



# The Hindu Important News Articles & Editorial For UPSC CSE Tuesday, 22 April, 2025

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### Page 01: GS 2: International relations

In recent years, India-U.S. relations have evolved beyond traditional diplomacy to encompass strategic convergence, technology partnerships, and trade negotiations. The recent visit of U.S. Vice-President J.D. Vance to India marked another step in strengthening bilateral ties, with "significant progress" reported on the Bilateral Trade Agreement (BTA).

# Modi, Vance see 'significant progress' in trade talks

PM reviews bilateral ties with U.S. Vice-President, hosts his family for dinner; no new agreements announced as earlier expected; no mention of tariff, visa revocation issues in PMO statement; Modi also discusses India-U.S. road map that seeks to build on Mr. Trump's 'Make America Great Again' slogan and New Delhi's 'Viksit Bharat 2047' plans

Suhasini Haidar

elcoming "significant gress" in talks for a Bilateral Trade Agreement (BTA), Prime Minister Narendra Modi and U.S. Vice-President J.D. Vance met in Delhi on Monday, and reviewed plans for India-U.S. cooperation, the Prime Minister's Office (PMO) said.

Mr. Vance's office said the two leaders "formally announced the finalisation of the Terms of Reference for the negotiations", even as Indian and U.S. officials were set to begin another round of BTA talks in Washington this week.

Mr. Modi met with Mr. Vance along with senior officials from both sides, before hosting Mr. Vance, his Chilukuri Vance, and their children for dinner at his residence.

However, they did not

launch the TRUST Technology Partnership as had been earlier expected.

#### Trump's visit

Mr. Modi said he looked forward to U.S. President Donald Trump's visit to India "later this year", when India will host the U.S.-India-Japan-Australia Quad Summit.

"The BTA is expected to create new opportunities of growth for workers, farmers, and entrepreneurs in both countries, Mr. Vance's office said, calling the agreement an "opportunity to negotiate a new and modern trade agreement" to increase "bilateral trade and supply-chain integration". Talks for a BTA, that

were announced during Mr. Modi's meeting with Mr. Trump in February, are discussing the first tranche of the agreement due to be announced during Mr. Trump's India visit, includ-



U.S. Vice-President J.D. Vance and family with Prime Minister Narendra Modi at his residence in New Delhi on Monday, REUTERS

ing reducing tariffs in a number of areas. However, there has been little indication of a breakthrough on issues like market access in agriculture, and the revocation of the digital equalisation levy and other mea-

sures by India, so far. "[The leaders] welcomed the significant progress in the negotiations for a mutually beneficial India-U.S. Bilateral Trade Agreement focused on the welfare of the people of the two countries," the PMO said in its statement. "They noted continued efforts towards enhancing cooperation in energy, defence, strategic technologies and areas." The statement, however, made no mention on whether the leaders discussed more testy issues, including U.S. tariffs and a crackdown on student visas by the Trump administration which may

force many Indians to return without completing their studies

Mr. Modi also discussed the India-U.S. road map that seeks to build on Mr. Trump's "Make America Great Again (MAGA)" slogan and New Delhi's plans for "Viksit Bharat (Developed India) 2047", the statement said. National Security Adviser Ajit Doval and External Affairs Minister S. Jaishankar were pre-sent at the talks at the Prime Minister's residence, along with senior U.S. officials, and U.S. Charge d'Affaires Jorgan

### Regional, global issues

'The two leaders also exchanged views on various regional and global issues of mutual interest and called for dialogue and diplomacy as the way forward," the statement said, but did not mention specifically whether the Ukraine war or the conflict in Gaza were discussed.

Earlier, the visit had some uncertain moments as news came in of Pope Francis' sudden demise in the Vatican, leading to questions about whether Mr. Vance, a Catholic, who had met the Pope only on Sunday after Easter mass, would curtail his plans, or whether the Prime Minister would put off the official dinner. However, the visit proceeded as scheduled, with Mr. Vance writing a post on X just after learning of the Pope's passing. "I was happy to see him yesterday, though he was obviously very ill," Mr. Vance said, expressing condolences.

Mr. Vance, his family and the U.S. delegation consisting of U.S. NSC point-person for South and Central Asia Ricky Gill, Pentagon and State department officials had landed in Delhi's Palam airport on

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Monday morning, where he was received by Railway Minister Ashwini Vaishnaw. Mr. Vance and Ms. Usha Vance then brought their two sons, Ewan and Vivek, and daughter Mirabel off the plane dressed in Indian clothes. Although an earlier plan to visit the Red Fort was cancelled, the Vances went to the Akshardham temple and then shopped at the government-owned Cottage Emporium for Indian handicrafts

The Vances will spend Tuesday in Jaipur at private engagements and cultural events, as well as a visit to the Amer Fort and the U.S. Vice-President will give a public address at the Rajasthan International Centre in the afternoon. On Wednesday, they will visit the Taj Mahal monument in Agra before returning to Jaipur the same day and flying back to the U.S. on Thursday.

### **Key Developments:**

- 1. Progress on BTA (Bilateral Trade Agreement):
  - Finalisation of the Terms of Reference for the agreement negotiations.
  - Focus areas include agriculture, trade expansion, and supply chain integration.
  - Seen as a step towards a modern and mutually beneficial trade framework.
- 2. High-Level Political Engagement:
  - o PM Modi and VP Vance discussed cooperation in energy, defence, strategic technology, and regional issues.
  - Alignment between 'Viksit Bharat 2047' and Trump's 'Make America Great Again' vision was emphasized.
- 3. Lack of Breakthrough on Sensitive Issues:







- No discussion in public domain on contentious issues like U.S. tariffs, student visa restrictions, or India's digital tax policies.
- o The expected launch of the TRUST Technology Partnership was also deferred.

