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GS 1 – HISTORY

Sabarmati

Redevelopment Plan

#SabarmatiAshram

#DandiMarch

#MahatmaGandhi #ModernHistory #History

#GS1

On March 12, marking the 94th anniversary of the Dandi March that began from the Sabarmati Ashram, Prime Minister Narendra Modi performed the 'Ashram Bhoomi Vandana', a symbolic laying of the foundation stone, and unveiled the masterplan of the Rs 1,200 crore Gandhi Ashram Memorial and Precinct Development Project. The Prime Minister also inaugurated the redeveloped Kocharab ashram from Ahmedabad.

What's in the proposed masterplan for the Sabarmati Ashram?

Prepared by Ahmedabad-based HCP Design, Planning and Management Pvt Ltd (HCPDPM) led by Bimal Patel, the masterplan proposes to restore, conserve, and rebuild about half of the 63 structures that existed in the original ashram that was spread over 120 acres of land on the banks of the Sabarmati River on the outskirts of Ahmedabad. In all, 36 buildings will be restored.

The place that is popularly known as Sabarmati Ashram currently, and is open to the public, covers only 5 acres of this original space. It is managed by the Sabarmati Ashram Preservation and Memorial Trust (SAPMT).

The new memorial will be spread over 55 acres, and the entire precincts will sprawl over 322 acres.

Thirteen buildings — which include two gaushalas, Sardar Vallabhbhai Patel's office, and Dus Ordi (Ten Rooms) — will be restored.

And three buildings — the Dehla Puni Kendra (place for storing cotton bales), Saat Ordi (Seven Rooms), and Anand Bhawan Sanghralaya — are proposed to be rebuilt.

Ashram

What is the historical importance of the Gandhi Ashram at Sabarmati?

Gandhi set up five settlements during his lifetime — two in South Africa (Phoenix Settlement in Natal, and Tolstoy Farm outside Johannesburg), where he lived from 1893 to 1914, and three in India, where he arrived in January 1915.

Gandhi set up the first ashram in Ahmedabad in Kocharab in 1915. It was an already built space, rented for use by the ashram and was therefore not according to Gandhi's own ideas of how such a place should be designed and built.

Thus, in 1917, Gandhi founded the ashram at Sabarmati — his fourth ashram — on the western bank of the Sabarmati River. The location was to the north of the village of Juna Vadaj, beyond the Chandrabhaga rivulet, a tributary of the Sabarmati.

The ashram at Sabarmati is seen to be the most important in Gandhi's life and work. It was a space that Gandhi designed himself, and was built using local material. He spent the most time here, and it was the cradle of eight major movements related to India's struggle for independence.

Apart from the Dandi March that Gandhi began from here on March 12, 1930, he also launched the Champaran Satyagraha (1917), the Ahmedabad mills strike and Kheda Satyagraha (1918), the Khadi movement (1918), the Rowlatt Act and Khilafat Movements (1919), and the Non-Cooperation movement (1920) while living in Sabarmati.

What will be added to the existing ashram as part of the redevelopment project?

According to the masterplan, the redeveloped memorial and precincts will have an orientation centre, a scholars' residency, a parking area, a water harvesting pond, souvenir shops, two exhibition areas, a

cafeteria, a workshop area, and a grand entrance plaza.

The redevelopment and restoration plan is based on an aerial image from 1949 of the ashram, and a 200-page concept note prepared by the SAPMT based on the ashram's documented accounts, brochures, and "a study of the visitors' books of last ten years to understand what people want from this space", a source closely associated with the project said.

The plan for the orientation centre is based on such feedback, especially from educational institutions that brought students to visit the ashram. **The ashram has been maintaining a visitors' book since 1963 — eminent visitors include Queen Elizabeth (1961), the Dalai Lama (1984-85), former Irish President Mary Robinson (1993), South Africa's former President Nelson Mandela (1995), and former US President Bill Clinton (2001).**

How will the existing buildings be used once the redevelopment is done?

The existing buildings will tell the story of the ashram, host exhibitions and galleries on Gandhi's works in India and abroad, describe his movements and yatras, and have information about his daily routine, important events of his life, and his engagement with children and the youth. There will be information on his key associates and important visitors to the ashram before 1930, when Gandhi and Kasturba lived there.

There will also be a feature on the "principal Ashramites" from 1917 to 1951, and a gallery of women leaders. One of the buildings will house charkhas and khadi production centres. A section on "Gandhiji's Legacy" will contain manuscripts and honours he got, exchanges with the postal department, journals, and texts.

At least 261 of the 263 residents of the ashram premises, called Ashramwasis, have been evacuated and compensated to make way for the project. The total compensation for relocation has been Rs 375 crore.

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GS 1 – ART & CULTURE

Who was Ayya Vaikundar, and why TN Governor calling him 'Sanatan Dharma saviour' sparked a row

#AyyaVaikundar

#SocialReformer

#ArtandCulture #GS1

Tamil Nadu Governor R N Ravi's recent remarks about the 19th-century social reformer Ayya Vaikundar — that he was Lord Vishnu incarnated to prevent the destruction of Sanatan Dharma — have evoked sharp reactions in the state, from politicians as well as Vaikundar's followers.

The Governor made the statements on March 4, at an event to mark the 192nd Ayya Vaikundar Avathara Dina Vizha, or his birth anniversary.

Vaikundar, the social reformer

Ayya Vaikundar, born in 1809, is revered as a social reformer and the founder of the Ayyavazhi sect, primarily in southern Tamil Nadu. His teachings focused on equality, fraternity, and the eradication of caste-based discrimination, challenging the established religious and social hierarchies of the time. Thus, Governor Ravi's portrayal of him as a protector of Sanatan Dharma, a term often associated with orthodox Hinduism in contexts of caste politics debates, has been vehemently opposed.

At a time when rigid casteism and caste-based atrocities were the norm, **Vaikundar introduced measures to challenge these divisions. He organised *Samapanthi-bhojana* or community eateries for people from all**

backgrounds. He would send his disciples to the homes of lower castes to eat with them.

When lower castes were not allowed to fetch water from wells used by upper caste Hindus, Vaikundar initiated the digging of common wells, called *Muthirikinarus*.

At a time when priests threw vibhuti and sandal paste at devotees from a distance to avoid touching them — a practice that still exists — and lower castes were not allowed to enter temples at all, **Vaikundar introduced *Thottu Namam*, in which he inspired priests to apply the sacred paste on devotees' forehead, irrespective of their caste.** The paste would be applied in the form of a lamp, indicating the soul and God, representing the form of God inside every life.

Vaikundar also encouraged all devotees to wear turbans and dhotis, promoting equality. **He initiated the *Thuvayal Panthy* programme, teaching vegetarianism and discipline to followers, who spread these teachings across Tamil Nadu. He established *Nizhal Thangals* as community worship spaces, which did not have any idol or deity, and only Tamil was used for worship.** These community worship centers also had community kitchens and even basic schools.

He pioneered education for the lower castes and opposed discriminatory taxes. **One of his significant interventions was the introduction of simplified, inclusive marriage customs without a Brahmin priest or Sanskrit mantras.**

R N Ravi said that **Vaikundar's text '*Akilathirattu Ammanai*' is the essence of Sanatan Dharma, which is that everyone is equal and children of the same divine.**

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Pritzker prize 2024

[#PritzkerPrize](#) [#ArchitectureNobel](#)
[#ArtandCulture](#) [#GS1](#)

Japanese architect Riken Yamamoto was this week declared winner of the 2024 Pritzker Architecture Prize, the highest international award in the field, which is sometimes

referred to as the “Architecture Nobel”. The prize has been awarded every year since its founding in 1979, and Yamamoto is the ninth laureate from Japan.

The Nobel of Architecture

The Pritzker Architecture Prize was instituted by Jay A Pritzker, the late founder of the Hyatt Hotels chain, and his wife Cindy, “to honour a living architect whose built work demonstrates talent, vision and commitment, who has produced consistent and significant contributions to humanity and the built environment through the art of architecture”.

The award comes with a purse of \$100,000, a citation, and a bronze medallion based on designs by Louis Sullivan, the Chicago architect known as the father of the skyscraper, which bears the words firmness, commodity, and delight, recalling the Roman architect and engineer Marcus Vitruvius's prescription for a well-built structure.

The winner is picked from a field of more than 500 on average, nominated by experts including past laureates, academics, and professionals, by a jury who make visits to sites of the projects. **The prize is awarded in May, at a ceremony that is modelled on the Nobel Prizes.**

The Pritzker and Japan

Architects from Japan have won the largest number of Pritzkers, including the 2010 prize that was shared by Kazuyo Sejima and Ryue Nishizawa, **followed by the United States** (eight laureates, including a shared prize and two architects with dual nationality). **The only Indian laureate is the late Balkrishna Doshi (2018).**

-----N---E---X---T-----

What is Cuttack's famed silver filigree work, which recently received GI tag

[#SilverFiligree](#) [#RupaTarkasa](#) [#GITag](#)
[#ArtandCulture](#) [#GS1](#)

GS 1 – GEOGRAPHY

El Niño and the summer, monsoon

**#ElNino #OceanicNinoIndex #ENSO
#ENSONeutral #SummerMonsoon
#Climatology #Geography #GS1**

Earlier this month, the India Meteorological Department (IMD) predicted a hot summer this year, with above-normal temperatures and an above-normal number of heatwave days from March to May.

On Tuesday, the World Meteorological Organisation (WMO), a specialised agency of the UN, said in a media release that the 2023-24 El Niño, one of the five strongest on record, has peaked and is gradually weakening — but it will continue to impact climate around the world in the coming months.

First, how has the ongoing El Niño event played out?

El Niño refers to the abnormal warming of sea surface waters in the equatorial Pacific Ocean. El Niño episodes emerge naturally during autumn-summer in the northern hemisphere, typically once every 2-7 years. It peaks during winter (October-February) before weakening in the subsequent summer, making it a phenomenon that typically lasts for between 9 and 12 months. Occasionally, El Niño will last up to two years in a row.

El Niño episodes affect the global weather, lead to an increase in temperatures and large-scale dryness and droughts, and disrupt normal rainfall patterns globally. Large parts of East Africa have experienced multiple failed rainy seasons in recent years, in part due to El Niño conditions.

After the last episode in 2015-16, El Niño conditions emerged for the first time in June last year — and average temperatures breached new records across most parts of the world in every subsequent month. As the El Niño peaked between November 2023 and January 2024, recorded sea surface temperatures in the Pacific Ocean touched 2 degrees Celsius above the

1991-2020 normal, the WMO said. The 2023-24 El Niño played a significant role in 2023 ending as the warmest year ever recorded.

So what does the peaking and weakening of El Niño mean?

The intensity of an El Niño event is measured by the temperature values recorded over the sea along the equatorial Pacific Ocean.

One of the key indicators of the sea surface temperatures is the Oceanic Niño Indices (ONI) values (in degree Celsius). Data from the United States National Oceanic and Atmospheric Administration (NOAA) show that after peaking at 2 degree Celsius during November-January, the ONI value has started to decline. The timing of the fall in ONI is important because it suggests that the El Niño will not extend into another year.

What is the heat forecast for India for 2024?

The IMD has said that even as they weaken, El Niño conditions will push temperatures above normal in most of the country during March, April, and May.

Above normal maximum temperatures are likely to be experienced over Ladakh, Himachal Pradesh, Rajasthan, Uttar Pradesh, Jharkhand, Odisha, Maharashtra, coastal Gujarat, Karnataka, Kerala, Tamil Nadu, Lakshadweep and the Andaman and Nicobar islands, the IMD has said in its summer forecast. **Nights too, shall remain warmer than usual** over almost the entire country, except some regions in Eastern India.

Heat waves are common over Central and Northern Peninsular India during March to June, when day temperatures rise 4.5 degree Celsius above normal. The IMD has warned of **longer and harsher heat wave spells this summer, mainly due to prevailing El Niño conditions.**

Individual spells of heat wave are expected to last for as long as 12-15 days in Maharashtra, Telangana, and North Karnataka. Heat waves are also expected to sweep over Andhra Pradesh,

Gujarat, Rajasthan, Madhya Pradesh, Uttar Pradesh, Jharkhand, Odisha, West Bengal, Bihar, Delhi, Haryana and Punjab in the coming months.

And how is the Indian summer monsoon likely to be in 2024?

