is completing 70 years and as on March 31, 2026 the asset base stood at ₹59.03 lakh crore.

SBI raises ₹4,691 crore via Additional Tier 1 bonds

State Bank of India has raised ₹4,691 crore through its first Basel III compliant Additional Tier 1 (AT1) bonds to part fund the growth strategy, signifying its ability to diversify and raise long term non-equity regulatory capital. This is the first Tier 1 bonds issuance in the ongoing financial year. "This issue attracted a robust response from investors with bids of more than two times against the base issue size of ₹3,000 crore," SBI said in a statement.

Parliamentary panel calls for upgrading coal washery infra

The quality of domestically produced coal with high-ash content remains a "major challenge, the Parliamentary Standing Committee on Coal, Mines and Steel stated in its latest report, calling for increased priority to coal beneficiation and modernisation of washery infrastructure for increasing availability of higher quality coal. Specifically, on logistical constraints, the committee called for the ministry to institute washeries "at or near pitheads".

Private R&D spends cross govt.'s in FY24

A level last seen in 2009-10, official data reveal a structural shift: private industry accounted for 45.5% of national R&D spending in 2021-22, rising further to 51.8% in 2023-24, the first time businesses have contributed more to India's research effort than all levels of government combined

Jacob P Koshy
NEW DELHI

India's spending on research and development (R&D) surged to 0.83% of GDP in 2021-22, the first time that the country crossed the 0.8% threshold – a level last seen in 2009-10, according to newly disclosed government data.

The figures also reveal a structural shift in India's innovation landscape: private industry accounted for 45.5% of national R&D spending in 2021-22, rising further to 51.8% in 2023-24, the first time businesses have contributed more to India's research effort than all levels of government combined.

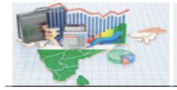
The figures were disclosed by the Department of Science and Technology (DST) in response to a Lok Sabha questionon Wednesday. They form part of the latest Research & Development Statistics 2025-26, although the full statistical report itself has not yet been publicly released.

The numbers are significant because India, despite possessing one of the world's largest scientific workforces and ranking among the top countries in scientific publications, has long spent a much smaller share of its economy on research than major scientific powers. The share of R&D in GDP - long considered a bellwether of progress - has, in the case of India, steadily fallen every year till it reached its nadir of 0.64% in 2020-21.

That year China spent 2.4% of GDP, Japan 3.3%, South Korea 4.8%, United States 3.5% and around 5% in Israel. Successive governments have also repeatedly argued that India's innovation ecosystem is constrained because industry contributes a much smaller share of national R&D spending than in advanced economies, where business routinely accounts for over 70% of research expenditure.

Science wins

The numbers are significant because India has long spent a much smaller share of its economy on research than major scientific powers



- India's share of R&D in GDP has steadily fallen every year till it reached its nadir of 0.64% in 2020-21
- That year, China spent 2.4% of GDP, Japan 3.3%, South Korea 4.8%, U.S. 3.5%, Israel 5%

DST compiles India's official R&D statistics through its National Science and Technology Management Information System (NSTMIS), which has conducted national science surveys since 1973 using UNESCO and OECD definitions. The surveys gather expenditure data from central and state government agencies, universities, public sector enterprises and private industry. The 2022-23 edition explicitly stated that its coverage had been expanded to include multinational companies and enterprises outside the Department of Scientific and Industrial Research's recognition scheme. There were 2,397 DSIR-recognised in-house R&D centres as of December 2022. Until Wednesday's parliamentary reply, the latest publicly available DST publication was the 2022-23 edition, released in 2023, which contained data only up to 2020-21. The parliamentary reply is therefore the first official disclosure of India's R&D expenditure for 2021-22, 2022-23 and 2023-24, even though the corresponding statistical reports have yet to be published.

The fresh data point to an abrupt discontinuity. Gross Expenditure on Research and Development (GERD) fell from ₹1.33 lakh crore in 2019-20 to ₹1.27 lakh crore in 2020-21 (a COVID-year slump), before jumping 53% to ₹1.95 lakh crore in 2021-22. It subsequently rose to ₹2.13 lakh crore in 2022-23 and ₹2.45 lakh crore in 2023-24.

However, budget documents from the period do not suggest a commensurate surge in government science spending. Union allocations to the Department of Science and Technology, Department of Biotechnology, Department of Atomic Energy, ISRO and other major science agencies rose only incrementally across these years, making it unlikely that the increase was driven solely by public expenditure.

The sharp rise in GERD coincided with a dramatic increase in the private sector industry's contribution to India's research spending. Private industry accounted for 38.5% of GERD in 2017-18, 37.7% in 2018-19, 33.8% in 2019-20 and 36.4% in 2020-21, before jumping to 45.5% in 2021-22, 48.0% in 2022-23 and 51.8% in 2023-24 – the first time private industry has contributed more than half of India's total R&D expenditure. In absolute terms, Industry R&D spending increased from about ₹43,800 crore in 2017-18 and ₹46,700 crore in 2018-19 to ₹44,800 crore in 2019-20 and ₹46,400 crore in 2020-21, before almost doubling to ₹88,600 crore in 2021-22 and rising further to ₹126,800 crore in 2023-24.

Garment exporters hope for tariff-rate quota from the U.S.

