

DAILY CURRENTS AFFAIRS (06 August 2024)

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दिल्ली से भी बेहतर

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पैडलेगंज, गोरखपुर Mob. 9971932488



Team Led by:
Amit Kumar

(More than 4 Years of Teaching Experience
In Vision IAS Delhi & Qualified 4
Times For The IAS Mains).



Piyush Gambhir Sir

(More than 5 years of teaching experience
in Vision IAS Delhi & qualified 3 times for
the IAS mains & 2 times IAS Interview)



Sonal Choudhary Ma'am

More than two years of experience
in Vision IAS and qualified
3 Times for IAS mains.



Tanya Sehgal Ma'am

More than four years of
experience in Vision IAS and
qualified 2 times for IAS mains.



Manohar Pandey Sir

(More than 5 years of experience
in Vision IAS Delhi & qualified
3 times for the IAS mains &
2 times for PCS Interview).



Piyush Kannaujiya Sir

(More than 4 years of teaching
experience in Vision IAS Delhi &
qualified 6 times for the
IAS Mains & 2 IAS Interview)



Abhishek A. Singh Sir

(More than 3 years of experience
in Vision IAS Delhi & qualified
2 times for the IAS Mains).



Divyansh Srivashtava sir

More than 3 years Working
experience with Vision IAS Delhi
and Qualified 2 times for IAS mains and
2 times for CAPF interview.

L-G can nominate 10 aldermen to Delhi corporation, rules SC (06 August)

- The Supreme Court ruled that the Lieutenant-Governor (L-G) of Delhi can nominate 10 experts to the Municipal Corporation of Delhi without needing the aid and advice of the Council of Ministers.
- The judgment was given by a Bench of Chief Justice D.Y. Chandrachud, Justices P.S. Narasimha, and J.B. Pardiwala, with Justice Narasimha authoring the judgment.
- The L-G's power comes from **Section 3(3)(b)(1) of the Delhi Municipal Corporation Act, 1957, amended in 1993 to include the nomination power.**
- The Bench referenced a Constitution Bench judgment stating that the Delhi government's executive power must align with parliamentary laws on State and Concurrent List subjects in the Seventh Schedule of the Constitution.
- Justice Narasimha disagreed with A.M. Singhvi's argument that the L-G's power was outdated and merely symbolic.
- Singhvi contended that Delhi's elected government should manage its municipal administration without L-G interference.
- The court emphasized that the L-G's power to nominate is based on a law made by Parliament, which requires the L-G to exercise this power.
- **The key legal question was whether the L-G could independently nominate 10 persons or if he needed the Council of Ministers' aid and advice.**
- Justice Narasimha noted that the L-G's power to nominate was established by the 1993 amendments to the DMC Act, 1957, to align with constitutional changes in **Articles 239AA and 239AB regarding the Delhi government.**
- The DMC Act, a parliamentary law, expressly grants the L-G the power to nominate.
- The court ruled that the L-G must act according to the statute, independent of the Council of Ministers' advice.

NPAs on Mudra loans have come down in 2023-24, says Nirmala

GS Paper III:
Banking System

The non-performing assets (NPA) associated with Mudra loans given out by public sector banks have come down in the current financial year, Union Finance Minister Nirmala Sitharaman informed the Lok Sabha on Monday.

She said in 2023-24, the NPAs on Mudra loans had declined to 3.4%, a significant improvement from 4.77% in 2020-21, 4.89% in 2019-20, and 3.76% in 2018-19. Replying to a supplementary question by Congress leader S. Senthil during the Question Hour, Ms. Sitharaman said Mudra loan NPAs in private sector commercial banks was at 0.95% in 2023-24 from a



Nirmala Sitharaman

peak of 1.77% in 2020-21 and 0.67% in 2018-19.

In response to a question regarding depositors' money in the Sahara group, she said the Serious Fraud Investigation Office was carrying out a detailed probe. It is also looking into the reason behind a sizeable number of investors not coming forward to claim the invested money in the company, she said.

What Are NPAs

- **NPAs Definition:** NPAs are loans or advances for which the principal or interest payment remains overdue for a period of more than 90 days.
- **Causes of NPAs:**
 - Poor lending practices and inadequate risk assessment.
 - Economic downturns affecting borrowers' repayment capacity.
 - Delay in projects for which loans were given.
 - Wilful defaults by borrowers.
 - External factors like market changes, government policies, and legal hurdles.

Classification of NPAs

- **Asset:** A loan given by the bank.
- **Non-Performing Asset (NPA):** An asset that does not generate interest.
- **Loan:** Principal + Interest (paid in the form of EMI).

Stages of NPAs:

1. **Special Mention Account (SMA) Type 1:**
 - If EMIs are not paid for 1 month, the account shows signs of stress.
2. **Special Mention Account (SMA) Type 2:**
 - If EMIs are not paid for 2 months (60 days).
3. **NPA Type 1 (Substandard Asset):**
 - If dues are not paid for 3 months (90 days).
4. **NPA Type 2 (Doubtful Asset):**
 - If dues are not paid for 1 year.
5. **NPA Type 3 (Loss Asset):**
 - If dues are not paid for more than 2 years.

4. Addressing and Improving the Health of Banks

- **Early Detection:** Regular monitoring and early identification of stressed assets.
- **Resolution Mechanisms:** Implementing efficient resolution mechanisms like Insolvency and Bankruptcy Code (IBC) and Debt Recovery Tribunals (DRTs).
- **Rehabilitation and Restructuring:** Providing support for viable projects facing temporary distress.
- **Risk Management:** Strengthening risk management frameworks and improving credit appraisal processes.
- **Accountability:** Ensuring accountability of bank officials and borrowers.
- **Write-off Losses:** Recognizing and writing off losses for NPA Type 3 assets to clean up the balance sheet.

The Pradhan Mantri MUDRA Yojana (PMMY) was launched by the Government of India in April 2015 to provide loans to non-corporate, non-farm small/micro enterprises. The scheme aims to facilitate the growth of small businesses by providing them with access to finance.

Objectives of Mudra Loans

- **Promote Entrepreneurship:** Encourage self-employment and entrepreneurship among the youth and women.
- **Inclusive Growth:** Ensure that the financial needs of small/micro businesses are met, thereby promoting inclusive growth.
- **Financial Inclusion:** Bring the underserved and unserved sections of the society under the formal banking system.

Categories of Mudra Loans

Mudra loans are classified into three categories based on the stage of business growth and funding requirements:

1. **Shishu (Infant):**
 - **Loan Amount:** Up to ₹50,000.
 - **Target Group:** Start-ups and early-stage businesses.
 - **Purpose:** To meet initial funding needs for starting a new business or expanding an existing one.
2. **Kishore (Adolescent):**
 - **Loan Amount:** ₹50,001 to ₹5,00,000.
 - **Target Group:** Businesses looking to expand or diversify their operations.
 - **Purpose:** To provide funds for buying equipment, working capital, and other business-related expenses.
3. **Tarun (Adult):**
 - **Loan Amount:** ₹5,00,001 to ₹10,00,000.
 - **Target Group:** Established businesses seeking further growth and expansion.
 - **Purpose:** To support significant expansion and modernization activities.

Features of Mudra Loans

- **Collateral-Free Loans:** Mudra loans do not require any collateral or security.
- **Repayment Period:** Flexible repayment terms, generally ranging from 3 to 5 years, depending on the borrower's profile and business plan.

RS begins discussion on Ministry of new and renewable energy

GS Paper III: S&T

The Hindu Bureau

NEW DELHI

The Rajya Sabha, on Monday, started discussion on the working of the Ministry of New and Renewable Energy.

Initiating the debate, Trinamool Congress MP Derek O'Brien asked the Centre to consult the State governments, local bodies, communities and the private sector in the spirit of cooperation. He said that **thinking globally and acting locally must be the mantra for the Centre.**

"The spirit of consultation is antithetical to your thinking," he said.

Union Minister Pralhad Joshi will reply to the discussion on Tuesday.

The Trinamool MP said schemes such as the **International Solar Alliance,**

Green Hydrogen Mission and PM KUSUM failed to achieve the target. "Our suggestion is to **reduce dependency on China, Thailand and Vietnam,**" Mr. O'Brien said

Countering him, BJP MP Laxmikant Bajpayee said the **Centre is promoting renewable energy through several schemes.** "By 2030, half of the requirement of energy would come from new and renewable sources," he said.

Former Prime Minister H.D. Deve Gowda supported the Centre's endeavours and said that over the years, the importance of renewable energy in India has only grown upwards. "In a country of 1.4 billion people, we cannot secure our future if you do not adopt a model of sustainable development," he said.

International Solar Alliance (ISA)

- **Establishment:** Launched at the COP21 Climate Conference in Paris on November 30, 2015, by India and France.
- **Objective:** To promote solar energy globally and make solar power accessible and affordable.
- **Membership:** Open to 121 solar-resource-rich countries lying fully or partially between the Tropics of Cancer and Capricorn, but also open to all member countries of the United Nations.

- **Key Initiatives:**
 - Mobilizing \$1 trillion of investments by 2030 for massive deployment of solar energy.
 - Facilitating access to solar technologies.
 - Promoting collaborative research and development.

Green Hydrogen Mission

- **Purpose:** To produce hydrogen using renewable energy sources, thus reducing carbon emissions and fostering a green economy.
- The National Green Hydrogen Mission was launched on 4th January, 2023 with an outlay of Rs. 19,744 crores up to the financial year 2029-30.
- **Goals:**
 - To establish a green hydrogen economy by producing, storing, and using hydrogen derived from renewable energy.
 - Reduce dependency on fossil fuels and lower greenhouse gas emissions.
 - Position India as a global hub for green hydrogen production and export.
- **Initiatives:**
 - Setting up green hydrogen production facilities.
 - Developing storage and distribution infrastructure.
 - Promoting research and development in green hydrogen technologies.