The four-month southwest monsoon is India's economic lifeline. The country receives nearly 70% of its annual rainfall (880 mm) during the June to September period. A good monsoon is crucial for sustaining the agrarian economy and for replenishment of the country's water reservoirs.

Although no direct one-on-one link has been established yet, El Niño episodes are correlated with a depressed southwest monsoon. Past El Niño episodes have coincided with India receiving below-average rainfall during the four-month rainy season. The 2015-16 El Niño coincided with a deficient monsoon in 2015, at 84% below the Long Period Average.

However, climatologically and historically, about 50% of El Niño events are followed by ENSO (El Niño Southern Oscillation) neutral conditions, and in 40-50% cases, La Niña conditions develop post an El Niño event.

This time, multiple global climate models have suggested that ENSO neutral conditions will emerge during the April-June period. **India's Monsoon Mission Climate Forecast System (MMCFS) model has predicted ENSO neutral conditions to be established along the equatorial Pacific Ocean by May. The transition from El Niño to ENSO neutral will take some time after that.**

If these conditions are realised, the desired establishment of favourable oceanic conditions could take place ahead of the onset phase of the southwest monsoon over the country. The southwest monsoon arrives over the Andaman

and Nicobar Islands around mid-May. Thereafter, it progresses and enters the mainland through the gateway in Kerala around June 1 (with a standard deviation of four days). By mid-July, it covers the entire country.

As the country awaits the Long Range Forecast (LRF) for the upcoming southwest monsoon, expected to be released by the IMD by mid-April, the prediction about the development of ENSO neutral conditions would suggest that the southwest monsoon may not be directly impacted by the ongoing El Niño episode.

There are chances of normal monsoon rainfall — provided other ocean-atmosphere parameters, wind conditions, formation of low-pressure systems, etc remain favourable — this year.

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Why scientists voted down proposal to declare start of the Anthropocene

[#AnthropoceneEpoch](#) [#GeologicTimeScale](#)
[#Chronostratigraphy](#) [#Geology](#) [#Geography](#)
[#GS1](#)

From the peak of Mount Everest to the depths of the Mariana Trench, the evidence of human activity is unmissable — and possibly indelible. Yet, a committee of 18 scientists have voted down a proposal to declare the start of the Anthropocene, or the “Human Epoch”, in geologic time.

A timeline of Planet Earth

Geoscientists, or scientists who study the Earth, use the geologic time scale (GTS) to measure the history of the planet. The GTS (since the formation of Earth, roughly 4.54 billion years ago) is divided, in descending order of duration, into aeons, eras, periods, epochs, and ages (See table below).

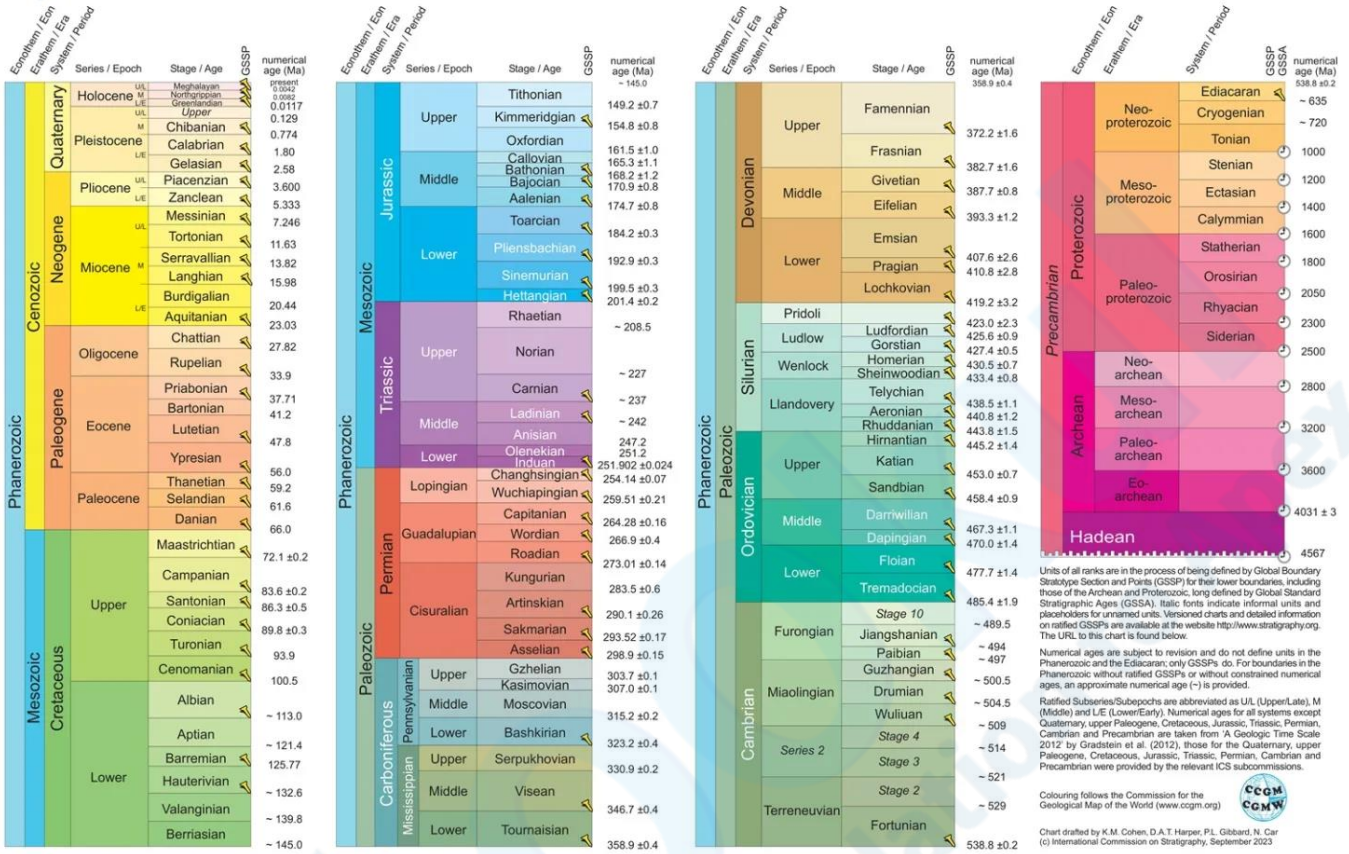


INTERNATIONAL CHRONOSTRATIGRAPHIC CHART

www.stratigraphy.org

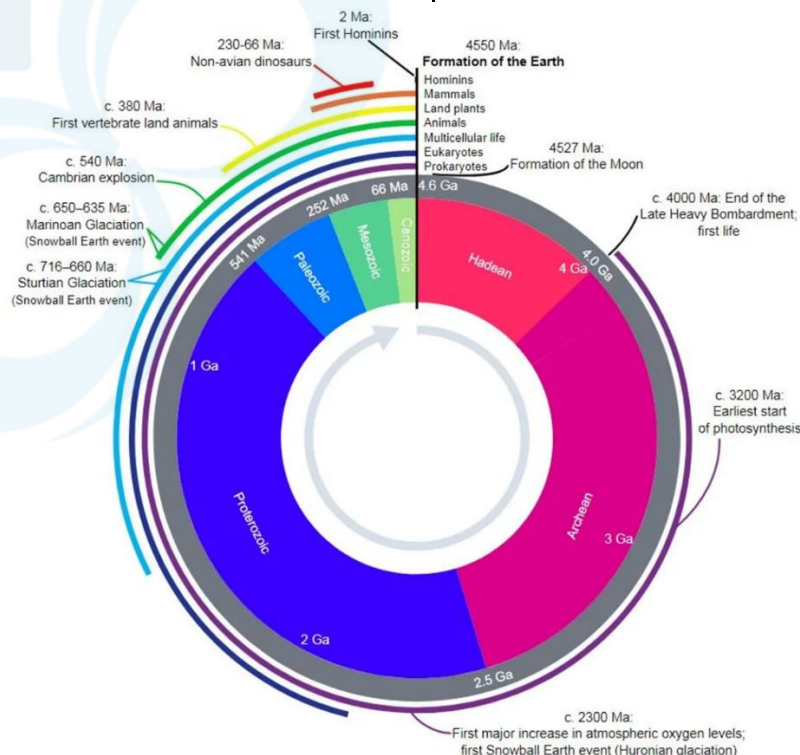
International Commission on Stratigraphy

v 2023/09



The GTS is based on chronostratigraphic classification. Stratigraphy is a branch of geology that deals with the study of rock layers (or strata). Chronostratigraphy

("chrono": relating to time) is an aspect of stratigraphy that deals with the relation between rock strata and the measurement of geological time.



GS 2 – POLITY

Govt amends rules to allow postal ballots for those aged 85 or above, not 80-plus

[#PostalBallot](#) [#SeniorCitizens](#)
[#ElectionRules1961](#) [#ElectoralProcess](#)
[#ElectionCommission](#) [#Elections](#) [#Polity](#) [#GS2](#)

For the upcoming Lok Sabha and State Assembly elections, senior citizens who are 85 years and older will be able to opt for postal ballots as the government amended the rule to increase the eligibility from the current limit of 80 years and above.

In a gazette notification, the Union Law Ministry amended the Conduct of Elections Rules-1961 to change the definition of senior citizens who are eligible to choose the postal ballot facility from those “above 80 years” to those “above 85 years”. This, the notification said, was “after consulting the Election Commission of India”.

The rules enable postal ballot voting for a “notified class of electors”, which includes essential services workers, persons with disabilities, Covid-19-infected or suspected cases and senior citizens. In Section 27(A) (e), senior citizens had been defined as those above 80 years.

“In the conduct of Elections Rules-1961, in rule 27A, in clause (e), for the words and figures –above 80 years, the words and figures –above 85 years shall be substituted,” the notification said.

-----N---E---X---T-----

A stay can't be time-bound: What SC ruled, why it matters

[#CourtStays](#) [#AsianResurfacingCase](#)
[#Article142](#) [#Article226](#) [#Judiciary](#) [#Polity](#)
[#GS2](#)

“Sometimes, in the quest of justice we end up doing injustice. Asian Resurfacing is a clear example of the same,” a five-judge Constitution bench of the Supreme Court said on Thursday (February 29), overruling its 2018 decision in

Asian Resurfacing v. Central Bureau of Investigation.

What the 2018 bench ruled in the Asian Resurfacing case

In 2018, a three-judge bench comprising Justices Adarsh Goel, Navin Sinha and Rohinton Nariman were deciding a batch of cases involving the Prevention of Corruption Act. These batches of cases had one aspect in common – that the respective High Courts had granted a stay at some stage of trial. Stay orders are passed for a court to temporarily halt a judicial proceeding, to secure the rights of a citizen.

Grant of stay invariably delays the trial, irrespective of which side benefits from it. For example, if an HC in a case had to consider the challenge against an order framing charges (by the trial court), it would first grant a stay of trial and then grant a date for hearing arguments on framing charges.

With Courts bogged down with criminal cases that perhaps need more immediate attention, such as bail cases, the hearing against framing of charges gets delayed. In our three-tier system of courts, a trial court’s decision can be challenged at every stage, not just at the final stage after a verdict is delivered. It is not uncommon to find trials pending for decades because a stay is in operation.

In Asian Resurfacing, the SC held that while a “High Court has jurisdiction in appropriate case to consider the challenge against an order framing charge and also to grant stay but how such power is to be exercised and when stay ought to be granted needs to be considered further.”

To address the big problem plaguing the criminal justice system, of undue delays in trials, the SC held that interim orders of stay at the High Court and Civil Court level will be only valid for six months. At the end of this period, they will automatically be rescinded or “vacated”.

What was the impact of the 2018 ruling?

As anticipated, with the 2018 ruling, several trials on stay virtually rose from the dead without notice. Lawyers would cite the Asian Resurfacing ruling to alter the status quo.

For example, say a flimsy or frivolous FIR is filed and a trial court has issued summons. This would be challenged before the HC, but the HC would first stay the summons and grant a date for the hearing. But citing the Asian Resurfacing case meant that a trial court would issue non-bailable warrants suddenly for not appearing before the Court. All this, while the HC had not yet heard arguments for quashing the summons itself.

While this added the load on the HCs and burdened the average litigant, it also raises key questions of law. These questions were framed by another three-judge bench headed by CJI DY Chandrachud in December last year.

