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Voting in Jammu and Kashmir

In the third and final phase of voting in Jammu and Kashmir held on October 1, 65.58% voting took place.

In this phase, elections were held on 40 assembly seats in 7 districts.

First female President of Mexico

- She assumed charge/office on 1st October as the 66th President of Mexico
- She is a member of the left-wing National Regeneration Movement (Morena)

New PM of Japan

- Shigeru Ishiba became the new PM of Japan on 1 October 2024

G.I.Tag

- Ant Chutney – It is made from red ants in the Lal district in the Mayurbhanj district of Orissa. Geographical Identification Goods. (Registration and protection) Act 1999.
- Protein, Calcium, Zinc, Vitamin B-12, Iron, Magnesium, Potassium, Sodium Copper, and Amino Acid are found in it.
- It boosts the immune system in the body
- It is helpful as medicine for many diseases.

Dharti Aaba Janjatiya Gram Utkarsh Campaign

- This package was launched by the PM on 2 October 2014 from Hazaribagh in Jharkhand.
- Originally it was PM Janjatiya Unnat Gram Abhiyan.
- It is a package for basic Scheme saturation in tribal majority 63,000 villages
- Dharti Aaba refers to Birsa Munda.

Civil War in Haiti

There is a situation of civil war in Haiti, about 7 lakh people have been displaced from here.

Voyage around the world by 2 women Navy officers

- Lt. Commander Dilna K. and Lt. Commander Roopa A. embarked from Goa on 2 October on a challenging expedition to circumnavigate the globe covering 23000 nautical miles. Over INSV 240 days on the 56-foot boat Tarini"
- It was the second edition of the Navika Sagar Parikrama was flagged off from the ocean Sailing Node, INS Mandovi by Navy Chief Admiral Dinesh K. Tripathi

Work for prisoners in jails on the basis of caste

- This is a violation of fundamental rights

Classical Languages

- In the Union Cabinet meeting on 3 October 2024, the government gave the status of classical language to 5 languages – Marathi, Pali, Prakrit, Assamese, and Bengali.
- With this the total number of classical languages in India became 6+5=11.
- A new category of twelve classical languages was formed by the Central Government in 2004 and Tamil language was first placed in this category.
- Indians are the third largest population of unauthorized immigrants to the US after Mexico and El Salvador.

e-Shram Portal

According to the e-Shram portal of the Central Government, more than 5 lakh people are involved in the field of education and the non-government sector (school coaching).





Highest employment provider in the field of education:

First place=Uttar Pradesh

Second place = West Bengal

Third place = Bihar

Maldives's President visits New Delhi

The President of Maldives arrived in New Delhi on October 6 on his first bilateral visit with India.

Sammy Basso Died

Sammy Basso (of Italy) who was suffering from Progeria (rapid-aging disease) died on 6 October at the age of 28. He was the longest living survivor of the rare genetic disease Progeria.

Nominated members in legislative assembly

In addition to the 90 elected members in the Jammu and Kashmir Assembly, there is a provision for 5 members to be nominated by the Lieutenant Governor. A similar provision is there in Puducherry where 3 members are nominated.

Bihar Government Launched HPV Vaccination

- Bihar Govt. Launched the free human Papillomavirus (HPV) vaccination drive for girls aged between 9-14 years.
- This vaccine shall prevent young girls from developing cervical Cancer later in their lives.
- Bihar is the first state to launch such a drive.
- This HPV vaccination programme is launched under the "Mukhyamantri Balika cancer Pratirakshan Yojana".

LUPEX

- LUPEX refers to the Lunar Polar Exploration Mission.
- It is the fifth Lunar Mission of India which will be jointly implemented by
- The National Space Commission is the apex body that decides on space missions.
- It was established in June 1972.

Excavation in Surkotada, Harappan Civilization

- Excavation is going on in Surkotada of Harappan civilization which is located in Kutch district of Gujarat.
- This archaeological mining is being done by a joint team of IIT, Gandhinagar, the University of Kerala, and University of North Carolina, US.
- This excavation resulted in a research paper titled - "Understanding Cooking Techniques through Lipid Residue Analysis at the Harappan sites of Surkotads, Rann of Kachch, Gujarat."
- This site remained under the Indus Valley Civilization from about 2100 BC to 1700 BC.
- The analysis of lipid residues (fatty compounds) indicated that during early stages of these settlements, the inhabitants most probably employed both boiling and frying techniques to prepare the food.
- Lipids, which are fatty compounds, are durable. Lipid-employed residue analysis is often employed in archeological studies.

International Finance Corporation (IFC)

- IFC is the World Bank's private sector lending arm.
- MD of IFC = Makhtar Diop.

Attack on Israel by Hamas

After the attack on Israel by Hamas on October 7, 2023, 41870 people were killed in Gaza in one year till October 7, 2024. About 97,166 people were injured in this.





Increase in Illegal migration in Britain

The number of people reaching Britain illegally through the English Channel is increasing.

On 5 October 2020, 973 people succeeded in crossing the English Channel and reaching England. This was the highest number of crossings in a single day so far (CK ex 882).

By the year 2024, 26,600 people accessed this channel illegally.

Visit of the President of Maldives to India (October 2024)

- This is his second visit to India. (For the first time in the swearing-in of Shri Narendra Modi)
- Sukuk is an Islamic bond. For this, Maldives has taken a loan of 500 million dollars from India.

Nobel Prize 2024 (Medicine)

Nobel Prize 2024 (Medicine) American scientists Victor Ambrose and Gauri Ruvkun will be awarded the Nobel Prize in the field of medicine.

- Their discovery has made the treatment of cancer easier. Both myco r.n.a. Discovered that it controls the way cells use genes to make proteins.
- M.R.N.A. The discovery helped explain how genes work inside humans and how they give rise to tissues. Human gene DNA and R.N.A. It is made of.
- Micro RNA Cells and tissues of basic RNA do not develop. Abnormal changes in it cause serious diseases like cancer and diabetes.
- Both scientists are associated with the University of Massachusetts.
- MRNA plays a crucial role in gene regulation
- Both Scientists were awarded the Prestigious prize for the discovery of micro RNA and its role in post-transcriptional gene regulation.
- The Principle of gene regulation, which was previously unknown, turned out to be essential for multicellular organisms, including humans.

- The duo made their finding by studying the 1 mm long roundworm *Caenorhabditis elegans*.
- The body makes proteins in a complex process with two broad steps: transcription and translation.
- During transcription, a cell copies a DNA sequence into messenger RNA (mRNA) in the nucleus.
- The MRNA moves from the nucleus, through the cell fluid and attaches itself to the ribosome.
- During translation, another type of RNA called transfer of RNA (tRNA) brings amino acids to the ribosome where they are linked together in the order specified by the mRNA to make a protein.
- Micro RNA or mi RNA regulates the production of Proteins by bonding with and Subsequently silencing the mRNA at an appropriate juncture. The process is called Post-transcriptional gene regulation.
- Ambros and Ruvkun found the first miRNA gene in *caenorhabditis elegans* (*C. elegans*)
- They confirmed that miRNAs are actually present across the animal kingdom. Clean energy is in Solar Photovoltaics and electric vehicles.
- 12 Uranium: Primary fuel for nuclear energy production.

Five Agreements: -

1. Agreement regarding the exchange of currencies
2. Training between the National Defense University and the Policing and Law Enforcement Agency of Maldives
3. CBI and Anti-Corruption Commission of Maldives will work together to stop corruption
4. Renewal of agreement between the National Judicial Academy and the Judicial Commission of Maldives regarding training.
5. Agreement on cooperation in sports also

Launch of three facilities:

1. RuPay card launched in Maldives
2. Inauguration of a new runway in Hanimaadhoo airport.
3. Distribution of 700 houses built with India's help.





