



Factly Compilation

10th to 15th July, 2023

Factly Compilation for the Month of July (Second Week) 2023

1. [Ministry of Education releases combined report on Performance Grading Index for Districts \(PGI-D\) for the year 2020-21 & 2021-22](#)
2. [Objections overruled, Forest Bill goes to House unchanged](#)
3. [Data Protection Bill approved by Cabinet: Content, concerns](#)
4. [Coming, women-only courts for alternative dispute resolution](#)
5. [Understanding solar flares: How explosions on Sun's surface can lead to radio blackouts](#)
6. [GSTN launches geocoding in all states and UTs](#)
7. [At G20 meet, a Guinness effort to shine light on Karnataka's Lambani craft](#)
8. [Import of urea may ease by 2025, alternative forms will replace it, says Minister](#)
9. [Dilution of Article 370 led to unprecedented era of peace in J&K, Centre informs SC](#)
10. [Rafales, Scorpenes and jet engine development on the agenda of PM's France trip](#)
11. [Solomon Islands and China sign deals on police, economy, tech](#)
12. [Warming Bay: An ongoing heatwave in India's eastern sea is causing extreme rain in its northwest, say experts](#)
13. [RBI presses ahead with VRRR to suck out excess liquidity from banking system](#)
14. [El Nino, India, and the risk of food shortage](#)
15. [The unmaking of Vedanta-Foxconn's chip dream: What went wrong?](#)
16. [Poll bonds chief source of donations for parties: report](#)
17. [What is the legal row between farmers and PepsiCo?](#)
18. [Supreme Court asks ED chief to quit; but upholds amendments](#)
19. [415 million Indians came out of multidimensional poverty in 15 years, says UNDP study](#)
20. [Japan India Maritime Exercise-2023 concludes](#)
21. [Recommendations of 50th meeting of GST Council](#)
22. [Kui language inclusion in 8th schedule gets approval of Odisha govt](#)
23. [Massive shelf cloud appears in Haridwar amid heavy rains](#)
24. [Chandrayaan-3 launch: What are the different kinds of moon missions?](#)
25. [Union Minister inaugurates 'SAGAR SAMPARK' Differential Global Navigation Satellite System to Strengthen Maritime sector](#)
26. [PAU develops new wheat variety to keep diabetes, obesity in check](#)
27. [Fifth of suspected money mule cases involve under-21s'](#)
28. [Cabinet okays commercial mining of lithium, titanium](#)
29. [What is the National Research Foundation?](#)
30. [In UNHRC vote, India stands against desecration of Koran](#)
31. [Atal Vayo Abhyuday Yojana: Empowering the Elderly for a Dignified Life](#)
32. [Adani-Hindenburg case: Lack of requirement to disclose 'last natural person above every person' owning economic interest in FPIs is the challenge, SEBI to SC](#)
33. [Tele Law : Reaching the Unreached](#)
34. [Sangam literature for the layman](#)
35. [Proposed National Research Foundation looks to tap CSR to address funding concerns](#)
36. [Sediments decode climate and environmental changes on Kaas Plateau around 8664 years BP](#)
37. [Scientists say the 'Anthropocene epoch' began in the 1950s: What it means, significance](#)
38. [The first GSI survey of the Siachen](#)
39. [Low-energy-consuming switchable smart windows developed based on novel architecture for confining liquid crystals](#)
40. [European Parliament asks India to act promptly to end Manipur violence](#)
41. [PM Modi in France: What is Bastille Day, whose celebrations he will attend?](#)

Factly Compilation for the Month of July (Second Week) 2023

42. [Tropical waters have turned green in colour, courtesy climate change: Study](#)
43. [India, France set to co-develop jet engine](#)
44. [New Scorpene class submarines for the Navy: Why they are a crucial buy](#)
45. [Chandrayaan-3 | India's third lunar odyssey begins with perfect launch](#)
46. [Union Minister leads Mangrove Plantation drive in Chengalpattu , Tamil Nadu as part of the Mangrove Initiative for Shoreline Habitats and Tangible Incomes \(MISHTI\) scheme](#)
47. [Skill India project successfully revives the dying Namda Art of Jammu and Kashmir](#)
48. [Union Minister of Cooperation inaugurates the National Mega Conclave on FPO in the cooperative sector](#)
49. [Govt effort on to curb vector-borne diseases](#)
50. [Data Protection Bill poses severe restrictions to RTI Act, NCPRI cautions govt.](#)
51. [Export Preparedness Index \(EPI\) Report, 2022](#)
52. [What is the Guillain-Barré Syndrome?](#)

Factly Compilation for the Month of July (Second Week) 2023

1. [Ministry of Education releases combined report on Performance Grading Index for Districts \(PGI-D\) for the year 2020-21 & 2021-22](#)

Source: The post is based on the article “**Ministry of Education releases combined report on Performance Grading Index for Districts (PGI-D) for the year 2020-21 & 2021-22**” published in **PIB** on **9th July 2023**

What is the News?

The Department of School Education and Literacy (DoSE&L), Ministry of Education has released the Performance Grading Index for Districts (PGI-D) combined report for 2020-21 and 2021-22.

What is the Performance Grading Index for Districts (PGI-D)?

Aim: To assess the performance of the school education system at the District level by creating an index for comprehensive analysis.

Methodology: PGI-D structure comprises of total weight age of 600 points across 83 indicators, which are grouped under 6 categories viz., Outcomes, Effective Classroom Transaction, Infrastructure Facilities & Student’s Entitlements, School Safety & Child Protection, Digital Learning and Governance Process.

– These categories are further divided into 12 domains such as Learning Outcomes and Quality (LO), Access Outcomes (AO), Teacher Availability, Learning Management (LM), Infrastructure, Facilities, school Safety and Child Protection (SS&CP), Digital Learning (DL) among others.

Categories: PGI-D has 10 grades under which districts are categorized with Daksh being the highest grade (above 90%) followed by Utkarsh (81%-90%); Ati-Uttam (71%-80%); Uttam (61%-70%); Prachesta-1 (51%-60%); Prachesta-2 (41%-50%); Prachesta-3 (31%-40%); Akanshi-1 (21% to 30%); and Akanshi-2 (11% to 20%).

– The lowest grade is Akanshi-3, for districts that score less than 10%.

Significance: PGI-D is expected to help the state education departments to identify gaps at the district level and improve their performance in a decentralized manner.

What are the key findings of PGI-D 2020-21 and 2021-22?

Learning outcomes in districts

None of the districts attained the top two grades according to the Performance Grading Index for Districts (PGI-D) combined report for 2020-21 & 2021-22. The table summarises the scores achieved by districts in the two years



Score range (%)	Number of districts in 2020-21	Number of districts in 2021-22
>90	0	0
81 to 90	0	0
71 to 80	124	51
61 to 70	277	271
51 to 60	229	290
41 to 50	86	117
31 to 40	24	18
21 to 30	0	1
11 to 20	2	0
upto 10	0	0

Source: The Hindu

There are no districts in the country figuring in the top two grades — “Daksh” and “Utkarsh” in the 2020-21 and 2021-22 index.

121 districts were graded as Ati-Uttam for 2020-21. This number fell by more than half in 2021-22 with just 51 districts making the grade.

Factly Compilation for the Month of July (Second Week) 2023

Among the best-performing districts in 2020-21, the maximum are from Rajasthan (26) followed by Gujarat (22) and Punjab (19). All nine districts of Delhi have figured in the “Ati Uttam” category.

In the digital learning domain during 2021-22, the majority of districts are still in the bottom three grades indicating the need for boosting the digital learning aspect.

2. Objections overruled, Forest Bill goes to House unchanged

Source: The post is based on the article “**Objections overruled, Forest Bill goes to House unchanged**” published in **Indian Express** on **10th July 2023**

What is the News?

A Parliamentary committee set up to examine the proposed amendments to the Forest (Conservation) Act, 1980 has endorsed the amended Bill in its entirety.

What is the Forest (Conservation) Amendment Bill, 2023?

The Forest (Conservation) Amendment Bill, 2023, is a proposed legislation aimed at amending the Forest (Conservation) Act, 1980, with the objective of promoting sustainable development while conserving India’s forests and biodiversity.

What are the key provisions of the Forest (Conservation) Amendment Bill, 2023?

Land under the purview of the Act: The Bill provides that two types of land will be under the purview of the Act: (i) land declared/notified as a forest under the Indian Forest Act, 1927 or under any other law, or (ii) land not covered in the first category but notified as a forest on or after October 25, 1980 in a government record.

Exempted categories of land: The Bill exempts certain types of forest land from the provisions of the Act such as:

- Forest land along a rail line or a public road maintained by the government providing access to a habitation, or to a rail, and roadside amenities up to a maximum size of 0.10 hectare.
- Forest land situated within 100 km from international borders, Line of Control, or Line of Actual Control, for construction of a strategic linear project of national importance and concerning national security
- Forest land up to 10 hectares, for constructing security-related infrastructure
- Forest land proposed to be used for constructing defense related projects, camps for paramilitary forces, or public utility projects up to five hectares in a left-wing extremism affected area.

Assignment/leasing of forest land: Under the Act, a state government requires prior approval of the central government to assign forest land to any entity not owned or controlled by the government.

– In the Bill, this condition is extended to all entities, including those owned and controlled by the government.

Permitted activities in forest land: The Act specifies certain activities that will be excluded from non-forest purposes, meaning that restrictions on the use of forest land for non-forest purposes will not apply.

– These activities include works related to the conservation, management, and development of forest and wildlife such as establishing check posts, fire lines, fencing, and wireless communication.

Factly Compilation for the Month of July (Second Week) 2023

– The Bill adds more activities to this list such as: (i) zoos and safaris under the Wild Life (Protection) Act, 1972 (ii) ecotourism facilities, (iii) silvicultural operations and (iv) any other purpose specified by the central government.

Power to issue directions: The Bill adds that the central government may issue directions for the implementation of the Act to any authority/organization under or recognised by the centre, state, or union territory (UT).

What are the key issues with the Forest (Conservation) Amendment Bill, 2023?

[Click Here to read](#)

3. [Data Protection Bill approved by Cabinet: Content, concerns](#)

Source: The post is based on the article “**Data Protection Bill approved by Cabinet: Content, concerns**” published in **Indian Express** on **6th July 2023**

What is the News?

The Digital Personal Data Protection Bill, 2022 is expected to be tabled in the upcoming Parliament’s Monsoon Session.

What are the key provisions of the Digital Personal Data Protection Bill, 2022?

Applicability: The Bill will apply to processing of digital personal data within India and to data processing outside the country if it is done for offering goods or services, or for profiling individuals in India.

Collection of Personal Data: The bill requires entities that collect personal data — called data fiduciaries — to maintain the accuracy of data, keep data secure, and delete data once their purpose has been met.

Data Breach: The bill is expected to allow “voluntary undertaking” — meaning that entities violating its provisions can bring it up with the data protection board which can decide to bar proceedings against the entity by accepting settlement fees.

– Repeat offences of the same nature could attract higher financial penalties, the official said. The highest penalty — to be levied for failing to prevent a data breach — has been prescribed at Rs 250 crore per instance.

[Click Here to read more](#)

What are the key changes that are made in the bill now?

[Click Here to read](#)

What are the key concerns with the bill?

Firstly, the Bill has prescribed that the central government can exempt “any instrumentality of the state” from adhering to the provisions of the bill on account of national security, relations with foreign governments, and maintenance of public order among other things.

Secondly, the central government will have complete control in appointing members of the data protection board — an adjudicatory body that will deal with privacy-related grievances and disputes between two parties — is learnt to have been retained as well.

Factly Compilation for the Month of July (Second Week) 2023

Thirdly, there is also concern that the law could dilute the Right to Information (RTI) Act, as personal data of government functionaries is likely to be protected under it, making it difficult to be shared with an RTI applicant.

What are the data protection laws in other countries?

[Click Here to read](#)

4. [Coming, women-only courts for alternative dispute resolution](#)

Source: The post is based on the article **“Coming, women-only courts for alternative dispute resolution”** published in **The Hindu** on **8th July 2023**

What is the News?

The Central Government is launching a unique initiative of setting up women-only courts called Nari Adalats.

What are Nari Adalats?

Nari Adalats are being set up at the village level as an alternate dispute resolution forum for resolving issues like domestic violence, property rights and countering the patriarchal system.

It will also raise awareness about social schemes under the government while collecting valuable feedback to enhance the effectiveness of these initiatives.