First, whether the SC, under Article 142 of the Constitution (which allows the Supreme Court to pass any order to secure “complete justice”) can order automatic vacation of all interim orders of the HC of staying proceedings of Civil and Criminal cases on the expiry of a certain period?

Second, whether the SC, under Article 142 of the Constitution, can direct the HCs to decide pending cases in which interim orders of stay of proceedings have been granted on a day-to-day basis and within a fixed period?

On what grounds has the 2018 ruling been undone?

The five-judge bench held that constitutional courts should refrain from laying down precise timelines for deciding cases, highlighting the discretion that should be afforded to lower courts which are more aware of “grassroots issues”. The SC also pointed out that courts often have different patterns when it comes to their pending caseload, and so the concerned court is best placed to decide which cases to prioritise.

The case was heard for a single day on December 13 last year by a bench led by Chief Justice of India D.Y. Chandrachud and comprising Justices A.S. Oka, J.B. Pardiwala, Pankaj Mithal and Manoj Misra. **Senior Advocate Rakesh Dwivedi, who was representing the petitioner (the High Court Bar Association of Allahabad), argued that vacation of a stay is a judicial decision which needs application of mind, without which judicial decisions would become arbitrary. Automatic vacation of stay would be antithetical to this principle.**

Solicitor General Tushar Mehta, representing the central government, also appeared and argued that the Asian Resurfacing judgment infringes on the discretion afforded to High Courts to decide applications for vacation of stay orders under Article 226(3) of the Constitution. He also argued that deciding timelines for judicial proceedings is a decision for Parliament to make through its law-making power, not the courts.

Justice Abhay S. Oka in his majority opinion (for four judges while Justice Manoj Misra concurred with the majority in a separate opinion), held that a stay order can only come to an end after all the parties in the case have been heard first.

The court also held that the bench in Asian Resurfacing did not have the power to set a six-month time limit for vacating stay orders. The bench in Asian Resurfacing had invoked Article 142.

In the judgment written by Justice Oka, the court held that automatically vacating a stay order after six months would in fact “defeat justice” by nullifying interim orders that had been lawfully passed without hearing the parties.

The court also agreed with Tushar Mehta’s argument that the six-month time limit would amount to court-created legislation, which is impermissible. **Only the legislature has the power to decide if a category of cases should be decided within a specific amount of time.**

-----N---E---X---T-----

Centre signs pact with Tripura govt, Tipra Motha for tribal rights

#TripartiteAgreement #Tripura
#TipraMotha #GreaterTipraland #Kokborok
#NortheastTribes #TribalGroups #Polity
#GS2

Union government signed a tripartite agreement with the Tripura government and The Indigenous Progressive Regional Alliance, popularly known as Tipra Motha, for a “time-bound” and “honourable” solution to “all issues” related to the state’s indigenous people.

“Under the pact, it was agreed to amicably resolve all issues of indigenous people of Tripura relating to history, land and political rights, economic development, identity, culture and language. Along with this, it was agreed to constitute a joint working group/ committee to work out and implement the mutually agreed points on all the above mentioned issues in a time-bound manner to ensure an honourable solution,” the Centre said in a statement.

The Tipra Motha’s demands include a “Greater Tipraland” — a separate state for Tripura’s tribals which seeks to include those living outside the Tripura Tribal Areas Autonomous District Council (TTAADC) area as well. The party has also sought more powers for the TTAADC – including direct funding from the Centre, its own police force, share of revenue from gas exploration in the state – and Roman script to be declared as the official script for the indigenous Kokborok language.

-----N---E---X---T-----

60 years ago, when a Rajya Sabha election was declared void

#RajyaSabhaElections #RajyaSabha
#Parliament #Polity #GS2

Last month, the Election Commission of India (ECI) held polls to fill 56 Rajya Sabha seats from 14 states. Without the vibrancy of a direct election, Rajya Sabha polls are usually lacklustre affairs. There are no big political rallies or a large electorate that candidates need to reach out to. The voters in these elections are

Members of State Legislative Assemblies (MLAs). More often than not, there is no contest and MLAs don’t even have to cast their vote to elect a Rajya Sabha member. In the latest round of elections, for instance, there was no contest on 41 seats.

For the 15 seats that did go to polls, the candidates campaigned over lunch, dinners and intimate one-on-one interactions. And like every two years, Rajya Sabha elections make news when a political personality/ party loses what numerically appears to be a winnable election. This time, Congress candidate in Himachal Pradesh, Abhishek Manu Singhvi, and Alok Ranjan, the Samajwadi Party candidate who was the former chief secretary of Uttar Pradesh, lost the polls. The loss was due to cross-voting by the respective party MLAs.

Rajya Sabha is a permanent House and its members have a six-year term. A third of its members retire every two years, requiring an election to fill the vacant seats. Allegations of money, muscle power and cross-voting have dogged these elections for the last 60 years.

The general elections in 1951 elected MPs to the first Lok Sabha and MLAs to the state assemblies.

With elected MLAs in place, the stage was ready for the first Rajya Sabha elections. The ECI held these elections in March 1952 and Rajya Sabha was constituted on April 3, 1952. MLAs voted to elect 204 MPs to represent states and 12 were nominated by the President. The Constitution also states that a third of upper House MPs must retire every two years. It presented a problem in deciding which among the newly elected MPs in office until 1958 would have their terms cut short.

The solution was to group Rajya Sabha MPs from each state into three equal groups. The first group would have the complete six-year tenure ending April 2, 1958. The second group would serve for four years, and the last would be MPs for two years. This grouping was also applicable to nominated MPs.

led him to believe that the Bills were passed in breach of law and procedure. However, the Bills were not remitted to the Assembly for reconsideration.

The court held that the Governor did not have the power to “thwart the normal course of lawmaking by the State Legislatures”, and held that the phrase “as soon as possible” in Article 200 means that “the Governor cannot be at liberty to keep the Bill pending indefinitely without any action whatsoever.”

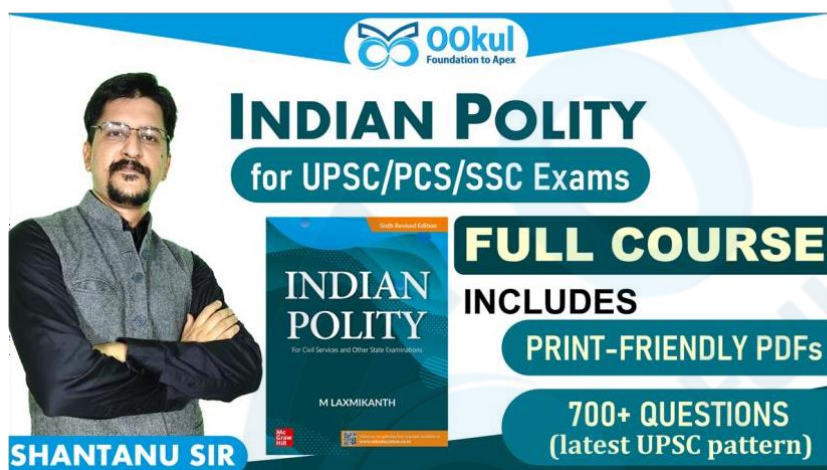
If the Governor decides to withhold assent, he is bound to follow the procedure provided

in the first proviso of Article 200, and return it to the state legislature for reconsideration, the court said.

Though the court spelled out the obligations of the Governor in the lawmaking process, it stopped short of providing a definitive timeline for the Governor to make the decision. The Kerala government has now approached the Supreme Court to address the same issue.

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GS 2 – GOVERNANCE

Patanjali controversy and the lure of a magic cure

[#PatanjaliAyurveda](#)

[#MisleadingAdvertisement](#) [#ASUmedicines](#)

[#Classicalmedicines](#) [#P&Pmedicines](#) [#AYUSH](#)

[#Governance](#) [#GS2](#)

There is something deeply disturbing about the way the marketing and sale of Ayurveda, Siddha and Unani (ASU) medicine is going on. In November 2023, the Supreme Court had given directions to Patanjali Ayurveda to stop publishing misleading advertisements but a day later, to establish its credibility, the company issued a press release reporting that it has conducted preclinical and clinical trials on a

database of more than one crore people, to test the efficacy of its products.

Earlier this week, the matter came up again before the apex court, which took umbrage at the continued issue of advertisements despite having been given an assurance.

Advertising drugs purported to treat or cure certain diseases is prohibited under DMR, that is, the Drugs and Magic Remedies (Objectionable Advertisements) Act 1954, which applies to all systems of medicine. Promoting drugs intended for the treatment and cure of 54 specific medical conditions, which include cancer, diabetes, heart disease and blood pressure, is explicitly barred.

For decades, the prohibitions under the DMR Act have been more flouted rather than respected. Seeing countless advertisements for treating and curing any number of conditions displayed in newspapers, and the electronic media, consumers have become inured to risks. Even as the claims are made with growing impunity, no visible action seems to have been taken by the state governments to whom the Ministry of Ayush has sent hundreds of complaints. **The regulatory watchdog, Advertising Standards Council of India, has failed to take effective cognisance or to set guidelines.**

The extant case is against Patanjali, but the ramifications raise broader issues. **The Drugs and Cosmetics (D&C) Act was enacted in 1940 and a new Chapter IV A was introduced in 1964 for ASU medicine. The difference between classical medicine and patent and proprietary medicine is explained there.**

Classical ASU medicine refers to drugs that are manufactured strictly in accordance with the authoritative ancient texts (granthas or samhitas) listed under the D&C Act.

Patent and Proprietary (P&P) medicine refers to manufacture of ASU drugs by modifying the classical recipe and introducing new combinations. For this category, the efficacy and safety of the medicine is required to be proven by following the Good Clinical Practice Guidelines issued by the Ministry of Ayush — to document evidence of safe and effective use.

A large proportion of P&P medicine professes to treat new conditions that aren't mentioned in the ancient texts — for instance, fits, heart disease, hypertension, obesity, or cancer, to name a few.

To obtain a manufacturing licence, citing scientific sources is essential and if unavailable, pre-clinical or clinical trials are required to be held along with clinical data as stipulated. During Covid, the Ayush Ministry had mandated the registration of all medical research projects with the Indian Council of Medical Research's CTRI — Clinical Trials

Registry of India database — which has been established to cover medical research involving human subjects — without distinction between allopathic or ASU research. The objective was to promote evidence-based clinical practice to ensure patient safety. Not only Patanjali, but several others too have been proactively promoting their P&P drugs but whether they have complied with CTRI requirements is unclear.

The DMR Act was enacted to control misleading claims and advertisements involving medicinal substances and products. Whether the products have been licensed or not, whether they are evidence-based or otherwise, whether R&D has been done, goes beyond the ambit of DMR. The news about Patanjali which has been flashed countrywide is disturbing because it highlights the vulnerability of the consumer who assumes that some regulatory body would have checked that nothing unsafe, hazardous, or ineffective is sold as medicine.

In the case of ASU drugs (of which Ayurveda constitutes more than 75 per cent), there is greater danger, because the consumer assumes all products are natural and consequently safe. When she sees advertisements about efficacious treatment and cure of intractable diseases, she goes for self-medication instead of being diagnosed by a vaidya or medical practitioner, trained to diagnose the overall constitution of the individual in a holistic way. Prompted by advertisements, she purchases P&P medicine over the counter. **But unlike chemists dispensing allopathic drugs whose credentials are checked, selling ASU medicine requires no sale licence and all pharmacists, and even general stores and groceries, have the latitude to sell these drugs, possessing zero knowledge of the drug use, dosage, or ingredients — including presence of heavy metals.**

This can be dangerous, because **many ASU drugs can be unsafe if ingested through self-medication, especially by those in compromised health.** Unfortunately, the need for a sale licence for ASU products has been

negated by the Drugs Technical Advisory Board (DTAB); likewise, the progressive Rule 170 introduced in 2018, which required clearance of advertisements from the state licensing authority (as a preventive against misleading advertisements,) has also been nullified for now, by the DTAB.

On implementation, however, the buck stops with the Ayush state drug controllers, and considerable patchiness exists in the way the two Drug Acts are being administered — be it licensing, quality control, enforcement or advertising. **The country needs a unified structure and system for regulating and administering the licensing, manufacture, sale, safety monitoring and drug advertising of ASU drugs when sold across states in inter-state commerce.** This will instil not just oversight of safety but will bring greater ownership among new consumers worried about quality and claims. **The vagaries of the state drugs control systems (where posts lie vacant for months or are handled by non-qualified persons and enforcement is ineffective), will otherwise take their toll.**

What are the allegations against Patanjali?