PM-KUSUM (Pradhan Mantri Kisan Urja Suraksha evam Utthan Mahabhiyan)

- **Launch:** Announced in the 2018-19 Union Budget of India.
- **Objective:** To promote solar energy use among farmers for irrigation and reduce their dependency on grid electricity and diesel.
- **Components:**
 1. **Component A:** Installation of 10,000 MW of decentralized ground/stilt-mounted grid-connected solar power plants.
 2. **Component B:** Installation of 1.75 million standalone solar agriculture pumps.
 3. **Component C:** Solarization of 1 million grid-connected agriculture pumps.
- **Benefits:**
 - Reducing electricity subsidies for agriculture.
 - Providing farmers with additional income through the sale of surplus solar power.
 - Enhancing energy security and sustainability in the agricultural sector.

Opposition criticises 'plans' to amend Waqf Act, says it will oppose Bill in Parliament

GS Paper II: Polity

NEW DELHI

Reacting to the buzz over the BJP-led Union government's plan to table a Bill to amend the Waqf Act, 1995, the Opposition leaders on Monday claimed the Bill aims to create a divide in the society and that they will oppose it in Parliament.

Sources in the Ministry of Minority Affairs told *The Hindu* that the Bill is unlikely to be tabled in the ongoing Parliament session as it is still under consideration at the bureaucratic level.

Commenting on the government's plans, All-India Majlis-e-Ittehadul Muslimeen (AIMIM) chief Asaduddin Owaisi questioned why details of the Bill were leaked to the media when the Parliament was in ses-



Akhilesh Yadav

sion. "The government is acting against parliamentary supremacy and privileges by informing the media, and not Parliament about such a Bill. From what has been written in the media, I can say that the Modi government wants to take away the autonomy of the Waqf Board," Mr. Owaisi said.

Samajwadi Party (SP) chief Akhilesh Yadav said his party will oppose the

Bill in Parliament while Amra Ram, Communist Party Of India (Marxist) MP from Sikar, Rajasthan, said the BJP believes in "divisive politics" and instead of strengthening Waqf boards, they are trying to interfere with them.

Officials in the Ministry claimed that the Sachar Committee's 2006 report recommended that there was a need to regulate functioning of *Mutawallis* (managers or custodians of Waqf properties) and ensure efficient management of Waqf records. "The committee had recommended that organisational reforms should be made to strengthen Waqf Boards administratively," an official said, adding that a parliamentary panel report presented to Rajya Sabha in 2008 also made very similar recommendations.

Waqf Act, 1995

- The Waqf Act, 1995, is a significant piece of legislation in India that regulates and administers waqf properties.
- A waqf (or wakf) is a charitable endowment under Islamic law, typically involving the donation of property or assets for religious or charitable purposes.
- The Waqf Act, 1995, aims to provide better administration, supervision, and management of these waqf properties to ensure they are used appropriately and effectively for the intended purposes.

Preamble dropped from several NCERT Class 3, 6 textbooks

GS Paper II: Polity

The Hindu Bureau

NEW DELHI

The National Council of Educational Research and Training (NCERT) has dropped the Preamble to the Constitution from several Class 3 and Class 6 textbooks issued this year.

In the newly published textbooks for Class 6, the NCERT has dropped the Preamble from the social science textbook, *Exploring Society: India and Beyond*. The book mentions the fundamental rights and fundamental duties. The Preamble is present in the science textbook, *Curiosity*, and the Hindi textbook, *Malhar*.

In the old textbooks, the Preamble was printed in the English book, *Honey Suckle*, the science book, the Hindi textbook, *Durva*, and all three social science books – *Our Pasts-I*, *Social*

and *Political Life-I and The Earth Our Habitat*.

The new English textbook, *Poorvi*, has the National Anthem, while the Sanskrit textbook, *Deepakam*, has both the National Anthem and the National Song, but not the Preamble. The earlier Sanskrit book, *Ruchira*, also did not have the Preamble.

The new Class 3 textbooks for Hindi, English, mathematics and World Around Us (which replaces EVS) do not have the Preamble. The old EVS book, *Looking Around*, and the Hindi book, *Rimjhim 3*, carried the Preamble. "The allegations regarding removal of the Preamble from textbooks do not have a sound basis," Professor Ranjana Arora, Head of the Department of Curriculum Studies and Development at NCERT, said.

वंदे मातरम्

सुजलां सुफलां मलयजशीतलाम्
सस्य श्यामलां मातरम्
शुभ्र ज्योत्सनाम् पुलकित यामिनीम्
फुल्ल कुसुमित द्रुमदलशोभिनीम्,
सुहासिनीं सुमधुर भाषिणीम्
सुखदां वरदां मातरम् ॥

सप्त कोटि कण्ठ कलकल निनाद कराले
द्विसप्त कोटि भुजैर्धृत खरकरवाले
के बोले मा तुमी अबले
बहुबल धारिणीम् नमामि तारिणीम्
रिपुदलवारिणीम् मातरम् ॥

तुमि विद्या तुमि धर्म, तुमि हृदि तुमि
मर्म
त्वं हि प्राणाः शरीरे
बाहूते तुमि मा शक्ति,
हृदये तुमि मा भक्ति,
तोमारै प्रतिमा गडि मन्दिरे-मन्दिरे ॥

त्वं हि दुर्गा दशप्रहरणधारिणी
कमला कमलदल विहारिणी
याणी विद्यादायिनी, नमामि त्वाम्
नमामि कमलां अमलां अतुलाम्
सुजलां सुफलां मातरम् ॥

श्यामलां सरलां सुस्मितां भूषिताम्
धरणीं भरणीं मातरम् ॥



सारे जहाँ से अच्छा



सारे जहाँ से अच्छा हिन्दोस्तां हमारा
हम बुलबुलें हैं इसकी ये गुलिस्तां हमारा

गुर्बत में हों अगर हम, रहता है दिल वतन में
समझो वहीं हमें भी दिल है जहाँ हमारा

परबत वह सबसे ऊँचा, हमसाया आसमाँ का
वह संतरी हमारा, वह पासबाँ हमारा

गोदी में खेलती हैं इसकी हज़ारों नदियाँ
गुल्शन है जिनके दम से रश्क-ए-जनाँ हमारा

ऐ आब-ए-रूद-ए-गंगा! वह दिन है याद तुझको
उतरा तेरे किनारे जब कारवाँ हमारा

मजहब नहीं सिखाता आपस में बैर रखना
हिन्दी हैं हम, वतन है हिन्दोस्तां हमारा

यूनान-ओ-मिस्र-ओ-रूमा सब मिट गए जहाँ से
अब तक मगर है बाक़ी नाम-ओ-निशाँ हमारा

कुछ बात है कि हस्ती मिटती नहीं हमारी
सदियों रहा है दुश्मन दौर-ए-ज़माँ हमारा

इक्बाल! कोई महरम अपना नहीं जहाँ में
मालूम क्या किसी को दर्द-ए-निहाँ हमारा



chīn-o-arab hamārā hindostāñ hamārā

muslim haiñ ham vatan hai saarā jahāñ hamārā

tauḥīd kī amānat sīnoñ meñ hai hamāre

āsāñ nahīñ miTānā nām-o-nishāñ hamārā

duniyā ke but-kadoñ meñ pahlā vo ghar ḵhudā kā

ham is ke pāsbañ haiñ vo pāsbañ hamārā

teghoñ ke saa.e meñ ham pal kar javāñ hue haiñ

ḵhanjar hilāl kā hai qaumi nishāñ hamārā

maghrib kī vādiyoñ meñ gūñjī azaañ hamārī

thamtā na thā kisī se sail-e-ravāñ hamārā

bātil se dabne vaale ai āsmāñ nahīñ ham

sau baar kar chukā hai tū imtihāñ hamārā

ai gulistān-e-undulus vo din haiñ yaad tujh ko

thā terī Dāliyoñ meñ jab āshiyāñ hamārā

ai mauj-e-dājla tū bhī pahchāntī hai ham ko

ab tak hai terā dariyā afsāna-ḵhvāñ hamārā

ai arz-e-pāk terī hurmat pe kaT mare ham

hai ḵhuuñ tirī ragoñ meñ ab tak ravāñ hamārā

sālār-e-kārvāñ hai mīr-e-hijāz apnā

is naam se hai baaqī ārām-e-jāñ hamārā

'iqbāl' kā tarāna bāñg-e-darā hai goyā

hotā hai jāda-paimā phir kārvāñ hamārā

The social benefits of stock market speculation

The Government of India, in its Budget, raised taxes on both short-term and long-term capital gains made in the stock market and also raised the securities transaction tax on derivatives transactions.

The fundamental belief behind the idea of imposing higher taxes on stock market profits is that gains from stock market speculation are akin to gains from gambling. In fact, the Economic Survey released a day prior to the Budget argued that unlike developed countries, a developing country such as India cannot afford to waste its limited savings on stock market speculation.

Finance Secretary T.V. Somanathan even noted that capital gains could be taxed at higher rates as it is currently the fastest-growing income class.

Capital gains made in the stock market are somehow seen as easy profits earned by investors without providing any useful service to society. Similar disdain is also shown when the owner of a piece of real estate profits from a rise in the price of his or her property – as is evident in the removal of indexation benefits for real estate investors in the recent Budget. This is not surprising because many believe that when an investor buys an asset and sells it at a higher price in the future, he does not add any value to society in the process. In fact, capital gains are seen as a major reason behind growing inequality and taxing such gains is deemed good for society. The truth, however, is very different from this belief.

How capital gains occur

To understand why, one must first consider how capital gains occur in an economy. In a world where investors could perfectly forecast the future cash flow from different assets, there would be no capital gains because it would then be impossible for any investor to buy an asset at a price that is cheaper than its fair value. Here is an explanation, with a very simple example. Suppose investors knew very precisely that a business (or any other asset) would yield a one-time cash flow of ₹110 a year from now and they wanted a minimum annual return of 10%. Competition among investors to purchase the business would ensure that any buyer would have to pay ₹100 for it or risk losing it to other potential buyers. In such a Utopian world, there would be no opportunity for any investor to purchase the business for, let us say, ₹50 and sell it later at its fair value of ₹100 to earn a profit (or capital gains) of 100%.