### **Geopolitical Context:**

- The visit comes amidst global turbulence, including the Russia-Ukraine war, Gaza conflict, and evolving Indo-Pacific dynamics.
- India is set to host the Quad Summit (India-U.S.-Japan-Australia) later this year, reaffirming its role as a strategic anchor in the region.
- The convergence on promoting dialogue and diplomacy over conflict reinforces shared democratic values.

### Significance for India:

Sector Potential Gains

Trade Boost in exports, better market access for Indian goods and services.

Employment Greater foreign investment could benefit MSMEs and startups.

Strategic Partnerships Counterbalance to China's influence in the Indo-Pacific.

Diaspora Diplomacy Strengthening the position of Indian professionals and students in the U.S.

### Challenges & Unresolved Issues:

- 1. Tightening of Student Visas: May impact Indian students in U.S. universities.
- 2. Digital Trade Disputes: U.S. dissatisfaction with India's digital tax regime.
- 3. Agriculture Market Access: India's protectionist policies remain a concern.
- 4. Technology Transfer Delays: TRUST initiative remains unlaunched.

### Way Forward:

- Balanced Trade Approach: India must harmonize economic growth with fair market access.
- Continued Strategic Dialogue: Sensitive topics like visas and digital rules must be resolved gradually.

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- Technology & Innovation Focus: Reviving initiatives like TRUST to enable tech cooperation.
- Public Diplomacy: Strengthen trust through cultural and educational exchanges.

### **Conclusion:**

While the visit of VP J.D. Vance did not result in headline agreements, it highlighted the depth and maturity of India-U.S. relations. The progress on BTA negotiations reflects a shared strategic intent to deepen economic engagement and build a resilient partnership in a rapidly changing global order.







### **Quote:**

"True partnership is built not just on agreements, but on continuous dialogue and mutual respect. India and the U.S. are advancing on that path."

### **UPSC Mains Practice Question**

**Ques :**"India-U.S. relations are evolving from strategic partnership to strategic convergence." In light of recent developments, critically analyze the progress and limitations in bilateral trade and technological cooperation. **(250 Words)** 









### Page 06: GS 2: Indian Polity

On the occasion of Civil Services Day, Cabinet Secretary T.V. Somanathan credited the All India Services (AIS) and civil servants for ensuring smooth, constitutional, and peaceful transfer of power in India — a contrast to political instability in several neighbouring countries. His remarks underline the institutional strength and democratic maturity of India, facilitated significantly by a non-partisan, competent civil service.

# 'Civil services should get credit for smooth transfer of power in India'

Vijaita Singh NEW DELHI

Cabinet Secretary T.V. Somanathan said on Monday that unlike other countries in the neighbourhood that have seen military coup and violent overthrow of governments, India has always seen a smooth transfer of power for which the credit should go to the All India Services (AIS) and the civil services officials.

He said it was the duty of the civil services to preserve the constitutional order such as democracy, rule of law, national unity and the federal structure.

The Indian Administrative Service (IAS) officer said that in a democracy, it is the elected government which has the mandate, and it is the duty of the civil servant to assist the government in carrying out its policies. He said the officers should be politically neutral "because we don't serve only those who be-



T.V. Somanathan

long to some particular party or a community."

### Need for competence

Speaking on the occasion of Civil Services Day, Mr. Somanathan added that lateral entry will be a necessity in future and there was a need for greater competence and subject matter expertise among civil servants as the era of the good generalist was over.

"I think without the All India Services and the central services, free and fair elections would not be possible. Governments have been defeated both at the Centre and in the States in elections conducted by civil servants. We have smooth transfer of power whenever a government changes. We don't have tanks on the streets when there's a change of government. We also have imposition of President's Rule. which passes off with no problem at all... That is because of the civil services. So, this is an unqualified success," the country's top bureaucrat said during an interactive session on Civil Services Reforms - Challenges and Opportunities.

He said that ever since transparency was introduced in the Annual Performance Assessment Report system for the AIS officers, it had become useless. "And particularly in IAS, this is a disease. Everybody is between 9 and 10 (rating)... There are crooks

in our service. There are bad people in the service. How can everybody be 9 to 10," Mr. Somanathan asked while responding to an Uttar Pradesh cadre IAS officer who suggested transparency in empanelment process of officers at joint secretary rank and above.

When Bidur Kant Jha, an officer appointed in the Ministry of Road Transport and Highways through the lateral entry mode, asked about the low salary structure, the Cabinet Secretary remarked, "Pay is not part of today's discussion.... you give it to the Pay Commission when it comes, but we are not talking about pay and benefits. So, if we are underpaid, we have alternative careers. We can pursue them."

Earlier, while inaugurating the conference, Prime Minister Narendra Modi said that India's bureaucracy and policymaking cannot operate on outdated frameworks.

### **Key Highlights from the Speech:**

- 1. Preserving Constitutional Order:
  - o Civil servants are custodians of democracy, federalism, rule of law, and national unity.







 Smooth change of governments — without military intervention or street unrest — is a testament to India's stable administrative structure.

### 2. Political Neutrality:

- Civil servants must remain impartial and serve every government and citizen, regardless of ideology, party, or identity.
- 3. Civil Services and Electoral Integrity:
  - Elections conducted by civil servants have led to governments being peacefully voted out, enhancing faith in democratic institutions.
  - Even the imposition of President's Rule has happened peacefully again showcasing the maturity of Indian governance.