Two important announcements were also made on this occasion:

1. Agree to adopt a comprehensive economic and maritime security partnership approach
 2. Coast Guard ship Huravee will sail without charge
- Both countries will work together for stability and prosperity in the Indian Ocean region.
 - Work is going on on the Ektha Harbor Project.

Plants with the greatest medicinal importance

In the list released by the Union Ministry of Environment, Forest and Climate Change on October 7, those important plants present in the country which are of greatest medicinal importance have been included.

- A total of 1021 types of plants in 26 states are included in this list. There are 52 such types of plants in Uttarakhand. This type of plant is found in Uttar Pradesh (26 types).
- There are 22 types of such medicinal plants in Bihar. Of these, eight are herbal, seven are trees, four are creepers and three are shrubs.
- 8 October 2024 = 92nd Indian Air Force Day

India and Maldives Currency swap

- India and Maldives on Monday signed a currency swap agreement worth US \$ 400 million.
- Greater male connectivity projects will be expedited.
- A new commercial port will be developed in Thilafushi.
- India will open a Consulate in Addu, Maldives and a Consulate in Maldives in Bengaluru.

Abnormal Catchment Area

According to a UN weather agency report, river flows worldwide fell to all-time lows last year amid record heat, endangering water supplies in an area of growing demand.

According to it, 50% of the global Catchment area shows abnormal condition

US military aid to Israel

After October 7, 2023, the USA has given military aid to Israel amounting to \$17.9 billion.

Apart from this, the military operations conducted by America since October 7 (2023) cost 4.86 billion USD.

World Bank loan to Sri Lanka

The World Bank has approved a loan of 200 million dollars to Sri Lanka.

Storage of water reservoirs in India

- The storage of India's water reservoirs has seen an increase of 18%.
- At present, 155 water reservoirs in the country have 88% live storage of their total capacity.

Prison Manuals of India

- Supreme Court on the Manuals of Prisons of India On 03 October 2024, the Supreme Court should make necessary reforms in the Model Praise Manual 2016 and Model Prison and Correctional Services Act 2023 applicable in various prisons of different states of India within three months.
- These statutes/rules provide for distribution of work on the basis of caste of prisoners.
- These provisions violate Articles 14, 15, and 17.



High Performance buildings (HPBS)

High-Performance buildings (HPBS) are designed and operated to be energy efficient, minimize environmental impact, and promote occupant health.

- HPBs are the need of the day because buildings are significant contributors to global emissions, especially in fast-growing cities, so improving their energy and carbon efficiency is vital.
- Globally, buildings account for nearly 40% of total final energy consumption over their lifespan, primarily for operational use. needs is running HVAC (Heating, ventilation, Air Conditionings) Systems and Lighting
- This significant energy use leads to approximately 28%. of energy-related Carbon emissions arising from both on-site energy consumption and indirect emissions from Power plants and other off-site sources.
- In India, buildings account for more than 30% of the national energy use and 20% of its carbon emission, according to the Bureau of Energy Efficiency Academic Freedom Index:
- Published by "Global Public Policy Institute"

Partners in making Global time Series data set (1900-2019) are

- (i) Friedrich-Alexander University Erlangen Nurnberg
- (ii) Scholars at Risk (SAR)
- (ii) V-Dem Institute

Indicators that are used in this index –

- (i) Freedom to research and Teach
- (ii) Freedom of academic exchange and dissemination
- (iii) Institutional autonomy of University's Campus integrity
- (iv) The freedom of academic and cultural expression
- (v) constitutional protection of academic freedom
- (vi) International covenants on Economic, social and cultural Rights
- vii) Suwival of Universities
- (viii) international legal commitments under academic freedom

Academic Freedom refers to

(1) Right to Pursue knowledge and Conduct research without interference, supporting the open exchange of ideas and Protecting academic integrity.

- SAR - Network of 665-way universities across the globe.
- "Free to think 2024" is an annual report published by the SAR Academic Freedom Monitoring Project.
- In this India's score is 0.18 while it was 0.6 in 2013.

AGE diets = Advanced Glycation End diets.

- AGE diets (which include ultra-Processed and fast food)
- AGE rich foods lead to inflammation in the body.
- Glycation - a non-enzymatic chemical process in which a sugar molecule binds to a protein or Lipid molecule
- Glycation can result in harmful reactions" in the body.
- Low AGE diet (fruits, whole grains....) Can reduce oxidative stress in bodies.
- Oxidative stress refers to the imbalance of free radicals and antioxidants that result in inflammations and cells.

CERC = Central Electricity Regulatory Commission

- Formed on 24 July 1998
- Chairperson = Jishnu Barua (IAS)
- Key regulator and statutory body and is a Quasi Indicial body. (under Electricity Act 2003)





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Turkey's President Recep Tayyip Erdogan termed Benjamin Netanyahu as the "Butcher of Gaza" and compared him to Hitler.(one line)





Central Water Commission Report

The entire country has been divided into 5 regions

- (i) Western Region
- (ii) Central Region
- (iii) Eastern Region
- (iv) Northern Region
- (v) Southern Region

Elections in Jharkhand, Maharashtra

- Official announcement of elections in Jharkhand and Maharashtra 15-10-24 (Jharkhand- 81 seats, Maharashtra 288 seats)

Election date: Jharkhand

Phase I -13 November

Phase II- 20 November

Maharashtra – 20 November

- Counting of votes in both 23rd November

Asian Women Hockey Championship.

- It was organized from 11th to 20th November in the new hockey stadium built in Rajgir.
- Participating countries: India, China, Japan, South Korea, Thailand and Malaysia
- Bhubhankar – Sparrow
- Theme sentence – Hockey festival, pride of Bihar 23rd SCO Summit 2024
- Pakistan is hosting the SCO CHG on Summit 15-16 October 2024
- India shall be represented by Foreign Minister Mr. S.Jayshankar

Japanese organization - Hibakusha

- The Japanese Organization, which has been awarded the Nobel Peace Prize for 2024, Nihon Hidankyo the Survivors of the Hiroshima and Nagasaki nuclear attacks are known as “ Hibakusha”

- An estimated 1.5 Lakh people died due to the bombings and many more later due to the after-effects of the exposure to radioactivity
- "Nihon Hidankyo" popularized the term "No more "Hibakusha."

Paddy purchase in Bihar

- Will start from 1st November (in North Bihar)
- Will start from 15th November in South Bihar
- For this, the Food and Consumer Protection Department has issued a notification for 2024-25.
- Registered farmers can sell paddy packs and trade boards till 15th February.
- Rs 2300 per quintal will be available on ordinary paddy and Rs 2320 per quintal on grade 'A' paddy.

The merger of Uttar Vihar and South Bihar Gramin Banks

- The Central Government will merge both the rural banks operating in Bihar under the process of reorganization of banks.
- □ On January 1, 2019, South Bihar Gramin Bank was formed by merging Madhya Bihar Gramin Bank and Bihar Gramin Bank.
- South Bihar Gramin Bank is the largest rural bank in India (headquartered in Patna)
- The headquarters of North Bihar Gramin Bank is in Muzaffarpur.
- North Bihar Gramin Bank is working in 18 districts and has a profit of Rs 32 crore.
- South Bihar Gramin Bank is working in 20 districts and has Rs 918 crore. is at a loss of





23rd SCO(CHG) Summit

- In this Summit the Indian Foreign Minister emphasized that three evils are essential for the SCO nations (Eurasian Group) to realize its goals of balanced growth and integration.

Here three evils refer to -

- (i) Terrorism
- (ii) Extremism
- (iii) Separatism

Main issues raised during the summit:

1. No developmental issues like trade, energy, and communication if terrorism is not Stopped.
2. No support to China's one belt, one Road" (OBOR). India is the Only SCO nation that does not support the OBOR.
3. India also raised the issue of military Conformation between India and china is Eastern Ladakh.
4. India also objected the CPEC passage through the POK (CPEC is a part of OBOR)
5. Matters of the impact of COVID-19, climate Change, wars also were raised
6. India also emphasized on reforms in the UNSC.