M. Soundariya Preetha
COIMBATORE

Indian garment exporters are hoping for tariff-rate quota, which countries such as Bangladesh have got, from Washington as India is also a major buyer of U.S. cotton.

Officials in textile and apparel export promotion councils told *The Hindu* the Centre was trying to negotiate with the U.S. for tariff concession for such garments exported to that country.

"Bangladesh, Indonesia and Malaysia will not be charged the additional 10% tariff by America for garments with U.S. cotton. However, this is a quota-based concession and does not apply to all garments exported by Bangladesh to the U.S. Australia offers India similar concessions," said an official.

Further, India is talking to the U.S. for a bilateral trade pact too.

IRDAI okays reforms, policyholder fund norms, new general insurer

Special Correspondent
HYDERABAD

Insurance regulator IRDAI approved various reforms, including the Policyholders' Education and Protection Fund (PEPF) regulations, besides permitting a new general insurer, at its meeting on Tuesday.

On PEPF, IRDAI said the Fund will be a dedicated institutional mechanism to promote insurance awareness and literacy initiatives, strengthen grievance redressal mechanisms and facilitate tracing and recovery of unclaimed insurance amounts.

Other reforms included introduction of perpetual registration supported by an annual fee regime instead of periodic renewals; and regulations governing penalties. Approving grant of certificate of registration to ProTec General Insurance, IRDAI said since January this is the fourth registration.

Govt. must continue E10 supply, says Team Bharat amid E20 row

Saptaparno Ghosh
NEW DELHI

Team Bharat with Union Minister Hardeep Puri.

Amid growing concerns over the impact of E20 fuel on vehicles, citizens' advocacy group Team Bharat met officials from the Union Petroleum Ministry, urging the government to continue supplying E10 petrol (petrol with 10% ethanol) for vehicles designed to use it even as it demanded pure petrol with no ethanol blending be made available at all fuel stations at affordable prices.

The citizens'-advocacy group, founded by political commentator and observer Tehseen Poonawalla, put forth the demands at a meeting with Union Petroleum Minister Hardeep Puri.

Speaking to *The Hindu*, Mr. Poonawalla said Team Bharat also called for E20 being made available at 20% discount to the pure petrol variant being sought. The group also sought relevant documents and reports on E20 fuel to be in the public domain for transparency.

Also, they called for a mechanism and rules to assess how vehicles may have been damaged because of the blended fuel, along with procedures to address the grievances.

Making it clear Team Bharat has not called for a complete rollback of the E20 fuel, Mr. Poonawalla said "The government has come forward to discuss concerns, we are thus striving for a middle-ground acceptable to all."

The group also raised concerns about a potential conflict of interest allegedly involving Union Transport Minister Nitin Gadkari in relation to the overall blending programme.

The outreach assumes significance in the wake of furore over E20. *The Hindu* also reached out to officials at the Union Petroleum Ministry for a comment.

Separately, sources told *The Hindu* the government and Team Bharat at the next meeting would be working on a mechanism to inspect vehicles reportedly damaged due to E20.

'Maruti Suzuki India is top EV exporter in Q1 FY27'

Lalatendu Mishra
MUMBAI

Over 41,000 units of eVitara, introduced in 2025, have been exported to 47 countries

Maruti Suzuki India Ltd, which entered the electric vehicles (EV) segments last year, has exported as many as 15,210 EV units in April-June (Q1) quarter FY27, commanding a 97% share in total EV shipments from the country.

The EV market, which is dominated by Tata Motors and Mahindra, registered total exports of 15,641 units in the review period, as per available industry data.

The company had in August 2025 introduced e Vitara and since then, more than 41,000 units have been exported to 47 countries with the U.K. being the top destination.

"It is India's pride that Maruti Suzuki's BEV – the e Vitara – has emerged as the country's third largest exported model [after Fronx and Jimny]. The e Vitara is now being exported to 47 countries including U.K., Germany, Japan, Norway, and Switzerland as top few destinations. It stands as a symbol of the success of hi-tech Indian manufacturing on the global stage" said Rahul Bharti, Senior Executive Officer, Maruti Suzuki India Ltd.

Highlighting that Maruti Suzuki is taking a "calibrated approach" to rollout EV in the domestic market, he said it will expand distribution in tandem with the growth of the country's charging infrastructure.

Semicon firm Marvell to invest $250 mn in India

The Hindu Bureau
BENGALURU

Marvell Technology, Inc., a Nasdaq-listed firm in data infrastructure semiconductor solutions, will invest $250 million in India over the next three years to expand its capabilities across technology, talent and infrastructure.

The company, which plans to double its headcount over the next three years, is opening a new wing at its Bangalore office, while expanding presence in Hyderabad. The expanded footprint will strengthen its global innovation network, supporting the design and development of advanced semiconductor solutions for artificial intelligence (AI), cloud and data infrastructure applications.

The expansion would include doubling of Marvell's India employee headcount from 2,000 at present to 4,000 over the next three years, with new a office in Hyderabad and further facility scale up in Bengaluru, the firm said.

"India has become a strategic hub of engineering excellence for Marvell, playing a critical role in advancing the infrastructure technologies that power the world's leading hyperscalers and cloud providers," said Navin Bishnoi, Vice President and India country manager at Marvell.

