

**The Hindu Important News Articles & Editorial For UPSC CSE**

**Friday, 11 Oct , 2024**

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**21st ASEAN - India Summit**

The 21st ASEAN-India Summit, held on 10 October 2024 in Vientiane, Lao PDR, marked a decade of India's Act East Policy. PM Modi participated for the 11th time, joining ASEAN leaders to assess the ASEAN-India Comprehensive Strategic Partnership and to shape future cooperation.



**Key highlights of the 21st ASEAN - India Summit**

➔ **PM Modi's Address: Focus on ASEAN Unity and Economic Growth**

- PM Modi reiterated India's unwavering support for ASEAN Unity, ASEAN Centrality, and the ASEAN Outlook on the Indo-Pacific.
- Calling the 21st century the "Asian century," he stressed the importance of India-ASEAN ties in shaping Asia's future.
- **Key achievements in the last decade include:**
  - Doubling of India-ASEAN trade to over USD 130 billion
  - Direct flight connectivity with seven ASEAN nations
  - Fin-tech collaboration and restoration of shared cultural heritage
  - Scholarships for ASEAN youth at Nalanda University

➔ **10-Point Plan for Enhanced Connectivity and Resilience**

- **In line with the Chair's theme of "Enhancing Connectivity and Resilience," PM Modi unveiled a 10-point plan, including:**
  1. Celebrating 2025 as ASEAN-India Year of Tourism with USD 5 million for joint activities

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2. Marking a decade of the Act East Policy with people-centric activities like Youth Summits and Start-up Festivals
3. Organizing the ASEAN-India Women Scientists Conclave
4. Doubling scholarships at Nalanda University and adding new ones at Indian agricultural universities
5. Reviewing the ASEAN-India Trade in Goods Agreement (AITIGA) by 2025
6. Allocating USD 5 million to enhance Disaster Resilience
7. Initiating a Health Ministers' track to build health resilience
8. Establishing an ASEAN-India Cyber Policy Dialogue
9. Hosting a workshop on Green Hydrogen
10. Launching the 'Plant a Tree for Mother' campaign to promote climate resilience

### ➔ **Future Plan of Action (2026-2030)**

- Leaders agreed on the creation of a new ASEAN-India Plan of Action (2026-2030) to further the partnership.
- Strengthening ASEAN-India Partnership: 2 joint statements were adopted
- Joint Statement on Strengthening ASEAN-India Comprehensive Strategic Partnership for Peace, Stability, & Prosperity in Indo-Pacific
- Joint Statement on Advancing Digital Transformation, recognizing India's role in digital public infrastructure

### **Joint Statement on Advancing Digital Transformation: Key Highlights**

#### ➔ **Importance of Digital Public Infrastructure (DPI)**

- India's contributions to ASEAN Digital Masterplan 2025 and Centers of Excellence in Software Development were appreciated.

#### ➔ **Financial Technology (FinTech) Collaboration**

- The partnership seeks to expand collaboration on FinTech innovations, especially through cross-border payment systems and digital financial solutions.

#### ➔ **Cybersecurity Cooperation**

- Both parties supported the establishment of the ASEAN-India Cyber Policy Dialogue to bolster the resilience and security of digital infrastructure.

#### ➔ **Artificial Intelligence (AI) Collaboration**

- The Joint Statement called for collaboration in AI to develop skills, infrastructure, risk management frameworks, and responsible policies.
- Focus areas include upskilling and reskilling the workforce and promoting trustworthy AI systems.

#### ➔ **Capacity Building and Knowledge Sharing**

- Capacity building and knowledge-sharing initiatives will be fostered through regular exchanges, workshops, and training programs under the ASEAN-India Digital Ministers' Meeting to support digital transformation efforts.

#### ➔ **Sustainable Financing and Investment**

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- India and ASEAN agreed to explore innovative financing mechanisms, including public-private partnerships and international funding to support digital initiatives.
- The ASEAN-India Fund for Digital Future will initially fund these activities.

### ASEAN

#### ➔ About

- The Association of Southeast Asian Nations (ASEAN) is a regional grouping that aims to promote economic and security cooperation among its ten members:
- Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.
- Timor-Leste joined the ASEAN in 2022 as an Observer. ASEAN has agreed in principle to accept Timor-Leste as its 11th member.
- ASEAN countries have a total population of 662 million people and a combined gross domestic product (GDP) of \$3.6 trillion as of 2022.
- ASEAN has an anthem, a flag and biannual summits (twice a year) with a rotating chairmanship.

#### ➔ Establishment:

- It was established on 8 August 1967 in Bangkok, Thailand, with the signing of the ASEAN Declaration (Bangkok Declaration) by the founding fathers of ASEAN: Indonesia, Malaysia, Philippines, Singapore and Thailand.
- Aim: The motto of ASEAN is "One Vision, One Identity, One Community".
- Secretariat: Jakarta, Indonesia.

### India's relationship with ASEAN

#### ➔ ASEAN and Act East Policy

- ASEAN is central to India's Act East policy, which focuses on the extended neighbourhood in the Asia-Pacific region.

#### ➔ India among the dialogue partners

- India is part of the ASEAN Plus Six grouping, which includes China, Japan, South Korea, New Zealand and Australia as well.

#### ➔ Trade and Investment

- In 2010, India-ASEAN FTA in goods were signed. FTA in services were signed in 2014.
- India and ASEAN are important trading partners, with ASEAN accounting for 11% of India's global trade.
- India and ASEAN registered a bilateral trade of USD 131.5 billion in 2022-23.
- In 2023-24, bilateral trade between the two sides was \$122.67 billion.
- India has a trade deficit with ASEAN, exporting \$41.21 billion to ASEAN states in 2023-24, while importing \$79.67 billion.