Goddess of justice

- She is the goddess of Greece. This statue was brought to India by the British in the 17th century.
- Now these have been changed in 2024.
- 60th Femina Miss India
- It was held on 16 October 2024 at the Famous. Studio, Mumbai
- Nikita Porwal of Madhya Pradesh is the winner Nandini Gupta, the winner of 2023 crowned her.
- Nikita Porwal shall represent India at the 73rd Miss World Pageant.

Foreign Commonwealth and Development Office (FCDO)

- UK's Foreign Commonwealth and Development Office (FCDO) came in the news as it issued a statement on 17 October 2024 stating India should cooperate with Canada's Judicial system in the murder case of Hardeep Singh Nijjar.
- India has objected to the statement of the FCDO
- A workshop on the PM Gatishakti National Master plan (PMGS-NMP) was held in Patna on 18 October 2024.

Increase in MSP

The Central Government announced the increase in MSP for Rabi crops on October 18.

The highest increase has been made in Barley (2005-26) = 7%. (In 2024-25 it was Rs 1850 per quintal which became Rs 1980 in 2025-26)

Strike at Samsung

- A month-long strike at Samsung's manufacturing facility in Sriperumbudur (Tamil Nadu) ended on 15 Oct.
- It was announced by the Tamil Nadu govt.
- The management of Samsung was demanded on not recognizing the Samsung India workers' Union (SIWU)

Global Hunger Index 2024

- India achieved a score of 27.3 Ranking 105 among 127 countries. This status refers to the prevalence of a 'serious level of hunger in India.

The score is based on four broad parameters:

1. Child stunting (share of children under five with lower height proportional to their age, reflecting chronic under-nutrition)
2. Undernourishment (share of population was insufficient caloric intake)
3. Child wasting (share of children under five with lower weight to proportional to their height)
4. Child Mortality (share of children who die before their fifth birthday)





India's share in the above parameters

1. 35.5%
2. 13.7%
3. 18.7%
4. 2.9%

- As per the survey, India has the highest child wasting rate globally.

Schemes in operation by the GOI

1. National food security Act
2. Poshan Abhiyan (National Nutrition Mission)
3. PM Garib Kalyan Yojana
4. National mission for natural farming

- The GHI report states that the per capita GDP growth and low levels of hunger are not directly related to each other
- GHI was started in 2006 and at present it is published by a Germany-based welth hungerhilfe and an Irish NGO concerned worldwide.
- The theme of the GHI 2024 is "How gender justice can advance climate resilience and zero hunger"

World Food Day 2024

- Celebrated on October 16, 2024
- The theme of 2024 "Right to food for a better life and a better future"

Five Eyes countries

1. Australia
2. Canada
3. New Zealand
4. US
5. UK

Section 6A of the Citizenship Act 1955.

- Under this section, it has been provided that foreigners who had entered Assam before January 1, 1966, and been ordinarily resident" is the state, would have all rights and obligations of Indian Citizens.

- Those who had entered the state between January 1, 1966, and March 25, 1971, would have the same rights and obligations except that they would not be able to vote for 10 years.
- The Constitutionality of this section was challenged in which the Petitioners had questioned why Assam alone the border states, had been singled out to implement that Section.
- The Petitioners had blamed the "rise in infiltration a consequence or an effect of section 6A.
- The section 6A was inserted into the Act in furtherance of a Memorandum of Settlement called the "Assam Accord Signed on August 15, 1985.

Battle of Walong

- Walong, Arunachal Pradesh (A place in Arunachal Pradesh)
- There was a war here between India and China from 21 October to 16 November 1962.
- Walong is close to the Mc Mohan Line, the India-China border.
- Although China was successful in establishing its control over Eighth, the 11th Infantry Brigade of the Indian Army held China back.
- Time Magazine had written in January, 1963 that "At Walong, Indian troops lacked everything. The only thing they did not lack was guts."
- The Battle of Walong came into the news as the Army has done various events to mark its 62nd anniversary.

First CM of J&K

- Omar Abdullah took over as the first CM of the 5-year-old UT of J&K on 17 Oct 2024.
- The J&K Ministry has 10 berths, including the CM.
- 6 ministers took oath with CM-three from the Jammu region and three from the Kashmir region.
- Surinder Kumar Chaudhary, the NC MLA for Now Shera (in Jammu) became the Deputy CM.



Export, Import, and Trade gap in September 2024

- India's goods trade deficit in September 2024 will be 20.78 billion USD, which is the lowest in the last 5 years.
- The goods trade deficit in August 2024 was 29.70 billion USD, which was the second highest.
- Goods import stood at 55.4 billion USD in September 2024, which is 9 billion USD less than the all-time high level of 64.4 billion USD in August 2024.
- Between April-September 2024, goods exports increased by 1% to 213.2 billion USD and goods imports increased by 6.16%.

New Chief Minister - Haryana

Nayab Singh Saini, the 19th Chief Minister of Haryana, was sworn in as the 19th Chief Minister of Haryana on 17.10.24.

After the retirement of the current C.J.I on November 10, 2024, Justice Sanjeev Khanna will take over as the 51st CJI of India.

death due to alcohol poisoning

- When methyl alcohol or methanol is found in alcohol, it becomes poisonous.
- It reacts with a chemical called alcohol dehydrogenated present in the human body to first form a substance called formaldehyde and then formic acid.
- Formic acid is poisonous and affects the nervous system, choking it and resulting in death.

Digital Arrest

- Digital arrest is the process of extorting money from someone by threatening them through online mediums.
- Rs 30 thousand crore in the financial year 2023. Bank fraud cases worth more than Rs 1 lakh were registered (@RBI)

Mauritania

- A country in Northwest Africa bordered by the Atlantic ocean (west), western Sahara (in North and Northwest), Algeria (Northeast) Mali (east/southeast), and Senegal (south west)
- 11th largest country in Africa, 28th largest of the world
- Capital: Nouakchott.
- Religion: Sunni Islam
- PM: Mokhtar Ould Djay President: Mohammad Ould Ghazouani
- This country was in the news because the Indian president was on an official visit to this country (17.10.24)

Haryana's new Government

- Along with the CM, 13 other members took oath as ministers. No Deputy Cm post was offered it includes two women members

Fine for a childless lifestyle

- Russia introduced a fine of 4020 USD for engaging in a "childless lifestyle"

Yasukuni Shrine in Japan

- Yasukuni shrine is in Tokyo, Japan which was founded by Emperor Meiji in June 1869 in memory of dead people in Boshin war (1868-1869)
- China, Russia, South Korea, and North Korea object to the honor to these individuals as they term this war as violation of the branches of Saudi Arabia: Musaned Platform.

Digital platform - Musaned

- Saudi Arabia under its vision 2030" has Launched a digital Platform "Musaned" on 16 Oct 2024.
- This will benefit the foreign workers from at least 10 African countries and 9 Asian Countries.



- Under this Platform, foreign workers in the domestic (household work sector can Check existing employment contracts and follow updates.
- It would protect human rights and provide a “stable working environment” for both the employee and employers

Pakistan Army’s Operation searchlight

- On 25 March 1971, the Pakistan Army had launched "Operation Searchlight" to curb the Bengali Nationalist movement in East Pakistan.
- The migrants before the operation were considered to be migrants of partition towards which India had a liberal Policy.
- Migrants from Bangladesh after the said date were considered to be migrants of war and not partition.
- Thus, the cut-off date of March 25, 1971 is reasonable.
- Even though states like West Bengal (Shares 2216.7 km), Meghalaya (443 km), Tripura (856 km) and Mizoram (318 km) share borders with Bangladesh whereas Assam shares only 263 km which is much less than the above states. This fact induces an impact. on the cultural and Political rights of Assamese and tribal population.