The real world, of course, is far from perfect as the future is often uncertain. Hence, forecasts about the future cash flow of businesses can, at times, vary a lot. This basically means that investors may end up over-investing in certain businesses when compared to the likely future cash flow of these businesses, leading to



Prashanth Perumal

A better understanding of the benefits of stock market speculation – erroneously viewed as akin to gambling – can lead to better public policy

overvaluation. They may also under-invest in other businesses, leading to undervaluation. Investors who put their money in undervalued businesses have the chance to earn capital gains when other investors finally recognise the fair value of these businesses and bid up their prices. So, an investor who makes capital gains is essentially one who deploys his capital efficiently into businesses whose future cash flow justifies the investment. An investor who suffers capital losses, on the other hand, is one who misallocates capital into businesses whose future cash flow does not justify the investment.

This lesson has important social implications. An economy that allocates a large part of its capital inefficiently would be poorer than another economy that allocates its capital more efficiently. This is because the way capital is allocated also determines how scarce resources are allocated towards satisfying different ends of society. Imagine if, during a pandemic such as COVID-19, investors in a country allocated most of their capital into building cruise ships and passenger aircraft which very few people want during a pandemic rather than building new hospitals and testing facilities that are in high demand. Such a country, where investors misallocated capital, would be directing its resources in an inefficient way than another economy where investors correctly prioritised health care over less important sectors. While a uniform tax on capital gains across all businesses may help prevent such resource misallocation, higher tax collections will still affect private incentives and the size of the overall economic pie.

The issue of 'gambling instincts'

Now, some may dispute that the argument above, for the benefits of speculation, does not apply to most of the buying and selling that happens in the stock market. When a retail investor buys a share of a business, they rightly say, the investor's cash often does not actually go into the balance sheet of the business but into the hands of the previous owner. What these critics do not understand, however, is that in many cases, early investors may not even be keen in investing in a business unless there is an active market such as the stock exchange where they could readily sell their shares to potential buyers in the future. The Centre says it wants to encourage long-term investing in companies by raising the tax on short-term capital gains. But it does not understand that without traders with "gambling instincts", who regularly buy and sell stocks in the short-term, there would not be sufficient liquidity in the market for many long-term investors to easily sell their stocks.

Further, a highly liquid market also ensures that the shares of businesses are priced as accurately as possible. The efficient pricing of the

shares of companies can help ensure that companies with promising prospects are able to raise funds more easily than companies with shaky prospects, thus aiding the efficient allocation of resources.

It is worse for derivatives

Meanwhile, gains that speculators make from derivatives such as futures and options suffer an even worse reputation than the more straightforward capital gains made from trading shares. But again, disdain towards derivatives speculation also comes from a lack of understanding of its social benefits.

Derivatives are contracts that allow investors to buy or sell an underlying asset such as a stock at a predetermined price in the future. In other words, these instruments allow one group of investors to offload the risk associated with changes in the price of an asset onto another group of investors who are willing to assume the risk. So, derivatives basically help in the transfer of risk among investors. It should be noted that without derivatives, many investors would simply not be willing to make many investments at all. A great example is of a farmer who may have the skills to produce agricultural output but not the skill or the risk appetite to forecast the future prices of his produce. In the absence of futures contracts that can assure the farmer a certain price for his produce in the future, the farmer will likely be discouraged from producing any output at all due to the risk of potential price fluctuations.

Derivatives trading can often look like pure gambling. This is particularly so in cases where neither party to the contract has any intention to ever actually buy or sell the underlying asset but purely wants to bet on changes in the price of the asset. Such bets on the price of an underlying asset can seem to be no different from bets placed on the outcome of a game of cricket or football. But note that such pure speculative bets in derivatives are not very different from much of the trading that happens in the cash market, where both the buyer and the seller of a stock may – unlike fundamental investors – trade without any long-term interest in the underlying business. We have seen that such active trading in stocks can be socially beneficial as it offers crucial liquidity to long-term investors who want to buy or sell based on fundamentals. Similarly, traders who bet in derivatives for purely speculative reasons help improve the availability of these instruments to fundamental investors who want to manage risk.

A better understanding of these benefits of stock market speculation can lead to better public policy.

prashanthperumal.j@thehindu.co.in

The social benefits of stock market speculation (06 August)

- The Indian government increased taxes on short-term and long-term capital gains from the stock market and raised the securities transaction tax on derivatives.
- The government believes that stock market gains are similar to gambling profits.
- The Economic Survey argued that India's limited savings should not be wasted on stock market speculation.
- Finance Secretary T.V. Somanathan said capital gains could be taxed higher as they are the fastest-growing income class.
- Capital gains are viewed as easy profits that don't provide a useful service to society.
- Similar disdain is shown for real estate profits, with the recent Budget removing indexation benefits for real estate investors.
- Many believe that buying and selling assets at a profit doesn't add value to society and contributes to inequality.
- Taxing capital gains is seen as beneficial for society, but this belief is disputed.

How capital gains occur

- Capital gains occur due to the inability to perfectly predict future asset values.
- If investors could perfectly forecast future cash flows, they would buy assets at their fair value, leaving no room for capital gains.
- For example, if an asset is known to yield ₹110 in a year and investors want a 10% return, they would pay ₹100 for it.
- In this ideal scenario, no investor could buy the asset for ₹50 and sell it for ₹100 to make a profit.
- However, in the real world, the future is uncertain, leading to varying forecasts about future cash flows.
- As a result, investors sometimes overvalue or undervalue assets based on their predictions.

- Investors earn capital gains by investing in undervalued businesses, which increase in price when others recognize their true value.
- Efficient capital allocation by investors leads to profitable capital gains.
- Inefficient capital allocation results in capital losses.
- Efficient capital allocation is crucial for a richer economy as it ensures scarce resources are used effectively.
- During a pandemic, capital should be allocated to high-demand sectors like healthcare, not low-demand sectors like cruise ships and aircraft.
- Uniform capital gains tax may help prevent misallocation, but higher taxes can affect incentives and overall economic growth.

The issue of 'gambling instincts'

- Critics argue that buying and selling stocks does not directly benefit businesses as the money often goes to the previous owner.
- They overlook that early investors are more likely to invest if there is an active market where they can sell their shares later.
- The government aims to encourage long-term investing by increasing taxes on short-term capital gains.
- However, without short-term traders providing market liquidity, long-term investors would struggle to sell their stocks easily.
- A highly liquid market ensures that shares are priced accurately.
- Efficient pricing helps promising companies raise funds more easily than those with uncertain prospects, aiding resource allocation.
- Gains from derivatives (futures and options) face even more criticism than capital gains from shares.
- This disdain towards derivatives speculation stems from a lack of understanding of their social benefits.
- Derivatives are contracts allowing investors to buy or sell an asset at a predetermined price in the future.
- These instruments help transfer the risk of price changes from one group of investors to another willing to assume that risk.
- Without derivatives, many investors would avoid making investments due to risk.
- For example, a farmer might avoid producing crops if futures contracts didn't exist to assure a future price, due to the risk of price fluctuations.
- Derivatives trading can appear like gambling, especially when neither party intends to buy or sell the actual asset.
- Such speculative bets in derivatives are similar to much of the trading in the cash market, where traders might not have a long-term interest in the business.
- Active trading, even for speculative reasons, provides liquidity for long-term investors.
- Speculative traders in derivatives improve the availability of these instruments for fundamental investors who want to manage risk.
- Understanding these benefits can lead to better public policy on stock market speculation.

The issue of institutional violence, addressing it

GS Paper I: Society

India's electoral process presents a dichotomy. Six hundred and forty-two million voters, more than half of whom were female, cast a vote in the largest democratic process in action in the world. Yet, in a country where 90 rapes are reported everyday, very few among the 2,823 candidates who stood for elections, had women's safety on their electoral agenda. For those that did, all were sporadic and none tackled the underlying institutional violence that millions of survivors live through everyday.

This dichotomy is real: nearly 50% women face domestic violence and two out of three Dalit women face sexual violence in their lifetimes. Yet, not just political parties ignored this. Even voters did not seem to demand it.

Prolonged and worse

Gender-based violence is incorrectly presumed to be one specific act of violence, often by an intimate partner at the household level, that politicians cannot address. However, in a white paper developed through 200-plus hours of interviews and discussions with lived experts, we found that the institutional violence on survivors is often prolonged and worse than the specific act of gender-based violence itself. This is where voters and politicians can make a vital difference.

Institutional violence against survivors starts even before the reporting process, influencing their decision to come forward. For example, a report published in 2019 by J-PAL, a global policy think tank, showed that 39% of officers in India think that complaints of gender-based violence are usually baseless. With a brutal police system, a decades-long traumatic judicial system and no hope of justice, a vicious cycle of violence is maintained.

Women only seek justice when their circumstances become unbearable. Despite one in two women facing intimate partner violence, India has one of the lowest divorce rates in the



Mathangi Swaminathan

the founder of Parity Lab, a first-of-its-kind feminist accelerator for survivor-led-organisations fighting against gender-based violence. She is an Echoing Green Fellow, an Acumen India Fellow, a World Economic Forum Global Shaper, and an alumna of the Harvard Kennedy School

Voters and politicians have the power to highlight the issue and make a difference

world at 1%. A report estimated that 77% of women in India remain silent, even to their closest relatives, about the violence they endure.

"A woman once approached us with bleeding veins," said Ranjita, Founder of Samarthyaa, a Denotified Nomadic Tribal youth and women-led organisation. "We accompanied her to the police station to file a complaint, and the cops told us to step aside so they could talk to her alone. They tried to dissuade her from filing the report and sent us around to different police stations. When she still wanted to report, they accused us of coercing her... Now, they tell us that since she comes from the neighbouring State of Karnataka, this case is out of their jurisdiction. These are the challenges we face with the justice system."