It will be launched on a pilot basis in 50 villages each in Assam and J&K and would be extended to the rest of the country over the next six months.

Ministries involved: This initiative is being implemented by the **Ministry of Women and Child Development** under the Sambal sub-scheme of **Mission Shakti**.

– The implementation will be done in collaboration with the Ministry of Panchayati Raj, the Ministry of Rural Development and Common Service Centers operated by the Ministry of Electronics & Information Technology (MeitY).

The scheme takes inspiration from the Parivarik Mahila Lok Adalats [People’s Court of Women] which were run by the **National Commission for Women (NCW) till 2014-15**.

Composition of Nari Adalats:

The Nari Adalat of each village would have 7-9 members/Nyaya Sakhis [legal friends]: Half of which would be the elected members of the gram panchayat and the other half are women with social standing like teachers, doctors and social workers – who would be nominated by the villagers.

The head of Nari Adalat called the Mukhya Nyaya Sakhi [chief legal friend] will be chosen among the Nyaya Sakhis, generally for a six-month term.

The Nari Adalat will not hold any legal status as its primary focus will be on reconciliation, grievance redressal and creating awareness of rights and entitlements.

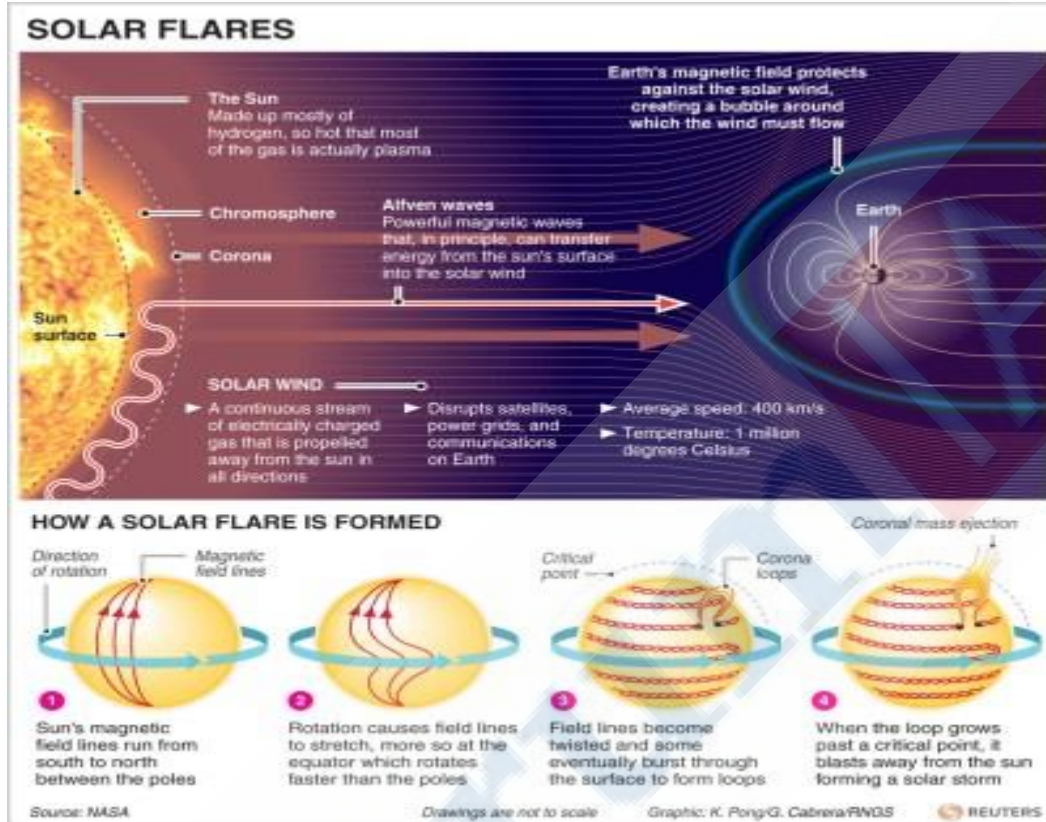
5. [Understanding solar flares: How explosions on Sun’s surface can lead to radio blackouts](#)

Source: The post is based on the article **“Understanding solar flares: How explosions on Sun’s surface can lead to radio blackouts”** published in **Down To Earth** on **6th July 2023**

What is the News?

The Sun emitted an X-class solar flare disrupting radio communications over parts of the United States and the Pacific Ocean.

What are Solar Flares?



Source: Reuters

A solar flare is a tremendous explosion on the Sun that happens when energy stored in 'twisted' magnetic fields (usually above sunspots) is suddenly released.

They can heat a substance to several millions of degrees in a matter of minutes, producing a burst of radiation that spans the electromagnetic spectrum, from radio waves to x-rays and gamma rays.

Impact of Solar Flares: Solar Flares can affect radio communications, power grids and navigation signals and endanger astronauts and spacecraft.

Categories: Solar flares can be divided into various categories based on their brightness in X-ray wavelengths.

- **X-class flares** are large, significant events that have the power to cause global radio blackouts and persistent radiation storms in the upper atmosphere.
- **Medium-sized M-class flares** typically result in brief radio blackouts that affect the Earth's polar regions. Sometimes an M-class flare is followed by small radiation storms.
- **C-class flares** are slight and have little effect on the Earth.

Factly Compilation for the Month of July (Second Week) 2023

6. [GSTN launches geocoding in all states and UTs](#)

Source: The post is based on the article “**GSTN launches geocoding in all states and UTs**” published in **Indian Express** on **8th July 2023**

What is the News?

The GST Network (GSTN) has introduced geocoding functionality in all states and union territories of India.

What is Geocoding?

Geocoding converts an address or description of a location into geographic coordinates.

It has been introduced to ensure the accuracy of address details in GSTN records and streamline the address location and verification process.

This is important because the accuracy of the address details is crucial in determining the applicable GST rates, place of supply rules, and other compliance requirements.

The GST Network has already geocoded 1.8 crore principal places of businesses.

Applicability: This functionality is currently available for various types of taxpayers, including normal taxpayers, composition taxpayers, SEZ units, SEZ developers, Input Service Distributors (ISDs) and casual taxpayers who are active, cancelled or suspended.

What is the GST Network (GSTN)?

7. [At G20 meet, a Guinness effort to shine light on Karnataka’s Lambani craft](#)

Source: The post is based on the article “**At G20 meet, a Guinness effort to shine light on Karnataka’s Lambani craft**” published in **Indian Express** on **11th July 2023**.

What is the News?

At the third G20 culture working group (CWG) meeting in Hampi, a Guinness world record was created for the ‘largest display of Lambani items’.

Over 450 Lambani women artisans and cultural practitioners associated with Sandur Kushala Kala Kendra Kendra (SKKK) came together to display Lambani items.

What is Lambani embroidery?

Lambani embroidery is a vibrant and intricate form of textile embellishment characterized by colorful threads, mirror work, and a rich array of stitch patterns.

Practised in: It is practised in several villages of Karnataka such as Sandur, Keri Tanda, Mariyammanahalli, Kadirampur, Sitaram Tanda, Bijapur, and Kamalapur.

Community involved: This embroidery is predominantly done by the skilled women of the Lambani community. It serves them as a vital source of livelihood and sustenance.

Features: Lambani embroidery involves stitching together small pieces of discarded fabric to create a beautiful fabric.

Significance: The embroidery traditions of the Lambanis are shared in terms of technique and aesthetics with textile traditions across Eastern Europe, West, and Central Asia. This signifies

Factly Compilation for the Month of July (Second Week) 2023

the movement of the nomadic communities across such regions historically, forming a shared artistic culture.

What is Sandur Kushala Kala Kendra Kendra (SKKK)?

Sandur Kushal Kala Kendra(SKKK) is a registered society established in 1988.

Aim: To revive traditional crafts and enhance the livelihoods of craftswomen by nurturing their skills, promoting their products, and thus ensuring a steady income.

Contribution to Lambani craft: SKKK has gained national and international recognition for the Lambani craft earning the prestigious **UNESCO Seal of Excellence for Handicrafts** in South Asia in 2004 and 2012.

– It has also obtained the **GI (Geographical Indication) tag** for the craft ‘**Sandur Lambani hand embroidery**’ in the year 2008.

8. [Import of urea may ease by 2025, alternative forms will replace it, says Minister](#)

Source: The post is based on the article “**Import of urea may ease by 2025, alternative forms will replace it, says Minister**” published in **The Hindu** on **11th July 2023**

What is the News?

The Union Cabinet has approved a Rs 3.70 lakh crore special package of innovative schemes for farmers.

What are the major components of the special package announced for farmers?

There are four components in this package:

First component: Ensuring a subsidy for urea for the next three years. A sum of Rs 3,68,676.7 crore has been committed for urea subsidy from 2022-23 to 2024-25.

Second component: Prime Minister’s Programme for Restoration, Awareness Generation, Nourishment, and Amelioration of Mother Earth (PM-PRANAM) scheme.

Third component: Market Development Assistance(MDA) of ₹1,500 per metric tonne to support marketing of organic fertilizers, produced as a by-product from bio-gas plants/compressed bio-gas (CBG) plants set up under GOBARdhan scheme.

Fourth component: Introduce sulphur coated urea as Urea Gold. This will address sulphur deficiency for the soil in the country and improve our crop productivity.

What was the need for such a special package?

The package had to be brought in as the use of fertilizers has become unbalanced in the country.

The nitrogen, phosphorus and potassium ratio should have been 4:2:1. Instead, it is 8:3:1. Due to this, the balance of the soil has been damaged and production has become saturated.

According to a study, overuse of fertilizers has resulted in a 16% decrease in production in Punjab despite a 10% increase in the use of fertilizers in the State during the same period. This is leading to the deterioration of soil health over a period of time

Hence, it is clear that balanced use of fertilizers is needed for steady production, food security, and for helping farmers too. That’s why, this package has been announced.

Factly Compilation for the Month of July (Second Week) 2023

What are the steps being taken to reduce the use of chemical fertilizers?

India is not planning to stop the use of chemical fertilizers completely but will be adopting alternate fertilizers.

For example, instead of urea, we have launched neem-coated urea, sulphur-coated urea, and nano urea, which will reduce the consumption of chemical fertilizers without impacting production.

The country is moving towards natural farming and organic farming step by step.

These steps will help India reduce its import dependency on urea by 2025.

9. Dilution of Article 370 led to unprecedented era of peace in J&K, Centre informs SC

Source: The post is based on the article “**Dilution of Article 370 led to unprecedented era of peace in J&K, Centre informs SC**” published in **The Hindu** on **11th July 2023**

What is the News?

The Centre has filed an affidavit in the Supreme Court defending the abrogation of Article 370 of the Constitution.

What is the case before the Supreme Court?

A five judge Constitution bench has been constituted to hear a number of petitions challenging a Presidential Order from 2019 which abrogated Article 370.

Under Article 370, special rights and privileges have been granted to the people of Jammu and Kashmir since 1954 in accordance with the Instrument of Accession.

Subsequently, the Jammu and Kashmir (Reorganization) Act of 2019 came into effect bifurcating the state into the Union Territories of Jammu and Kashmir and Ladakh.

What is the Central Government stand on the abrogation of Article 370?

Centre has defended the abrogation of Article 370 of the Constitution. It has said that this decision has brought “unprecedented stability and progress” to the region. For instance,

- Stone-pelting incidents, which reached as high as 1,767 in 2018, have now ceased completely in 2023.
- The anti-terror actions have led to the dismantling of the terrorist ecosystem, resulting in a significant drop in terrorist recruitment from 199 in 2018 to 12 in 2023.
- There has been a significant increase in tourist visits to the valley after the decision. As of December 2022, 1.88 crore tourists have visited.
- Reservation had been extended to persons residing in areas adjoining the Actual Line of Control, it noted. Seats had been reserved for Scheduled Tribes persons and the Pahari speaking people.
- Duly-elected three-tier panchayati raj system could be established for the first time in the history of Jammu and Kashmir after 2019.
- Crucial Central laws, including right to free education for children and land acquisition compensation statutes, were now applicable in Jammu and Kashmir.

Factly Compilation for the Month of July (Second Week) 2023

– The annual budget of Jammu and Kashmir had grown from ₹80,423 crore in 2019-20 to ₹1,18,500 crore in 2023-24.

