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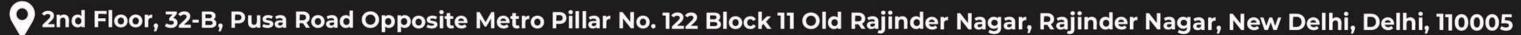






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RBI MONETARY POLICY COMMITTEE MEETING SCHEDULED FROM AUG 4-6

Amid US Fed hawkishness, RBI likely to walk the cautious line with a status quo

HITESHVYAS

MUMBAI, AUGUST 3

AFTER REDUCING the reporate by 00-basis points this year, the Reserve Bank of India's (RBI) six nember Monetary Policy Committee (MPC) is likely to naintain status quo in the upcoming monetary policy schediled to be announced on August 6. The MPC is also expected to retain he policy stance as neutral. While he inflation projection for FY26 is ikely to be revised downward, the RBI may retain its forecast for real gross domestic product (GDP) growth for the current year.

What is expected?

The upcoming Monetary Policy Committee's (MPC) meetng, scheduled from August 4-6, is being held amid rising uncertainries around trade tariffs and geopolitical tensions, as well as noderation in headline inflation. Economists are of the view that the six-member MPC may pause n the upcoming policy, which will

rate in February 2025 with a 25 ops reduction, followed by a simlar cut in April, bringing the total

RBI HAS CUT REPORATE BY 100-BPS THIS YEAR



2025 to 100 bps. The reporate currently stands at 5.5 per cent.

"With the RBI having already frontloaded rate cuts and ensured ample liquidity, the MPC may prefer to pause for now and assess how the macroeconomic landscape evolves. Additionally, transmission of the previous rate cuts is still underway and could take some more time to show its effect on the economy," CareEdge Ratings said in a report.

"Moreover, a hawkish stance from the US Federal Reserve, ongoing trade tension with the US and recent appreciation of the US dollar index could provide further reasons for adopting a wait-andwatch approach, as additional pressure on the rupee may

State Bank of India's group chief economic advisor, Soumya

cutting reporate in

a similar cut in April,

bringing the total cut

February 2025 with a 25

bps reduction, followed by

between February and June

2025 to 100 bps. The repo

rate currently stands at

Kanti Ghosh, however, expects RBI to continue frontloading with a 25 bps cut in August policy.

"With inflation having decisively eased and remained within the RBI's tolerance band for several months, maintaining a restrictive policy stance risks exacerbating output losses that are neither easily reversible. Monetary policy operates with lags, and postponing a rate cut until inflation falls further or growth weakens more visibly could result in deeper and more persistent economic damage," he said.

CareEdge expects the RBI's policy statement to retain a dovish tone, while maintaining a cautious outlook on evolving global

Policy stance



Rising global

THE UPCOMING Monetary Policy Committee's (MPC) meeting is being held amid rising uncertainties around trade tariffs and geopolitical tensions, as well as moderation in headline inflation. Experts are of the view that the sixmember MPC may take a pause in the upcoming policy, which will be announced on August 6, after frontloading a 50 basis points (bps) cut in the reporate in June.

likely to be maintained at 'neutral', having just changed in the June policy from 'accommodative' in April, said Kaushik Das, chiefeconomist-India, Malaysia, and South Asia, Deutsche Bank AG.

The change in stance to neutral from accommodative within a span of two months came as a big surprise, but on balance, this reflects a prudent move on the MPC's part to ensure that the larger-than-expected 50 bps repo rate cut in June did not result in expectations of further aggressive **GDP** and inflation forecast

According to Madan Sabnavis chief economist, Bank of Baroda, RBI may revise downwards its inflation forecast for FY2026. In June policy, RBI projected consumer price index (CPI) inflation for FY26 at 3.7 per cent.

"There could be a downward revision in inflation but it will not be very significant. It may be revised from 3.7 per cent to 3.5 per cent," Sabnavis said.

Headline inflation, as measured by year-on-year changes in the all-India consumer price index (CPI), declined to 2.1 per cent in June 2025 — the lowest since January 2019 - from 2.8 per cent in May. The retail inflation remained below the 4 per cent target for the fifth consecutive month in June. Economists expect RBI to maintain its FY26 GDP forecast at 6.5 per cent in the policy.

Lending rates

If the RBI leaves the reporate steady at 5.5 per cent, all external benchmark lending rates (EBLR) that are linked to the marginal cost of fund-based lending rate

Article Summary

The RBI, after cutting repo rates by 100 bps in 2025, is set to maintain a neutral stance amid global uncertainties and the US Fed's hawkishness to manage inflation and stabilize growth. With the repo rate at 5.5%, no immediate changes in lending rates (EBLR/MCLR) are expected. Headline inflation, measured by the CPI, is projected to stay low, influencing policy direction.

