

Factly Compilation

3rd to 8st July, 2023

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1. India adds 664 animal species to its faunal database in 2022, 339 taxa to its flora

Source: The post is based on the article "India adds 664 animal species to its faunal database in 2022, 339 taxa to its flora" published in The Hindu on 3rd July 2023

What is the News?

The Union Minister for Environment, Forest, and Climate Change has released data on the floral and faunal database in 2022.

What are the key highlights from the Flora and faunal database?

Faunal Discoveries: The faunal discoveries are compiled in a publication by the Zoological Survey of India (ZSI) titled Animal Discoveries – New Species and New Records 2023.

According to the document, India has added 664 animal species to its faunal database in the year 2022. These comprise 467 new species and 197 new records [species found in India for the first time].

The maximum number of new faunal discoveries has been of invertebrates with 583 species, while vertebrates constitute 81 species.

In 2022, the maximum number of new discoveries were recorded from Kerala, followed by Karnataka and Tamil Nadu.

Major faunal discoveries are:

- Two species of bats – Miniopterus phillipsi, a long-fingered bat and Glischropus meghalayanus, a bamboo-dwelling bat, both from Meghalaya.

- Sela macaque (Macaca selai): It is a new macaque species discovered in western and central Arunachal Pradesh and named after the Sela Pass

– Macaca leucogenys: It is a white-cheeked macaque earlier found in Modog, southeastern Tibet, and sighted in India for the first time in 2022 in West Siang, Arunachal Pradesh.

- Ficedula zanthopygia: It is a yellow-rumped flycatcher, earlier known from Mongolia, Transbaikal, southern China, Korea, and western Japan, and found last year in Narcondam Island of the Andaman archipelago.

Floral Discoveries: The floral discoveries are contained in Plant Discoveries 2022 published by the Botanical Survey of India (BSI).

According to it, India has added 339 taxa to its flora during 2022. These comprise 319 species, and 20 infraspecific taxa as new to the Indian flora.

The discoveries encompass seed plants, fungi, lichen, algae, bryophytes, microbes, and pteridophytes.

Western Himalayas and Western Ghats are prominent regions for plant discoveries.

Kerala recorded the highest number of plant discoveries (57), accounting for 16.8% of all discoveries.

Major new plant discoveries are:

- Nandadevia Pusalkar: It is common throughout the foothills and warm outer valleys of the Uttarakhand Himalayas. and

– Nilgiriella Pusalkar: It is endemic to the southern Western Ghats of India and distributed in Karnataka, Kerala, and Tamil Nadu.



- Calanthe lamellosa: It is an orchid species. It was earlier recorded in China and Myanmar, and found for the first time in India in the Japfu mountain range in Kohima, Nagaland.

2. DPIIT successfully organizes National Workshop on Industrial Park Rating System

Source: The post is based on the article "DPIIT successfully organizes National Workshop on Industrial Park Rating System" published in PIB on 3rd July 2023

What is the News?

The Department for Promotion of Industry and Internal Trade(DPIIT) has successfully organized the National Workshop on Industrial Park Rating System (IPRS).

What is the Industrial Park Rating System (IPRS)?

The Industrial Park Rating System (IPRS) was launched by the Department for Promotion of Industry and Internal Trade (DPIIT) in 2018. It a pilot initiative, launched with the support of the Asian Development Bank(ADB) and the Ministry of Electronics and Information Technology(MeitY).

It is an extension of the **India Industrial Land Bank (IILB)** platform which features more than 4,500 industrial parks

Aim: To rate the country's industrial parks and special economic zones.

Parameters: It rates industrial parks across four pillars: internal infrastructure and utilities, external infrastructure and facilities, business support services, and environmental and safety management.

Based on the findings of the pilot and review of the global approaches, frameworks, and guidelines DPIIT **launched 'IPRS 2.0' in October, 2021. It is** a key enabler for identifying additional measures to enhance industrial competitiveness.

Compared with the 34-parameters assessment framework used for the pilot phase, 45 parameters were developed for the assessment of industrial parks and 40 parameters separately for SEZs under the four pillars of IPRS 2.0.

3. <u>Prime Minister launches National Sickle Cell Anaemia Elimination Mission from Shahdol,</u> <u>Madhya Pradesh</u>

Source: The post is based on the article "Prime Minister launches National Sickle Cell Anaemia Elimination Mission from Shahdol, Madhya Pradesh" published in pib on 3rd July 2023

What is the News?

The Prime Minister has launched the National Sickle Cell Anaemia Elimination Mission (NSCEM) in Shahdol, Madhya Pradesh.

What is Sickle Cell Anaemia?

Click Here to read

What is the National Sickle Cell Anaemia Elimination Mission?

The Mission was announced in the Union Budget 2023.

Aim: To address the pressing health challenges posed by sickle cell disease, particularly among the tribal population.



Part of: The mission is being implemented in a mission mode as part of the **National Health Mission (NHM).**

Target: The mission aims to eliminate sickle cell disease as a public health problem by 2047.

States covered: The mission will be implemented in 278 districts of 17 states in India namely Gujarat, Maharashtra, Rajasthan, Madhya Pradesh, Jharkhand, Chhattisgarh, West Bengal, Odisha, Tamil Nadu, Telangana, Andhra Pradesh, Karnataka, Assam, Uttar Pradesh, Kerala, Bihar, and Uttarakhand.

Features of the mission: The mission focuses on awareness creation, universal screening of approximately seven crore people in the 0-40 years age group in affected tribal areas and counseling through collaborative efforts of central ministries and state governments.

4. <u>Rules of origin delay FTA tariff discussions with EU</u>

Source: The post is based on the article "Rules of origin delay FTA tariff discussions with EU" published in Business Standard on 3rd July 2023

What is the News?

India and the European Union (EU) have not been able to make major progress in the tariff negotiations under the ongoing free trade agreement (FTA) discussions due to differences over the rules of origin criteria.

This is because India wants a conservative rule of origin, while the EU wants us to follow liberal criteria.

What is Rules of origin?



THE CRITERIA

Rules of origin are the criteria needed to determine the national source of a product

It prevents an FTA partner country from re-exporting an imported item to the other partner country without substantial value addition

TARIFF PLAY

While the EU asks for 95% tariff elimination from India, the country is not ready for it

But the EU is ready to provide 100% tariff elimination as a majority of its items anyway have zero tariffs

India seeks to get clarity on carbon border adjustment mechanism and deforestation Act



Source: Business Standard

Rules of origin criteria are critical to determining the country of origin of a product. The country of origin refers to the country where the products were manufactured or substantially transformed.

What are rules of origin used for?

— to implement measures and instruments of commercial policy, such as anti-dumping duties and safeguard measures;

— to determine whether imported products shall receive most-favored-nation (MFN) treatment or preferential treatment;

- for the purpose of trade statistics;
- for the application of labeling and marking requirements and

— for government procurement.

Criteria used to qualify for the rules of origin requirements: Tariff level changes and minimum value additions are the two most commonly used criteria for a product to qualify for the rules of origin requirements.

- Most developed countries prefer the flexibility to use either of the criteria, as it allows flexibility for exporters. India has traditionally preferred the use of both criteria and is not given the flexibility to use either of them.

5. Government revises the Crop Residue Management guidelines

Source: The post is based on the article "Government revises the Crop Residue Management guidelines" published in PIB on 2nd July 2023

What is the News?

The Government of India has revised the crop residue management guidelines for Punjab, Haryana, Uttar Pradesh, and Delhi to help tackle the challenge of stubble burning in these states and improve air quality.

What are Crop Residues?

Crop residues are materials left in an agricultural field after the crop has been harvested. These residues include stalks and stubble (stems), leaves, and seed pods.

Crop residues are primarily used as bedding material for animals, livestock feed, soil mulching, bio-gas generation, bio-manure/compost, thatching for rural homes, mushroom cultivation, biomass energy production, fuel for domestic and industrial use, etc.

However, a large portion of crop residue is burnt 'on-farm' primarily to clean the field for sowing the next crop.

The problem of 'on-farm' burning of crop residues is intensifying in recent years due to a shortage of human labor, the high cost of removing the crop residue from the field, and mechanized harvesting of crops.

Adverse effects of crop residue burning:

Loss of nutrients: It is estimated that burning one tonne of rice straw accounts for the loss of 5.5 kg Nitrogen, 2.3 kg phosphorus, 25 kg potassium, and 1.2 kg sulphur besides, organic carbon.



Impact on soil properties: Heat from burning residues elevates soil temperature, causing death of beneficial soil organisms.

