

12 JULY 2024

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A cataract (मोतियाबिंद) is a medical condition affecting the eye where the **lens**, which is normally clear, becomes **cloudy or opaque**. This clouding typically develops gradually over time and can eventually impair vision.

- **Causes:** Cataracts often develop with age, but they can also be caused by other factors such as injury, certain medications, or medical conditions like diabetes.
- **Symptoms:** Common symptoms include blurry vision, sensitivity to light, difficulty seeing at night, seeing halos around lights, and needing brighter light for reading or other activities.
- **Treatment:** Surgery is the most effective treatment for cataracts. During surgery, the cloudy lens is removed and replaced with an artificial lens called an intraocular lens (IOL).
- **Prevention:** While cataracts cannot always be prevented, wearing sunglasses with UV protection, quitting smoking, managing diabetes, and having regular eye exams can help reduce the risk.
- **Impact:** Cataracts are a leading cause of vision loss worldwide but are usually treatable with surgery. It's essential to seek medical advice if you notice any changes in your vision.

Controversial probationary IAS officer Pooja Khedkar joins new posting; Centre to look into her appointment

GS Paper IV Ethics

PUNE

Probationary Indian Administrative Service (IAS) officer **Pooja Khedkar**, in the eye of a storm for seeking special privileges and “faking” certificates, joined the Washim district administration on Thursday to complete her training amid a demand for an in-depth probe into the circumstances of her recruitment.

Meanwhile, the Union government said on Thursday that a senior officer, of the rank of Additional Secretary to Government of India, will verify the claims and other details of Ms. Khedkar and submit a report within two weeks.

A 2023-batch IAS officer, Ms. Khedkar made news



Pune police personnel arrive at the residence of probationary IAS officer Pooja Khedkar.

for seeking special privileges including a separate office, house, car, and staff (including a constable) before taking charge as Assistant Collector.

These perks are not given to trainee officers and there were allegations that her father, a retired IAS officer, used his influence to get her demands fulfilled.

She is said to have used a ‘Government of Maharashtra’ sticker and a red-blue beacon on her private luxury car while on probation in Pune

Hailing from a family of bureaucrats, it also emerged that she allegedly faked mental illness to secure a disability certificate and appeared for the UPSC exam under the visually impaired category.

Khedkar mum on row

The allegations led to a probe and a report was submitted by Pune District Collector Suhas Diwase to the General Administration Department (GAD), which resulted in Ms. Khedkar’s transfer to Washim district as a “supernumerary assistant collector” till July 30, 2025.

Speaking to reporters in Washim before joining duty, Ms. Khedkar said, “I am looking forward to working here... I am not authorised to comment on the issue as per government rules.”

Washim District Collector Buveneswari S. said, “The GAD has a schedule for probationary IAS officers. We are ready to give training to her under that schedule.”

Besides faking disability, Ms. Khedkar is also alleged to have furnished an Other Backward Class (OBC) certificate ahead of the civil services exam.

She has skipped her medical examination six times despite being asked to report at AIIMS in Delhi for verification of her disability certificate.

Meanwhile, demanding a probe into her recruitment, Pune-based RTI activist Vijay Kumbhar said in the OBC category the annual parental income limit is ₹8 lakh. Ms. Khedkar’s father, Deelip Khedkar, had unsuccessfully contested the Lok Sabha election from the Ahmednagar constituency as a candidate of the Prakash Ambedkar-led Vanchit Bahujan Aghadi and his election affidavit puts his wealth around ₹40 crore.

Mr. Kumbhar further alleged that Ms. Khedkar herself owned property worth ₹17 crore. The activist said that no trainee IAS officer had managed to secure a posting in his or her home town until now.

(With inputs from Vijayta Singh)

Controversial probationary IAS officer Pooja Khedkar joins new posting; Centre to look into her appointment (12 July)

- Pooja Khedkar, a 2023-batch IAS officer, has sparked controversy for seeking special privileges such as a separate office, house, car, and security before officially assuming her role as Assistant Collector.
- These privileges are typically not granted to trainee officers, leading to allegations that her father, a retired IAS officer, used his influence to fulfill her demands.
- During her probation in Pune, she allegedly used a 'Government of Maharashtra' sticker and a red-blue beacon on her private luxury car.
- She is accused of faking mental illness to obtain a disability certificate and appearing for the UPSC exam under the visually impaired category.
- The Union government has initiated an investigation, with a senior officer tasked to verify Ms. Khedkar's claims and submit a report within two weeks.

Khedkar mum on row

- Pooja Khedkar faced allegations including seeking special privileges and faking certificates during her probation.
- Pune District Collector Suhas Diwase conducted a probe and submitted a report to the General Administration Department (GAD).
- As a result, Ms. Khedkar was transferred to Washim district as a "supernumerary assistant collector" until July 30, 2025.
- Ms. Khedkar refrained from commenting on the issue per government rules but expressed readiness to work in Washim.
- Washim District Collector Buveneswari S. confirmed adherence to the probationary schedule for IAS officers.
- Besides faking disability, Ms. Khedkar is accused of submitting an Other Backward Class (OBC) certificate ahead of the civil services exam.
- She allegedly avoided medical examinations despite multiple notices to verify her disability certificate at AIIMS, Delhi.
- RTI activist Vijay Kumbhar demanded an investigation into her recruitment, citing discrepancies in her OBC category application and her family's wealth and property holdings.
- He highlighted that no trainee IAS officer had previously secured a posting in their hometown, raising further concerns.

Offence of cruelty by husband does not apply to live-in partner: Kerala High Court

GS Paper I: Society

The Hindu Bureau

KOCHI

The Kerala High Court has observed that a man who was not a legally wedded partner of a woman cannot be prosecuted for the offence of cruelty under Section 498 (A) of the India Penal Code (IPC) as he does not come under the definition of husband in the Section.

Justice A. Badharudeen made the observation recently while quashing a case registered against a live-in partner on a complaint of a woman.

The court observed that



Marriage is the constituent which takes the woman's partner to the status of her husband, says Kerala HC.

the term "husband" means a married man, a woman's partner in marriage. Thus,

the marriage was the constituent which takes the woman's partner to the status of her husband. Marriage means a marriage in the eye of the law. Thus, without legal marriage, if a man becomes a woman's partner, he will not be covered by the term 'husband' under Section 498(A) of IPC.

The allegation against the man was that, while the woman was maintaining a live-in relationship with the accused, during the period from March 13, 2023 to August 20, 2023 at his house, he mentally and physically harassed her.

Offence of cruelty by husband does not apply to live-in partner: Kerala High Court (12 July)

- The Kerala High Court ruled that a man who is not legally married to a woman cannot be prosecuted under Section 498(A) of the IPC for cruelty.
- Justice A. Badharudeen made this observation while quashing a case against a live-in partner based on a complaint by a woman.
- The court clarified that the term "husband" in Section 498(A) refers specifically to a legally married man, recognized as a woman's partner through marriage.
- Without a legal marriage, a man in a live-in relationship does not qualify as a "husband" under Section 498(A), even if allegations of mental and physical harassment are made against him.

Carrying 1,930 containers, *San Fernando* becomes first mothership to dock at Kerala's Vizhinjam port

PCS

The Hindu Bureau
THIRUVANANTHAPURAM

Scripting a new chapter in the maritime history of the country, the first mothership carrying cargo from the Xiamen port in China called at the Vizhinjam international seaport, India's first deep-water container transshipment port, on Thursday morning.