Coastal Water Quality Index 2023-24

- According to it offshore water Quality (up to 5 km.) is best in Kerala and Karnataka is descending order.
- West Bengal has the worst.

BRICS Summit 2024

- Dale: 22-23 October 2024
- Place: Russia

Fish production in Bihar

- In 2005: 2.88 thousand metric tons
- In 2023: 8.73 thousand metric tons

NITI Aayog's S. D.G. Index Report 2024

- Bihar got 32 points in this report. This score is the lowest.
- 12 standards have been kept in this index.

National Commission for women (NCW)

- Chairperson of National Commission for Women (NCW) is – Vijaya Kishore Rahatkar
- Her tenure shall be for a period of three years or till she reaches the age of 65 years. Whichever comes first.
- NCW is a Statutory body.
- NCW is empowered to work toward the advancement of women's rights.
- Its mandates include reviewing the Constitutional and legal Safeguard, provided for women.

Kala-azar

- Caused by a Protozoan parasite of genus *Leishmania* transmitted by the bite of an infected female Sandfly
- In India, *Leishmania donovani* is the only parasite causing this disease.
- The Parasite primarily infects the reticuloendothelial systems and may be found in bone marrow, spleen, and liver.
- Post Kala-azar Dermal Leishmaniasis (PKDL) is a condition when *Leishmania donovani* invades skin cells, resides and develops there, and manifests as dermal lesions.
- Its symptoms include irregular fever, weight loss and anemia.
- It is prevalent mostly in Bihar, Jharkhand, west Bengal, and parts of UP.





- In news, India is seeking an elimination certificate from the WHO as it has managed to keep the number of Cases under one in 10,000 for two consecutive years. which is parameter fixed by the WHO.

Nikshay Poshan Yojana (NPY)

Related to Sending 1000/- per month through DBT to a TB patient for the entire duration of treatment and initiating the disbursement of 3000/- at the time of diagnosis.

Tea in India

- Brought to India from China and southeastern Asia about 3 centuries ago
- India has the largest total consumption of Tea (5,40,000 metric tonnes or 620gm Per Capita)
- India is the world's fourth-largest exporter of tea. It generates about 800 million USD.
- As per NSSO, in India, Tea is consumed 15 times more than coffee.
- The aroma of tea leaves is due to the presence of carotenoids such as volatile compounds called carotenoids such as Lycopene, Lutein, and Jasmonate.
- On the other hand, the taste of food is due to non-volatile compounds such as sugar, salt, iron, and Calcium.
- The Central Food Technology and Research Institute (CSIR-CFTRI) - at Mysore.
- Coffee is better than tea for diabetes.

Google's violation of antitrust laws

- Trancent backed Epic Games" (which makes a game called Fortnite) filed a case against Google and Apple Play store.
- The case against Apple started as a bench trial in the US district court.
- Judge Yvonne Gonzales Rogers of this court decided that although Apple had not established a monopoly in the app marketplace, it had still implemented a variety of anti-competitive policies.

- The court ordered that Apple should provide payment options for in-app purchases to app developers on its platform.
- In this decision, Epic Games was also ordered to pay for the damages caused by the violation of the agreement made with Apple.
- The case against Google began as a jury trial in the court of US District Court Judge James Donato.

In the decision made by this court, an injunction was passed against Google in which it was said that

1. Google should open its Play-store for third party apps.
 2. In this, Google is now prohibited from making exclusive deals with App-developers and Phone manufacturers under which they have to compulsorily pre-install the Google Play store.
 3. Google will now have to provide app-developers an alternative payment option (within their apps).
- To use the payment facility of Epic Games of Google, one had to pay 15-30% charges and no other option was available for payment.

United Nations Interim Force in Lebanon (UNIFIL)

- United Nations Interim Force in Lebanon
- It is a global body's Peacekeeping force patrolling southern Lebanon.
- It was established by the UNSC in 1978
- It was tasked with ensuring the withdrawal of Israeli troops from southern Lebanon after Tel Aviv invaded Beirut to Push Back the PLO
- It is also tasked with ensuring the withdrawal of Israeli troops from Southern Lebanon after Tel AVIV invaded Beirut to push Back the PLO
- It is also tasked with maintaining peace and security in the region and assisting the Lebanese govt. to regain authority in the area.
- The 9532-strong troops monitor movement across the UN-mapped "Blue Line" spanning 120 km. border between Israel and Lebanon.





- In the UNFIL, troops of 34 nations Participate. But Indonesia is the largest contributor (1215 out of 9532) Other contributors are (in descending order: Italy (963), India (876), Nepal (858)
- It is funded by the UNGA with an annual budget of 500 million USD.

India's Explosives capital

- Nagpur
- Here explosives used in wars at world level are manufactured.
- Among buyer countries like Germany, South Africa, Poland, Bulgaria, South Africa, Vietnam, Saudi Arabia are included.
- In past 3 months orders of 900 crore rupees have been dispatched, and another orders worth 3000 crore & are under executions.

Drone targets Bibi's house

- Here Bibi is Netanyahu

Assembly by-election in Bihar

By-elections will be held for 4 vacant seats of Bihar Assembly to be held on 13 November. This is the site

Tarari, Ramgarh, Belaganj, Imamganj (safe)

International women's Asian Hockey championship

- It will start from 11 Nov. 2024
- Indian women. Hockey Team occupies 7th rank in the world ranking
- In this championship, it is in the top ranking.
- The Women's Hockey Team of China is the second ranked team in Asia in the world ranking it is in 10th place.

Oil refinery capacity in India

- At present the total capacity of 23 refineries in the country has reached 240 million metric tons.
- 70% of crude oil for use in India is supplied by imports.
- 30% of demand is met indigenously

BRICS

- BRICS Stands for Brazil, Russia, India, China, and South Africa.
- In 2006, BRIC was founded in 2010, South Africa was included
- Now it has 9 members as, on 1 January 2024, from more countries - Egypt, Ethiopia, Iran, and UAE became its members.
- The objective of BRICS formation:
- To bring big developing countries on a single platform.
- To make its members strong on the economic and strategic front.
- BRICS Covers 45% population of the World (450 crores)
- Its economy has a value of 28.5 trillion USD (28% of the global economy)
- India has hosted 3 BRICS SUMMITS

Change in the Advance Reservation Period

- The railways have issued a new circular according to which Passengers will now be able to book tickets on the Indian Railway for two periods was for 120 days before this circular)
- This circular shall come into force from November 1, 2024.
- The 120-day period rule came into effect on May 1, 2008
- In the past, the booking period was tried as 45 days and 90 days
- The rationale given by the official to reduce the period is that when passengers do not cancel their tickets and do not turn up for journeys, it opens up possibilities for fraud.



Demchok and Depsang

- The two frictional points between India and China
- Demchok lies in Charding Nullah near LAC between India and China (in Ladakh)
- Depsang Plains lies in the Aksai Chin area of Pok
- Both areas lie in the Siachen Glacier region
- China has established a tent city in the Demchok area since 2017 and is preventing India from patrolling.
- Even in Depsang, China has stopped India from patrolling since January/February 2020.

Cyclone Dana

- It could record wind speeds of 100-110 km per hour and cause heavy rain in 11 districts of Odisha
- Shall originate over the East-central Bay of Bengal.
- The name Dana means "generosity" in Arabic and was chosen by Qatar.

GDP Growth in India

GDP Growth of India in Q1 of FY 2024-25 was 6.7%.
[As per an economic activity Index Compiled by the RBI]
[6.8% in Q2. is likely to remain]
[GVA growth in Q1 6.8%. Had been]

Bihar's 1st Dry Port

Bihar's first Dry Port and Inland Container Depot (ICD) was inaugurated at Bihta on 21 October 2024. It is well connected by rail to Kolkata Port Haldia, Visakhapatnam, Mundra, and other major ports.