Committed to strengthening India's semiconductor ecosystem, Marvell has also invested in the long-term growth of India's semiconductor ecosystem through collaboration with universities, start-ups, industry associations, and government organisations.

Q2 net income slips to $636 mn at Cognizant

Balasubramanyam C. P.
CHENNAI

Cognizant net income for the second quarter ended June 30 slid to $636 million from $645 million a year earlier. Q2 revenue rose 4.5% to $5.48 billion. Operating margin expanded 30 basis points to 15.9%.

Financial Services, Cognizant's largest business segment, posted 12% year-on-year revenue growth to $1.73 billion.

Stating that "40% of software development in the firm is AI assisted", CEO Ravi Kumar S., on an earnings call, said AI represented significantly larger long-term opportunity for technology services firms, estimating the $1 trillion systems integration market could expand into a $5-6 trillion enterprise operations market with $4.5 trillion of operational labour exposed to AI.

Cognizant revised downward 2026 constant currency revenue growth guidance to 4%-5.5%

For the third quarter, Cognizant expects revenue of $5.60-$5.68 billion, representing a growth of 3.4%-4.9%, or 3.8%-5.3% in constant currency.

Cognizant revised downward its 2026 constant currency revenue growth guidance to 4%-5.5% from 4-6.5% earlier.

The IT services provider ended the quarter with 3,56,700 employees while voluntary attrition at the company over the last 12 months stood at 13%.

Young billionaires' club gets bigger amid ageing population

Ashokamithran T.
MUMBAI

Indian billionaires got younger but the average Indian continues to get older as the median age of crorepatis fell to 57 in 2026, from 63 last year and will continue to reduce, according to a report of 360 ONE Wealth Management, which maps thousands of top Indian billionaires and ultra-high-net-worth individuals.

Indicating irreversible arithmetic of demographics, the median age of an Indian has increased to 29 and is expected to increase, said the findings of the 360 ONE Wealth Creators' report, which is based on a sample of 3,040 people with a minimum wealth value of ₹425 crore.

The total wealth of the cohort surveyed was ₹104 lakh crore.

The wealthiest age group, however, was 60-69 years, comprising 25.8% of the wealth share

This means it is the people who entered professional age after the economic liberalisation of India after 1990. This cohort understood old constraints and new possibilities, the authors said.

The list covered people aged between 7 years and 96 years. It is more expansive than the previous year's report, which had a list of 2,013 billionaires with combined wealth of ₹100 lakh crore, however the minimum wealth to be considered in the report was at a higher ₹500 crore.

According to the report which was written in collaboration with CRISIL Intelligence, the average wealth of a wealth creator was ₹3,413 crore, up from ₹1,475 crore in the previous year's study. The median wealth created per person, which excludes extreme values, was at ₹1,005 crore.

The wealthiest age group, however, was 60-69 years, comprising 25.8% of the wealth share. Those who were in the range of 50 and 59 years, comprised 15.5% of the wealth share; implying that about half of the wealth creators were in the age group 50 and 69.

The average wealth of a GenZ and millennials wealth creator was ₹5,094 crore.

$275mn U.S. deal hits Adani Enterprises Q1

The Hindu Bureau
MUMBAI

This is AEL's consolidated net loss for second straight quarter.

Adani Enterprises Ltd (AEL), the holding firm of the Adani Group, suffered a consolidated net loss of ₹1,160 crore in the June ended quarter of FY27 on a one-time settlement of $275 million (₹2,644 crore) relating to U.S. Office of Foreign Assets Control.

This is AEL's consolidated net loss for the second straight quarter even as the flagship Adani Group firm saw record quarterly operating profit on the back of growth in airports and copper businesses.

The one-time charge had a significant impact on the firm's reported net earnings in the quarter as AEL had reported net profit of ₹855 crore in the corresponding period of the previous year.

Excluding this exceptional settlement, core business remained profitable as earnings before interest, taxes, depreciation and amortisation (EBITDA) grew 49% year-on-year. Profit before tax stood at ₹1,295 crore (excluding OFAC settlement of ₹2,644 crore). Revenue from operations rose by almost 50% YoY to ₹32,924 crore.

Private R&D spends cross govt.'s in FY24

A level last seen in 2009-10, official data reveal a structural shift: private industry accounted for 45.5% of national R&D spending in 2021-22, rising further to 51.8% in 2023-24, the first time businesses have contributed more to India's research effort than all levels of government combined

Jacob P Koshy
NEW DELHI

India's spending on research and development (R&D) surged to 0.83% of GDP in 2021-22, the first time that the country crossed the 0.8% threshold – a level last seen in 2009-10, according to newly disclosed government data.

The figures also reveal a structural shift in India's innovation landscape: private industry accounted for 45.5% of national R&D spending in 2021-22, rising further to 51.8% in 2023-24, the first time businesses have contributed more to India's research effort than all levels of government combined.

The figures were disclosed by the Department of Science and Technology (DST) in response to a Lok Sabha questionon Wednesday. They form part of the latest Research & Development Statistics 2025-26, although the full statistical report itself has not yet been publicly released.

The numbers are significant because India, despite possessing one of the world's largest scientific workforces and ranking among the top countries in scientific publications, has long spent a much smaller share of its economy on research than major scientific powers. The share of R&D in GDP - long considered a bellwether of progress - has, in the case of India, steadily fallen every year till it reached its nadir of 0.64% in 2020-21.