[10. Rafales, Scorpènes and jet engine development on the agenda of PM's France trip](#)

Source: The post is based on the article “**Rafales, Scorpènes and jet engine development on the agenda of PM's France trip**” published in **The Hindu** on **11th July 2023**

What is the News?

The Indian Prime Minister will be visiting France as Chief Guest at the Bastille Day parade.

What will be the key defence deals that are expected to be signed between India and France?

Rafale M Aircraft: India is planning to buy 26 Rafale M Aircrafts from France. They are intended for deployment on the Indian Navy's aircraft carriers INS Vikrant and INS Vikramaditya, which currently employ the MiG-29.

Three Scorpène-class submarines: Scorpène are a class of diesel-electric attack submarines jointly developed by the French Naval Group and the Spanish company Navantia under Project 75. They are being built at Mazagon Dockyards Limited in Mumbai.

Five of Scorpène submarines have been commissioned and the sixth one is expected to be commissioned early next year.

However, the ageing submarine fleet and delay in the procurement of new submarines under P-75I meant the Navy has to procure three follow-on submarines to arrest the depleting fleet.

Hence, that's why the Indian Navy is now planning to buy Three additional Scorpène class submarines under the repeat clause where they would be built in the Mazagon Dockyards Limited in Mumbai.

Aircraft engine: India is planning to sign a pact with France for the co-development of fighter jets to power India's futuristic Advanced Medium Combat Aircraft (AMCA) fighter jet.

The AMCA will be the cornerstone of the Indian Air Force's manned tactical fleet within the next decade.

[11. Solomon Islands and China sign deals on police, economy, tech](#)

Source: The post is based on the article “**Solomon Islands and China sign deals on police, economy, tech**” published in **The Hindu** on **11th July 2023**

What is the News?

China and Solomon Islands have jointly announced the official establishment of a comprehensive strategic partnership. As part of this, the two countries signed a deal on police cooperation.

Where is Solomon Island?

The Solomons are an archipelago of hundreds of small islands in the southern part of the Pacific Ocean. It is located approximately 2,000 km from Australia.

There are six big islands – the largest, Guadalcanal, is home to the capital Honiara.

Factly Compilation for the Month of July (Second Week) 2023

About China-Solomon Island relations:

Solomon Islands and China (PRC) established official diplomatic relations in 2019. Prior to this, Solomon Islands had diplomatic relations with Taiwan.

In 2022, China's government signed a [security deal](#) with the Solomon Islands.

Why is the US concerned with the China-Solomon Island relations?

The Solomon Islands are strategically located in the Pacific, and the United States and its regional allies, such as Australia and New Zealand, are concerned that the China-Solomon Islands security pact allows Chinese naval vessels to replenish there.

That could open the door to a Chinese naval base, which would significantly extend China's military reach in the South Pacific.

What are the steps taken by the US to address Chinese presence in the Pacific Island countries?

The US has responded by announcing plans to reopen an American Embassy in the Solomon Islands.

The US convened a summit of Pacific Island leaders in September, 2022 to unveil a strategy that included cooperation in climate change, maritime security and preventing overfishing.

US has promised \$810 million in new aid for Pacific Island nations over the next decade, including \$130 million to address the effects of climate change

[12. Warming Bay: An ongoing heatwave in India's eastern sea is causing extreme rain in its northwest, say experts](#)

Source: The post is based on the article **“Warming Bay: An ongoing heatwave in India's eastern sea is causing extreme rain in its northwest, say experts”** published in **Down To Earth** on **8th July 2023**

What is the News?

The northern Bay of Bengal has been experiencing an intense marine heatwave. This has led to India's usually arid northwest receiving extreme rainfall.

What is causing heavy rainfall in Northwest India?

During the monsoon, the northern Bay of Bengal tends to be warm.

This region needs to be warm as it plays an important role in the southwest monsoon's trajectory as it enables the monsoon winds blowing from the southwest to cross over into the Bay of Bengal and bring moisture into the Indian subcontinent.

However, the northern Bay of Bengal currently has been experiencing an intense **marine heatwave**. Due to this, it is warmer than usual and may be contributing to the extreme rainfall in northwest India.

What are Marine Heatwaves?

Marine heatwaves (MHW) are periods of extremely high temperatures in the ocean (above the 90th percentile).

Such heat waves are caused by an increase in the heat content of oceans, especially in the upper layers. Worldwide, they are one of the major results of human-induced global warming.

Factly Compilation for the Month of July (Second Week) 2023

During an MHW, the average temperatures of the ocean surface (up to a depth of 300 feet) goes 5-7 degrees Celsius above normal.

Impact: These events cause habitat destruction due to coral bleaching, seagrass destruction, and loss of kelp forests, affecting the fisheries sector adversely.

– An underwater survey showed that 85% of the corals in the Gulf of Mannar near the Tamil Nadu coast got bleached after the marine heatwave in May 2020.

13. [RBI presses ahead with VRRR to suck out excess liquidity from banking system](#)

Source: The post is based on the article “**RBI presses ahead with VRRR to suck out excess liquidity from banking system**” published in **The Hindu Businessline** on **7th July 2023**

What is the News?

The Reserve Bank of India (RBI) has said that it will conduct a three-day variable rate reverse repo (VRRR) auction for Rs 2 lakh crore.

What is Variable rate reverse repo(VRRR)?

The Reserve Bank of India(RBI) uses various ways to increase or decrease liquidity in the banking system.

Repo rate is the rate at which the central bank gives loans to commercial banks against government securities.

Reverse repo rate is the interest that RBI pays to banks for the funds. Variable rate reverse repo(VRRR) is a sub-type of reverse repo.

VRRR is usually undertaken to reduce surplus liquidity by withdrawing existing cash in the system.

RBI has been conducting VRRR everyday since June 30 to ensure that the overnight [call money rate](#) remains close to the target rate of 6.50 per cent.

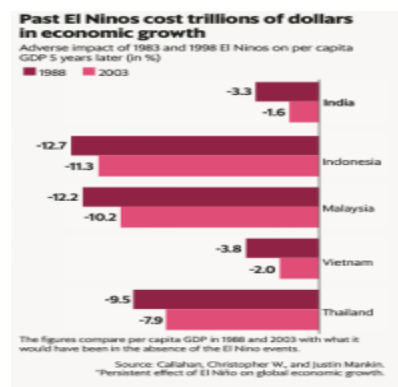
14. [El Nino, India, and the risk of food shortage](#)

Source: The post is based on the article “**El Nino, India, and the risk of food shortage**” published in **Livemint** on **11th July 2023**

What is the News?

The UN World Meteorological Organisation (WMO) has confirmed it: El Niño conditions have arrived and are expected to become moderate to strong as they develop over the coming year.

What will be the impact of El Nino on India?



Source: Livemint

Impact on Trade Pattern of India: El Nino generally leads to drier conditions in Southeast Asia and Australia, which puts at risk critical crops from countries in these regions, some of which are key trading partners of India.

Australia, the second-largest wheat exporter, is officially expected to see a decline in wheat production. Similarly, palm oil production is likely to suffer in Indonesia and Malaysia.

This will have an impact on India's trade patterns. For instance, India imports 56% of its edible oil needs, with huge reliance on imports from Indonesia and Malaysia, where El Nino could hurt palm oil production.

India could then opt for alternative sources like soya bean oil from Brazil as it is expected to receive good rainfall and get a bumper soya bean crop.

Similarly, Paddy, a major crop produced by Indonesia and Vietnam could also witness a decline in production. India being the second largest rice producer in the world can help these regions meet their deficit if it first procures enough to meet domestic demand.

Impact on economic growth of India: El Nino has been known to harm economic growth, costing tens of billions of dollars in direct impacts.

The World Meteorological Organization has said there is a 90% chance that El Nino will continue during the second half of 2023. It also said countries should prepare and limit the impact on their economies.

The Reserve Bank of India has expressed concern over the rising international prices of key food items like rice and sugar and said the adverse climate events have the potential to quickly change the direction of inflation trajectory. It has projected a gross domestic product (GDP) growth of 6.5% for FY24.

However, the International Monetary Fund has lowered its estimate of India's GDP growth in 2023-24 to 5.9%.

15. [The unmaking of Vedanta-Foxconn's chip dream: What went wrong?](#)

Source: The post is based on the article **"The unmaking of Vedanta-Foxconn's chip dream: What went wrong?"** published in **Indian Express** on **11th July 2023**

Factly Compilation for the Month of July (Second Week) 2023

What is the News?

Taiwanese electronics manufacturer Foxconn has announced that it has withdrawn from a joint venture with Vedanta Ltd which was set up to produce semiconductors in India.

Why is chipmaking crucial for India?

Prime Minister has made chip manufacturing a top priority for India's economic strategy. This is because:

Firstly, Chips are an integral part of pretty much all electronic products so making them in India will massively improve the country's net value addition to the overall electronics manufacturing process.

Secondly, building semiconductors in India will eventually help India reduce its imports. The demand for semiconductors in India will reportedly reach around USD 100 billion by 2025, up from the current demand of USD 24 billion.

Thirdly, semiconductor manufacturing also has strategic advantages, as countries don't want to depend on their imports for essential infrastructure like defence and power.

Fourthly, China is currently one of the major destinations for chips manufacturing. As more companies are trying to diversify their bases from China, India has an opportunity to emerge as a reliable destination.

– **Note:** The United States of America has also passed the [CHIPS Act](#) in 2022 providing subsidies of around \$280 billion for manufacturing chips in the country. It has also imposed additional restrictions and sanctions on the Chinese semiconductor industry.

[16. Poll bonds chief source of donations for parties: report](#)

Source: The post is based on the article **“Poll bonds chief source of donations for parties: report”** published in **The Hindu** on **12th July 2023**

What is the News?

Association of Democratic Reforms(ADR) has released a report titled “Analysis of Donations to Registered Political Parties from FY 2016-17 and FY 2021-22.

What are the key findings of the report?

Donations to Political Parties: The total donations declared by the 7 National Parties from Electoral Bonds, corporate sector and other donations between FY 2016-17 and 2021-22 were Rs 13190 crores (80.247%).

– For National parties, there was a 743% increase in donations from electoral bonds between FY 2017-18 and FY 2021-22 while for corporate donations this increase is only 48%.

– Electoral Bonds are the most preferred mode of donations for making contributions to National and Regional parties followed by direct corporate donations.

– The total donations declared by BJP is more than three times the total donations declared by all other National parties.

Electoral Bonds: During the six-year period, more than 52% of BIP's total donations came from Electoral Bonds worth ₹5,271.97 crore.

Factly Compilation for the Month of July (Second Week) 2023

– The Congress declared the second highest donations from bonds of ₹952.29 crore (61.54% of its total donations) followed by the Trinamool Congress that got ₹767.88 crore (93.27%).

– Among the regional parties, the BJD received 89.81% of its total donation from bonds worth ₹622 crore, while the DMK got ₹431.5 crore (90.7%) and the TRS got ₹383.65 crore (80.45%).

Direct Corporate Donations: The direct corporate donations declared by 7 National parties are more than five times the corporate donations declared by 31 Regional Parties during the six-year period.

– The corporate donations declared by BJP are at least three-four times more than the total corporate donations of all other National Parties. In FY 2017-18, it was more than eighteen times that of all other National parties.

– For the six-year period, BSP has consistently declared no corporate donations while CPI has declared receiving zero corporate donations from FY 2018-19 to FY 2021-22.

17. [What is the legal row between farmers and PepsiCo?](#)

Source: The post is based on the article **“What is the legal row between farmers and PepsiCo?”** published in **The Hindu** on **12th July 2023**

What is the News?

The Delhi High Court has held that there was “no merit” in the appeal filed by PepsiCo over the patent rights for its ‘unique potato’ variety.

What is the case about?

The [Protection of Plant Varieties and Farmers Rights’ Authority \(PPVFRA\)](#) had revoked PepsiCo’s registration with respect to its potato plant variety, ‘FL 2027’ (used in Lay’s chips).

The rights were revoked on the grounds provided under Section 34 (grounds for revocation of registration) of the Protection of Plant Varieties and Farmers Rights Act, 2001 (PPV&FR).

Against this judgment, Pepsico went to Delhi High Court.

What is FL 2027?

FL 2027 is a potato variety with high dry matter and low sugar content better suited for making chips.

This variety was developed in 1996 by Robert W Hoopes, a US breeder employed with Frito-Lay Agricultural Research, a division of PepsiCo Inc.