#### ➔ Institutional cooperation

- **India – ASEAN summit-level partnership in 2002;**
  - The year 2022 marked 30 years of ASEAN-India relations and it was designated as ASEAN-India Friendship Year.

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- Ties were elevated to a strategic partnership in 2012 and Comprehensive Strategic Partnership in 2022.
- India and ASEAN have strengthened defence cooperation by the ASEAN Defense Ministers' Meeting Plus (ADMM+).
- The first ASEAN-India Maritime Exercise (AIME) was held in 2023.
- ➔ **Promoting Tourism and People-to-People Ties**
  - 2025 designated as ASEAN-India Year of Tourism to boost socio-economic development.
  - Implementation of ASEAN-India Tourism Cooperation Work Plan 2023-2027.



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As we consider how artificial intelligence (AI) is transforming various fields, one emerging area is the use of synthetic medical images in healthcare.

# AI-generated medical images: a new frontier or potential pitfall?

The demand for high-quality, annotated medical images far exceeds supply. Real-world images, such as those generated by the MRI and CT scans, are expensive and time-consuming to collect. Synthetic medical images can bridge this gap by providing an ethical, scalable, and cost-effective solution

C. Aravinda

In a world where even the experts are sometimes puzzled by our economic systems, only a tiny fraction of economists truly understand the mechanics that govern them. Imagine what would happen if these experts were replaced by artificial intelligence (AI). Would we still trust our monetary systems? This thought experiment becomes particularly relevant while considering the rapid rise of synthetic medical images in healthcare.

**What are synthetic medical images?**  
At its core, a synthetic medical image is generated by AI or computer algorithms without being captured by traditional imaging devices such as MRI, CT scans, or X-rays. These images are entirely constructed using mathematical models or AI techniques like generative adversarial networks (GANs), diffusion models, and autoencoders.

Synthetic images are like the concept of "this person does not exist" images, where the AI creates images of people who do not actually exist in the real world. In the medical field, synthetic medical images are created in a similar way, where the AI generates entirely new medical scans or radiological images that mimic real ones but are not derived from any actual patient data.

In healthcare, the demand for high-quality, annotated medical images far exceeds supply. Real-world medical images, such as those from MRI, CT scans, or X-rays, are expensive and time-consuming to collect. Additionally, privacy concerns around patient data limit the sharing of these images across medical institutions and research labs. Synthetic medical images can bridge this gap by providing an ethical, scalable, and cost-effective solution.

How are these images created? A variational autoencoder (VAE) takes an image, compresses it into a simpler form called the latent space, and then tries to recreate the original image from that compressed version. The process continuously improves the image by minimising the difference between the real image and the recreated version.

GANs involve a generator that creates synthetic images from random data and a discriminator that determines whether the image is real or synthetic. Both improve through competition—the generator tries to make its images more realistic, while the discriminator gets better at spotting fakes.

Diffusion models begin with a bunch of random noise and gradually transform it into a realistic image, using a step-by-step process that slowly shapes the noise into something that resembles the images it was trained on. These methods generate synthetic images in various fields.

**Advantages of synthetic images**  
One significant advantage of synthetic



AI generates entirely new medical scans or radiological images that mimic real ones but are not derived from any actual patient data. GETTY IMAGES

medical images is their ability to facilitate intra- and inter-modality translation. Intramodality translation refers to generating synthetic images within the same type of imaging modality, such as improving or reconstructing MRI scans based on other MRI data. Inter-modality translation, on the other hand, involves generating synthetic images by translating between different types of imaging modalities, such as creating CT scans from MRI data. This ability to move across and within modalities is invaluable in cases where certain scans are unavailable or incomplete. Synthetic images can fill these gaps by creating accurate representations from other types of data.

Privacy is another significant advantage. Since synthetic images are generated without patient data, they circumvent privacy concerns, making it easier for researchers and healthcare providers to share and collaborate on AI development without the risk of violating patient confidentiality.

Synthetic medical images also address the time and cost of collecting real medical data.

#### Challenges ahead

Synthetic data algorithms have the potential for malicious applications, including introducing deepfakes into hospital systems.

Deepfakes may impersonate individual patients, introducing clinical findings that do not exist, which could lead to incorrect diagnoses or treatments. Worse yet, they could be exploited to submit fraudulent claims to health insurers, creating a pathway for financial

**These images are entirely constructed using mathematical models or AI techniques like generative adversarial networks, diffusion models, and autoencoders**

exploitation.

Synthetic images might lack the complexity and nuances of real-world medical data. For instance, while a synthetic brain MRI might look accurate, it may not capture the subtle variations in tissue density or lesion patterns found in real-world cases.

The AI model's performance may worsen over time due to the absence of rich, real-world variability.

What if, over time, our AI systems, trained on synthetic medical data, begin to rely more on fabricated images than on real-world cases? This is where the issue of truth erosion comes into play.

As synthetic medical images become more prevalent, the distinction between what is real and what is generated may blur, making it harder for medical professionals to trust AI diagnoses based solely on synthetic data.

Suppose AI systems are trained exclusively on synthetic medical images, generating diagnoses that don't align with real-world cases.

Over time, this could lead to an entire diagnostic model based on artificial realities rather than true patient data.

**Collaborative solution and caution**  
One effective way to mitigate these risks and improve the quality of synthetic

medical images is through close collaboration between clinicians (such as radiologists) and AI engineers.

When developing AI models, clinicians can provide critical insights from real-world medical practice, helping AI engineers understand the complexities and nuances often missing from synthetic data. Their collaboration can lead to AI models that score better in evaluation metrics, resulting in real-life clinical utility.