That year China spent 2.4% of GDP, Japan 3.3%, South Korea 4.8%, United States 3.5% and around 5% in Israel. Successive governments have also repeatedly argued that India's innovation ecosystem is constrained because industry contributes a much smaller share of national R&D spending than in advanced economies, where business routinely accounts for over 70% of research expenditure.

DST compiles India's official R&D statistics through its National Science and Technology Management Information System (NSTMIS), which has conducted national science surveys since 1973 using UNESCO and OECD definitions. The surveys gather expenditure data from central and state government agencies, universities, public sector enterprises and private industry. The 2022-23 edition explicitly stated that its coverage had been expanded to include multinational companies and enterprises outside the Department of Scientific and Industrial Research's recognition scheme. There were 2,397 DSIR-recognised in-house R&D centres as of December 2022. Until Wednesday's parliamentary reply, the latest publicly available DST publication was the 2022-23 edition, released in 2023, which contained data only up to 2020-21. The parliamentary reply is therefore the first official disclosure of India's R&D expenditure for 2021-22, 2022-23 and 2023-24, even though the corresponding statistical reports have yet to be published.

The fresh data point to an abrupt discontinuity. Gross Expenditure on Research and Development (GERD) fell from ₹1.33 lakh crore in 2019-20 to ₹1.27 lakh crore in 2020-21 (a COVID-year slump), before jumping 53% to ₹1.95 lakh crore in 2021-22. It subsequently rose to ₹2.13 lakh crore in 2022-23 and ₹2.45 lakh crore in 2023-24.

However, budget documents from the period do not suggest a commensurate surge in government science spending. Union allocations to the Department of Science and Technology, Department of Biotechnology, Department of Atomic Energy, ISRO and other major science agencies rose only incrementally across these years, making it unlikely that the increase was driven solely by public expenditure.

The sharp rise in GERD coincided with a dramatic increase in the private sector industry's contribution to India's research spending. Private industry accounted for 38.5% of GERD in 2017-18, 37.7% in 2018-19, 33.8% in 2019-20 and 36.4% in 2020-21, before jumping to 45.5% in 2021-22, 48.0% in 2022-23 and 51.8% in 2023-24 – the first time private industry has contributed more than half of India's total R&D expenditure. In absolute terms, Industry R&D spending increased from about ₹43,800 crore in 2017-18 and ₹46,700 crore in 2018-19 to ₹44,800 crore in 2019-20 and ₹46,400 crore in 2020-21, before almost doubling to ₹88,600 crore in 2021-22 and rising further to ₹126,800 crore in 2023-24.

Science wins

The numbers are significant because India has long spent a much smaller share of its economy on research than major scientific powers

- India's share of R&D in GDP has steadily fallen every year till it reached its nadir of 0.64% in 2020-21
- That year, China spent 2.4% of GDP, Japan 3.3%, South Korea 4.8%, U.S. 3.5%, Israel 5%

Aspect	Details
Major development	For the **first time**, India's **private sector spent more on R&D than all levels of government combined**.
Private sector share (FY24)	**51.8%** of India's total R&D expenditure (GERD).
Government share (FY24)	**48.2%** (Centre + States + PSUs + Government institutions).
Significance	Marks a structural shift in India's innovation ecosystem, with businesses becoming the largest investors in research.

Year	GERD (₹ lakh crore)	Remarks
2019-20	1.33	Pre-COVID level
2020-21	1.27	COVID slowdown
2021-22	1.95	53% increase
2022-23	2.13	Continued growth
2023-24	**2.45**	Highest ever

Year	Private Share
2017-18	38.5%
2018-19	37.7%
2019-20	33.8%
2020-21	36.4%
2021-22	45.5%
2022-23	48.0%
2023-24	**51.8%**

Year	Spending (₹ crore)
2017-18	~43,800
2018-19	~46,700
2019-20	~44,800
2020-21	~46,400
2021-22	~88,600
2023-24	**~1,26,800**

Indicator	Value
2020-21	**0.64%** (lowest in recent years)
2021-22	**0.83%**

Country	R&D Expenditure (% of GDP)
Israel	~5.0%
South Korea	4.8%
United States	3.5%
Japan	3.3%
China	2.4%
India	**0.83% (2021-22)**

- **What is GERD?**
- **GERD (Gross Expenditure on Research and Development)** is the **total amount spent on research and development in a country** by:
  - Central Government
  - State Governments
  - Public Sector Enterprises (PSUs)
  - Universities
  - Private companies
  - Research institutions
- It is the standard indicator used globally (OECD/UNESCO) to measure a country's investment in innovation.