PepsiCo India was granted a certificate of registration for FL 2027 as an “extant variety” on February 1, 2016.

The validity period – during which nobody else could commercially produce, sell, market, distribute, import or export it without the breeder’s authorisation – was six years from the date of registration and extendable up to 15 years.

What is Protection of Plant Varieties and Farmers Rights Act, 2001(PPV&FR)?

[Click Here to read](#)

Factly Compilation for the Month of July (Second Week) 2023

What is Section 34 of the PPV&FR Act?

According to Section 34 of the PPV&FR Act, the protection granted to a breeder may be revoked by the authority on the following grounds: **1)** grant of a registration certificate is based on incorrect information furnished by the applicant **2)** registration certificate was granted to an ineligible person **3)** when the breeder does not provide the registrar with the required documents **4)** failure to provide an alternative denomination for variety registration in case the earlier variety provided is not permissible for registration **5)** failure of the breeder to provide the required seeds for compulsory license **6)** failure to comply with the acts, rules, regulations and directions issued by the Authority and **7)** if the grant of the registration certificate is against public interest.

Why did the PPVFRA revoked Pepsico's patent right over FL 2027?

PepsiCo had sought the registration of FL 2027 variety as a “new variant” instead of an “extant variant” in its application in 2012 despite furnishing the date of its commercialisation in India to be 2009.

However, to be registered as a “new variant” an additional requirement of ‘novelty’ in addition to ‘distinctiveness’, ‘uniformity’ and ‘stability’ must be satisfied one year before the date of filing of the application for registration.

The court held that FL 2027 could not fulfill the criteria of novelty and was only eligible for registration under “extant variety”.

Will this ruling impact investor confidence in India's IP regime for protection of plant varieties and breeder's rights?

Probably not. The High Court has merely faulted PepsiCo for wrongly applying for registration of FL 2027 under the category of “new variety” and giving an incorrect date for its first commercialisation.

18. [Supreme Court asks ED chief to quit; but upholds amendments](#)

Source: The post is based on the article “**Supreme Court asks ED chief to quit; but upholds amendments**” published in **The Hindu** on **12th July 2023**

What is the News?

The Supreme Court has said that the third extension to the present Enforcement Directorate (ED) chief was illegal and in violation of its judgment in 2021.

However, the court permitted him to continue in office until July 31 to allow for a smooth transfer.

What was the case before the Supreme Court?

The present ED Chief was first appointed as the ED Director in 2018, for a fixed period of two years.

Days before his tenure was to end, the President modified the previous order retrospectively and changed Mishra's tenure to three years.

In November 2021, the Supreme Court upheld the extension granted to ED Chief beyond two years.

In December 2021, the Parliament passed two bills: The [Central Vigilance Commission \(Amendment\) Bill, 2021](#) and [Delhi Special Police Establishment \(Amendment\) Bill, 2021](#).

Factly Compilation for the Month of July (Second Week) 2023

These bills provide that the tenure of ED and CBI chiefs could be extended by up to three years after the mandated term of two years.

Hence, under the amended law, he got an extension from November 2021 to November 2022. Further, he got the third extension by a notification till November 2023.

This extension and the amendments to the CVC and DSPE Act were challenged before the Supreme Court.

What was the ruling of the Supreme Court?



Source: Hindustan Times

On ED Tenure extension: The Supreme Court has said that the consecutive service extensions granted to Mishra in 2021 and 2022 as illegal. The court ordered the present ED Chief to resign by July 31, allowing for a smooth transition of responsibilities to his successor.

On amendments to the CVC and DSPE Act: The Supreme Court upheld as constitutional the amendments made to the Central Vigilance Commission Act, 2003 and The Delhi Special Police Establishment Act, 1946.

The court referred to the need to exercise self-imposed limits while undertaking judicial review of legislative or executive actions.

It said that the legislative enactment can be struck down only on two grounds: **1)** Firstly, that the appropriate legislature does not have the competence to make the law and **2)** secondly, that it takes away or abridges any of the Fundamental Rights enumerated in Part III of the Constitution or any other constitutional provisions.

[19. 415 million Indians came out of multidimensional poverty in 15 years, says UNDP study](#)

Source: The post is based on the article **“415 million Indians came out of multidimensional poverty in 15 years, says UNDP study”** published in **The Hindu** on **12th July 2023**

What is the News?

The Global Multidimensional Poverty Index(MPI) 2023 has been released.

What is the Global Multidimensional Poverty Index (MPI)?

Global MPI is a key international resource that measures acute multidimensional poverty across more than 100 developing countries.

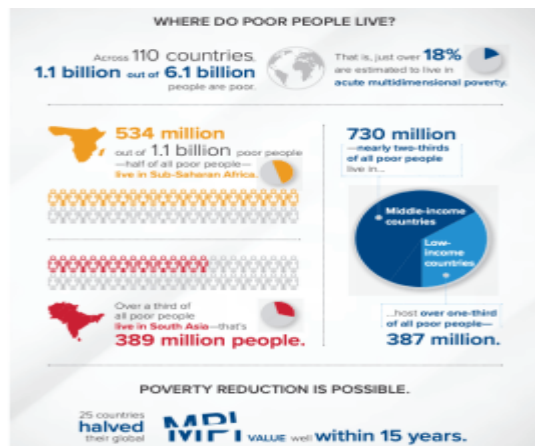
It was first launched in 2010 by the United Nations Development Programme (UNDP) and the Oxford Poverty and Human Development Initiative (OPHI).

Factly Compilation for the Month of July (Second Week) 2023

The Global MPI advances SDG 1 – ending poverty in all its forms everywhere. It also measures interconnected deprivations across indicators related to SDGs 1, 2, 3, 4, 6, 7 and 11.

[Click Here to read more](#)

What are the key findings of the report?



Source: UNDP

Globally: 25 countries including India have successfully halved their global MPI values within 15 years, indicating that substantial progress is attainable.

- Around 1.1 billion out of 6.1 billion people (just over 18%) live in acute multidimensional poverty across 110 countries.
- Sub-Saharan Africa (534 million) and South Asia (389 million) are home to approximately five out of every six poor people.
- Nearly two-thirds of all poor people (730 million people) live in middle-income countries, making action in these countries vital for reducing global poverty.
- Children under 18 years old account for half of MPI-poor people (566 million). The poverty rate among children is 27.7%, while among adults it is 13.4%.
- Poverty predominantly affects rural areas, with 84% of all poor people living in rural areas.

India: Around 415 million people exited poverty within a span of just 15 years between 2005 to 2021 in India.

The number of people in multidimensional poverty in India decreased from approximately 645 million in 2005-06 to about 370 million in 2015-16 and further to 230 million in 2019-21. Hence, the incidence of poverty fell from 55.1% to 16.4% during the period.

Deprivation in all indicators declined in India.

The poorest states and disadvantaged groups, including children and individuals from marginalized castes, experienced the fastest progress in reducing poverty.

People who are multidimensionally poor and deprived under the nutrition indicator in India declined from 44.3% in 2005/2006 to 11.8% in 2019/2021 and child mortality fell from 4.5% to 1.5%.

Factly Compilation for the Month of July (Second Week) 2023

[20. Japan India Maritime Exercise-2023 concludes](#)

Source: The post is based on the article “**Japan India Maritime Exercise-2023 concludes**” published in **PIB** on **11th July 2023**

What is the News?

The 7th edition of Japan India Maritime Exercise 2023 (JIMEX 23) has been concluded in the Bay of Bengal.

What is Japan India Maritime Exercise(JIMEX)?

JIMEX is an annual maritime exercise between India and Japan.

Aim: To consolidate the high degree of interoperability that exists between maritime forces of the two countries, through complex exercises in the surface, sub-surface and air domains.

JIMEX 2023 witnessed complex exercises undertaken jointly by the two navies. Both sides engaged in advanced level exercises in all three domains of maritime warfare: surface, sub surface and air.

JIMEX 23 saw the participation of 1) INS Delhi – India’s first indigenously built Guided Missile Destroyer 2) INS Kamorta – an indigenously designed and built Anti-Submarine Warfare Corvette 3) P8I, maritime patrol aircraft and 4) Dornier, ship-borne helicopters and fighter aircraft.

What are the other exercises between India and Japan?

Exercise DHARMA GUARDIAN: It is an annual joint military exercise between India and Japan from 2018.

SHINYUU Maitri: It is a joint exercise between the Indian Air Force and the Japanese Air Self Defence Force (JASDF).

[21. Recommendations of 50th meeting of GST Council](#)

Source: The post is based on the article “**Recommendations of 50th meeting of GST Council**” published in **PIB** on **11th July 2023**

What is the News?

The 50th meeting of the Goods and Services Tax(GST) Council was held under the chairmanship of the Union Finance Minister.

What is the Goods and Services Tax(GST) Council?

[Click Here to read](#)

Factly Compilation for the Month of July (Second Week) 2023

What are the decisions taken by the GST Council?

AT THE MEETING

Conundrum resolved

▶ A key issue before the GoM was whether to impose a 28% GST on the face value of bets, or gross gaming revenue, or just on platform fees

Exempted from GST

▶ Cancer-fighting drugs, medicines for rare diseases

▶ Satellite launch services by private operators

Tax eased

▶ GST rate on food served in cinema halls to be 5%. Earlier, the rate was 18%

▶ Tax on uncooked and unfried snack pellets and fish soluble paste down from 18% to 5%; tax on imitation zari thread down from 12% to 5%

Progress awaited

▶ Retail sale price-based cess on some tobacco items

Setting the ball rolling

▶ GST tribunal to be operational in phases. It will expand from initial Benches in state capitals. A framework is likely by August

SUV defined

▶ The definition of an Sports Utility Vehicle tweaked for attracting a cess over and above the GST rate

Source: Business Standard

GST on Online Gaming: The GST Council has approved the imposition of a uniform 28% tax on full “face value” of bets involving online gaming, casinos and horse racing. This will bring them on a par with betting and gambling.

– Currently, most online gaming platforms pay an 18 per cent tax on the commission collected for each game.

Tax on food and beverages in Cinema Halls: The GST on restaurants inside Cineplex will attract 5% GST against 18% earlier.

– Currently, movie tickets below Rs 100 were taxed at 12%, while those above the threshold attracted 18% GST.

Exempted GST on cancer drugs: GST Council has decided to exempt GST on import of cancer drug Dinutuximab, and Food for Special Medical Purposes (FSMP) used in the treatment of rare diseases. Currently, the drug attracts a 12% integrated GST.

Tribunals: The council has recommended setting up of a mechanism for appellate tribunals. Demands for state-wise benches were presented by various states, and the Council approved setting up of as many as 40 benches in phases.

22. [Kui language inclusion in 8th schedule gets approval of Odisha govt](#)

Source: The post is based on the article “**Kui language inclusion in 8th schedule gets approval of Odisha govt**” published in **New Indian Express** on **11th July 2023**

What is the News?

The Odisha Cabinet has approved a proposal to recommend the inclusion of the Kui language in the [Eighth schedule of the Constitution of India](#).

Factly Compilation for the Month of July (Second Week) 2023

What is Kui Language?

Kui is a South-Eastern Dravidian language spoken by the [Khonds](#) (also spelt Kondha and Kandha) community.

It is primarily spoken in the state of Odisha. It is traditionally written using the Odia script.

It is closely related to other languages in the Dravidian family such as Gondi and Kuvi.

It was also referred to as the Kuinga language during the historical period.

What are the benefits of inclusion of Kui Language in 8th Schedule?

It will help in the preservation, promotion, and propagation of the Kui language and culture;

Activities such as publication, creation of content and recognition will get momentum;

Create an eco-system to facilitate research & Studies anchored around the preservation, promotion and propagation of Kui Language.

[23. Massive shelf cloud appears in Haridwar amid heavy rains](#)

Source: The post is based on the article “**Massive shelf cloud appears in Haridwar amid heavy rains**” published in **Livemint** on **11th July 2023**

What is the News?

A terrifying shelf cloud has recently appeared in Uttarakhand’s Haridwar amid heavy rains.

What are Shelf Clouds?



Source: Moneycontrol

Shelf clouds are a type of arcus cloud, characterized by their impressive and intimidating appearance.

These unique cloud formations often resemble a large, horizontal wedge or shelf extending from the base of a thunderstorm or cumulonimbus cloud.

These clouds are typically formed on the leading edge of a storm.

Formations of Shelf Clouds:

Created with love ❤️ by ForumIAS- the knowledge network for civil services.
Visit academy.forumias.com for our mentor based courses.