While synthetic medical images hold the potential for improving healthcare, their widespread use comes with risks. Just as we wouldn't leave the decision of printing physical currency entirely to an AI system, we should be cautious about relying too heavily on synthetic medical images to shape our understanding of human health.

Reality is stranger than fiction. Synthetic images won't be able to generate those strange realities.

They pose significant regulatory and ethical challenges. Human oversight remains critical to ensuring that AI-generated content serves the best interests of patients and healthcare providers.

The balance between innovation and truth is delicate, and only time will tell whether synthetic images will enhance or distort our understanding of health.

We must proceed with optimism and caution, ensuring that the benefits of synthetic images are realised without compromising the integrity of real-world healthcare.

*(Dr. C. Aravinda is an academic and a public health physician. aravindaaimsrj10@hotmail.com)*

## What are Synthetic Medical Images?

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- ➔ Synthetic medical images are AI-generated images created without using traditional imaging devices like MRI, CT scans, or X-rays.
- ➔ These images are constructed using mathematical models or AI techniques, such as generative adversarial networks (GANs), diffusion models, and autoencoders.

### Advantages offered

- ➔ **Intra- and Inter-Modality Translation:** Generate images from the same or different types of scans, helping when certain scans are unavailable.
- ➔ **Privacy Protection:** Created without patient data, reducing privacy concerns and easing data sharing for research.
- ➔ **Cost and Time Efficiency:** Synthetic images are quicker and cheaper to generate compared to real medical scans.
- ➔ **Scalability:** Easier to produce large volumes of medical data for AI training and research.

### Challenges posed

- ➔ **Potential for Misuse:** Could be used to create medical deepfakes, leading to fraudulent claims or fake clinical findings.
- ➔ **Lack of Real-World Complexity:** May not capture subtle details found in real medical data, potentially lowering diagnostic accuracy.
- ➔ **Truth Erosion:** Relying too heavily on synthetic data may distort AI models, leading to diagnoses that don't align with real-world cases.
- ➔ **Ethical and Regulatory Concerns:** Questions around how these images should be controlled and monitored to avoid misuse.

The World Development Report 2024 highlights the “middle-income trap,” where economies stagnate as growth slows. Only 34 middle-income nations advanced to high-income status in 34 years.

# Can India escape middle-income trap?

How does the World Bank define the threshold for middle-income economies? Why is state intervention considered crucial for breaking the middle-income trap? What lessons can be drawn from South Korea and Chile? What challenges does India face in balancing state intervention with democratic values?

## ECONOMIC NOTES

Rahul Menon

The World Development Report 2024 – authored by the World Bank – calls attention to the phenomenon of the “middle-income” trap, or the slowing down of growth rates as incomes increase. The World Bank estimates a stagnation of income per capita when economies reach a level of per capita incomes 11% of that of the U.S., hindering their journey to high-income status. Over the last 34 years, only 34 middle-income economies – defined as economies with per capita incomes between \$1,136 and \$13,845 – have transitioned to higher income levels.

The WDR details the policies and strategies necessary to break out of the trap based on the development experiences of those countries that did manage the transition. It highlights the importance of the “3i” approach: investment, infusion, and innovation. Economies must invest, ensure the infusion of new global technologies, and develop an environment conducive to domestic innovation. This is no easy task and requires nimble and responsive state policy. In the modern economy, there are plenty of headwinds that India must overcome to successfully navigate the middle-income trap.

### Role of the state

Most countries that broke the trap were part of the European Union which facilitated growth and mobility of capital and labour for its members. Such institutions that aid free factor mobility are not available for most countries, for whom capital inflows are liberalised – largely flowing into their economies – with restrictions on the movement of labour. An important non-European country that managed to escape the trap



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is South Korea.

The South Korean state was heavily interventionist, often directing the private sector's activities and ensuring their participation in an export-driven growth model. Successful companies were rewarded with access to new technologies and other supportive measures, while firms that did not perform were allowed to fail. This was no pure free market, but one where a powerful state intervened to bring about developmental goals, disciplining local elites and ensuring they followed the dictates of the state's economic plan.

Another economy that broke the middle-income trap was Chile. But it too, saw state intervention in ensuring the success of natural resource exporting sectors. The salmon industry, for instance, succeeded in Chile due to the targeted intervention of the state on multiple fronts to ensure that the industry flourished.

The South Korean government's approach carries significant lessons for India today. The state must be seen as being neutral amongst private players and ensuring those who do not make the mark are allowed to fail. The benefits firms receive from the state must be based on their performance instead of closeness

to power. The presence of powerful business houses can promote growth provided they invest, ensure the adoption and infusion of new technologies, and innovate. South Korean business houses, or chaebols, are among the leaders in innovation today.

### The pitfalls

South Korea's success was built on manufacturing exports; such a strategy is not possible in today's economic scenario. World export growth has slowed, with demand from large economies slowing down following the multiple shocks of the last few years. Several countries have seen a slow turn to protectionism. The employment losses in developed economies caused by free trade have made it more difficult for countries such as India to access foreign markets.

Moreover, several countries have been hit by what economist Dani Rodrik terms ‘premature deindustrialisation’. Modern economies face a reduction in the income share of manufacturing at much lower levels of GDP compared to previous economies. Manufacturing is no longer an engine of growth for developing economies, and it remains to be seen whether the service sector is strong enough to break the trap.

### Challenges facing India

The power of billionaires in the Indian economy has increased, and they are seen as being close to the state, with the state unable – or unwilling – to ensure high rates of investment from domestic capital. The manufacturing sector has stagnated, and there has been a reversal of the process of structural transformation, with employment increasing in agriculture and in low-productive forms following the pandemic.

