Celebrating 16 Years

₹100

Uday India

Vol. XVI, No. 27-28, Delhi, 08-14 June, 2025

Empowering The Nation





India's Astounding Growth Story

www.udayindia.in, editor@udayindia.in, FACEBOOK.COM/UDAYINDIAONLINE

Published on 07th JUNE 2025, Released on 09th JUNE 2025



छत्तीसगढ़ के जनजाति समुदायों की संस्कृति, जीवन शैली और लोक कला को समर्पित

राज्य का प्रथम

आदिवासी संग्रहालय

आदिम जाति अनुसंधान एवं प्रशिक्षण संस्थान
परिसर, नवा रायपुर (अटल नगर)

संग्रहालय के प्रमुख आकर्षण

- संग्रहालय की कुल 14 गैलरियों में जनजातीय जीवनशैली के सभी पहलुओं का जीवंत प्रदर्शन
- जनजातियों के भौगोलिक विवरण, तीज-त्यौहार, पर्व-महोत्सव तथा विशिष्ट संस्कृति का चित्रण
- आवास एवं घरेलू उपकरण, शिकार उपकरण, वस्त्र (परिधान) एवं आभूषण की अनुपम झलकियाँ
- कृषि तकनीक, उपकरणों व फसल मिंजाई का प्रदर्शन, जनजातीय नृत्यों एवं वाद्ययंत्रों का संग्रह
- आग जलाने, लौह निर्माण और रस्सी निर्माण की पारंपरिक जनजातीय तकनीक का प्रदर्शन
- कत्था निर्माण, चिवड़ा-लाई निर्माण, मंद आसवन, अन्न कुटाई- पिसाई व तेल प्रसंस्करण की प्रदर्शनी



मुख्यमंत्री श्री विष्णु देव साय से जुड़ने के लिए QR Code स्कैन करें

सुशासन से समृद्धि की ओर

Visit us : ChhattisgarhCMO ChhattisgarhCMO ChhattisgarhCMO ChhattisgarhCMO DPRChhattisgarh DPRChhattisgarh www.dprcg.gov.in

COVER STORY

INDIA POISED TO REMAIN FASTEST-GROWING MAJOR...

The RBI also highlighted that inflationary pressures are under control, thanks to effective monetary policy interventions, a steady supply of essential commodities, and improved logistics infrastructure. Retail inflation, which had spiked during the global supply chain crises of 2022-23, has now stabilized well within the RBI's comfort zone of 4-6%. Furthermore, foreign exchange reserves remain healthy, bolstered by strong export performance and a surge in foreign direct investment (FDI), particularly in sectors such as manufacturing, renewable energy, and digital infrastructure.



PAGE- 18

THE POLITICAL KUMBH OF 2027 WILL BEGIN FROM VILLAGE...



Ultimately, Panchayat elections are a stage in Uttar Pradesh's politics from where the path to government formation becomes visible. The results of these elections will reflect the political mood for the 2027 Assembly elections. The party that succeeds in Panchayat elections will have a stronger political grip and will likely perform better in Assembly polls as well.

P-08



DARK PATTERNS IN DIGITAL MARKETPLACE P-28

INDIA'S SKYWARD LEAP AMCA AND THE RISE OF INDIGENOUS AIR POWER



P-10

TIME TO MODERNISE INDIA'S POLICE FORCES



P-12



P-16 WESTERN WORLD AND SUPERPOWERS HAVE...

KUTTANAD'S SILENT INVADER HOW WATER HYACINTH IS CHOKING A WETLAND AND ITS PEOPLE



P-36

Regular Feature

06	RIGHT ANGLE
46	ECO-WATCH
50	EDITOR'S NOTE

Published on 07th June 2025
Released on 09th June 2025
Total No. of Pages+Cover=52

Shyam Sharanam
Shri Hanumate Namah

Uday India

Editor-in-Chief: Prakash Nanda
Editor: Deepak Kumar Rath
News Editor: Ashok Kumar, Anshuman Anand
Legal Editor: Prasanna Kumar Nanda
Bureau Chief: Nirmal Jain
Editorial Advisor : Shashi Dubey
Special Correspondents: Joydeep Dasgupta (Kolkata), Satish Sharma (Bhuvaneshwar), Ankush Manjhu Ridmalsar (Rajasthan), Manish Shah (Ahmedabad), Joginder Kumar (Jammu)
Business Representative: Mahendra Rout, Surat
Bharat Bhushan, Bengaluru
Graphic Designer : Ramveer Singh
Photographer : Subhash Kumar Sharma

Advisers: Dr HR Nagendra, Swadeshpal Gupta
Manager (Communications & PR): Sangeeta Bisht
Business Manager : Sohan Kadel **(Hyderabad)**
Office : 5, Pocket D, Mayur Vihar Phase II, Patparganj, New Delhi, Delhi 110091
E-mail: editor@udayindia.in
Bengaluru Office : No. 11, Second Floor, KSV Complex, Millers Road, Bengaluru-560052,
Ph. No.: 080-41472201-02, Fx: 080-22201704
Hyderabad Office : Kadel Marketing Pvt. Ltd, 401, Mogul Court, Basheerbagh, Hyderabad-500001,
Ph. No: 040-23237563, +91-9849033200,
+91-9392233200
Jaipur Office: 128 Vasundhra Colony, Tonk Road, Jaipur, Rajasthan, Ph. No: +91-9649939888
For Subscription & Advertisement:
011-46102482-83, +91-8800396723, +91-8800396724
Published, printed and edited by Deepak Kumar Rath from E-256, Saraswatikunj Apartment, 25 I.P. Extension, Delhi-92, and owned by Upali Aparajeeta Rath
Printed at MP Printers, B-220, Phase-II, Noida, Dist. Ghaziabad, UP

©All rights reserved. Reproduction in any form is prohibited. The contents of this publication reflect the views of writers and contributors, not necessarily those of the publisher and editor. All disputes are subject to the exclusive jurisdiction of competent courts and forums in Delhi/New Delhi only

MAILBOX

31 MAY 2025

E-MAIL: editor@udayindia.in

I write in response to your recent cover story on Operation Sindoor, a powerful account of India's unprecedented and precise military response to the April 22 Pahalgam terror attack. The operation not only avenged the death of 26 innocent lives but also marked a new chapter in India's counterterrorism doctrine — one that is assertive, technologically empowered, and unapologetically proactive. The scale and swiftness with which the Indian Armed Forces dismantled 21 terror camps across Pakistan and Pakistan-occupied Kashmir are nothing short of historic. Striking deep into hostile territory — including high-value targets like the Jaish-e-Mohammed HQ in Bahawalpur and Lashkar-e-Taiba's base in Muridke — with such surgical precision showcases India's evolving capabilities and intent. The success of indigenous systems like the Akashteer Air Defence Control System stands as a testament to our growing self-reliance in defence technology under the spirit of Aatmanirbhar Bharat.



—Nitin Bansal, Kota

* * *

Operation Sindoor's ability to expose the vulnerabilities of Pakistan's much-touted Chinese-supplied air defence systems sends a strong geopolitical message. It not only punctures the myth of Pakistan's military preparedness but also questions the reliability of China's defence exports. While concerns about civilian casualties must always remain paramount in any military engagement, the Indian Army's conscious restraint in avoiding collateral damage while neutralizing terror infrastructure deserves recognition. The decision to withhold official casualty numbers to prevent escalation reflects maturity and responsibility in military diplomacy. Operation Sindoor is not just a military milestone — it is a strategic message to the world: India will not passively endure terrorism exported from across the border. With its sharpened arsenal, advanced surveillance, and firm political will, India has entered a new era of deterrence.

—Gayitri Shankar, Gulbarga

A Need for Strategic Prudence

This is in reference to your insightful article analyzing China's role in the recurring military tensions between India and Pakistan, and whether India should prepare for a possible two-front threat. The piece rightly highlights that while the debate on a simultaneous threat from China and Pakistan has intensified in recent years, it is not an entirely new concern. Historically, China has remained a "collusive" rather than "collaborative" partner of Pakistan in conflicts with India—providing political support, military aid, and occasionally logistical help, but never opting for direct military engagement. This pattern was evident during the 1965 and 1971 wars and continued into the Kargil conflict and recent skirmishes. However, what deserves greater emphasis in contemporary strategic discourse is the growing military-industrial dependence of Pakistan on China, especially in light of the nearly $8.2 billion worth of arms sales to Islamabad since 2015. The deepening of the China-Pakistan nexus through platforms like the China-Pakistan Economic Corridor (CPEC) and the transfer of advanced military hardware—such as the J-10 fighters—calls for urgent recalibration of India's defense posture.

—Rahul Ganguli, Patna

गुरु घासीदास विश्वविद्यालय बिलासपुर, (छ ग) भारत
GURU GHASIDAS VISHWAVIDYALAYA BILASPUR (CG)- INDIA
A Central University established by the Central Universities Act 2009 No. 25 of 2009
A++ NAAC



"Empowering minds, fostering innovation, and building a legacy of excellence - the hallmarks of the Guru Ghasidas Vishwavidyalaya."

4 Years
ASPIRE
KNOWLEDGE
CREATE

Prof. Alok Kumar Chakrawal
Aspire-Knowledge-Create

Under Prof. Alok Kumar Chakrawal's visionary leadership, Guru Ghasidas Vishwavidyalaya has grown remarkably over the past three years. His focus on academic excellence, innovative research, and social impact has transformed the university. Key achievements include A++ NAAC accreditation, significant placements, 252+ patents, and robust infrastructure development. Initiatives like Swavalambi Chhattisgarh and the Earn While You Learn program highlight his commitment to social equality. Prof. Chakrawal has set a strong foundation for continued excellence and innovation.

Rankings
NAAC A++ ACCREDITED
ICFRE A++ ACCREDITED
THE WORLD UNIVERSITY RANKINGS
401-500 World Young University Rankings
301-400 World SDG Achieved (6 Categories)
401-500 World Interdisciplinary Science
501-600 Asia University Rankings
800-1000 World Engineering
1000+ World Physical Sciences
44 India Ranking among
nirf
54 Pharmacy
R. World Institutional Ranking
#1 Mental Health & Wellbeing
1 India Academia Ranking
Platinum Band
India Today Ranking
Ranked # 1 in India for patents filed, published, and granted.
Ranked #6 among Central universities of India.
Ranked 22nd in India.
263 QS World South Asia
801-850 QS World South Asia
business today
Best B-School Ranking
Return on Investment (ROI) category 4 East Zone category: 14
Ranking among Government Institutes in India: 26 Ranking in living experience: 45 Overall ranking among Indian Institutes: 107

SUCCESSFULLY IMPLEMENTED NATIONAL EDUCATION POLICY 2020

FACULTY AND STUDENT
450+ Faculty Members
25+ National & International Awardees
10,000+ Students
32 Departments, 11 Schools
50+ International PhD Students
115+ On-Site Courses, 13 Online Courses

INNOVATION, COLLABORATION & ENTREPRENEURSHIP
70+ MoUs, including 13 International Institutions
36+ Start-ups nurtured
Incubation Centre, Tech Centre, and
Section 8 Companies established

RESEARCH ECOSYSTEM
INR 166 Cr+ seed funding disbursed
INR 3389.76 Lakhs research projects
INR 708.25 Lakhs consultancy revenue
3730+ Scopus-indexed Publications
252+ Patents Filed
34% Faculty with active Research Grants
100+ Projects worth ₹35 Cr proposed to DST, CSIR, ICSSR, ICMR, SERB, CGCOST, AARF
10 Projects worth ₹9.37 Cr already approved
24 Projects Ongoing
Partnership with Delhi University under DST-PAIR scheme (₹8.57 Cr Project)

BEST PRACTICES
Sustainable Initiatives: Bio-compost, Herbal & Mushroom Production, Carbon Footprint Index, Solar Power Plant
Mission HUM – Healthy University Movement
Swavalambi Chhattisgarh Scheme
Tree Plantation, Raakhi Making, Bread & Herbal Gulaal Production

SOCIAL CONNECT SCHEMES (20+)
GGV Swabhiman Thali (GST)
GGV Shravan Line (GSL)
Kilkari Day Care Centre
GGV Healthy University Movement (GGV - HUM)
Fitness and Wellness Centre
Nataraj Kala Manch
Swavalambi Chhattisgarh Scheme
GGV Pyau Sewa (GPS)
GGV Saarthi Yojana
GGV Sudama Yojana
National Service Scheme (NSS)
National Cadet Corps (NCC)
GGV Rakt Sambandh Sanskar (GRSS)
GGV Scout and Guide
Unnat Bharat Abhiyan
Ek Bharat Shreshtha Bharat
Ek Ped Maa Ke Naam
GGV Shiksha Mitra Sanskar (GGV-SMS)
GGV Kutumb Prabodhan Sanskar (GGV-KPS)
GGV Vyavsayik Sansthapaan Sanskar (GGV-VSS)

Koni, Bilaspur, Chhattisgarh
www.new.ggu.ac.in
centraluniv@ggu.ac.in

RIC's Limitations

Has the time really come for reviving the Russia-India-China (RIC) trilateral cooperation? And if so, what are the prospects of it really becoming significant in the prevailing state of international geopolitical relations?

Russian foreign minister Sergey Lavrov thinks that such a time has come indeed!

Speaking at a security conference in Eurasia in the city of Perm on May 29, he said, " "I would like to confirm our genuine interest in the earliest resumption of the work within the format of the troika -- Russia, India, China -- which was established many years ago on the initiative of (ex-Russian prime minister) Yevgeny Primakov, and which has organised meetings more than 20 times at the ministerial level since then, not only at the level of foreign policy chiefs, but also the heads of other economic, trade and financial agencies of the three countries" .



PRAKASH NANDA

It may be noted that the last RIC foreign ministers' meet was held in 2021, contrary to the media reports in the last 24 hours that such trilateral talks were stalled after the Indian and Chinese troops clashed at Galwan near the Line of Actual Control(LAC) in the disputed Ladakh region in June 2020.

As a matter of fact, " The 18th Meeting of the Foreign Ministers of the Russian Federation, the Republic of India and the People's Republic of China" was held in the digital video-conference format on 26 November 2021 under India's chairmanship in the RIC format . The meeting took place in the backdrop of negative impacts of the global Covid-19 pandemic.

India had taken over the chairmanship of the RIC after the last meeting of RIC Foreign Ministers in Moscow in September 2020. So it was Indian external affairs minister S. Jaishankar, who had organised the meet and chalked out a comprehensive agenda.

That was reflected in a lengthy joint communique under 35 headings, dealing essentially with issues pertaining to fight against Covid-19 pandemic, reforms of the multilateral systems and "international hot-spot Issues" such as threats of terrorism, extremism, drug trafficking, trans-national organized crime, natural and man-made disasters, food security and climate change.

Interestingly, while the joint communique mentioned at length the then prevailing Syrian civil war, conflict in Yemen and the formation of the new transitional Presidency Council and Government of National Unity in Libya, it was scrupulously silent on border clashes between India and China the year before and the continued presence of their large troops near the LAC.



The 35th and the last paragraph of the communique read, " Foreign Minister of the People's Republic of China and the Foreign Minister of the Russian Federation thanked the External Affairs Minister of India for the successful organization of the RIC Foreign Ministers Meeting. The External Affairs Minister of India passed on the chairmanship in the RIC format to the Foreign Minister of the People's Republic of China. The date and venue of the next RIC Foreign Ministers Meeting will be agreed upon through the diplomatic channels".

Obviously, nothing much has happened since then, though the ball has been in the court of China to proceed further.

It is against this background that Russia now wants to revive the RIC format.

It is important to note that it is Russia which has always championed the RIC-idea. Since 2000, important Russian leaders have been advocating for what is called a strategic triangle ("trilateral cooperation", to use the words of former Russian Prime Minister Yevgeny Primakov, the first leader to propose the idea during his visit to New Delhi in 1998) involving Russia, India and China.

Interestingly, the concept of "the Russia-China-India triangle" is usually spoken about whenever a top Russian leader meets his Indian and Chinese counterparts either together or separately with a short interval. Thus it is understandable that Lavrov has talked about it now , before Russian President Valdimit Putin's scheduled visit to India this year. Putin had hosted Chinese President Xi Jinping on May 8 at the Kremlin.

For instance, the idea of Russia-India-China initiative was talked about on the eve of Putin's visit to India in October 2000, a visit which followed the Russia-China summit (between Putin and the then Chinese President Jiang Zemin) in July that year at Moscow. In 2002 again the idea was talked about during Putin's visit to Delhi, which took place immediately after his trip to Beijing; in fact Putin had combined his China and India visits together and landed in Delhi straight from Beijing.

In fact, it was at Putin's behest that the first trilateral summit involving India, Russia and China had taken place in St. Petersburg in July 2006. It was then said that Beijing and New Delhi accepted Russia's proposal to hold a trilateral summit because "it was beneficial to boosting the cooperation among the three countries as well as maintaining multipolarity in the world".

Russian interests in the RIC format seem to have been guided by three developments. First, Russia's inability to impede the eastward expansion of NATO and its frustration over NATO's unilateral military actions in the last few decades, beginning in Kosovo in 1999. This forced Moscow to seek closer strategic understanding with China and India.

Russia also found commonality with India and China in the perceived US bid for global hegemony, which was in direct conflict with their preference for a "multipolar world".

The second reason from the Russian point of view is that the three countries have had problems with Islamic militants. India fights border problems everyday against radical Islamic fighters infiltrating from Pakistan into Kashmir. Moscow is concerned about the growth of Islamic fundamentalism in the five Central Asian Republics of the former Soviet Union (which Russia still sees as its sphere of influence). China's problem with Islamic guerrillas focuses on the Muslim Uighar separatists in Xinjiang, an area of China rich in mineral resources.