Factly Compilation for the Month of July (Second Week) 2023

The formation of shelf clouds occurs when a mass of cold and dense air is forcefully driven by the wind into a warmer air mass.

This phenomenon takes place during the downdraft of a thunderstorm, where the cold air rapidly descends and disperses, creating a strong gust front.

Distinctive Features of Shelf Cloud:

Shelf clouds exhibit several distinct features that contribute to their dramatic appearance. The underside of the shelf cloud is often dark and menacing, featuring turbulent and rapidly rising air.

This area is characterized by a swirling mass of clouds, indicating the intense updrafts and strong winds associated with the thunderstorm.

The leading edge of the cloud is typically smooth and well-defined, appearing as a rolling arc or shelf. This edge may have a greenish or bluish tint due to the scattering of sunlight caused by water droplets within the cloud.

Significance and implications of Shelf Clouds:

As shelf clouds are usually associated with thunderstorms, their presence serves as a visual warning sign of impending severe weather. However, they are typically harmless.

24. Chandrayaan-3 launch: What are the different kinds of moon missions?

Source: The post is based on the article “**Chandrayaan-3 launch: What are the different kinds of moon missions?**” published in **Indian Express** on **12th July 2023**

What is the News?

The Chandrayaan-3 mission is India’s third lunar mission and second attempt to make a soft landing on the surface of the Moon.

It is one of the several space missions lined up to go to the Moon including Russia’s Luna 25 mission and NASA’s Artemis II.

What are the different kinds of moon missions that have been launched so far?

Flybys: These are the missions in which the spacecraft passed near the Moon but did not get into an orbit around it. These were either designed to study the Moon from a distance or were on their way to some other planetary body or deep space exploration and happened to pass by the celestial body.

– Some early examples of flyby missions were Pioneer 3 and 4 by the United States and Luna 3 of the then USSR.

Orbiters: These were spacecraft that were designed to get into a lunar orbit and carry out prolonged studies of the Moon’s surface and atmosphere.

– India’s Chandrayaan-1 was an Orbiter, as were 46 other Moon missions from various countries. Orbiter missions are the most common way to study a planetary body. Chandrayaan-2 mission also consisted of an orbiter, which is still operational and orbiting the Moon at an altitude of around 100 km.

Impact Mission: These are an extension of Orbiter missions. While the main spacecraft keeps going around the Moon, one or more instruments on board make an uncontrolled landing on the

Factly Compilation for the Month of July (Second Week) 2023

lunar surface. They get destroyed after the impact, but still send some useful information about the Moon while on their way.

– One of the instruments on Chandrayaan-1, called Moon Impact Probe, or MIP, was also made to crash land on the Moon's surface in a similar way. ISRO claimed that the data sent by the MIP had presented additional evidence of the presence of water on the Moon.

Landers: These missions involve the soft landing of the spacecraft on the Moon. These are more complicated than the Orbiter missions. In fact, the first 11 attempted lander missions had all ended in failure.

– The first landing on the moon was accomplished on January 31, 1966, by the Luna 9 spacecraft of the then USSR. It also relayed the first picture from the Moon's surface.

Rovers: Rovers are special wheeled payloads on the lander that can detach themselves from the spacecraft and move around on the moon's surface, collecting very useful information that instruments within the lander would not be able to obtain. The rover onboard Vikram lander in the Chandrayaan-2 mission was called Pragyaan.

Human missions: These involve the landing of astronauts on the moon's surface. So far only NASA of the United States has been able to land human beings on the moon.

[25. Union Minister inaugurates 'SAGAR SAMPARK' Differential Global Navigation Satellite System to Strengthen Maritime sector](#)

Source: The post is based on the article **“Union Minister inaugurates ‘SAGAR SAMPARK’ Differential Global Navigation Satellite System to Strengthen Maritime sector”** published in **PIB** on **12th July 2023**

26. What is the News?

The Union Minister of Ports, Shipping and Waterways has inaugurated the indigenous Differential Global Navigation Satellite System (DGNSS) called ‘SAGAR SAMPARK’.

27. What is Sagar Sampark?

Sagar Sampark is a terrestrial based enhancement system that corrects the errors and inaccuracies in the Global Navigation Satellite System (GNSS) and provides more accurate positioning information.

Features: Sagar Sampark is able to transmit corrections for both GPS and Global Navigation Satellite System (GLONASS).

– It improves the accuracy of GPS positioning by reducing errors caused by atmospheric inferences, satellite clock drift and other factors.

– The error correction accuracy has been improved from 5 to 10 meters to less than 5 meters for 100 Nautical Miles from Indian coastlines.

Significance: Sagar Sampark will help mariners in safe navigation and will reduce the risk of collisions, groundings, and accidents in the port and harbour areas. This will lead to the safe & efficient movement of vessels.

Factly Compilation for the Month of July (Second Week) 2023

28. PAU develops new wheat variety to keep diabetes, obesity in check

Source: The post is based on the article “**PAU develops new wheat variety to keep diabetes, obesity in check**” published in **Indian Express on 11th July 2023**

What is the News?

The Punjab Agricultural University (PAU) has developed a new variety of wheat called PBW RS1.

What is PBW RS1?

PBW RS1 is a new variety of wheat.

Developed by: Punjab Agricultural University (PAU)

Benefits: PBW RS1 has high amylose content and is resistant to starch. This ensures that glucose is released more slowly into the bloodstream. This can help in bringing down the prevalence of diet-related diseases including obesity and diabetes (especially type 2).

- Chapatis and biscuits from its flour taste just like normal wheat.
- It is also resistant to yellow rust and moderately resistant to brown rust fungal diseases.

Drawbacks: It has lower productivity compared to other wheat varieties of Punjab.

29. Fifth of suspected money mule cases involve under-21s'

Source: The post is based on the article “**Fifth of suspected money mule cases involve under-21s**” published in **Independent on 11th July 2023**

What is the News?

According to a report, young people under the age of 21 account for around one in five cases where money muling activity is suspected.

What is Money Muling?

Money muling is a type of money laundering.

A money mule is a person who receives money from a third party in their bank account and transfers it to another one or takes it out in cash and gives it to someone else, obtaining a commission for it.

Even if money mules are not directly involved in the crimes that generate the money (cybercrime, payment and on-line fraud, drugs, human trafficking, etc.), they are accomplices as they launder the proceeds of such crimes.

Simply put, money mules help criminal syndicates to remain anonymous while moving funds around the world.

30. Cabinet okays commercial mining of lithium, titanium

Source: The post is based on the article “**Cabinet okays commercial mining of lithium, titanium**” published in **Livemint on 12th July 2023**

Factly Compilation for the Month of July (Second Week) 2023

What is the News?

The Union Cabinet has approved amendments to the Mines and Minerals (Development and Regulation) Act, 1957 to allow the commercial mining of six critical minerals.

Which are the six critical minerals where commercial mining will be allowed now?

The six critical minerals are: lithium, beryllium, niobium, tantalum, titanium and zirconium.

Till now, commercial mining of these critical minerals by private companies was prohibited. Only government agencies were allowed in exploration and mining operations.

The amendment proposed to insert the provision of an exploration license in the law which will be granted through auction for undertaking reconnaissance and prospecting operations.

Companies will be allowed to suggest areas they want to explore, and eventually mine. This is a deviation from the usual practice where blocks or mines are defined by the government to be taken up for auction.

What are the uses of these critical minerals?

1) Lithium is a key component for electric vehicles, batteries and other energy storage solutions. 2) Beryllium is used in aerospace, defence, IT, telecommunications and so on 3) Titanium is used in mobile phones, bicycles and prosthetics 4) Niobium is used in jet engines and rockets 5) Tantalum is used in electrolytic capacitors and corrosion resistant chemicals and 6) Zirconium is used primarily in fabrication and as an alloying agent.

What is the significance of this decision?

The changes are likely to incentivise private sector participation in all spheres of mineral exploration, with a focus on precious and critical ones.

This will also help reduce India's import dependence on critical minerals such as lithium.

31. What is the National Research Foundation?

Source: The post is based on the article "What is the National Research Foundation?" published in **The Hindu** on **12th July 2023**

What is the News?

The Union Cabinet has approved the introduction of the National Research Foundation (NRF) Bill in Parliament.

What is the National Research Foundation (NRF)?

The National Research Foundation (NRF) was one of the key recommendations of the National Education Policy 2020.

Objective: To act as a coordinating agency between researchers, various government bodies and industry, thus bringing industry into the mainstream of research.

– To provide research grants to individuals.

– To facilitate research in India's universities, especially State universities, by funding research infrastructure and researchers.

The Science and Engineering Research Board (SERB) created by an act of Parliament in 2008, will stand repealed and subsumed into the NRF.

Factly Compilation for the Month of July (Second Week) 2023

Funding of NRF: The NRF will operate with a budget of ₹50,000 crore for five years, of which 28% will be the government's share, and the remaining 72% will come from the private sector.

[Click Here to read more](#)

What are the steps that should be taken to help NRF facilitate the “ease of doing science”?

First, the time between applying for a research grant and receiving the money must be minimal, preferably within six months.

– The NRF draft mentions that the peer-review process will be completed within six months but releasing funds may take time.

Second, all the paperwork must be digitally processed without sending stacks of papers in hard copies to the NRF.

Third, all finance-related queries, paperwork, approval and acceptance need to be between the NRF and the finance department of the university/research institution keeping the scientist free to focus on research.

Fourth, the NRF needs explicit spending guidelines away from the General Financial Rules (GFR) and the government's e-Marketplace (GeM) usage.

Fifthly, participation of the private industry in the NRF is an important and welcome step. But it is unclear how the government will raise ₹36,000 crore from the industry. Hence, a more detailed plan and establishing mechanisms akin to escrow accounts will reassure the scientific community.

Finally, the release of money needs to be timely. The NRF draft mentions timely disbursement of funds but a mechanism needs to be in place to facilitate and implement this.

[32. In UNHRC vote, India stands against desecration of Koran](#)

Source: The post is based on the article “**In UNHRC vote, India stands against desecration of Koran**” published in **The Hindu** on **12th July 2023**

What is the News?

The UN Human Rights Council (UNHRC) has voted to condemn recent Koran burning incidents.

About UNHRC resolution condemning burning of Quran:

The United Nations Human Rights Council has approved a resolution that condemns and strongly rejects acts of desecration of the Quran.

This resolution has been adopted in the wake of the burning of a Quran in Sweden.

The resolution was introduced by Pakistan on behalf of the 57-nation Organisation of Islamic Cooperation (OIC).

The resolution calls for the U.N. rights chief to publish a report on religious hatred and for states to review their laws and plug gaps that may impede the prevention and prosecution of acts and advocacy of religious hatred.

Which countries supported and opposed the resolution?

India was among the 28 countries who voted in favour of the resolution.

Factly Compilation for the Month of July (Second Week) 2023

– India stated that there was an increase in “phobias” against all religions. Hence, there is a need for the international community to recognize the instances of intolerance, prejudice, phobia, and violence against followers of all religions and work together to eliminate them.

China which is always under the scanner for its alleged treatment of the Uighurs Muslims supported the resolution

The resolution was **strongly opposed by the United States and the European Union**, who said that it conflicts with their view on human rights and freedom of expression.

33. [Atal Vayo Abhyuday Yojana: Empowering the Elderly for a Dignified Life](#)

Source: The post is based on the article “**Atal Vayo Abhyuday Yojana: Empowering the Elderly for a Dignified Life**” published in **PIB** on **12th July 2023**

What is the News?

The Ministry of Social Justice & Empowerment is implementing the Atal Vayo Abhyuday Yojana to empower senior citizens in India.

What is Atal Vayo Abhyuday Yojana?

Nodal Ministry: Ministry of Social Justice & Empowerment

Renamed version of: National Action Plan for Senior Citizen (NAPSrC) had been revamped, renamed as Atal Vayo Abhyuday Yojana(AVYAY) and subsumed in 2021.

Type: Central Sector Scheme

Aim: To improve the quality of life of the Senior Citizens by providing basic amenities like shelter, food, medical care and entertainment opportunities and by encouraging productive and active aging through providing support.

Sub Schemes/Components:

– **Integrated Programme for Senior Citizens (IPSrC):** Under this, financial assistance is provided to eligible organizations for running and maintenance of Senior Citizen Homes/ Continuous Care Homes to improve the quality of life of the senior citizens.