Emission of greenhouse and other gases: Crop residue burning is a potential source of Green House Gases (GHGs) and other chemically and radiative important trace gases and aerosols such as CH4, CO, N2O, NOX, and other hydrocarbons.

What are the revised crop residue management guidelines the government has released?

Techno-commercial pilot projects for Paddy Straw Supply Chain will be established under the bilateral agreement between the Beneficiary/Aggregator (Farmers, Cooperative Societies of Farmers, Farmers Producer Organizations (FPOs), and Panchayats) and Industries utilizing the paddy straw.

Govt shall provide financial assistance on the capital cost of machinery and equipment.

The required working capital may be financed either by the Industry and Beneficiary jointly or utilizing the Agriculture Infrastructure Fund (AIF), NABARD Financial, or Financing from the Financial Institutions by the beneficiary.

The land for storage of the collected paddy straw will be arranged and prepared by the beneficiary as may be guided by the end-use industry.

Significance of these revised guidelines: 1) This will supplement the efforts of paddy straw management through in-situ options 2) Air pollution caused by stubble burning will be considerably reduced and 3) It would also help generate employment opportunities of about 9,00,000 man-days.

6. India, China ramp up infra on north bank of Pangong lake

Source: The post is based on the article "India, China ramp up infra on north bank of Pangong lake" published in The Hindu on 3rd July 2023

What is the News?

India and China are busy with construction in the Pangong Lake area.

What is China and India building along the Pangong Lake?

China: China is constructing a bridge to connect the north and south banks of the lake.

- Apart from the bridge, work on road connectivity along the south bank towards Shandong village is also under progress.

– The Chinese air defence site is also located east of the Khurnak fort. (**Khurnak Fort** is a ruined fort on the northern shore of Pangong Lake).

India: India is building a black-topped road on its side on the north bank.

What is Pangong Tso Lake?

Click Here to read

India-China talks to resolve border issues:

So far, India and China have held 18 rounds of military talks and 27 meetings of the Working Mechanism for Consultation and Coordination on India-China Border Affairs (WMCC).

However, the friction points remain on Depsang Plains and Demchok over the patrolling rights. The Indian army had been patrolling in these areas until the Galwan clash, which restricted the movement.



<u>Scientists detect the universe's 'noisy' gravitational wave background: What it means and why</u> you should care about it

Source: The post is based on the article "Scientists detect the universe's 'noisy' gravitational wave background: What it means and why you should care about it" published in Indian Express on 3rd July 2023

What is the News?

Scientists have said that they have found evidence to suggest that the universe is filled with low-frequency gravitational waves.

How were low-frequency gravitational waves detected?

Scientists used six large radio telescopes around the world, including the one in Pune to detect low-frequency gravitational waves.

These telescopes studied objects called pulsars. Pulsars are distant rapidly-rotating neutron stars that emit pulses of radiation, observed from the Earth as bright flashes of light. These bursts take place at extremely precise intervals, and therefore scientists use pulsars as 'cosmic clocks'.

After examining 25 pulsars over a period of 15 years, scientists found that some of the signals from these neutron stars arrived a little early while a few others were late, the discrepancies ranging in millionths of seconds.

Scientists have proposed that the observed inconsistencies were due to deformities caused in spacetime by gravitational waves.

These low-frequency gravitational waves probably emerged from a colliding pair of very large, 'monster', black holes, millions of times bigger than our Sun.

Why is this discovery important?

Scientists have been looking for low-frequency gravitational waves for decades. They believed that such ripples are perpetually rolling through space like background noise.

This latest breakthrough provides enough data to suggest that there is a gravitational wave background, which exists in our universe.

Moreover, this discovery will also help scientists expand their knowledge about the nature and evolution of the universe. It will also help them gain more information about the environment around massive black holes.

7. When did humans first arrive in Southeast Asia? - Tam Pà Ling cave

Source: The post is based on the article "When did humans first arrive in Southeast Asia?" published in The Hindu on 3rd July 2023

What is the News?

Tam Pà Ling cave provided the earliest evidence of modern humans in mainland South-East Asia.

What is Tam Pà Ling cave?

Tam Pà Ling cave is located in the Annamite Mountain range in Northern Laos.

The cave features a sloping structure formed by periodic slope wash deposition.



What are the key findings made at Tam Pà Ling cave?

The excavations revealed that humans were present in the vicinity of Tam Pà Ling Cave for roughly 56,000 years.

The age of the lowest fossils found at Tam Pà Ling cave suggests modern humans arrived in this region between 86,000 and 68,000 years ago.

This has pushed back the timing of Homo sapien's arrival in Southeast Asia.

Moreover, a tooth, estimated to be 150,000 years old, was found in the Cave, linking it to the presence of <u>Denisovans</u>, an extinct human relative.

What are the dating methods used at the Tam Pà Ling cave?

Luminescence dating: It is a technique that measures the last time crystalline materials, such as stones, were exposed to sunlight or heat. This technique mainly uses two minerals: quartz and feldspar.

Uranium series dating: It works by measuring uranium, and the elements into which it transforms via radioactive decay within the tooth.

Electron spin resonance dating: It relies on measuring the number of electrons in tooth enamel.

Micromorphology: It is a technique that examines sediments under a microscope to establish the integrity of the layers that buried the fossils.

8. <u>DoT Launches Bharat 6G Alliance to Drive Innovation and Collaboration in Next-Generation</u> <u>Wireless Technology</u>

Source: The post is based on the article "DoT Launches Bharat 6G Alliance to Drive Innovation and Collaboration in Next-Generation Wireless Technology" published in PIB on 4th July 2023

What is the News?

The Union Minister for Communications has launched Bharat 6G Alliance. It will work towards setting up the 6G network in India.

What is Bharat 6G Alliance?

Bharat 6G Alliance (B6GA) is a collaborative platform consisting of public and private companies, academia, research institutions, and standards development organizations.

Objectives of the alliance:

- To understand the business and societal needs of 6G beyond technical requirements.

-Foster consensus on the needs, and promote high-impact open research and development (R&D) initiatives.

- To bring together Indian startups, companies, and the manufacturing ecosystem to drive the design, development, and deployment of 6G technologies in India.

– To facilitate market access for Indian telecom technology products and services, enabling the country to emerge as a global leader in 6G technology.

- Government aims for 10 per cent of 6G patents by 2030.

What is Telecom Technology Development Fund (TTDF)?

Launched in: 2022



Aim: To fund R&D in rural-specific communication technology applications and form synergies among academia, start-ups, research institutes, and the industry to build and develop the telecom ecosystem.

- To promote technology ownership and indigenous manufacturing, create a culture of technology co-innovation, reduce imports, boost export opportunities, and create Intellectual Property.

Funding: 5% of annual collections from the Universal Service Obligation Fund (USOF) will be available for the TTDF Scheme.

What is the Digital Communication Innovation Square(DCIS) Initiative?

Digital Communication Innovation Square initiative was launched under the <u>Champion Services</u> <u>Sector Scheme.</u>

Aim: To foster an ecosystem of indigenously developed telecom equipment, in a bid to reduce reliance on imported equipment and technologies.

Under the initiative, startups will get a grant of Rs 50 lakhs, while MSMEs will get a grant of Rs 2 crore, and a consortium will get a grant of Rs 10 crore. Financial support will be provided to those projects and ideas that have reached at least the proof of concept level.

- The initiative will also provide the selected startups and MSMEs mentorships, incubation, and technical advisory support during the project.

9. DAY-NRLM launches eSARAS mobile App

Source: The post is based on the article "DAY-NRLM launches eSARAS mobile App to Market products made by women of Self-help Groups" published in PIB on 3rd July 2023.

What is the News?

The Union Ministry of Rural Development has launched eSARAS mobile App.

What is eSARAS mobile App?

eSARAS mobile App is an initiative of <u>Deendayal Antyodaya Yojana- National Rural Livelihoods</u> <u>Mission (DAY-NRLM)</u>, a flagship program of the Ministry of Rural Development (MoRD).

Purpose: It is an e-commerce mobile app. It will be used as a more effective platform for marketing the products made by women of self-help groups.

What is eSARAS fulfillment center?

eSARAS fulfillment center will be managed by the Foundation for Development of Rural Value Chains (FDRVC).

– Note: FDRVC is a Not for Profit Company constituted under MoU between the Ministry of Rural Development and Tata Trusts to support large-scale community-based organizations.

Purpose: The center will be used for processing, packaging, and shipping of products that customers purchase through the eSARAS Portal and eSARAS mobile App.

- It will also handle the logistics required to bring an online order to a customer's doorstep.



10. Political parties can now file financial statements online

Source: The post is based on the article "Political parties can now file financial statements online" published in PIB on 3rd July 2023

What is the News?