The third common interest is the arms trade. Until recently, China and India accounted for nearly 70 percent of Russia's arms exports. But the problem is that at times both India and China demand the same weapon systems with same features. However, India had always enjoyed a special status as an importer of Russian arms. Russia sent weapons of more value and substance, weapons which were not only the latest but also those which were not even commissioned into the Russian armed forces.

However, things seem to be changing, of late, given China emerging as the biggest supporter of Russia after the war in Ukraine. Obviously, India will not like China to get the same features and facilities from the Russians. It is all the more so when there is every chance of some of such weapons finding their way to Pakistan.

In that sense, by suggesting the concept of a Russia-China-India triangle, Moscow wants to somewhat appease the Indian sensitivities, with the hope that the idea will remove mutual suspicions between Delhi and Beijing.

But will the RIC process succeed?

It is extremely doubtful that it will, and, that, in turn, is the reason why one does not see great virtues in India showing enthusiasm about the "triangle". From an Indian point of view, for any triangular relationship, China has to vacate the countervailing strategic space in favor of Pakistan in South Asia by pulling back from first facilitating and then using Pakistan's nuclear and missile build-up as leverage against India.

In other words, since China is part of the strategic nexus with Pakistan aimed at India, how can India be part of a coalition in which two of its potential antagonists are intertwined?

Secondly, given the anti-American overtone of the "triangle" concept, India may find it difficult to be associated with it, particularly when over the last few years Indo-US relations have witnessed unprecedented improvements, the Pakistan-factor notwithstanding.

It is important to note that it is Russia which has always championed the RIC-idea. Since 2000, important Russian leaders have been advocating for what is called a strategic triangle ("trilateral cooperation", to use the words of former Russian Prime Minister Yevgeny Primakov, the first leader to propose the idea during his visit to New Delhi in 1998) involving Russia, India and China.

In fact, even China will not like any ganging up against the US for similar reasons, notwithstanding the Donald Trump factor. All told, the Chinese economy is crucially dependent on the American market. Trump knows it well and some sort of understanding on trade between the U.S. and China will emerge, sooner rather than later.

In fact, former Indian foreign secretary Kanwal Sibal, who also was Indian ambassador in Moscow, makes a lot of sense when he argues that the RIC dialogue may not have as much promise as originally anticipated because "the validity of most of the premises underlying it has been shaken". Now that the United States' sole superpower status has waned, there is not as much need for Russia, India and China to come together to balance the global power structure as it was when the RIC was mooted in the late 1990s.

Even otherwise, though Moscow advocates for a durable and long-term framework of shared interests with India and China, unlike Indo-Russian relationship, the Sino-Russian link is controversial among influential Russian policymaking elites. As has been pointed out in Eurasian Times on a few occasions, Russia shares a long border with China and a long history of often bitter and complex relations. Besieged with a growing problem of demographic decline, Russian elites fear that Siberia and its far east would soon be over-run by migrant Chinese labor. This fear is genuine as anyone familiar with Chinese history will admit that Chinese territorial claims all over Asia often followed its emigrants. Likewise, the Russians are not comfortable with the growing Chinese activities in Central Asia, which Moscow always considers to be falling under its sphere of vital interests.

Besides, it is also felt in Russian strategic circles that China, with ex-Soviet Union scientists and engineers working in its defense facilities, is producing weapons by reverse-engineering the Russian products and exporting them in international markets, particularly in Pakistan and North Korea.

Viewed thus, the RIC process, though a grand idea, has its obvious limitations. Therefore, for India, further development of relations with Russia bilaterally will always weigh more than a trilateral relationship, involving China.

(prakash.nanda@hotmail.com)



The Political Kumbh of 2027 Will Begin from Village Politics

In Uttar Pradesh, the 2026 Panchayat elections, to be held a year before the 2027 Assembly elections, are being considered extremely crucial by political parties. These Panchayat elections are being called a litmus test for the 2027 Assembly elections, as their results will bring clarity to the state's political landscape. The Election Commission has begun full preparations for the Panchayat polls, and the notification is likely to be issued soon. In such a scenario, political parties are busy chalking out their strategies. The Panchayat elections will not only reveal the grassroots grip of parties but also determine the direction of their strategies for the 2027 Assembly elections. The political fervor visible in the villages of Uttar Pradesh around the Panchayat polls clearly indicates that these elections will play a major role in shaping the politics of the state.



AJAY KUMAR

The current tenure of the village heads (gram pradhans) of Uttar Pradesh will end in 2026. Elections will be held for approximately 57,691 village heads, panchayat members, block development committee members, 826 block chiefs, 3,200 district panchayat members, and 75 district panchayat chairpersons. The State Election Commission has also issued e-tenders for the purchase of around 1.27 lakh CR1 grade ballot boxes for these three-tier Panchayat elections. The last elections were held in April-May 2021, so this time the notification is expected in the second or third week of January or February 2026. Panchayat elections are held at three levels Gram Panchayat, Kshetra Panchayat, and Zila Panchayat. Among these, the election of the village head garners the most attention and political excitement, as it directly influences local village politics.

Political parties have begun their preparations for the Panchayat elections. All parties are trying to understand which candidate can contest from which seat after reservation is declared. Analyzing the possibilities after reservation becomes essential to frame the right strategy. BDC members and district panchayat members have also started displaying their claims through hoardings and posters. The activism of leaders and the Election Commission makes it evident that the political machinery is fully active regarding these elections.

Data from previous Panchayat elections suggest that the ruling party usually holds sway. In the 2021 Panchayat elections, BJP, SP, BSP, Congress, RLD, Aam Aadmi Party, and many independent candidates contested. Out of 3,050 district panchayat member seats, independent candidates also showed considerable strength. BJP won 768 seats, SP 759, BSP 319, Congress 125, RLD 69, and Aam Aadmi Party secured 64 seats. The number of independents was 944. BJP formed an alliance with many independents and secured the post of district panchayat chairperson in 67 districts, while SP managed to secure only five. This data highlights how significant the influence of power is even at the Panchayat level.

Panchayat elections are considered the semifinal for the 2027 Assembly elections because a large number of rural-area seats are involved. Nearly two-thirds of Uttar Pradesh's Assembly constituencies come from rural regions, so the results of Panchayat elections have a direct impact on the strength of political parties in Assembly polls. The party that performs well in Panchayat elections builds a strong grip over the rural vote bank, which proves advantageous in Assembly elections. Political parties analyze the results of Panchayat elections by district, region, and caste to frame their strategies accordingly.

After the Panchayat elections, political parties deeply introspect. They consider caste equations, regional strength, vote percentages, increases or decreases compared to previous elections all aspects are taken into account while preparing for the upcoming Assembly elections. These elections give parties an opportunity to correctly assess their strength so they can work on their weak areas. By comparing the votes from previous Assembly and Lok Sabha elections, parties analyze changes in their vote bank and, based on that, adjust their candidate selection, alliances, and campaign strategies.

In Uttar Pradesh's politics, the importance of Panchayat elections has increased because they indicate a party's hold at the local level. These elections strengthen the organization of a party down to the booth level. Even the smallest village-level elections can play a decisive role in larger polls. A party with a strong grassroots network finds it easier to win Assembly and Lok Sabha elections. That is why parties do not take these elections lightly and contest them with full force.

In these elections, Apna Dal (S) also holds special significance, as it works as an ally of the BJP. Union Minister Anupriya Patel recently announced that her party will contest the UP Panchayat elections independently. She clearly stated there will be no alliance and that Apna Dal (S) is prepared to contest all seats with full strength. Anupriya Patel believes that Panchayat elections are a rehearsal for the 2027 Assembly elections. She thinks that by testing their strength in these elections, they can craft a stronger strategy for the upcoming Assembly polls. Although Apna Dal (S) has been in alliance with BJP in Lok Sabha and Assembly elections for years, it has always contested Panchayat elections independently. In 2021 too, Apna Dal (S) contested the district panchayat member elections alone. The same strategy is being followed this time. Though the BJP and Apna Dal (S) are together at the Center and in the state, they will be rivals in village-level Panchayat elections.

Anupriya Patel also stated that she wants to give maximum opportunities to her party workers in Panchayat elections. It was not possible for all workers to contest elections while being in an alliance, so contesting independently was necessary. She said the organization needs to be strengthened in line with the Panchayat elections. Efforts are ongoing to prepare the party structure at every level for these elections. The party is also becoming stronger at the booth level to ensure that candidates receive full support.

This strategy will also bring new opportunities for Anupriya Patel's party. Panchayat elections will provide the party an opportunity to expand its influence in rural areas, which will be beneficial in the Assembly elections. These elections will serve as a platform for party workers to prove their political capabilities. Electoral success will boost local leaders' confidence and strengthen the party organization. A strong performance in Panchayat elections also energizes the party for the upcoming Assembly polls.

Ultimately, Panchayat elections are a stage in Uttar Pradesh's politics from where the path to government formation becomes visible. The results of these elections will reflect the political mood for the 2027 Assembly elections. The party that succeeds in Panchayat elections will have a stronger political grip and will likely perform better in Assembly polls as well. That is why political parties are showing immense enthusiasm and fighting hard for the 2026 Panchayat elections.

Political analysts say that Panchayat elections lay the foundation for Uttar Pradesh's politics. When a party strengthens its hold in village politics, the chances of success in Assembly elections increase. Success in Panchayat polls also helps leaders understand which areas are weak for their party and adjust strategies accordingly. Moreover, Panchayat elections help political parties understand caste and regional equations.

In addition, Panchayat elections provide opportunities for new leaders to emerge. Often, young and new faces enter politics through these elections and later establish themselves at a higher political level. Therefore, Panchayat elections are not confined to local politics; they help determine the direction of the state's political future.

In rural Uttar Pradesh, the political battle among parties begins with the Panchayat elections, and this rivalry continues up to the Assembly elections. This time too, political parties are putting in all their efforts in Panchayat elections to strengthen their base before the 2027 Assembly polls. Under the leadership of the Yogi government, the BJP has established a strong hold in Panchayat elections, but opposition parties are also not far behind. SP, BSP, Congress, Aam Aadmi Party, and Apna Dal (S) are also working hard in their respective areas to secure victories.

Ultimately, Panchayat elections are a stage in Uttar Pradesh's politics from where the path to government formation becomes visible. The results of these elections will reflect the political mood for the 2027 Assembly elections. The party that succeeds in Panchayat elections will have a stronger political grip and will likely perform better in Assembly polls as well. That is why political parties are showing immense enthusiasm and fighting hard for the 2026 Panchayat elections. These elections are not just a means to elect rural leadership, but a platform to lay the foundation for future politics. The outcome of these elections will determine the political direction of the entire state and decide who will hold power in Uttar Pradesh in 2027.

(The content of this article reflects the views of writers and contributors, not necessarily those of the publisher and editor. All disputes are subject to the exclusive jurisdiction of competent courts and forums in Delhi/New Delhi only)



India's Skyward Leap

AMCA and the Rise of Indigenous Air Power

■ UDAY INDIA BUREAU

In a decisive move that underscores India's strategic aspirations and technological confidence, Defence Minister Rajnath Singh has approved the much-anticipated Advanced Medium Combat Aircraft (AMCA) program. This fifth-generation stealth fighter jet initiative, entirely 'Made in India', is more than just a military asset; it is a declaration of India's ambition to stand shoulder to shoulder with global aerospace giants. At a time when the geopolitical landscape is shifting rapidly, India's push for self-reliance in critical defence technologies couldn't be more timely—or more vital.

The AMCA project represents a significant leap in India's journey toward indigenous defence manufacturing. It aims to deliver a state-of-the-art stealth multirole fighter aircraft, designed to counter the evolving nature of aerial warfare. Equipped with cutting-edge technologies like supercruise capability, advanced avionics, internal weapons bays, and stealth shaping, the AMCA will place India in an elite club of nations—such as the United States, Russia, and China—that have successfully developed fifth-generation fighter aircraft. This marks a qualitative upgrade from the current fourth-generation fighters, enhancing survivability, lethality, and operational range in contested environments.

But the importance of AMCA goes far beyond the military hardware. At its core, this program is about building an ecosystem—one that nurtures homegrown innovation, attracts private enterprise, and reduces India's historical dependence on foreign arms suppliers. By opening the gates to private sector participation—either independently or through joint ventures—the government is injecting competitive dynamism into what has traditionally been a state-dominated domain. This move has the potential to unlock a wave of technological advancement and employment opportunities, while also fostering long-term strategic autonomy.



The importance of AMCA goes far beyond the military hardware. At its core, this program is about building an ecosystem—one that nurtures homegrown innovation, attracts private enterprise, and reduces India's historical dependence on foreign arms suppliers. By opening the gates to private sector participation—either independently or through joint ventures—the government is injecting competitive dynamism into what has traditionally been a state-dominated domain. This move has the potential to unlock a wave of technological advancement and employment opportunities, while also fostering long-term strategic autonomy.

The private sector's involvement also promises to be a catalyst for a robust aerospace industrial base. Startups and established firms alike can contribute to various facets of AMCA's supply chain—from avionics and propulsion to radar and materials engineering. This decentralization and diversification of talent and capital can accelerate timelines, improve quality, and increase exports. For Indian companies, this is an unprecedented chance to gain global credibility, and for the country, an opportunity to become a net exporter of high-value defence products.

Moreover, the AMCA program complements and strengthens the Modi government's broader vision of 'Aatmanirbhar Bharat'—a self-reliant India. It echoes similar successes in the defence sector, such as the Tejas Light Combat Aircraft, the Arjun Main Battle Tank, and the Akash surface-to-air missile system. Each of these projects, despite initial skepticism, has gradually proven the viability of indigenization. The AMCA, with its higher technological threshold, is the logical next step in this upward trajectory.

Of course, challenges remain. Fifth-generation platforms are notoriously complex, requiring years of R&D, sustained investment, and rigorous testing. India must ensure that bureaucratic inertia, funding bottlenecks, and inter-agency coordination do not hamper progress. A dedicated project management team with cross-functional expertise and accountability will be crucial. Additionally, forging effective public-private partnerships and incentivizing R&D through policy support will be key to ensuring timely and cost-effective delivery.

India's approval of the AMCA project is a bold and welcome step toward reshaping the strategic contours of its air power. It signals confidence in Indian engineering, trust in indigenous talent, and a recognition that future wars will be won not just by the size of the arsenal, but by the quality of technology and the autonomy of supply. If executed with vision and vigor, AMCA won't just give India a powerful new fighter jet—it will give it wings to soar as a truly self-reliant aerospace power.



A CISF quick reaction commando unit positioned near Delhi Airport

Time to modernise India's police forces

At a time when India is facing many internal security threats including Maoism and Islamic terrorism, it is time to reshape the strategic dynamics by modernising the nation's police and paramilitary forces. The Pahalgam terrorist attack was an eye-opener for all. A comprehensive report.



AMARTYA SINHA

Central Armed Police Forces (CAPF) or paramilitary forces in public parlance as well as state police forces, have always been considered a critical part of India's internal security mechanism, without which wars against anti-national elements can't be taken to a logical conclusion and socio-political order in the country can't be maintained. While the three branches of the Indian armed forces (army, navy and air force) are expected to counter external security threats at the border, paramilitary organisations such as Assam Rifles, Border Security Force (BSF), Central Reserve Police Force (CRPF), Indo-Tibetan Border Police (ITBP), Sashastra Seema Bal (SSB), Central Industrial Security Force (CISF), and special forces like National Security Guard (NSG), along with state police units, are expected to reign in internal sub-conventional level threats emanating from isolated pockets and closely guard the nation's vital strategic installations from enemies. It goes without any saying that these troopers need better weapons along with cutting edge electronic gadgets, to live up to the best of national leadership's expectations.

Replacing old assault rifles

Assault rifles are one of the primary service weapons being used by CAPF troopers in sub-conventional level battlefields. Starting with close quarter battle (CQB) engagements with left-wing insurgents in an asymmetric warfare environment and ending with long-range shooting at infiltrating terrorists at the border, the assault rifle remains the standard issue weapon of paramilitary soldiers for countering threats. While the Indian government decided to phase out the L1A1 Self Loading Rifles (SLR) and the highly obsolete Lee-Enfield bolt-action rifles from the Indian Army's armoury during the early 1990s, many of these scrapped weapons were handed over to CAPFs till the advent of INSAS (Indian National Small Arms System) weapons in the late 1990s. Large numbers of AK series rifles were also inducted into paramilitary forces as a stopgap measure until the induction of INSAS weapons.



CRPF's newly-inducted female COBRA commandos during a drill

Three variants of INSAS which included an automatic assault rifle, a carbine and a light machine gun (squad automatic weapon) were planned by the Indian Ordnance Factory Board (IOFB) which entered serial production in 1997. The weapons were displayed during the 1998 Republic Day parade in Delhi.

Capable of firing the 5.56X45mm ammunition, the INSAS underwent the first combat use during the 1999 Kargil war during which a lot of issues came up regarding the battle-worthiness and the quality of the weapon system. Indian Army and paramilitary soldiers have frequently complained of the rifle jamming during automatic firing. There are also reports of the weapon firing in fully automatic mode while it was set to fire three-round bursts, thus rapidly draining out ammo during long-range target engagements. Reports of the magazines cracking in cold weather and high-altitude conditions has also come up quite frequently. It is thus proved that INSAS isn't the gun the Indian Army or CAPFs are looking for in order to meet their long-term operational requirements.