Commonwealth Games

- The Commonwealth Games will be held in Glasgow (England) from 23 July to 2 August in 2026.
- Sports like hockey, badminton, wrestling, cricket and shooting will not be included in this.

- This time only 10 sports have been included, last time there were 19 types of sports.
- Glasgow will host these games for the second time, having previously hosted it in 2014.
- In order to reduce the increasing cost of organizing sports, the number of sports has been reduced. For this reason, Australia had refused to organize it in Victoria.

Tarang Utsav (in Bihar)

- State-level arts and sports festival in 6 genres was organized by SCERT on 21st and 22nd of October

BRICS summit

- In Kazan, Russia
- Products worth \$78 billion are exported from India to America.

Gold reserves with BRICS countries

Russia-2336 metric tonnes (MT)
China - 2268 metric tonnes (MT)
India - 841 metric tonnes (MT)
Brazil 130 metric tonnes (MT)
Egypt - 127 metric tonnes (MT)
South Africa 125 metric tonnes (MT) (आकड़े NASDAQ)

- Gold reserves with rich countries are USA-8133 MT, Germany-3352 MT, Italy-2452 MT, France 2437 MT, Netherland-612MT, Turkey - 585 MT.

"My Panchayat App"

- Launched by the Central Government on 24 October 2024)
- This will make real-time weather forecasts possible at the Gram Panchayat level.

Kartarpur Pact between India and Pakistan extended for next 5 years

- This pact was made on 24 October 2024 for Sikh devotees to visit Kartarpur Gurudwara Darbar Sahib in Narowal, Pakistan.
- Now it has been extended for a further 5 years.



India has 573 wildlife Sanctuaries

- In 2000, this number was 478 (whose total area was 1,13,285 sq km) which increased to 573 in 2023 (whose area was 1,27,198 sq km, i.e. an increase of 13,913 sq km in the area of 2000).
- Most wildlife sanctuaries. Andaman-Nicobar (97) while the largest area (8,216.69 sq km) is in Karnataka.

India's Fourth Nuclear Submarine

- India's fourth Nuclear Submarine named S4 was launched into water on 16 October 2024.
- It comes under the Category of Nuclear-powered ballistic Missile submarine (SSBN)
- India, currently has two SSBNs operational (i) INS Arihant (ii) SSBN INS Arighaat (53) (i ii) SSBN Aridhman (54)

Agriculture (Bihar)

- The target of sowing Rabi crops for 2024-25 has been set in 40 lakh hectares. (is Rs 39.80 lakh)

In this, the target of sowing of wheat is = 26.14 lakhs

The target of sowing of maize is = 8 lakhs

Target of sowing of pulses = 5.22 lakhs

Target of sowing of oilseeds = 2.12 lakhs

India and China summit meeting

- Heads of Governments of India and China met on the sidelines of the BRICS summit in Kazan, Russia.
- This meeting lasted 50 minutes
- Representatives were appointed to resolve insurance border issues between the two countries.
- There will be Ajit Doval from the Indian side and Foreign Minister Wang Yi from the Chinese side.
- The first priority in border issues is to restore the situation before May 2020.
- Two important areas in this are Depsang and Demchowk.

- Apart from this, removal of armies from the area declared a No Man's Land or Buffer Zone.
- The third result would be that L. S. C. Troops will be reduced from tension areas in a phased manner.

Disputed issues between India and China:

- (1) Aksai Chin
- (2) Arunachal Pradesh
- (3) Doklam (Bhutan) (since 2017)
- (4) Terrorism
- (5) Infrastructure
- (6) Maritime Security

BRICS Summit declaration

1. Agreed to increase mutual trade and make arrangements for financial settlements in local currency.
2. Call for reform in Bretton Woods institutions (World Bank, IMF)
3. Terrorism was described as a common threat and there was a commitment to take decisive steps to stop it.

14C

According to the I4C, the online financial frauds siphon off 0.7% of the Indian GDP (1.2 lakh crore)

Modi-xi Meeting

Modi tells Xi that 3 mutual –

- (i) Mutual trust
- (ii) Mutual respect
- (iii) Mutual Sensitivity

India-Germany

- India-Germany relations have come into discussion because German Chancellor Olaf Scholz is on a visit to India.
- Bilateral trade between the two countries was worth \$26 billion in 2022-23. 10.1 billion dollars were exported from India.





- Germany is India's 12th largest trading partner.
- Germany ranks 9th in terms of investment in India.
- Germany had invested Rs 54 crore under foreign direct investment in 2022-23.
- Submarine purchase is important in the agreement with the Chancellor of Germany (about 6 submarines for 4.8 billion dollars).

"Friendship Gate"

- Friendship Car is built at Petrapole land port on the India-Bangladesh border in West Bengal.
- Its foundation stone was laid on 9 May 2023 and it was inaugurated by the Union Home Minister on 26 October 2024.
- Petrapole, Kosing is the largest land port in South Asia and an important gateway for trade and commerce between India and Bangladesh.
- 70% of the land trade between India and Bangladesh happens through this "land port".
- Petrapole land port is also India's 8th largest international immigration port and facilitates the movement of more than 23.5 lakh passengers annually between India and Bangladesh. Pakistan's 30th Chief Justice

Stubble burning

- The Union Agriculture Minister said that the stubble is burning. in Punjab in 2024 is 35% Less and 21% less in Haryana as against 2023.
- He said that compared to 2017, it has decreased by 51%.

SEBI Chairman skipped PAC

- Sebi chief Madhvi Puri Buch didn't appear before the Public Accounts Committee, the Parliamentary Committee in the case of the Stock Scam.
- PAC is headed by K.C. Venugopal.

ED Smells of illegal sale of tickets of Coldplay and Diljit Dosanjh's concerts.

- Diljit Dosanjh Concert:- "Dil-Luminati Tous"
- Coldplay (band)" concert "Music of the Spheres World Tour".

Pandemic fund Project

- The Central Govt. Launched the 25 million USD G-20 Pandemic fund Project to improve animal health in India as a part of an effort to improve the preparedness and response to Pandemics
- It was launched on 24 October 2024.
- It is designed to enhance the country's "animal health Security" by upgrading and expanding animal health labs and developing laboratory networks
- This will curb zoonotic diseases.
- Its partners are the ADB, the World Bank, and the FAO
- India is at high risk of emerging infections as per the infectious diseases Index.
- India scored low (42.8) on the Global Health Security Index with a high level of environmental risks and public health vulnerability.
- 60% of Pathogens that cause human diseases come from domestic animals or wildlife and 75% of emerging human Pathogens are of animal origin.

Biography of Ratan Tata

Ratan Tata A Life" Authored by Thomas Matthew
Successor of Ratan Naval Tata = Noel Naval Tata

UN-Robotics for good Youth Challenge in India 2024 Award

- The famous symbol of Arrah of Bihar has won the above award.
- This award was presented by the India-head of the International Telecommunication Union (ITU) in Delhi.





- The famous symbol of the UN was organized by the United Nations in Geneva, Switzerland in 2025. Will represent India in the Robotics for Good Youth Challenge.

Spain President Pedro Sanchez to visit India

- Spain President Pedro Sanchez to visit India on 28 October 2024
- This was the first visit by any President of Spain in the last 18 years.
- Political relations between India and Spain were established in 1956.