The growth of the aggregate economy is not being reflected on the ground. While the government estimates a real GDP growth of around 7% in recent years, wages have not kept up. According to the PLFS, nominal wages for regular wage workers at the all-India level between April and June 2023-24 has only grown at around 5%, and that of casual workers at roughly 7%. With an inflation rate of roughly 5% during this time, this implies that wage earners have seen little to no real wage growth. An economy cannot break a middle-income trap if workers are unable to partake in the growth process, as reduced consumption demand will become a drag on the economy.

Most importantly, the question of democracy looms large. South Korea's export strategy was overseen by a military government that ruled till the 1980s. The government frequently quelled labour unions to aid the accumulation process of capital. Chile deposed the democratically elected government of Salvador Allende by a military coup, installing General Augusto Pinochet as the head of state. It is vital not to take the wrong lessons from these countries, and think that democracy is an acceptable price to pay for higher growth. The challenge for policy is to promote state intervention to ensure growth while maintaining the sanctity of the democratic ethos.

Rahul Menon is Associate Professor in the Jindal School of Government and Public Policy at O.P. Jindal Global University

### THE GIST

▼ The middle-income trap refers to the slowdown of growth as economies reach middle-income status, with only 34 countries successfully transitioning to high-income levels in the last 34 years.

▼ Breaking the middle-income trap requires policies focused on investment, infusion of global technologies, and fostering domestic innovation, supported by flexible and responsive state policies.

▼ India's challenge is to foster growth through strategic state intervention while preserving democratic principles and ensuring inclusive participation in the growth process.

## How does the World Bank define the threshold for middle-income economies?

- ➡ The World Bank defines middle-income economies as those with incomes between \$1,136 and \$13,845 per capita.
- ➡ The middle-income trap refers to a slowdown in growth when an economy reaches a certain income threshold, about 11% of U.S. per capita income.
- ➡ Only 34 middle-income countries have transitioned to higher-income status over the last 34 years, indicating the difficulty of escaping the middle-income trap.

## Why is state intervention crucial for breaking the middle-income trap?

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- ➔ State intervention is vital for coordinating development goals, as seen in South Korea and Chile, where governments played an active role in shaping industries and ensuring the private sector's alignment with national development objectives.
- ➔ The state ensures investment, infusion of global technologies, and domestic innovation, which are critical for modern economies. This is known as the 3i approach (Investment, Infusion, Innovation).
- ➔ State intervention disciplines local elites, ensuring firms succeed based on performance, not political connections. Underperforming firms are allowed to fail, promoting efficiency and innovation.

### What lessons can be drawn from South Korea and Chile?

- ➔ **South Korea adopted a state-led industrialization strategy with a focus on export-driven manufacturing:**
  - The state actively directed private sector activities, ensuring businesses were competitive on the global stage.
  - Chaebols (large business conglomerates) were supported based on their performance, promoting technological advancement and innovation.
- ➔ **Chile achieved success by focusing on natural resource exports, like its salmon industry:**
  - The state's role was crucial in developing and supporting industries with growth potential, showing how targeted interventions can help small but strategically important sectors thrive.

### What challenges does India face in balancing state intervention with democratic values?

- ➔ **Economic Power Concentration:** India faces a growing concentration of wealth among powerful business houses, which are perceived to be closely linked to the state. This risks cronyism rather than performance-based growth, which could hinder innovation and investment.
- ➔ **Manufacturing Stagnation:** Unlike South Korea, India's manufacturing sector has not experienced significant growth. With global export demand slowing and increased protectionism, manufacturing is less likely to drive India's growth.
- ➔ **Wage Stagnation:** Real wage growth has been stagnant, as inflation erodes the benefits of nominal wage increases. This limits domestic demand, a critical factor in economic dynamism.
- ➔ **Premature Deindustrialization:** India, like many developing economies, faces premature deindustrialization, meaning that manufacturing's contribution to GDP is declining at a lower level of income than historically seen in developed economies.
- ➔ **Balancing State Intervention with Democracy:** South Korea and Chile implemented aggressive state interventions under authoritarian regimes. However, India, as the world's largest democracy, must ensure that growth strategies do not come at the cost of democratic values and labor rights.

### World Bank recommendation to escape the middle-income trap

- ➔ **World Development Report 2024:** This report outlines a three-pronged approach for middle-income countries to escape the trap:
  - **Investment:** Initially focusing on increasing investment.
  - **Technology Infusion:** Incorporating modern technologies into domestic industries.
  - **Innovation:** Ultimately fostering innovation to enhance competitiveness and productivity

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### Way forward:

- ➔ **Economic Growth Strategy:** Niti Aayog CEO emphasized the need for a comprehensive economic strategy to avoid the middle-income trap, which he described as the "biggest threat" to India's growth.
- ➔ **Free Trade and Global Integration:** Niti Aayog CEO advocated for increased openness to free trade and alignment with global value chains.
- ➔ **Urban Development and Infrastructure:** The government should focus on transforming urban areas into economic hubs, which is seen as crucial for driving growth.