- **Why This Matters for India**
- **Positives**
  - Greater industry participation in innovation.
  - Stronger startup and deep-tech ecosystem.
  - Improved prospects for high-value manufacturing.
  - Reduced dependence on government-funded research.
- **Challenges**
  - India's overall R&D intensity (**0.83% of GDP**) remains well below global leaders.
  - More investment is needed in universities, fundamental research, and emerging technologies such as AI, semiconductors, biotechnology, quantum computing, and clean energy.
-

Indian-origin CEO elevated as P&G chairman

New Delhi: US FMCG major Procter & Gamble Company on Wednesday announced the appointment of its India-born President and CEO Shailesh Jejurikar as the Chairman, effective August 1, 2026. This appointment is in addition to Jejurikar's current role as President and CEO, a statement from Procter & Gamble Company said. Incumbent Jon Moeller, Executive Chairman, will retire from the Board on July 31, 2026, and from P&G on August 14, 2026, it added. PTI

Aspect	Details
Company	Procter & Gamble (P&G), USA
New Chairman	**Shailesh Jejurikar**
Previous Position	President & CEO
New Position	Chairman + President & CEO
Effective Date	**1 August 2026**
Outgoing Chairman	Jon Moeller
Retirement	Board: 31 July 2026; P&G: 14 August 2026

Aspect	Details
Nationality	Indian-born
Company Joined	P&G in 1989
Experience	Over 35 years
Expertise	Consumer goods, brand management, supply chain, emerging markets
Current Role	President & CEO of P&G

PARTICULAR	DETAILS
Founded	1837
Headquarters	Cincinnati, Ohio, USA
Industry	Fast Moving Consumer Goods (FMCG)
Presence	Over 180 countries
Employees	~1,00,000

Major Brands

- Pampers
- Ariel
- Tide
- Gillette
- Whisper
- Pantene
- Oral-B
- Head & Shoulders
- Olay
- Vicks

Importance of the Appointment

Significance	Explanation
Indian leadership	Strengthens India's global corporate reputation.
Corporate governance	Chairman and CEO roles are now combined under Jejurikar.
Global business	Reflects growing trust in Indian executives to lead multinational corporations.

Executive	Company
Sundar Pichai	Alphabet (Google)
Satya Nadella	Microsoft
Shantanu Narayen	Adobe
Arvind Krishna	IBM
Nikesh Arora	Palo Alto Networks
Laxman Narasimhan	Former Starbucks CEO
Shailesh Jejurikar	Procter & Gamble

At $20.6 bn, IPL now world's second-most valuable league

● RCB brand value at $312 mn, best among franchises

CHRISTINA MONIZ
Mumbai, July 29

THE BIG HITTERS

Rank	Brand value ($ mn)	
1	Royal Challengers Bengaluru	312
2	Mumbai Indians	264
3	Kolkata Knight Riders	245
4	Chennai Super Kings	244
5	Sunrisers Hyderabad	168
6	Rajasthan Royals	161
7	Gujarat Titans	158
8	Delhi Capitals	157
9	Punjab Kings	156
10	Lucknow Super Giants	122

Source: Houlihan Lokey IPL Brand Valuation Study

THE INDIAN PREMIER League (IPL) posted an 11.4% year-on-year increase in business value to reach $20.6 billion after the 2026 season, becoming the second-most valuable sporting league in the world behind the National Football League (NFL) in the US. According to Houlihan Lokey's IPL Brand Valuation Study, the marquee T20 cricket league's standalone brand value rose by 10.3% to $4.3 billion, adding over $1.1 billion in value since 2023.

Among the league's 10 franchises, the Royal Challengers Bengaluru (RCB) is now the most valuable, with its brand value rising by 16% to reach $312 million this year from $269 million in 2025. Despite a dismal season in 2026, Mumbai Indians retained its second place with a brand value of $264 million. Kolkata Knight Riders (KKR) climbed to the third place at $245 million, ahead of Chennai Super Kings (CSK), which dropped to the fourth place at $244 million. Sunrisers Hyderabad, with a brand value of $168 million, was ranked fifth.

Continued on Page 10

Aspect	Details
League	Indian Premier League (IPL)
Total Business Value	**US$20.6 billion**
Annual Growth	**11.4%**
Global Rank	**2nd most valuable sports league**
Ranked Above	Most global sports leagues except NFL
Source	Houlihan Lokey IPL Brand Valuation Study

Global Position

Rank	League	Country
1	National Football League (NFL)	USA
2	Indian Premier League (IPL)	India

IPL Standalone Brand Value

Year	Brand Value
2023	~US$3.2 billion
2026	**US$4.3 billion**

Increase since 2023:

- **More than US$1.1 billion**
- Growth of **10.3%**

Rank	Franchise	Brand Value (US$ million)
1	Royal Challengers Bengaluru (RCB)	**312**
2	Mumbai Indians	264
3	Kolkata Knight Riders	245
4	Chennai Super Kings	244
5	Sunrisers Hyderabad	168
6	Rajasthan Royals	161
7	Gujarat Titans	158
8	Delhi Capitals	157
9	Punjab Kings	156
10	Lucknow Super Giants	122

Factor	Impact
Media rights	Massive broadcasting revenue
Sponsorship	Record corporate sponsorships
Digital streaming	Growth in online audiences
Global fan base	International popularity
Franchise investments	Strong commercial ecosystem
Merchandise	Rising brand revenues

Maize becomes top ethanol feedstock

SANDIP DAS
New Delhi, July 29

THE USE OF maize and rice as feedstock for ethanol production has increased substantially in the past six years, with maize surpassing rice in the last couple of years.

In the ethanol supply year (ESY) 2024-25 (October-September), 13.11 million tonne (MT) of maize was used for ethanol production against close to 5 MT of broken and Food Corporation of India's surplus rice used in biofuel manufacturing. In the ESY 2025-26, 6.79 MT of maize has been used for ethanol against 5.4 MT of rice so far. In FY 2021-22, maize was not used as feedstock for ethanol.