The Marshall Island-flagged container ship *San Fernando*, owned by SFL Corporation Ltd. and chartered by Maersk (AP Moller Group), Denmark, is managed and operated by Bernhard Schulte Ship Management, Singapore.

Adani Port pilots boarded the ship carrying 1,930



Mega visitor: *San Fernando* will leave for Colombo on Friday after the official reception planned by the Kerala government.

containers around 7.45 a.m. when the ship reached the passage leading to the berth. The ship was then navigated through the buoyed channel to enter the tranquil breakwater area inside the port. The ship turned around before the tugs pushed it to the berth and moved the ship to the wharf with mooring ropes. Four tugs were pressed in to bring the ship to the berth. Three tugs were in-

involved in pushing the ship forward and pulling the aft, or *vice versa*, to turn the ship to get the bow facing out and then aligned the ship with the berth before the tugs finally pushed the ship to berth. The ship's bow thruster and the power from the main engine were also used for the berthing.

The vessel was set to begin the work of offloading 1,930 containers by around 2 p.m.

Water salute

The ship was also accorded a water salute at the port. The ship will leave for Colombo on Friday after the official reception planned by the State government to

be attended by Chief Minister Pinarayi Vijayan, Union Shipping Minister Sarbajit Sonowal, and others.

The work on the ₹7,700-crore port project, one of the major flagship infrastructure projects promoted by the Kerala government with the Adani Group in the public-private partnership (PPP) mode, started on December 5, 2015.

However, the project, which was scheduled to be commissioned in 2019, got delayed and missed several deadlines due to various reasons. The trial run of the port will officially begin on July 12, ahead of the revised scheduled commissioning in December 2024.

Carrying 1,930 containers, *San Fernando* becomes first mothership to dock at Kerala's Vizhinjam port (12 July)

- The first mothership carrying cargo from Xiamen port in China arrived at Vizhinjam international seaport, India's first deep-water container transshipment port.
- The container ship *San Fernando*, flagged by Marshall Islands and owned by SFL Corporation Ltd., was chartered by Maersk (AP Moller Group) and managed by Bernhard Schulte Ship Management, Singapore.
- Adani Port pilots boarded the ship around 7:45 a.m. as it approached the berth at Vizhinjam.
- The ship was guided through the buoyed channel and into the breakwater area using four tugs.
- Tugs assisted in maneuvering the ship to the berth, aligning it using bow thrusters and the ship's main engine power.
- Operations to offload 1,930 containers were scheduled to commence around 2 p.m.

Water salute

- The ship received a water salute upon arrival at Vizhinjam port.
- It will depart for Colombo on Friday after an official reception hosted by the Kerala government.

- Chief Minister Pinarayi Vijayan, Union Shipping Minister Sarbananda Sonowal, and other officials will attend the reception.
- The Vizhinjam international seaport project, a ₹7,700-crore initiative under PPP with Adani Group, began on December 5, 2015.
- Originally scheduled for commissioning in 2019, the port faced delays and missed several deadlines.
- A trial run of the port is set to begin on July 12, with the revised commissioning now planned for December 2024.



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BIMSTEC: Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation

BIMSTEC is an international organization connecting seven South Asian and Southeast Asian countries bordering the Bay of Bengal.

- **Founding:** Established on 6th June 1997, in Dhaka, Bangladesh.
- **Members:** The member countries of BIMSTEC are Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand.
- BIMSTEC headquarters is located in **Dhaka, Bangladesh.**
- **Objectives:** BIMSTEC focuses on promoting regional cooperation in various sectors including trade, technology, energy, transport, tourism, fisheries, agriculture, counter-terrorism, environment, culture, and people-to-people contact.
- **Structure:** BIMSTEC summits are held every two years, with a Ministerial Meeting preceding each summit. The organization also has a permanent Secretariat located in Dhaka, Bangladesh.
- **Recent Activities:** The website highlights recent meetings of BIMSTEC Expert Groups on Cultural Cooperation and Fisheries and Livestock, finalizing plans of action in these areas



SAARC: South Asian Association for Regional Cooperation

SAARC is a regional intergovernmental organization and geopolitical union of states in South Asia.

- **Member States:** There are eight member states: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.
- **Founding:** Established on December 8, 1985, in Dhaka, Bangladesh.
- **Headquarters:** Kathmandu, Nepal.
- **Goals:**
 - Promote the welfare of the peoples of South Asia and improve their quality of life.
 - Accelerate economic growth, social progress and cultural development in the region.
 - Provide all individuals the opportunity to live in dignity and to realize their full potentials.



During conflict, there is no such thing as strategic autonomy: U.S. Ambassador

As Washington raises concerns over Prime Minister Narendra Modi's visit to Moscow, Eric Garcetti says India and the U.S. must 'act together' in 'times of need' as trusted partners; both countries should also be open to criticising each other, especially on issues of human rights, says the Ambassador

CS Paper II, India-US Relationship

Sahasini Haidar
Dinakar Peri
NEW DELHI

There is no such thing as "strategic autonomy" during a conflict, U.S. Ambassador Eric Garcetti said on Thursday, even as sources said that U.S. officials have raised concerns with Indian officials over Prime Minister Narendra Modi's visit to Russia this week.

The comments, including a series of statements critical of the visit by the U.S. State Department, are the sharpest sign of tensions between the U.S. and India over the Putin-Modi summit, including the timing of the talks that came as Western leaders met in Washington for a conference of the North Atlantic Treaty Organisation (NATO), and a series of deadly Russian missile strikes across Ukraine.

"I respect that India likes its strategic auto-

my. But in times of conflict there is no such thing as strategic autonomy, we will, in crisis moments, need to know each other," Mr. Garcetti said, addressing a conference in Delhi, stressing the need for India and the U.S. to "act together" in "times of need" as trusted partners.

The U.S. Ambassador was addressing a conclave on India-U.S. defence and security partnership, organised by CUTS International and U.S. Consulate-General, Kolkata.

"No war is distant any more and we must not just stand for peace. We must take concrete actions to make sure those who don't play by peaceful rules, that their war machines cannot continue unabated," Mr. Garcetti continued, without specifically naming Russia's invasion of Ukraine in 2022 or China's transgressions at the Line of Actual Control in 2020, but referring to countries



U.S. Ambassador to India Eric Garcetti was addressing a conclave on India-U.S. defence and security partnership in Delhi. FILE PHOTO

that have "ignored sovereign borders" in the past three years.

In statements on Ukraine, the U.S. State Department regularly refers to the "Russian war machine".

India has consistently held that its ties with Russia are part of its independent bilateral relations and strategic autonomy, and has thus far not directly criticised Russia at the Un-

ited Nations for the war in Ukraine.

Meanwhile, sources confirmed to *The Hindu* that U.S. officials have raised concerns directly over India's ties with Russia, including the surprise visit by Mr. Modi to Moscow this week, which had not been announced until recently.

According to the sources, India's Acting Ambassador in Washington, Sripri-

ya Ranganathan, was "asked" to explain the reason for the visit and its timing by the U.S. State Department officials. U.S. Deputy Secretary of State Kurt Campbell had also spoken to Foreign Secretary Vinay Kwatra about the issue.

External Affairs Ministry officials did not deny the conversations, but an official downplayed their significance, saying that Indian diplomats are in "constant touch with the State Department and the White House".