MCOs for Practice

Which of the following statements is/are correct regarding the **Monetary Policy Committee (MPC)?**

- 1. It decides the RBI's benchmark interest rates.
- 2. It is a 12-member body including the Governor of RBI and is reconstituted every year.
- 3. It functions under the chairmanship of the Union Finance Minister.

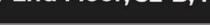
Select the correct answer using the code given below:

- 1. (a) 1 only
- 2. (b) 1 and 2 only
- 3. (c) 3 only
- 4. (d) 2 and 3 only

[PYQ 2017]







(O) understand.upsc









If the RBI decides to adopt an expansionist monetary policy, which of the following would it not do?

- 1. Cut and optimize the Statutory Liquidity Ratio
- 2. Increase the Marginal Standing Facility Rate
- 3. Cut the Bank Rate and Repo Rate

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

[PYQ 2020]

Monetary Policy Committee (MPC)

- 6-member body: 3 RBI + 3 Govt-appointed experts.
- Decides key interest rates (like repo) to manage inflation and growth.
- Meets bi-monthly; decisions based on inflation targeting framework.

Repo Rate

- Rate at which RBI lends short-term funds to commercial banks.
- Tool for liquidity management & inflation control.
- Current rate (Aug 2025): 5.5%

Policy Stances of RBI

- Hawkish: Controls inflation → higher/steady rates.
- Neutral: Waits for economic data → no bias.
- Accommodative: Supports growth → lower rates even if inflation rises.

4th AUG, 2025

Global Factor: US Federal Reserve Impact

- Fed's rate hikes → capital outflows from India.
- Puts pressure on the rupee; forces RBI to be cautious with rate cuts.

Lending Rate Mechanisms

- EBLR (External Benchmark Lending) Rate):
- · Linked to external benchmarks (e.g. repo rate).
- Ensures faster and transparent monetary transmission.
- MCLR (Marginal Cost of Funds-based **Lending Rate):**
- Based on banks' internal cost of funds.
- Slower and less effective in policy transmission.



















EXAMPLE 2 Consumer Price Index (CPI)

- Measures the change in prices of a fixed basket of goods and services consumed by households (food, fuel, housing, clothing, etc.).
- Compiled and published monthly by the National Statistical Office (NSO).
- Used by the RBI for inflation targeting under the Flexible Inflation Targeting (FIT) framework.
- Current target: 4% ± 2% (i.e., range of 2% to 6%).

Headline Inflation

- Refers to the overall inflation rate in the economy as measured by the CPI, including volatile components like food and fuel.
- · Reflects the actual cost of living impact on consumers.
- Sensitive to supply shocks (e.g. oil prices, monsoon effects on food).















MAINS ENRICHMENT

First AI-powered anganwadi: A rural classroom bridges digital gap

PAGE 1 **ANCHOR**

ANKITA DESHKAR

NAGPUR, AUGUST 3

MEHER PACHE, 4, can identify a crocodile in a virtual jungle in a jiffy, while Aarzoo Prajapati, 3, can draw balloons on the interactive smart board with a flourish that stuns adults.

A quiet learning revolution has been taking place since the past three months at India's first Artificial Intelligence (AI)-powered anganwadi in a village in

Maharashtra's Nagpur district, located around 18 km from the city. Not just their learning, even the number of students aged 2-6 years attending the anganwadi in Waddhamna village regularly has gone up from 10 children earlier to over 25 at present.

Since July, instead of being limited to chalks and slates, the children in this anganwadi have been learning poems, songs and foundational concepts with the help of virtual reality (VR) headsets from Meta (formerly Facebook for Business), Al-enabled interactive smart boards, tablets and other interactive digital content.

This step to redefine early

by the Nagpur Zilla Parishad, under its pioneering Mission Bal Bharari initiative, which aims to give children from rural areas the same digital access as their urban counterparts.

Inaugurated by Maharashtra Chief Minister Devendra Fadnavis on July 27, the project was launched at a cost of nearly Rs 9.5 lakh from the Zilla Parishad's CESS fund.

Of the district's 2,202 anganwadis, including five in the village, the one led by Saroj Kukde, an anganwadi worker at Waddhamna for 14 years, was chosen as the pilot model



The Waddhamna village anganwadi is equipped with VR headsets, AI-enabled dashboards and tablets. Ankita Deshkar

Vinayak Mahamuni, a 2021batch IAS officer and the Nagpur Zilla Parishad CEO, says, "We chose this particular anganwadi because of its accessibility, the sevika's (Kukde's) enthusiasm and its proximity to other centres for training visits. It also offers a secure environment for safeguarding the equipment."

To ensure transparency, the anganwadi was retrofitted with Wi-Fi-enabled CCTV cameras that can be accessed by key stakeholders. including Mahamuni, his deputy and the Child Development Project Officer (CDPO).