While, there is an increasing thrust on replacing some of the ageing INSAS weapons with the Russian-designed AK series automatic assault rifles capable of firing the highly penetrating 7.62X39mm calibre rounds, the orders are still running short of addressing the massive deficit. With the CRPF itself having almost three lakh active personnel, the union government approved the initial batch of 36,000 AK-47 rifles for quick import and induction into the force. As a matter of great disgrace, the vintage INSAS rifles also remain as the mainstay service weapon of the BSF. With over 2.5 lakh active BSF personnel serving the nation, the availability of AK series rifles is very limited.

Other CAPFs like the ITBP, CISF and SSB also suffers from modern infantry combat weapons shortage and are ill-equipped with the infamous INSAS weapons. There is an urgent need to arm all 14-lakh active duty CAPF troopers with cutting edge AK series rifles at the earliest. In March, 2019, Prime Minister Narendra Modi had laid the foundation stone of a manufacturing unit of AK-203 rifles at the Ordnance Factory in Amethi. More than 7,50,000 rifles are supposed to be initially manufactured in the new plant under full technology transfer from Russian firm Izhmash.

The joint venture project between the OFB and the Russian corporation is also expected to manufacture 13,00,000 additional AK-203 rifles for Indian paramilitary forces in the long run. The new weapon will be capable of firing shots up to an effective range of 500 metres and can be equipped with detachable UBGLs and optical/ infrared night sights. The weapon is considered one of the deadliest rifles in its class and is capable of firing LRDLOS (Long Range Direct Line of Sight) shots up to a maximum range of 800 metres with a firing rate of 600 bullets a minute. But, while the order book of Indian Army to acquire these new weapons are being readied, the order book for CAPFs still hangs in abeyance due to bureaucratic logjams and the government's inaction. With Prime Minister Narendra Modi stressing upon 'Atmanirbharta', it is time for some solid action in this domain by sprucing up of orders.

Acquisition of newer carbines

While the assault rifles play an important role in long-range target engagements, short-to-medium range targets can be easily neutralised with carbine weapons. Carbines play a pivotal role in effectively hitting terrorists in difficult terrain where the visual range is limited by topographical challenges (close-quarter battle). Such weapons are also used by special forces during RI (Room Intervention) operations in indoor environments for tackling hostage crisis like situations. As carbines are firearms with shorter barrels, the bullets have limited range while compared to traditional assault rifle rounds. Currently, the CRPF, BSF and ITBP are equipped with limited numbers of Heckler and Koch MP-5 weapons. Some 68,000 Beretta MX-4 Storm carbines are also being procured for BSF for replacing the ageing Sterling submachine guns. Many CISF units guarding public utilities like airports, Metrorail stations and vital strategic installations are yet to acquire the newer carbines. While the political establishment of the country can always explore the option of importing carbines from foreign manufacturers, many indigenous options are also on the table.

A new carbine version of INSAS dubbed as the 'Amogh carbine' project took shape during the first half of 2000s decade. Being a derivative of the Excalibur project, the new weapon is capable of firing 5.56X30mm MINSAS rounds up to a distance of 200 metres. The weapon was based on a gas-operated, rotating-bolt and long-stroke piston with a rate of fire of 700 to 900 rounds per minute. Amogh was a dual-mode gun (single-shot and automatic) and had fixed iron sights with front sights (post type) and rear sights (aperture type) for accurate shooting. But the project was reportedly scrapped after the weapon was rejected by the Indian Army during user trials in 2017 due to its loud sounds and undesirably huge muzzle



BSF's women troopers patrolling the India-Bangladesh border

flashes. The new weapon can be handed over to CAPFs in limited numbers to test its battle-worthiness.

Another brand-new carbine christened as 'MSMC' (Modern Sub Machine Carbine) has been designed by the Armament Research and Development Establishment (ARDE) under the Defence Research Development Organisation (DRDO) and manufactured by OFB which ran parallel to the Amogh project during the latter half of the 2000s decade. The MSMC weapon, also known as the JVPC (Joint Venture Protective Carbine), is designed to fire the same 5.56X30mm MINSAS ammunition as used in Amogh.

The MSMC has a grip-feeding 'Uzi'- like design which is capable of firing shots up to 300 metres range. It is fitted with a picatinny rail mechanism on the upper receiver for placing of optical/ infrared night sights. Iron sights are also built into the receiver which has made the weapon very effective for CQ engagements. MSMC is well calibrated to play the role of a submachinegun (SMG). Its ergonomics have been improved for boosting the export potential and the rounds were capable of penetrating even soft armour (bulletproof jackets). After three successful trials of the weapon system in 2006, 2007 and in 2009, the weapon was showcased during Defence Expo-2010 held in New Delhi. After undergoing further trials between April and June, 2010, MSMC was handed over to the Indian Army for final user trials in August, 2011. The gun was pitted against foreign-made weapons like H&K MP-7 and FN-P90 during the tests, the results of which were reported to be extremely satisfactory by the OFB.

The Indian Army, however, eventually rejected the weapon as the GSQRs (General Staff Qualitative Requirements) were raised for acquiring rifles capable of firing 7.62mm rounds. But the future of the MSMC/JVPC gun looks very bright as the weapon was formally handed over to the then Home Minister Rajnath Singh by erstwhile Defence Minister Nirmala Sitharaman in 2017 for starting the user trials with Indian paramilitary units. The CRPF conducted user trials of JVPC and has found extremely satisfactory results.

The Chhattisgarh Police ordered 640 JVPC guns for operational deployment with field units. The weapon is also used in limited numbers by Jammu & Kashmir Police, CISF, and CRPF. The SPG (Special Protection Group) is also contemplating the induction of JVPC in service. The weapon can also be used by all paramilitary organisations as a primary weapon in the not-too-distant future. The MSMC is considered one of the best carbines in its category by renowned weapon experts and has found its place in a niche first-person shooter video game- Call of Duty: Black Ops-2 which has proved to be an eye candy for global videogame enthusiasts. It is time to bulk-produce the MSMC for CAPFs and paramilitary special forces units, along with state police forces, and also explore the export potentials of this highly sophisticated indigenously developed advanced weapon system. It will be prudent to say that the MSMC should be considered as the mainstay weapon for each and every state police personnel in the country by replacing all old Lee-Enfield (.303) rifles which have been in use since several decades.

New pistols for RI ops

A pistol plays a very important role of a sidearm (secondary weapon) of a paramilitary soldier. Due to the frequent ricocheting of heavy automatic assault rifle rounds and high velocity carbine rounds in indoor environments, it is much safer and easier to use low calibre pistols during RI (Room Intervention) operations. RI missions during hostage crisis-like situations demand the presence of special forces units. While pistols like SIG Sauer P226, FN Five-seven and Glock-17 are standard issue firearms for Indian military's special forces, Indian paramilitary soldiers are issued the 'Pistol Auto 9mm 1A' of 1970s vintage. As the 21st battlefield has gone a massive transformation since the turn of the new millennium due to widespread usage of asymmetric warfare tactics by jihadi terrorists and left-wing insurgents, it is quite evident that all active paramilitary personnel must be equipped with a modern secondary firearm for handling a multitude of situations. It may take several hours for mobilising special forces commandos for handling a hostage situation. But if regular paramilitary soldiers or state police personnel are armed with a modern sidearm like the Glock-17 or an underwater pistol like the 'Heckler & Koch P-11', CRPF/ BSF/ITBP/CISF/ state police forces personnel can handle the crisis by using the manpower and resources at their disposal at the earliest without waiting for the army or elite units to intervene.

Protective body-armours and helmets

The body-armour is always considered a very crucial safety equipment for a soldier which protects him/her from rifle and carbine rounds fired by the enemy. While traditional body-armour being used the Indian paramilitary soldiers consist of a metal armour-plating, modern-day bulletproof jackets (BPJ) are made with a modular design capable of resisting high-energy impacts from both lead-core and steel-core bullets. Recently, the union government has ordered a very limited numbers of modular BPJs for the Quick Reaction Teams (QRTs) of CRPF deployed in Kashmir, whereas the BSF, ITBP and CISF still continue to use the bulky iron-plated BPJs of 1980s vintage.

Other than acquisition of newer BPJs for CAPFs, the government also needs to acquire bulletproof Kevlar helmets for paramilitary soldiers in large numbers which not just protect the heads but will also render additional protection to the neck area of troopers. There is also an urgent need to gear up the CAPF troopers and state police with bulletproof kneepads, elbow pads and groin pads for shielding the body's vital organs during close quarter engagements with armed terrorists.

It goes without any saying that CAPF personnel need better weapons along with cutting edge communication gadgets, to live up to the best of national leadership's expectations

Latest electronic gadgets required

Night vision gears: Night Vision Devices (NVD) are one of the prominent force-multipliers in the conventional and asymmetrical realms in the tactical-level battlefield. Other than night warfare, NVDs also play a significant role during target engagements in lowlight daytime conditions. At present, CAPFs (especially the BSF and CRPF), are ill-equipped as far as NVDs are concerned. The NVDs held by Indian paramilitary troopers are lagging behind in technology and are too few in numbers. The limited numbers of second-generation devices are more of a hindrance than an asset and very few third-generation NVDs are issued to special forces.

Ideally, each regular paramilitary soldier should be equipped with an NVD. However, even if 75 percent of the CAPF personnel are provided with NVDs, it would be a substantial capacity enhancement. Many elite units of state police forces also need to be equipped with NVDs. The latest Generation-3-plus or Generaton-3 Omni-7 NVDs should be handed over to Indian paramilitary forces in large numbers and focus should also be on developing fourth generation gated/filmless technology-based NVDs for CAPF troopers.

Software-defined radios: There is also an urgent need to equip the CAPFs with cutting-edge SDRs (software-defined radios). Usage of latest communication gadgetry based on digital technologies is the need of the hour. Widespread implementation of SDR equipment with paramilitary personnel will also prove to be a massive boon in this domain as it will prevent redundancies of communication hardware over the medium-to-long term.



NSG commandos participating at a Republic Day Parade in New Delhi

Laser range finders: Laser range finders (LRFs) are often used by police forces in developed nations which are installed on their service rifles, carbines and pistols. This helps in better and highly accurate targeting during close quarter battles with anti-nationals and terrorists. It should be made mandatory for Indian police forces to use laser range finders on their service pistols and rifles during nighttime raids and firing engagements. No gun should be issued to paramilitary troopers without a laser rangefinder.

Surveillance Drones: Another area which requires immediate attention is the procurement of quadcopter surveillance drones equipped with thermal imaging cameras and night vision. The drones, preferably powered by artificial intelligence, will come in handy when there is a dearth of security manpower in rough terrains and remote areas. The AI-enabled drones will provide real-time information to the stationary and mobile command and control centres of state police and central paramilitary forces and will help the security agencies in the tracking the movement of suspects. A fleet of tens of thousands, or possibly even lakhs of such drones is required which will cover the vast geographical expanse of the nation and will help in preventing Pahalgam terrorist attack type fiascos and Naxal ambushes by inviting a quick response from forward units of security forces. These AI-based drones will also significantly help in intercepting ELINT (electronic intelligence) and SIGINT (signals intelligence) and will boost the inland ISR (intelligence, surveillance and reconnaissance) capabilities of our police and paramilitary forces.

It will be very prudent to conclude that Home Minister Amit Shah should find some way to circumvent the pertinent obstacles. Paramilitary and police modernisation have always been considered as very capital-intensive affairs for obvious financial issues involved in execution of such a massive exercise. The union government must make a golden beginning by arranging the funds through widescale privatisation of PSUs. A steady build-up of budgetary resources for modernising CAPFs and state police forces will prove to be a blessing for India in the long run.

(The content of this article reflects the views of writers and contributors, not necessarily those of the publisher and editor. All disputes are subject to the exclusive jurisdiction of competent courts and forums in Delhi/New Delhi only)

Western world and superpowers have

Discriminatory understanding on terrorism

■ PANKAJ J JAYSWAL



India has been suffering from Pakistan-sponsored terrorism for many decades. Thousands of Indians have been slaughtered by Pakistani terrorists in the name of "jihad". The biased international community, particularly the Western world, has a different perspective on terrorism. If terrorism harms their country, they believe in strong action; however, if terrorism takes place in another country and it helps them grow stronger economically and maintain or increase their superpower status, they support and encourage terrorist groups and countries. Is this humanity? India has been a victim of such bigotry for many decades.

When it comes to Pakistan, it is a cancer. Top Pakistani and international leaders clearly knows and acknowledged that cancer cells are difficult to eradicate, regardless of the amount of radiation therapy or surgery performed. One encouraging development is the international community's strong support for the unavoidable necessity of coordinated action against terrorism and the establishment of the United Nations Office of Counter-Terrorism [UNOCT] in June 2017 through a UN General Assembly Resolution to fight terrorism on a national, regional, and worldwide scale. Even though everyone seems to agree that fighting terrorism is important, the international community unfortunately doesn't live up to its rhetoric. Nevertheless, America, China, and other nations have continuously provided financial support, as well as weapons and ammunition, to this terrorist nation in order to bolster their influence in South Asia and undermine the Indian economy by sustaining instability through the use of ISI army-controlled government and Pakistani terrorist organisations.

The following quotations from Pakistani and foreign authorities demonstrate that despite Pakistan's status as a terrorist state, China and the West continue to support its barbaric practices.

"When you talk about militant groups, we still have about 30,000-40,000 armed people who have been trained and fought in some part of Afghanistan or Kashmir," stated Pakistan's then-prime minister, Imran Khan, during a 2019 visit to the United States.

Pakistan's defence minister, Khawaja Asif, acknowledged Islamabad's lengthy history of aiding terrorist groups, but he attempted to avoid being implicated by claiming, "We have been doing this dirty work for the US and the West, including Britain, for three decades," when questioned about it earlier this month.

India's External Affairs Minister S. Jaishankar was not divulging a secret when he said, "Terrorism is not something that is being conducted in dark corners of Pakistan; it's done in broad daylight." Instead, he was articulating something that the world was well aware of. In his 2018 tweet, US President Donald Trump claimed that "they [Pakistan's government and army] give safe haven to the terrorists we hunt in Afghanistan." Did he not say the exact same thing?

However, Trump is not the first to reveal that the Pakistan Army promotes terrorist organisations. "I think it's very important for President Musharraf to make a clear statement to the world that he intends to crack down on terror," President George W. Bush told reporters back in 2002. "The very strong feeling in the international community is that people want to see the circumstances brought about where dialogue and the political process can take the place of extremism and terrorism," cautioned Pakistan, the then-prime minister of the United Kingdom, Tony Blair.

In addition, the European Foundation for South Asia Studies [EFSAS] confirmed in 2017 that "the ISI [Pakistan Army's spy agency] has fundamentally altered the dimensions of the conflict in Kashmir by transforming it to a movement being carried out by foreign militants on Pan-Islamic religious terms, aside from training and funding the terrorist organisations." Two years later, Pakistan must "continue addressing terrorism including clear and sustained actions targeting not only all UN-listed transnational terrorist groups but also individuals claiming responsibility for such attacks," according to the European Union.

Despite the international community's obvious acceptance of terrorism committed by Pakistan against India and numerous other terrorist attacks around the world, including 9/11, they have received special support from America and China for their own self-interest, and no one brings up the humanitarian concerns against these two superpowers. During the war, the International Monetary Fund always provides Pakistan with financial support. It indicates that banks controlled by the West hold nearly all of the dirty money required for dirty politics. In the future, the economic superpowers China and America will undoubtedly bear the burden of their anti-humanitarian actions.

India demonstrated the new international order and willingness to fight terrorism against all circumstances.

The five days of combat between India and the terrorist nation Pakistan demonstrated to the entire world the effectiveness of contemporary military tactics used by India, combining both domestic and foreign technology with accuracy and lasting influence. India's ability to protect itself from American and Chinese drone, missile, and fighter aircraft threats was demonstrated by its in-house Air Defence System and Navics. Many countries' trust in Chinese and American weapons and ammunition was shattered by the ability of Indian jet fighters, missiles, and drones to penetrate the enemy's air defence system, which was created by China. Why did China and the United States try to defuse the situation? After witnessing the terrible devastation at many air bases, Pakistan and ISI understood they were losing the war and began pleading for a ceasefire through China, the United States, and Saudi Arabia. Indian leaders were then addressed by the U.S. vice president and other officials. Since war is not the best option, India agreed to a truce with terms that favoured its interests. But why did America show such interest in a ceasefire when India never requested mediation from US President Donald Trump? The causes may include...

Pakistan's defence minister, Khawaja Asif, acknowledged Islamabad's lengthy history of aiding terrorist groups, but he attempted to avoid being implicated by claiming, "We have been doing this dirty work for the US and the West, including Britain, for three decades," when questioned about it earlier this month.

Since we haven't had a significant peer-to-peer conflict in decades, the US was ultimately concerned that their own weapons might be revealed for their strengths and shortcomings. Having said that, the confrontation between India and Pakistan provided a glimpse of how it might unfold and challenged the belief in the unstoppable military and technological power of the United States. Since war is ultimately a struggle of perception and an extension of politics, any interruptions will affect American influence in other international affairs.

In addition, Trump has another significant challenge at hand: negotiating a tariff fight with China, which has a significant stake in its investments in Pakistan and its $100 billion commerce with India. It would appear that maintaining peace would assist the US negotiate an advantageous agreement with China.

Has PM Modi sought for mediation?

India abides by the Shimla Agreement and the Lahore Declaration, and any border disputes must be resolved amicably. Trump's remarks have caused a stir in the political system and caused Modi some controversy. Trump has found success with this minor strategy, but India would never use a third party to settle the Kashmir dispute.