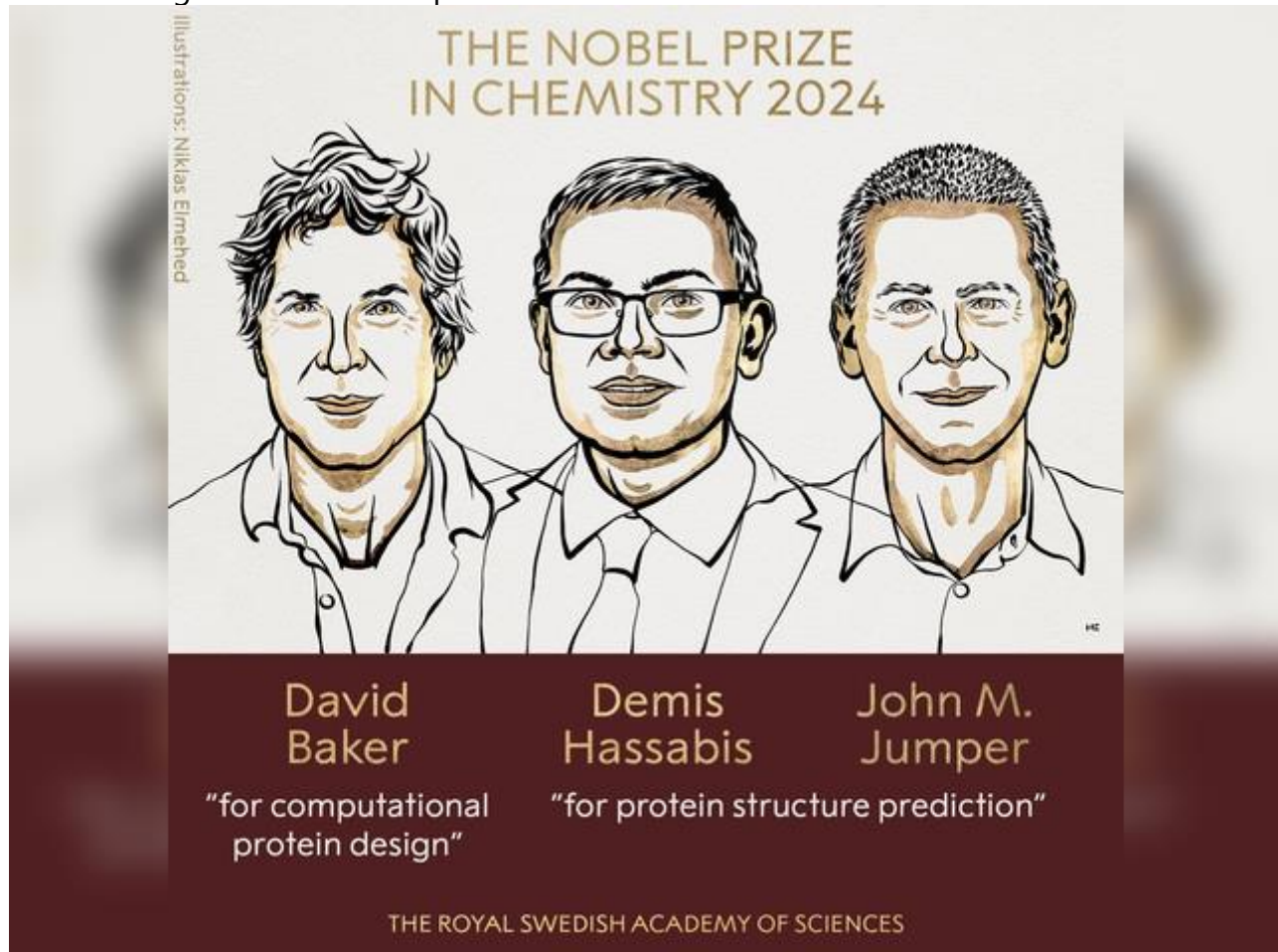
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## Award In News : Nobel Prize in Chemistry

The 2024 Nobel Prize in Chemistry is awarded to David Baker, Demis Hassabis, and John M. Jumper for their groundbreaking contributions to protein science.



- ➔ **Major Discoveries:** One-half of the prize is given to David Baker 'for computational protein design' and the other half jointly to Demis Hassabis and John M. Jumper 'for protein structure prediction.'
- ➔ **Significance:** David Baker has achieved the extraordinary feat of designing entirely new proteins. Demis Hassabis and John Jumper developed an artificial intelligence (AI) model to address a 50-year-old challenge- predicting the complex 3-D structures of proteins.
  - Baker's group has since 2003 created a range of novel proteins from scratch that have found applications in pharmaceuticals, vaccines, nanomaterials, sensors, and other fields.
  - Hassabis and Jumper AI-based model in 2020 named AlphaFold2. This can predict the structure of nearly all 200 million proteins identified to date.
  - AlphaFold2 has been used extensively by millions of scientists around the globe to address issues like antibiotic resistance and plastic degradation.

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**Term In News : Rice Fortification**

The Union Cabinet extended the universal supply of fortified rice in all central government schemes providing free food grain under the National Food Security Act, 2021, in its present form, until December 2028.



**About Rice Fortification:**

- Fortification is the process of adding Fortified Rice Kernels (FRK), containing FSSAI-prescribed micronutrients (Iron, Folic Acid, Vitamin B12) to normal Rice in a ratio of 1:100 (Mixing 1 Kg of FRK with 100 Kg custom milled rice).
- Fortified rice is nearly identical to traditional rice in aroma, taste, and texture. This process is done in the rice mills at the time of milling of rice.
- It is a cost-effective, culturally appropriate strategy to address micronutrient deficiency in countries with high per capita rice consumption.
- Rice Fortification is a 2-step process – (1) Production of Fortified Rice Kernels (FRK) (2) Blending of rice with FRK