Though the Zilla Parishad ini-

tially faced challenges in finding the right tech partner for the mission, Mahamuni says they eventually roped in Qolaba, a firm working under the Centre's IndiaAl programme.

Stating that the anganwadi was refurbished recently to both meet the new technological requirements and attract more children, Mahamuni says, "These frontline educators (anganwadi workers) were trained to navigate this new world of smart learning to ensure that children even from the remotest of areas get a chance to learn in an engaging and modern environment."

Aware that anganwadi work-

ers already juggle multiple roles — from cooking meals to keeping records - Qolaba structured their training programme as a threemonth module to ensure they did not get overwhelmed. Over the past two months, a team from the company started working on a user-friendly system built on the anganwadi workers' familiarity with smartphones.

Trained by Qolaba, Kukde uses 10 VR sets and the interactive smart board for around one hour each day to teach the students, who spend five hours at the anganwadi (from 9.30 am to 2.30 pm) six days a week.

CONTINUED ON PAGE 2

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Article Summary

The article spotlights Maharashtra's first Al-powered anganwadi in Waddhamna village, near Nagpur. This innovative preschool integrates virtual reality (VR) headsets, , AI-enabled dashboards, and tablets into early childhood education, making digital learning accessible to rural children. The project is part of the Nagpur Zilla Parishad's Mission Bal Bhavan initiative, which aims to provide children from rural families with the same digital resources as their urban counterparts.













4th AUG, 2025

Relevance for UPSC Mains

GS Paper II (Governance, Social Justice)

- Govt efforts in early childhood education via tech.
- Role of local administration & inclusive policies.
- Tackles urban-rural digital divide.

GS Paper III (Science & Tech)

- Use of AI, VR, digital dashboards in rural areas.
- Real-world example of tech in grassroots governance.

GS Paper IV (Ethics)

- Case of equitable public service same digital tools for rural & urban children.
- Reflects transparency, inclusivity, innovation, and ethical leadership.

Essay Paper

- Apt for essays on:
- Bridging the Digital Divide
- Innovation in Education
- Technology for Human Development





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How does the World Bank classify countries by income?

The World Bank's income groups are widely used in global data. This article explains how they are defined and updated

DATA POINT

Bertha Rohenkoh Pablo Arriagada

hen people talk about countries as 'rich' or 'poor', they can mean many different things. But for researchers and policymakers, it helps to have a way to compare countries by income using clear criteria. One widely used approach is the World Bank's income classification system, which places countries into four groups: low, lower-middle, upper-middle, and

high-income countries.

Every year, the World Bank assigns each country to an income group based on its gross national income (GNI) per capita. GNI per capita is a measure of the average income of a country's residents, including income that is earned abroad. Since countries report GNI in their local currencies, the World Bank converts these figures into U.S. dollars using exchange rates. It then places countries in one of four income groups based on specific thresholds. Maps 1 and 2 show how countries were classified by income in 2014 and 2024.

The income thresholds that separate groups were first set in the late 1980s when this classification system was introduced. At that time, these were aligned with the World Bank's policies for lending money to countries. The Bank used average incomes to determine which countries were eligible for concessional loans.

This threshold for receiving such loans became the boundary between low-income and middle-income countries. The Bank then added two more thresholds to allow for further distinctions. These were chosen based on the distribution of country incomes at the time, rather than on lending rules.

Today, the thresholds are no longer linked to the Bank's operations, but they have been updated yearly to account for inflation. This

adjustment is based on a measure of global inflation.

This means that the classifica-

tion is absolute. Countries are put into groups according to predetermined thresholds, and a country's placement depends only on its gNI per capita, not on how it stacks up relative to other countries. The thresholds for the latest income groups are (in U.S. dollars): low income: \$1,135 or less; lower-middle income: \$1,136 to \$4,495; upper-middle income: \$4,496 to \$13,935; high income: More than \$13,935.

If a country's GNI per capita crosses a threshold, it moves into a new income group in the following update. Because GNI per capita changes over time, and thresholds are revised annually, countries can move between income groups over time. These movements may reflect real changes in income, shifts in exchange rates, or updates to population data.

In the long run, most countries have moved up the income ladder as their economies have grown. However, countries can also move down – and some have, particularly in periods of war and economic crisis. Two examples are Syria and Yemen, which went from low-middle income to low income in 2017.

When we hear that there are four income groups, we might imagine that the world's population is evenly divided across them, with around 25% of people living in each. But this isn't the case. Again, these groups are defined based on absolute thresholds, not relative cut-offs that change based on other countries' progress.