Population is becoming a criterion for the distribution of central taxes

- Population is becoming an important issue as a criterion for the distribution of central taxes to the states by the Finance Commission.
- The theme of 'Symographic Change' was implemented by the 14th Finance Commission. This spread a message that the states which controlled population better had their share reduced and where population growth was more, their share in central taxes was also determined to be higher. Now the Chief Ministers of the southern states have started reducing the standard of 2 children, which will encourage people to have more than 2 children. This will increase the population
- The 15th Finance Commission standardized "demographic performance" to reduce the feeling that states with population control were being punished.
- The recommendation of the 16th Finance Commission is likely in 2025.
- According to the recommendation of the 13th Finance Commission, 19.7% tax share has been allotted to UP and 10.9% to Bihar, whereas according to the 15th Finance Commission, it has been reduced to 17.9% and 10.1% respectively.
- According to NFHS data of 2019-21, the fertility rate of Bihar was 3.2 which was 4.0 in 2005-06.

India's defense exports

- The largest buyer of Indian defense exports is Armenia.
- The weapons exported to it include Akash Air Defense missile Systems, Pinaka multi-launch rocket System and 155mm artillery guns.
- India's defense exports in 2023-24 will be Rs 21,083 crore. been worth
- Both public and private sector companies of India export weapons to about 100 countries.
- These weapons include Brahmos Supersonic Cruise Missiles, Droniers-228 aircraft artillery guns, radars, Akash Missiles, Pinaka rockets, and armored vehicles.
- Most items of sub-systems and components category of defense weapons are exported to America.
- After Armenia's clash with Azerbaijan, India's exports to Armenia have increased more. (Azerbaijan is closer than Turkey)
- The highest export in Armenia is the Akash air defense system whose interception range: 25 Km.

Global Nature Conservations Index 2024

- India ranked 176 out of 180 countries.
- India's Score in this index is 45.5/100
- In this index, last one was Kiribati Which Came at 180th rank
- The Natural Conservation Index (NCI) is developed by Goldman Sonnenfeldt of Sustainability and Climate Change.
- Top-ranking countries are Luxembourg, Estonia, and Denmark
- India is a mega-diverse country with 7-8% of the world's species

India's first private Military Aircraft factory

- Jointly inaugurated by the Indian PM and the Spanish PM Pedro Sanchez on 28 October 2024
- It is established at Vadodara, Gujarat
- It is the TATA Aircraft complex in Vadodara.





- Here C-295 transport aircraft shall be manufactured.
- The final Assembly Live Plant of the aircraft, coproduced by Airbus Spain and Tata Advanced System Ltd. Vadodara will roll out the first “made in India” C-295 in 2026.

India and Spain Condemned attack on UNIFIL

- UNIFIL stands for United Nations Interim Force in Lebanon
- Its troops were attacked recently by Israel.
- Various countries including India and Spain have sent their soldiers to the UNIFIL.
- India has 903 troops under the UNIFIL.
-

Increase is Co₂ levels in the atmosphere

- In 2023, CO₂ in the atmosphere will increase by 2.3 parts per million.
- This increase is more than the increase in 2022.
- This increase of Co₂ in the atmosphere in 2023 has remained above 2.0 ppm for 12 consecutive years.

Democracy becomes expensive

- The US presidential election to be held in November 2024 is expected to cost around 16 billion USD [about Rs 1,36,000 crore]
- The expenditure incurred by various political parties in the Lok Sabha elections held in India in 2024 is estimated to be around Rs 1,00,000 crore. Is.
- Rs 95 lakh per candidate in big states by the Election Commission. And Rs 75 lakh per candidate in small states. The limit has been kept.
- Similarly, the limit of expenditure per candidate in the Legislative Assembly elections has been fixed at Rs 28 lakh in big states and Rs 28 lakh per candidate in small states by the Election Commission (India).

- There is no limit on the expenditure incurred by political parties in elections.
- Of the 16 billion US dollars spent on US elections, 5-5 billion dollars were spent on the US House of Representatives and the US Senate. 10.5 billion U.A. in Congress elections is likely to be dollars.
- In England, a political party is allowed to spend £ 54,010 in one constituency. Thus if a political party contests all the seats it will be allowed to spend £35 million.
- Rs 1264 crore won by BJP in 2019 Lok Sabha elections in India. And Rs 820 crore by Congress. The official announcement of expenditure has been made. However, according to an estimate (by CMS), Rs 50,000 crore has been spent by various political parties. Estimates for spending are expressed.
- According to some reports, 35% of the total expenditure is spent on the candidate's campaign and 25% is spent on illegal distribution among the voters.
- According to CMS estimates, around Rs 1,00,000 crore was spent by various political parties in the 2024 Lok Sabha elections in India.
- State funding of elections was recommended by the Inderjit Gupta Committee in 1998 and the Law Commission report in 1999.

The global fertilizer market will be affected by the Gaza and Ukraine war.

India is an agricultural country. Fertilizer consumption is quite high here. In 2021-22

1. Total consumption of all types of fertilizers = 579.67 Lakh Metric Tonne (LMT)
2. Urea consumption = 341.73 LM
3. DAP of consumption = 92-64 LMT
4. MOP consumption = 23.93 LMT
5. NPK consumption = 121.37 LMT

- Fertilizer production in India in 2021-22 was 435.95 LM.
- Thus in 2021-22 there was a difference of 143.72 LMT between demand and supply.



Production of fertilizers in India in 2021-22

1. Urea = 250.72 LMT
 2. DAP = 42.22 LMT
 3. MOP Zero
 4. NPK = 89.67LMT
 5. SSP Single Super Phosphate) = 53.34 LMT
- The gap between demand and production is obvious.
 - According to the budget estimate for 2023-24, a fertilizer subsidy of Rs 1.79 lakh crore has been given by the Government of India.

Map My India APP

- This is an app developed by a private company with which Bihar Police has started using it under an agreement for the purpose of live traffic updates in all the districts of Bihar state.
- With this, information about traffic-related problems like dilapidated bridges, jams, black spots and dangerous turns will be available for free through the app.
- Bihar is the fourth state in the country to provide this facility.

Mithun Chakraborty was given the Dr. Saheb Phalke Award

- Mithun Chakraborty was given the Dr. Saheb Phalke Award for 2022. He is the 54th person to receive this honor.
- This award will be given to him at the 70th National Film Awards ceremony on October 8.

2024 Shrilal Shukla Smriti Literary Award

- 2024 Shrilal Shukla Smriti literary award = Famous litterateur Chandra Kishore Jaiswal (11 lakhs, symbol, appreciation letter)
- Shri Lal Shukla Smriti IFFCO Youth Sahitya Samman for 2024 – Renu Yadav (for her story collection “Kala Sona”) Rs 2.5 lakh, insignia, circulated letter)

8th Kazind

It is a bilateral military exercise between India and Kazakhstan. It is taking place in Uttarakhand (at Uli) It started on 30 September 2024 it will end on 13th October 2024.

- It was launched in 2016 as the “Exercise PRABAL DOSTYK”

Mt Everest

- Chomolungma in Tibet
- Sagarmatha in Nepal
- Everest began to form around 45 million you ago (4.5 crore years ago)

Choi Soon-Hwa (81 years old)

The missed Miss Universe 2024

- Choi Soon-hwa of South Korea who is 81 years old participated in Miss Universe Contest 2024 at the country level.
- She could not win the Miss Universe crown but got the best dresser” award.
- In the contest, the upper age was lifted this year which was 28 years (18 to 25 years)
- Choi Soon-hwa began her journey of modeling at 70 years of age.
- Miss Universe 2024 shall be held in the Arena CDMX, Mexico city, Mexico on 16 November
- Sheynnis Palacios of Nicaragua will crown her successes at the end of the event
- The Oldest participated shall be Beatrice Njoya of Malta (140 years)

Moon: Temperature down

- The scientists from Physical Research Laboratory, Ahmedabad have found evidence that the global lockdowns even affected the faraway moon, pushing its temperature down. Index of Core Industries (ICI)



Index of Industrial Production (IIP)

- ICI stood at 155.8 in August 2024 which was at 151.6 in July 2024.
- ICI constitutes about 40% of the IIP

Xama-Zilla in Assam

- The Assam government has formed 39 sub-districts named as “xama-zilla” to increase efficiency and maximize productivity at the grassroots level. They will be headed by an Assistant district commissioner.
- The USA has approved Taiwan and the USA 567 million USD to Taiwan
- The USA does not recognize Taiwan officially
- However, the USA is a key partner of Taiwan and is a major provider of weapons.