– **State Action Plan for Senior Citizens (SAPSrC):** Each State/UT is expected to plan and strategize taking into account their local considerations and frame their own State Action Plans for the welfare of their senior citizens.

– [Rashtriya Vayoshri Yojana\(RVY\)](#)

– [Senior Able Citizens for Re-employment in Dignity\(SACRED\)](#)

– **Action Groups Aimed at Social Reconstruction (AGRASR):** Senior Citizens are encouraged to form Self-Help Groups (SHGs), which will provide them with a platform to share the time constructively with each other. To attain financial assistance under the scheme SHGs will function as AGRASR Groups.

– [Senior-care Aging Growth Engine \(SAGE\)](#)-Silver economy for Senior Citizens

– [Elderline – National Helpline for Senior Citizens](#)

– **Channelizing the CSR fund for elderly care:** It was launched with an objective to channelize the CSR funds in an appropriate manner for elderly care projects.Under Schedule VII of Section

Factly Compilation for the Month of July (Second Week) 2023

135 of the Companies Act, setting up old age homes, day care centers and such facilities for Senior Citizens is an approved item for CSR funding.

– **Training and capacity building for senior citizens.**

34. Adani-Hindenburg case: Lack of requirement to disclose 'last natural person above every person' owning economic interest in FPIs is the challenge, SEBI to SC

Source: The post is based on the article “**Adani-Hindenburg case: Lack of requirement to disclose 'last natural person above every person' owning economic interest in FPIs is the challenge, SEBI to SC**” published in **The Hindu** on **12th July 2023**

What is the News?

The Securities and Exchange Board of India (SEBI) has clarified in the Supreme Court that the challenges it faced in the Hindenburg-Adani allegations case were from the lack of a requirement to disclose the 'last natural person above every person' owning an economic interest in the FPIs.

What was the issue before the Supreme Court?

The Supreme Court had appointed a six-member committee headed by Justice Sapre to suggest measures to protect investors against the kind of market volatility seen after the Hindenburg report against the Adani Group.

The committee has said that the changes made by SEBI in Foreign Portfolio Investors (FPI) Regulations in 2019 made it difficult to identify beneficiaries of offshore funds which allegedly invested in the companies of the Adani Group.

However, SEBI has clarified in Supreme Court that the challenges it faced during the Hindenburg-Adani allegations case were not a result of the changes made in 2019 FPI regulations but due to lack of a requirement to disclose the '**last natural person above every person**' owning an economic interest in the FPIs.

What is the Last Natural Person above every person?

It refers to the requirement to identify and disclose the ultimate individual who has control or ownership over a financial investment such as Foreign Portfolio Investor (FPI).

It means revealing the final person in the ownership chain who holds an economic interest in the FPI ensuring transparency and accountability in the investment structure.

What are the challenges in finding the Last Natural Person above every person?

SEBI said that the core problem lay in the fact that there had never been any requirement to disclose the last natural person above every person owning any economic interest in the FPI.

Even the Prevention of Money Laundering Act(PMLA) required Beneficial Owners(BO) identification only on the basis of control or ownership.

Moreover, the Financial Action Task Force had also identified ambiguity over the last natural person owning any economic interest in an FPI ” as a global challenge.

Tele Law : Reaching the Unreached

Source: The post is based on the article “**Tele Law : Reaching the Unreached**” published in **PIB** on **13th July 2023**

Factly Compilation for the Month of July (Second Week) 2023

What is the News?

The Tele Law program has revolutionized access to pre-litigation advice and empowered over 46 lakh beneficiaries nationwide with free legal advice.

What is the Tele Law Initiative?

The Tele Law Initiative was launched by the Department of Justice in 2017.

Purpose: It is an e-interface mechanism to seek legal advice and consultation at a pre-litigation stage with the aim of 'Reaching the Unreached'.

Under this initiative, smart technology of video conferencing, telephone /instant calling facilities available at the vast network of Common Service Centres at the Panchayat level are used to connect the indigent, down-trodden, vulnerable, unreached groups and communities with the Panel Lawyers for seeking timely and valuable legal advice.

– In addition, the service can also be accessed through the Tele Law Mobile App (available on Android and iOS).

Cost: Tele Law is provided free of cost to those persons entitled to free legal aid under Section 12 of the Legal Services Authorities (LSA) Act, 1987, and at a nominal fee of Rs. 30/- per consultation for "others".

Real time data: A dedicated Tele Law dashboard has been developed to capture real-time data on the nature of cases registered & advice enabled.

Significance: Tele Law initiative has made legal consultation both easily accessible and highly affordable for the common citizens.

35. [Sangam literature for the layman](#)

Source: The post is based on the article "**Sangam literature for the layman**" published in **The Hindu** on **11th July 2023**

What is the News?

Tamil Nadu Text Book and Education Services Corporation has released **Patthuppattu**, a collection of ten idylls, one of the earliest Sangam poetry collections.

Note: An idyll is a short poem descriptive of some picturesque scene or incident, mainly associated with pastoral life.

What is the Sangam Age?

The Sangam Age constitutes an important chapter in the history of South India.

According to Tamil legends, there existed three Sangams (Academy of Tamil poets) in ancient Tamil Nadu popularly called **Muchchangam**. These Sangams flourished under the royal patronage of the Pandyas.

The first Sangam, held at Then Madurai, was attended by gods and legendary sages but no literary work of this Sangam was available.

The second Sangam was held at Kapadapuram but all the literary works had perished except **Tolkappiyam**.

Factly Compilation for the Month of July (Second Week) 2023

The third Sangam at Madurai was founded by Mudathirumaran. It was attended by a large number of poets who produced voluminous literature but only a few had survived. These Tamil literary works remain useful sources to reconstruct the history of the Sangam Age.

Sangam Literature:

The collection of Sangam literature includes Tolkappiyam, Ettutogai, Pattuppattu, Pathinenkilkanakku and the two epics – Silappathigaram and Manimegalai.

Tolkappiyam authored by Tolkappiyar is the earliest of Tamil literature. It is a work on Tamil grammar but it provides information on the political and socioeconomic conditions of the Sangam period.

The **Ettutogai** or Eight Anthologies consist of eight works. The **Pattuppattu** or Ten Idylls consist of ten works. Both Ettutogai and Pattuppattu were divided into two main groups – Aham (love) and Puram (valour).

Pathinenkilkanakku contains eighteen works mostly dealing with ethics and morals. The most important among them is Tirukkural authored by **Thiruvalluvar**.

Silappathigaram written by Elango Adigal and **Manimegalai** by Sittalai Sattanar also provides valuable information on the Sangam polity and society.

36. Proposed National Research Foundation looks to tap CSR to address funding concerns

Source: The post is based on the article “**Proposed National Research Foundation looks to tap CSR to address funding concerns**” published in **The Hindu** on **14th July 2023**

What is the News?

The National Research Foundation (NRF) has been approved by the Cabinet. But there are concerns over its autonomy and its funding structure.

What is the National Research Foundation (NRF)?

[Click Here to read](#)

What are the concerns related to the National Research Foundation (NRF)?

Funding: NRF will operate with a budget of ₹50,000 crore for five years, of which 28% will be the government's share and the remaining 72% (36,000 crore) will come from the private sector.

– But the statistics from the Ministry of Science and Technology suggest that only 36% of India's research expenditure of roughly ₹1.2 lakh crore came from the private sector in 2019-20.

– This is one of the reasons why India's expenditure on research and development is still around 0.6% of the Gross Domestic Product, below the 1-2% which was characteristic of countries with a stronger science and technology infrastructure and the global average of 1.8%.

– Hence, the measures being planned is to have private companies and public sector entities contribute from their 'corporate social responsibility (CSR)' corpus to the NRF.

Autonomy: NRF has been envisioned as an autonomous body. The money given to it wouldn't be controlled by the general financial rules (laid down by the Ministry of Finance) and the CEO as well the board would have autonomy in directing research funds.

Factly Compilation for the Month of July (Second Week) 2023

- But the proposed structure has both the Science Minister and Education Minister as vice-presidents. The Science Ministry will administratively control it.
- Hence, the clauses on autonomy must be clearly spelt out or else it will end up like multiple attempts in the past.

[37. Sediments decode climate and environmental changes on Kaas Plateau around 8664 years BP](#)

Source: The post is based on the article **“Sediments decode climate and environmental changes on Kaas Plateau around 8664 years BP”** published in **PIB** on **13th July 2023**

What is the News?

A study of the sediments from a seasonal lake in the Kaas Plateau has indicated a major shift in the Indian Summer Monsoons towards dry and stressed conditions with low rainfall during the Early-Mid-Holocene, around 8664 years BP.

Note: Holocene is the name given to the last 11,700 years of the Earth’s history — the time since the end of the last major glacial epoch, or “ice age.”

What is Kaas Plateau?

Kaas plateau also known as valley of flowers is located on the Western Ghats in Maharashtra.

Its name is derived from the Kaasa tree, botanically known as *Elaeocarpus glandulosus* (rudraksha family).

It is located on a lake that dates back to the Early-Mid-Holocene period, which means it is an ancient lake that has been preserved over a long time.

It was included in the UNESCO World Natural Heritage Site in 2012 for being a biodiversity rich zone.

The plateau is known for various types of seasonal wild flowers and species of endemic butterflies.

The plateau boasts of more than 850 species of flowers, which include orchids, shrubs and carnivorous plants, making it a popular tourism destination.

What was the study conducted by researchers at Kaas Plateau?

Researchers studied the ancient lake to understand and decipher the past climate of the Kaas Plateau.

The study has found that there was a major shift in the Indian Summer Monsoons towards dry and stressed conditions with low rainfall during the Early-Mid-Holocene, around 8664 years BP.

Around the late Halocene (around 2827 years BP), there was a decrease in rainfall and a weakened southwest Monsoon.

However, during the recent past (around the last 1000 years), pollen, as well as the presence of a high number of planktonic and pollution-tolerant diatom taxa indicated lake eutrophication, possibly due to human impact and cattle/livestock farming in the catchment.

Factly Compilation for the Month of July (Second Week) 2023

38. [Scientists say the 'Anthropocene epoch' began in the 1950s: What it means, significance](#)

Source: The post is based on the article **“Scientists say the ‘Anthropocene epoch’ began in the 1950s: What it means, significance”** published in **Indian Express** on **13th July 2023**

What is the News?

According to the Anthropocene Working Group (AWG), sediments at Crawford Lake in Canada's Ontario have provided evidence of the beginning of the Anthropocene epoch.

What is the Anthropocene epoch?

Anthropocene is a proposed epoch that denotes the present geological time interval, in which the Earth's ecosystem has gone through radical changes due to human impact.

The word Anthropocene is derived from the Greek words anthropo, for “man,” and cene for “new”.

The term was coined and made popular by biologist Eugene Storer and chemist Paul Crutzen in 2000.

There are numerous phenomena associated with this proposed epoch such as global warming, sea-level rise, ocean acidification, mass-scale soil erosion, the advent of deadly heat waves, deterioration of the biosphere and other detrimental changes in the environment.

What is the Anthropocene Working Group (AWG)?

Anthropocene Working Group (AWG) is an interdisciplinary research group dedicated to the study of the Anthropocene as a geological time unit.

It was established in 2009 as part of the Subcommittee on Quaternary Stratigraphy (SQS), a constituent body of the International Commission on Stratigraphy (ICS).

What did the Anthropocene Working Group (AWG) find out?

AWG has studied the sediments at Crawford Lake in Canada's Ontario. They have revealed that the Anthropocene epoch started sometime between 1950 and 1954.

However, scientists still debate whether the Anthropocene is different from the Holocene.

Moreover, the term Anthropocene has also not been formally adopted by the International Union of Geological Sciences (IUGS), the international organization that names and defines epochs.

The primary question that the IUGS needs to answer before declaring the Anthropocene an epoch is if humans have changed the Earth system to the point that it is reflected in the rock strata.

What is the Geological Time Scale?

The geologic time scale is the calendar for events in Earth's history.

It is divided into five broad categories: eons, eras, periods, epochs and ages. While eon is the broadest category of geological time, age is the smallest category.

Each of these categories is further divided into sub-categories. For instance, Earth's history is characterized by four eons, including Hadean (oldest), Archean, Proterozoic, and Phanerozoic (youngest).

Currently, we are officially in the Phanerozoic eon, Cenozoic era, Quaternary period, Holocene epoch and the Meghalayan age.