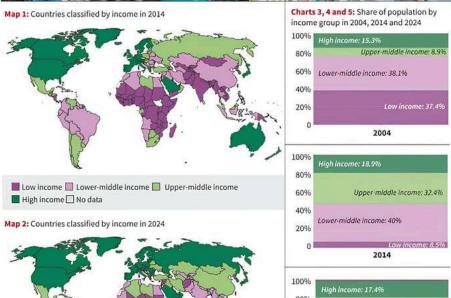
In 2004, 37% of the population lived in low-income countries. To-day, that share has fallen to less than 10%. In the same period, the share of upper-middle income countries increased from less than 10% to 35%. You can see this change in Charts 3, 4 and 5.

Bertha Rohenkohl is Research and Data Economics Lead and Pablo Arriagada is Data Scientist at Our World in Data

Income thresholds

The data for the charts were sourced from Our World in Data's story titled "How does the World Bank classify countries by incom





1ap 2: Countries classified by income in 2024 20% Low Income: 8-5% 2014 100% 80% 60% 40% 20% Low Income: 34.7% Lower-middle income: 34.7% Lower-middle income: 34.7% Lower-middle income: 34.7% Lower-middle income: 38.2% Low Income: 7.6% 2024

World Bank Income Classification – Summary & Key Data

Classification Basis: Countries are grouped by GNI per capita (USD) into 4 income categories.

- 2024 Thresholds:
- Low Income: ≤ \$1,135
- Lower-Middle: \$1,136 \$4,465
- Upper-Middle: \$4,466 \$13,845
- High Income: ≥ \$13,845

GNI Definition:

- Total income of a nation's residents and businesses, including net income from abroad (remittances, foreign investments).
- GNI per capita = GNI ÷ Population















Significance:

- · Used for global comparison, aid eligibility, and development tracking.
- Originally a World Bank lending tool, now a standard international metric.
- Share of low-income population has declined over two decades; high-income share slightly increased.

UPSC Mains Utility

- GS II: Global inequality, international development, role of World Bank.
- GS III: Inclusive growth, global economic status, India's place in the world economy.
- Essay: Supports themes like poverty, economic mobility, global benchmarks.



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'Bio-fortified potatoes with added iron to hit Indian market soon'

A.M. Jigeesh NEW DELHI

Bio-fortified potatoes, with added iron content, will soon be available in Indian markets, said Simon Heck, Director-General of the Peru-based International Potato Center (CIP), in an interview with *The Hindu*. Bio-fortified sweet potatoes, with vitamin A added using technology developed by the CIP, are already available in Karnataka, Assam, West Bengal, and Odisha

The CIP, an apex research body of international research institutions working on tubular crops, will take efforts to make the seeds of bio-fortified sweet potato available to more farmers, said Dr. Heck, currently in India for the establishment of the CIP South Asia regional centre in Agra.

The focus is on iron fortification in potatoes. "We have already shared the germ plasm with the Indian Council of Agricultural Research's Central Potato Institute in Shimla. The first variety has been released in Peru", he said.

"Now it is under the evaluation of the ICAR, and it needs to be adapted to the Indian growing conditions," Dr. Heck added.

Dr. Heck said India has the strongest momentum

for potato production and farmers wanted better varieties of potato that grew well with fewer agro-chemical input, and they also wanted to be part of the market chain, including food processing. He expressed hope that the centre will help farmers access better quality potato and sweet potato seeds and provide them with bet-

The CIP believes that the location chosen for the new centre near Agra, in the heart of the potato belt of India, is ideal as the Indo-Gangetic plains is the largest potato-producing area in the world.

ter exposure to markets.

Dr. Heck said the Uttar



imon Heck

Pradesh government had made available the land and handed it over to the National Horticulture Board, which invited the CIP to establish the centre.

The agreement between the CIP and the Union Agriculture Ministry, signed last week of July, was set up following the demand from the Government of India in recognition of the potential for economic growth from the thriving potato sector.

"It may be noted that international companies, especially potato firms from Europe and North America, are increasingly investing in potato production in India," he said.

Part of market chain

"What they [farmers] needed is access to potato seed of the right quality, of the right variety, and at the right time of the year. There are constraints. They do not have enough potato seeds or they come

too late for planting or they are not of good quality. We need to build the capacity for companies to multiply potato seeds. That will be a major contribution of the CIP," he said.

The CIP was working with private companies and public research institutes to make sure that farmers throughout India would have access to good quality planting material, right from the initial breeding of new varieties, through multiplication every year, in the right locations.