Even throughout Donald Trump's first term as president, neither PM Modi nor the Indian government requested mediation. Donald Trump repeatedly requested mediation, but each time it was turned down. In 2019, Congressman Brad Sherman tweeted, "I just apologised to Indian Ambassador Harsh Shringla for Trump's amateurish and embarrassing mistake," shortly after Trump's shocking assertion that Prime Minister Narendra Modi had asked him to mediate or arbitrate the Kashmir dispute. Therefore, Donald Trump's unwarranted remarks on "X" platform regarding ceasefire mediation is just a power struggle against China in the South Asian region. India is never going to request mediation.

Though India will have to work on multiple fronts, it has demonstrated its political and military strength to the globe, and the international order will undoubtedly shift soon.

(The content of this article reflects the views of writers and contributors, not necessarily those of the publisher and editor. All disputes are subject to the exclusive jurisdiction of competent courts and forums in Delhi/New Delhi only)



India Poised to Remain Fastest-Growing Major Economy in 2025-26

A Steady March Toward Financial and Defence Superpower

The RBI also highlighted that inflationary pressures are under control, thanks to effective monetary policy interventions, a steady supply of essential commodities, and improved logistics infrastructure. Retail inflation, which had spiked during the global supply chain crises of 2022-23, has now stabilized well within the RBI's comfort zone of 4-6%. Furthermore, foreign exchange reserves remain healthy, bolstered by strong export performance and a surge in foreign direct investment (FDI), particularly in sectors such as manufacturing, renewable energy, and digital infrastructure.



NILABH KRISHNA

The Reserve Bank of India (RBI) on May 30 reaffirmed its bullish outlook on the country's economic trajectory, projecting that India will retain its position as the fastest-growing major economy in the fiscal year 2025-26. The central bank's assessment comes amid a landscape of global economic uncertainty, and underscores the remarkable resilience and momentum that the Indian economy has built over the past few years. In doing so, the RBI's statement adds to the growing consensus that India is not only on a stable financial growth path but is also steadily transforming into a formidable financial and defence superpower on the global stage.

RBI's Economic Outlook: Growth Engine Still Roaring



According to the RBI's official statement released on May 30, India's GDP growth is expected to remain robust, driven by strong domestic consumption, buoyant investment trends, and a resurgence in private sector spending. The central bank noted that despite geopolitical tensions, fluctuating crude oil prices, and tightening global monetary conditions, India's economic fundamentals remain sound. Real GDP growth for the fiscal year 2025-26 is expected to exceed 7%, maintaining India's status as the fastest-growing major economy, ahead of China, the United States, and members of the Eurozone.

The RBI also highlighted that inflationary pressures are under control, thanks to effective monetary policy interventions, a steady supply of essential commodities, and improved logistics infrastructure. Retail inflation, which had spiked during the global supply chain crises of 2022-23, has now stabilized well within the RBI's comfort zone of 4-6%. Furthermore, foreign exchange reserves remain healthy, bolstered by strong export performance and a surge in foreign direct investment (FDI), particularly in sectors such as manufacturing, renewable energy, and digital infrastructure.

Financial Strength and Structural Reform

India's macroeconomic resilience is underpinned by a series of structural reforms undertaken in recent years. Initiatives such as the Production Linked Incentive (PLI) schemes, simplification of the Goods and Services Tax (GST), digitization of financial services, and the expansion of the Unified Payments Interface (UPI) have significantly enhanced transparency, ease of doing business, and investment attractiveness. The rapid formalization of the economy, powered by fintech innovation and regulatory modernization, has broadened the tax base and improved fiscal discipline.

One of the standout success stories has been the digital public infrastructure framework. India's UPI system, which facilitates billions of real-time transactions every month, has become a global benchmark for inclusive financial technology. With its recent expansion into international markets, including Southeast Asia and the Middle East, UPI has become a symbol of India's soft financial power, cementing its role as a leader in the digital financial services revolution.

In tandem, India's banking sector has seen a significant revival. Non-performing assets (NPAs) have come down sharply, and credit growth, especially in rural and micro, small and medium enterprises (MSMEs), has accelerated. Public and private sector banks have strengthened their balance sheets, and the push towards financial inclusion has ensured that over 500 million citizens now have access to formal banking channels.

Defence Sector: From Importer to Strategic Powerhouse

While economic growth has captured headlines, India's parallel rise in the defence sector is equally noteworthy. Over the past decade, India has made concerted efforts to reduce its dependence on foreign defence imports and build indigenous capabilities. The "Atmanirbhar Bharat" (Self-Reliant India) initiative has played a crucial role in this transformation, with a focus on domestic manufacturing, defence exports, and strategic autonomy.

India's defence budget for 2025-26 is one of the largest in the world, and a significant portion of it has been allocated to indigenous research and development, joint ventures, and advanced weapon systems. Key indigenous projects such as the Light Combat Aircraft (LCA) Tejas, Advanced Medium Combat Aircraft (AMCA), Arjun tanks, and the Agni and BrahMos missile systems are not only in full production but are also being exported to friendly nations.



The establishment of the Defence Innovation Organisation (DIO) and initiatives like iDEX (Innovations for Defence Excellence) have fostered a vibrant ecosystem of defence startups and MSMEs. These companies are now involved in the development of cutting-edge technologies, including drone warfare systems, cyber defence, space-based surveillance, and artificial intelligence-driven command systems. India's increasing prowess in space, marked by successful satellite launches and defence space capabilities, adds another dimension to its emerging strategic power status.

Geopolitical Clout and Strategic Partnerships



India's growing economic and military capabilities have naturally translated into increased geopolitical influence. As a key member of international groupings such as the G20, BRICS, the Quad, and the Indo-Pacific Economic Framework, India has leveraged its strategic position to build stronger alliances and advocate for multipolarity in global governance. The country's foreign policy, while maintaining strategic autonomy, has focused on balancing relationships with global powers, securing regional interests, and deepening partnerships with Africa, Latin America, and Southeast Asia.

India's growing defence exports – which have touched a record $5 billion in the past fiscal year – have helped forge defence and strategic ties with over 70 countries. In 2024, India signed major defence deals with nations in the Middle East, Africa, and Southeast Asia, cementing its role not just as a buyer but increasingly as a supplier of advanced military hardware. The Indian Navy, now with a third aircraft carrier under construction and advanced submarine capabilities, is emerging as a key force in securing maritime security in the Indo-Pacific region.

Challenges on the Horizon

Despite the optimism, the RBI and independent analysts have warned of potential challenges. Climate-related disruptions, energy security vulnerabilities, and the looming threat of a fragmented global trading environment could pose risks. Internally, the country must address issues of income inequality, labor market reforms, and urban infrastructure strain if it is to sustain inclusive growth.

There is also an imperative to modernize the education and healthcare sectors to ensure that the demographic dividend is not squandered. With over 65% of the population below the age of 35, India has a unique opportunity – and responsibility – to invest in skilling and human capital development. The RBI has stressed that long-term growth will depend on the nation's ability to harness innovation, boost productivity, and ensure broad-based prosperity.



The Road Ahead: India at a Strategic Crossroads

The convergence of economic vibrancy, defence modernization, and strategic diplomacy positions India at a unique inflection point. No longer just a "rising power," India is now increasingly seen as a key pole in the emerging multipolar world order. Whether it is shaping global norms on digital governance, playing a mediating role in regional conflicts, or contributing to global peacekeeping efforts, India's voice is being heard with greater weight.

The next few years will be critical in cementing this trajectory. Strategic investments in clean energy, semiconductor manufacturing, AI, and green mobility are expected to propel the country into the next phase of high-value economic development. The RBI has signaled that it will continue to adopt a balanced monetary policy stance – one that supports growth while guarding against inflation and external shocks.

India's Rise as the World's Fourth Largest Economy

India's ascent to become the fourth-largest economy in the world is not a sudden phenomenon, but the outcome of decades of economic reforms, policy shifts, demographic leverage, and structural resilience. As of 2025, India has overtaken Germany in nominal GDP terms, trailing only behind the United States, China, and Japan. This transformation reflects more than just numerical expansion—it represents India's evolution from a low-income, agrarian economy into a dynamic, diversified powerhouse with global influence. The trajectory, although not without challenges, highlights a combination of strategic policy decisions, robust consumption patterns, digital innovation, and an increasingly confident global posture.



The seeds of India's economic transformation were sown in the early 1990s with the liberalization of its economy. The dismantling of the Licence Raj, promotion of foreign investment, and shift toward market-driven policies laid the foundation for long-term growth. Over the next two decades, India emerged as a service-sector giant, particularly in IT and business process outsourcing (BPO), which became a major source of foreign exchange and employment. However, in recent years, India's growth has diversified beyond services, with renewed focus on manufacturing, infrastructure, and digital economy.

One of the primary factors behind India's rise is its massive and youthful population, which has fueled a vast consumer market and labor force. With a median age under 30, India enjoys a demographic dividend that few other major economies can match. This has not only boosted domestic consumption—now a key driver of GDP—but has also attracted global corporations looking to tap into India's consumer base. Additionally, India's growing middle class, which is expected to reach nearly 600 million by the end of the decade, has created demand for goods, services, and housing, further stimulating economic activity.

The government's policy direction in the last decade has also played a pivotal role. Flagship initiatives like "Make in India", the Production Linked Incentive (PLI) schemes, and "Digital India" have sought to enhance industrial output, encourage investment, and build a resilient digital infrastructure. The Goods and Services Tax (GST) unified the domestic market, reducing logistical barriers and increasing tax compliance. Simultaneously, financial inclusion programs such as Jan Dhan Yojana and the expansion of the Unified Payments Interface (UPI) have empowered millions with access to banking and digital finance, accelerating economic formalization and broadening the tax base.

The post-pandemic years have further underscored India's adaptability and resilience. While much of the world struggled with prolonged economic recovery, India's economy bounced back swiftly due to a combination of pent-up demand, government stimulus, and a strong export performance, especially in pharmaceuticals, chemicals, and electronics. India also benefited from global supply chain reconfigurations, as firms sought alternatives to China, positioning India as a credible manufacturing hub.

Investment trends reflect growing global confidence. Foreign direct investment (FDI) inflows have reached record highs, and India has become a preferred destination for global tech companies, semiconductor manufacturers, and green energy firms. The growing startup ecosystem—now one of the largest in the world—has added vibrancy and innovation to the economy. In tandem, a well-regulated and increasingly robust financial sector has provided the necessary credit and capital to sustain this momentum.

India's rise is not without its obstacles. Infrastructure deficits, regulatory complexities, skill mismatches, and regional inequalities remain persistent challenges. However, the strategic intent to address these issues is evident in rising public investment, labor law reforms, and skill development initiatives. Moreover, India's ability to maintain macroeconomic stability—inflation control, stable currency, and fiscal discipline—has given it a favorable edge amid global volatility.

In conclusion, India's emergence as the fourth-largest economy is the result of a complex interplay of reforms, demographic strength, strategic policymaking, and global economic shifts. While challenges remain, the foundations are strong. If current trends continue, India is poised not only to sustain its position but also to challenge for the third spot in the coming years, marking its rise as a true economic superpower of the 21st century.

Conclusion: A Nation on the Rise

The RBI's projection for 2025-26 is more than a statistical forecast. It is a validation of India's evolving story – one of resilience, reform, and rising ambition. As the fastest-growing major economy, India is not merely chasing numbers. It is laying the groundwork for a new era, where financial robustness and defence self-reliance go hand in hand to shape a global power that is confident, capable, and cooperative.

The path is not without obstacles, but the direction is clear. India is no longer the future – it is the present. And in that present, the nation stands tall, not only as a beacon of economic opportunity but as a pillar of stability and strength in an increasingly uncertain world.

(The content of this article reflects the views of writers and contributors, not necessarily those of the publisher and editor. All disputes are subject to the exclusive jurisdiction of competent courts and forums in Delhi/New Delhi only)



GDP Unleashed

Locking Fraud, Unlocking India's Potential



RAKESH KUMAR

RBI has assured the Nation that the Indian economy will sustain its position as the fastest growing major economy in 2025-26. However, we can do much better! The reader will be surprised to learn that the Indian economy has enough potential to surpass this prediction. What we need to do is focus on reducing fraud as well as money laundering by illicit trade. Let's examine.

Fraud reduction would definitely increase GDP, By curbing fraud, more legitimate economic activity can occur, leading to a higher overall output. Fraudulent activities divert resources and hinder economic growth, so reducing them frees up these resources for productive use.

Fraud as a drain on the economy:

Fraudulent activities, such as cyber fraud, can drain resources and negatively impact economic growth. A study by the Ministry of Home Affairs (MHA) in India indicated that cyber fraud losses could amount to 0.7% of the country's GDP. It hurts the economy in more ways than one can imagine.

Reduced economic activity

When businesses are targeted by fraud, these may suffer heavy financial losses, potentially leading to reduced investment, production, and employment. Lot of energy and resources are wasted in filing complaints and making efforts to recover the losses. Litigation further adds to the cost of doing business.

People scared of Cyber frauds deal in cash which may lead to illicit trade and money laundering.

Many people avoid doing online business as they have burnt their fingers due to fraudsters. Dealing in cash leads to under reporting, evasion of taxes and money laundering sometimes. In a way one can say that fraudsters create circumstances where money laundering becomes more viable. While controlling frauds to a minimum benefits everybody;

More legitimate economic activity

By reducing fraud, legitimate economic activity is encouraged, allowing businesses and individuals to retain more of their earnings and invest in productive activities, leading to increased production, employment, and overall economic growth.

Increased consumer and business confidence

When fraud is reduced, consumer and business confidence in the economy increases, leading to more spending, investment, and overall economic activity.

Positive trade balance

A reduction in fraud can also lead to a more positive trade balance, as businesses can focus more on exports and less on losses suffered with fraudulent imports. In an environment where doing fraud becomes difficult, Money laundering activities also become difficult as it uses fraudulent channels most of the time. The monster of money laundering is harming the economy in a big way.

"Money Laundering via Illicit Trade Hovering at 5% of India's GDP, Says CII Study"

IANS 28 September 2023

FICCI reports on money laundering has emphasised its prevalence and impact on the Indian economy, often emphasizing its link to other illicit activities like terrorism and drug trafficking. The reports also address the economic risks of trade-based illicit financial flows and the challenges in combating these activities.

- **Scale of the Problem:**

FICCI reports, citing UNODC estimates, highlight the significant amount of money laundering in India, reaching billions of dollars annually. It Impacts GDP as mentioned above. The reports underscore the challenges in combating money laundering, including the rise of illicit markets and the need for comprehensive strategies to address it.

- **Links to Terrorism and Crime:**

It is a well established fact that there is a direct connection between money laundering and terrorism, there are cases where illicit funds have been linked to terror financing and drug trafficking.

Understanding frauds.

Fraud refers to any deceptive practice intended to gain an unfair or unlawful advantage. Maria Konnikova has shared a great piece of wisdom.

"Fraud really thrives in moments of great social change and transition. We're in the midst of a technological revolution. That gives con artists huge opportunities. People lose their frame of reference for what can and can't be real".

India is passing through a great transformation. Internet outreach, direct transfer of subsidy, UPI Gateway, free ration, mid day meal, better electricity supply, roads and other infrastructure creation has created new opportunities. Aspirations are soaring. Unicorns are being created. All these things create an illusion of infallibility which is the main motivation for the fraudster. Educating the public and nabbing the fraudsters is a big challenge.

> **By reducing fraud, legitimate economic activity is encouraged, allowing businesses and individuals to retain more of their earnings and invest in productive activities, leading to increased production, employment, and overall economic growth.**

Experts like Sandeep Mittal believe that the well-being of a nation depends on its critical infrastructure and how secure and resilient it is to sustain the services to its citizens and maintain normal life and activity. World today has critical infrastructure so widely distributed in time and space that the entire process of establishing, maintaining, securing and making it resilient involves a number of stakeholders like the governments at the centre, state and local level. Specialised technical organizations in public and private sectors; private vendors, security agencies and last but not the least the citizens or the society. Each participant should play a role in harmony with other stakeholders. The exponential growth has created a critical infrastructure which is increasingly becoming more dependent on cross- sectorial processes governed by technology and humans. It is universally realized that humans are the weakest link in cyber security to the extent that the dictum 'users are the enemy' has been debated over about two decades to understand the behavior of the user while dealing with cyber security issues. Attempts have been made to identify the user behaviour through various theories in criminology to understand the motive and opportunities available to the user.

The simple step of keeping the password secret has become a major challenge as most of the people keep their password as abcd, 1234 , date of birth of self spouse and children. They are fond of free apps without caring for data theft or downloading viruses, giving OTP to fraudulent calls etc. passwords are written on walls, monitors and Similar places to get these at ease. But they forget that they are exposing themselves and their companies to cyber frauds.From creating fake sense of fear to luring victims with investment schemes. This is how the criminals spread web of lies to loot online.

Policing is at its worst in the sense that it is under staffed, under equipped and not trained to handle the present situation. The common man is to be trained to understand the limitations and be ready to be more alert and watchful.

"Do not let greed and fear overpower your common



sense" Sandeep Mittal IPS, ADGP - Cyber Crime Wing, Tamil Nadu

The author had the opportunity to interact with him along with reading his research papers. His research work indicates that the challenges being faced by India in combating frauds are.

- Lack of skills and knowledge
- Lack of tools, software and hardware.
- Lack of funds
- Lack of cooperation between internet service providers(ISP)
- Lack of awareness and cooperation between financial institutions, banks and credit card/ financing companies.
- Lack of awareness among the general public.7

All these shortcomings only indicate that we have not seen beyond the tip of the fraud iceberg else would have managed these resources with ease. We have worked on our defence infrastructure and upgraded it. It has paid rich dividends during operation SINDOOR. As discussed above, FRAUDS, ILLICIT TRADE AND MONEY LAUNDERING activities help fund terrorism then it is more important to invest in upgrading infrastructure and other resources to combat frauds. We have to think in terms of investment needed to boost the GDP growth by 5.7 percent (.7 percent fraud and 5 percent illicit trade and money laundering). As we have zero tolerance for terror activities we have to have zero tolerance for fraud and money laundering as well.