Factly Compilation for the Month of July (Second Week) 2023

The first GSI survey of the Siachen

Source: The post is based on the article “**The first GSI survey of the Siachen**” published in **The Hindu** on **14th July 2023**

What is the News?

In 1958, V. K. Raina, a top Indian geologist, led the first Geological Survey of India expedition to the Siachen glacier.

This event is of historical and geostrategic significance as it puts to rest all myths to the effect that Pakistan was in control of the glacier since the beginning.

What is the Siachen glacier?



Siachen glacier is located in the Eastern Karakoram range in the Himalayas.

At 78 km long, Siachen Glacier is the longest glacier in the Karakoram and second longest in the world's non-polar areas. It is also the world's highest battlefield.

The glacier lies just northeast of Point NJ9842 where the Line of Control between India and Pakistan ends.

The Siachen has been an important bone of contention between India and Pakistan since 1984 when the Indian Army launched Operation Meghdoot to take control of the entire Siachen glacier.

The glacier's melting waters are the main source of the Nubra River in the Indian region of Ladakh which drains into the Shyok River. The Shyok in turn joins the Indus River which flows through Pakistan.

Siachen Glacier also boasts of the world's highest helipad built by India at Point Sonam, 21,000 ft (6,400 m) above the sea level, to supply its troops. India also installed the world's highest telephone booth on the glacier.

Factly Compilation for the Month of July (Second Week) 2023

39. [Low-energy-consuming switchable smart windows developed based on novel architecture for confining liquid crystals](#)

Source: The post is based on the article “**Low-energy-consuming switchable smart windows developed based on novel architecture for confining liquid crystals**” published in **PIB** on **13th July 2023**

What is the News?

Researchers have developed a novel technique for confining liquid crystals in an architecture known as hierarchical double networks of polymers.

This technique can provide next-generation solutions for low-energy consumption on-demand switchable smart windows that operate between low and high transmittance.

What are Polymers?

The term polymer is defined as very large molecules having high molecular mass ($10^3 - 10^7$ u).

These are also referred to as macromolecules, which are formed by joining of repeating structural units on a large scale.

The repeating structural units are derived from some simple and reactive molecules known as monomers and are linked to each other by covalent bonds. The process of formation of polymers from respective monomers is called polymerisation.

Types of Polymers: Under this type of classification, there are three sub categories:

– **Natural polymers:** These polymers are found in plants and animals. Examples are proteins, cellulose, starch, some resins and rubber.

– **Semi-synthetic polymers:** These are those that are derived from nature itself but are made to undergo chemical processes to enhance their quality. Cellulose derivatives such as cellulose acetate (rayon) and cellulose nitrate etc. are the usual examples of this sub category.

– **Synthetic polymers:** These are those which are human-made polymers. Some examples of synthetic polymers are: plastic (polythene), synthetic fibres (nylon 6,6) and synthetic rubbers (Buna – S).

What are Interpenetrating polymer networks?

Interpenetrating polymer networks are soft matter systems that innovatively optimize different functionalities such as mechanical, optical, and electrical properties to provide novel solutions in engineering and biomedical applications.

A specific class of these architectures called as **hierarchical double networks** synergistically combine rigid and soft networks to realize thermal, electrical, and optical properties.

40. [European Parliament asks India to act promptly to end Manipur violence](#)

Source: The post is based on the article “**European Parliament asks India to act promptly to end Manipur violence**” published in **The Hindu** on **14th July 2023**

What is the News?

The European Parliament has adopted a resolution on Manipur violence.

Factly Compilation for the Month of July (Second Week) 2023

What does the European Parliament resolution on Manipur violence say?

Firstly, it called on the Indian government to act “promptly” to halt the violence in Manipur and protect religious minorities.

Secondly, it also calls on authorities to grant unhindered access to the area by journalists and international observers and to end Internet shutdowns.

Thirdly, it asks the Indian government to repeal the unlawful Armed Forces Special Powers Act in line with the recommendations of the UN Universal Periodic Review.

Fourthly, it asserted that the EU should make human rights prominent in its dialogue and relationship with India.

What was India’s response to the resolution?

The Ministry of External Affairs (MEA) has called the resolution move “unacceptable” and reflective of a “colonial mindset”.

It said that the Indian authorities at all levels including the judiciary, are monitoring the situation in Manipur and are taking steps to maintain peace and harmony and law and order.

[41. PM Modi in France: What is Bastille Day, whose celebrations he will attend?](#)

Source: The post is based on the article “**PM Modi in France: What is Bastille Day, whose celebrations he will attend**” published in **Indian Express** on **13th July 2023**

What is the News?

The Indian Prime Minister will be attending the French National Day celebrations as the Guest of Honour.

The National Day of France is celebrated on July 14 also known as Bastille Day and is marked by a long military parade, along with dancing and other merriment.

Note: Before the present PM Modi, Prime Minister Manmohan Singh had attended Bastille Day celebrations in 2009.

What is Bastille Day?

Bastille Day is the name given to the National Day of France, which is celebrated on 14 July each year.

The day signifies the start of the French Revolution, more than 200 years ago.

What happened on Bastille Day?

In 1789, people were unhappy with King Louis XVI’s reign, which had been dominated by food shortages and high taxes.

After outbreaks of violence on the streets of Paris, an armed mob surrounded Bastille on the morning of 14 July.

They stormed the Bastille prison and as word spread, the French Revolution was born.

The mob chose Bastille because people were imprisoned here simply because the King said so, without trial and without publicly stated causes.

The monarchy was eventually overthrown and Louis XVI and his wife Queen were executed.

Factly Compilation for the Month of July (Second Week) 2023

42. [Tropical waters have turned green in colour, courtesy climate change: Study](#)

Source: The post is based on the article “**Tropical waters have turned green in colour, courtesy climate change: Study**” published in **Down to Earth** on **12th July 2023**

What is the News?

A recent study has indicated that Tropical Ocean waters are turning Green in colour due to alteration in phytoplankton communities.

About the Study:

The study has found that 56% of the global ocean — a territory larger than the total land area on Earth — experienced color change between 2002 and 2022.

Tropical ocean regions near the Equator seem to have become greener over time. The southern Indian Ocean, in particular, has seen a significant colour change.

What does green color in oceans indicate?

Green-coloured water indicates life, especially phytoplankton, which are microscopic plant-like organisms. Blue, in contrast, indicates little life.

The colour also determines the amount of carbon dioxide absorbed by the ocean. Currently, oceans absorb 25% of all carbon dioxide (CO₂) emissions.

Why are Tropical oceans turning green in colour?

Researchers said that more work would be needed to find out what exactly those colour changes might mean. But they have said **climate change** was very likely to be the cause.

What is the impact of Climate Change on oceans?

Climate change threatens global oceans and the life that depends on them in multiple ways.

For instance, a 2020 study has warned that polar bears could largely disappear by the end of the century if global warming continues.

Another study found that half of the world’s coral reefs have already been killed by warmer waters and ocean acidification.

43. [India, France set to co-develop jet engine](#)

Source: The post is based on the article “**India, France set to co-develop jet engine**” published in **The Hindu** on **15th July 2023**.

What is the News?

The Indian Prime Minister has paid an Official Visit to France. He was the Guest of Honour at the [Bastille Day](#) Parade.

What are the key highlights from the Indian Prime Minister’s visit to France?

The Indian PM was conferred with the highest honour of France, the **Grand Cross of the Legion of Honour**, by the French President.

Factly Compilation for the Month of July (Second Week) 2023

Joint Statement: India and France have issued a joint statement – “25th Anniversary of the Strategic Partnership between France and India: towards a Century of Indo-French Relations”. This sets the course for the France-India bilateral relationship in all areas till 2047.

– Year 2047 will mark: 100 years of India’s Independence, 100 years of diplomatic relations between our two countries, and 50th year of the Indo-French strategic partnership.

– The roadmap for bilateral relations has three pillars: partnership for security and sovereignty; partnership for the planet; partnership for the people.

Defence: The two countries signed agreements on: 1) acquisition of 26 Rafale-M (the marine version) fighters for the Indian Navy 2) co-production of three more Scorpene class submarines at the public sector Mazagon Dock Shipbuilders Ltd and 3) joint development of a combat aircraft engine.

Indo-Pacific Roadmap: India and France have released India-France Indo-Pacific Roadmap.

– Under this roadmap, the two sides decided to work on finalizing an **Indo-French development fund** for third countries. This will enable joint financing of sustainable development projects in the Indo-Pacific region.

– India and France will also work to set up the Indo-French Health Campus for the Indo-Pacific, with the aim of making it a regional magnet for research and academia.

– In 2018, India and France agreed on a ‘Joint Strategic Vision of India-France Cooperation in the Indian Ocean Region.

Single-use plastic: India and France made a joint commitment to eliminate single-use plastic products pollution, including a ban on single-use plastic products which have low utility and high littering potential.

– The two countries have decided to constructively engage other like-minded countries to strengthen the negotiations for an international legally binding instrument to end plastic pollution.

44. New Scorpene class submarines for the Navy: Why they are a crucial buy

Source: The post is based on the article “**New Scorpene class submarines for the Navy: Why they are a crucial buy**” published in **Indian Express on 15th July 2023**

What is the News?

The Defence Acquisition Council has cleared proposals worth thousands of crores to buy three additional Scorpene submarines and 26 Rafale Marine fighter jets for the Navy.

What are Scorpene submarines?

The Scorpene submarines are conventional attack subs, meaning that they are designed to target and sink adversary naval vessels.

They are capable of launching a large array of torpedoes and missiles. They are also equipped with a range of surveillance and intelligence-gathering mechanisms.

These submarines use diesel electric propulsion systems, with an endurance – ability to operate independently without refueling – of approximately 50 days.

This sort of propulsion system alternates between using diesel (for functioning on the surface) and electric (for functioning underwater).

Factly Compilation for the Month of July (Second Week) 2023

How many Scorpene submarines does India have currently?

Mazagon Dock Shipbuilders Limited (MDL) is building six Scorpene class submarines under the Project-75, as part of a deal signed in 2005, which allowed for transfer of technology from the French defense firm, Naval Group.

Of these, five (INS Kalvari, INS Khanderi, INS Karanj and INS Vela) have already been commissioned and the last one (INS Vagir) will likely be commissioned early next year.

This project saw significant delays, with the first submarine originally slated for delivery in 2012.

What is the need of three additional scorpene class submarines?

The need to procure the three additional submarines was felt in the backdrop of the delayed deliveries of submarines under Project 75, as well as to bolster India's dwindling submarine fleet.

Currently, the Navy has 16 conventional submarines in service – seven of the Sindhughosh class (Russian Kilo class), four of the Shishumar class (modified German Type 209) and five of the Kalvari class (French Scorpene class). However, to carry out its full spectrum of operations the Navy needs at least 18 such submarines.

Moreover, at any given time, around 30% of the submarines are under refit, thus further bringing down the strength of operational submarines.

How are nuclear class submarines different from scorpene class submarines?

Nuclear submarines are known for their unlimited endurance – a nuclear reactor on a submarine has an operational life of up to 30 years.

As they are not propelled by batteries, these submarines only need to come to the surface for replenishing supplies for the crew. They are also able to move much faster than conventional submarines.

However, this is not to say that a navy should only choose to procure nuclear submarines. This is because:

First and foremost, nuclear submarines are expensive and require a significant amount of specialized experience to operate.

Second, with advancements in diesel electric technology, the range of conventional submarines as well as their stealth has gone up significantly.

[45. Chandrayaan-3 | India's third lunar odyssey begins with perfect launch](#)

Source: The post is based on the article “Chandrayaan-3 | India's third lunar odyssey begins with perfect launch” published in **The Hindu** on **15th July 2023**

What is the News?

Indian Space Research Organisation (ISRO) will launch the highly anticipated Chandrayaan-3 mission to the moon from the Satish Dhawan Space Centre in Sriharikota, Andhra Pradesh.

What is Chandrayaan-3?



Source: Indian Express

Chandrayaan-3 is India's third lunar mission.

It is a follow-on mission to Chandrayaan-2 to demonstrate end-to-end capability in safe landing and roving on the lunar surface.

Objectives: 1) To demonstrate Safe and Soft Landing on Lunar Surface 2) To demonstrate Rover roving on the moon and 3) To conduct in-situ scientific experiments.

Modules: The spacecraft consists of two parts — the propulsion and the Lander-rover modules.