On Wednesday, U.S. State Department spokesperson Mathew Miller had confirmed that conversations had been held, without revealing the identity of the officials.

"We have been quite clear about our concerns about India's relationship with Russia. We have expressed those privately, directly to the Indian government and continue to do

so, and that hasn't changed," Mr. Miller said, in response to a question. "We have had conversations with them in the past 24 hours, and I think I'll keep the contents of those private," he added, when pressed for more details.

The External Affairs Ministry declined to comment on the latest remarks by the U.S. or on the U.S. statements of "concern" to Indian officials. On Tuesday, Mr. Kwatra had responded to questions about criticism from the U.S. and from Ukraine President Volodymyr Zelenskyy by repeating Mr. Modi's statement to Mr. Putin that there was "no solution on the battlefield" to the Ukraine conflict.

In other comments likely to raise eyebrows in South Block, Mr. Garcetti said India and the U.S. should be open to criticising each other, especially on issues of human rights and NGOs.

During conflict, there is no such thing as strategic autonomy: U.S. Ambassador (12 July)

As Washington raises concerns over Prime Minister Narendra Modi's visit to Moscow, Eric Garcetti says India and the U.S. must 'act together' in 'times of need' as trusted partners; both countries should also be open to criticising each other, especially on issues of human rights, says the Ambassador

- U.S. Ambassador Eric Garcetti stated that "strategic autonomy" holds no relevance during conflicts.
- There are tensions between the U.S. and India following concerns raised by U.S. officials over PM Modi's recent visit to Russia.
- Garcetti emphasized the need for India and the U.S. to collaborate closely during crisis moments as trusted partners.
- He spoke at a Delhi conference on India-U.S. defence and security, urging concrete actions against nations violating peaceful norms.
- Although not explicitly naming specific events, Garcetti referred to countries that have disregarded sovereign borders in recent years.

- The U.S. State Department regularly criticizes the "Russian war machine" in its statements on Ukraine.

India hosts BIMSTEC Foreign Ministers amid raging Myanmar crisis

GS Paper: India and its neighbours
NEW DELHI

The seven-member Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) should find solutions to the regional challenges within itself, External Affairs Minister S. Jaishankar said on Thursday, addressing the first BIMSTEC Foreign Ministers' retreat held here.

The meeting assumes significance as it is being held against the backdrop of major developments in Myanmar, where the military junta has been receiving battlefield setbacks against dozens of ethnic armed organisations (EAO).

"Global and regional developments also make it imperative that we find more solutions among ourselves. There are long-standing goals such as capacity-building and economic cooperation that have acquired a new urgency. And not least, a grouping that is so complementary and so congenial in its membership should surely harbour higher aspirations," Mr. Jaishankar said.

This is the first time such an event was organised since the Charter of BIMSTEC came into effect on May 20, which marked a landmark development



External Affairs Minister S. Jaishankar with the Foreign Ministers of other countries, in New Delhi on Thursday. ANI

in the evolution of the organisation.

The developments in Myanmar pose a major issue before the BIMSTEC as instability there has put a question mark on a number of developmental and connectivity projects that were aimed at firming up ties among countries like Nepal, Bhutan, India, Bangladesh, Myanmar, and Thailand.

A day before the beginning of the meeting in Delhi, the military junta in Naypyidaw lost control of Naungcho, a major town along a trade highway to China in the northern Shan State, to the Ta'ang National Liberation Army.

Following his meeting with Myanmar Deputy Prime Minister and Foreign Minister U. Than Swe, Mr. Jaishankar said, "Our discussions focused on the connectivity projects, so crucial for the future of BIMSTEC. Also ex-

changed views on border stability and humanitarian assistance."

The External Affairs Ministry is yet to clarify if India will extend humanitarian assistance to the affected civilian population inside Myanmar. Till now, assistance has been limited to the displaced population and personnel of the Myanmar military who sought refuge in Mizoram.

India has maintained a cautious approach to the crisis in Myanmar where the EAOs have gained control over the trade routes and territories that are close to the international borders. "Countering transnational crimes including cyber, narcotics and illegal arms is a shared priority of all three nations. We will continue to cooperate in that regard," said Mr. Jaishankar after meeting with his Myanmar and Thai counterparts.

India hosts BIMSTEC Foreign Ministers amid raging Myanmar crisis (12 July)

- External Affairs Minister S. Jaishankar emphasized the need for BIMSTEC countries to solve regional challenges together during the first BIMSTEC Foreign Ministers' retreat.
- The meeting focused on issues amidst developments in Myanmar, where the military junta faces setbacks from ethnic armed organizations.
- Mr. Jaishankar highlighted the importance of capacity-building, economic cooperation, and higher aspirations within BIMSTEC.
- Recent instability in Myanmar has raised concerns about developmental projects and connectivity in the region.
- Discussions with Myanmar's Deputy Prime Minister focused on connectivity projects, border stability, and humanitarian assistance.
- India's response to the crisis in Myanmar has been cautious, with a focus on humanitarian aid to displaced populations and military personnel in Mizoram.
- Cooperation among BIMSTEC countries on countering transnational crimes like cybercrime, narcotics, and illegal arms trade remains a shared priority.

Indian ship crew win 'exceptional bravery' awards for Red Sea rescue

PCS

Press Trust of India

LONDON

Captain Avhilash Rawat and his crew of an oil tanker have been named among the winners of the International Maritime Organisation (IMO) 2024 Award for Exceptional Bravery at Sea for their "extraordinary courage" shown in a Red Sea rescue mission.

Captain Rawat and his crew were declared winners by the IMO on Wednesday for the "determination and endurance" demonstrated while coordinating firefighting and

The crew were given the award by the International Maritime Organisation

damage control efforts to combat a fire that broke out after an anti-ship missile reportedly fired by Iranian-backed Houthi rebels struck their vessel 'Marlin Luanda' earlier this year.

Captain Brijesh Nambiar and the crew of the Indian Navy ship *INS Visakhapatnam* have been conferred a Letter of Commendation for their sup-

port to the oil tanker when in distress.

"On the evening of J26 January 2024, the Marlin Luanda, carrying 84,147 tonnes of Naphtha, was en route from Suez to Incheon when it was struck by an anti-ship ballistic missile. The explosion ignited a cargo tank, creating a significant fire hazard with flames exceeding 5 meters," reads the award citation.

"Despite the damage, Captain Avhilash Rawat swiftly organised firefighting efforts, ensuring the crew's safety and maintaining the ship's navigabil-

ity amidst the chaos. With the starboard lifeboat destroyed, the remaining crew mustered at the port lifeboat station, ready for potential evacuation," it added.

Despite the extreme danger and the constant threat of further attacks, Captain Rawat and his crew fought the fire using fixed foam monitors and portable hoses. The fire continued to spread, particularly affecting an adjacent tank, but the crew managed to contain it using seawater after foam supplies were exhausted, the IMO said.

Indian ship crew win 'exceptional bravery' awards for Red Sea rescue (12 July)

- Captain Avhilash Rawat and his crew aboard the oil tanker 'Marlin Luanda' won the IMO 2024 Award for Exceptional Bravery at Sea.
- They were recognized for their courage during a rescue mission in the Red Sea, where their ship was struck by an anti-ship missile fired by Iranian-backed Houthi rebels.
- Despite significant damage and a fire hazard from ignited cargo, Captain Rawat coordinated firefighting efforts to ensure crew safety and maintain navigability.
- The crew used fixed foam monitors and portable hoses to combat the fire, eventually containing it with seawater after exhausting foam supplies.
- Captain Brijesh Nambiar and the crew of INS Visakhapatnam received a Letter of Commendation for their support during the distress situation.