The Election Commission of India (ECI) has launched a new web portal to allow political parties to file their financial accounts online.

What is the purpose of launching an online facility for filing financial statements by Political parties?

The online facility for filing financial statements by political parties has been created with twin objectives:

- **Firstly**, to facilitate political parties in overcoming the difficulties in physical filing of reports and

- **Secondly**, to ensure timely filing of financial statements in the prescribed or standardized formats.

What are the financial reports political parties have to file online?

Political Parties need to file a Contribution Report, Audited Annual Account, and Election Expenditure Statement.

These financial statements are required to be submitted by political parties to the Election Commission/Chief Electoral Officers of States/Union Territories, as per the Representation of People's Act, 1951 & transparency guidelines issued by the Commission.

The portal also has a facility for sending reminder messages on the registered mobile number and registered emails of the authorized representatives of the political party so that the dates of compliances are not missed.

What happens if the political party does not want to file their financial accounts online?

The political parties not willing to file the financial report through online mode will have to convey the reasons to the Commission in writing. Then, it may continue to file its reports in hard copy along with CDs/Pen drives in the prescribed formats.

The commission will in turn publish all such reports online, along with a letter of justification sent by the party for not filing financial statements online.

11. WMO revives ozone-UV bulletin after 7 years, shows steady recovery of ozone layer

Source: The post is based on the article "WMO revives ozone-UV bulletin after 7 years, shows steady recovery of ozone layer" published in Down To Earth on 3rd July 2023

What is the News?

The World Meteorological Organization (WMO) has released Ozone and UV Bulletin after a gap of seven years.

What are the key highlights from the Ozone and UV Bulletin?

Steady recovery of ozone layer: The production and consumption of controlled ozone-depleting substances have been phased out up to 99%. This has happened due to the Montreal Protocol and its amendments.

- Stratospheric ozone is slowly recovering, with a full recovery in most parts of the atmosphere projected to occur in the coming decades.



– However, unfortunately, climate change is slowing down the recovery of the ozone layer. Ozone depletion is affecting the climate of the lower atmosphere.

Hunga Tonga-Hunga Ha'apai volcanic eruption changed the stratosphere: The Hunga Tonga-Hunga Ha'apai volcanic eruption in January 2022 was the largest in the last 100 years, injecting ice and water vapor high into the stratosphere.

- The eruption increased the water vapor content of the stratosphere by 5% to 10%, resulting in substantial cooling of the stratosphere above the Southern Hemisphere.

– The additional water vapor has resulted in less ozone in the lower stratosphere of the Southern Hemisphere in 2022.

What is an Ozone Layer?

Click Here to read

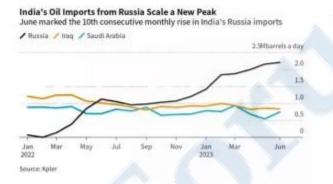
12. India refiners start yuan payments for Russian oil imports, say sources

Source: The post is based on the article "India refiners start yuan payments for Russian oil imports, say sources" published in The Hindu on 4th July 2023

What is the News?

Indian refiners have begun paying for some oil imports from Russia in Chinese yuan.

India as the largest buyer of seaborne Russian oil



India has emerged as a largest buyer of seaborne Russian oil. This is because Russia is selling oil at a discounted rate since the invasion of Ukraine.

Moreover, India being able to buy cheap Russian crude has boosted output and profits at Indian refineries.

It has also enabled them to export refined products competitively to Europe and take a bigger market share.

How is India paying Russia for the oil?

The U.S. dollar has long been the main global oil currency, including for purchases by India.

But now the Chinese yuan is playing an increasingly important role in Russia's financial system because Russia has been frozen out of the dollar and euro financial networks by international sanctions.

Indian Oil Corporation, the country's biggest buyer of Russian crude oil, became the first state refiner to pay for some Russian purchases in yuan.



This rise in yuan payments has given a boost to China's efforts to internationalize its currency, with Chinese banks promoting its use specifically for the Russian oil trade.

13. Hul Diwas: Remembering the Santal rebellion against the British

Source: The post is based on the article "Hul Diwas: Remembering the Santal rebellion against the British" published in Indian Exprss on 3rd July 2023

What is the News?

The Prime Minister has commemorated Hul Diwas, honoring the sacrifice of Santhals in their fight against British colonial authorities.

What is Hul Diwas or Santhal Rebellion?

The Santal rebellion or 'Hul' began in 1855.

It was an "organized war against colonialism" led by the Santals, standing against the various forms of oppression they were subjected to by the British and their collaborators.

What was the reason for the Santhal Rebellion?

The Santal people – or Santalis – were not the original inhabitants of modern-day Santhal Pargana.

They had migrated from the Birbhum and Manbhum regions (present-day Bengal), due to the 1770 famine in Bengal.

With the enactment of the Permanent Settlement Act of 1790, the East India Company was desperate to bring an ever-increasing area in its control under settled agriculture.

Thus, they chose the area of Damin-i-Koh, at the time heavily forested, to be settled by the Santhals, in order to collect a steady stream of revenue.

However, once settled, the Santals bore the brunt of colonial oppression. Predatory moneylenders and the police were a byproduct of this system.

Who were the leaders in the revolution?

The Murmu brothers - Sidho, Kanhu, Chand and Bhairab - were among those who led the revolt.

But the women also played an important role. Phulo Murmu and Jhalo Murmu, sisters from the same family, participated in the Hul, inspiring women to join the rebellion.

The rebellion saw participation from 32 communities, both tribals, and non-tribals, challenging the notion that it was solely a Santhal rebellion.

The East India Company's army was defeated twice during the rebellion, debunking the belief that they were invincible.

In 1855, martial law was introduced to curb the revolt, and the Hul was quashed by early 1856.

What was the impact of the Santhal rebellion?

The Santhal rebellion did not end with its suppression in 1855. It continued to inspire future uprisings, such as the Santhal involvement in the 1857 mutiny.

The Hul rebellion also symbolized resistance against British colonialism and laid the foundation for subsequent movements in Jharkhand.



14. Diversity for Restoration(D4R) Tool to drive India's eco-restoration initiatives

Source: The post is based on the article "This new tool can drive India's eco-restoration initiatives; here's how" published in Down To Earth on 3rd July 2023

What is the News?

Researchers have developed a tool called Diversity for Restoration (D4R) to aid in agroforestry and ecosystem restoration efforts.

What is the Diversity for Restoration(D4R) Tool?

The Diversity for Restoration (D4R) tool has been developed by **Biodiversity International**.

The tool has been modified to adapt to the Indian context by researchers from Ashoka Trust for Research in Ecology and the Environment (ATREE).

The tool aims to **support ecosystem restoration programs** in India by improving decisionmaking and promoting sustainable development.

The tool is already being used in countries such as Malaysia, Ethiopia, Columbia, Peru, Burkina Faso, Cameroon, etc.

What are the services that Diversity for Restoration(D4R) Tool can provide?

The Diversity for Restoration tool can:

- Help the user in identifying species that match their restoration objectives.

- Identify species that can resist local stresses and adapt to evolving environmental conditions.

- Can pinpoint areas and regions to procure the seeds for the required species.

– Informs the user whether the tree species offers timber, fruit, manure, or other commercial benefits.

- It also informs if the tree is resilient to physiological stresses such as extremely high or low temperatures, salinity, or acidity tolerance in the soil among others.

- Identify windbreakers - the trees can act as a barrier against high winds.

- The user can also know if the species offers better nitrogen fixing and whether it serves as a good pollinator for birds and bees.

What is the significance of the Diversity for Restoration(D4R) Tool?

The tool will help improve the **effectiveness of restoration programs** by providing manifold benefits to interested stakeholders while promoting sustainable development.

It will also **help in better decision-making** and bring the best outcome for plantation programs.

15. 23rd SCO Summit - SCO calls for multipolar world order as Iran joins grouping

Source: The post is based on the article "SCO calls for multipolar world order as Iran joins grouping" published in The Hindu on 5th July 2023.

What is the News?

India hosted the 23rd Summit of the Shanghai Cooperation Organisation (SCO) Council of Heads of State in the virtual format. This is the first time India is hosting the summit.

What are the key takeaways from the 23rd SCO Summit?

Iran as new member: SCO has decided to induct Iran as its ninth member.



New Delhi Declaration: One of the major outcomes of the SCO summit was the New Delhi Declaration.

- The name of the declaration was coined by the Indian government.

- The declaration proposes five joint statements namely: fight against terrorism, deradicalisation, sustainable lifestyle to tackle climate change, production of millets and digital transformation.