- The propulsion module's main job is to take the lander-rover payloads to the moon. You can think of the propulsion module as a truck and the lander-rover payload as the cargo.
- After reaching the vicinity of the moon, the lander-rover payload will detach itself from the propulsion module and fall on to the moon.
- The lander has engines that will slow down the fall, so that it descends gently onto the moon rather than crash-landing on it.
- The rover is a tiny, trolley kind of device with wheels. Once the lander lands on the moon, the rover will slide out of the lander's belly and crawl over the moon's surface.
- Both the lander and the rover have instruments for experiments, such as analyzing the moon soil, checking how the moon's surface conducts heat, and how quake waves move through the moon surface.

Lander payloads: 1) Chandra's Surface Thermophysical Experiment (ChaSTE) to measure the thermal conductivity and temperature 2) Instrument for Lunar Seismic Activity (ILSA) for measuring the seismicity around the landing site 3) Langmuir Probe (LP) to estimate the plasma density and its variations and 4) passive Laser Retroreflector Array from NASA is accommodated for lunar laser ranging studies.

Rover payloads: 1) Alpha Particle X-ray Spectrometer (APXS) and 2) Laser Induced Breakdown Spectroscopy (LIBS) for deriving the elemental composition in the vicinity of the landing site.

Factly Compilation for the Month of July (Second Week) 2023

Significance: A successful soft landing will make India the fourth country, after the United States, Russia, and China, to achieve the feat.

[46. Union Minister leads Mangrove Plantation drive in Chengalpattu , Tamil Nadu as part of the Mangrove Initiative for Shoreline Habitats and Tangible Incomes \(MISHTI\) scheme](#)

Source: The post is based on the article “**Union Minister leads Mangrove Plantation drive in Chengalpattu , Tamil Nadu as part of the Mangrove Initiative for Shoreline Habitats and Tangible Incomes (MISHTI) scheme**” published in **PIB** on **14th July 2023**

What is the News?

The Ministry of Environment, Forest and Climate Change has organized a mangrove plantation program at Kovalam Panchayat in Chengalpattu District in Tamil Nadu.

It was organized as part of the Mangrove Initiative for Shoreline Habitats and Tangible Incomes (MISHTI) scheme.

What is MISHTI Scheme?

The MISHTI Scheme was announced in the Budget 2023-24.

Objective: To take up mangrove reforestation and afforestation along the coastal districts of India by adopting best practices that already exist in India as well as from other countries including Indonesia.

– To develop mangrove associated ecotourism initiatives and livelihood generation in coastal states.

Coverage: Currently, there is approximately 5000 sq kms of area under mangroves and through the MISHTI program an additional area of 540 sq km is proposed to be covered across 9 States and 4 Union Territories.

Duration of the scheme: The scheme is planned to be implemented for a period of five years from 2023-2024 to 2027-2028.

Funding: MISHTI is to be implemented by converging CAMPA Fund, MGNREGS, and other sources.

Significance: MISHTI will contribute to the efforts of ‘[Mangrove Alliance for Climate \(MAC\)](#)’ – an intergovernmental alliance for promotion of Mangrove, of which India became its active member during the (COP27)

[47. Skill India project successfully revives the dying Namda Art of Jammu and Kashmir](#)

Source: The post is based on the article “**Skill India project successfully revives the dying Namda Art of Jammu and Kashmir**” published in **PIB** on **14th July 2023**

What is the News?

The Union Minister of State for Skill Development and Entrepreneurship has flagged off the first batch of Namda Art products for export to the United Kingdom (UK).

Factly Compilation for the Month of July (Second Week) 2023

What is Namda Art?



Namda is a type of traditional Kashmiri rug (rug is *something made of woven fabric that covers a floor*).

It is made of sheep wool through felting technique instead of the normal weaving process.

Note: Felting is the process of producing a textile or fabric by combining and compressing the loose fibers, wool or hair.

What has the government done to revive the Namda Art?

Due to low availability of raw material, lack of skilled manpower and marketing techniques, the export of Namda craft has declined almost 100 percent between 1998 and 2008.

To preserve this craft, the government has launched a project to revive the Namda craft under a Skill India's Pilot Project as part of the [Pradhan Mantri Kaushal Vikas Yojana \(PMKVY\)](#).

Under this project, nearly 2,200 candidates have been trained in the art of Namda craft, representing a significant milestone in preserving this traditional craft and empowering the local weavers and artisans.

This project sets a great example of the public-private partnership (PPP) model in the field of skill development, as it is being implemented in collaboration with local industry partners.

[48. Union Minister of Cooperation inaugurates the National Mega Conclave on FPO in the cooperative sector](#)

Source: The post is based on the article **“Union Minister of Cooperation inaugurates the National Mega Conclave on FPO in the cooperative sector”** published in **PIB** on **14th July 2023**

What is the News?

The Union Minister of Cooperation has addressed the National Mega Conclave on Farmer Producer Organisations (FPO) in the cooperative sector.

The minister also released an action plan for the formation of 1,100 new FPOs by Primary Agricultural Credit Societies (PACS).

What are the key highlights from the address of the Minister at the conference?

On Cooperatives sector in India: Cooperatives in India can be divided into three categories: 1) states, where the cooperative movement has been successful in advancing and strengthening itself 2) states, where the cooperative movement is still going on and 3) States, where the cooperative movement is almost dead.

Factly Compilation for the Month of July (Second Week) 2023

– About 65 crore people in India are engaged in agriculture. Hence, it is important to revive the cooperative movement, modernize it, bring transparency in it and aim to achieve new heights.

On FPOs: The idea of Farmer Producer Organisations (FPO) was conceived in 2003 by the Yogendra Alagh Committee.

– Currently, 11,770 FPOs are working in the country and through these and through these, lakhs of farmers of the country have been successful in increasing their income.

– It was announced in the budget to set up 10,000 FPOs and the target is to achieve this by the year 2027.

Importance of Agriculture and allied activities: Agriculture, animal husbandry and fisheries sectors are the backbone of the country's economy and strengthening them will strengthen the country's economy.

– The three sectors together make up 18 percent of India's GDP, but are never discussed in the country.

– Unlike manufacturing, if agriculture, animal husbandry and fisheries sectors are strengthened through cooperatives, then employment opportunities will increase along with the GDP.

Agriculture Budget: The budget allocation for the agriculture sector has increased by 5.6 times. In 2013-14, the agriculture budget was Rs 21,000 crore, it has now increased to Rs 1.15 lakh crore in the year 2023-24.

49. [Govt effort on to curb vector-borne diseases](#)

Source: The post is based on the article “**Govt effort on to curb vector-borne diseases** ” published in **Livemint** on **15th July 2023**

What is the News?

The Union health ministry has sounded the alarm on a vector-borne disease outbreak with record rainfall in North India creating a favourable breeding ground for disease-carrying mosquitoes.

What are Vector Borne Diseases?

Vector-borne diseases are human illnesses caused by parasites, viruses and bacteria that are transmitted by vectors.

Every year there are more than 700,000 deaths from diseases such as malaria, dengue, schistosomiasis, human African trypanosomiasis, leishmaniasis, Chagas disease, yellow fever, Japanese encephalitis and onchocerciasis.

The burden of these diseases is highest in tropical and subtropical areas, and they disproportionately affect the poorest populations.

Since 2014, major outbreaks of dengue, malaria, chikungunya, yellow fever and Zika have afflicted populations, claimed lives, and overwhelmed health systems in many countries.

Other diseases such as Chikungunya, leishmaniasis and lymphatic filariasis cause chronic suffering, life-long morbidity, disability and occasional stigmatization.

What are the steps the government is taking against vector borne diseases?

Government has issued advisories to states and Union Territories (UTs) to collaborate with the respective civic agencies and take prompt action against vector borne diseases.

Note: India has set ambitious goals to eliminate kala-azar by 2023 and eradicate malaria and lymphatic filariasis by 2030.

Factly Compilation for the Month of July (Second Week) 2023

50. [Data Protection Bill poses severe restrictions to RTI Act, NCPRI cautions govt.](#)

Source: The post is based on the article “**Data Protection Bill poses severe restrictions to RTI Act, NCPRI cautions govt.**” published in **The Hindu** on **15th July 2023**

What is the News?

The National Campaign for Peoples’ Right to Information (NCPRI) has warned that the Digital Personal Data Protection (DPDP) Bill will severely restrict the scope of the Right to Information (RTI) Act.

How does the Digital Personal Data Protection (DPDP) Bill affect the Right to Information (RTI) Act?

Digital Personal Data Protection Bill (DPDP Bill) seeks to amend the Section 8(1)(j) of the RTI Act.

According to Section 8(1)(j) of the RTI Act, in order to deny personal information at least one of the following grounds has to be proven: 1) information sought has no relationship to any public activity or information sought has no relationship to any public interest or 2) information sought would cause an unwarranted invasion of privacy and 3) PIO/appellate authority is satisfied that there is no larger public interest that justifies disclosure.

The Bill proposes to remove all these exemptions prohibiting government agencies from sharing private information of any kind, regardless of the public interest it may entail.

This will severely restrict the scope of the RTI Act and adversely impact the ability of people to access information.

51. [Export Preparedness Index \(EPI\) Report, 2022](#)

Source: The post is based on the article “**Export Preparedness Index (EPI) Report, 2022**” published in **PIB** on **14th July 2023**

What is the News?

NITI Aayog will be releasing the third edition of Export Preparedness Index (EPI) for States/UTs of India for the year 2022.

What is the Export Preparedness Index (EPI)?

EPI is a comprehensive tool which measures the export preparedness of the States and UTs in India.

Aim: To undertake a comprehensive analysis of States and UTs across export-related parameters in order to identify their strengths and weaknesses.

- To present a comprehensive picture of states and UT’s export preparedness.
- To highlight the achievements of states/UTs and encourage peer-learning among the states/UTs to uphold the spirit of competitive federalism.

Pillars: The index assess the performance of the States and UTs across **four pillars:**

- **Policy Pillar** evaluates states and UTs’ performance based on its adoption of the export-related policy ecosystem at a state and district level as well as the institutional framework surrounding the ecosystem.

Factly Compilation for the Month of July (Second Week) 2023

- **Business Ecosystem** assesses the prevailing business environment in a state/UT, along with the extent of business-supportive infrastructure, and a state/UTs' transport connectivity.
- **Export Ecosystem** focuses on the export-related infrastructure in a state/UT along with the trade support provided to the exporters, and the prevalence of Research and Development in the state/UT to foster innovation.
- **Export Performance** is an output-based indicator which gauges the growth of a state's export over the previous year and analyzes its export concentration and footprint on the global markets.

52. What is the Guillain-Barré Syndrome?

Source: The post is based on the article “**What is the Guillain-Barré Syndrome?**” published in **Indian Express** on **14th July 2023**

What is the News?

The Peruvian Government has declared a state of national emergency for up to three months due to a spike in the number of cases of a rare neurological disorder called Guillain-Barré Syndrome.

What is Guillain-Barré Syndrome?

Guillain-Barré Syndrome is a rare neurological disorder where the body's immune system — which normally protects it from infections and other foreign bodies — mistakenly attacks its own peripheral nerve cells.

In most cases of GBS, the immune system damages the myelin sheath. (Myelin sheath is an insulating layer of fat and protein that surrounds the nerve cells. It enables signals to pass through the nerve tracts at breakneck speed under normal conditions).

What causes Guillain-Barré Syndrome?

The exact reasons for Guillain-Barré Syndrome are not yet understood. However, it often develops shortly after a person gets an infectious disease.

Rarely, vaccinations can cause it. Guillain-Barré Syndrome was also linked to the cytomegalovirus, Epstein Barr virus, Zika virus and even the COVID-19 pandemic.

What are the types of Guillain-Barre syndrome?

GBS has three forms:

Acute inflammatory demyelinating polyradiculoneuropathy(AIDP) is the most common form found in North America and Europe. The most common sign of this form is muscle weakness that starts in the lower body and spreads to the upper body.

Miller Fisher syndrome(MFS): In this, the paralysis starts with the eyes. This syndrome is less common in the US, and more common in Asia.

Acute motor axonal neuropathy is more common in China, Japan, and Mexico.

Is Guillain-Barré Syndrome curable?

Currently, there is no certain cure for Guillain-Barré Syndrome. The paralysis not only affects the legs and arms, but also important parts of the nervous system that regulate breathing, blood pressure and heartbeat.