The Indian Medical Association (IMA) filed a petition at the apex court in August 2022 after Patanjali published an advertisement titled ***“MISCONCEPTIONS SPREAD BY ALLOPATHY: SAVE YOURSELF AND THE COUNTRY FROM THE MISCONCEPTIONS SPREAD BY PHARMA AND MEDICAL INDUSTRY.”***

What is the legal argument against Patanjali’s actions?

The IMA claimed that the advertisement was in **direct violation of the Drugs & Other Magical Remedies Act, 1954 (DOMA), and the Consumer Protection Act, 2019 (CPA).** The publishing of false and misleading advertisements is an offence under both statutes.

Under Section 4 of the DOMA, there is a prohibition against publishing misleading

advertisements relating to a drug. This is described as an advertisement which “directly or indirectly gives a false impression regarding the true character of the drug”, “makes a false claim for the drug”, or “is otherwise false or misleading in any material particular.”

Publishing a misleading advertisement under the DOMA is punishable with up to six months imprisonment, and/or a fine for the first offence. On the second offence, the period of imprisonment can extend to one year.

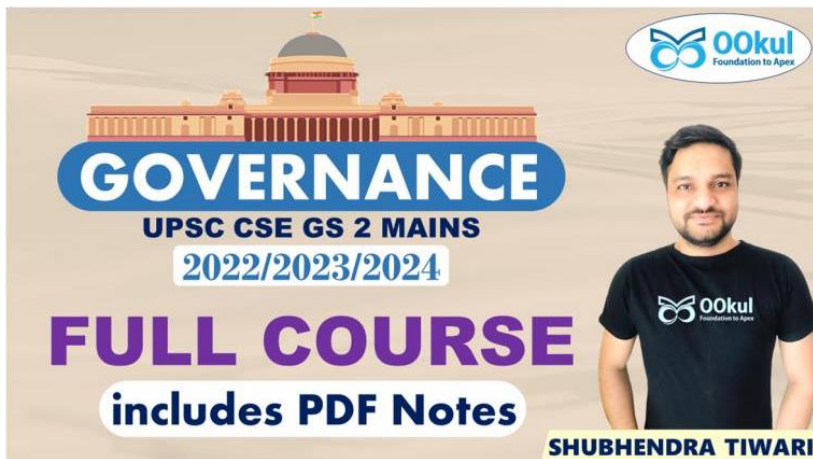
The IMA has also highlighted the **Memorandum of Understanding signed by the Ministry of AYUSH and the Advertising Standards Council of India in January 2017.** AYUSH, which is responsible for developing and setting medical standards for traditional medicine, agreed to identify misleading advertisements that may be in violation of the DOMA, and send complaints to the Council for review. Despite this, the IMA claims that Patanjali has continued to disregard the law and violate the DOMA.

Section 89 of the CPA contains even more stringent punishments for false or misleading advertisements. It states: “Any manufacturer or service provider who causes a false or misleading advertisement to be made which is prejudicial to the interest of consumers shall be **punished with imprisonment for a term which may extend to two years and with fine which may extend to ten lakh rupees; and for every subsequent offence, be punished with imprisonment for a term which may extend to five years and with fine which may extend to fifty lakh rupees.**”

The CPA also provides the definition for a “misleading advertisement”. It includes advertisements which give a false description of the product or service, partakes in unfair trade practices, deliberately conceals important information, or is likely to mislead the consumer about the nature, substance, quantity or quality of the product or service.

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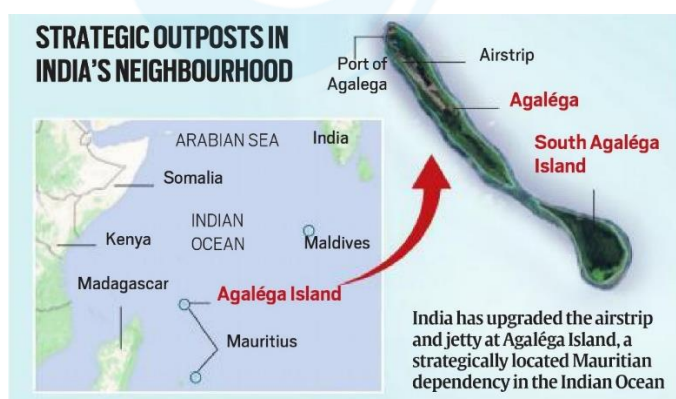
GS 2 – INTERNATIONAL RELATIONS

India-built airstrip inaugurated in Agaléga, Mauritius

#AgalegaIsland #Mauritius
#IndiaMauritiusRelations
#IndiaMaldivesRelations #IndianOcean
#MaritimeSecurity #StringOfPearls
#InternationalRelations #GS2

Earlier this week, the first team of Indian “technical personnel” reached the Maldives to take charge of one of the three aviation platforms stationed in the country. They will replace Indian military personnel whose first batch is required to leave the islands by March 10.

On Thursday (February 29), **Prime Minister Narendra Modi and Prime Minister Pravind Jugnauth of Mauritius jointly inaugurated an airstrip and a jetty that India has built on Agaléga, a two-island Mauritian dependency 1,100 km to the north of Port Louis and 2,500 km southwest of Malé.**



As Indian Ocean outposts, **Mauritius and the Maldives have great strategic significance for India.** New Delhi’s maritime security and strategic imperatives in the Indian Ocean are linked to the presence and increased activities of China in the region.

The Maldives case

Soon after coming to power in November 2023, Mohamed Muizzu, the pro-China President of the Maldives, requested India to withdraw its military personnel from his country. Muizzu had defeated the incumbent Ibrahim Mohamed Solih in the presidential election on the “India Out” plank.

Late on Monday, the Maldives defence ministry said the first team of Indian civilians had arrived, and would take charge of the operation of a helicopter in Addu, the country’s southernmost atoll. The two countries had agreed on February 2 that India would pull out 80-odd military personnel stationed in the Maldives between March 10 and May 10.

The Indian Ministry of External Affairs had said that the two helicopters and a Dornier aircraft in the Maldives would be operated by “competent Indian technical personnel” who would replace the “present personnel”.

The Mauritius case

Following Prime Minister Modi's visit to Mauritius in March 2015, **India signed a Memorandum of Understanding for the "improvement in sea and air transportation facilities" at Agaléga island.**

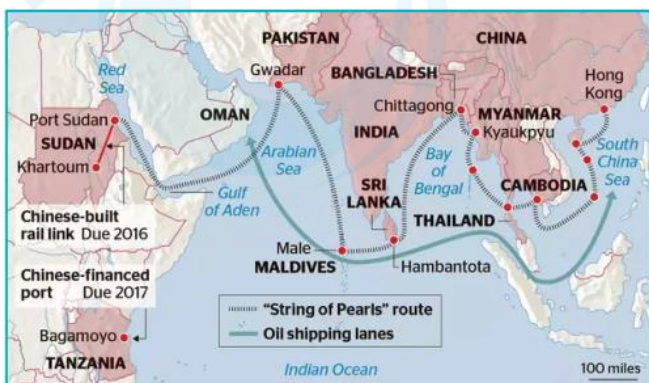
"The March 2015 MoU (to upgrade the airstrip and the Set James jetty) reflected India's commitment to continually assist Mauritius in meeting its development goals satisfying the principles of mutual benefit..." Prime Minister Jugnauth said.

The presence of India would lead to more effective monitoring of Mauritius' vast 2.3 million sq km Exclusive Economic Zone, and equip it to better counter-piracy, terrorism, narcotics and human trafficking, and illegal and unregulated fishing, Prime Minister Jugnauth said.

China in Indian Ocean

China sees great value in having a powerful presence in the Indian Ocean region. **Nine of China's top 10 crude oil suppliers transit the Indian Ocean... [which] is also the primary theatre of transit for China for engagements with Africa, Middle East, island nations, and littorals across the vast ocean.**

China is the only nation with an embassy in each of the six islands in the Indian Ocean — Sri Lanka, Maldives, Mauritius, Seychelles, Madagascar, and Comoros and none of the traditional players — the United States, the UK, India, or France have embassies on all six. Beijing had gone beyond diplomatic and trade partnerships in the region, and had begun to maintain a consistent military presence as well.



In 2017, China opened its first overseas military facility in the Indian Ocean in

Djibouti on the Horn of Africa. Analysts believe that it is only a matter of time before a second Chinese military facility comes up in the Indian Ocean — whether in Pakistan, Myanmar, or the western Indian Ocean.

View from New Delhi

India sees the urgency and importance of working with the governments of all these island nations. The domestic politics of these nations often impact their behaviour and policies abroad — and **India will have to manage its diplomatic relationships well while continuously pursuing its strategic interests in the region.**

The Jugnauth government in Mauritius has so far been able to manage the domestic criticism of India's presence better than the Solih government was able to do in the Maldives.

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Grey Zone warfare

#GreyZoneWarfare

#ColdWar

#InternationalRelations #GS2

On the last day of the 2024 Raisina Dialogue (February 24), India's Chief of Defence Staff General Anil Chauhan said that "grey zone warfare" is the latest in informal warfare.

During a discussion titled 'The New Wars: Policies, Practices, and Preparation', he gave an example of the situation in the South China Sea. Occasionally, confrontational incidents involving small boats have been reported in the region, over the fact that several countries have extended competing territorial claims here.

What does grey zone warfare mean?

Grey zone warfare generally means a middle, unclear space that exists between direct conflict and peace in international relations.

A multitude of activities fall into this murky in-between — from nefarious economic activities, influence operations, and cyberattacks to mercenary operations, assassinations, and disinformation campaigns.

Other experts include economic actions too, such as **debt traps and economic sanctions**.

The **Cold War era, which began after the end of the Second World War in 1945, led to conditions that favoured grey zone warfare. Amid the US-USSR rivalry for ideological and economic dominance, the knowledge that both parties were armed with nuclear weapons meant direct conflicts had to be restrained.**

Experts also told the thinktank that such methods are often employed by parties who have not had access to massive resources or power, traditionally. Therefore, such tactics can help gain an advantage over a more technically well-equipped adversary that is more used to conventional warfare.

What grey zone warfare looks like

Experts from the US and Europe have characterised certain Russian and Chinese actions of late as examples of grey zone warfare. **It includes the Chinese military's presence in the South China Sea.**

The Philippines is one of the countries which has challenged China's claims, extending over around 80 per cent of the region. In December 2023, it termed the presence of more than 135 Chinese maritime militia vessels near a disputed reef as "illegal".

It accused China of firing water cannons at its boats and ramming into others, while the Chinese coast guard blamed the Philippines for hitting Chinese boats.

Another example can be found in a recent Reuters report, which said, "Taiwan has complained for four years of stepped-up Chinese military action, such as fighters regularly flying over the strait as part of a 'grey zone' strategy to wear down Taiwan with activities that stop short of a full-blown conflict."

US has also engaged in similar tactics. These include its economic sanctions against China and imposition of duties on Chinese imports to the US, along with maritime reconnaissance.

-----N---E---X---T-----

Kerala man killed on Israel farm: What are Indians doing there?

#IndiansInIsrael #IndianWorkers #Hezbollah #IsraelLebanonConflict #InternationalRelations #GS2

An Indian national was killed and two injured after an anti-tank missile allegedly fired by Hezbollah from Lebanon struck an orchard in northern Israel on Monday (February 4).



Israel's Hezbollah problem

Founded during the Lebanese Civil War (1975-90), **Iran-backed Hezbollah is driven by its opposition to Israel and resistance to Western influence in West Asia.** It boasts an extensive security apparatus, political organisation, and social services network in Lebanon, and many of its overt goals are similar to Sunni hardline Hamas.

Indian workers in Israel

Israel, with its relatively small population, has historically struggled to meet its demand for labour, especially for blue-collar, manual work. Prior to the October 7 attacks, Palestinians and Arab migrants made up the majority of this work force, with some 80,000 Palestinians working in the Israeli construction industry alone.