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2 times for PCS Interview).



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qualified 6 times for the
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2 times for the IAS Mains).



Divyansh Srivastava sir

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

Blind gamer puts ChatGPT to the test (12 July)

- Mashiro, a blind Japanese eSports gamer, often needs help to navigate Tokyo but hopes AI can help him travel alone.
- He tested AI chatbot ChatGPT on his way to a Para eSports event.
- Mashiro wishes to be independent and use AI for special needs support.
- GPT-4, released by OpenAI, can understand voice, text, and image commands in multiple languages and could make daily services more accessible.
- Mashiro used tactile paving and a stick with a mascot to find his way while listening to ChatGPT for directions.
- He asked ChatGPT for specific details for blind people and received helpful responses.
- The journey took him much longer than it would for sighted people, and he eventually needed help from a friend due to heavy rain.
- Mashiro successfully reached his destination and used sound to compete in 'Street Fighter 6'.
- AI can better cater to specific needs compared to standard assistive products, empowering individuals and promoting independence.
- Examples of AI tools for people with disabilities include Seeing AI, Envision AI, TapTapSee, and Be My Eyes.
- There are challenges, such as catching mistakes in AI responses, and improving real-time visual recognition is a key objective.



Masahiro Fujimoto using ChatGPT for directions in Kawasaki, south of Tokyo. AFP

Blind gamer puts ChatGPT to the test

Agence France Presse
GS Paper III: S&T

Japanese eSports gamer Mashiro is blind and often relies on a companion to get around Tokyo -- but he hopes that artificial intelligence, hailed as a promising tool for people with disabilities, can help him travel alone. The 26-year-old 'Street Fighter' player put the latest version of AI chatbot ChatGPT to the test on his way to a stadium for a recent Para eSports meet-up.

"I can't participate in an event like this without someone to rely on," he said. "Also, sometimes I just want to get around by myself without speaking to other people. "So if I can use technology like ChatGPT to design my own special needs support, that would be great."

This year, the US firm OpenAI, released GPT-4o, which understands voice, text and image commands in several languages. The generative gadget, along with others such as Google's Gemini, is part of a fast-growing field that experts say could make education, employment and everyday services more accessible.

Following the streets' tactile paving, Masahiro Fujimoto -- who goes by his online handle Mashiro -- used his stick adorned with a small monkey mascot to find his way from the station. As he went, he spoke to GPT-4o like a friend, receiving its answers through an earpiece in one ear, leaving the other side free to listen out for cars.

Zika virus: the need to improve surveillance and vector control

GS Paper III: Basic Science

Zube

The Zika virus is making the news once again. At least 15 cases, including eight pregnant women, of Zika have been discovered so far in Pune, Maharashtra. In Karnataka, a 74-year-old who had Zika has died. State Health Department officials say the death was caused by other factors. Another suspected case in Karnataka is being investigated as well.

The Pune Municipal Corporation has said it has stepped up surveillance; the Karnataka Health Department has released guidelines on the virus for the public, and both States have urged members of the public to ensure there are no mosquito-breeding sites at their homes.

Meanwhile, the Union Health Ministry has issued an advisory to States to be vigilant; screen pregnant women, and strengthen entomological surveillance and intensify vector-control activities.

The Indian Council of

Medical Research (ICMR) has asked States not only to increase testing for Zika but also to test patients with chikungunya and dengue-like symptoms who test negative for these infections for Zika, as per a news report.

As the monsoon continues over large parts of the country, creating ideal breeding grounds for mosquitoes, and with cases of dengue spiking as well, State administrations and members of the public need to step up mosquito-control measures to prevent transmission of diseases.

Here's a quick FAQ on Zika:

What is Zika virus?

As per the World Health Organization (WHO), Zika virus is a mosquito-borne virus first identified in Uganda in 1947 in a Rhesus macaque monkey, followed by evidence of infection and disease in humans in other African countries in the 1950s. Zika virus occurs through the bite of infected Aedes mosquitoes,



Mosquitoes carry dengue, yellow fever, chikungunya and Zika. AP

mainly Aedes aegypti, which also transmits dengue and chikungunya. The Aedes mosquitoes usually bite during the day. Sexual transmission, transmission from mother to foetus and transfusions of blood and blood products are other routes of transmission.

How it manifests?

Most people infected with the Zika virus do not develop symptoms, the WHO says. Among those who do, they typically start 3-14 days after infection and are generally mild, including rash, fever, conjunctivitis, muscle and joint pain, and headache, which usually

last for 2-7 days.

How is it diagnosed?

Zika virus may be suspected based on symptoms or the fact that the person is living in or visiting areas where Zika transmission has occurred. A diagnosis can only be given after a laboratory test. A recent report in *The Hindu* pointed to gaps in the tracking and surveillance of the virus, highlighting the fact that in March 2023, the Central Drugs Standard Control Organisation (CDSCO), India's apex agency for diagnostic approvals, confirmed that there was no approved

diagnostic test for Zika. This limitation, the report said, hinders the country's ability to diagnose Zika. At present, samples are generally sent to a few select labs, including the National Institute of Virology, for confirmation. The NIV, a media report indicates, is flooded with samples, leading to delays in the issuing of reports.

What are the ill effects?

Zika virus infection during pregnancy, the WHO says, can cause infants to be born with microcephaly and other congenital malformations and can also cause preterm births and miscarriage. Microcephaly is a condition in which an infant's head is smaller than what is typical for their age and can be caused by the brain not developing properly. An estimated 5-15% of infants born to women infected with Zika virus during pregnancy have evidence of Zika-related complications, as per the WHO. Zika virus infection is also associated with Guillain-Barré

syndrome, neuropathy, and myelitis in adults and children. Guillain-Barré syndrome is a rare condition that causes a person's immune system attacks the peripheral nerves.

Is there a vaccine?

No vaccine is as yet available for the prevention or treatment of Zika virus infection, the WHO says. The development of a Zika vaccine remains an active area of research.

A few studies have shown promising results. In India for instance, several companies are attempting to make a vaccine. In a study published in 2017, Bharat Biotech's "killed Zika virus vaccine" which uses an African strain showed 100% efficacy against mortality and disease in animal studies. Indian Immunologicals Limited, a wholly-owned subsidiary of the National Dairy Development Board said earlier this year that it was also working on developing a vaccine.

(zubeda.h@thehindu.co.in)

Zika virus: the need to improve surveillance and vector control (12 July)

- Zika virus has resurfaced with 15 cases in Pune, Maharashtra, including eight pregnant women, and a fatal case in Karnataka.
- In Karnataka, a 74-year-old patient with Zika has died; health officials attribute the death to other factors, and another suspected case is under investigation.
- Pune Municipal Corporation and Karnataka Health Department have increased surveillance and issued guidelines to prevent mosquito breeding at homes.
- The Union Health Ministry has issued advisories to states to intensify surveillance, especially screening pregnant women and enhancing vector-control activities.
- Indian Council of Medical Research (ICMR) has advised states to increase Zika testing, especially for patients with symptoms similar to chikungunya and dengue.
- Mosquito-control measures need to be heightened during the monsoon, as ideal breeding conditions increase the risk of Zika and dengue transmission.