Success of GIFT city promoted in Gujrat will depend upon our capacity to deal with above issues. Recently the author was in conversation with a leading investment banker. One of the reasons for investors rushing to Singapore as told by him is, robust infrastructure and flawless cooperation in combating frauds.

The present PM of the nation is capable of launching this drive against fraud and money laundering. He has successfully conducted drives like, surrender of gas subsidy, beti padhao beti bachao, Swachcha Bharat. He has already launched a mission for politicians, " Na Khaunga, na khane dunga" . This has to be expanded for all business/non business transactions as well. Time has come to graduate from Man Ki Baat to 'business and economy ki baat'.

Conclusion.

- **Fraud prevention.**

Fraud prevention starts with awareness—know the risks, stay alert. Strong laws and swift action send a clear message: fraud won't be tolerated. Banks and businesses must adopt strict KYC and real-time monitoring tools. Digital verification, like biometrics, adds an extra layer of protection. Regular audits and transparent systems reduce chances of manipulation. AI and data analytics can spot suspicious patterns before damage is done. With the huge talent pool we have as a youth population we can catch the culprits using keywords used to threaten or lure the innocent/less aware victims to be . These Citizens will play a key role—reporting fraud helps protect everyone. Together, smart vigilance and strong systems can build a fraud-resilient India.

- **Building a Anti money laundering echo system which should create fear in the mind of criminals.**

Building a strong anti-money laundering (AML) infrastructure is essential for safeguarding India's financial integrity and national security. It requires an integrated approach—robust legislation, empowered institutions, advanced technology, and vigilant enforcement. Collaboration between government agencies, financial institutions, and global partners is critical to track illicit flows and close loopholes. Public awareness and professional training must also be prioritized to create a culture of compliance. With sustained commitment and innovation, India can build a resilient AML ecosystem that deters crime, promotes transparency, and upholds trust in the financial system.

The time has come to show the world that India has the will and the know-how to fire software based 'AI Brahmos missiles' to destroy the infrastructure built to commit fraud on the Indian public. The infrastructure built for money laundering using illicit trades will also meet the same fate.

India is not going to be satisfied with the success achieved in destroying terrorism, Maovadis etc. Operation SINDOOR might have halted at borders but it will continue to hit terrorist funding infrastructure inside and outside india using AI And other advanced technologies.

The mission is incomplete till we are able to make the world believe that Indian cyber space is safe. Indian soil is not available to fraudsters as well as illicit trade leading to money laundering.

If we have to see our economy growing fastest, then we have to make it safer as well. Institutions like the world bank, IMF and Asian development bank etc should be eager to open new offices in new centres similar to GIFT city. As we have taken a lead in making India a manufacturing hub, let's build upon the success of digital payments by creating a platform better than SWIFT (Society for Worldwide Interbank Financial Telecommunication) and China's Alternative – CIPS (Cross-Border Interbank Payment System). Today it may seem a far-fetched dream but plugging a 5.7 percent leakage to our GDP can make it possible. As achieving it will make us network and collaborate globally which will lead in opening new business opportunities in 'cyber fraud detection and elimination' as has happened with the sale of Brahmos missiles post operation SINDOOR.

(The content of this article reflects the views of writers and contributors, not necessarily those of the publisher and editor. All disputes are subject to the exclusive jurisdiction of competent courts and forums in Delhi/New Delhi only)



INDIA'S GROWTH ENGINE
POWERED BY REFORMS, DRIVEN BY VISION



MANOJ DUBEY
PRINCIPAL (RETD.)
DELHI PUBLIC SCHOOLS

Independence brought with it not only dreams for individuals but also aspirations for economic, social, and political freedom. Seventy-seven years later, these ideals have undergone a transformation as India seeks to become $5 trillion economy. In 1700, India's share in the global income was 22.6% which collapsed to 3.5% by 1950. Britain deindustrialized India to promote their industries. In 1947, India's population was 34 crores with 12% literacy. The GDP was Rs.2.7 lakh crores, accounting for a mere 3% of the world's total. Agriculture sector contributed over 50% to GDP.

In the years following independence, India inherited a colonial economy with low industrialization, widespread poverty, and weak infrastructure. Prime Minister Nehru initiated the development process through what came to be known as the Nehruvian economic model. Influenced by socialist ideals and Soviet-style (state ownership of means of production) central planning, it was adapted to fit India's democratic structure. The Industrial Policy Resolution of 1948 proposed a mixed economy with significant state involvement.

This model laid the foundation for industrial infrastructure, built institutions like IITs, AIIMs, National Institute of Design (NID), and numerous research labs. It promoted self-reliance and indigenous capability in many sectors. However, there were also drawbacks such as low economic growth averaging around 3.5%, inefficiency in public sector enterprises, bureaucratic red tape, the rise of a 'License Raj', and inadequate focus on agriculture and poverty alleviation.

In 1950, the Planning Commission was setup to manage resource allocation and oversee the implementation and evaluation of five year plans. The first plan, launched in 1951, focused on agriculture and irrigation to boost farm output. The second plan, introduced in 1956, prioritized rapid industrialization particularly in heavy industries and capital goods. This paved the way for the development of public sector and beginning of the License Raj. Nehru identified power and steel crucial to national development and is often referred to as the architect of modern India.

The drive for industrialization diverted resources away from the farm sector worsening food shortages and fuelling inflation. The 1962 war with China exposed India's economic and military weaknesses. Though we won the 1965 war with Pakistan, it further strained the economy. India then launched green revolution, spearheaded by M. S. Swaminathan, which significantly boosted agriculture output. This was followed by White Revolution, led by Verghese Kurian, which made India self-sufficient in dairy production.

The fourth five-year plan (1969-1974) was a failure because of 1971 war with Pakistan, though India achieved a decisive victoty. In 1969 Indira Gandhi nationalized fourteen private banks and LIC followed in 1972. Government control increased further with the introduction of FERA of 1973, which put numerous restrictions on the foreign investment and companies.

In June 1991, under Prime Minister Narsimharao and finance minister Manmohan Singh, India introduced a series of bold economic reforms. These included liberalization, privatization, and globalization (commonly referred to as LPG reforms), which opened up the Indian economy and dismantled the License Raj.

These reforms aimed to integrate India with the global economy and to create a business-friendly environment. Due to these reforms, increasing foreign debt and deficit came under control. On 1st July 1991, the RBI devalued rupee by 9%, and two days later again by 11%. In 1992, Securities and Exchange Board of India (SEBI) was setup to regulate the stock market. Many industrialists who had opposed the reforms have built themselves into stronger and bigger companies, competing with the global leaders in their segments.

China began liberalizing its economy in 1976, and in 1987, the GDP of India and China was approximately the same. Because of early reforms and stable government, Chinese economy moved fast and has become the second largest in the world.

A decade of economic reforms unleashed the Indian potential. The early 21st century saw major Indian corporations expanding globally. In 2007, Tata Steel acquired UK based company Corus for $13.1 billion. The same year, Aditya Birla Group's Hindalco Ltd acquired US based Novelis for $6 billion. In 2008, Tata Motors bought UK-based Jaguar Land Rover for $2.3 billion, and in 2010, Bharti Airtel purchased Zain Africa for $10.7 billion. It was an era of multi-billion dollar acquisitions.

During the first UPA government (2004-2009), economic liberalization slowed due to dependence on left parties support. However, several welfare schemes were introduced, including MNREGA, the Farm Loan Waiver, Right to Education Act, and the Food Security Act. The average GDP growth during UPA was 7.4%, though inflation remained high. By 2014, India was at 11th largest economy in the world, with foreign exchange reserve of $311 billion.

The NDA government under Prime Minister Narendra Modi elected, in 2014, focused on economic reforms, infrastructure, and welfare schemes. Massive investments were made in roads, railways, airports and housing. Domestic manufacturing was promoted, Air India was privatized, and LIC was taken public through an IPO. Welfare schemes like PM-Kisan, Ujjwala, and Ayushman Bharat were launched, with improved targeting achieved through Aadhar-linked DBTs. India improved its Ease of Doing Business rank from 142 to 63. Digital infrastructure advanced rapidly with the adoption of UPI and Aadhar. Tax reforms, including the implementation of GST and direct tax system changes, and the opening of 500 million Jan Dhan accounts enhanced financial inclusion. However, demonetization has not been a success and there was criticism of the implementation of GST. The government pursued gradual fiscal consolidation, expanded the PLI schemes, and increased capital investment to drive growth. India's geopolitical position is improving, with the country emerging as potential alternative to China in global supply chains. The average GDP growth over the past 10 years is about 6%, with inflation under control.

It is a matter of pride for all Indians that the country now holds $692 billion foreign exchange reserves and ranks as fourth largest economy. This remarkable journey has been made possible through sound planning, stable governance, and visionary leadership. With continued momentum, India stands to shape the future of global economy.

India took 60 years to become $1 trillion economy in 2007. It then added another trillion in just seven years, reaching $2 trillion in 2014. In 2021, GDP crossed the $3 trillion mark. As of May 2025, India has become the world's fourth largest economy with a GDP of $4.2 trillion, trailing only America, China, and Germany. At the current growth rate, India could become the third largest within two years.

India's rise has been long in the making. The 1991 liberalization reforms laid the foundation for sustainable long term growth. Over the following three decades, India steadily transitioned from an agriculture-based economy to one driven by service and industry. Key sectors like IT, telecom, manufacturing, and financial services flourished, and India became a global hub of software exports.

The IMF has repeatedly acknowledged India's rapid growth trajectory. In its April 2024 World Economic Outlook, the IMF projected India's economy to grow at 6.8%, the highest among the major economies. The IMF described India a 'bright spot in global economy', attributing this to strong domestic demand and meaningful structural reforms.

Despite these achievements, challenges remain. Growth in GDP hasn't translated into widespread prosperity. India's per capita income is just $ 2800 annually, ranking 124 globally. While GDP is a useful measure for investors and global comparisons, it can obscure internal disparities if not paired with people-centric development policies in health, education, and employment.

(The content of this article reflects the views of writers and contributors, not necessarily those of the publisher and editor. All disputes are subject to the exclusive jurisdiction of competent courts and forums in Delhi/New Delhi only)



Dark Patterns in Digital Marketplace

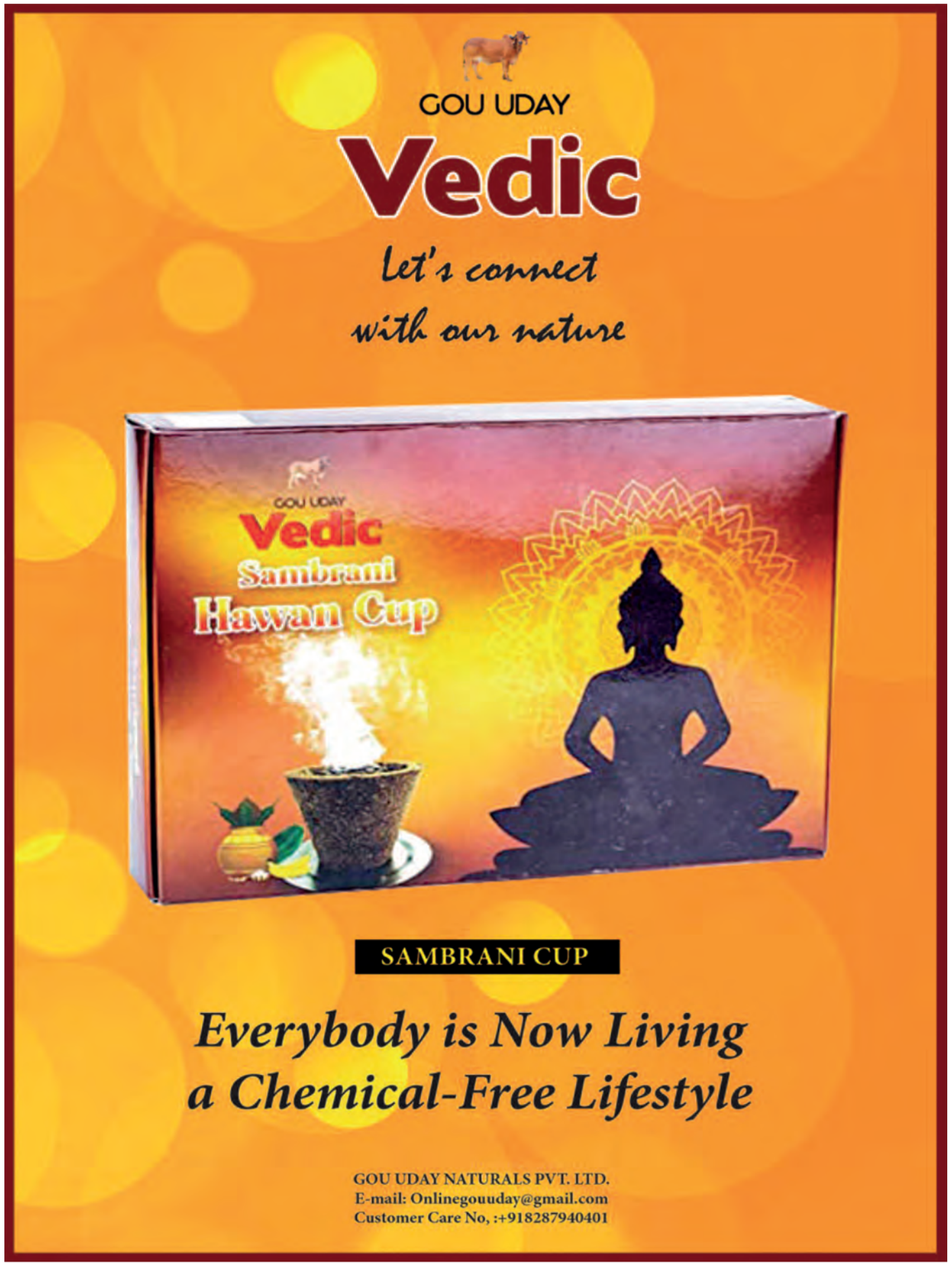
UNMASKING THE MANIPULATION AND PROTECTING OURSELVES

■ UDAY INDIA BUREAU

In the age of digital commerce and ubiquitous internet services, convenience and speed often come at an invisible cost. That cost is increasingly being extracted through what experts call dark patterns—deceptive design techniques embedded in websites, apps, and online services, purposefully crafted to trick users into taking actions they might not otherwise choose. Whether it's accidentally subscribing to a service, paying for add-ons you didn't ask for, or being nudged toward sharing more personal data than necessary, dark patterns are now deeply woven into the digital fabric of our online experiences.

The term "dark patterns" was coined by UX designer Harry Brignull in 2010 to describe interface designs that benefit the service provider by manipulating users into unintended decisions. These patterns are not bugs or glitches—they are deliberately designed strategies based on behavioral psychology. They exploit cognitive biases, urgency, and information overload to tilt the balance in favor of corporations and platforms. As online shopping and services grow more complex, these tactics have also become more sophisticated and difficult to detect.

One of the most common dark patterns is roach motel, where entering a subscription or service is easy, but canceling it is intentionally difficult. For example, some streaming services allow sign-up in a click, but canceling the subscription involves navigating a maze of menus, often accompanied by guilt-inducing language like "Are you sure you want to miss out?" Another popular tactic is the use of





confirmshaming, where users opting out of a service or promotional email must click buttons labeled with statements like “No, I don’t want to save money” or “I prefer to pay full price.”

Then there’s the sneak into basket pattern, seen frequently in e-commerce websites. Customers may find additional items—like warranty plans, insurance, or accessories—automatically added to their shopping cart without explicit consent. If users are not attentive, they may end up paying more than they intended. Similarly, many travel and airline websites employ the drip pricing model, where the displayed price looks low, but mandatory fees and charges are revealed only at the final payment step, often making it too inconvenient to start over.

Social media platforms and mobile apps often use privacy Zuckering—a dark pattern where users are led to unknowingly share more personal data than they intended. Default settings, hidden opt-outs, or confusing language during sign-up make it difficult to retain control over one’s digital footprint. These manipulative designs are especially concerning when targeted at vulnerable populations like children, the elderly, or those with lower digital literacy.

So how can users safeguard themselves in this murky digital terrain? Awareness is the first line of defense. Recognizing the signs of dark patterns—such as pre-checked boxes, guilt-tripping prompts, or intentionally hidden opt-out options—can empower users to pause and make informed choices. Reading the fine print, scrutinizing every step in the checkout process, and routinely checking account settings for unnecessary subscriptions or privacy violations are vital habits.

Additionally, browser extensions and privacy tools like ad blockers, cookie managers, and password vaults can reduce exposure to manipulative designs. Regulatory support is also gaining momentum. The European Union, under its Digital Services Act, and countries like the U.S. and India are beginning to recognize the harmful impact of dark patterns and are proposing legislation to curb such practices. Until these protections become widespread and enforceable, the responsibility to remain vigilant lies largely with users.

In a world where attention is currency and data is power, dark patterns represent an unethical breach of user trust. Transparency, consent, and respect for the user must return to the heart of digital design. By educating ourselves and demanding accountability from companies, we can push back against these underhanded tactics and reclaim a more honest digital experience.

One of the most common dark patterns is roach motel, where entering a subscription or service is easy, but canceling it is intentionally difficult. For example, some streaming services allow sign-up in a click, but canceling the subscription involves navigating a maze of menus, often accompanied by guilt-inducing language like “Are you sure you want to miss out?” Another popular tactic is the use of confirmshaming, where users opting out of a service or promotional email must click buttons labeled with statements like “No, I don’t want to save money” or “I prefer to pay full price.”