However, after the attacks, Israel suspended the work permits of thousands of Palestinians, while many other foreign workers simply left the country amid security concerns. This triggered a **massive labour shortage — which Indians are now filling.**

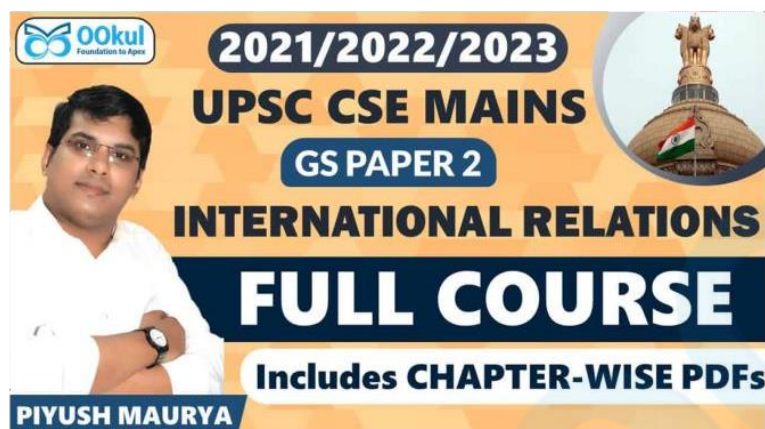
(MFN) status to India under World Trade Organisation (WTO) rules, meaning it would not discriminate against New Delhi as a trade partner. But the Pakistan Army applied the brakes.

In India, traders in Punjab have been reported as saying they want to trade with

Pakistan. Lowering the tensions with Pakistan will surely be beneficial for India too. But Pakistan does not appear ready to break with its past policies. When it does, India should be ready to reciprocate.

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GS 3 – ECONOMY

Centre launched 2nd part of critical minerals auction

[#CriticalMineralsAuction](#) [#CompositeLicence](#)
[#MiningLicence](#) [#ExplorationLicence](#)
[#Minerals](#) [#Economy](#) [#GS3](#)

India launched the second part of its critical minerals auction worth an estimated ₹ 30 lakh crore (about \$362 billion).

A total of 18 critical mineral blocks, including tungsten, vanadium, cobalt and nickel, will be auctioned in eight states across the country in Chhattisgarh, Madhya Pradesh, Karnataka, Maharashtra, Rajasthan, Andhra Pradesh, Arunachal Pradesh and Tamil Nadu.

Seventeen mineral blocks have been put up for a composite licence, while one block is for a mining lease. A composite licence includes a licence to examine a block and mine it afterwards.

Maharashtra, Madhya Pradesh, Haryana, Chhattisgarh and Rajasthan will auction

blocks for exploration licence of critical minerals, separately.

-----N---E---X---T-----

Cabinet OKs ₹75k cr rooftop solar scheme

[#PMSuryaGharYojana](#) [#RooftopSolar](#)
[#RenewableEnergy](#) [#Economy](#) [#GS3](#)

The Union Cabinet has cleared a ₹75,021-crore rooftop solar scheme under which one crore households in the country will get a subsidy for installation of such units.

The PM-Surya Ghar: Muft Bijli Yojana will offer a subsidy of up to ₹78,000 per household for the installation of solar plants, under which they will get 300 units of free power, the government said.

Through this scheme, households will be able to save electricity bills as well as earn additional income through sale of surplus power to DISCOMs. A 3-kW system will be able to generate more than 300 units a month on an average for a household.

The scheme will run for four years — from 2023-24 to 2026-27.

The scheme provides a central financial assistance (CFA) of 60 per cent of system cost for 2 kW systems and 40 per cent of additional system cost for systems between 2 kW and 3 kW capacity; the assistance is capped at 3 kW. At current benchmark prices, this will mean ₹30,000 subsidy for 1 kW plant, ₹60,000 for 2 kW and ₹78,000 for 3 kW systems or higher.

According to a statement issued by the government, **households can apply for subsidy through a national portal launched for the scheme, where they can also select a suitable vendor for installing rooftop solar units.** The portal will offer information about appropriate system sizes, benefits calculator and vendor rating. **Households can register on pmsuryaghar.gov to avail of the benefits.**

-----N---E---X---T-----

Why have GDP and GVA growth rates diverged in Q3?

[#GDP](#) [#GVA](#) [#GDPDeflator](#) [#EconomicGrowth](#)
[#Economy](#) [#GS3](#)

India's Gross Domestic Product (GDP) growth rate surpassed expectations to rise to a six-quarter high of 8.4% in the third quarter (October-December) of 2023-24, data released by the National Statistical Office (NSO) showed.

This was much higher than the 6.5% estimate for Q3 by the Reserve Bank of India (RBI), and similar estimates by economists. The Q3 GDP helped push the estimate for the full year to 7.6% in the second advance estimates, from the 7.3% estimated in the first advance estimates released in January.

While there was an improvement in manufacturing, mining, construction, trade, hotels, transport and communication, and services related to broadcasting, the agriculture sector recorded a contraction in Q3.

There was, however, a **sharp divergence in the growth rates based on GDP and Gross Value Added (GVA), which has led some economists**

to suspect that GDP may have been overstated. While GDP for Q3 was 8.4%, GVA growth was recorded 190 basis points lower at 6.5%. GDP is arrived at by adding product or indirect taxes, and excluding subsidies to GVA, which measures national income from the output side.

Another factor that seems to have contributed to real growth being overstated is lower-than-usual annual GDP deflator. It is seen growing by 1.4% in FY24 as against 6.8% in FY23, reflecting the deflation in the wholesale price index (WPI) used to calculate it.

The deflator measures changes in prices of all the goods and services produced in an economy, and thereby helps compare the levels of real economic activity from one year to the next. A lower deflator means higher real GDP growth and vice versa. In Q3, deflator increased marginally to 1.7% from 1.5% in Q2 FY24.

Why is there a divergence between the two measures of growth, GVA and GDP?

The sharp divergence in GDP and GVA rates for Q3 is on account of a sharp rise in net taxes and a fall in subsidies.

Net taxes are calculated by adding product taxes and excluding subsidies.

Government officials said the divergence between GVA and GDP rates was mainly due to a sharp fall in subsidies in the quarter because of lower payouts on fertiliser subsidies.

-----N---E---X---T-----

Why Thailand's now-replaced WTO Ambassador questioned India's agriculture subsidies

[#AgriculturalSubsidy](#) [#WTO](#)
[#AgreementOnAgriculture](#) [#PeaceClause](#)
[#InternationalTrade](#) [#Economy](#) [#GS3](#)

Thailand is reported to have replaced its Ambassador to the World Trade Organisation (WTO) after India formally registered a protest

over her comments on India's PSH (Public Stockholding) programme.

Thai Ambassador Pimchanok Vonkorpon Pitfield had targeted India's rice procurement programme recently. She said that its Public Distribution System (PDS), under which the government procures essential food items from producers and sells them to the public at low rates, is not for the people but for "capturing" the export market.

After India, Thailand is the second largest rice exporter in the world. However, India has put temporary restrictions on rice exports to arrest domestic prices.

What were Thailand's concerns?

Thailand is a member of the 20-nation Cairns Group, which has time and again questioned India's PSH programme at WTO. It has argued that the programme is "highly subsidised" and India's farm support is "distorting" global food prices and "hurting" the food security of other countries.

Trade distortion is a situation where prices and production are higher or lower than levels that would usually exist in a competitive market. As per WTO, nearly all domestic support measures are considered to distort such trade, but they are permitted to a certain limit called the 'de minimis' limit.

Under the provisions of the WTO's Agreement on Agriculture (AoA), the aggregate value of the product-specific support should not exceed 5% of the total value of production of the agricultural product in question. In the case of developing countries such as India, the de minimis ceiling is 10%.

India has breached the de minimis limit in the case of rice. This has angered other exporters such as Thailand, as they are finding it difficult to compete with Indian rice and losing the global export market share to India.

The Cairns group comprises Argentina, Australia, Brazil, Canada, Chile, Colombia, Costa Rica, Guatemala, Indonesia, Malaysia, New Zealand, Pakistan, Paraguay, Peru,

Philippines, South Africa, Thailand, Ukraine, Uruguay, and Vietnam. It has been lobbying for agricultural trade liberalisation.

Trade experts say that the grouping is trying to get India to dismantle or reduce the scope of the Minimum Support Price (MSP) scheme. Through the scheme, the government gives an assured price to farmers for certain major crops to ensure price stability and secure farmers' income.

Why are India's rice subsidies being questioned?

The WTO norms say that the support given should be within the 10% de minimis limit. India informed the WTO that the value of its rice production in 2019-20 was \$46.07 billion while it gave subsidies worth \$6.31 billion or 13.7%, as against the permitted 10%.

However, India has questioned the way subsidies are calculated at the WTO, saying it is calculated at a fixed and outdated 1986-88 price, which overestimates the subsidy. India is seeking to change it at the WTO negotiations on agriculture.

What is India's argument and demand at the WTO?

The Cairns Group is also attacking the 'peace clause', triggered after India breached the de minimis limit.

The interim peace clause was put in place in 2013 under the Bali Agreement to protect developing countries from being challenged for breach of subsidy levels.

Therefore, India and a group of developing nations are seeking a permanent solution for public stockholding for food grains that will give India better flexibility in providing farm support. **India has been arguing that the subsidy that it provides is far less than what the US and EU give.**

The Indian government's subsidy to farmers comes in at \$300 per farmer, compared to \$40,000 per farmer in the US. However, the 13th Ministerial Conference of WTO ended

without any decision on a permanent solution for public stockholding of food.

Why are Indian farmers asking the government to leave the WTO?

Since WTO norms restrict the government's ability to provide higher farm support, **farmers during the ongoing protests around New Delhi have demanded the agriculture sector be taken out of the WTO agreement.**

Calling the WTO policies "anti-farmer", the protesters also demanded legal guarantees for MSP, debt waiver, the implementation of Swaminathan Commission recommendations on issues related to agriculture, and pensions for farmers.

However, experts pointed out that this approach could pose problems and restrict India and other developing nations from disciplining the subsidies being given by the developed world.

-----N---E---X---T-----

How to bring about White Revolution 2.0

#WhiteRevolution2.0 #MilkConsumption
 #MilkYield #MilkProduction
 #ArtificialInsemination #EmbryoTransfer
 #AnimalNutrition #HCES #Economy #GS3

The government's latest Household Consumption Expenditure Survey (HCES) for 2022-23 shows milk emerging as India's top food spend item, both in rural and urban areas.

The monthly value of milk and dairy products consumed by an average person in rural India, at Rs 314, was ahead of vegetables (Rs 203), cereals (Rs 185), egg, fish & meat (Rs 185), fruits (Rs 140), edible oil (Rs 136), spices (Rs 113) and pulses (Rs 76).

The HCES data reveals the same for urban India: Milk (Rs 466), fruits (Rs 246), vegetables (Rs 245), cereals (Rs 235), egg, fish & meat (Rs 231), edible oil (Rs 153), spices (Rs 138) and pulses (Rs 90).

The challenge

Indians spending more on milk – viewed as a "superior" food – is good news for the dairy industry, especially farmers. But this could face headwinds from two sources.

The first relates to consumer demand itself from inflation. The all-India modal (most-quoted) price of milk has gone up from Rs 42 to Rs 60 per litre in the last five years, according to the department of consumer affairs. Much of the increase – from Rs 52 to Rs 60 – has happened in the last one year alone.

The second has to do with the cost of fodder, feed and raw materials/ingredients. As these have increased significantly (see table), dairies have had to hike procurement prices paid to farmers and, in turn, pass-through the same to consumers.

PRICE OF FODDER, FEED AND INGREDIENTS

	2018-19	2023-24
Amul Dan*	1117@	1540@
Amul Power Dan**	1345@	1950@
De-oiled Rice Bran	8-11	16-19
Rice Bran	16-18	23-28
Maize	14-16	23-25
Rapeseed Extraction	18-19	23-29
Molasses	4-6	11-16
Dry fodder	5-7	8-14
Green fodder	3-4	5-7

Note: *Type II cattle feed containing 20% crude protein and 3% crude fat;

**Type I feed with 22% protein and 4% fat; @Rs per 70-kg bag.

Source: Amul.

There's a limit to how much more the consumer can pay for milk without it causing demand destruction. **If farmer incomes are to be raised without shrinking domestic demand and eroding the global competitiveness of the Indian dairy industry, the only solution is to reduce the cost of milk production.**

How can that be achieved?

GS 3 – ENVIRONMENT

What the 2022 Status of Leopards in India report suggests about the big cat's population estimates

#LeopardPopulation

#HumanLeopardConflict

#WildlifeConservation #Environment #GS3

There are an estimated 13,874 leopards in India, up from 12,852 in 2018, according to the 'Status of Leopards in India, 2022' report, released by the Union Environment Ministry on February 29.