Problems in rural India

In rural India, male and upper-caste dominated panchayats add an additional set of barriers for women to seek justice. Divorce is almost never an option: India has a backlog of 40 million court cases and this particularly impacts survivors of gender-based violence, even more so survivors from marginalised communities with pre-existing systemic inequities due to their caste, literacy and geography.

"Getting justice in India can lead to a lot of injustice," says Ranjita.

We, as a country, have lost hope. This is where bureaucrats and elected leaders can come in and make a difference by creating survivor-centric institutions.

For years, social impact organisations have been taking up this responsibility to train police and members of the judicial system to adopt a trauma-informed lens. For example, Vanangna, a women-led organisation in Bundelkhand trains government officials, including the police and law enforcement, on women-centric and survivor-centric processes. We need to adopt these learnings at a national level, and we need

the wisdom of survivors of violence, especially those from historically marginalised communities, to help us design and validate a just system.

Strong laws, weak implementation

India has strong domestic violence laws, yet, implementation has been a colossal failure due to inept officials and archaic processes. This is unsurprising because the officials come from the very society that has condoned violence. We need a national reimagination and improvisation of our justice institutions by leveraging the learnings of organisations such as Vanangna, to make them trauma-informed and focused on healing.

We also need more data and more stories to be shared publicly. For decades, institutional violence has been amplified by a lack of data. It is impossible to truly understand how often and how many women are being denied access to justice.

Granted, the recent updates to criminal law procedures heavily focus on timeliness and ease of access through digital means. However, this needs to be accompanied by gender-sensitive training and monitoring and evaluation measures to ensure staff have a trauma-informed approach when working with survivors of violence.

Voters and politicians have the power to shine a light on the issue and make a massive difference. For example, with the widespread government campaign to promote education of girls, we have seen a massive national shift in enrolment of girls in school.

For such a shift to happen in the small and large institutions of our country where survivors of violence no longer fear the repercussions of accessing justice, we, as voters, must demand our rights.

Our women deserve safety and dignity. We must fight for it.

The issue of institutional violence, addressing it (06 August)

- India's electoral process is large, with 642 million voters, over half of whom are women.
- Despite the high number of female voters, few election candidates prioritized women's safety in their campaigns.
- Gender-based violence is prevalent: 90 rapes reported daily, nearly 50% of women face domestic violence, and two out of three Dalit women experience sexual violence.
- Political parties and voters largely ignored these issues.
- Gender-based violence is often seen as a single act, but institutional violence against survivors is prolonged and more damaging.
- Institutional violence includes negative attitudes from authorities; for example, 39% of officers think gender-based violence complaints are baseless.
- Survivors face a brutal police system and a long, traumatic judicial process, perpetuating a cycle of violence.
- Women often seek justice only when their situation becomes unbearable.
- Despite high rates of intimate partner violence, India has a very low divorce rate (1%).
- 77% of women in India remain silent about the violence they experience, even to close relatives.
- Ranjita, founder of Samarthyaa, shared an example where a woman with bleeding veins was discouraged by police from filing a complaint.
- The police tried to dissuade her, sent her to different stations, and accused the organization of coercion.
- They later claimed the case was out of their jurisdiction since the woman was from a neighboring state.
- These are common challenges faced in the justice system.

Problems in rural India

- Rural India faces additional barriers for women seeking justice due to male and upper-caste dominated panchayats.
- Divorce is rarely an option; India has a backlog of 40 million court cases, heavily impacting gender-based violence survivors.
- Survivors from marginalized communities face even more difficulties due to caste, literacy, and geographic inequities.
- Ranjita says that seeking justice in India can often lead to further injustice.
- Bureaucrats and elected leaders can help by creating survivor-centric institutions.
- Social impact organizations have been training police and judicial members to adopt trauma-informed approaches.
- Example: Vanangna, a women-led organization in Bundelkhand, trains government officials on women-centric and survivor-centric processes.
- These learnings should be adopted nationally.
- Involvement of violence survivors, especially from marginalized communities, is crucial in designing a just system.

Strong laws, weak implementation

- India has strong domestic violence laws, but they are poorly implemented due to ineffective officials and outdated processes.
- Officials often come from a society that has normalized violence, affecting the justice system.
- There is a need for a national overhaul of justice institutions, using lessons from organizations like Vanangna to make them trauma-informed and healing-focused.
- More data and public stories are needed to understand the scope of violence and justice denial.
- Recent updates to criminal laws focus on timeliness and digital access but need to be paired with gender-sensitive training and evaluation.
- Voters and politicians can drive change by highlighting the issue, similar to the success seen with promoting girls' education.
- For meaningful change, voters must demand rights to ensure women's safety and dignity.

On the edge (06 August)

While protecting Israel, the West must

also rein in Netanyahu

- On July 30, senior Hezbollah commander Fuad Shukr was killed in Beirut, and Hamas leader Ismail Haniyeh was killed in Tehran.
- Israel has claimed responsibility for Shukr's killing but hasn't confirmed or denied involvement in Haniyeh's assassination.
- Tensions on Israel's northern border with Lebanon have been high since last year's Gaza war, with frequent exchanges of fire between Hezbollah and Israeli Defense Forces.
- After Shukr's death, Hezbollah launched numerous rockets, escalating tensions further.
- There is concern about potential Iranian retaliation against Israel for the attacks on its allies.
- Previously, when Israel bombed Iran's embassy in Damascus, Iran responded with drone and missile attacks on Israel.
- Given the recent direct attack on Tehran and the killing of an ally, Iran may retaliate strongly against Israel.
- By killing Ismail Haniyeh in Tehran, Israel has shown it can carry out complex operations in hostile areas and revealed weaknesses in Iran's security.
- This act sends a strong warning to Hamas that its leaders are not safe, but it might also backfire for Israel.
- The timing of Haniyeh's killing undermines peace efforts between Israel and Hamas, as Haniyeh was a moderate pushing for a ceasefire.
- Prime Minister Netanyahu's actions suggest he prefers continuing the conflict rather than seeking peace.
- Attacking Tehran violates Iran's sovereignty and could provoke Iranian retaliation, potentially dragging the U.S. into a conflict.
- The U.S. had previously prevented such escalation by controlling Israel's actions, but Israel has continued provocative attacks.

- As tensions rise, the U.S. and its allies should minimize the impact of Iran's response on Israel and establish new rules to prevent further threats to regional security.

On target

Indian shooters lived up to expectations in Paris Olympics

Ever since Rajyavardhan Singh Rathore won the silver medal in the men's double trap shooting at the Athens Olympics in 2004, Indian shooters have always dealt with the pressure of expectations. The stress quadrupled when Abhinav Bindra won the gold in the 10m air rifle category in the 2008 Beijing Games. This success was replicated in the 2012 London Games with Gagan Narang winning the bronze in the 10m air rifle shooting while Vijay Kumar did one better, seizing the silver in the 25m rapid fire pistol competition. And then followed the inexplicable drought in shooting during the subsequent editions at Rio de Janeiro and Tokyo. Cut to the latest Paris Games, where all doubts pertaining to whether the shooters would hit bullseye were emphatically laid to rest as 22-year-old Manu Bhaker became the first Indian woman to win an Olympic medal in shooting. It was also Manu's turn to exorcise the ghosts of the past as in the previous Tokyo Games she faltered as an equipment malfunction affected her performance. First up, Manu claimed the bronze in the 10m air pistol. Later she combined with Sarabjot Singh to win another bronze in the mixed 10m air pistol segment. A hat-trick though proved elusive as she finished fourth in the 25m pistol final.

Manu's success is a testimony to the rapid strides that Indian shooting has made besides being a tribute to an efficient system that the sporting fraternity has established. Manu is following the path that predecessors Anjali Bhagwat and Suma Shirur, presently a head coach too, had carved. Those were days when funds were meagre and, at times, awkward questions were asked about carrying firearms at airports as the knowledge of shooting as a sport was low. Anjali and Suma did not win an Olympics medal but they inspired their juniors to follow the sport with passion. Manu linking up with her former coach Jaspal Rana, an ace shooter himself, helped add a new dimension. Shooting demands still hands, a sharp eye and a zen mind, and finally Manu revealed that she was in the zone while aiming at the target. Her traits were evident in Swapnil Kusale too as he won bronze in the men's 50m rifle three positions event. Equally, Arjun Babuta's fourth-place finish in the men's 10m air rifle final was a pointer to shooting's razor thin margins that split ecstasy and agony. There was more grief too in archery, as India continued to fail at the Olympics with Deepika Kumari and company often stumbling at the business end.

On target (06 August)

Indian shooters lived up to expectations in Paris Olympics

- After Rajyavardhan Singh Rathore's silver medal in 2004, Indian shooters faced high expectations.
- Abhinav Bindra's gold in 2008 intensified the pressure.
- In 2012, Gagan Narang and Vijay Kumar won bronze and silver, respectively, in shooting events.
- However, there were no shooting medals in Rio 2016 and Tokyo 2020.
- At the Paris Games, Manu Bhaker broke the drought by winning the first Olympic shooting medal for Indian women.
- Manu Bhaker won bronze in the 10m air pistol and another bronze in the mixed 10m air pistol with Sarabjot Singh.
- She narrowly missed a hat-trick, finishing fourth in the 25m pistol final.
- Manu Bhaker's success highlights the progress of Indian shooting and reflects an efficient sporting system.
- She follows the path set by Anjali Bhagwat and Suma Shirur, who faced challenges with limited funds and low awareness of shooting as a sport.
- Although Anjali and Suma didn't win Olympic medals, they inspired future shooters.
- Manu's collaboration with her former coach Jaspal Rana added a new dimension to her performance.
- Shooting requires steady hands, sharp vision, and a calm mind, traits evident in Manu's performance.
- Swapnil Kusale won bronze in the men's 50m rifle three positions event.
- Arjun Babuta's fourth-place finish in the men's 10m air rifle final showed how close shooting results can be.
- Archery, on the other hand, continued to disappoint, with Deepika Kumari and others struggling in crucial moments.