- The declaration also listed a number of global challenges, including new and emerging conflicts, turbulence in the markets, supply chain instability, climate change and the COVID-19 pandemic.

India on China's Belt and Road Initiative (BRI): India has once again refused to endorse China's ambitious Belt and Road Initiative (BRI) scheme which envisions rebuilding the old Silk Road to connect China with Asia, Europe and beyond with large infrastructure spending.

- India was the only country in the Shanghai Cooperation Organisation (SCO) not to support the project.

India has also stayed out of a joint statement on **SCO Economic Development Strategy 2030**, indicating a lack of consensus in the grouping.

India on cross border terrorism: Prime Minister has said that some countries use cross-border terrorism as an instrument of their policies.

The PM said that SCO should not hesitate to criticize such nations because there can be no place for double standards on such serious matters.

India has been repeatedly pointing out that Islamabad uses terrorist groups as instruments of state policy.

China has been blocking the listing of Pakistan-based terrorists at the UN Security Council (UNSC).

16. Govt. to help combat child trafficking in border areas, set up rehabilitation homes

Source: The post is based on the article "Govt. to help combat child trafficking in border areas, set up rehabilitation homes" published in The Hindu on 5th July 2023.

What is the News?

The Central Government has decided to help build infrastructure in border areas to combat child trafficking and help in rehabilitation and protection of victims.

About Trafficking in border areas of India:

India is a source as well as destination country for trafficking of persons.

The source countries of such trafficking are Nepal, Bangladesh and Myanmar from where women and girls are trafficked under false promises of providing a better life, jobs and good living conditions in India.

A majority of those trafficked are minor girls or young women who after their arrival in India are sold and forced into commercial sex work.

These girls/women often reach major cities like Mumbai, Delhi, Hyderabad etc. from where they are taken out of the country mainly to the Middle East and SouthEast Asia.



What are the steps the government has taken till now to combat trafficking in border areas?

Till now, the Women and Child Development Ministry has been providing financial assistance to all States and Union Territories under the Nirbhaya Fund to set up and strengthen Anti-Human Trafficking Units (AHTU) in every district of the country.

Funding has also been provided for setting up of AHTU units in border guarding forces such as the Border Security Force (BSF) and Sashastra Seema Bal (SSB).

What are the further steps the government is planning to take to combat trafficking on border areas?

Government has decided to provide financial assistance to States/UTs in border areas to set up protection and rehabilitation homes for the victims of trafficking particularly for minor girls and young women.

These homes will provide services like shelter, food, clothing, counseling, primary health facilities and other daily requirements.

The government will also help build infrastructure to combat child trafficking in border areas.

The victims of trafficking will also be produced before the child welfare committee to declare fit facility for providing sponsorship as per the <u>Mission Vatsalya Scheme guideline</u> and accordingly, the states/UTs will be requested to do the needful.

17. Impact of CSR funds 'not widely felt' despite jump in spending: Ministry of Corporate Affairs

Source: The post is based on the article "Impact of CSR funds 'not widely felt' despite jump in spending: Ministry of Corporate Affairs" published in Economic Times on 2nd July 2023.

What is the News?

The Ministry of Corporate Affairs (MCA) has said that there has been a limited impact of corporate social responsibility (CSR) initiatives despite an increase in such spending in recent years.

What is Corporate Social Responsibility(CSR)?

Click Here to read

Data on Corporate Social Responsibility(CSR):



Source: Economic Times

CSR spending in FY21 amounted to Rs 26,210 crore representing an 80% growth since FY16.



This increase is commendable but the impact of CSR funds is not widely felt, necessitating a strategic and sustainable approach.

What are the challenges to CSR in India?

Regional disparity: There is a substantial regional disparity in the deployment of CSR funds.

In FY21, ten states, including Maharashtra, Gujarat, Karnataka, and Andhra Pradesh accounted for over 44% of the CSR funds.In contrast, the eight northeastern states received a meager 0.91% share.

This regional imbalance is worrisome as the smaller regions often face higher levels of socioeconomic challenges and underdevelopment.

The potential reason for such disparity could be the stipulation under the Section 135(5) of the Companies Act 2013 which says that companies should give preference to the areas around which they operate while allocating CSR funds.But this rule is not mandatory.

Hence, companies can avoid concentrating CSR funds in specific regions by adopting a multidimensional approach to CSR. This involves identifying regions with high socioeconomic vulnerabilities and directing resources towards their development.

For this, they can collaborate with local NGOs, community-based organizations, and government agencies to ensure the effective implementation of CSR projects at the grassroots level.

CSR funding in few specific sectors: Education, healthcare, and rural development have remained the top receivers of the CSR funds.

According to the official data, between FY15 and FY21, the education sector received about 37% of the total CSR spending.

The health sector received 30% and Rural development projects received 9.6% of the total CSR expenditure.

18. Deep sea mining permits may be coming soon. What are they and what might happen?

Source: The post is based on the article "Deep sea mining permits may be coming soon. What are they and what might happen?" published in Indian Express on 3rd July 2023

What is the News?

The International Seabed Authority is preparing to resume negotiations on the opening up of international seabed for deep sea mining.

What is Deep Sea Mining?

Deep-sea mining is the process of retrieving mineral deposits from the ocean below 200 metres the deep seabed, which covers around two-thirds of the total seafloor.

There are three types of deep sea mining: 1) taking deposit-rich polymetallic nodules off the ocean floor 2) mining massive seafloor sulphide deposits and 3) stripping cobalt crusts from rock.

How is Deep Sea Mining regulated now?

Countries manage their own maritime territory and exclusive economic zones, while the high seas and the international ocean floor are governed by the United Nations Convention on the Law of the Seas(UNCLOS). It is considered to apply to states regardless of whether or not they have signed or ratified it.

Under the treaty, the seabed and its mineral resources are considered the "common heritage of mankind" that must be managed in a way that protects the interests of humanity through the



sharing of economic benefits, support for marine scientific research, and protecting marine environments.

Mining companies interested in deep sea exploitation are partnering with countries to help them get exploration license.

Why is there a pressure on ISA to establish regulations now?

In 2021 the Pacific island nation of Nauru — in partnership with mining company Nauru Ocean Resources applied to the ISA to exploit minerals in a specified deep sea area.

This triggered a clause of the UN treaty that requires the ISA to complete regulations governing deep sea exploitation by July 2023.

If no regulations are finalized, Nauru can submit an application to conduct the mining without any governing regulations. Other countries and private companies can start applying for provisional licenses if the ISA fails to approve a set of rules and regulations by July,2023.

What is the environmental impact of deep-sea mining?

Firstly, the deep ocean absorbs and stores more than 90% of the excess heat and approximately 38% of the carbon dioxide generated by humanity. Breakdown of even a small fraction of carbon stored in marine sediments could exacerbate climate change.

Secondly, noise from deep-sea mining could disrupt marine mammals, such as whales and dolphins, that use sound as a primary means of underwater communication and sensing.

Thirdly, waste water and the particles discharged by mining ships at the ocean surface will affect ecosystems and commercially important or vulnerable species,

Fourthly, there are implications for the human rights of communities that could be affected by pollution or damaged fisheries.

What do mining companies say about the environmental impact?

The mining companies argue that the biggest threat to the oceans is climate change, and that the planet's top priority should be to achieve net-zero emissions. To achieve this, trade-offs will be necessary.

Zo peoples of Manipur and Mizoram: ethnicity, religion, a shared history.

Source: The post is based on the article "Ethnicity, religion, a shared history: ties that bind the Zo peoples of Manipur & Mizoram" published in Indian Express on 5th July 2023.

What is the News?

Mizoram's Zoram People's Movement (ZPM) has called for a reunification of the Zo people in view of the continuing ethnic violence between the dominant Meiteis and the Kuki-Zomi tribes in Manipur.

Who are Zo people?

The Zo people are an ethnic group which inhabit areas of India, Myanmar and the Chittagong hill tracts of Bangladesh.

The Chin Hills or Indo-Chin hill ranges in northwestern Myanmar is the home to a large number of tribes that come under the Zo umbrella.

Zo group includes many sub-tribes and clans such as the Chin, **Kuki, Mizo,** Lushei, Zomi, Paitei, Hmar, Ralte, Pawi, Lai, Mara, Gangte, Thadou, etc.

These tribes are believed to have migrated from China through Tibet to settle in Myanmar, and speak a group of Tibeto-Burman languages.

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Constant feuds among the tribal clans and their kings (chieftains) drove many of the clans westward to modern-day Mizoram and parts of Manipur in the 17th century.

They settled in new villages but even so remained socially and emotionally connected with the Chin tribes of Myanmar.