### 4. Need for Reforms:

- o Emphasized lateral entry, domain expertise, and moving beyond the "good generalist" model.
- Criticized the current Annual Performance Appraisal System (APAR) for being inflated and ineffective.
- 5. Candid Views on Pay Structure:
  - Deflected questions on salary concerns, asserting that civil servants who are underpaid can choose other career paths.
- 6. Prime Minister's Address:
  - o PM Modi urged the bureaucracy to shed outdated policy frameworks and embrace innovation and agility in governance.

### **Analytical Perspective:**

Dimension	Observation	
Institutional Stability	Civil services have been a neutral bridge between successive governments, ensuring continuity in governance.	
Merit vs. Patronage	The need for transparency in empanelment and tackling corruption within services reflects ongoing administrative challenges.	
Reform Imperatives	Lateral entry, digital governance, and performance-linked promotions are crucial for revitalizing bureaucracy.	
Comparative Advantage	Unlike nations with military coups (e.g., Pakistan, Myanmar), India's rule-based governance is a global democratic model.	

### **Conclusion:**

The role of the Indian civil services in maintaining peaceful transitions of power is an underappreciated cornerstone of Indian democracy. While their contribution is undeniable, there is a parallel need to reform,







professionalize, and depoliticize the services to meet the aspirations of a New India. As India progresses toward its "Viksit Bharat 2047" vision, the civil services must evolve in function, structure, and mindset.

### **Quote for Enrichment:**

"A nation's stability lies not just in its Constitution, but in the character of those who administer it."

### **UPSC Mains Practice Question**

**Ques**: "Civil services have played a pivotal role in maintaining democratic continuity in India." Critically examine this statement in light of recent observations by the Cabinet Secretary. **(250 words)** 









### Page: 07: GS 3: Science and Technology

The discovery of the Bullseye Galaxy (LEDA 1313424) with its unique nine-ring structure presents a rare opportunity in modern astrophysics. Scientists suggest this galaxy may be in the process of evolving into a Giant Low Surface Brightness (GLSB) galaxy, offering a possible window into the distribution and behavior of dark matter—one of the most puzzling and unobservable components of the universe.

### **Bullseye! Galaxy with nine rings** may reveal dark matter secrets

Researchers found signs that a blue dwarf galaxy had passed through the centre of the Bullseye Galaxy, and the interaction could have led stars to

team of international researchers recently in researchers recently in discovered a galaxy with nine "serendiptous discovery" because previous ringed galaxies have only displayed two or three rings at best. Using the Hubble space telescope, the team confirmed the presence of eight rings, while data from the W.M. Keck Observatory in Itawaii confirmed the existence of the minh ring. This unusual galaxy has been named LEDA ISB3449 but its common name is more memorable: the Bullseye Galaxy. The story of how its rings could have formed may render it more memorable. team of international

The story of how its rings could have formed may render it more memorable.

At this trail of evidence when the researches analysed the data observatory, they found signs that a blue dwarf galaxy, located at the immediate centre-left in an image, had passed through the centre of the Bullseye Galaxy is unique stape.

As evidence of his interaction gave the Bullseye Galaxy is unique shape.

As evidence of his interaction gave the Bullseye Galaxy is unique shape.

As evidence of his interaction, the connecting the two galaxies even though they are separated by 120,000 lightycars (or 1.2 bullion billion lam). This sail the more remarkable considering the Bullseye Galaxy is nearly 2.5-times larger than the Milky Way with a diameter of 2.5,0000 lightycars.

On cosmic timescale; selection of the sail the more remarkable considering the Bullseye Galaxy is nearly 2.5-times larger than the Milky Way with a diameter of 2.5,0000 lightycars.

On cosmic timescale; selection of the sail the more remarkable considering the Bullseye Galaxy straight path through the Bullseye Galaxy caused gas in the latter to ripple back and forth in waves, creating new places of star formation. The interaction didn't after the orbits of individual stars but it caused continue to evolve and, as a result, will have thee star-filled rings only for a short interval of time. This means the astronomers captured an intriguing image of a multili-ring galaxy in a special moment.

star-filled rings only for a short interval of time. This means the astronomers captured an intriguing image of a multi-ring galasy in a special moment. For other astronomers, however, the intrigue may run even deeper: the Bullseye Galaxy also contains signs that it could one day evolve into a gain ow surface brightness (GLSB) galaxy, which are important in the study of dark matter. Their findings were published in February in The Astrophysical Journal Letters.

Cosmic oddballs Low surface-brightness galaxies have a shortage of elements heavier than Low surface-brightness galaxies have a shortage of elements heavier than hydrogen and helium. They also have very little star formation despite possessing large disks filled with hydrogen, large disks filled with hydrogen, they are the star between the stars. Scientists haven't been able to explain this paradox. These galaxies are also believed to be filled with dark matter, making them excellent appears of study! if scientists are



### to understand this still-mysterious form of

These galaxies also have a mere in IThese galaxies also have a mere in uniform distribution of mass near their centres —which is at odds with the standard model of cosmology, which predicts the centres of galaxies to be a lot more dense. This discrepancy is another challenge scientists are trying to overcome with more data and better theories.

overcome with more data and better theories.
Giant low surface-brightness (GLSB) galaxies are the largest of the low surface-brightness galaxies. All GLSB galaxies are the largest of the low surface-brightness galaxies. All GLSB galaxies are truly colosal. Their galaxies for the surface of the largest spiral galaxies for most famous member, called Malin I, is roughly 6.5 times wider than the Mility Way and one of the largest spiral galaxies known.
December of the largest spiral galaxies that prosesses why officiary of the properties of the largest spiral galaxies that prosesses why officiary of the properties of the largest spiral galaxies and better areas. She added that the mass of black holes

at the centers of these gazaxes is also lower than usual, meaning they aren't fully evolved. It was a supply in which LSBs deviate from the pattern stat unite other galaxies, astronomers have struggled to understand them. Their simulations, which are based on the standard model of cosmology, predict these galaxies' hydrogen content, the surface brightness of their disks, and their density profiles—only for them to be at odds with what astronomers see in the data collected by telescopes and observatories.