A marginal increase in overall leopard population

Indian leopards (*Panthera pardus fusca*) are distributed across a variety of forested habitats in India, Nepal, Bhutan, and parts of Pakistan. Being apex predators, they sit at the top of the food chain, and thus play a crucial role in maintaining a balanced ecosystem. Like lions (*Panthera leo*), leopards came to India from the west, most likely Ethiopia.

According to the recently released report, Central India and Eastern Ghats has the highest population of leopards (8,820), followed by the Western Ghats (3,596), and the Shivalik Hills and Gangetic Plains (1,109). Statewise, Madhya Pradesh boasts of the largest population of leopards (3,907), followed by Maharashtra (1,985), Karnataka (1,879) and Tamil Nadu (1,070).

Decrease in population in some regions

Nonetheless, leopard populations declined in a few regions. The report showed that the Shivalik Hills and Gangetic Plains recorded a worrying 3.4% per annum decline, going down from 1,253 in 2018 to 1,109 in 2022.

Several states too reported a decline in leopard population. In Odisha the number of leopards dropped from 760 in 2018 to 562 in 2022, and in Uttarakhand, the population declined from 839 in 2018 to 652 in 2022. Kerala, Telangana, Chhattisgarh, Bihar, and Goa too reported population declines.

Table E.1: Estimated leopard numbers in each landscape from 2018 and 2022 (Number in parenthesis are one standard error limit of the mean).

State	2018 Population (SE)	2022 Population (SE)
Bihar	98 (8)	86 (3)
Uttarakhand	839 (48)	652 (77)
Uttar Pradesh	316 (39)	371 (54)
Shivalik Hills & Gangetic Plains	1,253 (95)	1,109 (134)
Andhra Pradesh	492 (31)	569 (41)
Telangana	334 (16)	297 (20)
Chhattisgarh	852 (39)	722 (45)
Jharkhand	46 (10)	51 (10)
Madhya Pradesh	3,421 (150)	3,907 (215)
Maharashtra	1,690 (99)	1,985 (122)
Odisha	760 (33)	568 (35)
Rajasthan	476 (39)	721 (112)
Central India & Eastern Ghats	8071 (417)	8,820 (600)
Goa	86 (3)	77 (13)
Karnataka	1,783 (71)	1,879 (261)
Kerala	650 (28)	570 (76)
Tamil Nadu	868 (40)	1,070 (132)
Western Ghats	3387 (142)	3,596 (482)
Arunachal Pradesh	11 (3)	42 (10)
Assam	47 (9)	74 (11)
North Bengal	83 (17)	233 (21)
North Eastern Hills, and Brahmaputra Floodplains	141 (26)	349 (42)
India	12,852 (680)	13,874 (1,258)

One factor behind this can be the increase in tiger populations. Uttarakhand wildlife officials said that although leopard numbers remain stable in Rajaji and Corbett national parks, the Ramnagar Forest Division has recorded a significant decline in its leopard population possibly due to increased tiger density.

Other factors include a number of external threats, such as poaching and habitat loss. Road accidents are also a significant cause of leopard fatalities.

Benefits from tiger conservation efforts

While a rise in the tiger population has been known to adversely impact the habitat and resources available to leopards and other creatures lower down the predator chain, **tiger conservation efforts have also helped grow leopard populations.**

Tiger in Madhya Pradesh is an umbrella species. When we conserve the tiger, we also conserve the co-predators, the vegetation, and the whole habitat as a whole. The state has a very good track record of tiger conservation and that protection has been extended to leopards.

Leopard-human conflict remains a worry

Leopards' adaptability in terms of habitat and dietary preferences help them to thrive in agro-pastoral areas, plantations, and near human settlements. This, however, has led to increasing leopard-human conflict.

According to the report, in the Shivalik region, roughly 65% of the leopard population is present outside protected areas. The **Uttarakhand Forest Department said that 30% of all wildlife-caused human deaths and injury cases were due to leopards (570 of nearly 2,000 cases from the last five years).**

A 2023 report states that Maharashtra has emerged as the worst-affected state, reporting 113 fatal attacks in the last seven years, while Karnataka reported over 100 human-leopard encounters. This escalation can largely be attributed to habitat loss, due to mining and other human activities.

In Kerala, from 2013 to 2019, there were a total 547 reported incidents of human-leopard conflict, including 173 livestock deaths or injuries (93 cattle, 2 buffalo, 78 goats), a Kerala state government report said.

In Uttar Pradesh, attacks are attributed mostly to the fact that protected areas are "less than 10 km wide." A 2019 research paper on UP's Katarniaghat Wildlife Sanctuary noted that **"38% of the conflict with leopards occurred**

when the victim was either inside or adjacent to a home. Another 40% of the conflict was recorded in agricultural fields, and 11% of attacks were on people who were defecating in farmlands".

In Tamil Nadu, the coffee-tea estates and other commercial plantations surrounded by forests are frequently occupied by leopards, since land is cheaper near the edges of forests, plantation workers buy these land for building houses, a 2017 research paper stated.

-----N---E---X---T-----

MethaneSAT

[#MethaneSAT](#)

[#GlobalWarming](#)

[#EnvironmentalPollution](#)

[#GS3](#)

[#MethaneEmission](#)

[#GreenHouseGases](#)

[#Environment](#)

MethaneSAT — a satellite which will track and measure methane emissions at a global scale — was **launched aboard a SpaceX Falcon9 rocket from California.**

While the **washing-machine-sized satellite** is not the first spacecraft to identify and quantify methane emissions, it will provide more details and have a much wider field of view than any of its predecessors.

Why do we need to track and measure methane emissions?

Methane is an invisible but **strong greenhouse gas, and the second largest contributor to global warming after carbon dioxide, responsible for 30 per cent of global heating since the Industrial Revolution.** According to the United Nations Environment Programme, over a period of 20 years, methane is **80 times more potent at warming than carbon dioxide.**

The gas **also contributes to the formation of ground-level ozone** — a colourless and highly irritating gas that forms just above the Earth's surface. **According to a 2022 report, exposure to ground-level ozone could be contributing to one million premature deaths every year.**

Therefore, it is crucial to cut methane emissions. And the main culprit: **fossil fuel operations, which account for about 40 per cent of all human-caused methane emissions. The objective of MethaneSAT is to help achieve this goal.**

What is MethaneSAT?

The entity behind MethaneSAT is the **Environmental Defense Fund (EDF)** — a US-based nonprofit environmental advocacy group. **To develop the satellite, EDF partnered with Harvard University, the Smithsonian Astrophysical Observatory, and the New Zealand Space Agency.**

Essentially, **MethaneSAT will orbit the Earth 15 times a day, monitoring the oil and gas sector. It will create a large amount of data, which will tell “how much methane is coming from where, who’s responsible, and are those emissions going up or down over time”, according to a statement by EDF.**

The **data collected by MethaneSAT will be made public for free in near real-time.** This will allow stakeholders and regulators to take action to reduce methane emissions.

What are the features of MethaneSAT?

Historically, tracking the source of methane emissions and measuring them has been quite challenging.

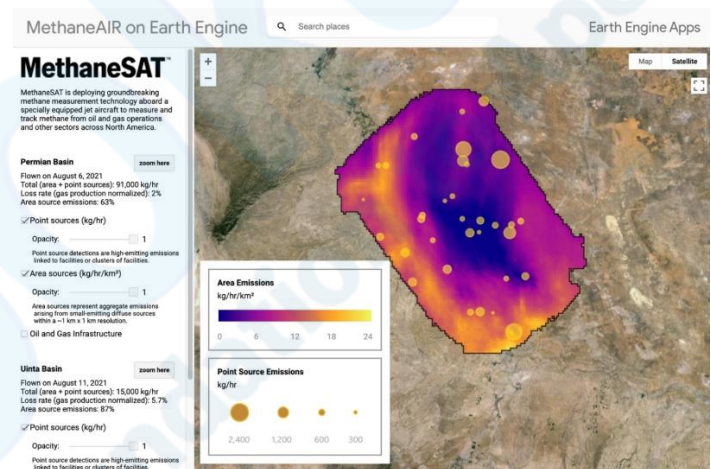
While some satellites can provide high-resolution data, they can only scan specific, pre-targeted sites. Others can examine larger areas and detect large emitting events, but cannot scan “smaller sources that account for the majority of emissions in many, if not most, regions,” the EDF statement added.

Due to this discrepancy, according to an International Energy Agency (IEA) report, global methane emissions are about 70 per cent higher than levels reported by national governments.

MethaneSAT is expected to fix the issue. **Equipped with a high-resolution infrared sensor and a spectrometer, the satellite will**

fill critical data gaps. It can track differences in methane concentrations as small as three parts per billion in the atmosphere, which enables it to pick up smaller emissions sources than the previous satellites. MethaneSAT also has a wide-camera view — of about 200 km by 200 km — allowing it to identify larger emitters so-called “super emitters”.

The collected data will be analysed using **cloud-computing and AI technology developed by Google — the company is a mission partner — and the data will be made public through Google’s Earth Engine platform.**



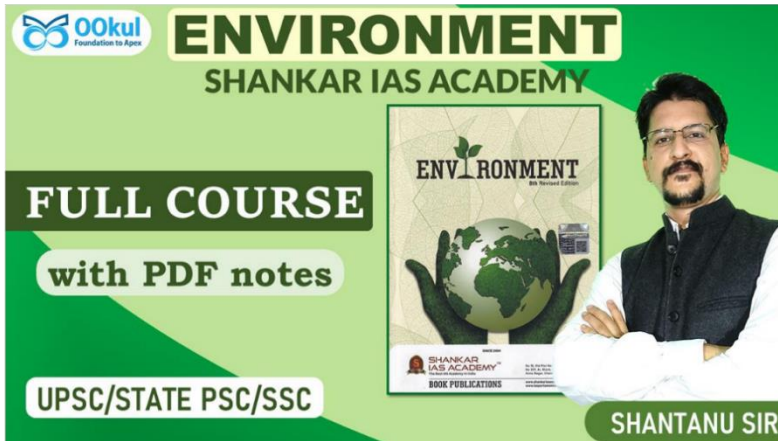
A sample of MethaneSAT’s data. (Source: Google Earth Engine)

Why is it significant?

The launch of MethaneSAT has come at a moment when the world is implementing more stringent methane management policies. For instance, **more than 150 countries signed the Global Methane Pledge in 2021, to cut their collective methane emissions by at least 30 per cent from 2020 levels by 2030. At last year’s COP, more than 50 companies committed to virtually eliminating methane emissions and routine flaring.** MethaneSAT will help them meet these targets.

The satellite will also usher in a new era of transparency. Its publicly available data, which can be accessed by anyone in the world, will keep track of methane commitments made by governments and corporations.

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PDF NOTES

GS 3 – SCIENCE & TECHNOLOGY

New Lancet study shows India sitting on obesity curve

[#Obesity](#) [#Underweight](#) [#Malnutrition](#)
[#LancetStudy](#) [#HealthIssue](#)
[#ScienceandTechnology](#) [#GS3](#)

India could be facing an obesity epidemic with alarm bells ringing particularly for the young. A new global analysis, published by The Lancet, found that 12.5 million children (7.3 million boys and 5.2 million girls) in the country, aged between five and 19, were grossly overweight in 2022, up from 0.4 million in 1990.

The report showed more than three per cent prevalence among children and teens, an increase of over three percentage points from 1990.

Obesity is also a concern among adults, with female obesity prevalence increasing sharply — women had a 9.8 per cent prevalence, an increase of 8.6 percentage points from 1990. For men, this number stood at 5.4 per cent, an increase of 4.9 percentage points.

Obesity, as defined by the World Health Organisation (WHO), is an abnormal or excessive accumulation of fat that poses health risks. A body mass index (BMI) over 25 is considered overweight and over 30 is obese.

Why is this study relevant for India?

The new study reveals that 44 million women and 26 million men aged above 20 in India were found to be obese, this figure being 2.4 million women and 1.1 million men in 1990.

India ranks 182 among 197 countries for the prevalence of obesity in women and 180 for men in 2022. The country ranked 174 in the world for both girls and boys.

This finding is significant at a time when India already has a high burden of non-communicable diseases — heart disease, strokes, and diabetes topping them. Obesity is a major risk factor and a trigger for early onset of these diseases, even Type 2 diabetes among teens.