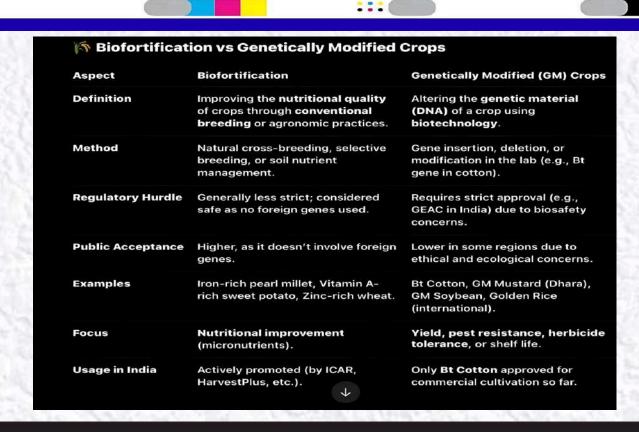
He said the CIP would also ensure that the vulnerable parts of society had access to nutritious potato. There were a number of opportunities along the road; one was to work with the government, with public sector food procurement, for school feeding programmes, such as midday meals. This would give children access to nutritious potato, more specifically and consistently, he said. Another one was to breed potato that was more nutritious, he added.

Governing committee

The CIP regional centre would be governed by a coordination committee that comprises the Secretaries of Agriculture of India, Nepal, Bhutan, and Bangladesh.

Context (Bio-Fortified Potatoes)

Bio-fortified potatoes with enhanced iron content, developed by the International Potato Center (CIP) in collaboration with Indian institutions (like ICAR and the Potato Research Institute, Shimla), aim to combat iron deficiency in India. A new research center in Agra supports breeding and distribution, while global companies and the Indian government work to expand access, including through school nutrition programs.















The 'right to repair' must include 'right to remember'

nificant step toward promoting inable electronics. It accepted a rt proposing a Repairability Index for e phones and appliances, ranking products based on ease of repair, spare part access, and ftware support. New e-waste policies now

But as India takes steps toward making repair isumer right, we must also treat it as a cultural ind intellectual resource - a form of knowledge that deserves preservation and support. India's digital and Artificial Intelligence (AI) policy andscape is evolving rapidly. Initiatives such as gigital Public Infrastructure (DPD and the National Strategy on Artificial Intelligence (NSAI emphasise innovation, data-driven governance nd economic efficiency. Yet, the systems that quietly sustain everyday life - especially the emain largely invisible in digital and policy

In an age of cloud backups and algorithmic ocessing, it is easy to forget the value of nowledge that cannot be codified. Much of India's repair expertise lives in muscle memory quiet observation, and years of hands-on provisation. This tacit knowledge is vital to India's material resilience. From mobile fixers in Delhi's Karol Bagh to appliance technicians in Chennai's Ritchie Street, repairers keep devices working well past their planned obsolescence, "If we don't fix it, who will?" says a mobile repairer in Ritchie Street. "People throw things out. But we see what can be made new." Their tools may be modest and their workshops discreet, but their work reflects deep ingenuity. They restore devices not by consulting manuals, but by diagnosing faults through sensory cues, reusing components, and adapting creatively to constraints. Yet, this ecosystem is gradually eroding. As product designs become less repairable and consumer habits shift toward disposability, informal renairers find themselves increasingly locked out of markets, of skilling programmes, and of policy attention. What risks being lost is not only economic opportunity but also a vast, undocumented reservoir of knowledge that has long supported India's

public goods, it "I learnt by watching my uncle," says an must align appliance repairer in Bhopal. "He never these ambitions explained with words. He just showed me once, with the and expected me to try. That's how we pass it ground realities on." Tacit knowledge refers to forms of skill an of repair and an established culture of wn through mentorship, observation, and innovation epetition - not through formal training or and frugality



Kinnari Gatare

Human Computer Interaction (HCI) and Consultant, National Programme on Technology Enhanced Learning (NPTEL), Indian Institute of Technology Madras

As India invests

infrastructure

and digital

in Al

systems, including AI, often struggle to replicate. As AI advances, it increasingly draws on insights shaped by this kind of labour. However, mechanisms to acknowledge or equitably involve the contributors of this knowledge are still recognised. Globally, the Right to Repair and repair documentation. In India, the Department of Consumer Affairs launched a Right to Repair framework in 2022, followed by a national portal in 2023 covering electronics. automobiles, and farm equipment. Meanwhile the United Nations Sustainable Development Goa 12 promotes repair as part of responsible consumption. India now has the opportunity to also as a form of knowledge work.