Powering India's future

GS Paper III: Energy

In her seventh consecutive Budget speech, the Finance Minister announced measures indicating India's commitment to its clean energy transition. These measures include developing policies on pumped hydro storage, and energy transition pathways to support nuclear energy and energy efficiency. Yet, the memories of this summer's record-breaking heatwaves, which drove up power demand, are still fresh. They reflect both a growing economy and a warming climate. What will it take to keep India's economy powered?

For the NDA government, energy security and the clean energy transition have been the priorities. This is evident from three key milestones India has achieved in the last decade. First, near-universal electrification through the Saubhagya scheme, with independent surveys by the Council on Energy, Environment, and Water (CEEW) suggesting that approximately 97% of households were electrified in 2020. Second, the country saw a five-fold increase in installed renewable energy (RE) capacity, making India the fourth-largest country globally by RE capacity. Third, there was a 40% drop in aggregate losses of power distribution companies (discoms), to an all-time low of about 15% in 2022-23. These indicate that the base of the Indian power sector is strengthening. However, India confronts challenges in decarbonising its power system at speed and scale while supplying quality and affordable power to consumers.

Moreover, India's power sector must prepare for stronger headwinds. Our annual electricity demand has been growing by 7-9% every year since the COVID-19 pandemic. But our peak demand is rising even faster. Climate change-induced weather extremes further exacerbate these challenges. For discoms, meeting unplanned surges through affordable options and existing network capacity is challenging,



Shalu Agrawal

Director of Programmes at the Council on Energy, Environment and Water (CEEW)



Disha Agarwal

Senior Programme Lead at the Council on Energy, Environment and Water (CEEW)

Investing in a cleaner, flexible, and resilient power grid will help our economy grow sustainably and create jobs in the clean energy sectors

resulting in power outages.

To address the concerns

First, the government must raise targets for renewable energy and storage systems to go beyond 500 GW in 2030. Despite past efforts to add renewable capacity, its share in India's power generation mix is just 13%. Previous power supply shortages and expectations of rising energy demand have driven policymakers to bet on new coal capacity. Instead, we must strive to raise the share of renewables in India's power generation mix and scale up storage solutions. Renewables and storage can support peak demand, are cost-competitive, and are faster to build.

Second, steer faster deployment of diverse clean energy resources. In 2023 alone, China added 300 GW of solar and wind capacity, while the European Union added 73 GW. As of March, India's cumulative renewable capacity stood at 144 GW, with another 128 GW in the pipeline. This comparison indicates the urgency of deploying clean resources at speed and scale. This requires tapping the RE potential in more States as well as faster grid connectivity and access to suitable, conflict-free land for the timely commissioning of projects. Diversifying from solar energy to other clean technologies would also help India meet its evolving demand.

Third, implement measures to improve the availability of energy. During FY23, only 6.3% of India's power generation was procured through power exchanges, with the rest coming through bilateral agreements. The low liquidity (volume being traded) in the power exchange presents price volatility risks. This restricts both buyers and sellers from relying on the exchange for power procurement and value recovery, and in turn, constrains our ability to integrate renewables at scale. India needs innovation in bid designs to attract RE developers to sell power in the exchange, besides

setting up capacities for long-term contracts. For instance, under the RE Implementation Agency-led bidding process, RE developers may be required to build part of the project capacities for merchant sale, beyond the bid quantum for long-term contracts.

Fourth, ensure effective maintenance and utilisation of the coal fleet. Even as we add more renewables, coal plays an important role. CEEW's analysis of MERIT data shows that, in FY24, more than 210 GW of coal capacity generated about 80% of the power during non-solar hours. However, more than 40 GW of coal capacity was unavailable for nearly 60% of the time that year, due to planned maintenance or technical faults. State regulators must revise the norms to enable timely upkeep of the coal fleet and compensate for investments to make select coal plants flexible.

Finally, fast-track digitalisation to empower discoms and consumers to play an active role in India's energy transition. Smart meters would enable discoms to forecast power demand accurately, plan networks better, and integrate renewables cost-effectively. More than 11 million smart meters have already been installed in India, with half of these in Bihar and Assam. However, India's smart metering drive is far from the 250 million target. Discoms must overcome their hesitation and take inspiration from Bihar and Assam, which are already reaping benefits like reduced losses and timely bill delivery to consumers through smart metering. But keeping consumer privacy and system preparedness against cyberattacks at the heart of regulations and digitalisation efforts would be crucial.

All eyes are on the Indian government to deliver in this critical decade. Investing in a cleaner, flexible, and resilient power grid will help our economy grow sustainably and create jobs in the clean energy sectors.

Views expressed are personal

Powering India's future (06 August)

- The Finance Minister announced measures for India's clean energy transition, including policies on pumped hydro storage, nuclear energy support, and energy efficiency.
- India experienced record-breaking heatwaves this summer, increasing power demand.
- The NDA government prioritizes energy security and clean energy transition.
- Three key milestones achieved in the last decade:
 - Near-universal electrification through the Saubhagya scheme, with 97% of households electrified by 2020 (according to CEEW).
 - Five-fold increase in installed renewable energy capacity, making India the fourth-largest globally in RE capacity.
 - 40% drop in aggregate losses of power distribution companies, reaching an all-time low of about 15% in 2022-23.
- Despite these achievements, India faces challenges in rapidly decarbonizing its power system while ensuring quality and affordable power for consumers.
- India's power sector must prepare for increasing challenges, with annual electricity demand growing by 7-9% since the COVID-19 pandemic.

- Peak demand is rising even faster, exacerbated by climate change-induced weather extremes.
- Discoms face difficulties meeting unplanned surges with affordable options and existing network capacity, leading to power outages.
- To address these concerns:
 - The government should raise targets for renewable energy and storage systems beyond 500 GW by 2030.
 - Despite past efforts, renewable energy accounts for only 13% of India's power generation mix.
 - Previous power shortages and rising energy demand have led to reliance on new coal capacity.
 - The focus should shift to increasing the share of renewables in the power generation mix and scaling up storage solutions.
 - Renewables and storage can support peak demand, are cost-competitive, and can be built faster.
- India needs faster deployment of diverse clean energy resources.
- China and the European Union have significantly outpaced India in adding solar and wind capacity.
- India's renewable capacity was 144 GW as of March, with 128 GW in the pipeline.
- Urgency in deploying clean resources requires tapping RE potential in more states, faster grid connectivity, and access to conflict-free land.
- Diversifying from solar energy to other clean technologies is necessary.
- Improving energy availability is crucial; only 6.3% of power generation in FY23 was procured through power exchanges.
- Low liquidity in power exchanges presents price volatility risks, restricting buyers and sellers and constraining the integration of renewables at scale.
- India needs innovation in bid designs to attract renewable energy (RE) developers to sell power in exchanges and set up capacities for long-term contracts.
- RE Implementation Agency-led bidding process could require developers to build part of project capacities for merchant sale.
- Effective maintenance and utilization of the coal fleet is crucial even as more renewables are added.
- Coal remains important, generating about 80% of power during non-solar hours in FY24.
- Over 40 GW of coal capacity was unavailable for nearly 60% of the time due to maintenance or technical faults.
- State regulators need to revise norms for timely coal fleet upkeep and compensate investments to make select coal plants flexible.
- Fast-track digitalization to empower discoms and consumers in India's energy transition.
- Smart meters enable accurate power demand forecasting, better network planning, and cost-effective renewable integration.
- Over 11 million smart meters installed, with significant progress in Bihar and Assam.
- India's smart metering drive aims for 250 million meters.
- Discoms need to overcome hesitation and follow the example of Bihar and Assam, which benefit from reduced losses and timely bill delivery.
- Ensure consumer privacy and system preparedness against cyberattacks in regulations and digitalization efforts.
- Government investment in a cleaner, flexible, and resilient power grid is crucial for sustainable economic growth and job creation in clean energy sectors.

Saubhagya Scheme

The Saubhagya Scheme, officially known as the **Pradhan Mantri Sahaj Bijli Har Ghar Yojana**, was launched by the Government of India in September 2017. The primary objective of this scheme is to **provide universal household electrification across the country**, aiming to ensure that all willing households, particularly in rural and urban areas, have access to electricity.

Objectives

1. **Universal Electrification:** Ensure last-mile connectivity and electricity connections to all remaining unelectrified households in rural areas and poor households in urban areas.
2. **Quality of Life:** Improve the quality of life for all citizens, especially for women and children, by providing reliable electricity access.
3. **Economic Development:** Facilitate economic development and poverty alleviation through the electrification of households.

Key Features

1. **Beneficiary Identification:** Households identified under the **Socio-Economic and Caste Census (SECC) 2011 data** and others will be provided electricity connections free of cost.
2. **Subsidy Provision:** Non-SECC households have the option to pay for the connection in installments.
3. **Infrastructure:** Includes setting up of electricity infrastructure such as transformers, meters, and other necessary equipment to ensure seamless supply.
4. **Ease of Access:** Beneficiaries receive electricity connections free of charge, covering the cost of wires, meters, and installation.

Implementation

- **Executing Agencies:** The scheme is implemented through state-owned power distribution companies (DISCOMs) and state power departments.
- **Funding:** The funding for this scheme is shared between the central government and state governments.
- **Monitoring and Evaluation:** A robust monitoring mechanism has been put in place to ensure the timely completion of the targets. The progress is regularly monitored at the highest levels in both the central and state governments.

Impact

1. **Electrification Milestone:** By March 2019, all willing households were electrified, meeting the initial target set under the Saubhagya scheme.
2. **Socio-Economic Benefits:** Electrification has led to improved quality of life, enhanced education and health services, increased economic activities, and better security and comfort.
3. **Environmental Impact:** Reduction in the use of kerosene lamps and other non-renewable energy sources, promoting cleaner energy consumption.