**Processes used for rice is fortification**

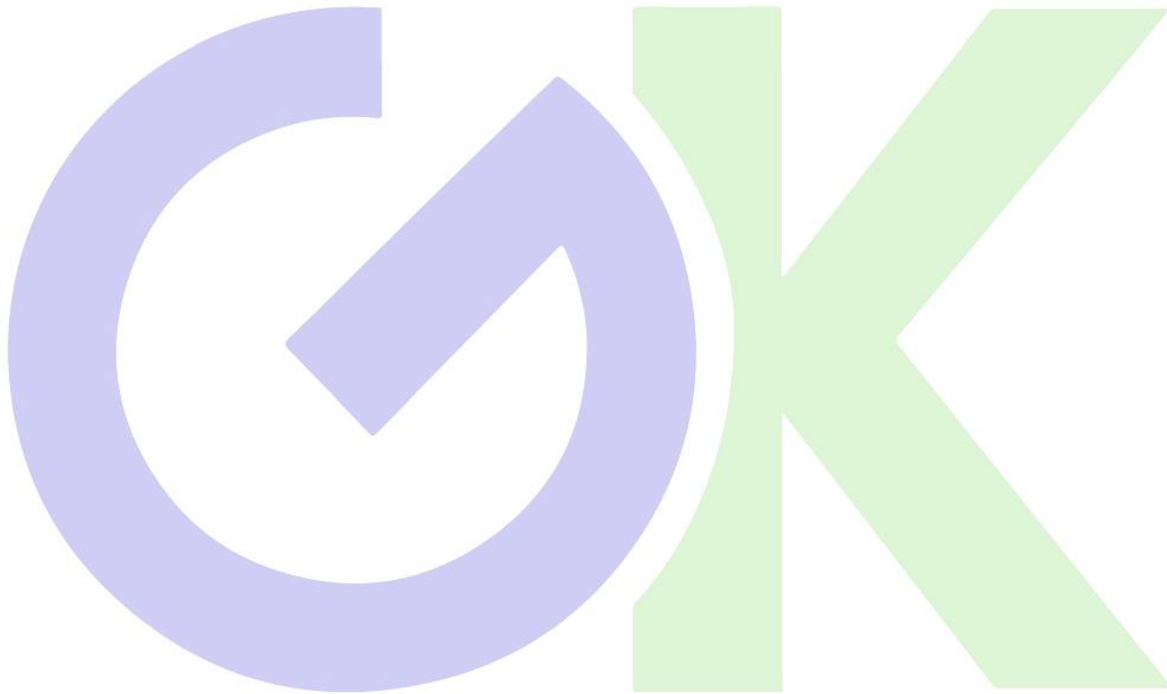
- Various technologies, such as coating, dusting, and 'extrusion', are available to add micronutrients to regular rice.
- Adding micronutrient technology involves the production of Fortified Rice Kernels (FRKs) from a mixture using an 'extruder' machine. It is considered to be the best technology in India.

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- ➡ Dry rice flour is mixed with a premix of micronutrients and water is added to this mixture, which is then passed through a twin-screw extruder with heating zones.
- ➡ Kernels similar in shape and size to rice are produced, which must "resemble the normal milled rice as closely as possible".
- ➡ The kernels are dried, cooled, and packaged. FRK has a shelf life of at least 12 months.
- ➡ The kernels are blended with regular rice to produce fortified rice. Under the Ministry's guidelines, 10 g of FRK must be blended with 1 kg of regular rice.
- ➡ According to FSSAI norms, 1 kg of fortified rice will contain the following: iron (28 mg-42.5 mg), folic acid (75-125 micrograms), and vitamin B-12 (0.75-1.25 microgram).



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# The gruelling course of litigation in India

Last month, the President of India, Droupadi Murmu, highlighted the issue of court delays. In her speech at the National Conference of the District Judiciary, she noted that these delays are what are making people hesitate approaching courts, as they fear that the pursuit of justice will complicate their lives further. She referred to this as the 'black coat syndrome', likening it to white coat hypertension – a condition where patients exhibit elevated blood pressure in clinical settings. While the term is symbolic, it underscores a real issue – that many people are reluctant to engage in litigation due to the gruelling process, which includes endless adjournments, numerous appeals, and escalating legal costs. A significant factor contributing to these delays is the Indian judiciary's scheduling and case management practices. Effective case management, involving clear timelines for filing documents, conducting witness examinations, scheduling hearings, and limiting adjournments, are crucial. Without these, the court system struggles to move cases forward efficiently, exacerbating delays and frustrations faced by litigants.

Court scheduling and case management have long been challenges within the Indian judiciary, significantly contributing to delays. Mechanisms such as Case Flow Management Rules were introduced for district and High Courts to streamline processes, set timelines, and create more predictable court schedules. However, despite their introduction in the late 2000s, these rules and other initiatives, that were aimed at improving scheduling and timely case disposal, have been inconsistently implemented, and with limited impact.

## At the level of the district judiciary

While stricter rules and rigid timelines are often suggested as solutions, the reality is more complex. It is crucial to recognise that all participants in the judicial system – judges, lawyers, litigants and witnesses – act with rationality and good intentions, though their actions are often influenced by various constraints and incentives. Court scheduling issues are deeply rooted in the complex interplay of these motivations. A holistic approach that considers the psychological and behavioural aspects of all stakeholders is essential for meaningful progress. Let us look at the challenges in the district judiciary.

Judges have a crucial role in enforcing case management timelines. But systemic pressures often compromise their ability to do so. Judges in the district judiciary have to prioritise cases, with directions from higher courts to dispose of these cases within a specific time or where target



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Court scheduling and case management continue to be a hurdle that litigants face

disposal numbers have been provided for case types. While such oversight aims to ensure timely justice, higher courts often impose deadlines without fully considering their impact on the overall scheduling in district courts. This forces district courts to allocate disproportionate resources to expedite certain cases, disrupting scheduling and creating delays. The Supreme Court of India and various High Courts have criticised this trend, noting that such directives often disrupt case management in district courts. A more balanced approach is needed, wherein higher courts' deadlines align with district court operational realities to avoid exacerbating delays.