Apart from ethnicity— the tribes are also connected together by Christianity

19. <u>Union Minister lays foundation stone of Inland Waterways Transport Terminal at Bogibeel,</u> <u>Dibrugarh</u>

Source: The post is based on the article "Union Minister lays foundation stone of Inland Waterways Transport Terminal at Bogibeel, Dibrugarh" published in PIB on 5th July 2023.

What is the News?

Union Minister of Ports, Shipping & Waterways has laid the foundation stone of Inland Waterways Transport (IWT) terminal to be developed at Bogibeel in Dibrugarh, Assam.

Where is the Inland Waterways Transport (IWT) terminal being developed?

Inland Waterways Transport (IWT) terminal is being developed at **Bogibeel in Dibrugarh, Assam** by the bank of the **River Brahmaputra (National Waterways 2)**.

The terminal is being developed under the aegis of Inland Waterways Authority of India(IWAI).

The executing agency of the terminal is being done by the **Indian Port Rail and Ropeway Construction Limited.**

Some major features of the terminal include cargo and passenger berths, approach and other internal roads, transit shed, open storage area, truck parking area, passenger waiting area among others.

The terminal is scheduled to be completed by February 2024.

What is the significance of developing this Inland Waterways Transport (IWT) terminal at Bogibeel?

Firstly, this terminal is likely to play a pivotal role in rejuvenating inland waterways transportation in the region for both cargo and passenger movement.

Secondly, the terminal will act as a catalyst towards reclaiming the lost glory of Dibrugarh as a major commercial hub. It will also play a crucial role in the development of upper Assam and nearby states such as Arunachal Pradesh, Nagaland in terms of cargo as well as passenger transportation.

Thirdly, it will also lead to increase in eco-tourism, and easing the movement of EXIM cargo with comparatively lower transportation cost vis-a-vis others.

Source: The post is based on the article "India's remarkable economic scale and market potential enable startups to flourish and thrive in global startup ecosystem: Union Commerce and Industry Minister" published in PIB on 3rd July 2023.

What is the News?

The Union Minister for Commerce and Industry has addressed the Startup20 meeting at Gurugram.



^{20. &}lt;u>Startup20</u> -India's remarkable economic scale and market potential enable startups to flourish and thrive in global startup ecosystem: Union Commerce and Industry Minister

What is Startup20?

Startup20 is an official engagement group established under India's G20 Presidency.

It acts as a dialogue forum with the G20 nations startup ecosystem stakeholders and intends to represent the startup ecosystem of the G20 nations to raise the macroeconomic concerns and challenges faced by the startup ecosystem players in these nations.

Startup20 Engagement Group will operate through three Task Forces:

- The Foundations and Alliances Taskforce: It will work to create a startup terminology handbook, set up a global knowledge hub, and create bilateral and Multilateral collaborations with governments, policymakers, academic & research institutes, industry associations and international organizations to promote startups.

- The Finance Taskforce: It will broaden the array of financial instruments available to startups, through policy level intervention and create pitching, capacity building and networking opportunities for startups with the global investor community.

- Inclusion and Sustainability Taskforce: It will work towards promotion of inclusive entrepreneurship, startups working towards inclusion, creating a sustainable planet on the back of startups working towards the SDGs, while also encouraging them to adopt growth-centric sustainable strategies.

First meeting of Startup20: Startup20's inception meeting was held in Hyderabad in January 2023. At the meeting, Startup20X was launched.

- **Startup20X** is a platform conceptualized to host talks, conferences, and events conducted under the aegis of India's Startup20 Engagement Group. It will bring together leaders from the world of innovation and entrepreneurship and give them a platform to share their experiences and network with ecosystem stakeholders.

21. India ranked 67th on Energy Transition Index, Sweden on top: WEF

Source: The post is based on the article "India ranked 67th on Energy Transition Index, Sweden on top: WEF" published in The Hindu on 28th June 2023

What is the News?

The World Economic Forum(WEF) has released the Energy Transition Index 2023.

What is the Energy Transition Index?

Click Here to read

What are the key takeaways from Energy Transition Index 2023?

Rankings: Sweden has topped the list and was followed by Denmark, Norway, Finland and Switzerland in the top five.

- France (7) was the only G20 Country in the top 10, followed closely by Germany (11), the U.S. (12), and the U.K. (13).

India: India has been ranked 67th out of 120 countries.

Observations made on India: India is the only major economy with energy transition momentum accelerating across all dimensions.

– Despite continued economic growth, India has successfully reduced the energy intensity of its economy and the carbon intensity of its energy mix, while achieving universal energy access and effectively managing affordability of electricity.



Contributors: Universal access to electricity, replacing solid fuels with clean cooking options and increasing renewable energy deployment have been primary contributors to the improvement of India's performance.

Concerns: Rising import dependence amid global energy market volatilities, predominantly carbon-intensive energy mix. Challenges include balancing economic growth and creating quality jobs for the growing working-age population.

Recommendations: Continued progress of India will be challenged by two key macro trends: strong economic growth and the urgency to create quality jobs for a growing working age population.

- Hence, for this a skilled workforce, public-private collaboration in innovation, and investment in research and development in low-carbon technologies are necessary to enable India's energy transition.

22. <u>Data scraping explained: What is data scraping and why Elon Musk is changing Twitter rules</u> over it?

Source: The post is based on the article "Explained: What is data scraping and why Elon Musk is changing Twitter rules over it?" published in TOI on 5th July 2023

What is the News?

Twitter has implemented temporary reading limits to address issues of Data Scraping and system manipulation.

What is data scraping?

Data scraping, also known as web scraping, is the automated process of extracting large amounts of data from websites or online sources.

It involves using software tools or programming techniques to gather information from web pages and convert it into a structured format, such as a spreadsheet or a database.

What are the positive implications of Data Scraping?

Data Scraping can be used for various legitimate purposes. Researchers and analysts can scrape data to gather information for market research, trend analysis, or monitoring competitors' pricing and product information.

Companies can scrape data to collect customer feedback, reviews, or to generate leads for their sales teams.

Data scraping can also be used for academic research, data journalism or to create innovative applications and services.

What are the drawbacks of data scraping?

Firstly, data scraping can be harmful when used for unethical or illegal purposes. For instance, many websites have terms of service or usage agreements that prohibit scraping their data without permission. When scraping violates these terms, it becomes unauthorized access to a website's data and can lead to legal consequences.

Secondly, there's always the threat of copyright infringement as data scraping may involve copying and reproducing copyrighted material without proper authorisation.

Thirdly, scraping personal data, such as email addresses, phone numbers, or sensitive information, without the consent of individuals can result in privacy violations. It may lead to the misuse of personal data, identity theft, or targeted advertising.



Fourthly, data scraping impacts a website's performance. Intensive and frequent scraping can put a significant load on the targeted website's servers leading to decreased performance or even crashing the site. This affects the user experience of legitimate visitors and can be considered a form of denial of service attack.

23. <u>RBI panel recommendations for internationalization of rupee</u>

Source: The post is based on the article "RBI panel recommends measures for internationalization of rupee" published in Indian Express on 6th July 2023.

What is the News?

Reserve Bank of India(RBI) Inter-Departmental Group (IDG) has recommended several measures for Internationalization of rupee.

About RBI Inter-Departmental Group(IDG):

Reserve Bank of India(RBI) had set up an Inter-Departmental Group (IDG) under RBI Executive Director Radha Shyam Ratho.

Mandate: To review the position of the rupee as an international currency and to frame a road map for the internationalization of the domestic currency.

What is Internationalization of the rupee?

Internationalization of the rupee is a process that involves increasing use of the local currency in cross-border transactions.

What are the benefits of Internationalization of the rupee according to Inter-Departmental Group (IDG)?

The benefits are: limited exchange rate risk, lower cost of capital due to better access to international financial markets, high seigniorage benefits and reduced requirement of foreign exchange reserves.

Note: Seigniorage is the difference between the value of currency/money and the cost of producing it. It is essentially the profit earned by the government by printing currency.

What are the drawbacks of Internationalization of the rupee according to the RBI Inter-Departmental Group (IDG)?

The RBI group has cautioned that internationalization of rupee may result in increased volatility in the rupee's exchange rate in the initial stages.

This would further have monetary implications as the obligation of a country to supply its currency to meet the global demand may come in conflict with its domestic monetary policies, popularly known as the <u>Triffin dilemma</u>.

What are the RBI panel recommendations for internationalization of rupee?

- Inclusion of the rupee in SDR (Special Drawing Rights) basket. The SDR is an international reserve asset created by the IMF (International Monetary Fund) to supplement the official reserves of its member countries. The value of SDR is based on a basket of five currencies—the U.S. dollar, the euro, the Chinese renminbi, the Japanese yen, and the British pound sterling.