Hasina's paradoxical rule — economic progress, democratic regression

Indicators measuring political rights and civil liberties declined drastically under her 15-time rule

DATA POINT

The Hindu Data Team

The protests against currently deposed Prime Minister Sheikh Hasina — who has been in power since 2009 in Bangladesh — seeking her resignation indicate the level of anger that has grown following a clear erosion of civil liberties and rights in contrast to the notable progress made in various socio-economic parameters during her long tenure.

Ms. Hasina tendered her resignation and fled the country after renewed violence and clashes between government supporters and protestors. Last month, students led protests against quotas in government jobs benefiting families of freedom fighters who took part in the Bangladesh War of Liberation. After 150 people were killed during the agitation, the Supreme Court of Bangladesh had done away with most of the quotas in question. However, protests were renewed with calls for Ms. Hasina's resignation owing to her regime's use of excessive use of violence, closure of educational institutions, and internet clampdown to suppress the student-led agitation.

Ms. Hasina's resignation marks a steep fall for a leader whose regime's use of measures to curb civil liberties and the opposition is in sharp contrast to its economic policies. Her government deserves credit for various economic measures such as strengthening infrastructure in the country by providing electricity to remote villages and building highways, railway lines, and ports.

The country's GDP per capita (current U.S.\$), surpassed India's in 2023, as shown in Chart 1. The rapid increase in the measure post-2003 is visible. The economic growth also translated to better outcomes in education and health.

The country's Human Development Index also surpassed India's

in 2020 and stood just behind Sri Lanka in the region (Chart 2). The country's Infant Mortality rate also drastically reduced from 151.4 in 1973 (behind India) to 24.1 in 2022 (ahead of India), as shown in Chart 3.

In contrast to the rapid progress in socio-economic measures, the nation's indicators which measure political rights, political pluralism, civil liberties, organisational rights, rule of law, and personal autonomy have all declined in recent years.

Chart 4 shows Bangladesh's scores in such parameters over the last decade, based on ratings by Freedom House. In each category, the maximum score is four and the minimum score is one, or zero if no rights exist at all.

The 76-year-old leader became the world's longest-serving female head of government, when Ms. Hasina won a fourth consecutive term in January this year, in an election boycotted by the main Opposition who claimed the polls were not free and fair.

As Chart 4 shows, all indicators measuring political rights and political pluralism, such as "Was the head of government elected free and fairly?", "Are electoral laws implemented impartially?", "Is there the right to organise political parties?", and "Is there an opportunity for the opposition to gain power through polls?", have recorded a drastic decline in the past decade.

The Freedom of Press index, already poor, suffered a further drop in the second half of 2010. That protestors were met with excessive violence recently was not surprising, given that the nation's score in "freedom of assembly" declined.

Ratings also showed that people were afraid to air opinions on sensitive issues, with the independence of the judiciary taking a beating. Indeed the rule by Ms Hasina in Bangladesh can only be termed a paradox.

With inputs from AP, Reuters

Boon and bane

The data for the charts are sourced from the World Bank, the Human Development Reports, and Freedom House

Chart 1: Various countries' GDP per capita (current U.S.\$) over the years

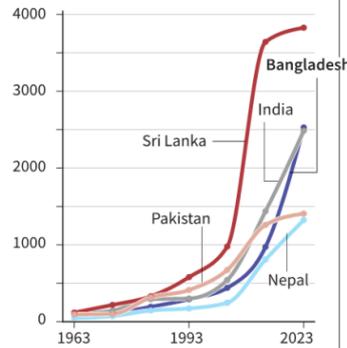


Chart 2: Various countries' Human Development Index over the years

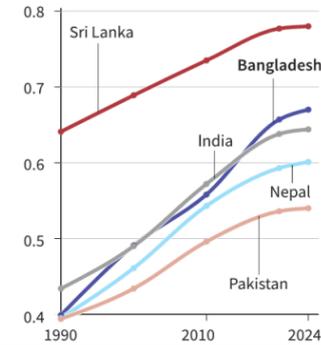
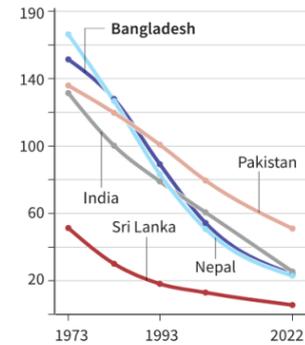
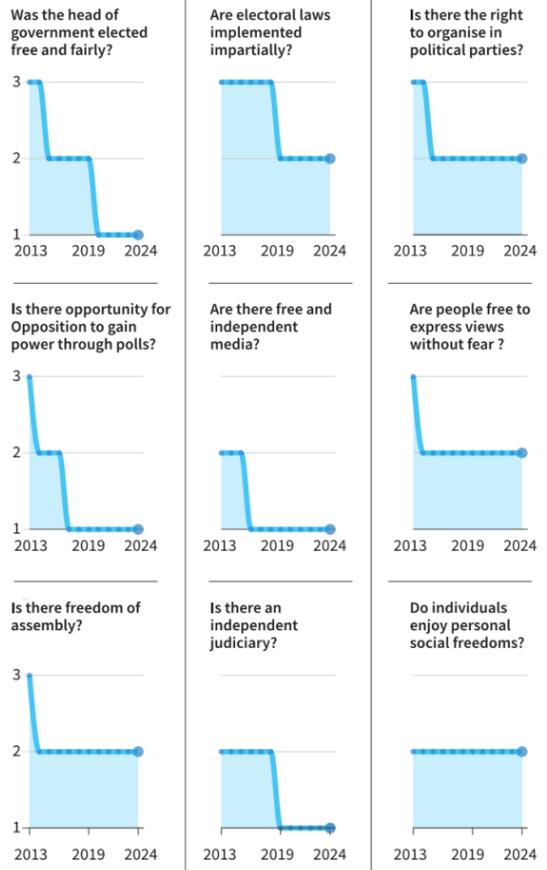


Chart 3: Various countries' Infant Mortality Rates over the years



People celebrate Bangladeshi PM Sheikh Hasina's resignation in Dhaka, on Monday. REUTERS

Chart 4: The chart shows Bangladesh's scores over the years in various indicators which measure political rights, civil liberties, and more



Pat

On doorstep delivery of alcohol

What are the arguments for and against online delivery of alcohol? How much of India consumes liquor? Can such a system make it safer for women to access alcohol? How should governments regulate liquor consumption?

GS Paper IV: Ethics

EXPLAINER

Parth Sharma
Siddhesh Zadey
Vid Karmarkar

The story so far:

The States of Delhi, Karnataka, Haryana, Punjab, Tamil Nadu, Goa, and Kerala are or were mulling plans to allow the doorstep delivery of alcohol through platforms like Swiggy, BigBasket, and Zomato. India has seen a steady rise in alcohol consumption. The recorded per capita consumption has increased from 1.6 litres in 2003-2005 to 2.2 litres in 2010, then to 5.5 litres in 2016-2018. With \$52 billion in revenue, India is the sixth-largest alcohol market worldwide. According to a Ministry of Social Justice and Empowerment survey in 2019, there were about 16 crore alcohol users in India in the 10-75 year age group in 2018. Medically, the safe limit for alcohol consumption is zero millilitres. Alcohol use causes three lakh deaths in the country every year.

Why doorstep delivery?

There are two main arguments in favour of doorstep delivery of alcohol. First, that excise taxes on alcohol sales can help generate revenue for Central and State governments. Across States, taxes on alcohol sales contribute up to a quarter of all revenue generated for governments.

Second, doorstep delivery can help reduce drunk-driving incidents and prevent road traffic crashes and injuries. In India, 6-48% of fatal road traffic fatalities are due to alcohol use.

A third argument is that doorstep deliveries may not threaten the safety of women consumers. There is some evidence from Kerala that shutting bars selling hard liquor reduced on-premise violence against women. Doorstep delivery options might have a similar effect, especially for women who live alone or with other women.



GETTY IMAGES

However, this argument is on a slippery slope: for the majority of India's women, safety cannot be presumed as domestic violence related to alcohol use is rampant. So while doorstep delivery will help women access alcohol without social stigma – a possible advantage in itself – whether it could reduce violence against them is suspect.

What are the arguments against?

Studies to date agree that for India, the costs due to alcohol use exceed economic benefits from alcohol sales. Second, schemes with doorstep delivery of alcohol assume people will change their drinking and socialising behaviours in response to the new option. It is reasonable but requires concrete evidence. There is some evidence that the availability of alcohol on-demand can increase consumption, promote binge drinking, and lead to harms related to alcohol use.

Similarly, it is not straightforward to assume doorstep alcohol delivery can reduce drunk-driving. There are several other, evidence-based policies that can help deal with that issue including sobriety checkpoints, stringent penalties for repeat offenders, and increasing availability of public transport and other ride-share options.

What are the effects of alcohol consumption?

Alcohol is a carcinogen and causes at least seven types of cancers. Alcohol consumption also increases the risk of injuries, abuse of other substances, mental illnesses, diabetes mellitus, liver disease, diseases of the heart and blood vessels, and chronic kidney diseases. Along with health implications for the user, male alcohol misuse increases the risk and severity of inter-partner violence. Treatment of diseases and injuries due

to alcohol consumption are expected to cost India more than ₹3 lakh crore between 2011 and 2050. Adding productivity losses raises this to ₹121.3 lakh crore. The revenue to governments from excise taxes will be only one-fifth of the financial losses. Worldwide, the alcohol industry is known for intense lobbying including efforts to weaken health warning labels. The alcohol industry views low- and middle-income countries as emerging markets. In India, the industry has been known to advocate against alcohol use reduction policies despite evidence of its effectiveness.

What can governments do?