Various statutes and rules impose timelines for the disposing of cases or filing documents, but judges are often not incentivised to adhere to these deadlines. When extensions are permissible, judges frequently grant them beyond statutory deadlines, knowing that higher courts are likely to condone such delays if appealed. Judges who enforce these deadlines may face pressure from the bar, potentially affecting their career progression as they risk being labelled 'difficult' and subjected to constant complaints.

The performance evaluation system for judges of the district judiciary, known as the units system, exacerbates these challenges. Judges are awarded "units" or points based on the type and number of cases they dispose of, with different weights assigned to different case types. To maximise their units, judges might prioritise and dispose of the simpler cases quickly, allowing them to accumulate points more quickly. This can lead to a situation where judges focus on less complex cases to boost their unit count, potentially neglecting the more challenging cases that require substantial judicial intervention. By favouring cases that are easier to resolve and quicker to process, judges may inadvertently contribute to delays in more complex cases, which are sidelined or postponed.

## The impact down the line

Lawyers significantly impact court scheduling and case management. Often handling multiple cases scheduled across different courts on the same day, they strategically decide about which cases to attend to based on factors such as the likelihood of adjournment, the importance of the case, or the perceived mood and predispositions of a particular judge. This often leads to adjournments in some matters.

The lack of predictability in case hearings exacerbates this issue. Lawyers often do not have a clear understanding of when a particular case will be heard or the likelihood of adjournment, making it difficult to plan their schedules. Moreover, lawyers may request adjournments or deliberately delay proceedings if they perceive

that the judge is likely to grant an adjournment, especially if their client has expressly asked for it. This lack of predictability and the strategic behaviour it encourages only adds to the congestion in court schedules.

The tendency to extend stays and interim orders further diminishes the interest of lawyers in actively pursuing a case. For litigants, obtaining a stay on a case can often be seen as a victory, especially in civil matters where a stay order may prevent any immediate adverse action. Consequently, once a stay is obtained, there may be little incentive in pushing for a speedy resolution, contributing to the backlog of cases.

Before a trial begins, the judge sets a schedule with specific dates for each witness's testimony, and, accordingly, summons are issued. However, the timing of testimonies often becomes unpredictable due to changes in the court schedule, adjournments, and procedural delays. This disrupts daily life for witnesses, forcing them to leave their jobs, make travel arrangements and put personal responsibilities on hold, often without knowing when they would have to testify. The lack of a predictable schedule frustrates witnesses, is a financial strain, discourages their court appearances and contributes to trial delays.

## Need for holistic reform

To address court scheduling issues, a holistic approach is needed that goes beyond rules and timelines, and which focuses on incentivising all actors. Judges should be evaluated not just by the number of cases they dispose of but also by their ability to manage and resolve more complex cases within the prescribed timelines. The unit system needs reform so as to prioritise complex cases that require substantial judicial intervention, encouraging a broader range of case management. Lawyers need better scheduling information to reduce uncertainty and avoid unnecessary adjournments. Courts should implement predictable scheduling systems, introduce penalties for delays, and reward lawyers who adhere to schedules. Litigants should be discouraged from using stay orders and interim reliefs as delay tactics by making such orders temporary and subject to regular review. Witnesses require more predictability in court appearances, with advance notice and sufficient compensation beyond travel expenses to encourage their participation.

Technological solutions could enhance case management, providing real-time updates and the monitoring of timelines. Courts can adopt a data-driven approach to identify and address scheduling bottlenecks, improving overall judicial efficiency. Without reform that accounts for the human side of the system, any procedural changes will remain just that – paper reforms.



**GS Paper 02 : Indian Polity :Judiciary**

**UPSC Mains Practice Question : Discuss the factors contributing to the staggering backlog of cases in the Indian Supreme Court. Discuss key reforms needed to address the challenges faced by the Supreme Court. (250 w/15m)**

**Context :**

- At the National Conference of the District Judiciary, President Droupadi Murmu emphasized the problem of court delays.
- She pointed out that these delays are causing people to hesitate in approaching the courts.

**Introduction**

- Last month, the President of India, Droupadi Murmu, highlighted the issue of court delays. In her speech at the National Conference of the District Judiciary, she noted that these delays are what are making people hesitate approaching courts, as they fear that the pursuit of justice will complicate their lives further.
- She referred to this as the 'black coat syndrome', likening it to white coat hypertension — a condition where patients exhibit elevated blood pressure in clinical settings.
- While the term is symbolic, it underscores a real issue — that many people are reluctant to engage in litigation due to the gruelling process, which includes endless adjournments, numerous appeals, and escalating legal costs.

**Factors Contributing to Judicial Delays**

- A significant factor contributing to these delays is the Indian judiciary's scheduling and case management practices.
- Effective case management: involving clear timelines for filing documents, conducting witness examinations, scheduling hearings, and limiting adjournments, are crucial.
- Without these, the court system struggles to move cases forward efficiently, exacerbating delays and frustrations faced by litigants.
- Court scheduling and case management have long been challenges within the Indian judiciary, significantly contributing to delays.
- Mechanisms such as Case Flow Management Rules were introduced for district and High Courts to streamline processes, set timelines, and create more predictable court schedules.
- **Inconsistent implementation:** However, despite their introduction in the late 2000s, these rules and other initiatives, that were aimed at improving scheduling and timely case disposal, have been inconsistently implemented, and with limited impact.