- Adopting a standardized approach for examining the proposals on bilateral and multilateral trade arrangements for invoicing, settlement and payment in Indian Rupees(INR).

- Opening of INR accounts for non-residents both in and outside India should be encouraged.

- Indian payment systems should also be integrated with other countries for cross-border transactions.

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– Use of the existing bilateral and multilateral payment and settlement mechanisms such as ACU (Asian Clearing Union) to internationalize the rupee.

- Inclusion of Indian Government Bonds (IGBs) in global bond indices

- Rationalization of the foreign portfolio investor (FPI) regime to facilitate a more conducive environment for foreign investments into the Indian debt markets (both government and corporate).

- Waiver of the withholding tax for masala bond issuances.

- Expansion of the RTGS (Real Time Gross Settlement) system for settling international transactions.

24. Iran's induction in the Shanghai Cooperation Organisation

Source: The post is based on the article "Iran's induction in the Shanghai Cooperation Organisation" published in The Hindu on 6th July 2023

What is the News?

Iran has joined the Shanghai Cooperation Organisation (SCO) as its ninth member.

What is Shanghai Cooperation Organisation (SCO)?

Click Here to read

How has SCO dealt with bilateral issues between countries?

India and Pakistan joined the SCO as observers in 2005 and became full members in 2017. Despite their strained bilateral relations, both countries have actively participated in SCO meetings, including military and anti-terrorism exercises together.

The SCO has also facilitated discussions between India and China on the Line of Actual Control (LAC) border issue.

Why is Iran's induction in SCO significant?

SCO's original goals focused more on stability and security. But the recent focus has shifted towards connectivity in the region.

In this context, Iran's induction into SCO will help India build its connectivity strategy through Iran's Chabahar port, where it operates a terminal and through the International North South Transport Corridor that goes through Iran and Central Asia to Russia. This will also help India circumvent land-based trade through Pakistan.

Additionally, Iran's induction enables India to engage with the Central Asian region without getting entangled in China's Belt and Road Initiative.

Moreover, Iran's historical ties with India and its shared concerns about terrorism from Pakistan and Afghanistan will enhance India's call for action against terror safe havens.

What are the challenges for India after Iran's induction into SCO?

Iran's membership may deepen the perception of the SCO as an 'anti-West' forum. Both Iran and Russia face severe sanctions. The United States has also accused Iran of supplying weapons to Russia.

Further, the expected inclusion of Belarus next year in the SCO will further strengthen the image of SCO as an 'anti-West' forum.

Adding to these concerns. India's growing ties with the Quadrilateral Security Dialogue (Quad) has made the Indian balancing act more difficult.



25. Pay half of fine to informer: court's bid to spur animal protection

Source: The post is based on the article "Pay half of fine to informer: court's bid to spur animal protection" published in The Hindu on 6th July 2023

What is the News?

A Sessions Court in Rajasthan has ordered the payment of half of the fine amount imposed on a convict in a chinkara killing case, to the informer as a prize for helping in the detection of crime against wildlife.

The court said that this would make the society sensitive to wildlife protection.

What is the case about?

A person was arrested after police were tipped off by an informer that the former was seen on a camel cart with the carcass of a chinkara.

The arrested person admitted that he hunted the chinkara with his licensed gun and had burnt its horns and some other parts of its body near the scene of the crime.

Following his conviction by the Magistrate's court, he moved an appeal in the sessions court.

The court upheld his conviction and sentence and directed that 50% of the fine be paid to the informer as a prize. It would encourage the people to report the killing of endangered animals to the authorities.

What is Chinkara or Indian gazelle?



Source: Wikipedia

IUCN Status: Least Concern



Chinkara or Indian gazelle (Gazella bennettii) is a relatively small gazelle.

The range states of the species are India, the Islamic Republic of Iran, Pakistan and possibly Afghanistan.

The chinkara inhabits arid areas, including sand deserts, flat plains and hills, dry scrub and light forest.

They can go for a long time without water, so they are adapted to live in very dry areas.

It is mostly a solitary animal, but sometimes forms small groups of 2 – 4 individuals.

Most of the global population is found in the Thar Desert of western India. It is also the State animal of Rajasthan.

26. Cabinet gives nod to Data Protection Bill

Source: The post is based on the article "Cabinet gives nod to Data Protection Bill" published in The Hindu on 6th July 2023

What is the News?

The Union Cabinet has approved the Digital Personal Data Protection (DPDP) Bill.

What is the Digital Personal Data Protection (DPDP) Bill?

Click Here to read

The Bill allows laypersons to complain to a Data Protection Board, consisting of technical experts, constituted by the government. The complaint will be accepted if they have reason to believe that their personal data has been used without their consent (for example, mobile phone numbers or Aadhaar details).

The bill has a clause for offering voluntary undertaking in case an entity wants to admit that a breach has occurred and pay penalty as mitigation measure to avoid court litigation.

The Data Protection Board of India could fine firms which do not protect user data with fines for individual offenses ranging from ₹10,000 to ₹500 crore, which may apply in case of data breaches.

What are the changes made in the bill?

The bill could allow cross-border data flows to all international jurisdictions, except the countries placed in the "negative" or "official blacklist".

A provision on "deemed consent" in the previous draft could also be reworded to make it stricter for private entities, while allowing government departments to assume consent while processing personal data on grounds of national security and public interest.

What are the concerns related to the bill?

Right to Information activists have raised concerns on an amendment to the RTI Act, 2005 in the DPDP Bill that would prohibit government departments from sharing personal information, arguing government departments may refuse to share information that could hold public officeholders accountable.

What are the data protection laws in other countries?

Click Here to read



27. The risks of the Zaporizhzhia Nuclear Power Plant(NPP)

Source: The post is based on the article "The risks of the Zaporizhzhia Nuclear Power Plant(NPP)" published in The Hindu on 6th July 2023

What is the News?

The Zaporizhzhia Nuclear Power Plant in Ukraine has been a focus of concern since Russian forces took control over it.

Russia and Ukraine have accused each other over shelling near the plant that caused power outages.

A major concern is the working conditions of the 3,000 or so people at the plant, most of whom have refused to sign new employment contracts with their Russian employers.

What is the Zaporizhzhia Nuclear Power Plant?



Nuclear power plants in Ukraine

Source: BBC

Zaporizhzhia Nuclear Power Plant is the largest nuclear power plant in Europe and among the 10 largest in the world.



The plant is located in south-east Ukraine in Enerhodar on the banks of the Kakhovka reservoir on the Dnieper River.

It is one of the four operating NPPs in the country and has been operating since 1984.

It accounts for about 40% of the total electricity generated by all the Ukrainian NPPs and onefifth of Ukraine's annual electricity production.

How is Zaporizhzhia NPP different from the Chernobyl power plant?

Zaporizhzhia Nuclear Power Plant is not similar to Chernobyl-type reactors.

Zaporizhzhia Nuclear Power Plant are pressurized water reactors. The reactors are housed in thick steel reinforced concrete containment units which are built to withstand extreme explosions, such as an aircraft crash.

28. In boost to ties, Taiwan to set up office in Mumbai

Source: The post is based on the article "In boost to ties, Taiwan to set up office in Mumbai" published in The Hindu on 6th July 2023

What is the News?

Taiwan has announced that it would open its third representative office in India in Mumbai, more than a decade after it last expanded its presence in India.

India-Taiwan Relations:

India and Taiwan do not maintain formal diplomatic ties, as India adheres to the One-China policy.

But in 1995, India and Taiwan established India-Taipei Association (ITA) in Taiwan and Taipei Economic and Cultural Center (TECC) in New Delhi as de-facto Indian and Taiwanese embassies.

In 2012, Taiwan established Taipei Economic and Cultural Centres(TECC) in Chennai to conduct business. In the absence of an embassy, these offices represent Taiwan's interests in India.

The opening of these offices by Taiwan in India did not create much of a fallout on India-China relations, despite Chinese sensitivities on Taiwan.

This is because India had conveyed to China that the offices would not be official and there would be no government-to-government engagement.

29. What are flight duty time limitation norms?

Source: The post is based on the article "Pilot refuses to operate Lucknow-Chennai flight due to fatigue: What are flight duty time limitation norms?" published in Indian Express on 6th July 2023

What is the News?

A recent IndiGo flight from Dehradun to Chennai was delayed by several hours as the pilot complained of fatigue.

The pilot refused to operate the flight, citing flight duty time limitation (FDTL) norms.

What is Pilot Fatigue?