What's driving obesity across age groups?

The primary drivers of the obesity epidemic in India — A shift in dietary choices away from traditional foods and physical inactivity. We have shifted away from whole foods such as pulses, whole grains, fruits, and vegetables. Our traditional food was low on animal products, salt, refined oils, sugars and flours but we have now moved towards a diet that is high in energy but low in nutrients - refined carbohydrates, high fat, meat products, and processed foods. In addition, a range of behavioural factors could also have a potential effect on obesity among children.

Double Trouble

The study also flags **severe under-nutrition in the country among all age groups. India ranks the highest in the world for underweight girls and the second highest for boys. In India, about 35 million girls and 42 million boys between five and 19 years were underweight in 2022**, compared to 39 million girls and 70 million boys in 1990 (a seven-percentage-point dip for girls and a 23-percentage-point dip for boys). **Among adults too, 61 million women and 58 million men were underweight in 2022**, a drop from 41.7 per cent in 1990 to 13.7 per cent for women and 39.8 per cent to 12.5 per cent for men.

Obesity and being underweight are both forms of malnutrition. These two divergent peaks show that India has a double burden of both thinness and obesity, which remains a significant health challenge in the country.

To successfully tackle both forms of malnutrition, it is vital we significantly improve the availability and affordability of healthy, nutritious foods.

Can we reverse these trends?

Experts say these trends can, however, be reversed with targeted interventions. Eating behaviour involves snacking, patterns of restrained eating, dieting, binge eating and dining out. **Consumption of added sugars plays a significant role in driving obesity, particularly when ingested through beverages like sodas, sweetened coffee, tea and juices.**

Addressing obesity in adolescents requires a multi-faceted approach that involves government policy, community initiatives and individual actions. At least 60 minutes of physical activity per day is recommended to be fit and healthy. The sale of unhealthy foods and beverages to children, restricting junk food advertisements targeted at children, clear nutritional labelling and promoting healthier options at school cafeterias are a must.

Parents should also involve children in their daily household chores. Children are spending their time sitting for long hours at school,

returning by bus/car/auto/scooter/van, spending time in front of TV /and playing with gadgets at home. They need to eat healthy food and regularly go for a health screening.

Why under-nutrition remains a challenge?

Maternal malnutrition is the key reason. More than half of pregnant women suffer from micronutrient deficiencies like those of iron and vitamin B12. The Lancet Food Commission, NFHS surveys and national comprehensive nutrition surveys among others have shown that dietary diversification is very poor among children. The school and college curriculum can include more chapters on nutrition, healthy eating habits, healthy food consumption, and increased physical activities like sports and games.

Why are obesity levels rising faster in women?

Women in more traditional settings may face more barriers to accessing physical activity, **have limited access to healthy food options or may be subject to dietary practices that prioritise the nutritional needs of other family members over their own.**

They have **limited access to healthcare and education about obesity**, its health implications and healthy lifestyle choices.

In addition, **biological factors, including pregnancy and menopause**, uniquely affect women's weight.

It is necessary to educate women at a community level on the importance of maintaining a healthy weight which will stem from practising a healthy lifestyle.

Sedentary lifestyles have gone up significantly over four decades. The National Nutrition Monitoring Bureau diet and nutrition surveys in rural areas carried out in different periods (decadal surveys) have shown that the sedentary activity had significantly increased from 34 per cent in 1975-79 to 74 per cent by

2012. This could be the major contributing factor for the high prevalence of obesity in India.

-----N---E---X---T-----

PM Modi launches hydrogen-powered ferry: features, significance

[#HydrogenPoweredFerry](#) [#HydrogenFuelCell](#)
[#InlandWaterways](#) [#HaritNaukaInitiative](#)
[#NationalGreenHydrogenMission](#)
[#ScienceandTechnology](#) [#GS3](#)

Prime Minister Narendra Modi Wednesday virtually launched India's first indigenously developed hydrogen fuel cell ferry. The vessel, manufactured by Cochin Shipyard Limited (CSL), will be deployed for service at Varanasi in Uttar Pradesh.

Built at a cost of Rs 18 crore, the ferry will be handed over to the Inland Waterways Authority of India by the CSL after rigorous trials. The Ministry of Ports, Shipping and Waterways met 75 per cent of the project cost.

What are the special features of the vessel?

The Hydrogen fuel cell vessel is a 24-meter-long catamaran, which can carry 50 people in its air-conditioned passenger area. The accommodation area has been constructed with high-quality fiberglass reinforced plastic, similar to metro train coaches.

Hydrogen fuel cell vessels do not use conventional batteries as the primary storage house of electrical energy. The vessels run on hydrogen fuel, which is stored in cylinders. This boat has five hydrogen cylinders that can carry 40kg of hydrogen and support eight hours of operations. The vessel is also fitted with a 3-kW solar panel.

The hydrogen fuel cell-powered vessel has zero emission, zero noise and is energy-efficient, which makes it more environment-friendly. Since there are no moving parts, the ferry requires less maintenance than combustion vessels.

How do hydrogen fuel cells work?

A hydrogen fuel cell generates electricity by utilising the chemical energy contained in hydrogen. It releases only pure water, not discharging pollutants. Hydrogen is loaded into cells. The energy within the hydrogen is converted into electricity and heat, which is then used to power the vessel's propulsion mechanism. In the fuel cell, the hydrogen reacts with the oxygen in the air to produce electricity. Unlike batteries, hydrogen fuel cells do not require recharging. Provided uninterrupted supply of fuel and oxygen, these cells would work continuously.

What type of cells have been used in the vessel?

This vessel uses a 50-kW PEM (proton-exchange membrane) fuel cell, with Lithium-Ion Phosphate batteries. The advantage is that the cells can quickly change their output depending upon the power demand. PEM fuel cells are popular in automotive applications because they operate at a lower temperature, and are lighter and more compact.

How was it developed?

The vessel has been built completely by the CSL, which also developed the vessel automation system and power management system. The hydrogen fuel cell system was developed by KPIT Technologies, Pune, in collaboration with the Council of Scientific and Industrial Research Labs, under the Union Ministry of Science and Technology.

While hydrogen fuel cell technology has been under development for maritime applications, only a few countries globally have done demonstration projects. This ferry, thus, has given India an early mover advantage to tap the potential of hydrogen as an emerging green fuel in the marine sector.

The 'Harit Nauka' (green boat) initiative of the Ministry of Ports, Shipping and Waterways envisages a green transition of inland vessels. In line with this, the ferry can be replicated in other parts of the country for urban mobility. It is also

a boost to the National Green Hydrogen Mission.

What is the Harit Nauka initiative?

In January 2024, the shipping ministry unveiled the Harit Nauka guidelines for inland vessels. As per the guidelines, all states have to make efforts to use green fuels for 50 per cent of inland waterways-based passenger fleets in the next one decade, and 100 per cent by 2045. This is to reduce greenhouse gas emissions as per the Maritime Amrit Kaal Vision 2047.

Globally, the shipping industry is increasingly transitioning to green fuels due to environmental regulations, sustainability goals, and advancements in green fuel technologies. Hydrogen and its derivatives are gaining attention for promising zero-emission fuels for the industry.

-----N---E---X---T-----

Why is ISRO building a second rocket launchport in Tamil Nadu's Kulasekarapattinam?

#ISROlaunchport

#SmallSatelliteLaunchVehicle

#SHAR

#ScienceandTechnology #GS3

Prime Minister Narendra Modi laid the foundation stone of the second rocket launchport of the Indian Space Research Organisation (ISRO) at Kulasekarapattinam on February 28. Situated at a geographically advantageous location in coastal Tamil Nadu's Thoothukudi district, the facility costs Rs 986 crore. It will be extensively and exclusively used for commercial, on-demand, and small satellite launches in the future.

Why does India need a new launchport?

With the Union government's recent policy announcing the opening of the space sector to private players, a sharp rise in the number of commercial launches is certain. To ensure that ISRO's first launchport, the Satish Dhawan Space Centre (SDSC) SHAR in Sriharikota, is not overburdened with a high

number of launches, the space agency has decided to build another facility.

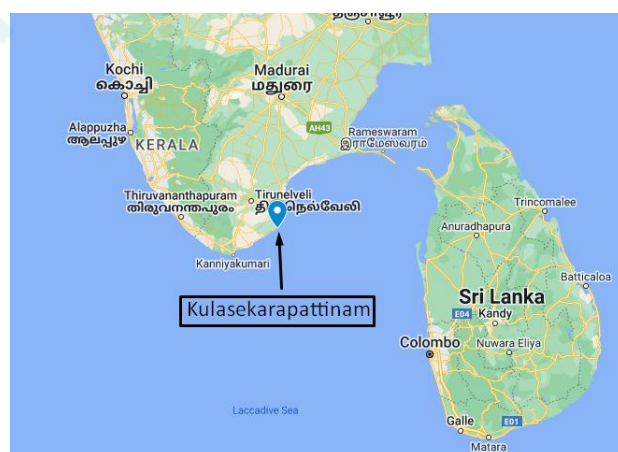
While SHAR will be only used for launching bigger and heavy-lift-off missions, the Kulasekarapattinam launchport will be used to launch smaller payloads. SHAR will also be available for India's big ticket missions to the Moon, Venus, and much touted human-flight mission, the Gaganyaan.

Private players could develop space-qualified sub-systems, build satellites, and even launch vehicles using the new launchport. It will also facilitate dedicated launch infrastructure for all the on-demand commercial launches.

Why is the new ISRO launchport located in Tamil Nadu?

Geographically, scientifically, and strategically, the Kulasekarapattinam launchport provides a natural advantage to ISRO's future launches pertaining to the Small Satellite Launch Vehicle (SSLV).

Allowing a direct southward and smaller launch trajectory for the light weight SSLVs carrying less fuel, the Kulasekarapattinam facility will boost ISRO's attempts to enhance payload capacities.



Currently, the trajectory followed by all launches from SHAR are longer as they follow a path which requires the vehicle to skirt eastwards around Sri Lanka before taking the actual southward flight. This consumes additional fuel. However, the same would not be required for future launches from Kulasekarapattinam, which is geographically located several kilometers to

boosts the chances for the virus to spread even further.

Higher sea surface temperatures might also be at play. For example, warmer sea temperatures near northern Chile have led to a

fall in the forage fish population and that has made sea lions weaker and more susceptible to disease.

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GS 3 – DEFENCE

Why INS Jatayu, India's new naval base in Lakshadweep, matters

#INSJatayu #Lakshadweep #Defence #GS3

On Wednesday (March 6), **Naval Detachment Minicoy will be commissioned as INS Jatayu, an upgraded naval base**, marking an important milestone in the Indian Navy's resolve to incrementally augment security infrastructure at the strategic Lakshadweep Islands.

While India has had a naval detachment in Minicoy, the southernmost atoll of the Lakshadweep archipelago, since the 1980s, **INS Jatayu will effectively be the country's second naval base in Lakshadweep. The Navy's first base on the islands, INS Dweepakshak in Kavaratti, was commissioned in 2012.**



INS Jatayu will be commissioned days after Prime Ministers Narendra Modi and Pravind Jugnauth of Mauritius jointly inaugurated an airstrip and a jetty that India has built on the Mauritian island of Agaléga off the coast of Africa in the western Indian Ocean.

Names of ships, bases, and detachments of the Indian Navy carry the prefix INS.

The Lakshadweep Islands

Lakshadweep, 'a hundred thousand islands' in Sanskrit and Malayalam, is an archipelago of 36 islands located between 220 km and 440 km from Kochi. The islands, only 11 of which are inhabited, have a total area of only 32 sq km.

The Lakshadweep are part of a chain of coralline islands in the Indian Ocean that includes Maldives to the south, and the Chagos archipelago farther beyond, to the south of the equator. Given their location in the Indian Ocean, the Lakshadweep are of huge strategic importance to India.

Minicoy straddles vital Sea Lines of Communications (SLOCs) — the world's main maritime highways — including the Eight Degree Channel (between Minicoy and Maldives) and the Nine Degree Channel (between Minicoy and the main cluster of Lakshadweep islands). In consequence, the Lakshadweep Islands are also vulnerable to marine pollution.

INS Jatayu naval base

The existing Naval Detachment Minicoy, which is under the operational command of the Naval Officer-in-Charge (Lakshadweep), will be commissioned as INS Jatayu.