- Zika virus is mosquito-borne, primarily transmitted by Aedes mosquitoes, which also spread dengue and chikungunya, mainly biting during the day.
- Zika can also spread through sexual transmission, from mother to fetus, and through blood transfusions.
- Symptoms of Zika infection are typically mild or absent in most infected people, including rash, fever, conjunctivitis, muscle and joint pain, and headache lasting 2-7 days.

How is it diagnosed?

- Zika virus is suspected based on symptoms or travel to affected areas; diagnosis requires a laboratory test.
- India faces challenges in Zika diagnosis due to the lack of approved diagnostic tests until March 2023, causing delays in test results from labs like the National Institute of Virology (NIV).
- Zika virus during pregnancy can lead to microcephaly and other congenital malformations, preterm births, and miscarriage, affecting 5-15% of infants born to infected mothers, according to WHO.
- Zika infection is also linked to Guillain-Barré syndrome, neuropathy, and myelitis in adults and children.
- Currently, no vaccine exists for Zika virus prevention or treatment; research for a vaccine is ongoing worldwide, including in India with promising studies by Bharat Biotech and Indian Immunologicals Limited.

Reading the tea leaves ahead of China's Third Plenum (12 July)

- Western commentators believe it's time to move beyond the optimistic view of a post-Cold War world.
- They think Moscow, Beijing, and their allies can't be trusted to be responsible within a rules-based international order.
- Attention is focused on the Third Plenum of China's 20th Party Congress, held from July 15-18, for potential policy changes.
- There's hope, but also skepticism, that China will change its stance on international security cooperation.
- The West believes China peaked economically after the "Zero COVID" policy and that its economy is in decline.
- The plenum's outcome is highly anticipated, despite doubts about significant changes.
- The Third Plenum's date was moved up, usually held in October or November, sparking speculation about major reforms.

- Third Plenums set economic strategy for the next 5-10 years and are crucial in the Central Committee's cycle.
- The 1978 Third Plenum led by Deng Xiaoping initiated significant economic reforms.
- China faces economic issues like an aging population, shrinking workforce, high debt, and ongoing economic problems.
- There's pessimism within China about its future, but hope that the Plenum will present new guidelines to reassure the public and the world.
- It's been a while since China held a meeting focused entirely on economic reforms.
- Experts are uncertain if the Plenum will bring new ideas or if the current leadership will take bold steps.
- Xi Jinping is unlikely to admit past mistakes as Deng Xiaoping did in 1978, as it could harm his position.

The view about China's 'intentions'

- Western countries will continue to accuse China of "gray zone coercion" tactics.
- These include disinformation campaigns, election interference, military provocations, and threats to Taiwan and other countries in the South and East China Seas.
- China's Global Development Initiative, Global Security Initiative, and Global Civilization Initiative reflect its values and leave little room for change.
- Xi Jinping sees national security threats everywhere, increasing paranoia about China's intentions.
- China's approach adds complexity to regional and global situations, creating challenges for India's policymakers.
- India-China relations are strained, mainly due to the border tension since 2020.
- Both countries are hardening their attitudes, with concerns about China's growing missile and nuclear capabilities.
- India's strategic community is worried about China's Rocket Force and advances in space and electronic warfare.
- There's debate on whether confrontation with China is inevitable or if diplomacy can deflect its aggressive intentions.
- Despite the power imbalance, efforts to avoid miscommunication and misadventures are crucial.
- There's uncertainty about China responding positively to diplomatic efforts, but avoiding conflict is important due to its serious economic and strategic consequences for both countries.

Where India stands

- India is currently in a better position than China to take a significant initiative.
- India is transitioning from a middle-level to a major power.
- Its economic performance is among the best globally.

- India has strong, focused leadership and numerous international allies.
- An initiative by India now would be seen as a major effort for world peace, not a sign of weakness.
- Historically, India has taken successful initiatives in its rivalry with China, like the Sumdorong Chu and Wangdung incidents.
- Rajiv Gandhi's visit to China in 1988 and discussions with Deng Xiaoping resulted in nearly three decades of peace.
- The current situation is less tense than many periods in the past.
- India holds a stronger position against China now than in modern history.
- Xi Jinping referencing the Five Principles of Peaceful Co-existence (Panchsheel) could be an opportunity for India to start a new initiative.
- It is up to India to decide whether to take this opportunity.
- A successful initiative would benefit India, China, Asia, and the world.

Breaking the taboo around men's reproductive health

GS Paper II: Health Sector

World Population Day (July 11) has passed. As we grapple with the multifaceted challenges of global population dynamics, it is crucial to turn the spotlight on a subject often overshadowed in discussions on reproductive health: male infertility. Male infertility remains a stigmatised issue, shrouded in silence and with misconceptions. This neglect exacerbates the emotional and psychological toll on those who are affected and impedes progress towards effective solutions.

In 2004, the World Health Organization (WHO) estimated that globally, between 60 million to 80 million couples struggle with infertility. However, the exact prevalence of infertility in India remains unspecified according to the Indian Council of Medical Research (ICMR) National Guidelines for Accreditation, Supervision and Regulation of Assisted Reproductive Technologies (ART) Clinics (2005). Extrapolating from WHO's data, it is suggested that approximately 13 million to 19 million Indian couples may face infertility issues. This incidence is only set to increase, shaped by factors such as environmental pollution and adverse lifestyle shifts. Male infertility accounts for 50% of all infertility cases in the country. Thus, it is important to shed light on male infertility, understand its causes, and identify solutions to aid the millions of affected couples.

Understanding the subject

Male infertility is not a standard experience. Its causes, and therefore its forms, vary. Infertility in men can manifest as an absence of sperm, low sperm count, low sperm motility, or both. The form of infertility can depend on various factors that include stress, hormonal imbalance, genetic, anatomical and epigenetic factors, or even



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It is time to recognise and address the subject of male reproductive health issues in India

exposure to certain infections. External factors such as environmental pollution and an indiscriminate use of pesticides on crops, plastics, and plasticisers can also affect fertility and influence the epigenetic makeup. Lifestyle factors such as diets, sleep patterns, work schedules, and consumption of alcohol and tobacco also play a major role. Adding to these factors is a growing preference for late marriages among youth, creating challenges due to declining sperm quality with age.

While the challenges listed above may appear daunting, male reproductive health can be safeguarded through various lifestyle interventions. First and foremost, it is imperative to be aware of reproductive and sexual health and the factors that influence it, particularly during the formative period from secondary school to junior college. Here, parents, particularly fathers, play a critical role and must educate their sons on the issue. At an individual level, young men should proactively adopt good lifestyle practices, ensuring healthy eating, regular sleep patterns, and eliminating the consumption of alcohol, tobacco, and other intoxicants. While mobile phones and laptops have become occupational hazards in most fields, their excessive usage, in proximity to the body, should be avoided. Stress is a major deterrent to reproductive health, and regular exercise, yoga, and meditation can go a long way in reducing its adverse effects on well-being. Couples together must also adopt such healthy lifestyle practices to safeguard their reproductive health and enhance their well-being.