The complete is the surface in some way incomplete. There are some ideas to resolve the disagreement. Das offered one example: "Previous studies have indicated that the dark-matter halos surrounding these galaxies spin more rapidly than expected," a process she likened to "how clay behaves on a spinning potter's wheel. As the wheel turns, the edga spreads and thins out. In the same way, as the called the dark-matter halos rotate rapidly, the



of these (GLSB) galaxies is also lov than usual, meaning they aren't fully evolved

MOUSUMI DAS

material within them expands outward, creating a large, disk-like shape with a low density," and eventually GLSB galaxies. "And their disks are not dense enough ceasily form stars." Studying GLSB galaxies in more detail could help check whether this idea, and others like It, could be true. This in turn makes confirming whether newfound galaxies dish the Ballaye could be GLSB galaxies in thure more important.

New insight
The international team of researchers reported that the size of the Bullseye Galaxy's extended disk and hydrogen content relative to its stellar mass are comparable to that of other GLSB in the transition from a finger galaxy to a GLSB galaxy is still required.

Ms. Das said, "The transition from a ringed galaxy to a GLSB galaxy is still a theory that is being explored" and that some GLSB galaxies may have formed galaxies," as in the Bullseye Galaxy's case. But she also said most GLSB galaxies are glauxies, as in the Bullseye Galaxy's case. But she also said most GLSB galaxies are found in isolation—i.e. not surrounded by other galaxies nearby—making it less likely for them to have experienced such collisions. In other words, confirming Bullsey's candidacy as a pre-GLSB galaxy is complicated.

A 10th ring?

At this moment, astronomers have an opportunity to obtain the first direct observational evidence of a collisional ring galaxy turning into a GLSB galaxy –

onservanotar evolence or a Chinsolar or ing galaxy running into a GLSB galaxy – Mr. Das expressed optimism because. Mr. Das expressed optimism because, when the said, the new study offers compelling evidence of an evolutionary link between the Bullseye Galaxy and GLSB galaxies. The authors of the new study have also said the Bullseye Galaxy may once have had a 10th ring that has since faded. They added that over billions of years following the collision, the nine rings will also slowly drift out and fade away, leaving behind a GLSB galaxy.

Mr. Das added that more information about the formation of GLSB galaxies could reveal new insights into the distribution of dark matter in the universe. Eventually, "if the [current] theoretical models are correct, we should see GLSB-like galaxies in the results of cosmological simulations."

cosmological simulations."
(Shreejaya Karantha is a freelance science writer and a content writer and research specialist at The Secrets of The Universe. shreejayakaranth@gmail.con

### What Makes the Discovery Unique?







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- The Bullseye Galaxy is the first known galaxy with nine rings, a result of a blue dwarf galaxy colliding head-on through its center nearly 50 million years ago.
- The interaction caused ripples of gas and star formation, leading to concentric ring formations—like a cosmic "bullseye".

### Scientific Significance:

Area		Relevance
Galactic Evolution		Offers real-time evidence of how head-on galactic collisions can create ring structures and lead to the formation of larger diffuse galaxies.
GLSB Galaxy		Provides a rare chance to observe the transformation of a ringed galaxy into a Giant
Formation		Low Surface Brightness (GLSB) galaxy.
Dark Matter		GLSBs are suspected to contain high amounts of dark matter due to their unique
Distribution		structure and low star formation.
Testing Cosmol	logi <mark>ca</mark>	l Observations challenge the standard cosmological model, which fails to explain
Models		many GLSB properties—forcing scientists to rethink galactic dynamics.

### What are GLSB Galaxies?

- GLSB (Giant Low Surface Brightness) galaxies are huge spiral galaxies with large disks but low stellar density and low surface brightness.
- They typically have:
  - Less star formation despite abundant hydrogen.
  - Low-mass black holes at their centers.
  - o A uniform mass distribution near their core (unlike standard dense galaxy centers).
  - Potential to be dark matter-rich systems.

Example: Malin 1 – 6.5 times wider than the Milky Way.

### Link to Dark Matter:

- GLSBs deviate from expected models of galaxy formation and evolution.
- The presence of dark-matter halos spinning rapidly might explain their large, low-density structures.
- The Bullseye Galaxy provides an opportunity to validate or challenge existing theories regarding dark matter behavior.

Implications for India and Global Scientific Research:







- Indian astrophysicist Dr. Mousumi Das emphasized that such ring galaxies may be transitional forms leading to GLSBs.
- These findings, if confirmed through further observation and simulation, could:
  - o Enhance global understanding of cosmic structure formation.
  - Contribute to India's space science research, particularly through institutions like the Indian Institute of Astrophysics and collaborations with international telescopes.

### **Challenges and the Road Ahead:**

- Though promising, confirming Bullseye as a GLSB candidate is complex:
  - o Most GLSBs are isolated, while Bullseye had a collision-based origin.
  - o Further longitudinal studies and simulations are needed.
- There is speculation that a 10th ring may have existed but faded—a reminder of the fleeting nature of cosmic features

### Conclusion:

The Bullseye Galaxy's discovery opens a new frontier in observational cosmology, linking galactic collisions with dark matter research and galactic morphology. If confirmed, it could be the first real-time case of a ring galaxy transforming into a GLSB galaxy, potentially reshaping our understanding of the invisible forces that govern the universe.