The blind spot in India's digital policy nird-largest producer. The E-Waste encourage recycling, they make only a passing mention of repair as a preventive strategy. ational skilling programmes such as the Pradhan Mantri Kaushal Vikas Yojana (PMKVY focus on short-term certifications for formal improvisation, diagnostic skill and creative reuse does not easily fit this framework. Similarly, the National Education Policy (NEP) 2020 celebrates Indian knowledge traditions and experiential learning but offers little guidance on how to support or transmit hands-on repair expertise mnaigns such as Mission LiFE (LiFEStyle For Environment) promote repair and reuse, but complementary efforts are needed to support the workers who make such sustainability practices ossible. While policies now champion circularity, they risk leaving behind the very

As sustainability becomes a national priority, policymakers and technologists are reconsidering how we design, discard, and extend the life of search is 'unmaking' - the process of taking rposing devices after their first use, revealing design flaws and opportunities for reuse. Breakdowns and repairs are not failures; they are feedback loops and sources of practical insight. A discarded circuit board can pecome a teaching tool. A salvaged phone part restore someone's access to work or school

Informal repairers perform this work daily. Their labour sits at the centre of the circular economy, here reuse is not an afterthought but a des principle. Recognising them as stewards of tainability - not marginal figures - can

AI-enabled solutions for repair justice India's culture of jugaad and frugality long pre-dates today's tech-forward policies. Repairer have always adapted across devices and decades with minimal support. As the country invests in AI infrastructure and digital public goods, it must align these ambitions with the ground realities of repair. Most modern gadgets are built for compactness and control, not repair, Acco o a 2023 iFixit global report, only 23% of norms and procurement policies must include repairability from the start. To make technology genuinely sustainable, public policy must consider not only how products are manufactured and used but also how they breal down, are repaired, and find new life. A shift toward designing for "unmaking", where disassembly and repair are anticipated from the outset, should inform both hardware standards and AI-integrated systems.

This transition will require coordinate nstitutional action. The Ministry of Electronic and Information Technology can embed repairability criteria into AI and procuremen volvement. Platforms such as e-Shram, under the Ministry of Labour and Employment, can formally recognise informal repairers and kill-building schemes. The Ministry of Skill Development and Entrepreneurship can consider training programmes to account for the tacit, diagnostic nature of repair work, which does not conform to standardised industrial templates. To support this, decision trees can help codify typical repair pathways, while Large Language Models can capture, summarise, and translate tacit repair narratives into structured, shareable knowledge, enabling broader learning without stripping local context or expertise.

labour that sustains our digital and material lives echnological future. As philosopher Michael Polanyi observed, "We know more than we can tell." By choosing to remember what cannot be digitised, we preserve the human wisdom essential to a meaningful technological future

- In May 2025, the Indian government introduced a Repairability Index for mobiles and appliances, ranking products based on how easy they are to repair, spares availability, and software support.
- New e-waste policies now require minimum payments for incentivizing formal recycling.
- The editorial argues that along with the "right to repair," India must preserve the "right to remember"—valuing the collective knowledge and skill of informal repairers and technicians.
- Much repair expertise exists outside formal systems in India—built from hands-on experience, community memory, and day-to-day improvisation.
- Current digital policies miss these vital contributors—the informal economy behind daily repairs remains largely unrecognized in formal policy frameworks.
- Global momentum on the right to repair is growing, with the EU and US making legal changes to require manufacturers to facilitate repairs.
- India produces a significant amount of e-waste, but policies still pay only limited attention to actual repair, reuse, and knowledge sharing.
- The Ministry of Electronics and Information Technology and the Ministry of Consumer Affairs have been developing frameworks that integrate repair, but the editorial urges broader recognition of repair as intellectual and cultural capital, not just a consumer right.















Keywords

- Tacit Knowledge:
 - Practical skills gained through experience and observation, common in India's informal repair sector.
- Circular Economy:
 - Economic model that promotes reuse, repair, recycle, reducing waste and conserving resources.
- EPR (Extended Producer Responsibility):
 - Policy that makes producers responsible for collecting and disposing of products after use.
- Mission LiFE:
 - Indian initiative promoting ecofriendly lifestyles and sustainable daily habits.

- Unmaking:
 - Disassembling products to repair, reuse, or learn, crucial for frugal innovation and circular economy.

















Why is Hong Kong regulating and licensing stablecoins?

Stablecoins are a class of cryptocurrencies, with their values linked to assets. Hong Kong is preparing the implementation of a regulatory regime for those issuing stablecoins, prompting enthusiasm in the fintech sector while authorities push for a more cautious approach

Sahana Venugopal

The story so far:

ng Kong is taking a decisive step forward in regulating certain types of eryptocurrencies, as it repares to enforce the Stablecoins Ordinance from August 1. The new regulations come amidst an explosion of interest in stablecoins and their promising applications in both personal finance and international business. While crypto users who support official regulation are excited, the authorities have advised

What is the new stablecoin licensing system in Hong Kong?

The Hong Kong Monetary Authority announced that the Stablecoins Ordinance will come into effect from August 1 this year. This means it will be illegal for people to "offer any unlicensed fiat-referenced stablecoin (FRS) to a retail investor, or actively market the issue of unlicensed FRS to the public of Hong Kong," according to Eddie Yue, Chief Executive of the Hong Kong Monetary Authority (HKMA).