Treatment options

While lifestyle interventions play a critical preventative role, it is also important to discuss

treatments available for those grappling with infertility. Treatment options are varied, and their efficacy depends on the cause and the form of infertility. It is important to seek help from a medical professional to identify and treat the issue. The medical professional will guide the person to undergo a routine semen analysis, conducted after a two to seven day period of sexual abstinence (WHO recommended). If the issue is physical or anatomical such as blocked sperm flow, undescended testicles, or an abnormal urethral opening, these can be fixed with surgery. If the issue is an absence of sperm, then treatments such as intra cytoplasmic sperm injection (ICSI) should be undertaken. Alternatively, couples facing this issue can also opt for donor sperm insemination or adoption. In cases where the sperm count is very low, there is a chance for the couple to conceive naturally if sperm motility is very good. However, if both sperm count and motility are low, intrauterine insemination (IUI), in vitro fertilisation (IVF), or ICSI are advocated. In cases of male infertility due to gene mutation/s, genetic counselling is of utmost importance before seeking the support of assisted reproductive technologies such as IVF and ICSI.

With millions of couples in India facing infertility issues, there is an urgent need for open and informed discussions on reproductive health. It is time to recognise and address the significant issue of male reproductive health. Awareness building, sex education, and timely medical interventions are key to supporting couples on their journey to parenthood. By breaking the taboo surrounding male infertility and fostering a more informed and supportive environment, we can help many couples realise their dream of having children.

Breaking the taboo around men's reproductive health (12 July)

- World Population Day (July 11) highlights global population challenges, including male infertility.

- Male infertility is often stigmatized and misunderstood, causing emotional and psychological distress.
- WHO estimated in 2004 that 60-80 million couples worldwide struggle with infertility.
- In India, around 13-19 million couples may face infertility issues, with male infertility accounting for 50% of these cases.
- The incidence of infertility is increasing due to environmental pollution and lifestyle changes.
- Male infertility can result from various factors such as absence of sperm, low sperm count, low sperm motility, stress, hormonal imbalances, genetic, anatomical, and epigenetic factors.
- External factors like environmental pollution, pesticides, plastics, and lifestyle factors such as diet, sleep patterns, work schedules, alcohol, and tobacco use affect fertility.
- Late marriages among youth contribute to declining sperm quality with age.
- Male reproductive health can be improved through lifestyle interventions.
- Awareness of reproductive and sexual health is crucial, especially during the formative years.
- Parents, especially fathers, should educate their sons about reproductive health.
- Young men should adopt healthy lifestyle practices: eat well, maintain regular sleep patterns, avoid alcohol and tobacco, and limit the use of mobile phones and laptops near the body.
- Stress negatively impacts reproductive health; regular exercise, yoga, and meditation can help reduce stress.
- Couples should adopt healthy lifestyle practices together to enhance their reproductive health and well-being.

Treatment options

- Lifestyle interventions are important for preventing infertility.
- Various treatments are available for those facing infertility, depending on the cause and type.
- It's important to seek medical help to identify and treat infertility.
- A routine semen analysis is usually conducted after 2-7 days of sexual abstinence (as recommended by WHO).
- Physical or anatomical issues like blocked sperm flow, undescended testicles, or an abnormal urethral opening can be fixed with surgery.
- If there is an absence of sperm, treatments like intra cytoplasmic sperm injection (ICSI) should be considered.
- Couples can also opt for donor sperm insemination or adoption.
- If the sperm count is very low but motility is good, natural conception is possible.
- If both sperm count and motility are low, intrauterine insemination (IUI), in vitro fertilisation (IVF), or ICSI are recommended.

- For infertility due to gene mutations, genetic counselling is important before using assisted reproductive technologies like IVF and ICSI.
- With millions of couples in India facing infertility, open and informed discussions on reproductive health are needed.
- It's important to recognize and address male reproductive health issues.
- Building awareness, providing sex education, and ensuring timely medical interventions are key to helping couples.
- By breaking the taboo around male infertility and creating a supportive environment, many couples can achieve their dream of having children.

Secular remedy (12 July)

Muslim women's right to maintenance under secular laws is well established

- The Supreme Court of India ruled that divorced Muslim women can seek maintenance under the Code of Criminal Procedure (CrPC).
- This decision clarifies that the 1986 law does not limit their relief to only Muslim personal law.
- The Muslim Women (Protection of Rights on Divorce) Act, 1986, was enacted after the Shah Bano case (1985), which allowed divorced Muslim women to seek maintenance under Section 125 of CrPC.
- The 1986 law was seen as undermining India's secular ethos by restricting maintenance to what is allowed in Muslim personal law.
- In 2001, a Constitution Bench upheld the 1986 law but interpreted it in a way that did not prevent Muslim women from seeking maintenance under CrPC.
- Different High Courts had varying views on whether Muslim women should use Section 3 of the 1986 Act or Section 125 of CrPC.
- The recent verdict by Justices B.V. Nagarathna and Augustine George Masih states that the 1986 Act's provisions are in addition to and not instead of the right to seek maintenance under CrPC.
- The 1986 Act includes rights such as maintenance during the Iddat period, provision for a dignified life until remarriage, and return of mehr and dowry.
- Justice Masih concluded that both personal law and secular remedies for maintenance should exist separately but alongside each other.
- A woman can invoke the CrPC if she cannot maintain herself.
- The 1986 Act obligates a Muslim husband to support his divorced wife and children up to a certain point.
- Justice Nagarathna highlighted that the CrPC's maintenance provision aims to prevent women from becoming destitute by requiring husbands to support their wives.

- The 1986 Act codified a divorced Muslim woman's right in personal law, which is additional to her rights under the CrPC.
- The verdict is an example of the Court expanding rights and making remedies more accessible by using harmonious interpretation.
- The Court's decision neutralizes the belief that Muslim women's right to seek maintenance under secular law has been invalid since 1986.

Can of worms (12 July)

The government must ensure greater transparency in NEET

- Trust in governance is crucial.
- NEET-UG 2024 results have caused widespread distrust due to accusations of paper leaks, malpractices, technical failures, and the grant of grace marks.
- NEET was meant to ensure merit-based selection for medical and dental seats but has deviated from its original purpose.
- The Supreme Court of India has rescheduled the NEET-UG hearing to July 18 to address these issues.
- A CBI investigation into the allegations is ongoing.
- The Centre relies on a report by IIT Madras that analyzed results to check for malpractices.
- The report found no abnormality in centre and city-wise analysis for the top 1.4 lakh ranks.
- The report states there is no evidence of mass malpractice or localized candidate benefits.
- The overall increase in marks is attributed to a 25% syllabus reduction.
- Despite the report, student applicants continue to express outrage on social media.
- NEET has faced controversies before, with states opposing it.
- This year's allegations have caused widespread distrust among students.
- The issue should be openly debated and resolved publicly, not hidden.
- Denials of malpractice should be accompanied by engagement with affected students and clear explanations.
- Any errors should be acknowledged and apologized for.
- Rebuilding trust requires honesty.
- The government must ensure transparency in the examination process.
- The NTA and related agencies should commit to maintaining transparency.
- Security checks and other issues with the exam should also be addressed.