"Diversification of feedstock base for ethanol production such as sugarcane juice, B-heavy molasses, C-heavy molasses, maize, damaged food grains, surplus FCI rice has reduced dependence on any single feedstock or crop and has supported agricultural diversification," the Department of Food and Public Distribution stated in Parliament on Wednesday.

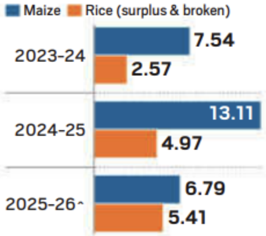
Inclusion of maize as a feedstock for ethanol production has helped in providing assured markets to farmers and ensured better prices, it said.

The Food Corporation of India diverts surplus rice for ethanol production after meeting the requirements under the National Food Security Act, other welfare schemes and maintaining a buffer, the department stated. FCI stopped supplying rice for ethanol production during ESY 2022-23.

According to the sugar industry, only 2890 million litres of ethanol, just 28% of the total requirement, have been allocated from sugar-based feedstocks for the 2025–26 ESY, compared to 72% or 7610 million litres from grain-based sources – 4780 million litres from maize (45%), and 2830 million litres from rice (22%). "Maize as India's largest feedstock for ethanol reflects the success of diversifying beyond traditional sugar-based feedstock. It results in sustainable feedstock availability and improved agricultural productivity," C K Jain, president, Grain Ethanol Manufacturers Association, told *FE*.

KEY FUEL INPUT

Maize & rice supplied for ethanol production (in million tonne)*



*Ethanol Supply Year (October-September), ^June 30, 2026

Centre sells rice to ethanol distillers below acquisition cost

The Food Corporation of India sold rice to ethanol distilleries at ₹2,250-2,320/quintal during June 2025 - June 2026, about 40% below its acquisition cost of ₹3,720-3,889/quintal.

3. Maize Becomes India's Largest Feedstock for Ethanol Production

Overview

India has witnessed a significant shift in ethanol production, with **maize overtaking surplus rice** as the largest feedstock.

Feedstock Usage

Ethanol Supply Year*	Maize (MT)	Rice (MT)
2023-24	7.54 million	2.57 million
2024-25	**13.11 million**	4.97 million
2025-26 (up to June 30)	6.79 million	5.41 million

*ESY = October to September.

What is Feedstock?

Feedstock refers to the **raw material** used to manufacture another product.

For ethanol, common feedstocks include:

- Sugarcane juice
- B-heavy molasses
- C-heavy molasses
- Maize (corn)
- Damaged food grains
- Surplus rice

Why is India Using More Maize?

Reason	Explanation
Diversification	Reduces dependence on sugarcane alone.
Water efficiency	Maize generally requires less water than sugarcane in many regions.
Farmer income	Provides an assured market and better prices.
Food security	Uses multiple feedstocks instead of relying on one crop.
Stable supply	Ensures year-round ethanol production.

Ethanol Production Mix (ESY 2025-26)

Source	Share
Sugar-based feedstocks	**72%**
Grain-based feedstocks	**28%**

Grain-Based Ethanol Breakdown

Feedstock	Share
Maize	**45%**
Rice	**22%**
Others	Remaining share

Government Policy

The **Food Corporation of India (FCI)** diverts surplus rice to ethanol only after:

- Meeting National Food Security Act (NFSA) requirements.
- Implementing welfare schemes.
- Maintaining buffer stock norms.

FCI Rice Sale

Particular	Details
Sale Price	₹2,250–2,320 per quintal
Procurement Cost	₹3,720–3,889 per quintal
Period	June 2025 – June 2026

FCI sold rice **below its procurement cost** to ethanol distilleries, implying a financial subsidy to support ethanol blending.