### Quote for enrichment:

"In astronomy, what we see is important, but what we can't see — like dark matter — might define the fate of galaxies themselves."

### **UPSC MainsPractice Question**

**Ques**: "The Bullseye Galaxy may hold the key to understanding the evolution of low surface brightness galaxies and the distribution of dark matter." Discuss in the context of recent astronomical findings. (250 words)







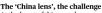
### Page 08: GS 2: International Relations

India and China, as two Asian giants and ancient civilizations, mark 75 years of diplomatic ties in 2025. However, this milestone arrives not with celebration, but with caution. The relationship has evolved from Nehruvian idealism to a cold, calculated geopolitical competition, shaped by border tensions, strategic mistrust, economic entanglements, and regional rivalry.

Former Foreign Secretary Nirupama Rao emphasizes that it is not a time for sentiment, but for strategy one that ensures military preparedness, economic resilience, and diplomatic balance.

### India, China at 75 - a time for strategy, not sentiment

s India and China mark 75 years of diplomatic ties, we find ourselves not merely at a commemorative milestone but also at a pivotal juncture in Asian and global geopolitics. The relationship, once rooted in idealistic visions of Asian solidarity, has become a tightrope walk across a landscape defined by contested borders, strategic rivalry and deep mistrust. Yet, it is also a relationship layered with opportunities for cooperation, economic interdependence and a shared responsibility for regional stability.



At the heart of this complex engagement is the stark reality that China is today the single most influential external factor shaping India's foreign policy. From border infrastructure to trade diversification and defence cooperation, nearly every strategic decision India makes is filtered through the "China lens". It is a structural challenge – one that requires us to balance deterrence with dialogue, sovereignty with economic interdependence, and competition with calibrated coexistence

The 1962 war remains a traumatic marker in our bilateral history, reinforced in 2020 by the deadly Galwan Valley clash, which reopened old wounds and catalysed a shift in India's China policy. No longer can engagement paper over our fundamental differences. The Line of Actual Control (LAC) remains tense, heavily militarised and vulnerable to miscalculation. Over 60,000 troops are now permanently deployed in Easter. Ladakh, while both countries continue to fortify infrastructure on their respective sides.

Yet, military vigilance is only one piece of the puzzle. India's trade imbalance with China touched almost \$100 billion in 2024-25; yet, Beijing is one of India's largest trading partners Despite efforts to ban Chinese apps and restrict certain investments, we remain economically entangled. Our dependence on Chinese components in sectors such as pharmaceuticals and electronics highlights a paradox: we deter at the border but depend on the marketplace. Full decoupling is neither feasible nor desirable in the

short term.
This is why India's approach has evolved into what can best be described as "competitive



Nirupama Rao is a former Foreign Secretary

and ensuring control over potentially adversarial situations. Our neighbourhood reflects the intensity of this competition. China's growing footprint in South Asia - from the Hambantota Port in Sri Lanka to the Pokhara Airport in Nepal and large infrastructure loans in the Maldives – has challenged India's traditional role as the regional anchor. While India has responded with development aid, defence cooperation, and connectivity projects, and demonstrating its effectiveness as first-responder in times of crisis, it must now go beyond reactive diplomacy to proactive, long-term engagement that wins hearts, not just headlines.

The recent remarks made by Bangladesh's interim leader Mohammad Yunus in Beijing – highlighting India's northeast as landlocked – were diplomatically charged. Although geographically accurate, the setting and subtext have raised concerns in New Delhi. Comments such as these reinforce China's strategic framing and underline the urgency for India to close infrastructure gaps, build trust with neighbours, and present itself as an even more reliable and responsive regional partner. Influence today is as much about narratives as it is about roads and

### The America factor

India's position on China is further complicated by the return of Donald Trump to the White House. Mr. Trump's second term has revived unilateralism, weakened multilateralism, and sharpened U.S.-China rivalry. India may well find itself under pressure to align more closely with Washington, especially in defence cooperation and Indo-Pacific security. Yet, we must tread carefully. Strategic autonomy remains India's north star – and deeper ties with the U.S. must be balanced with the need to manage any boiling-over of antagonism with China. Prime Minister Narendra Modi's rem

the Lex Fridman podcast in March 2025 signalled a subtle recalibration. By evoking ancient India-China synergy and emphasising dialogue, he articulated a vision of "healthy competition" and mutual growth. While some see this as conciliatory, it is better understood as strategic storytelling – a message to Beijing that India is open to engagement, a signal to Washington of independent judgement, and a reassurance to

domestic audiences of a steady hand at the helm. China's response was positive. Foreign Ministry spokesperson Mao Ning and state media welcomed Mr. Modi's "pragmatic approach", reinforcing a rare moment of diplomatic alignment. Verification patrolling along the LAC resumed in January 2025, signalling tentative steps toward de-escalation. China has agreed to hold an early meeting of the Expert Level

Mechanism on hydrological data-sharing on rivers, and discussions are underway to reopen the Kailash Mansarovar Yatra and restart direct flights. These may appear symbolic, but they indicate that both sides are testing waters for limited rapprochement – what one might call a thaw without illusions.