India's GVA

- India's GVA grew by 7.3% in current prices in 2022-23
- Among the major states, in terms of GVA, Maharashtra ranked first in 2022-23, followed by Gujarat, TN, Karnataka and UP.
- Top 5 states together contributed more than 54% of the total manufacturing GVA of the country.

India's current account deficit (CAD)

- India's current Account Deficit (CAD) in Q1 of FY25 increased to 9.7 billion USD (1% of the GDP) CAD was at 8.9 B.USD in Q1 FY 2024
- This widening of CAD on a year-on-year basis was primarily due to a rise in the merchandise trade deficit to 65% b USD in Q1 of 2024-25 from 56.7 b USD in Q of 2023-24
- Net receipts rose to 39.7 b USD in A1 2024-25 from 35.1 b USD

Maria corina machado (Venezuela)

- Machado has been awarded the 2024 top European rights Prize known as the Vaclav Havel Human right Prize.

The company uses of mining dust to enhance carbon capture : A new technology

The last thing you would expect is that dust from mining would be climate-friendly. But the right kind of dust moved to the right place is the core business of a Darjeeling-based company, Alt Carbon, and has already garnered \$5,00,000 in investments for carbon-credit companies. At the heart of the company's approach is the geo-chemical process called rock weathering.

All rock naturally breaks down into minerals over thousands of years. The consequence of this process is that atmospheric carbon reacts with these minerals (calcium and magnesium largely) and becomes bicarbonates. Eventually through aquifers, or underground streams and rivers, they make their way into the oceans where the carbon is locked for aeons.

The oceans, thus, are the major carbon sinks and capture about 30% of the CO₂ from human activities. Left to nature, this process takes aeons. However, with the levels of carbon dioxide building up in the air and a consensus by the Intergovernmental Panel on climate change that some amount of carbon dioxide already present in the air needs to be removed by 2050, to keep temperatures from exceeding 2 degrees Celsius by the end of the century, governments as well as businesses are experimenting and investing in schemes to accelerate natural carbon removal processes. This is where 'enhanced' rock weathering comes in. Basaltic rock, a kind of volcanic rock, is rich in minerals such as calcium and magnesium. Many parts of Maharashtra and Gujarat, where the volcanic Deccan Traps are located, are rich in such basaltic rock as parts of Jharkhand and West Bengal where the Rajmahal Traps are situated.





Once such basaltic rock is crushed into a fine powder, its effective surface area is greatly increased.

This accelerates the formation of bicarbonate anywhere from ten-fold to a hundred-fold and can be flushed into the ocean –depending on the soil, temperature and within a month,” said Sambhuddha Mishra, Associate Professor and expert in chemical oceanography, at the Indian Institute of Science, Bengaluru. He is also the chief scientist at Alt Carbon. The company, which derives from a family-owned tea garden industry, collects tonnes of crushed basalt from the Rajmahal mines, transports it about 200 kilometers to Darjeeling, and has them sprinkled on tea estates in the region.

Being an organic fertilizer, the basaltic dust enriches the soil as well as accelerates carbon sequestration. So far, the company has used about 500 tons of dust. Though still early years, it takes about 3-4 tonnes of basalt dust to sequester, or trap, a tonne of atmospheric carbon over two to four years. “Normally it would have taken 1,000 years for natural basaltic rock to capture that much carbon,” said Shrey Agrawal, CEO and co-founder of Alt Carbon. This September, the company entered into an agreement with Frontier, a consortium of McKinsey Sustainability, Alphabet, Meta, Shopify, and Strip, to buy a tranche of carbon sequestered this way in advance for \$5,00,000. Carbon credits generated this way are bought by companies and they can use it to offset their carbon emission, as required under their national laws. Currently, though, such purchases are largely voluntary.

Redesigned Programme to improve TB treatment outcomes

Doubling the direct benefit transfer to 1,000 per month, disbursing 3,000 at the time of diagnosis, and nutrition support to TB patients can have a huge impact.

- The health ministry has doubled the direct benefit transfer from 500 to 1,000 per month for the entire duration of the treatment

- Under the revised Nikshay Poshan Yojana (NPY) Programme, the process of disbursing 3,000 will be at the time of diagnosis
- The Chennai- based national institute of Epidemiology found that non-receipt of benefits under NPY was associated with a four-fold higher risk of adverse outcomes
- The RATIONS trial found compelling evidence that nutritional support improves treatment adherence, weight gain, and 50% reduced risk of deaths
- Given the prevalence of severe undernutrition in TB patients, two months of nutritional support may not be sufficient
- Commercial nutritional supplements risk higher cost, mystification, lower acceptability, and lower long-term sustainability.

TB remains a major public health problem in India with an estimated three million new patients with TB and 3,00,000 TB deaths every year. The recent announcement by the Ministry of Health and Family Welfare of doubling the direct benefit transfer from 500 to 1000 per month in the Nikshay Poshan Yojana (NPY) for the entire duration of treatment, and initiating the disbursement of 3,000 at the time of diagnosis is a welcome step. There is also a proposal to provide energy-dense nutritional supplements to underweight patients for two months and to extend nutritional and social support to the families. India is probably the only high TB burden country to roll out such a large-scale scheme that will address the nutritional needs and the economic distress of the patients.

TB remains a social disease in its causation and its outcomes. Social factors associated with poverty, such as overcrowding and undernutrition increase the risk of TB. Most other risk factors, too, like diabetes, smoking, and alcohol, are either more prevalent or are poorly managed in those living in poverty. Undernutrition contributes to more than a third to nearly half of new TB cases in India. Poor access to primary care, poor quality of care, and poor adherence generate a vicious cycle leading to severe disease and risk of death in the poor.



Their predicament is grim as they face income loss, direct and indirect costs due to the disease and its treatment, food insecurity, and often an inability to return to usual work because of the sequelae of the disease. The Nikshay Poshan Yojana is crucial because severe undernutrition is common in people with TB in India – the average weight of adult men is 43 kg and 38 kg for adult women at diagnosis. Without nutritional support, such patients have worse outcomes during and after treatment. These patients often do not have early weight gain, and this poses a high risk of death; even after effective treatment, undernutrition may persist, increasing the risk of recurrent TB. Studies also show a high prevalence of food insecurity in TB-affected households. Nutritional support thus has a sound clinical, public health, and ethical basis. It aligns with India's 2017 adaptation of the WHO guidelines for care and support for patients with TB. There is compelling evidence that nutritional support with food baskets can improve treatment adherence and weight gain, allow a successful return to work, and reduce mortality risk. In the RATIONS trial, in patients provided with a 10 kg per month food basket, early weight gain was associated with over 50% reduced risk of death. Moreover, a low-cost intervention of six months with a food basket of cereals and pulses with micronutrient pills for family members reduced new cases by up to 50% akin to a vaccine.

An evaluation of the NPY programme over five years by the Chennai-based National Institute of Epidemiology (NIE) has significant lessons. An important challenge is that the TB programme staff, now engaged in other new initiatives, feel overburdened by the processes of facilitating the direct benefit transfer. Another issue is that the most vulnerable communities cannot access the benefit because of a lack of proof of identity, residence, bank accounts, or distances involved. The NIE evaluation showed that no receipt of benefits under NPY was associated with a four-fold higher risk of adverse outcomes.