Why Ethanol Matters

Advantages

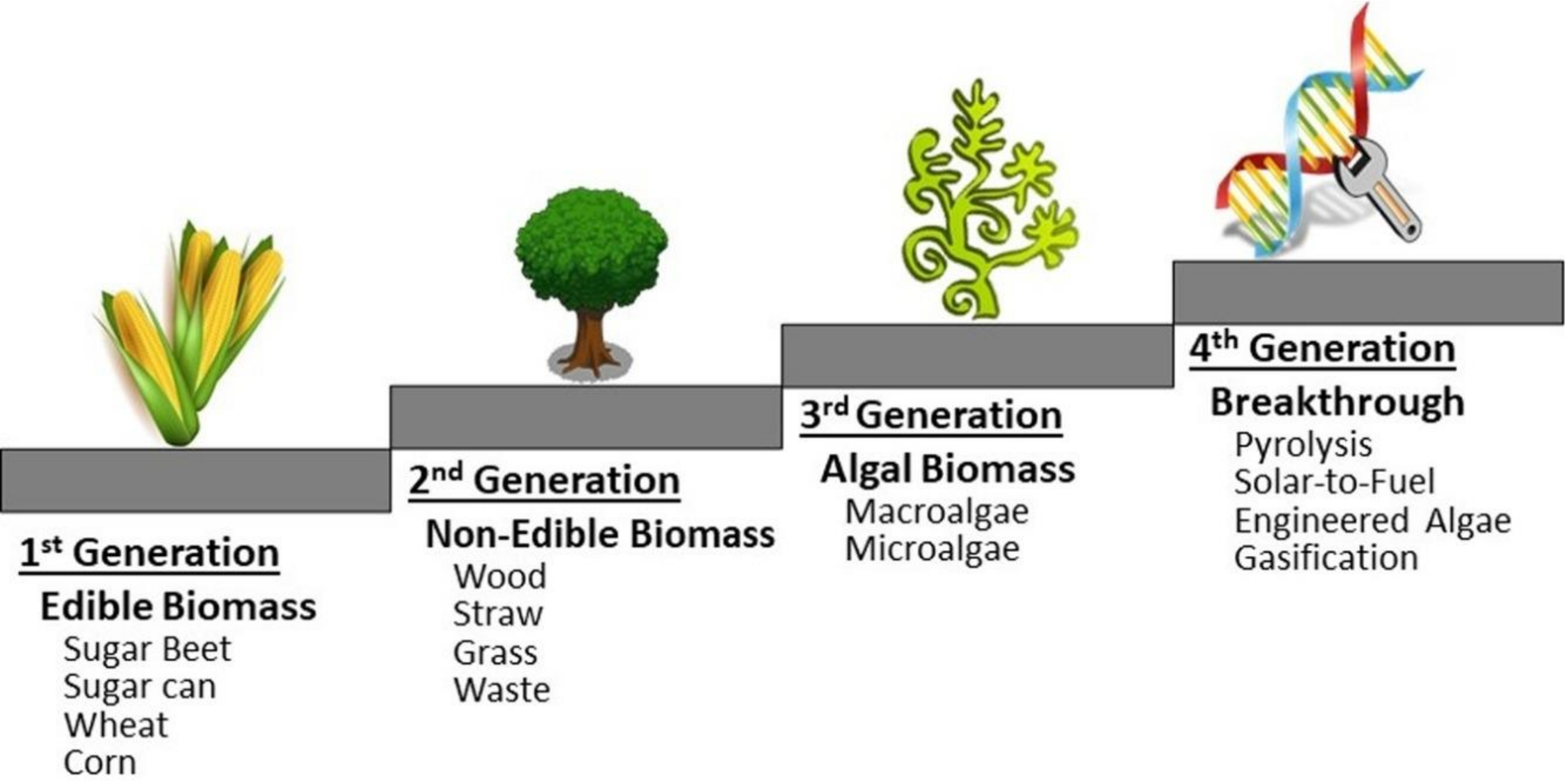
Benefit	Explanation
Energy security	Reduces dependence on imported crude oil.
Cleaner fuel	Lowers emissions compared to petrol.
Farmer welfare	Creates additional demand for agricultural produce.
Rural economy	Supports agri-processing industries.
Foreign exchange	Helps reduce oil import bills.

Challenges

Issue	Explanation
Food vs fuel debate	Excessive diversion of food grains could affect food security.
Water use	Some feedstocks require significant irrigation.
Price distortions	Government procurement may influence crop choices.
Climate risks	Crop failures can affect ethanol availability.

National Ethanol Blending Programme (EBP)

Aspect	Details
Implementing Ministry	Ministry of Petroleum & Natural Gas
Objective	Blend ethanol with petrol to reduce fossil fuel consumption
Benefits	Lower emissions, higher farmer income, reduced crude oil imports


1st Generation
Edible Biomass
Sugar Beet
Sugar can
Wheat
Corn
2nd Generation
Non-Edible Biomass
Wood
Straw
Grass
Waste
3rd Generation
Algal Biomass
Macroalgae
Microalgae
4th Generation
Breakthrough
Pyrolysis
Solar-to-Fuel
Engineered Algae
Gasification

World Hepatitis Day (WHD) 2026

Particular	Details
Date	**28 July** every year
Source	PIB / WHO
Theme (2026)	**"Hepatitis: Let's Break It Down"**
Objective	Raise awareness about viral hepatitis, promote testing, vaccination and treatment, and remove financial, social and healthcare barriers.

Why is it in News?

The world observed **World Hepatitis Day on 28 July 2026** to spread awareness about **viral hepatitis**, one of the leading infectious causes of death globally.

The **2026 theme**, **"Hepatitis: Let's Break It Down,"** focuses on:

- Breaking financial barriers
- Reducing social stigma
- Improving diagnosis
- Expanding treatment access
- Strengthening healthcare systems

What is Hepatitis?

Hepatitis means **inflammation of the liver**.

The liver performs vital functions:

- Detoxifies harmful substances
- Produces bile for digestion
- Stores nutrients
- Regulates metabolism
- Produces clotting factors

When the liver becomes inflamed, these functions are affected.

Cause	Explanation
Viral infections	Most common cause worldwide
Alcohol	Excessive consumption damages liver cells
Certain medicines	Drug-induced liver injury
Toxins	Chemical poisoning
Autoimmune diseases	Body attacks its own liver

Virus	Transmission	Acute/Chronic	Vaccine Available
Hepatitis A (HAV)	Contaminated food and water	Acute	✅ Yes
Hepatitis B (HBV)	Blood, sexual contact, mother-to-child	Acute & Chronic	✅ Yes
Hepatitis C (HCV)	Blood	Mostly Chronic	❌ No
Hepatitis D (HDV)	Occurs only with Hepatitis B infection	Chronic	Indirectly prevented by HBV vaccine
Hepatitis E (HEV)	Contaminated water	Acute	Limited availability

Which Types are Most Dangerous?