However, the underlying risks remain unchanged. The planned dam by China on the Yarlung Tsangpo (the Brahmaputra) near Arunachal Pradesh has rekindled concerns about ecological security and water weaponisation. India has no water-sharing treaty with China, and transparency remains low. The potential for mismanagement – or deliberate manipulation of water flows presents a new dimension to the bilateral equation, one where sovereignty, environment, and mis-trust intersect in volatile

### The framework of a China policy

India's China policy must therefore rest on four pillars: military readiness, economic diversification, diplomatic engagement, and narrative control. We must deter without provoking, trade without depending, and ensure skilful negotiation to safeguard interests. This demands sharper strategic communication, faster execution of regional projects, and a foreign policy mindset that thinks in decades, not just headlines. As India's Foreign Secretary Vikram Misri recently said, the "three mutuals" – respect, sensitivity, and interest - must guide our ay forward.

In a recent oped in *The Straits Times* (April 10,

2025), this writer had proposed that India and China embrace a model of "competitive coexistence" – not to downplay our rivalry, but to manage it responsibly. Asia can no longer rely solely on U.S. leadership in an era of global solety on U.S. leadership in an era of global disruption. In needs a home-grown security architecture where India and China act as custodians of stability. For that, we must build guardrails – military, diplomatic, and economic to prevent friction from becoming fire.

As we mark 75 years of bilateral ties, let us he bound by norstulia or regrenomy. This is a

be bound by nostalgia or ceremony. This is a moment for strategy, not sentiment. India's goal must be clear: to define its place in a world reshaped by flux, rivalry, and shifting alliances. China will remain a structural challenge – but it is also a mirror, forcing us to confront our capabilities, choices, and ambitions. In that mirror, we must see not a straitiacket, but an opportunity for India to lead.

(Adapted from the Gaston Sigur Memorial Lecture delivered by the writer at the Elliott School of International Affairs, George Washington University, Washington DC, on April 15, 2025)





As India and

China mark 75





### **Core Strategic Themes:**

- 1. From Engagement to Strategic Vigilance
  - Post-Galwan (2020), India's China policy shifted from engagement-based diplomacy to strategic containment.
  - Over 60,000 troops permanently stationed in Eastern Ladakh; LAC remains tense.
  - Despite military friction, engagement continues via diplomatic channels like the Expert Level Mechanism (ELM) and BRICS, SCO platforms.
- 2. "China Lens" in Foreign Policy
  - Nearly all Indian strategic decisions from border infrastructure to tech regulations are now made through the "China lens".
  - India's balancing act: Deterrence without provocation, competition without confrontation.
- 3. Competitive Coexistence A Defining Doctrine
  - India seeks regional parity, not dependence, and competes in areas like infrastructure diplomacy (e.g., BIMSTEC, SAGAR), vaccine diplomacy, and strategic connectivity projects.
  - Despite banning apps and tightening FDI rules, India's trade deficit with China remains near \$100 billion, indicating deep economic interlinkages.

### Regional Challenges and China's Footprint in South Asia:

### Country Chinese Strategic Presence India's Response

Sri Lanka Hambantota Port, Colombo Port City SAGAR doctrine, currency swap, fuel aid

Nepal Pokhara Airport, BRI talks Soft diplomacy, high-level visits

Maldives Infrastructure loans, new govt tilt

First-responder diplomacy, radar installations

India must shift from reactive diplomacy to long-term regional engagement to prevent strategic encirclement.

### **Narrative Battles and Strategic Messaging:**

- Influence now depends not just on ports and roads, but also on perceptions.
- Bangladesh's comment about India's northeast being "landlocked" in Beijing was symbolic of China's strategic narrative framing.
- India must invest in regional trust, cross-border infrastructure, and narrative control through proactive diplomacy.







### **U.S. Factor and Strategic Autonomy:**

- With Trump's return to the White House, U.S.-China rivalry may intensify.
- India could face pressure to align more closely with the West in Indo-Pacific dynamics.
- However, strategic autonomy remains India's core principle balancing ties with the U.S. while managing China.

### **Recent Thaw – Symbolic Yet Significant:**

- PM Modi's March 2025 remarks on the Lex Fridman podcast, emphasizing "healthy competition," received a positive response from Beijing.
- Outcomes:
  - Resumption of verification patrols on the LAC (Jan 2025)
  - o Revival of Kailash Mansarovar Yatra talks
  - Agreement on hydrological data-sharing

This reflects a "thaw without illusions" — cautious optimism amid continued mistrust.

### **Unresolved Threats:**

- China's planned dam on Yarlung Tsangpo (Brahmaputra) near Arunachal raises fears of water weaponisation.
- Absence of a water-sharing treaty, lack of hydrological transparency, and ecological risks amplify concerns.
- India must push for multilateral environmental safeguards and hydro-diplomacy frameworks.

### Policy Recommendations – A Four-Pillar China Strategy:

- 1. Military Readiness: Strategic deterrence along the LAC; maintain status quo with force posture.
- 2. Economic Diversification: Reduce dependence in pharmaceuticals, electronics, and infrastructure inputs.
- 3. Diplomatic Engagement: Continue dialogues through SCO, BRICS, and climate forums.
- 4. Narrative Control: Regional partnerships, soft power projection, and info warfare capabilities.

### **Conclusion:**

At 75 years of bilateral ties, the India-China relationship is neither friendly nor frozen — it is a nuanced interplay of rivalry and responsibility. India's strategy of "competitive coexistence" offers a path that avoids war, resists coercion, and asserts regional agency. It is time for India to lead with strategy, not sentiment — and ensure that China is not a threat to manage, but a challenge that shapes India's rise as a global power.







### **Quote for enrichment:**

"In the mirror of China, India must not see constraint, but its capacity for global leadership."