Directorate General of Civil Aviation (DGCA) defines flight fatigue/pilot fatigue, as a physiological and psychological state of tiredness and weariness. It can be caused by prolonged periods of wakefulness and/or insufficient restorative sleep.



Pilot fatigue is a cause of real concern. It can cause a pilot to make wrong decisions or even fall asleep inside the cockpit, leading to a fatal crash.

What are Flight duty time limitation (FDTL) norms?

The flight duty time limitations (FDTL) are laid down by the Directorate-General of Civil Aviation (DGCA).

It ensures adequate rest timings for pilots and flight attendants and prevent fatigue-related safety issues.

The DGCA mandates that all airlines follow FDTL norms. Norms include rules such as all crew members can fly a maximum of 8 hours in a day, 35 hours in a week, 125 hours in a month and 1,000 hours in a year.

Other rules include that every crew member shall be given rest, which will be pro-rata twice the flight time, subject to a minimum of 10 hrs in any 24 consecutive hours.

What is the responsibility of airlines?

Every airline is required to formulate its own FDTL scheme, which must be compliant with the regulations issued by the DGCA.

The FDTL scheme needs to be approved by the DGCA and must be a part of the airline's operations manual.

The DGCA rules prohibit airlines from asking flight crew to operate a flight if the prescribed time limitations are exceeded.

In addition, carriers are not supposed to ask a crew member to operate a flight if it is known or suspected that the flight crew member is fatigued to the extent that the safety of flight may be adversely affected.

30. Chandrayaan-3 integrated with launch vehicle LVM3

Source: The post is based on the article "Chandrayaan-3 integrated with launch vehicle LVM3" published in The Hindu on 6th July 2023

What is the News?

The Indian Space Research Organisation (ISRO) has announced that it has successfully integrated the Chandrayaan-3 spacecraft with the launch vehicle, Launch Vehicle Mark-III (LVM3), at the Satish Dhawan Space Centre in Sriharikota, Andhra Pradesh.

What is Chandrayaan-3?

Click Here to read

Why has Chandrayaan-3 been integrated with LVM3?

The Chandrayaan-3, which consists of a lander, rover and propulsion module, can't travel to space on its own.

It needs to be attached — like any satellite — to launch vehicles or rockets, like the LVM3 in this case.

Rockets have powerful propulsion systems that generate the huge amount of energy required to lift heavy objects like satellites into space, overcoming the gravitational pull of the Earth.

What is LVM3?

LVM3 is India's heaviest rocket with a gross lift-off weight of 640 tonnes.



It is essentially a three-stage launch vehicle, including two solid boosters (S200), the core liquid fuel-based stage (L110), and the cryogenic upper stage (C25).

It can carry up to 8 tonnes of payload to the lower earth orbits (LEO), which is about 200 km from the Earth's surface.

But when it comes to the geostationary transfer orbits (GTO), which lie much further ahead, up to about 35,000 km from the Earth, it can carry only about four tonnes.

LVM3 made its first journey into space in 2014 and also carried the Chandrayaan-2 in 2019. In March, 2023, it placed 36 OneWeb satellites, weighing about 6,000kg in LEO showing its capabilities to deliver multiple satellites into space.

31. <u>Ambergris worth Rs 4 crore found in dead whale: what is this rare substance, what it is used for</u>

Source: The post is based on the article "Ambergris worth Rs 4 crore found in dead whale: what is this rare substance, what it is used for" published in Indian Express on 6th July 2023.

What is the News?

A pathologist has recently discovered Ambergris in a dead whale, which could be worth nearly Rs 4 crore.

What is Ambergris?

Ambergris is a waxy substance that originates from the digestive system of protected sperm whales.

It is produced in the gastrointestinal tract of some sperm whales for the passage of hard, sharp objects that are ingested when the whale eats large quantities of marine animals.

What are the uses of ambergris, and why is it so expensive?

Ambergris is a rare substance, which contributes to its high demand and high price in the international market.

Traditionally, it is used to produce perfumes which have notes of musk. In the past cultures, it was used to flavour food, in alcoholic beverages and tobacco.

Is the trade of ambergris legal in India?

There is a ban on the possession and trade of ambergris in countries like the USA, Australia and India. But in several other countries, it is still a tradable commodity.

In the Indian context, sperm whales are a protected species under Schedule 2 of the Wildlife Protection Act. Possession or trade of its by-products, including Ambergris and its byproducts, is illegal under provisions of the Wildlife Protection Act, 1972.

32. India and Asean top recipients of FDI, says UNCTAD report

Source: The post is based on the article "India and Asean top recipients of FDI, says UNCTAD report" published in Economic Times on 6th July 2023

What is the News?

The United Nations Conference on Trade and Development (UNCTAD) has published its <u>World</u> <u>Investment Report 2023.</u>



What are the key findings of the World Investment Report 2023?

Globally: The global FDI fell by 12% in 2022 to \$1.3 trillion mainly due to overlapping global crises: the war in Ukraine, high food and energy prices, and soaring public debt.

- The decline was felt mostly in developed economies where FDI fell by 37% to \$378 billion.But flows to developing countries grew by 4% with a few large emerging countries attracting most of the investment while flows to the least developed countries declined.

- Investments in renewables have nearly tripled since 2015.But most of the money has gone to developed countries.

- Developing countries need renewable energy investments of about \$1.7 trillion each year but attracted only \$544 billion in clean energy FDI in 2022.

India: India was the third largest recipient of foreign direct investment (FDI) in greenfield projects in the world in 2022.

– The FDI flows into India rose 10 percent from \$44.7 billion in 2021 to \$49.3 billion in 2022.

- However, the total FDI inflows to India in 2022 was still lower than what was recorded in 2020, when India received \$64 billion of foreign investments.

– India was also the second-largest recipient of international project finance in the world in 2022. International project finance is when international lenders provide debt or equity to infrastructure projects in various countries.

- Moreover, Indian multinational companies substantially increased their overseas investments in 2022.Indian companies' invested about \$42 billion overseas, a three-fold increase in total investments.

33. Govt unveils guidelines for green hydrogen production, electrolyser manufacturing

Source: The post is based on the article "Govt unveils guidelines for green hydrogen production, electrolyser manufacturing" published in The Hindu Business Line on 6th July 2023

What is the News?

The Union Ministry of New and Renewable Energy (MNRE) has issued scheme guidelines for implementation of Strategic interventions for green hydrogen transition(SIGHT) programme.

What is Strategic Interventions for Green Hydrogen Transition (SIGHT) programme?

SIGHT is a major financial measure under the National Green Hydrogen Mission.

Objectives: 1) To maximize production of Green Hydrogen and its derivatives in India 2) Enhance cost-competitiveness of Green Hydrogen and its derivatives vis a-vis fossil-based alternatives and 3) Encourage large scale utilization of Green Hydrogen and its derivatives.

Components: The programme has two distinct financial incentive components:

- **Component I:** It targets domestic manufacturing of electrolysers.

- **Component II:** It focuses on green hydrogen production

Implementing Agency: Solar Energy Corporation of India (SECI)

What is the National Green Hydrogen Mission?

<u>Click Here to read</u>



34. <u>Secretary, DARPG launches the third edition of the National e-Governance Service Delivery</u> <u>Assessment (NeSDA) portal</u>

Source: The post is based on the article "Secretary, DARPG launches the third edition of the National e-Governance Service Delivery Assessment (NeSDA) portal" published in PIB on 6th July 2023

What is the News?

The Department of Administrative Reforms & Public Grievances (DAPRG) Secretary has launched the third edition of the National e-Governance Service Delivery Assessment (NeSDA).

What is National e-Governance Service Delivery Assessment (NeSDA)?

The NeSDA framework was launched in 2018 by the Department of Administrative Reforms & Public Grievances (DAPRG).

Objective: To measure the depth and effectiveness of existing e-Governance service delivery mechanisms from the citizen's perspective.

The framework is based on the **Online Service Index (OSI) of UNDESA eGovernment Survey.** It has been customized for the Indian federal structure and the e-Governance landscape of the States and UTs.

DARPG undertakes NeSDA study **biennially.** It has successfully released **2 editions of NeSDA study:** NeSDA 2019 was released in 2020 and second edition – NeSDA 2021 was released in 2022.

NeSDA 2023 Framework: The framework for NeSDA 2023 study has been elaborated under the following three dimensions:

Portals Coverage: All Government Portals assessed during NeSDA are classified into two categories viz., (i) State, UT, Central Ministry Portal and (ii) State, UT, Central Ministry Services Portals.

- NeSDA 2023 framework proposes to evaluate the maturity of e-Government at the City level as well by assessing City Portal i.e., the official portal of respective City/Urban Local Body that provides a single window access to the information and links to the services being provided for the citizens and other stakeholders in the city.