A naval detachment has administrative, logistics, and medical facilities. **INS Jatayu will be upgraded to a naval base with additional infrastructure such as an airfield, housing, and personnel, after obtaining the requisite environmental and other clearances.**

GS 3 – DISASTER MANAGEMENT

Kerala declares man-animal conflict a state-specific disaster

#ManAnimalConflict #StateSpecificDisaster #SDMA #DisasterManagement #GS3

Amid repeated deaths from animal attacks and rising anger over them, Kerala on Wednesday (March 6) declared man-animal conflict as a state-specific disaster, becoming the first state in the country to do so.

What changes

At present, managing man-animal conflict is the responsibility of the forest department, which acts as per the Wild Life Protection Act. Once the issue is declared a state-specific disaster, the onus to deal with it shifts to the state disaster management authority, which, powered by the Disaster Management Act, can take quicker and more decisive action.

At the state level, the Chief Minister is the *ex officio* chairman of the body, and several departments, including the forest department, are stakeholders. In the districts, the district disaster management authority is headed by the district collector, who is also the executive magistrate.

Once an issue is declared a state-specific disaster or a national disaster, the disaster management authority can take quick decisions and actions overriding all other norms. Also, district collectors can directly intervene in their capacity as the chairman of the district disaster body.

Why the change

In the past few weeks, every time a life has been lost to man-animal conflict, there has been a mounting chorus to tranquilise/capture/kill the animals responsible.

At present, the chief wildlife warden — there is only one such post in the state — is the only authority to take a call on a wild animal wreaking havoc in human settlement. Also, in the past, there have been cases where the decision to tranquilise a killer animal, such as a wild elephant, has been questioned in court.

Once the issue is under the disaster management authority, it can take actions overriding other norms, including those under the Wildlife Protection Act.

As per section 71 of the Disaster Management Act, no court (except the Supreme Court or a High Court) shall have jurisdiction to entertain any suit or proceeding in respect of anything done by relevant authorities in pursuance of any power conferred by this Act. Section 72 of the Act says that the provisions of this Act will have an overriding effect on any other law during the specific period that a disaster has been declared.

Other state-specific disasters

In 2015, Odisha had declared snakebite a state-specific disaster. In 2020, Kerala declared Covid as a state specific disaster. Besides, heat waves, sunburn and sunstroke have been declared so in 2019, the phenomenon of soil piping in 2017, and lightning and coastal erosion in 2015.

-----E---N---D-----

INTERNATIONAL AFFAIRS

‘Super Tuesday’, a key day in the US Presidential elections

#SuperTuseday #USPresidentialElections #InternationalAffairs

How US elections work

American voters usually have a strong affiliation with either of the two major political parties. As part of the Presidential elections, they first vote in the primary and caucus polls, or in a third setup that is a combination of the two.

In some of these, only registered Democrats or Republicans can vote, instead of general voters.

“In primaries, voters go to polling stations and check the box against the name of their favoured candidate.” For example, Republican voters will have Donald Trump and Nikki Haley as their options, since other candidates have dropped out of the race.

In comparison, caucuses are lengthier. Voters attend meetings at public places such as school gymnasiums, churches, and community centres, debate candidate preferences and openly raise their hands for their choice of vote.

So, what is a Super Tuesday?

This year, the states will hold their primaries and caucuses from January to June. **In March or sometimes in February, one Tuesday sees multiple states going to polls the same day.**

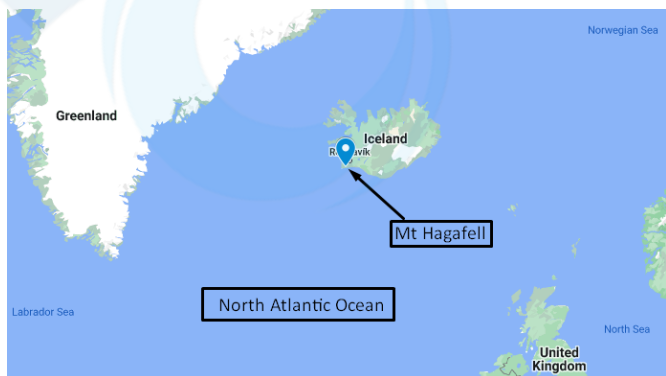
March 5 will see polls in 15 states – Alabama, Alaska, Arkansas, California, Colorado, Maine, Massachusetts, Minnesota, North Carolina, Oklahoma, Tennessee, Texas, Utah, Vermont and Virginia. **March 5, 2024, will be a ‘Super Tuesday’** in the ongoing cycle of the US Presidential elections, scheduled for November.

-----N---E---X---T-----

Iceland volcano spews lava again

#IcelandVolcano *#MountHagafell*
#PlacesInNews #InternationalAffairs

Volcanic eruption took place near Mount Hagafell in Iceland. A volcano erupted recently for the fourth time since December 2023.



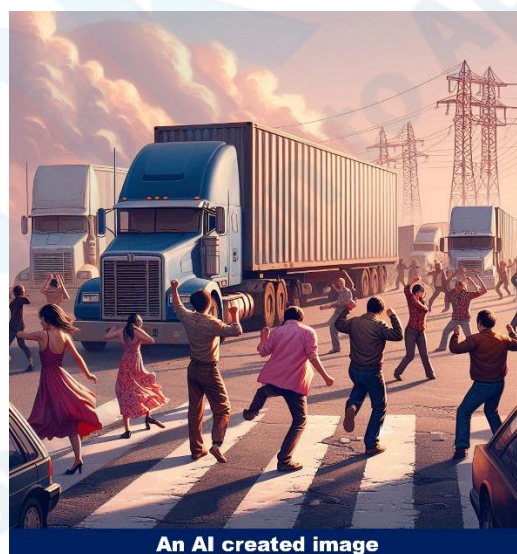
-----N---E---X---T-----

Cambodia bans musical horns in trucks

#MusicalHornsBan *#Cambodia*
#PlacesInNews #InternationalAffairs

Cambodian Prime Minister Hun Mane has ordered a ban on musical horns, after videos posted on social media showed **people dancing on roads and roadsides as passing trucks blasted rhythmic little tunes.**

Prime Minister called on Ministry of Public Works and Transportation and police across the country to **immediately take action against any vehicle whose normal horn has been replaced by a tune-playing one.**



-----N---E---X---T-----

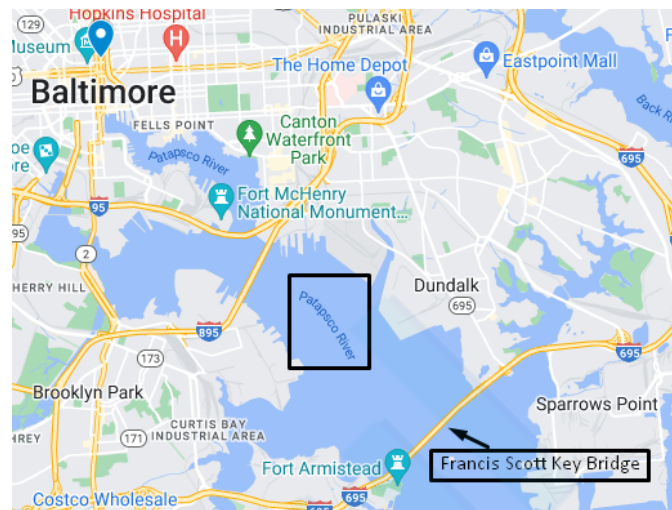
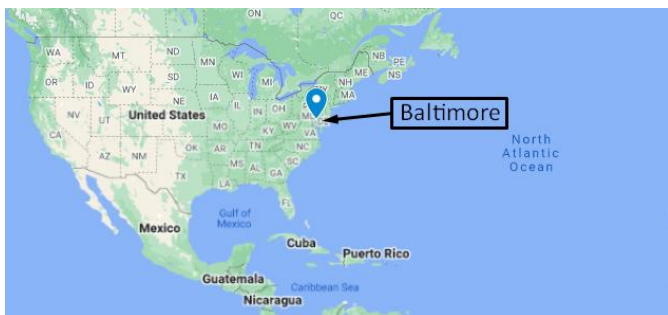
Baltimore post bridge collapses after hit by cargo ship manned by Indians

#BaltimorePort *#PatapscoRiver*
#FrancisScottKeyBridge *#DaliShip*
#PlacesInNews #InternationalAffairs

A massive freight ship stacked high with containers smashed into a bridge while sailing out of **Baltimore**, sending cars and people into the river below and closing **one of the busiest ports on the US Eastern Seaboard.** Rescuers pulled out two survivors, one of whom was hospitalized, and were searching for more in the **Patapsco River** after huge metal spans of the 2.57 km **Francis Scott Key Bridge** crumpled.

The entire 22-member crew of the cargo ship are Indians.

The ship named Dali faced a power issue and “lost propulsion” as it was leaving port, and crew on board notifies Maryland officials they had control of the vessel.



-----E---N---D-----

Practice Questions

1. With reference to the El Niño, consider the following statements:

1. It refers to the abnormal warming of sea surface waters in the equatorial Pacific Ocean.
2. It emerges naturally during autumn-summer in the northern hemisphere.
3. It does not affect the temperatures and rainfall patterns.
4. El Niño typically lasts for 2 to 3 months.

How many of the statement(s) given above is/are correct?

- A. only one
- B. only two
- C. only three
- D. all four

2. With reference to the Geologic Time Scale (GTS), consider the following statements:

1. The GTS is based on chronostratigraphic classification which deals with the relation between rock strata and the measurement of geological time.
2. The units in GTS like eons, eras, periods, epochs, and ages have same length of time.
3. The GTS (since the formation of Earth) is divided in ascending order of duration.

How many of the statement(s) given above is/are correct?

- A. only one
- B. only two
- C. all three
- D. none

3. With reference to the Penicillin G, consider the following statements:

1. It is the active pharmaceutical ingredient used in manufacturing antibiotics.
2. The production of Penicillin G was phased out in India after Chinese products flooded the market.
3. It is used for the treatment of bacterial infections.

How many of the statement(s) given above is/are correct?

- A. only one
- B. only two
- C. all three
- D. none

4. With reference to the silver filigree, consider the following statements:

1. It is known to have existed as far back as the 12th century.

2. Andhra Pradesh has received a geographical indication (GI) tag for this product.
3. In this art, silver bricks are transformed into thin fine wires or foils and used to create jewellery or showpieces.

How many of the statement(s) given above is/are correct?

- A. only one
- B. only two
- C. all three
- D. none

5. Recently, the Indian Navy commissioned INS Jatayu at which of the following places?

- A. Lakshadweep
- B. Andaman & Nicobar Islands
- C. Karwar
- D. Vishakhapatnam

6. With reference to the Sixth Schedule of the Constitution of India, consider the following statements:

1. It allows to create Autonomous District and Regional Councils with the power to administrate tribal areas.
2. The Schedule also gives power to collect land revenue and impose taxes.
3. Ladakh has been included under the Sixth Schedule.

How many of the statement(s) given above is/are correct?

- A. only one
- B. only two
- C. all three
- D. none

7. Which of the following person won Pritzker Architecture Prize for the year 2024?

- A. David Chipperfield
- B. Diébédo Francis Kéré
- C. Anne Lacaton
- D. Riken Yamamoto

8. The place Kulasekarapattinam was in the news. It is associated with:

- A. DRDO's new research centre in Telangana.
- B. ISRO's second rocket launchport in Tamil Nadu.
- C. Naval Port in Kerala.
- D. Island located north-west of Andaman and Nicobar.

9. Consider the following statement with reference to Methane:

1. It is an invisible but strong greenhouse gas, and the second largest contributor to global warming after carbon dioxide, responsible for 30 per cent of global heating since the Industrial Revolution.
2. The gas also contributes to the formation of ground-level ozone — a colourless and highly irritating gas that forms just above the Earth's surface.
3. The satellite which will track and measure methane emissions at a global scale is known as MethaneSAT.

How many of the statement(s) given above is/are correct?

- A. only one
- B. only two
- C. all three
- D. none

10. With reference man-animal conflict seen in news recently, consider the following statements:

1. Amid repeated deaths from animal attacks and rising anger over them, Kerala declared man-animal conflict as a state-specific disaster, becoming the first state in the country to do so.
2. Once the issue is declared a state-specific disaster, the onus to deal with it shifts to the state disaster management authority, which, powered by the Wildlife Protection Act, can take quicker and more decisive action.

Which of the statement(s) given above is/are correct?

- A. 1 only