Furthermore, companies that want to legally issue stablecoins to users in Hong Kong will have to obtain a licence from the Monetary Authority as well as meet set requirements when it comes to managing reserve assets and redemption. asset stabilisation, and processing user requests. In addition to this, they will have to comply with the applicable regulations that prevent money laundering and terrorist financing, thus making sure that their assets are properly disclosed and audited.

The HKMA warned that the regulations are not a red carpet for interested parties

to begin issuing stablecoins, and that in the beginning it would "at most grant a handful of stablecoin issuer licences. In other words, a large number of applicants will be disappointed," per Mr. Yue in an official statement.

What are stablecoins?

Stablecoins are a class of cryptocurrencies, with their values linked to assets. Unlike better known cryptocurrency coins such as Bitcoin (BTC) and Ether (ETH) or even tokens such as Shiba Inu (SHIB), whose values can wildly rise and fall due to investor sentiments and other factors, stablecoins are designed to maintain relatively steady prices. Hence, their name.

This so-called stability is achieved through the process of "pegging" the stablecoin to an asset such as fiat currency (like U.S. Dollars, EU Euros, Hong Kong Dollars, etc.), a commodity (like gold), other cryptocurrencies (such as Bitcoin), by regulating their value via computer algorithms, or by mixing multiple strategies. While the price of Bitcoin might rise or fall in the coming years, a USD-pegged stablecoin should ideally remain around \$1.

Stablecoins are different from CBDCs, or Central Bank Digital Currencies, which are digital currencies officially issued and controlled by a government's central bank. Meanwhile, stablecoins can be privately issued and can also be pegged to foreign currencies.

Why do stablecoins require regulation?

Stablecoins play an important role both within and outside the crypto ecosystem, even if they might not balloon in price like Bitcoin. Crypto investors often use stablecoins to facilitate easy trading on

crypto exchanges. Others around the world have used stablecoins to maintain the value of their savings when their native currencies are depreciating, or to save money on cross-border transactions. Argentina, Turkey, and even Taliban-occupied Afghanistan are some places where stablecoins are not just for trading, but a way to make daily life possible.

The numbers tell a compelling story as well. Tether (USDT), the fourth largest cryptocurrency by market capitalisation and the largest stablecoin, per CoinMarketCap, has a circulating supply of 163.75 billion USDT. Meanwhile, more than \$250 billion worth of stablecoins a estimated to be in circulation worldwide. Naturally, more governments are

concerned about whether the highly engineered use of stablecoins could one day affect the value of the original fiat currencies or commodities backing them up. Furthermore, what is the guarantee that every stablecoin pegged to the dollar, euro, pound, or peso is actually backed up by its issuer? Currently, it is largely up to stablecoin users to audit their issuers' reserves and make sure that their stablecoins are adequately backed. When a stablecoin issuer suddenly adds millions of dollars in assets, it naturally raises questions about where the money to back this is coming from, or whether it really exists. This is where regulation comes in.

Do stablecoins exhibit volatility despite being pegged to currencies? Despite their name and their backing, stablecoins can also exhibit volatility. In response to both technical factors and world events, stablecoins sometimes come unpegged and their prices may rise or fall beyond the usual range, with sudden drops triggering panic amongst

investors. For example, USDT, which is pegged to the U.S. Dollar, has in the past fallen to prices as low as around \$0.92.

Stablecoins have also collapsed entirely. In May 2022, Terra's cryptocurrency LUNA and its linked algorithmic stablecoin UST both lost most of their value in a matter of hours. Panicking investors who no longer trusted these assets quickly sold them off to minimise losses, and the prices fell close to zero. Billions of dollars were wiped from the crypto sector and the ensuing liquidity crunch triggered asset freezes across global crypto exchanges and intech platforms.

Have other countries started to regulate stablecoins?

U.S. President Donald Trump in July signed the GENIUS Act that is designed to regulate stablecoins and protect the U.S. dollar, much to the joy of his pro-crypto supporters

As per the White House, the GENIUS Act requires 100% reserve backing with liquid assets like U.S. dollars or short-term Treasuries for stablecoins. Those issuing this asset will also have to make monthly, public disclosures of the composition of their reserves, apart from complying with marketing rules.

Other countries that have started to regulate stablecoins include Japan and Singapore, per AFP, while multiple other jurisdictions have more generic regulations that cover stablecoins along with other cryptocurrencies.