MANIPAL TATA MEDICAL COLLEGE
JAMSHEDPUR
(A constituent unit of MAHE, Manipal)

INSPIRED BY LIFE

MANIPAL TATA MEDICAL COLLEGE



Manipal Tata Medical College (MTMC) Baridih, Jamshedpur, in the East Singhbhum District of Jharkhand, is a premium institution for medical education and training established under a consortium model between Manipal Academy of Higher Education (MAHE), Manipal, a duly notified "Institution of Eminence" and Deemed to be University and Tata Steel Ltd.

MTMC is the first of its kind private-private partnership model created as a result of visionary policy change in the medical education sector by the Government of India to strengthen medical education in the country. This has allowed leading private institutions to join hands in strengthening medical education in far flung areas.

Manipal Tata Medical College
(A constituent unit of MAHE, Manipal)
Kadani Road, Baridih, Jamshedpur 831 017

Email :info.mtmc@manipal.edu
Phone no :0657 2211122
Website :manipal.edu/mtmc-jamshedpur.html



Fissured Smile of Indian Dentistry

A Battle for Scope and Dignity

The promise of a fulfilling career, once shining brightly through years of rigorous training, now often dissolves into a frustrating search for opportunities that simply do not exist in sufficient numbers. This plight is exacerbated by what many dentists describe as an orchestrated campaign by certain professional bodies, particularly the Indian Association of Dermatologists, Venereologists and Leprologists (IADVL), to unlawfully restrict their scope of practice, particularly in the lucrative and rapidly expanding field of aesthetic cosmetology. However, these organisations assert that they work in the larger interest of public healthcare and aesthetics.



SARAT C. DAS

India, a nation of over 1.4 billion, boasts a remarkable landscape of medical and educational institutions, yet beneath the veneer of progress in various fields lies a simmering crisis within its dental fraternity. Thousands of dental graduates, brimming with academic credentials and professional aspirations, find themselves at the precipice of a burgeoning unemployment crisis.

Well, more startlingly, where unemployment in India plagues even the most qualified professionals, dentists face a unique and systemic crisis, struggling against not just a lack of opportunities but also institutional barriers designed to suppress their practice. Despite years of rigorous academic and clinical training, thousands of dental graduates find themselves in financial distress, with limited job prospects in an oversaturated market. Many turn to aesthetic medicine—a natural extension of their expertise in oral and maxillofacial anatomy—only to face aggressive opposition from the Indian Association of Dermatologists, Venereologists and Leprologists (IADVL). ''These organizations have systematically worked to exclude them from performing procedures like Botox for gummy smiles, TMJ disorders, and facial rejuvenation,'' says Dr. VK Swamy, a leading forensic, cosmetic and medico-legal expert and president of Juris Prudentia Medicina.

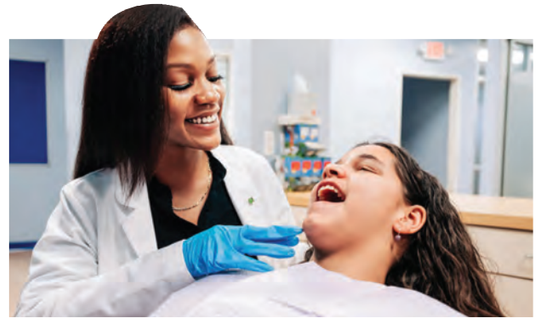
The promise of a fulfilling career, once shining brightly through years of rigorous training, now often dissolves into a frustrating search for opportunities that simply do not exist in sufficient numbers. This plight is exacerbated by what many dentists describe as an orchestrated campaign by certain professional bodies, particularly the Indian Association of Dermatologists, Venereologists and Leprologists (IADVL), to unlawfully restrict their scope of practice, particularly in the lucrative and rapidly expanding field of aesthetic cosmetology. However, these organisations assert that they work in the larger interest of public healthcare and aesthetics.

To be fair to both, the situation regarding the Indian Association of Dermatologists, Venereologists and Leprologists (IADVL) and their campaign against dentists performing aesthetic procedures is a contentious and ongoing issue within the medical and dental fraternities in India. The IADVL's stance is rooted in the assertion that aesthetic procedures, particularly those involving skin and hair, fall exclusively within the domain of dermatology, and that practitioners from other fields, including dentistry, lack the necessary specialized training and qualifications.

IADVL claims to have been actively campaigning against what it terms "quackery" and "unauthorized dermatological procedures" performed by individuals it considers unqualified, including dentists, homeopaths, and beauticians. They assert that their campaign focuses on public awareness, legal action, and regulatory lobbying, emphasizing the risks of aesthetic treatments conducted by untrained practitioners.

As part of its efforts, the IADVL claims to conduct public awareness programs, urging its members to distribute flyers and social media messages to warn against seeking aesthetic procedures from unqualified individuals while promoting "authentic dermatological care." The association also demands stricter surveillance and legal penalties against those it labels as "quacks," encouraging medical professionals to report malpractice to health authorities. Additionally, the IADVL highlights severe risks—such as infections, disfigurement, and even larger fatalities.

It is understood that IADVL has challenged guidelines from other professional bodies, particularly the Dental Council of India (DCI), which permits oral and maxillofacial surgeons to perform certain aesthetic procedures. Legal challenges have been filed by the Dynamic Dermatologist and Hair Transplant Association, an IADVL-linked group, contesting these guidelines. Furthermore, the IADVL has lobbied state and national medical and dental councils to restrict non-dermatologists from performing aesthetic treatments. Some state dental councils, like Karnataka's, have complied, declaring it "unethical" for general dentists to conduct certain facial procedures unless they are specialized oral surgeons. The Delhi Medical Council (DMC) has also ruled that only MBBS-registered practitioners—not dentists—are authorized to administer treatments like Botox or acne therapy.



Dentists, however, accuse the IADVL of overreach, alleging that its influence has led to blocked supplies of essential materials like botulinum toxin and fillers—even for legitimate therapeutic uses such as treating bruxism, temporomandibular joint disorders (TMD), facial palsy, and gummy smiles. They argue that their extensive training in head and neck anatomy justifies their role in facio-maxillary procedures.

The IADVL's core argument hinges on training and regulatory scope, asserting that only dermatologists with specialized postgraduate qualifications (MD/DNB) are authorized to perform skin- and hair-related aesthetic procedures. They maintain that dentists, despite their expertise in oral health, lack the necessary medical training for such interventions and that allowing them to perform these treatments constitutes a public health risk.

From the dental perspective, the IADVL's campaign is seen as an attempt to monopolize aesthetic medicine while disregarding the legitimate expertise of other professions. Dentists argue that their training in maxillofacial regions qualifies them for relevant procedures and that labeling them as "quacks" undermines their professional standing. They also criticize the IADVL for targeting legally obtained training certificates, pressuring authorities to act against certificate holders without justification.

Moreover, dentists allege that some state dental councils—under IADVL's influence—have issued unconstitutional directives without consulting the DCI, further complicating the issue due to potential conflicts of interest among council officials who themselves practice aesthetics. The Indian Dental Association (IDA) has faced backlash for allegedly siding with the IADVL instead of defending its members, exacerbating tensions within the dental community.

"This is not just professional rivalry; it's an orchestrated attempt to monopolize an entire medical field," says Dr. VK Swamy. "Dentists are trained in facial anatomy, nerve pathways, and injectable techniques—yet they are being unlawfully barred from practicing what they are qualified to do."

The narrative of an Indian dentist today is frequently one of quiet desperation. Each year, thousands emerge from dental colleges, armed with Bachelor of Dental Surgery (BDS) and Master of Dental Surgery (MDS) degrees, ready to serve the nation's oral health needs. However, the market satura-

tion, coupled with the high cost of setting up a private practice and limited public sector opportunities, leaves a vast majority struggling. Many find themselves underemployed, taking on roles far below their qualifications, or facing prolonged periods of unemployment. The dream of independent practice or specialized service becomes a mirage, as financial viability remains elusive.

It is against this backdrop of economic vulnerability that the actions of certain specialized medical associations have drawn sharp criticism, sparking a bitter inter-professional dispute. At the heart of this controversy is the IADVL, accused by dental practitioners of attempting to establish an unlawful monopoly over aesthetic procedures, even those falling squarely within the anatomical and academic purview of other professions. This includes, crucially, areas where dentists possess inherent expertise—particularly procedures within the Facio-Maxillary region.



The concerns raised by the dental community are multifaceted and deeply troubling, reflecting a systematic effort to marginalize and discredit their profession. One of the most significant points of contention is IADVL's claim of exclusive control over aesthetic procedures related to skin and hair, even when such procedures fall under the anatomical and academic jurisdiction of other professions—such as oral and maxillofacial surgery, ENT surgery, ophthalmology, and dentistry. This assertion, dentists argue, is fundamentally flawed, ignoring the comprehensive training they receive in head and neck anatomy, physiology, and pathology. Dental education covers the entire craniofacial complex, providing dentists with unparalleled knowledge of the muscles, nerves, blood vessels, and bone structures of the face – knowledge that is undeniably critical for the safe and effective administration of facial aesthetic treatments.

What has been particularly distressing for the dental community is the deliberate campaign of disparagement. Dentists have been wrongly labeled as “quacks,” their professional training and credentials disrespected, and their clinical scope misrepresented—especially for procedures in the Facio-Maxillary region, where dentists hold clear domain expertise. This vilification, often propagated through public statements and media campaigns, not only tarnishes the reputation of an entire profession but also misleads the public, potentially denying patients access to qualified practitioners for a wider range of services. The rigorous five-year BDS curriculum, followed by specialized MDS programs, imbues dental professionals with a nuanced understanding of facial aesthetics, function, and the intricate interplay of tissues in the region, making the "quack" label not just offensive but factually inaccurate.

Further exacerbating the issue, IADVL has allegedly aggressively targeted certificates of training and fellowships obtained from legally constituted Section 8 educational bodies, calling them fraudulent, and manipulating authorities to take action against the certificate holders without legal basis. This tactic, critics argue, undermines legitimate efforts by dental practitioners to upskill and specialize in areas within their anatomical scope. These Section 8 companies, established as non-profit organizations, often collaborate with experienced practitioners and academics to provide advanced training, filling gaps in formal university curricula or offering specialized modules. To label their certifications as fraudulent, without due legal process, is seen as an attempt to stifle professional development and healthy competition.

The IADVL’s tactics have been nothing short of draconian, extending from false public narratives to direct interference in supply chains. The association has repeatedly labeled dentists as "quacks," despite their accredited degrees, and pressured suppliers to restrict the sale of Botox and dermal fillers to dental professionals—even for therapeutic uses like bruxism and facial palsy. "It’s absurd that a dermatologist can inject fillers around the mouth, but a dentist—who spends years studying maxillofacial structures—is suddenly deemed unqualified," remarks Nisha Sharma, CEO of DenTrenz, a leading dental industry platform. "This isn’t about patient safety; it’s about protecting a lucrative monopoly." Worse still, the Indian Dental Association (IDA), instead of defending its own members, has remained passive or even complicit, leaving dentists to fight an uneven battle alone.

Perhaps the most alarming aspect of this alleged monopolistic behavior is the direct impact on clinical practice. With financial and lobbying influence, IADVL has managed to block the supply of essential aesthetic materials (such as botulinum toxin and fillers) to dental practitioners—even for use in clearly indicated therapeutic cases such as bruxism, TMD disorders, facial palsy, and gummy smiles. This blockade goes beyond mere cosmetic concerns; it directly impedes dentists' ability to provide legitimate therapeutic treatments for debilitating conditions. For instance, botulinum toxin is a recognized treatment for severe bruxism (teeth grinding) and Temporomandibular Joint Disorder (TMD), conditions that fall squarely within the domain of oral health. Denying dentists access to these materials for such therapeutic indications is not just anti-competitive; it compromises patient care and the professional autonomy of a lawfully recognized medical fraternity.

The pressure exerted by IADVL has reportedly led to alarming consequences at the state level. Under this pressure, State Dental Councils—such as those of Telangana, Maharashtra, Karnataka, and Madhya Pradesh—have issued unilateral, unconstitutional circulars without consulting the apex body, the Dental Council of India. This bypasses the very regulatory mechanism designed to ensure uniformity and legality in dental practice across the nation. What is more disconcerting, some of these circulars were issued by Registrar-level officials, even while those individuals themselves practice aesthetic procedures—indicating a clear conflict of interest. Such actions raise serious questions about procedural fairness, ethical conduct, and the integrity of regulatory bodies that are meant to safeguard the interests of all dental practitioners, not just a select few.



Adding to the despair, the Indian Dental Association (IDA), instead of defending its members, has also aligned with IADVL, deepening the crisis and exposing ethical, skilled practitioners to regulatory hostility. This perceived betrayal by their own representative body has left many dentists feeling isolated and vulnerable, caught between a powerful dermatological lobby and an organization that should be their primary advocate. This alignment not only weakens the collective voice of the dental community but also emboldens those attempting to restrict their professional scope.

The legal and ethical implications are staggering. By denying dentists the right to practice within their scope, many legal experts view that the IADVL is violating Article 19(1)(g) (right to profession), Article 21 (right to livelihood and dignity), and Article 51(A)(j) (duty to uphold scientific temper). "This is not just an attack on dentists; it’s an attack on interdisciplinary medicine itself," argues Dr. Swamy. "If one association can dictate who gets to perform which procedures, then tomorrow, cardiologists could block radiologists from reading echocardiograms, or orthopedic surgeons could prevent physiotherapists from rehabilitating patients. Where does it end?" The situation has forced many dentists to seek alternative certifications from legitimate interdisciplinary bodies like COCTRASI, DFACTIA, and OMILOCI, only for IADVL to delegitimize these qualifications as "fraudulent"—another baseless accusation aimed at maintaining control.

The dispute often involves legal challenges. For instance, the Bombay High Court has been adjudicating the eligibility of dentists to carry out such treatments. The Association of Oral and Maxillofacial Surgeons of India (AOMSI) defends their role, asserting their specialized training. In 2022, the DCI did issue guidelines allowing oral and maxillofacial surgeons to perform aesthetic procedures, which dermatologists have contested.

The IADVL's campaign reflects a broader struggle over professional boundaries in the rapidly expanding field of aesthetic medicine in India. While the IADVL emphasizes patient safety and the dangers of unqualified practitioners, dentists argue that their training and anatomical expertise in the facio-maxillary region legitimately qualify them for many aesthetic procedures, both cosmetic and therapeutic. The outcome of this campaign will significantly impact the scope of practice for dentists and the accessibility of aesthetic services in India.

The financial and emotional toll on dentists has been devastating. Many young graduates, already burdened by education loans, find themselves unable to sustain a practice due to these artificial restrictions. "We’re not asking for special privileges—just the right to work within our competence," says Nisha Sharma. "If dermatologists can expand into lasers and hair treatments beyond their core training, why can’t dentists use Botox for conditions they are academically and clinically trained to manage?" The answer, as many suspect, lies in the economic stakes. Aesthetic medicine is a multi-billion rupee industry, and IADVL’s aggressive posturing suggests a desperate bid to retain dominance.

The solution, however, is straightforward: regulatory clarity, judicial intervention, and professional solidarity. The Dental Council of India must assert its authority, nullifying unjust state-level restrictions. Courts must uphold constitutional rights by preventing private associations like IADVL from overstepping their jurisdiction. And most importantly, the dental community must unite, demanding fair representation and policy reforms. "The fight isn’t just for dentists—it’s for the future of ethical, skill-based medicine," asserts Dr. Swamy. "If we allow this suppression to continue, it won’t just be dentists suffering—it will be patients who lose access to safe, affordable, and expertly delivered care." As the battle intensifies, one thing is clear: India’s dentists will no longer remain silent. Their struggle is not just for professional survival—it’s a fight for justice, dignity, and the very principles of fair medical practice.

(The content of this article reflects the views of writers and contributors, not necessarily those of the publisher and editor. All disputes are subject to the exclusive jurisdiction of competent courts and forums in Delhi/New Delhi only)



Kuttanad's silent invader

How water hyacinth is choking a wetland and its people

Read how a community in Kuttanad, Kerala has got together to map water hyacinth spread and plan sustainable solutions to get rid of the invasive weed that threatens their health and livelihoods.

■ AARTI KELKAR KHAMBETE

In Pulinkunnu, a village in Kerala's Alappuzha district's Kuttanad region, the waters that once supported livelihoods are now strangled by a green invader. Water hyacinth, a fast-spreading aquatic weed, has blanketed canals and backwaters, obstructing fishing, choking irrigation channels, and posing serious health risks to local communities.

Though water hyacinth (Eichhornia crassipes) is known globally as an aggressive weed, its impacts in India remain poorly documented at the local level. A recent study by Aji Abba and Sabarinath S titled 'Sustainable management of water hyacinth (Eichhornia crassipes): Community-led strategies for livelihood enhancement in rural India,' published in Results in Engineering, sheds light on the Kuttanad region's ongoing battle—and how the community is seeking solutions from the ground up.

What is water hyacinth?

Water hyacinth (Eichhornia crassipes) often appears as a green layer of dense vegetation on rivers, ponds, and lakes. A fast-growing aquatic plant, it normally provides shelter and feeding grounds for a range of aquatic animals. However, under conditions where water bodies are polluted with a high nutrient load, these free-floating and highly invasive aquatic plants can proliferate rapidly, forming a dense green layer on water bodies and posing a risk to the natural habitats of the freshwater ecosystems. In Kuttanad, these mats now cover 75–94 percent of surface waters, with hotspots near farmlands, residential areas, and canals.