Except for some national policies – including drunk driving laws and health warning labels – alcohol-use policies have been delegated to States, resulting in wide variation in policy framing and implementation. The instruments available to State and Central governments allow them to mitigate harms due to alcohol use through cross-sectoral public health approaches. They include restricting the availability and marketing of alcohol, higher taxes, enforcement of drunk-driving laws, and higher investment in cost-beneficial psychosocial treatments of alcohol-use disorders. So if doorstep delivery is to be offered, for example, States can change the trade-off for consumers from whether they should order in to whether they should drink at all – which they can achieve by setting higher prices and taxes.

In tandem, governments should work with health departments and other organisations to monitor the impact of doorstep delivery on alcohol consumption. Companies offering these services must share accurate data with the government to understand the health and economic burden. The decision should be revised if harms are evident.

Vid Karmarkar is the founder and CEO of Canseva Foundation. Parth Sharma is founding editor of Nivarana.org. Siddhesh Zadey is a co-founder of Association for Socially Applicable Research.

THE GIST

The States of Delhi, Karnataka, Haryana, Punjab, Tamil Nadu, Goa, and Kerala are or were mulling plans to allow the doorstep delivery of alcohol through platforms like Swiggy, BigBasket, and Zomato.

There are two main arguments in favour of doorstep delivery of alcohol. First, that excise taxes on alcohol sales can help generate revenue for Central and State governments. However, studies to date agree that for India, the costs due to alcohol use exceed economic benefits from alcohol sales.

Except for some national policies – including drunk driving laws and health warning labels – alcohol-use policies have been delegated to States, resulting in wide variation in policy framing and implementation.

On doorstep delivery of alcohol (06 Augst)

What are the arguments for and against online delivery of alcohol? How much of India consumes liquor? Can such a system make it safer for women to access alcohol? How should governments regulate liquor consumption?

- States like Delhi, Karnataka, Haryana, Punjab, Tamil Nadu, Goa, and Kerala are considering allowing alcohol delivery via platforms like Swiggy, BigBasket, and Zomato.
- Alcohol consumption in India has steadily increased, with per capita consumption rising from 1.6 litres (2003-2005) to 5.5 litres (2016-2018).
- India is the sixth-largest alcohol market worldwide, generating \$52 billion in revenue.
- A 2019 survey indicated 16 crore alcohol users in the 10-75 age group in 2018.
- Medically, no amount of alcohol consumption is safe, causing 3 lakh deaths annually in India.
- Doorstep delivery of alcohol could generate significant revenue for Central and State governments through excise taxes.
- It may also reduce drunk-driving incidents and related road traffic fatalities, which range from 6-48% of total road deaths in India.
- A third argument for doorstep delivery of alcohol is that it may not threaten women's safety and might reduce on-premise violence against women, as seen in Kerala.
- Doorstep delivery could help women access alcohol without social stigma, but its effect on reducing violence against them is questionable due to rampant domestic violence related to alcohol use.
- Arguments against doorstep delivery include:
 - The costs of alcohol use in India exceed the economic benefits from alcohol sales.
 - Doorstep delivery assumes people will change their drinking behaviors, but this requires concrete evidence.
 - Availability of alcohol on-demand can increase consumption, promote binge drinking, and lead to alcohol-related harms.
- It is not clear that doorstep alcohol delivery will reduce drunk-driving, as other effective measures include sobriety checkpoints, stringent penalties for repeat offenders, and improved public transport options.
- Alcohol is a carcinogen and causes at least seven types of cancer.
- Alcohol consumption increases the risk of injuries, substance abuse, mental illnesses, diabetes, liver disease, heart disease, and chronic kidney disease.
- Male alcohol misuse can increase the risk and severity of inter-partner violence.
- Treatment costs for alcohol-related diseases and injuries are expected to exceed ₹3 lakh crore from 2011 to 2050. Including productivity losses, the total cost could reach ₹121.3 lakh crore.

- Revenue from excise taxes on alcohol is only a fifth of the financial losses.
- The alcohol industry often lobbies against health warning labels and reduction policies, viewing low- and middle-income countries as emerging markets.

What can governments do?

- Rational policies on alcohol, such as drunk driving laws and health warning labels, are in place, but most alcohol-use policies are managed by States, leading to varying approaches.
- States and Central governments can mitigate alcohol-related harms through measures like restricting availability and marketing, increasing taxes, enforcing drunk-driving laws, and investing in treatments for alcohol-use disorders.
- If doorstep delivery is implemented, States can adjust policies, such as raising prices and taxes, to influence consumer behavior.
- Governments should collaborate with health departments and organizations to monitor the impact of doorstep delivery on alcohol consumption.
- Companies offering doorstep delivery must provide accurate data to the government to assess health and economic impacts, and policies should be revised if harmful effects are observed.

Why was a customs duty hike imposed for lab chemicals?

What are the different kinds of chemicals which are imported into the country? How important are these chemicals for scientific research? Is Ethanol also imported into the country?

GS Paper III: Import Duty

The story so far:

The Finance Ministry has withdrawn a customs duty hike on imported laboratory chemicals, which was proposed post the Budget, after scientists raised a furore.

What are laboratory chemicals?

Imported chemicals, reagents, and enzymes come under the category of laboratory chemicals and are vital to experimental research across nearly every domain of scientific research. They comprise oxidisers, corrosive acids, and compressed gas, that are used by researchers to conduct experiments and even make new products. Outside of research settings, the medical diagnostics industry is run on laboratory chemicals. Closely affiliated to these chemicals are laboratory instruments such as funnels, beakers, test tubes and burners. Because

these chemical compounds have a wide range of properties and are potentially hazardous, they are regulated and their imports scrutinised.

Most of such chemicals are niche products and can be fairly expensive. The Customs Department defines laboratory chemicals as "all chemicals, organic or inorganic, whether or not chemically defined, imported in packings not exceeding 500 gms or 500 millilitres and which can be identified with reference to the purity, markings or other features to show them to be meant for use solely as laboratory chemicals."

What was the issue?

The Budget documents released on July 23, silently hiked the Basic Customs Duty (BCD) on these chemicals to 150% from the existing 10%. The matter came to light with scientists from reputed, publicly funded research laboratories in India reporting on social media platforms, such as X, on having received emails from

suppliers – typically there are specialised companies that trade in these chemicals – that the chemicals had become expensive. For instance, a batch of products that usually cost ₹1,00,000 before the Budget would now cost ₹2,50,000. There was also a 25% hike on the plastic components imported for laboratory uses. Researchers were flummoxed by the steep increase and some told *The Hindu* that they believed it to be a "misprint." Several senior scientists wrote to the Ministry of Science and Technology asking for clarity. However an issue of customs duty must ultimately be dealt with by the Ministry of Finance along with the Commerce Ministry.

Why are imported chemicals a must?

India is a major pharmaceutical and chemicals manufacturer and also an exporter of complex chemicals. However, there isn't enough of local demand among Indian research institutions for

companies to make the substantial capital investments required to produce niche chemicals, Dr. Vinod Scaria, a biologist, told *The Hindu*. A key feature of experimental research is trying to replicate results of experiments conducted abroad and this often requires the exact materials used.

How was the issue resolved?

As it emerged, the hiked up rate wasn't a misprint. The customs department did this as it wanted to reign in imports of ethanol that were being brought in as 'laboratory chemicals' to avoid the customs duty of 150%. There are broadly two kinds of ethanol. Ethanol, of varying grades, sourced from grain and used in the manufacture of alcohol and, 'denatured' ethanol, which is ethanol mixed with additives and unfit for consumption. The latter also comes in grades but is used in laboratories and in commercial applications.

Scientists told *The Hindu* that denatured alcohol is made by several local manufacturers and doesn't usually need to be imported. However, the revised Finance Ministry notification puts in some additional caveats that may still impose some delays in the procurement of such chemicals. It states that while the duty rate would revert back to the original rate, all imported laboratory chemicals need to be accompanied by a letter that says the goods will only be used in a laboratory and for research and not further traded for commercial gains.

THE GIST

Imported chemicals, reagents, and enzymes come under the category of laboratory chemicals and are vital to experimental research across nearly every domain of scientific research.

The Budget documents released on July 23, silently hiked the Basic Customs Duty (BCD) on these chemicals to 150% from the existing 10%.

The customs department did this as it wanted to reign in imports of ethanol that were being brought in as 'laboratory chemicals'. The Finance Ministry has now withdrawn the customs duty hike on imported laboratory chemicals.

Why was a customs duty hike imposed for lab chemicals?

What are the different kinds of chemicals which are imported into the country? How important are these chemicals for scientific research? Is Ethanol also imported into the country?

- The Finance Ministry has reversed a proposed customs duty increase on imported laboratory chemicals after backlash from scientists.
- Laboratory chemicals include imported chemicals, reagents, and enzymes essential for scientific research and medical diagnostics.
- They are used in experiments and making new products, and include items like oxidizers, corrosive acids, and compressed gases.
- Laboratory instruments such as funnels, beakers, test tubes, and burners are also related.
- These chemicals are regulated due to their varied properties and potential hazards.
- Laboratory chemicals are typically niche products and can be expensive.
- Customs defines them as chemicals imported in small quantities (up to 500 grams or milliliters) and intended solely for laboratory use.

What was the issue?

- The Budget documents on July 23 increased the Basic Customs Duty (BCD) on laboratory chemicals from 10% to 150%.
- Scientists discovered the increase when suppliers informed them that the cost of chemicals had risen significantly.
- For example, a batch of chemicals that previously cost ₹1,00,000 now costs ₹2,50,000.
- There was also a 25% increase in customs duty on plastic components used in laboratories.
- Researchers were shocked by the steep increase and some thought it might be a mistake.
- Senior scientists contacted the Ministry of Science and Technology for clarification, but customs duty issues are handled by the Ministry of Finance and the Commerce Ministry.

Why are imported chemicals a must

- India is a major manufacturer and exporter of complex chemicals but local demand isn't high enough to justify substantial investments in niche chemicals.
- Experimental research often requires exact materials used in foreign studies.