Though the Chinese government heavily restricts crypto-related activities in its jurisdiction, some of the country's tech giants hope that Hong Kong's upcoming regulatory regime will provide an outlet for their own stablecoin

- Hong Kong is introducing the Stablecoins Ordinance effective August 1, requiring stablecoin issuers to obtain licenses.
- It will be illegal to sell or market unlicensed fiat-referenced stablecoins to the public.
- Stablecoins are cryptocurrencies pegged to stable assets (e.g., US Dollar) aimed at reducing price volatility.
- They are widely used for maintaining savings value, cross-border transactions, and as a daily means of payment in some economies.
- Global concerns grew after events like the 2022 Terra stablecoin collapse, prompting stricter regulations.
- Hong Kong's regulation emphasizes consumer safety, transparency of reserves, and anti-money laundering compliance.
- Similar global regulatory movements are underway, including the US requirement for 100% cash or liquid asset backing.
- Hong Kong aims to manage risks while supporting fintech innovation and stablecoin ventures, especially given China's strict crypto stance.















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| Aspect | Stablecoins | Cryptocurrencies (General) |
| Definition | Digital assets pegged to a stable asset (e.g. USD, gold) to reduce price volatility. | Decentralized digital currencies with no inherent value backing . |
| Price Volatility | Low – value remains stable due to pegging. | High – prices fluctuate widely (e.g., Bitcoin, Ethereum). |
| Backing/Reserve | Backed by fiat currency, commodities, or crypto assets. | Usually not backed by any physical asset. |
| Purpose | Used for payments, remittances, and to stabilize crypto transactions. | Often used for investment, trading, and decentralization experiments. |
| Examples | USDT (Tether), USDC, DAI | Bitcoin (BTC), Ethereum (ETH), Dogecoin |
| Regulatory View | Increasingly under scrutiny for transparency of reserves. | Concerns around money laundering, volatility, legality. |













Scientists use AI-designed proteins to generate immune cells ancer. This process depends of

AI-Designed Proteins to Boost T Cell Immunity

- Harvard researchers, using AI, have developed synthetic proteins that stimulate T cell production, enhancing immune response against cancer and viral infections.
- These proteins activate the Notch signaling pathway, critical for transforming stem cell progenitors into T cells.
- Previous activators couldn't function inside living organisms—this gap is now addressed using Al-designed Notch agonists.
- Developed in collaboration with Nobel laureate David Baker's team, this breakthrough may significantly improve Tcell-based therapies, especially CAR T-cell therapy.

Key Terms

T Cells:

White blood cells essential for immunity; they destroy infected/cancerous cells and help regulate immune responses.

CAR T Therapy:

Advanced cancer treatment where a patient's T cells are genetically engineered to target and kill cancer cells; effective in blood cancers.

Notch Signaling:

A cell communication pathway vital for cell differentiation and immune system development. It plays a key role in producing T cells from stem cells.

Dysfunction in this pathway is linked to diseases like cancer.















DAILY MCQs FOR PRACTICE

Q1. Which of the following best describes the External Benchmark Lending Rate (EBLR)?

- A) The minimum rate below which a bank cannot lend
- B) A rate linked to RBI repo rate or government securities, making loan rates transparent and responsive
- C) A benchmark decided by each bank based on its cost of funds
- D) A fixed rate declared annually by the RBI

Q2. With reference to biofortified crops, consider the following statements:

- 1. Biofortification involves improving nutritional value of crops through genetic modification only.
- 2. Iron-rich potatoes introduced in India are an example of biofortified crops.
- 3. Biofortified crops and GM crops are identical.

Which of the statements given above is/are correct?

- A) 1 and 3 only
- B) 2 only
- C) 1, 2 and 3
- D) 2 and 3 only

Q3. The 'right to repair' movement advocates for which of the following?

- 1. Legal permission to repair devices after their planned obsolescence
- 2. Easy access to spare parts and repair information
- 3. Recognition of informal skill and knowledge in repair ecosystems

Select the correct answer using the code below:

- A) 1 and 2 only
- B) 2 and 3 only
- C) 1 and 3 only
- D) 1, 2 and 3

















DAILY MCQs FOR PRACTICE

Q4. In the context of digital currencies, which of the following statements about stablecoins is/are correct?

- 1. Stablecoins are always backed by gold reserves.
- 2. Stablecoins are cryptocurrencies designed to maintain stable value by being pegged to assets like fiat currencies.
- 3. Hong Kong has introduced strict licensing for stablecoin issuers to protect financial markets. Select the correct answer using the code below:
- A) 1 only
- B) 1 and 2 only
- C) 2 and 3 only
- D) 2 only

Q5. Which of the following statements regarding T cells is correct?

- A) T cells are specialized antibody-secreting immune cells
- B) T cells only develop in the bone marrow
- C) T cells play a vital role in fighting infections and cancers
- D) CAR T therapy uses B cells to fight cancer

















MAINS QUESTION FOR PRACTICE

Q. Explain the importance of the "right to repair" in India's digital economy. How can recognizing informal repair skills support sustainability and economic resilience? Suggest policy measures to empower this sector while promoting innovation and environmental goals.