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## At the level of the district judiciary

- ➔ **Challenge of implementing stricter rules:** While stricter rules and rigid timelines are often suggested as solutions, the reality is more complex.
  - It is crucial to recognise that all participants in the judicial system — judges, lawyers, litigants and witnesses — act with rationality and good intentions, though their actions are often influenced by various constraints and incentives.

## Court scheduling issues are deeply rooted in the complex interplay of these motivations

- ➔ **A holistic approach:** that considers the psychological and behavioural aspects of all stakeholders is essential for meaningful progress. Let us look at the challenges in the district judiciary.

## Challenges in the District Judiciary

- ➔ **Role of Judges:** Judges have a crucial role in enforcing case management timelines.
  - But systemic pressures often compromise their ability to do so. Judges in the district judiciary have to prioritise cases, with directions from higher courts to dispose of these cases within a specific time or where target disposal numbers have been provided for case types.
- ➔ **Impact of oversight:** While such oversight aims to ensure timely justice, higher courts often impose deadlines without fully considering their impact on the overall scheduling in district courts.
  - This forces district courts to allocate disproportionate resources to expedite certain cases, disrupting scheduling and creating delays.
  - The Supreme Court of India and various High Courts have criticised this trend, noting that such directives often disrupt case management in district courts.
  - A more balanced approach is needed, wherein higher courts' deadlines align with district court operational realities to avoid exacerbating delays.
- ➔ **Lack of Incentives for Judges to enforce deadlines:** Various statutes and rules impose timelines for the disposing of cases or filing documents, but judges are often not incentivised to adhere to these deadlines.
  - When extensions are permissible, judges frequently grant them beyond statutory deadlines, knowing that higher courts are likely to condone such delays if appealed.
  - Judges who enforce these deadlines may face pressure from the bar, potentially affecting their career progression as they risk being labelled 'difficult' and subjected to constant complaints.

## The Performance Evaluation System for District Judges

- ➔ **The Units System:** The performance evaluation system for judges of the district judiciary, known as the units system, exacerbates these challenges.
  - Judges are awarded "units" or points based on the type and number of cases they dispose of, with different weights assigned to different case types.
  - To maximise their units, judges might prioritise and dispose of the simpler cases quickly, allowing them to accumulate points more quickly.

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## Daily News Analysis

- ➔ **Focus on simpler cases:** This can lead to a situation where judges focus on less complex cases to boost their unit count, potentially neglecting the more challenging cases that require substantial judicial intervention.
  - By favouring cases that are easier to resolve and quicker to process, judges may inadvertently contribute to delays in more complex cases, which are sidelined or postponed.

### The impact down the line

- ➔ **Strategic Decision-Making by Lawyers:** Lawyers significantly impact court scheduling and case management.
  - Often handling multiple cases scheduled across different courts on the same day, they strategically decide about which cases to attend to based on factors such as the likelihood of adjournment, the importance of the case, or the perceived mood and predispositions of a particular judge.
  - This often leads to adjournments in some matters.
- ➔ **Unpredictability in case hearings:** exacerbates this issue. Lawyers often do not have a clear understanding of when a particular case will be heard or the likelihood of adjournment, making it difficult to plan their schedules.
  - Moreover, lawyers may request adjournments or deliberately delay proceedings if they perceive that the judge is likely to grant an adjournment, especially if their client has expressly asked for it.
  - This lack of predictability and the strategic behaviour it encourages only adds to the congestion in court schedules.
- ➔ **Impact on Court Congestion:** The tendency to extend stays and interim orders further diminishes the interest of lawyers in actively pursuing a case.
  - For litigants, obtaining a stay on a case can often be seen as a victory, especially in civil matters where a stay order may prevent any immediate adverse action.
  - Consequently, once a stay is obtained, there may be little incentive in pushing for a speedy resolution, contributing to the backlog of cases.

### Influence of Stays and Interim Orders

- ➔ Before a trial begins, the judge sets a schedule with specific dates for each witness's testimony, and, accordingly, summons are issued.
- ➔ However, the timing of testimonies often becomes unpredictable due to changes in the court schedule, adjournments, and procedural delays.
- ➔ This disrupts daily life for witnesses, forcing them to leave their jobs, make travel arrangements and put personal responsibilities on hold, often without knowing when they would have to testify.
- ➔ The lack of a predictable schedule frustrates witnesses, is a financial strain, discourages their court appearances and contributes to trial delays.

### Way forward: Need for holistic reform

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## Daily News Analysis

- ➔ **Holistic approach:** To address court scheduling issues, a holistic approach is needed that goes beyond rules and timelines, and which focuses on incentivising all actors.
- ➔ **Evaluation:** Judges should be evaluated not just by the number of cases they dispose of but also by their ability to manage and resolve more complex cases within the prescribed timelines.
- ➔ **The unit system needs reform:** so as to prioritise complex cases that require substantial judicial intervention, encouraging a broader range of case management.
- ➔ **Lawyers need better scheduling information:** to reduce uncertainty and avoid unnecessary adjournments.
  - Courts should implement predictable scheduling systems, introduce penalties for delays, and reward lawyers who adhere to schedules.
- ➔ **Avoiding stay orders:** Litigants should be discouraged from using stay orders and interim reliefs as delay tactics by making such orders temporary and subject to regular review.
  - Witnesses require more predictability in court appearances, with advance notice and sufficient compensation beyond travel expenses to encourage their participation.

### Conclusion

- ➔ Technological solutions could enhance case management, providing real-time updates and the monitoring of timelines.
- ➔ Courts can adopt a data-driven approach to identify and address scheduling bottlenecks, improving overall judicial efficiency.
- ➔ Without reform that accounts for the human side of the system, any procedural changes will remain just that — paper reforms.