Should States get special packages outside Finance Commission allocations? (12 July)

- Nitish Kumar and Chandrababu Naidu, Chief Ministers of Bihar and Andhra Pradesh, are demanding special financial packages.
- These packages could increase the fiscal burden on the Centre and other States.
- The Finance Commission allocates funds based on factors like income, population, area, forests, ecology, and demographic performance.
- In 2020-21, Uttar Pradesh and Bihar received the largest amounts, while Karnataka and Kerala saw decreases.
- The Centre determines the distribution of remaining funds, often influenced by political considerations.
- Arun Kumar believes states should receive 41% of the divisible tax pool and political determination influences additional fund distribution.
- Pinaki Chakraborty notes that Finance Commission transfers have limited discretion and Central transfers follow distribution principles.
- Large-scale discretionary transfers are limited to maintain fiscal prudence.
- Andhra Pradesh faced a fiscal shock after bifurcation, partly offset by revenue deficit grants.
- Bihar has a fiscal capacity problem, with per capita development spending less than 60% of the all-States average, not fully addressed by Finance Commission or additional Central transfers.
- Higher Central aid can boost a State's growth if governance and resource management are effective.
- Poorer States may experience more leakage of funds and savings.
- Bihar's credit-deposit ratio is low, causing savings to flow out to other States.
- Political economy affects resource flow, with richer regions getting more resources.
- Poorer regions need more capital investment for balanced development.
- GST centralization has reduced States' fiscal autonomy and tax competition.
- States lost significant revenue sources and cannot set their tax rates under GST.
- Flexibility in GST is needed to restore some fiscal autonomy for States while maintaining fiscal harmonization.
- GST has harmed federalism by centralizing power, which is not suitable for India's diverse states.
- GST benefits the organized sector while harming the unorganized sector, especially in backward states.
- Suggested GST reform includes collecting tax at the last point and increasing direct tax collection to reduce reliance on indirect taxes.

- Central aid to states is influenced by politics, with more powerful states getting more funds.
- 70% of central funds are non-discretionary, but the remaining 30% are influenced by political considerations.
- Greater decentralization and state autonomy are needed to reduce political influence on fund allocation.
- Central schemes often tie up state resources, and there needs to be a national discussion on which schemes should be handled by the Center and which by the states.
- The 14th Finance Commission suggested the Center should focus on schemes with large externalities or national priorities.

Future investments in India's EV space

Why is the government considering extending the EV policy? How does the revised policy align with India's goals of enhancing local manufacturing and technology adoption in the EV industry? In what ways can the policy's focus on localisation and production volume increase competition and lower costs?

GS Paper III: Industry
EXPLAINER

Saptaparno Ghosh

The story so far:

According to media reports, the government is looking to expand the scope of its electric vehicle (EV) policy, announced in March, to include a retrospective effect. This means that the policy, that endeavours to prompt global players to localise production and invest in the domestic ecosystem, will now extend benefits to entities who have already made their investments. Earlier, entities were eligible for incentives only if they set up local facilities within three years of receiving approval. The revised policy is expected to be formally announced in August, the publications learnt from people familiar with the development.

What was the March policy's focus on investment and localisation about?

The policy announced in March aimed to provide Indian consumers with access to the latest technology and strengthen the EV ecosystem by encouraging healthy competition among EV players by attaining higher volumes of production, economies of scale and lower cost of production. All in all, better the electric vehicle economics for Indian consumers, and in a commercially viable manner for the ecosystem. The policy also mandated that half of the value addition in the overall manufacturing be done domestically within five years. To maintain commercial viability and retain a foothold in the Indian market, the import duty on EVs as completely built units (CBUs) with a minimum cost, insurance, and freight (CIF) value of \$35,000 was reduced from 70%-100% to 15%.

The policy document held India, being the third-largest automotive market in the world, could potentially "lead the global transition" from internal combustion



Towards change: A person uses an electric vehicle charging station, in Hyderabad. NAGARA GOPAL

engine (ICE) to decarbonised electric counterparts. Overall, the policy was potentially a recognition that import substitution for EVs would require a layered and longer-sustained approach. To this effect, for a commercially viable transition, it further provided mechanisms for manufacturers to address the imperative affordability paradigm of Indian consumers.

Why does the ecosystem need investment and intervention?

A Niti Aayog report in 2022 argued that purchasing a vehicle is a "major investment decision" for most Indian consumers. Thus, it was essential to ensure viable economics for owning, as well as maintaining and running the same - the total cost of ownership.

The report suggested that a sharper decline in costs would prepone the EV adoption timeline. It is essential to note that the report points to India's structural unit cost disadvantages in the production of select cell components such as CAM NMC (8-10%) and electrolyte (2-3%). Furthermore, as per the report, certain cell components such as separators, copper foil and anode active material

(AAM) require sizeable capital investment - about \$200-500 million for a 20-30 GWh plant. The commission thus recommended it was imperative to offset the dynamics and "create an enabling eco-system to attract large-scale capex investment vis-à-vis other geographies".

The other essentiality for a comprehensive ecosystem stems from the observed experience of after-sales service. Bain & Company's India EV Report (2023), observing the two-wheeler EV segment, had pointed to after-sales service being a "big pain point" for EV customers. It also cast apprehensions about the scalability of business models that had OEMs partnering with standalone breakdown service providers (such as Ampere with ReadyAssist).

The report also held that India would require "significant investor support" to realise the \$100 billion-plus EV opportunity.

"As the landscape evolves, investors need to evaluate potential assets based on five criteria, namely, sustainable competitive advantages, go-to-market and distribution capabilities, customer feedback and brand perception, talent and culture as well as manufacturing and

supply chain strategy," it held.

Does all of it address the paradigm?

The EV policy announced in March shares similar priorities with those in the U.S., China and Europe, where incentives have been endowed on a case-by-case basis to different companies for setting up capacity for EV value chain manufacturing. They entail land and infrastructure, capital subsidies, financing support, fiscal incentives and subsidised utilities. However, unrelatedly, the International Energy Agency (IEA)'s Global EV Outlook for 2024 pointed out that electric cars remain 10% to 50% more expensive than combustion engine equivalents in Europe and the U.S., depending on the country and car segment.

Notably, Europe and the U.S. meet 20% and 30% of their EV battery demands through imports, according to the report. This also forms a case for the necessity for integrated production lines.

Dinesh Abrol, a retired professor at the Institute for Studies in Industrial Development and a long-time observer of industry and trade told *The Hindu*, that in a broader context, foreign investments have not always been known to deliver. He held that such policies should be able to dictate the type of production that must take place. It must not be restricted to de-risking and de-leveraging, he said.

"If FDI is to reap its potential fully, the focus must be on ensuring that it is towards building a core country, such that the critical components are made here, there is the transfer of technology and local manufacturing is built here," states Prof Abrol, adding, "If FDI does not enable one to be a core country, you will not be to progress towards an enabling capacity to establish yourself as a core player. Instead, you shall stand inserted as a peripheral player in the larger supply manufacturing chain." According to Mr. Abrol, the way forward is to strengthen the domestic players in the creation of capabilities for critical components and make the foreign automakers use the domestic suppliers' networks.

THE GIST

The Indian government plans to expand its electric vehicle (EV) policy announced in March to include retrospective benefits, incentivising both current and future investments in the domestic EV ecosystem.

Earlier, incentives were tied to setting up local facilities within three years of approval; the revised policy will extend benefits to entities that have already invested in local EV production.

The policy aims to encourage localisation of EV production, boost technology adoption, and enhance competitiveness in the Indian EV market.

The move is expected to stimulate investment in manufacturing capacity, reduce costs, and accelerate the adoption of electric vehicles in India.

Future investments in India's EV space (12 July)

Why is the government considering extending the EV policy? How does the revised policy align with India's goals of enhancing local manufacturing and technology adoption in the EV industry? In what ways can the policy's focus on localisation and production volume increase competition and lower costs?