### **UPSC Mains Practice Question**

**Ques:** "India's China policy must balance competition with calibrated coexistence." Discuss in the context of recent developments in India-China relations. (250 words)









### In News: Yak

Nepal observed its first-ever 'National Yak Day' on April 20, 2025, to honor the cultural, ecological, and economic value of the yak in the Himalayan region.

### Why in the News?

- The International Centre for Integrated Mountain Development (ICIMOD) urged stakeholders to elevate the yak to its rightful place in the sustainable development agenda, especially across the Hindu Kush Himalaya (HKH) region.
- ICIMOD emphasised that indigenous communities like the Sherpa, Tamang, Thakali, Rai, and Limbu have historically protected and practiced yak herding, linking it with food security, cultural identity, and biodiversity conservation.

### Biological and Geographic Features of Yak

- Scientific Name: Wild yak: Bos mutus; Domesticated yak: Bos grunniens
- Habitat: Wild yaks inhabit alpine tundra at altitudes of 5000 to 7000 meters. They thrive in environments such as alpine meadows, alpine steppes, and desert steppes.
- Geographic distribution: Found throughout the Himalayan region, Tibetan plateau, Mongolia, and parts of South-Central Asia.
- In India, yaks are reared in Arunachal Pradesh, Sikkim, Himachal Pradesh, Uttar Pradesh, and the union territories of Jammu & Kashmir and Ladakh.

### **Physical Characteristics of Yak**

- Wild yaks are around 2 meters tall at the shoulder, while domesticated yaks are smaller.
- They have long, shaggy hair for insulation and curved horns, with larger horns in males.
- Their lung capacity is nearly three times that of cattle, with smaller red blood cells, making them highly adapted to high-altitude, low-oxygen environments.
- Yaks are herbivorous, feeding on grasses and alpine plants.

### **Uses and Socio-Economic Importance:**

- Domesticated yaks are used for milk, meat, and as pack animals, transporting goods across mountain passes.
- They are also used in climbing and trekking expeditions, capable of ascending up to 20,000 feet.







Quality education

- Yaks are often crossbred with domestic cattle to produce dzo or chauri gai, which are adaptable hybrids used in agropastoralism across altitudinal gradients.
- Conservation Status: Wild yaks are listed as 'Vulnerable' on the IUCN Red List, indicating the need for urgent conservation efforts to protect their habitats and genetic diversity.

### **UPSC PrelimsPractice Question**

Ques :Which of the following statements regarding National Yak Day observed in Nepal is/are correct?

- 1. It was observed for the first time on April 20, 2025.
- 2. It aims to highlight the cultural, ecological, and economic value of yaks in the Himalayan region.
- 3. The event was launched by the Food and Agriculture Organization (FAO) of the United Nations.

### 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

Ans: A)







# Page : 08 Editorial Analysis New pathways for India's creative economy

ew countries have a unique history of innovations and creativity that changed the world. Yet, India's tryst with creativity and innovation ranges from the arts to science, from metallurgy to medicine, from astronomy and much more. As India works towards becoming a \$5 trillion economy, it needs to rejig its approach to innovations, supported by creativity at all levels

Globally, in 2022, exports of creative services surged to \$1.4 trillion, marking a 29% increase since 2017. Creative goods exports also experienced a 19% rise, reaching \$713 billion. Collectively, the creative economy generates annual revenues exceeding \$2 trillion and supports nearly 50 million jobs worldwide.

According to the United Nations Trade and Development (UNCTAD) report on the creative economy, Creative Economy Outlook 2024, three sectors are the main contributors of the creative economy (2022): software services (41.3%), research and development (30.7%), advertising, market research and architecture (15.5%).

India's creative economy has also demonstrated significant contributions. In 2019, creative goods and services exports totalled about \$121 billion, with creative services accounting for nearly \$100 billion. The design segment alone represented 87.5% of creative goods exports, while arts and crafts contributed around 9%.

As of 2024, India's creative industry is valued at \$30 billion and employs about 8% of the country's working population. Creative exports grew by 20% in the previous year, generating more than \$11 billion.

### Creativity in creative economy

While investments into traditional creative economic sectors are booming in a country such as India, we still need to explore ways of being more creative and innovative to take the economic gains to new horizons, especially at the grass-root levels. This will ensure that such creations and innovations help local people. This will be a disruptive approach to promoting local economies. Research has shown that creativity



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India needs investments to bridge the gap between creativity and innovation; the spotlight needs to focus on the grass-roots level can be segmented into four types: deliberate and emotional; deliberate and cognitive; spontaneous and emotional, and spontaneous and cognitive. Creativity can be endogenous – triggered by one's own thoughts or imagination or exogenous – that is externally induced. It can be manifested concurrently or only episodically such as in crises or extreme climate events.

A significant part of local innovations falls into deliberate and cognitive as well as the spontaneous and cognitive segments.

Creativity precedes innovation. While creativity can be individual-based, innovation can be bootstrapped but needs an institution to support its scale or formalisation.

In a country such as India, enormous creativity exists but such creativity is not translated into innovation many a time. Creators come up with ideas while innovators translate the ideas into products and services. We need investments to bridge the gap between creativity and innovation.

Pioneering work on identifying and recognising grassroot innovations by organisations such as the Grassroots Innovations Augmentation Network (GIAN) have resulted in popularising hundreds of grassroot creative ideas.

### An example from Indonesia

Where does one start? Consider a pioneering creative solution, the Antrodam Project, that has been conceived by the students of Binus School in Bekasi, Indonesia.