Water hyacinth, an aggressive weed is invading Kuttanad

A weed that thrives on pollution

Water hyacinth thrives in nutrient-rich waters, especially those loaded with agricultural runoff or untreated sewage. Its rapid growth forms dense mats that block sunlight, deplete oxygen, and disrupt aquatic ecosystems. As the weed grows, it alters water chemistry. The study found high nutrient loads, increased acidity, and elevated levels of total dissolved solids (TDS) in infested waters.

Rampant growth of this weed can also slow down water currents, leading to stagnation and creating conducive conditions for mosquito breeding and the spread of diseases such as malaria, encephalitis, filariasis, etc.
Contamination by E. coli bacteria and visible turbidity point to deteriorating water quality—posing health risks to people and animals alike.

Dense growth of the weed in water can cause massive water losses through transpiration, which can be three times higher than natural evaporation. Infestation with water hyacinth can also negatively affect irrigation facilities by decreasing water flows and also interfere with recreational activities such as swimming, fishing, and boating. During floods, heavy floating mats of the weed can dislodge and cause significant damage to downstream infrastructures such as bridges and fences and to crops and pastures.

It is no surprise that this invasive weed has spread to more than 141 countries and 24 Indian states with its remarkable ability to multiply. For example, 10 water hyacinth plants can reproduce into 655,360 plants, covering approximately half a hectare in 8 months. In India, control measures cost over ₹2.3 billion annually, with approximately two million hectares of water bodies affected by this invasive species.

Kuttanad is vulnerable to water hyacinth invasion

Kuttanad, a Ramsar-designated wetland in Kerala, is particularly vulnerable to water hyacinth invasions due to its below-sea-level farming systems and complex hydrology. The region has an intricate network of backwaters and canals, and the Pampa River serves as a main source of water in the region. People in the region practice intensive rice and coconut farming.

This study conducted in the Kuttanad region involved the community in mapping the spread of the weed and evaluated its impacts on water quality, health, agriculture, and fisheries in the region. The study also explored sustainable ways of managing the growing menace of water hyacinth.



A ferry wades through water hyacinth in an Alppuzha canal

A blow to livelihoods and health

The community was involved in mapping the spread of water hyacinth in Kuttanad, and it was found that the weed covered 75 to 94 percent of the surface area of water bodies in the region.

The water showed high nutrient content, bacterial count, high turbidity and TDS

The growth hotspots were concentrated in areas close to agricultural lands, canals, and densely populated residential areas, indicating that water enriched with nutrients from agricultural runoff such as nitrogen and phosphates and human and animal waste led to overgrowth of water hyacinth. The water quality of the area showed that the water was highly acidic, high in iron due to industrial effluents or natural minerals, and high in dissolved ions leading to high TDS possibly due to agricultural runoff or sewage intrusion.

The water covered with dense layers of water hyacinth was found to be highly turbid and contaminated with E. coli bacteria, indicating that the thick vegetation mats contributed to oxygen depletion and created anaerobic environments conducive for bacterial proliferation.

Fish deaths became common and fish counts reduced

The thick mats made it very difficult for fishermen to manoeuvre in the waters and affected their fishing activities. It also led to a reduction in fish count due to fish deaths because of loss of oxygen from the waters.

Water hyacinth disrupted agricultural irrigation

Water hyacinth growth also disrupted agricultural irrigation due to blockage in the flows of the water. Similarly, fishing was severely affected due to blocked waterways, oxygen depletion, and fish habitat loss. Small businesses also suffered,

The water covered with dense layers of water hyacinth was found to be highly turbid and contaminated with E. coli bacteria, indicating that the thick vegetation mats contributed to oxygen depletion and created anaerobic environments conducive for bacterial proliferation.

with 83 percent of people reporting negative consequences, possibly due to reduced water transport efficiency and increased maintenance costs.

Water hyacinth infestation led to high economic losses

Economic losses from fishing, boat damage, and health-related expenses reached upto Rs. 3000 per month per household, primarily due to reduced fish catch and increased costs associated with clearing waterways. This loss accounted for approximately 20 percent of the average monthly household income in the region—a significant amount that exacerbated financial instability for affected communities. Observations and information from the local population also revealed that there was a significant decline in native fish species, with 76 percent of surveyed fishermen reporting reductions in fish catch.

Health of the community living close to the wetland was compromised

A number of people experienced waterborne diseases, skin irritation, and fungal infections of legs, which they associated with frequent contact with contaminated or stagnant water hyacinth-infested waters.



Water hyacinth in bloom in one of the canals in Kerala

Turning a menace into manure: Community-led biofertiliser innovation

The study found that the community was keen to find sustainable solutions to the problem of water hyacinth and showed interest in utilising water hyacinth as a biofertiliser due to rising costs of chemical fertilisers. This community demand for sustainable solutions is now driving a collaborative effort in Kuttanad to develop biofertiliser as an alternative to chemical fertilisers, supporting sustainable agricultural practices.

What are the benefits of biofertilisers

They can help in leveraging locally available biomass to produce a cost-effective, nutrient-rich organic fertiliser that improves soil fertility and crop yields and reduces dependence on synthetic fertilisers.

Their low installation cost and simple production process make them accessible to small and marginal farmers.

Its use in saline soils has shown promising results in mitigating salinity stress for crops such as tomatoes and potatoes.

Use of water hyacinth for making biofertilisers is as beneficial as microbial populations within water hyacinth support plant growth through phytohormone production.

Beyond fertiliser: A call for policy and partnership

In addition to promoting biofertilisers, the study recommends a broader set of strategies to manage the water hyacinth crisis. These include reducing nutrient inflows from agricultural runoff and untreated wastewater—major contributors to the weed's rapid growth—through stronger policy interventions and improved water quality regulations.

It also highlights the potential of investing in sustainable aquaculture to diversify local livelihoods and reduce dependence on fisheries affected by the infestation.

Furthermore, introducing structured cash-for-work programs, which have shown positive results in wetland restoration projects in Southeast Asia and East Africa, could provide both ecological and economic benefits in Kuttanad.

(https://www.indiawaterportal.org/environment/ecology/kuttanads-silent-invader-how-water-hyacinth-is-choking-a-wetland-and-its-people)

(The content of this article reflects the views of writers and contributors, not necessarily those of the publisher and editor. All disputes are subject to the exclusive jurisdiction of competent courts and forums in Delhi/New Delhi only)



Project I-Star: Elevating the Indian Air Force into a Digital Powerhouse

■ UDAY INDIA BUREAU

In a significant leap toward modern warfare capability, the Government of India has unveiled Project I-Star—a cutting-edge initiative aimed at digitally transforming the Indian Air Force (IAF) into a truly network-centric force. Short for Indian Intelligence, Surveillance, Target Acquisition and Reconnaissance, Project I-Star represents a bold fusion of advanced technology and strategic foresight. At a time when information dominance and real-time situational awareness define the outcome of wars, this initiative will elevate the IAF's combat readiness, surveillance capabilities, and operational efficiency to global standards.

At its core, Project I-Star is designed to create a digital backbone that integrates various platforms—airborne, ground-based, and space—into a unified information grid. This project aims to harness artificial intelligence (AI), big data analytics, secure communication networks, and real-time geospatial intelligence to provide seamless situational awareness to IAF commanders. The traditional delays between reconnaissance, decision-making, and action will be drastically reduced. Instead, decisions will be data-driven, precise, and immediate—a hallmark of modern air forces across the world.

One of the key features of I-Star is its ability to connect multiple sensors and platforms, ranging from AWACS (Airborne Warning and Control Systems), UAVs, satellites, and fighter jets, to ground control centers. This integration ensures that data collected from one end of the battlefield is instantly available to commanders at another, enabling them to make faster, more accurate decisions. For instance, if a UAV detects hostile movement along the border, the information can be relayed in real-time to a Su-30MKI or a Rafale squadron, prompting instant action with zero delay.



Another critical aspect of the project is its focus on data fusion and predictive intelligence. Through AI-powered analytics, the IAF will be able to not only understand current threats but also predict enemy movement and resource deployment. Such predictive capabilities are already being used by advanced militaries like the United States and Israel, and India joining this league through I-Star is a testament to its growing technological maturity.

The I-Star project will also support the development of India's indigenous warfare capabilities. Indian defense firms and startups will be instrumental in creating the software infrastructure and hardware solutions that power this digital ecosystem. This aligns seamlessly with the Modi government's Atmanirbhar Bharat (self-reliant India) initiative, giving a massive boost to India's defense-tech ecosystem while reducing dependency on foreign suppliers.

From an operational standpoint, Project I-Star will dramatically enhance the IAF's ability to monitor and respond across India's complex terrain—be it the mountainous regions bordering China, the desert sectors near Pakistan, or the vast maritime expanse in the Indian Ocean. This real-time capability becomes even more critical in the age of hybrid warfare, where threats are fast-evolving and multidimensional.

Beyond operational effectiveness, the global perception of the Indian Air Force will undergo a transformation. In the past, while India was recognized for its brave pilots and capable aircraft, it lagged in the realm of integrated warfare technology. With I-Star, India steps into the future alongside countries like the US, Russia, China, and Israel, who have long embraced digitized warfighting. India's ability to manage large-scale joint operations, anticipate threats, and deliver coordinated responses will position it as a formidable air power in the Indo-Pacific and beyond.

One of the key features of I-Star is its ability to connect multiple sensors and platforms, ranging from AWACS (Airborne Warning and Control Systems), UAVs, satellites, and fighter jets, to ground control centers. This integration ensures that data collected from one end of the battlefield is instantly available to commanders at another, enabling them to make faster, more accurate decisions. For instance, if a UAV detects hostile movement along the border, the information can be relayed in real-time to a Su-30MKI or a Rafale squadron, prompting instant action with zero delay.

In conclusion, Project I-Star is more than just a digital upgrade—it is a paradigm shift in how the Indian Air Force views and executes modern warfare. It is about turning India's aerial strength from a platform-centric force to a network-centric combat entity. In a world where wars are increasingly won with bytes as much as with bullets, I-Star promises to be the invisible weapon that powers India's defense aspirations and secures its skies in the decades to come.













Reflecting on One Year of the Majhi Government in Odisha

A Year of Progress and Unfinished Business

■ UDAY INDIA BUREAU

As the Bharatiya Janata Party (BJP) government in Odisha marks its first anniversary under the leadership of Chief Minister Mohan Charan Majhi on June 12, 2025, it stands at a critical juncture of assessment and expectation. This milestone not only celebrates achievements but also prompts reflection on the challenges yet to be tackled.

During its victorious 2024 campaign, the BJP made ambitious pledges that resonated deeply with Odisha's electorate. Among these commitments were reopening all four gates of the revered Srimandir in Puri, revising the minimum support price (MSP) for paddy to Rs 3,100 per quintal, launching the Subhadra Yojana for women, and enhancing old-age pensions. Remarkably, three of these promises have been fully realised within the first year, while the increase in old-age pensions, albeit partial, has been initiated for beneficiaries above 80 years.

A notable achievement of the Majhi government has been the restoration of democratic processes within Odisha's governance structure. In contrast to the previous regime, where bureaucratic influence often overshadowed ministerial authority, the current administration has empowered its ministers, fostering greater autonomy in decision-making. This shift aims to rebalance the relationship between elected officials and the bureaucracy, crucial for effective governance and public service delivery.

Addressing long-standing criticisms, the administration has also focused on reforming the state's police administration. Previously accused of political bias and high-handedness, the police force under the new government has taken steps towards rebuilding public trust. From enhanced professionalism in interactions to a neutral stance in political matters, these efforts are pivotal in cultivating a more citizen-centric policing approach.

Across various departments including industries, agriculture, welfare schemes for scheduled castes and tribes, women and child development, healthcare, education, and consumer welfare, measurable improvements have been observed in service delivery and performance metrics. This progress underscores the government's commitment to enhancing socio-economic indicators and welfare programs.

However, amidst all these accomplishments, significant challenges remain unaddressed. Concerns persist over the government's approach towards combating the influence of the sand mafia, illegal mining operators, and the fallout from the massive chit fund scandal. The unresolved MV Black Rose case, along with the multi-crore mining scam and chit fund fraud, symbolizes the public's demand for accountability and justice, highlighting the administration's unfinished agenda.

While one year provides a snapshot of intent and initial actions, it serves as a precursor to the government's long-term vision and capability. The Majhi government has laid a solid foundation with its proactive initiatives and governance reforms. Yet, sustaining momentum will require navigating complex challenges decisively, addressing systemic issues, and ensuring transparency in governance.

In conclusion, as Odisha navigates its future under the Majhi government, the expectations of its citizens remain high. The first year has shown promise, with tangible achievements and significant strides in governance. However, the true test lies in the administration's ability to confront and resolve the lingering challenges, thereby securing public confidence and advancing Odisha towards a prosperous future.

In essence, while celebrating achievements, the anniversary also calls for renewed commitment to addressing the state's pressing issues, ensuring inclusive growth, and fostering a robust democratic framework that serves all citizens of Odisha.



Chief Minister of Odisha
Mohan Charan Majhi

Across various departments including industries, agriculture, welfare schemes for scheduled castes and tribes, women and child development, healthcare, education, and consumer welfare, measurable improvements have been observed in service delivery and performance metrics. This progress underscores the government's commitment to enhancing socio-economic indicators and welfare programs.



One nation, One Election is the major need of one climate !

One of the most immediate environmental benefits of ONOE is the reduction in resource consumption associated with election campaigns. India's elections are staggered, with national and state elections often occurring at different times, leading to repeated cycles of campaigning, rallies, and voter outreach programs. Each cycle involves extensive use of paper for posters, banners, and pamphlets, as well as fuel for transportation of candidates, campaign staff, and voters. By consolidating elections into a single event, the frequency of these activities would decrease significantly.



VIRAL DESAI

The election process in India is a massive undertaking, involving significant financial, logistical, and administrative resources. Given its scale and frequency, elections contribute to considerable environmental impacts, including high carbon emissions, resource consumption, and waste generation. In recent years, the concept of "One Nation, One Election" (ONOE)—holding simultaneous elections for the Lok Sabha and state assemblies—has gained traction as a potential reform to streamline the electoral process. By aligning ONOE with the idea of a "One Climate" approach, which emphasizes sustainable practices and environmental consciousness, this reform could yield significant ecological benefits. This article explores how implementing ONOE could contribute to environmental sustainability in India, focusing on reduced resource use, lower carbon footprints, minimized waste, and enhanced long-term environmental planning.

One of the most immediate environmental benefits of ONOE is the reduction in resource consumption associated with election campaigns. India's elections are staggered, with national and state elections often occurring at different times, leading to repeated cycles of campaigning, rallies, and voter outreach programs. Each cycle involves extensive use of paper for posters, banners, and pamphlets, as well as fuel for transportation of candidates, campaign staff, and voters. By consolidating elections into a single event, the frequency of these activities would decrease significantly. For instance, a single election cycle would reduce the need for millions of printed materials, which contribute to deforestation and paper waste. According to estimates, the 2019 Lok Sabha elections alone generated thousands of tons of non-biodegradable waste, including plastic banners and hoardings. ONOE could cut this waste by nearly half, assuming elections occur once every five years instead of multiple times within the same period.

Transportation-related emissions are another critical area where ONOE could make a difference. Indian elections involve extensive travel by candidates, political workers, and election officials. The movement of vehicles, including cars, buses, and even helicopters for high-profile campaigns, results in significant greenhouse gas emissions. With elections spread across different years and regions, these emissions accumulate over time. ONOE would consolidate these logistics into a single, synchronized event, reducing the overall number of campaign-related trips. For example, the Election Commission of India deploys thousands of vehicles and personnel to manage polling stations across the country. Simultaneous elections would streamline this process, minimizing fuel consumption and associated carbon emissions. Additionally, fewer election cycles would reduce the need for frequent deployment of security forces, further lowering the carbon footprint of logistics.

Waste management is another area where ONOE could have a profound environmental impact. Indian elections generate substantial amounts of waste, including single-use plastics, food packaging from campaign events, and discarded campaign materials. Much of this waste ends up in landfills or pollutes water bodies, contributing to India's growing waste management crisis. By holding elections simultaneously, the volume of waste generated in a given period would be significantly reduced. Moreover, a unified election schedule could encourage the adoption of eco-friendly campaign practices, such as digital campaigning or biodegradable materials, as political parties and the Election Commission would have more time to plan sustainable strategies. For instance, the use of digital platforms for voter outreach, which has been increasing, could be further incentivized under ONOE, reducing reliance on physical materials.

Beyond immediate resource and waste reductions, ONOE could foster long-term environmental benefits by enabling more consistent and focused governance. Frequent elections disrupt policy implementation, as governments shift their focus to campaigning rather than addressing pressing issues like climate change. With ONOE, elected governments would have a stable five-year term to implement environmental policies without the constant pressure of upcoming elections. This continuity could lead to better execution of initiatives like afforestation, renewable energy projects, and pollution control measures. For example, India's commitments under the Paris Agreement, such as achieving net-zero emissions by 2070, require sustained policy efforts. ONOE could provide the political stability needed to prioritize and monitor such long-term environmental goals.

Furthermore, ONOE could reduce the environmental strain caused by the Model Code of Conduct (MCC), which halts certain developmental projects during election periods. Repeated MCC impositions disrupt infrastructure projects, including those related to renewable energy or waste management systems, leading to delays and inefficiencies. A single election cycle would minimize these disruptions, allowing for uninterrupted progress on eco-friendly projects. Additionally, synchronized elections could encourage voter education campaigns that integrate environmental awareness, fostering a culture of sustainability among citizens.