- The government plans to expand its electric vehicle (EV) policy to include retrospective benefits.
- The revised policy will extend benefits to entities that have already made investments.
- Originally, entities had to set up local facilities within three years of approval to be eligible for incentives.
- The revised policy is expected to be announced in August.
- The March policy aimed to:
 - Provide Indian consumers with access to the latest EV technology.
 - Strengthen the EV ecosystem by encouraging competition and increasing production volumes.
 - Achieve economies of scale and lower production costs.
 - Improve the economics of EVs for Indian consumers and the ecosystem.
 - Mandate that half of the manufacturing value addition be done domestically within five years.
 - Reduce import duty on EVs with a CIF value of \$35,000 from 70%-100% to 15%.
- The policy sees India as having the potential to lead the global transition from internal combustion engines to electric vehicles.
- Import substitution for EVs requires a sustained approach.
- The policy includes mechanisms to address affordability for Indian consumers.

Why does the ecosystem need investment and intervention?

- A Niti Aayog report in 2022 emphasized that buying a vehicle is a significant investment for most Indian consumers.
- Ensuring viable economics for owning, maintaining, and running a vehicle (total cost of ownership) is essential.
- A sharper decline in costs would accelerate EV adoption.
- India has structural cost disadvantages in producing certain cell components like CAM NMC (8-10%) and electrolyte (2-3%).
- Some cell components, such as separators, copper foil, and anode active material (AAM), require substantial capital investment (\$200-500 million for a 20-30 GWh plant).
- The report recommended creating an enabling ecosystem to attract large-scale capital investment.
- After-sales service is a major pain point for EV customers, especially in the two-wheeler segment.

- Business models with OEMs partnering with standalone breakdown service providers have scalability concerns.
- Significant investor support is needed to realize the \$100 billion-plus EV opportunity in India.
- Investors should evaluate potential assets based on competitive advantages, distribution capabilities, customer feedback, brand perception, talent and culture, and manufacturing and supply chain strategy.

Does all of it address the paradigm?

- The EV policy announced in March aligns with similar policies in the U.S., China, and Europe, providing incentives for setting up EV value chain manufacturing.
- Incentives include land, infrastructure, capital subsidies, financing support, fiscal incentives, and subsidized utilities.
- The International Energy Agency (IEA) noted that electric cars are still 10% to 50% more expensive than combustion engine cars in Europe and the U.S.
- Europe and the U.S. import 20% and 30% of their EV battery demands, highlighting the need for integrated production lines.
- Dinesh Abrol, a retired professor, emphasized that foreign investments have not always been effective in delivering benefits.
- Policies should dictate the type of production, focusing on building critical components domestically and ensuring technology transfer.
- Abrol argued that FDI should help build local manufacturing capabilities, not just de-risk and de-leverage.
- Strengthening domestic players and making foreign automakers use local suppliers' networks is essential for progress.

Why are dengue cases on the rise worldwide?

GS Paper III: Basic Science

Are urbanisation and climate change fuelling dengue spread in the world?

Serena Josephine M.

The story so far:

Dengue cases have surged in India, with Karnataka, Kerala, and Tamil Nadu seeing significant increases.

According to data published by the National Centre for Vector Borne Diseases Control, as of April 30, India recorded 19,447 cases and 16 deaths, with Kerala and Tamil Nadu leading in numbers. Karnataka, initially reporting 2,503 cases, has now recorded 7,840 cases and seven deaths as of July 10, with 293 new cases reported on that day alone.

What is the global situation of dengue?

According to the World Health Organization (WHO), as of April 30, over 7.6 million cases of dengue were reported in 2024. This included 3.4 million confirmed cases, over 16,000 severe cases and over 3,000 deaths. In an update on the global scenario on May 30, it said that 90 countries have known active dengue

transmission, adding that “not all of which have been captured in formal reporting”.

The WHO noted that at least five countries, including India, were grappling with the onset of monsoon season, which created suitable conditions for the breeding and survival of *Aedes mosquito*. Urbanisation and population movements have also played a pivotal role in the increasing burden in the region.

Dengue is endemic in more than 100 countries in the WHO regions of Africa, the Americas, the Eastern Mediterranean, South-East Asia and Western Pacific. The Americas, South-East Asia and Western Pacific regions were the most seriously affected, with Asia accounting for around 70% of the global disease burden. However, it also noted that dengue is spreading to new areas in Europe, the Eastern Mediterranean and South America.

How does dengue spread and how is it treated?

Dengue virus is transmitted to humans

through the bite of infected mosquitoes, with the primary vector that transmits the disease being *Aedes aegypti*. While cases are mostly asymptomatic or mild, some may develop severe dengue that could include shock, severe bleeding or organ impairment. According to the National Guidelines for Clinical Management of Dengue Fever, dengue presents as an acute febrile illness lasting two to seven days, characterised by symptoms such as headache, retro-orbital pain, myalgia, arthralgia, rash, and hemorrhagic manifestations. In those without any warning signs or complications, dengue is managed through symptomatic and supportive treatment.

What are the emerging patterns in dengue?

Researchers and public health experts have been closely monitoring the emerging patterns in dengue.

According to the WHO, factors contributing to the increasing risk of dengue epidemics include the changing distribution of the *Aedes aegypti* vector,

Why are dengue cases on the rise worldwide? (12 July)

Are urbanisation and climate change fuelling dengue spread in the world?

- Dengue cases in India have surged, especially in Karnataka, Kerala, and Tamil Nadu.
- As of April 30, India recorded 19,447 cases and 16 deaths, with Kerala and Tamil Nadu leading.
- Karnataka reported an increase from 2,503 to 7,840 cases and seven deaths by July 10, with 293 new cases on that day alone.
- Globally, over 7.6 million dengue cases were reported in 2024, including 3.4 million confirmed cases, over 16,000 severe cases, and over 3,000 deaths.
- WHO reported active dengue transmission in 90 countries, noting that the monsoon season aids mosquito breeding and survival.
- Urbanization and population movements contribute to the increasing dengue burden.

- Dengue is endemic in over 100 countries, with the Americas, South-East Asia, and Western Pacific regions most affected, accounting for around 70% of the global burden.
- Dengue is spreading to new areas in Europe, the Eastern Mediterranean, and South America.
- Dengue spreads through the bite of infected *Aedes* mosquitoes, primarily *Aedes aegypti*.
- Symptoms include headache, retro-orbital pain, myalgia, arthralgia, rash, and hemorrhagic manifestations.
- Severe dengue can cause shock, severe bleeding, or organ impairment.
- Treatment is symptomatic and supportive for those without warning signs or complications.

What are the emerging patterns in dengue?

- Researchers and public health experts monitor emerging dengue patterns.
- WHO cites factors increasing dengue risk: changing *Aedes aegypti* distribution, urbanization, human activities, and climate change.
- The first dengue-like illness epidemic was recorded in Madras in 1780.
- Dengue virus was isolated in India in 1945; first evidence in Vellore district in 1956.
- Dengue spread due to urbanization, travel, and climate changes.
- Tamil Nadu has had dengue outbreaks every five years, with the last in 2017.
- Seasonal variation every five years is likely due to building susceptible populations.
- Tamil Nadu expects more cases in the coming months.
- Surveillance, immediate response, community empowerment, and education are essential.