The Antrodam Project began with one mission: to create a solution to flooding, a challenge that affects communities worldwide. Looking for ideas from the best source of inspiration, nature itself, the Binus team explored structures from the animal and plant kingdoms to find the perfect design.

Inspired by the nests of Indian Harvester ants, the students engineered a flood protection system that works with nature rather than against it. The ants have intricate tunnel systems that direct water away from their nests, keeping them safe and dry. The students were also inspired by natural structures such as 'rose petals and their

layered design to direct water; the lettuce leaf coral, with its intricate branching; the giant pill millipede which can roll into a compact shape; and the male frigate bird, known for its large, water-resistant throat pouch'.

This is sheer creative brilliance but what we now need are investments to scale up these creative ideas into an innovation at scale that can be applied elsewhere.

Take some examples of creativity from India such as the 'mitti cool clay refrigerator', pedal-operated washing machines or the amphibious bicycle. Each needs scale-up to be commercially attractive with appropriate protection for the creative idea, design and application.

### Investing in creativity and innovation

It is time that India invests more in creative pursuits at all levels – grassroots to technology-intensive ideas. Grassroot innovations need more investments to ensure the proof of concept demonstrated is supported by capital investments.

The innovation and associated intellectual property protection for such innovations, including informal ones, need better protection through adjustments to Indian intellectual property protection policies and regulations.

It is also time that the government invests in 'one district one innovation' modelled after the successful initiative of "one district one product' initiative.

While the climate tech sector in India received \$2,853 million in 2023, the investments that grassroots creativity received seems to be very poor. Even if a small percentage of investments go to climate adaptation and mitigation actions that are creative and not working at the local level, India's ability to deal with climate change will be many times more.

What we need today is an ecosystem that balances creativity and innovations at all levels, backed by investments to ensure that India's ambitions to improve creative economic conditions are met.

### Paper 03:Indian Economy

UPSC Mains Practice Question: "Creativity is the bedrock of innovation, and innovation is key to sustainable development." In this context, discuss the role of India's creative economy in achieving inclusive and resilient growth. (250 words)







### **Context:**

India has a rich legacy of creativity — from ancient metallurgy to contemporary digital design. As the country moves toward becoming a \$5 trillion economy, investing in the creative economy can catalyze inclusive, sustainable, and innovation-led growth. With global creative services and goods exports valued at over \$2 trillion, India has the potential to emerge as a major global player, provided the right policy, funding, and grassroots support are mobilized.

### **Understanding the Creative Economy:**

Feature Key Data

Global Size (2022) \$2+ trillion in annual revenue; 50 million jobs

Top Sectors (UNCTAD) Software services (41.3%), R&D (30.7%), Advertising & Design (15.5%)

India's Creative Exports (2019) \$121 billion (Services: \$100B, Goods: \$21B)

Current Valuation (2024) \$30 billion; employs 8% of working population

Recent Growth 20% rise in exports (2023–24), over \$11 billion earned

### **Challenges and Opportunities:**

### **Challenges:**

- 1. Creativity-Innovation Gap:
  - High levels of creativity do not translate into scalable innovations due to lack of institutional support.
- 2. Poor Investment at Grassroots Level:
  - Creative ideas like mitti cool refrigerator, amphibious bicycle, etc., lack access to venture capital and R&D grants.
- 3. Weak IP Protection Framework:
  - Informal innovations, especially at the grassroots, are often unprotected by the existing IP regime.
- 4. Fragmented Ecosystem:
  - o Lack of coordination between creators, innovators, and commercialisation agencies.

### **Opportunities:**

- 1. One District One Innovation (ODOI):
  - Inspired by the One District One Product (ODOP) model, this can unlock regional innovation.







- 2. Climate Change Adaptation:
  - Grassroots creativity in climate tech (e.g. flood control models) can be scaled for national resilience.
- 3. Creative-Driven Employment Generation:
  - Sectors like arts, crafts, design, media, and digital services can boost rural and urban employment.
- 4. Integration with Digital India and Skill India:
  - Strengthening innovation clusters under Startup India and Digital India can mainstream creative jobs.

### **Case Studies:**

Case	Relevance
Antrodam Project – Indonesia	Biomimicry in flood control — shows how student-led creativity can offer scalable eco-solutions.
Grassroots Innovation Augmentation	Helped identify and promote 100s of low-cost rural innovations in
Network (GIAN)	India.
Mitti Cool Fridge	Clay-based, electricity-free cooling solution — needs capital for

scaling and IP protection.

### **Policy Suggestions:**

Mitti Cool Fridge

- 1. Establish a National Creative Economy Mission
  - With dedicated funding, incubation, and export support, especially for informal and indigenous innovations.
- 2. Promote ODOI (One District One Innovation)
  - Institutionalise local innovation as part of district-level economic development planning.
- 3. Strengthen IP Framework for Grassroots Innovators
  - o Tailored IP support and legal aid for local creators.
- 4. Public-Private Partnerships (PPPs) in Creative Sectors
  - Leverage CSR and impact investment in arts, climate tech, and agri-innovation.
- 5. Innovation Funds for Climate Adaptation
  - Direct funding from climate finance to local creative adaptation projects.

### **Conclusion:**

India's path to inclusive development lies not just in digital tech or manufacturing, but in unlocking the full potential of its creative capital. A synergistic approach to creativity, innovation, and policy support will







drive sustainable livelihoods, cultural preservation, and resilience to climate change. As Balakrishna Pisupati argues, investing in creativity is no longer optional — it is foundational to India's future economy.

### **Quote for Enrichment:**

"Creativity is thinking up new things. Innovation is doing new things." - Theodore Levitt