- The customs duty hike was not a mistake but was intended to limit imports of ethanol falsely labeled as 'laboratory chemicals' to avoid high duties.
- There are two types of ethanol: regular ethanol used in alcohol production and denatured ethanol used in laboratories.
- Denatured ethanol is typically produced locally and not usually imported.
- The Finance Ministry's revised notification will revert the duty rate to the original but requires imported laboratory chemicals to come with a letter stating they will only be used for research and not for commercial purposes.

How time has been kept throughout history: from sundials to atomic clocks

The world has come from keeping time with the Sun and the moon to atoms and their nuclei. Some physicists have even started work on the next-to-next generation of devices, called nuclear clocks

GS Paper I: History of Clock

Time is an inalienable part of our reality. Scientists don't understand it fully at the universe's largest and smallest scales, but fortunately for humans, a panoply of natural philosophers and inventors have allowed us to keep step with its inexorable march – with clocks.

What is a clock?

Clocks are devices that measure the passage of time and display it. Their modern versions have the following parts – a power source, resonator, and counter.

A clock measures the amount of time that has passed by tracking something that happens in repeating fashion, at a fixed frequency. In many modern clocks, for example, this is a quartz crystal. More rudimentary devices often depended on natural events instead. The sundials in use in ancient times allowed people to 'tell' time by casting shadows of changing lengths against sunlight. In water clocks, water would slowly fill a vessel, with its levels at different times indicating how much time had passed. The hourglass served a similar purpose, using sand instead of water.

How did mechanical clocks work?

Until the Middle Ages, engineers around the world improved the water clock with additional water tanks, gear wheels, pulleys, and even attached musical instruments to the point where they were practically developing rudimentary analog computers.

One of the first major revolutions in timekeeping that paved the way for modern clocks was the invention of the verge escapement mechanism in the 13th century, which first opened the door to mechanical clocks. The fundamental element here was a gear that, through a combination of mechanical arrangements, could only move in fixed intervals. The gear was called an escape wheel if it was circular. A second gear, called the balance wheel, was enmeshed

with the first such that when the escape wheel moved forward one gear tooth at a time, the balance wheel would oscillate back and forth. This oscillation would drive the 'hands' of a clock on a clockface as long as some force was applied on the balance wheel to keep it moving.

Between the 15th and 18th centuries, clockmakers developed and improved on spring-driven clocks. These devices replaced the suspended weight that applied the force on the balance wheel in the previous designs with a coiled spring. To keep these clocks from becoming inaccurate as the spring unwound, clockmakers also developed mechanisms like the fusee, which ensured the spring always delivered a uniform force. The idea to couple a balance spring with the balance wheel also led to the advent of pocket watches.

After every 'tick' motion before the 'tock' motion towards the other side, the balance spring would return the balance wheel to its neutral position. As a result, the clocks lost a few minutes a day versus a few hours a day before.

Finally, in the mid-17th century, the Dutch inventor Christiaan Huygens invented the pendulum clock. While the clock itself used the by-then familiar escapement mechanism, Huygens made an important contribution by working out a formula to convert the pendulum's swings to the amount of time passed.

How did clocks change shipping?

The marine chronometer came the next century. For a ship to accurately know where it was on the face of the earth, it needed to know its latitude, longitude, and altitude. The latitude could be computed based on the Sun's position in the sky and the altitude could be assumed to be sea level, leaving the longitude – which requires an accurate clock onboard each vessel. Pendulum clocks couldn't serve this purpose because the ship's rocking motion rendered them inaccurate.

A carpenter named John Harrison built a working marine chronometer in 1761

and delivered it to the British government for its longitude prize, worth GBP 20,000 at the time. This device featured mechanisms to ensure the clock's operation wasn't affected by the ship's rocking, the force of gravity, and some temperature changes.

Thus, time flew until modernity dawned. The better clocks of the 19th century were electric clocks, that is, whose energy source was a battery or an electric motor rather than suspended weights or springs, although the former and latter were attached to improve the efficiency of existing designs. And at long last came the 20th century.

How do quartz clocks work?

Two important types of clocks in operation today are the quartz clock and the atomic clock. The fundamental setup of both these instruments is similar: they have a power source, a resonator, and a counter. In quartz clocks, the resonator is a quartz crystal. The power source sends electrical signals to a quartz crystal, whose crystal structure oscillates due to the piezoelectric effect. The signal's energy can be tuned to make the crystal oscillate at its resonant frequency, making it the resonator. The counter counts the number of periodic oscillations and converts them into seconds (depending on the crystal's period). A digital display shows the counter's results.

Such quartz clocks are inexpensive to make and easy to operate, and their invention led to watches and wall-clocks becoming very common from the mid-20th century.

What are atomic clocks?

An atomic clock may seem futuristic in comparison.

The power source is a laser and the resonator is a group of atoms of the same isotope. The laser imparts just enough energy for the atom to jump from its low energy state to a specific higher energy state. And when the atom jumps back down, it releases radiation with a well-established frequency. For example,

the caesium atomic clock uses caesium-133 atoms as the resonator. When these atoms excite and then de-excite, they release radiation of frequency 9,192,631,770 Hz. So when the counter detects 9,192,631,770 full waves of the radiation, it will record that one second has passed.

Atomic clocks are distinguished by their resonator; each such clock is called a time standard. For example, India's time standard is a caesium atomic clock at the National Physical Laboratory, New Delhi, which maintains the Indian Standard Time. Many countries are currently developing next-generation optical clocks. This is because the higher the frequency of the radiation emitted in the clock, the more stable the clock will be. That emitted in a caesium atomic clock is in the microwave range (gigahertz), and the resulting clock loses or gains a second only once in 20 million years or so. The radiation in the next-generation clocks is in the optical range (hundreds of terahertz) – thus the clocks' name. These devices use strontium or ytterbium atoms as resonators and don't miss a second in more than 10 billion years.

Some physicists have even started work on the next-to-next generation of devices, called nuclear clocks: their resonators are the nuclei of specific atoms rather than the whole atom. Atomic clocks need to make sure the resonator atoms aren't affected by energy from other sources, like a stray electromagnetic field; an atom's nucleus, however, is located well within each atom, surrounded by electrons, and thus could be a more stable resonator.

Since April this year, researchers around the world have reported three major developments in building functional nuclear clocks: a laser to excite thorium-229 nuclei to a specific higher energy state, a way to link a thorium-229 nuclear clock with an optical clock, and a precise estimate of the excitation energy. The nucleus's de-excitation emission has a frequency of 2,020 terahertz, alluding to an ultra-high precision.

How time has been kept throughout history: from sundials to atomic clocks (06 August)

The world has come from keeping time with the Sun and the moon to atoms and their nuclei. Some physicists have even started work on the next-to-next generation of devices, called nuclear clocks

- Time is a fundamental part of reality, but fully understanding it remains a challenge at both large and small scales.
- Clocks measure and display the passage of time.
- Modern clocks have three main parts: a power source, resonator, and counter.
- Clocks track time by measuring a repeating event, often using a quartz crystal in modern versions.
- Ancient timekeeping methods included sundials (casting shadows), water clocks (measuring water levels), and hourglasses (using sand).

How did mechanical clocks work?

- Until the Middle Ages, water clocks were improved with additional components like tanks, gears, and pulleys, evolving into rudimentary analog computers.
- The 13th-century invention of the verge escapement mechanism marked a major advancement in mechanical clocks.
- The verge escapement used an escape wheel and balance wheel to move the clock hands at fixed intervals.

- Between the 15th and 18th centuries, spring-driven clocks were developed, replacing weights with coiled springs.
- Mechanisms like the fusee were introduced to maintain accurate force as the spring unwound.
- The combination of a balance spring with the balance wheel led to the creation of pocket watches.
- After each 'tick' motion, the balance spring returned the balance wheel to its neutral position, improving clock accuracy to losing minutes a day instead of hours.
- In the mid-17th century, Christiaan Huygens invented the pendulum clock, using a formula to convert the pendulum's swings into time.
- The marine chronometer, developed in the next century, was crucial for ships to determine longitude accurately, as it required a precise clock onboard.
- **Pendulum clocks were unsuitable for ships due to their rocking motion affecting accuracy.**
- **John Harrison built a marine chronometer in 1761 that was unaffected by a ship's rocking, gravity, or temperature changes, and won the British government's longitude prize.**
- In the 19th century, electric clocks, powered by batteries or motors, improved clock efficiency.
- **Modern clocks include quartz and atomic clocks, both with a power source, resonator, and counter.**
- Quartz clocks use a quartz crystal as the resonator, which oscillates due to the piezoelectric effect. The oscillations are counted and converted into seconds.
- Quartz clocks are inexpensive and easy to make, leading to their widespread use in watches and wall-clocks from the mid-20th century.

What are atomic clocks?

- **Atomic clocks use a laser as the power source and atoms of the same isotope as the resonator.**
- The laser energizes the atoms to jump to a higher energy state; when they return to the lower state, they release radiation at a specific frequency.
- For example, **caesium-133 atoms in a caesium atomic clock release radiation at a frequency of 9,192,631,770 Hz. Counting these waves measures time.**
- Each atomic clock is a time standard, like the caesium atomic clock at India's National Physical Laboratory, which maintains Indian Standard Time.
- Next-generation optical clocks, using strontium or ytterbium atoms, operate at higher frequencies (optical range) and are even more precise, not losing or gaining a second in over 10 billion years.
- Researchers are developing nuclear clocks with resonators based on atomic nuclei rather than whole atoms.
- Nuclei are more stable because they are shielded from external energy sources by electrons.
- Recent advancements include:
 - A laser that excites thorium-229 nuclei to a higher energy state.
 - Linking thorium-229 nuclear clocks with optical clocks.
 - Precise estimation of excitation energy.
- The de-excitation frequency of thorium-229 nuclei is 2,020 terahertz, indicating very high precision.