As clinicians and researchers working in this field, some clarifications and implementation issues must be addressed first, there is a need for dedicated human resources for NPY activities, and these can also be utilized for newer initiatives like evaluating household contracts.

Second, there is a need for locally contextualized counseling material for patients and family members to emphasize nutrition as an essential component of treatment. It should include locally available and culturally acceptable foods to optimize the intake of energy and calories. Quality protein intake is deficient in poorer households. Pulses, soybean ground nuts, milk, and eggs are more cost-effective sources than supplements derived from them, and this needs particular emphasis in the counseling. Third, given the evidence supporting food baskets, the recommendation related to energy-dense supplements should be deliberated upon. Commercial nutritional supplements risk higher cost, mystification, lower acceptability, and lower long-term sustainability. Given the prevalence of severe undernutrition in our patients, two months of nutritional support may not be sufficient.

Fourth, with regard to Nikshay Mitra, the coverage of the most vulnerable is inadequate, and a red sign is warranted. Due to the significant stigma of TB, an explicit advisory against the picture of patients and families receiving food baskets is needed finally nutritional, financial, and social support initiatives can work best if they are integrated with other aspects of care – uninterrupted supply of drugs, better management of comorbidities, better evaluation of patients at diagnosis for high-risk features, and referral for in-patient care as is being done in Tamil Nadu – are vital to ensuring better outcomes. (Anurag Bhargava and Madhavi Bhargava work in the departments of Medicine and community at the Yenepoya Medical College, Mangalore, and led the RATIONS trial)

On sanctions and shadow fleet

The story so far while covering the Russia-Ukraine conflict, many Western media outlets have used the term 'shadow fleet' to describe tanker ships that carry Russian crude oil or oil products to other countries. The term conjures up images of pirate-like vessels and phantom owners trading in illegal, contraband substances. India has been painted as a host of a shadow fleet that is 'laundering' Russian crude.





How are sanctions implemented?

When the U.S. sanctions a country, as is the case with Russia, it launches an investigation into entities, companies, and individuals who violate the sanctions. Their assets in the U.S. are seized, bank accounts accessible to the Western banking system are frozen and, sometimes, criminal prosecutions are launched against them. U.S. sanctions against Russia oil mandate that Russia can only sell its crude oil at \$60 a barrel. Current market prices are at least 15 more. This is to ensure Russia doesn't profit much from oil sales and use that to fund its war effort in Ukraine .

What is the structure of global shipping?

The global shipping industry is highly diversified. Greeks own 20% of the global merchant shipping fleet with China now crossing Japan to become the second leading nation in terms of merchant shipping fleet ownership. Most ships are built and repaired in China, Japan, and South Korea. Yet, marine insurance ship finance as well as global shipping regulation revolve around the U.K., and the rest are enforced through these levers.

Each ship is associated with different stakeholders in various nations and locations. Although tracking systems allow authorities to access previous ports of call, some companies do succeed in hiding the original source of their cargo. Ships are registered in particular nations called flag states as they fly that country's flag. States were meant to indicate the origins of the ship.

To beat sanctions, ships often hop between flags. There are Flags of convenience (FOCs), such as Panama and Liberia, which started out as tax avoidance entities, to avoid too rigorous a scrutiny or inspection of a ship. FOCs obscure the ownership of ships. Then there are classification societies (class, in shipping parlance) that certify ship structure and machinery for the safety of life at sea and marine pollution, facilitating insurance cover for these. An insurance type covers loss of life and damage to property. These P&I insurance firms form 'clubs' to pool the risk

How do ships keep their insurance?

Turkey, a member of NATO, has been found to be extensively trading in Russian oil. A Turkish-owned ship found to be trading in Russian oil at more than 60 a barrel may lose its P&I club, since clubs are controlled from London and the U.S. has leverage there. However, the owner can divest the management of the vessel and contract with a European manager who has P&I cover. And the ship will be back in business with the same owner but with a new European manager.

Corporations with large fleets often set up shell companies that own just one or two ships. Such a complex ownership structure hides the true identity of a ship and its owner. Yet, another phenomenon is registering the ships within jurisdictions that are not compliant with regulatory agencies such as the International Maritime Organization (IMO). Eswatini, a country in southern Africa, is not a signatory to the IMO charter. It has therefore emerged as an FOC.

What is the accusation against India?

Soon after sanction enforcement, many Russian ships struck alliances with Indian firms. Many switched their base to Dubai where India has a presence in shipping. The Indian Register of Shipping (IRS), a classification society, did see an increase in the ships it was certifying, bolstering charges of Indian involvement in shadow fleets. Noting that it has been linked to Russian shipping entities, the IRS said its primary responsibility is to the safety of a vessel and that it will not be compromised. IRS reported that it has indeed been asked to provide.

Safety-related classification services to a number of vessels by Dubai-based entities. These vessels were registered under the flag administrations of Liberia and Cyprus and none flew the Russian flag, the IRS reported.





In 2015, when Iran was sanctioned, some 160 ships, many with trade links to Iranian oil, switched their classification society to the Korean Register of Shipping – Korea is a U.S. ally.

Can U.S. sanctions be enforced?

Many agencies and shipping experts acknowledge that sanctions on Russian oil cannot be rigorously enforced because of its potential impact on the world economy, the complex ways in which the shipping industry is structured, and because ownerships and origins of stakeholders are obscure and often based on voluntary disclosure.

More recently, the BBC reported that the U.K had taken only mild action against some 35 U.K companies found to have violated the price cap set by sanctions. Industry voices there say that taking strong action would be bad for UK businesses.

one Liners

- **Sonam Wangchuk - Leader of the struggle for statehood for Ladakh. Sonam Wangchuck VIth schedule for Ladakh**
- **Claudia Sheinbaum Pardo - New & First female President of Mexico.**
- **Israel declares UN's general security Guterres "Persona non-granta"**
- **US Commission on International Religious Freedom (USCIRF) in its report criticized India for alleged violations of religious freedom**
- **Air Marshall S. P. Dharkar took charge as the new IAF vice-chief on 3 October 2024.**
- **With the help of the Postal Department, 1400 export centers have been opened in Bihar.**
- **The National Film Award announced (to be given) to choreographer Jani Master (Sheikh Jani Basha) has been withdrawn by the Ministry of Information Broadcasting.**
- **907 kg Morphedron has been seized from a factory in Bhopal by the ATS and Narcotics Control Bureau. Its value is around Rs 2000 crore.**
- **First book in English by an Indian = "The Travels of Deen Mohammad written by Deen Mohammad of Patna.**
- **The highest human loss in recent train accidents occurred in the Balasore incident that occurred on June 2, 2023, in which 275 people died.**
- **Ganga is not the longest river in the country and the fifth largest in the world.**
- **India's bioeconomy is worth US\$150 billion.**
- **K.Radhakrishnan (former ISRO Chairperson) - Chairperson of the Committee to overhaul the NEET exam process.**
- **UPI is applicable in total 8 countries of the world (including Maldives)**





- Sanjeev Khanna will take oath as the second Chief Justice of the country on November 11.
- In America and Norway, children under 15 years of age will not be able to use social media.
- In the Press Freedom Index, India's rank was at 114 in 2004 which slipped to 159 in 2024 among 180 Countries
- Turkey's President Recep Tayyip Erdogan termed Benjamin Netanyahu as the "Butcher of Gaza" and compared him to Hitler.
- Maharashtra govt. declared that the Indigenous cows will be now referred to as "Rajya mata Gaumata"
- Cyberfraud = 1930
- Surakshit Safar suvidha = 112
- Srilanka recorded its first dip (of - 0.5%) in 39 years; the last dip took place in 1985.
- India has distanced itself from the resolution presented by Chile in the UN in which it has opposed the ban on the UN Secretary-General from Israeli soil.