The two most dangerous viruses are:

Hepatitis B

- Causes lifelong infection
- Leads to liver cirrhosis
- Causes liver failure
- Major cause of liver cancer

Hepatitis C

- Usually remains undetected for years
- Slowly damages liver
- Can now be cured with antiviral medicines
- Still causes many deaths due to delayed diagnosis

Together, Hepatitis B and C account for over 90% of hepatitis-related deaths and disability worldwide.

Global Burden

Indicator	Data
Annual deaths	**1.34 million**
New infections every year	**~2 million**
People living with chronic Hepatitis B or C	**287 million**

Major Concern

Most infected people **do not know they are infected**, allowing the disease to spread silently.

India's Burden

India has one of the world's largest hepatitis burdens.

Indicator	India
Chronic Hepatitis B patients	**29 million**
Chronic Hepatitis C patients	**5.5 million**
Rank globally	**2nd among highest-burden countries**
Share of global Hepatitis B carriers	**10–15%**

Why is India highly affected?

- Large population
- Delayed diagnosis
- Inadequate birth-dose vaccination
- Unsafe injections in some areas
- Lack of awareness
- Social stigma

Seroprevalence

Meaning

Seroprevalence is the percentage of people in a population who test positive for a disease based on blood tests.

According to **India's 2021 HIV Sentinel Surveillance**:

Disease	Seroprevalence
Hepatitis B	**0.85%** (about 1 in 118 people)
Hepatitis C	**0.29%** (about 1 in 345 people)

Virus	Mode of Spread
Hepatitis A	Contaminated food and water
Hepatitis B	Blood, sexual contact, childbirth
Hepatitis C	Blood transfusion, needles
Hepatitis D	Along with Hepatitis B
Hepatitis E	Contaminated water

Prevention

1. Vaccination

- Hepatitis A vaccine
- Hepatitis B vaccine

2. Safe Blood Transfusion

- Mandatory screening
- Quality blood banks

3. Safe Injections

- Use disposable syringes
- Avoid needle sharing

4. Safe Sexual Practices

- Use protection
- Regular screening for high-risk groups

5. Safe Drinking Water

- Especially to prevent Hepatitis A and E

6. Good Hygiene

- Hand washing
- Proper sanitation
- Safe food handling

Initiative	Purpose
National Viral Hepatitis Control Programme (NVHCP)	Prevention, diagnosis and treatment of hepatitis
Universal Immunization Programme (UIP)	Free Hepatitis B vaccination
Blood Safety Programme	Screening of donated blood
Mother-to-child transmission prevention	Timely birth-dose vaccination
Public awareness campaigns	Reduce stigma and increase testing

WHO Goal

The **World Health Organization (WHO)** aims to **eliminate viral hepatitis as a public health threat by 2030**.

WHO 2030 Targets

Target	Goal
New infections	Reduce by **90%**
Deaths	Reduce by **65%**
Diagnosis	Vastly increase testing coverage
Treatment	Universal access to effective medicines

Word of the day

Punctilio:

a fine point of etiquette or petty formality

Synonyms: formal, decorous, correct, nice

Usage: *Every punctilio of the ceremony was observed.*

Pronunciation: newsth.live/punctilio

International Phonetic Alphabet: /pʌŋktɪliəʊ/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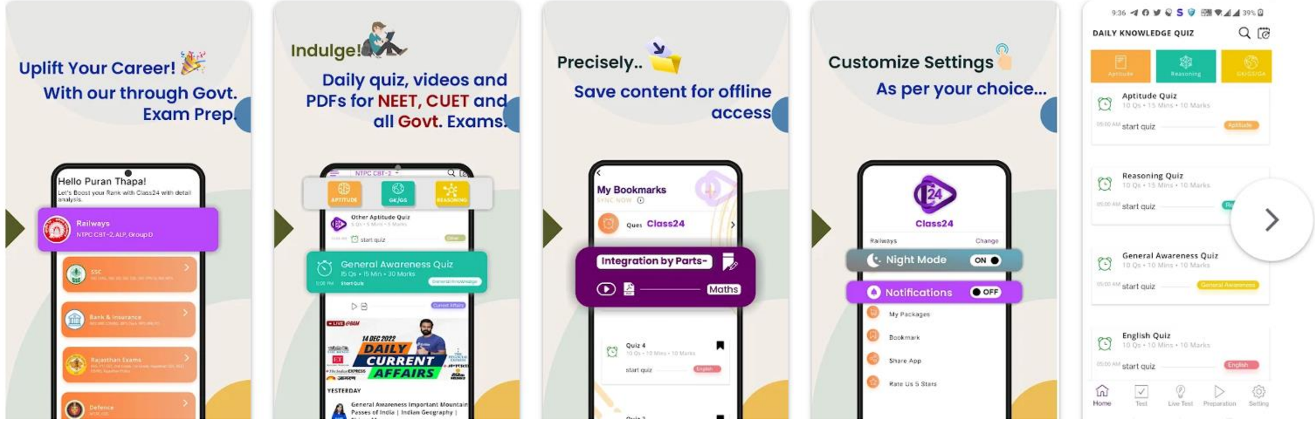

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