In conclusion, implementing One Nation, One Election in India, when viewed through the lens of a "One Climate" approach, offers significant environmental benefits. By reducing resource consumption, minimizing campaign-related emissions, and curbing waste generation, ONOE could make India's electoral process more sustainable. Moreover, it could provide the political stability needed for consistent environmental policymaking, aligning with India's broader climate goals. While challenges like logistical coordination and constitutional amendments remain, the potential for ONOE to contribute to a greener India is undeniable. Adopting eco-friendly practices within this framework could set a global example for sustainable democratic processes.

(The content of this article reflects the views of writers and contributors, not necessarily those of the publisher and editor. All disputes are subject to the exclusive jurisdiction of competent courts and forums in Delhi/New Delhi only)

(The author is a known Environmentalist and the pioneer of Satyagraha Against Pollution movement, viraludayindia@gmail.com)



When summer brings cyclones

Lessons the subcontinent can't ignore

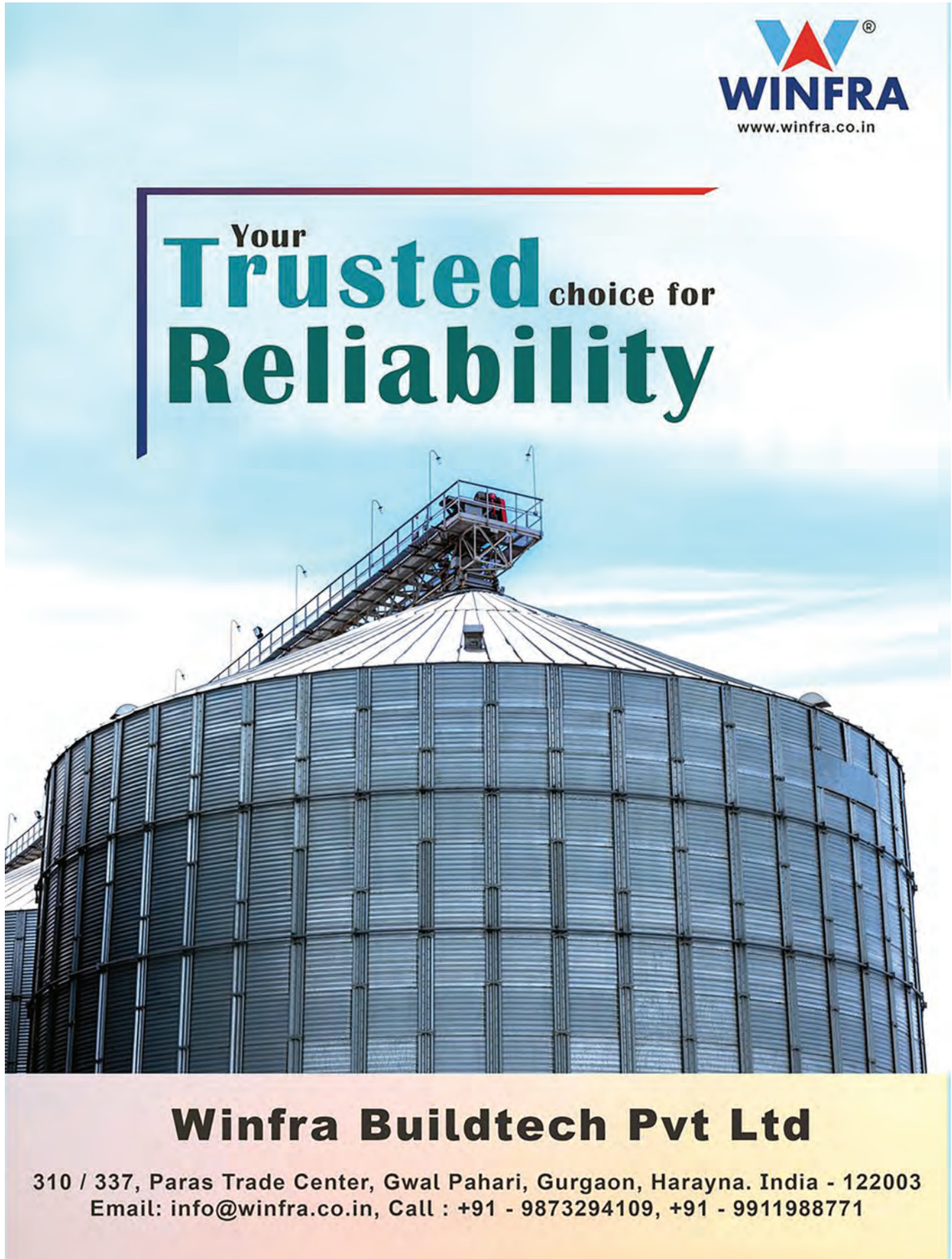
Climate change is making pre-monsoon cyclones more frequent and intense, and India's preparedness must go beyond forecasting to long-term resilience.

■ YEZDANI RAHMAN

Summer has arrived in India, bringing with it the now-familiar rise of pre-monsoon cyclones - an unsettling trend that no longer feels random. In recent years, the subcontinent has seen the formation of powerful cyclones from late April to May, each following its own path, yet all sharing a timing that suggests something deeper. Cyclone Fani in 2019, Amphan in 2020, Tauktae in 2021, Mocha in 2023, and most recently Remal in 2024 all arrived during the pre-monsoon window.

These cyclones may have differed in geography - Fani, Amphan, Mocha, and Remal formed over the Bay of Bengal, while Tauktae came up the Arabian Sea - but their formation reflects a common seasonal trigger. By late April, sea surface temperatures across both basins begin to climb sharply, often crossing 30 degrees Celsius. By late April, sea surface temperatures across both basins begin to climb sharply, often crossing 30 degrees Celsius. This sets the stage for explosive cyclogenesis, particularly when combined with favourable wind conditions and abundant moisture.

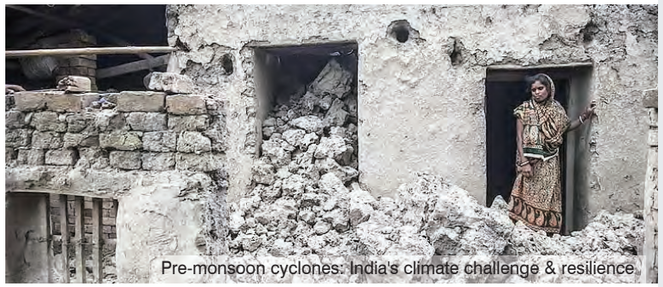
What's more troubling is that the Indian Ocean is heating up at a rate faster than the global average. An analysis of long-term trends found that the basin heated at a rate of 1.2 degrees Celsius per century between 1950 and 2020. Even more concerning, a new projection published in Science Direct predicts that between 2020 and 2100, the Indian Ocean could warm by 1.7 degrees Celsius to 3.8 degrees Celsius per century, unless greenhouse gas emissions are drastically reduced.



Rapid Intensification: A Growing Forecasting Challenge

While forecasting has undoubtedly improved, meteorological agencies now rely on a mix of satellite observations, ocean buoys, and atmospheric models to identify cyclone formation days in advance. In many cases, this lead time has helped avert large-scale loss of life. Yet even with improved detection, the pace at which these systems intensify is becoming a real challenge. Several recent cyclones, including Amphan and Tauktae, underwent rapid intensification, giving authorities less time to respond. Cyclone Mocha, which lashed parts of Myanmar and coastal Bangladesh in May 2023, was initially expected to be moderate but strengthened quickly, displacing thousands across the region and triggering heavy rainfall and disruption in parts of Northeast India.

No Coast Is Immune Anymore



Pre-monsoon cyclones: India's climate challenge & resilience.

Closer home, Cyclone Fani in 2019 forced the evacuation of over a million people from Odisha's coastal belt, while Amphan in 2020 devastated parts of West Bengal and the Sundarbans, pushing already fragile ecosystems and communities into deeper distress. In May 2024, Remal followed a similar arc of impact - less severe in scale but no less disruptive—with extensive flooding reported across Bengal and the Northeast.

Cyclone Tauktae in 2021, although on the west coast, caused severe damage in Gujarat and Maharashtra, killing over 100 people and disrupting pandemic-era recovery efforts. The western coast of India, once thought to be less at risk from cyclones, is now seeing stronger storms more often. Cyclone Tauktae was a clear sign that states like Maharashtra, Goa, and Gujarat also need to prepare better. Densely populated urban areas such as Mumbai are especially exposed, with older drainage systems, informal housing clusters, and a coastline under pressure from both rising seas and land reclamation. With the Arabian Sea warming quickly, experts warn that powerful storms may hit this coast more frequently in the years ahead.

Institutional Progress: Early Warnings and Evacuations

Despite these repeated blows, there have been clear signs of institutional learning. Early warning systems now reach millions via SMS alerts, local volunteers, and public announcements. Evacuation protocols are more structured, with shelters better stocked and medical response teams more quickly mobilised. But gaps remain, particularly in areas where infrastructure is weak or where people have been displaced multiple times. In many coastal regions, homes are rebuilt with whatever material is available, making them vulnerable to the next storm. Urban areas, too, are showing signs of strain. Cyclones no longer spare cities, and their impacts often ripple through power grids, drainage networks, and fragile housing clusters on the margins.

One dimension that is often overlooked but increasingly relevant is the simultaneous rise in thunderstorm and lightning incidents across India. From Bihar to UP and Odisha, hundreds of deaths are now recorded each year due to lightning, particularly during the pre-monsoon season, often affecting those working outdoors or living in poorly sheltered housing. While lightning doesn't directly influence cyclone formation or strength, its presence inside a developing system is a powerful signal.

Beyond Response: Building Real Resilience

What these recurring storms are forcing us to reckon with is not just a need for better response but for deeper resilience. It's not enough to track a cyclone or sound the alarm - preparedness has to be structural. That means investing in housing that can survive high winds, restoring coastal ecosystems like mangroves that offer natural protection, and training local communities to coordinate relief before outside help arrives. It also means recognising that some of the worst-affected areas, including parts of the Sundarbans, are on the frontlines of both climatic and developmental vulnerability.

Each summer cyclone offers both a warning and a window: a warning that climate risks are accelerating and a window of opportunity to adapt before the next storm strikes. The window is the time we still have to strengthen our systems, rethink how we build and rebuild, and ensure that the most exposed are not also the most forgotten.

Cyclones will continue to hit India. Whether they bring disaster or disruption depends not just on the storm but on how ready communities in those areas are when it lands.

(https://www.indiawaterportal.org/climate-change/disasters/when-summer-brings-cyclones-lessons-the-subcontinent-cant-ignore)

(The content of this article reflects the views of writers and contributors, not necessarily those of the publisher and editor. All disputes are subject to the exclusive jurisdiction of competent courts and forums in Delhi/New Delhi only)



EDITOR'S NOTE

India's Evolving Story: Resilience, Reform and Rising Ambition



DEEPAK KUMAR RATH

The Reserve Bank of India's (RBI) latest projection for the fiscal year 2025-26 transcends mere statistical forecasting, it encapsulates India's narrative of resilience, reform, and ambitious growth. For 2025-26, the RBI has projected real gross domestic product (GDP) growth at 6.5 per cent. As the fastest-growing major economy globally, India is not merely chasing economic figures but laying the groundwork for a new era where financial robustness and defence self-reliance converge to shape a global powerhouse that exudes confidence, capability, and cooperation. India, once dubbed the future superpower, now asserts itself as the present superpower. In an era fraught with uncertainty, the nation stands tall as a beacon of economic opportunity and stability. The RBI's optimistic projection underscores India's transformation into a global economic force, where robust economic growth is complemented by strategic advancements in defence capabilities. However, amidst this optimism lie cautionary notes from the RBI and independent analysts. Climate-related disruptions, vulnerabilities in energy security, and the specter of a fragmented global trade environment loom large as potential challenges. Domestically, income inequality, the need for labour market reforms, and strains on urban infrastructure demand attention to sustain inclusive growth. Modernising the education and healthcare sectors is imperative to harnessing India's demographic dividend, with over 65% of the population under 35 years old.

Against this backdrop, it is apt to mention here that the RBI underscores that India's long-term growth hinges on innovation, enhanced productivity, and widespread prosperity. Strategic investments in clean energy, semiconductor manufacturing, artificial intelligence (AI), and green mobility are poised to catapult India into the next phase of high-value economic development. A balanced monetary policy stance, focused on supporting growth, while guarding against inflation and external shocks, emphasises the RBI's commitment to fostering sustainable economic expansion. Beyond economic vibrancy, India's defence modernisation and strategic diplomacy position it as a pivotal player in the emerging multipolar world order. From shaping global norms in digital governance to mediating regional conflicts and contributing to global peacekeeping efforts, India's influence on the global stage is growing. This elevation from a "rising power" to a significant pole in global affairs reflects India's increasing geopolitical clout and leadership. Looking ahead, India faces a critical juncture in solidifying this trajectory. Strategic investments in human capital development, including skilling initiatives and education reforms, are paramount. These investments are crucial to harnessing India's youthful demographic advantage and ensuring sustainable, inclusive growth. In conclusion, as India navigates the complexities of a dynamic global landscape, its journey from aspiration to realisation is marked by resilience, reform, and burgeoning ambition. The RBI's projection not only forecasts economic growth but symbolizes India's emergence as a confident and capable global power, poised to shape the future of the world economy and beyond.



RNI No. DELENG/2013/30442 Postal Reg. No. DL(E)-11/5317
Licenced to dispatch on Monday and Tuesday of every advance week at KNHO, Delhi-110051
Licenced to post without pre-payment, Licence No. U(E)-05 Published for the week of 08-14 June, 2025

KALINGA INSTITUTE OF INDUSTRIAL TECHNOLOGY (KIIT)

Deemed to be University
(Established U/S 3 of UGC Act 1956), Bhubaneswar, Odisha, India

15th nirf
Among Indian Universities Ranked by NIRF, Govt. of India

A++ Grade
Accredited by NAAC

Tier 1 NBA
Re-accredited by NBA All Engineering Programs for 6 Years

KIITEE 2025 PHASE - 2

APPLY ONLINE

through KIIT Websites
www.kiitee.ac.in / www.kiit.ac.in

Last Date to Apply **4th June 2025**

No Examination Fee (Computer-Based Test)

KIITEE 2025 Online Test (Phase -2) starts from

8th June to 12th June 2025

Special Consultative Status by the UN-ECOSOC

ABET (US) Accreditation

THE 601-800 University Ranking 2024
World University Rankings

IET ACCREDITED PROGRAMME The Institute of Engineering and Technology

ACADEMIC PROGRAMMES AVAILABLE

UG (3 years/4 years)/Integrated (5 years) Programmes *[All 4 years Programmes are with Honors/Research]*

B.Tech Programmes

- Civil
- Construction Technology
- Electrical
- Electrical & Computer Science
- Mechanical
- Mechanical (Automobile)
- Aerospace
- Mechatronics
- Electronics & Telecommunication
- Electronics & Computer Science
- Electronics & Electrical
- Electronics (VLSI Design & Technology)
- Chemical
- Computer Science & Engineering (CSE)
- CSE (Artificial Intelligence & Machine Learning)
- CSE (Artificial Intelligence)
- CSE (Cyber Security)
- CSE (Data Science)
- CSE (Internet of Things & Cyber Security including Block Chain Technology)
- CSE (Internet of Things)
- Information Technology
- Computer Science & System
- Computer Science & Communication

UG Programmes in other Disciplines

- B.Design (Automobile/ Graphic/Product)
- B.Design (Fashion / Textile)
- B.Tech & M.Tech Biotechnology (5yrs)
- B.Tech (Lateral Entry)
- B.Arch
- BCA
- BBA
- B.Sc (Hospitality & Tourism)
- Bachelor of Film & Television Production
- Bachelor of Communication & Journalism
- Bachelor of Physical Education & Sports
- BA Economics
- BA Sociology
- BA English
- BA Psychology
- BA French
- BA Spanish
- BA Japanese
- BA German
- B.Com
- B.Sc (Economics & Data Analytics)
- B.Sc Computer Science
- B.Sc Nursing
- B.Pharma
- D.Pharma
- BA LLB/BBA LLB/B.Sc LLB (Hons) 5yrs

PG (1 year/2 years)/Integrated (5 years) Programmes

- M.Tech
- LLM (1yr)
- MCA
- M.Sc Biotechnology
- M.Sc Applied Microbiology
- M.Arch
- MBA
- MBA in Rural Management
- MBA in Agribusiness Management
- MBA-IEV (Innovation, Entrepreneurship and Venture Development)
- Master of Communication & Journalism
- Master in Urban & Regional Planning
- Master in Yoga & Naturopathy
- Master of Hospital Administration
- Master of Public Health
- MA in Fashion Management
- M. Design (Interior)
- M.Sc Computer Science
- MA Economics
- MA Sociology
- MA English
- MA Psychology
- Master in Public Policy
- M.Com
- M.Sc Physics
- M.Sc Chemistry
- M.Sc Mathematics & Data Science
- Master in Library & Information Sciences
- Master in Physical Education & Sports
- M.Sc Nursing
- Integrated M.Tech & Ph.D
- Ph.D

CAMPUS PLACEMENT 2024 HIGHLIGHTS

700+ Companies

5585+ Job Offers

₹53 LPA Highest Salary Offered

₹8.50 LPA Average CTC

1500+ Paid Internships

1000+ Students with multiple job offers

Director, Admissions : Admission Cell, Koel Campus, Po- KIIT, Bhubaneswar-751024, Odisha, India,
Ph: 8080 735 735, Fax : 0674 - 2741465, Email: admission@kiit.ac.in, Website: www.kiitee.ac.in

KIIT (Deemed to be University) has only one permanent campus in Bhubaneswar, Odisha.
It has no other campus / off campus anywhere else in the country and globe.