- For City portal assessment, States/UTs may propose one of the 3 most populous cities.

Focus Sectors and Mandatory Services Coverage: The NeSDA framework covers G2C and G2B services across seven sectors: Finance, Labour Employment, Education, Local Governance Utility Services, Social Welfare (including Health, Agriculture, Home Security), Environment (including Fire) and Tourism sectors.

- The framework for NeSDA 2023 proposes an expansion on focus sectors with an addition of Transport and Public Grievance.

Assessment Parameters: To make the NeSDA framework more robust and align with global digital government trends it is proposed to include three additional assessment parameters namely: Open Government Data (OGD), E-Participation and Leveraging Emerging Technologies.



35. <u>3-Day International Conference on Green Hydrogen begins in New Delhi</u>

Source: The post is based on the article "3-Day International Conference on Green Hydrogen begins in New Delhi" published in PIB on 6th July 2023

What is the News?

The three-day International Conference on Green Hydrogen (ICGH-2023) is being organized at Vigyan Bhawan, New Delhi.

What is the International Conference on Green Hydrogen (ICGH-2023)?

Organized by: Ministry of New and Renewable Energy in partnership with the Ministry of Petroleum and Natural Gas, Council of Scientific and Industrial Research, Office of Principal Scientific Advisor to Government of India and the Confederation of Indian Industry.

Aim: To explore how we can establish a Green Hydrogen ecosystem and foster a systemic approach for meeting the global goals for decarbonization through Green Hydrogen.

What are the key highlights from the conference?

India's energy import dependence: Energy use has doubled in the last 20 years in India and is likely to grow by at least another 25% by 2030.

- India currently imports over 40% of its primary energy requirements, worth over USD 90 billion every year.

– Major sectors like mobility and industrial production are significantly dependent on imported fossil fuels.

- This necessitates a shift towards technologies that enable enhanced share of renewable sources in the energy mix, to enable us to progressively reduce the reliance on fossil fuels.

Non fossil fuel: India is the only major economy to source 40% of our energy from non-fossil fuel sources nine years ahead of the target of 2030.

- Currently, around 42% of power generation capacity of India is based on non-fossil-fuels.

Green Hydrogen: As per the International Energy Agency, the world demand for hydrogen is expected to grow by 600% by the year 2050.

– India is one of the biggest consumers of green hydrogen in the world, with a demand of 6 million tons per annum.

- The Ministry of Petroleum & Natural Gas, and oil and gas PSUs have taken various initiatives for promotion of green hydrogen.Oil India Limited has started a pilot plant in Jorhat, Assam which produces 10 kg of green hydrogen per day.

– Projects have also been commenced for setting up 3.5 million tons of green hydrogen manufacturing capacity already.

– Indian Oil Corporation Limited has entered into an agreement with Tata Motors, for development of hydrogen fuel cells in India.



36. Non-compliance of orders of the green court by governments is a serious issue

Source: The post is based on the article "Non-compliance of orders of the green court by governments is a serious issue" published in The Hindu on 7th July 2023

What is the News?

The chairperson of National Green Tribunal has given an interview on the performance of NGT.

What is the National Green Tribunal?

Click Here to read

What are the three main challenges to the environment in India?

The three main challenges to the environment in India are: 1) Waste management 2) Environmental safety and 3) Safety norms in industrial processes.

How did NGT perform in the last five years?

NGT received 15,132 new cases in five years and disposed of 16,042 cases, including pending ones.

It has achieved this due to zero adjournments and has also made procedures simpler. It is also accepting only online filing and has independent verification of facts.

What are the challenges faced by the National Green Tribunal currently?

Non Compliance of NGT orders by governments continues to be a serious issue.

Lack of environmental finesse of its expert members.Usually, the expert members are specialists in one particular field and not on the environment as a whole.

Click Here to read more

37. Problem of manual scavenging eliminated, claims Union Social Justice Ministry panel

Source: The post is based on the article "Problem of manual scavenging eliminated, claims Union Social Justice Ministry panel" published in The Hindu on 5th July 2023

What is the News?

The Central Monitoring Committee of the Union Social Justice Ministry has concluded that the issue of manual scavenging has been eliminated.

The ministry claimed this despite noting that only 520 of the 766 districts across the country are free of manual scavenging.

This means that manual scavenging continues to be prevalent in nearly 34% of the districts in India even though the practice is banned under the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act.

What is Manual Scavenging?

Click Here to read

Deaths due to Manual Scavenging:

In 2022, 48 people had died due to hazardous cleaning of sewers in 2022. This number was 49 in 2021, 19 in 2020, and 117 in 2019.

However, government has for the last few years insisted that manual scavenging no longer exists in the country and has made a distinction between such instances and deaths due to hazardous cleaning of sewers and septic tanks.



What are the steps taken against Manual Scavenging?

NAMASTE Scheme

Scheme for rehabilitation of manual scavengers: Under this, the 58,000 identified sewer workers have been given a one-time cash payout of ₹40,000 each.

- In addition, around 22,000 of them have been connected to skills training programmes. Subsidies and loans are also available to them if they want to set up their own business.

38. What are the provisions of the High Seas Treaty?

Source: The post is based on the article "What are the provisions of the High Seas Treaty?" published in The Hindu on 7th July 2023

What is the News?

The United Nations has adopted the Marine Biodiversity of Areas Beyond National Jurisdiction (BBNJ) or the High Seas Treaty.

It became the third agreement to be approved under UNCLOS, after the 1994 and 1995 treaties, which established the International Seabed Authority and the Fish Stocks agreement.

What are the objectives of the High Seas Treaty?

To implement international regulations to protect life in oceans beyond national jurisdiction through international cooperation.

To address critical issues such as the increasing sea surface temperatures, overexploitation of marine biodiversity, overfishing, coastal pollution and unsustainable practices beyond national jurisdiction.

What are the key provisions of the High Seas Treaty?

Establishing marine protected areas to protect oceans from human activities through a threequarterly majority vote which prevents the decision from getting blocked by one or two parties.

Fair sharing of benefits from marine genetic resources: The treaty mandates sharing of scientific information and monetary benefits through installing a "clear house" mechanism.

- Through the mechanism, information on marine protected areas, marine genetic resources and area-based management tools will be open to access for all parties.

Capacity building and marine technology: The Treaty will provide funding for capacity building and implementation to help developing countries implement the Treaty, encourage cooperation, develop marine science and technical capability, as well as promote access to technology on fair terms.

Scientific and Technical Body: The body will be creating standards and guidelines for assessment procedures, and helping countries with less capacity in carrying out assessments.

- This will facilitate the conference of parties to trace future impacts, identify data gaps, and bring out research priorities.

Which countries opposed the treaty?

Many developed countries opposed the treaty as they stand by private entities which are at the forefront of advanced research and development in marine technology (patents relating to marine genetic resources are held by a small group of private companies).

Russia and China were also not in favour of the treaty.Russia withdrew from the last stage of reaching a consensus arguing that the treaty does not balance conservation and sustainability.



39. <u>One Health: FAO, UNEP, WHO and WOAH launch research agenda for antimicrobial resistance</u>

Source: The post is based on the article "One Health: FAO, UNEP, WHO and WOAH launch research agenda for antimicrobial resistance" published in Down To Earth on 4th July 2023

What is the News?

The 'Quadripartite' — comprising the United Nations (UN) Food and Agriculture Organization (FAO), the UN Environment Programme (UNEP), the World Health Organization (WHO) and the World Organisation for Animal Health (WOAH) has released the **One Health Priority Research Agenda on Antimicrobial Resistance(AMR).**

What is One Health?

One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals, and ecosystems.

It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and interdependent.

The approach mobilizes multiple sectors, disciplines and communities at different levels of society to work together to foster well-being and tackle threats to health and ecosystems while addressing the collective need for healthy food, water, energy, and air, taking action on climate change and contributing to sustainable development.

What is the One Health Priority Research Agenda on Antimicrobial Resistance (AMR)?

The agenda aims to guide a variety of stakeholders in generating new evidence to address antimicrobial resistance, with a focus on low- and middle-income countries.

It focuses on five key pillars:



Source: Down To Earth

- **Transmission:** It focuses on the environment, plant, animal, and human sectors where AMR transmission, circulation and spread occur.

- **Integrated surveillance:** It aims to identify cross-cutting priority research questions in order to improve common technical understanding and information exchange among One Health stakeholders.

– Interventions: It focuses on programmes, practises, tools, and activities aimed at preventing, containing, or reducing the incidence, prevalence, and spread of AMR.

- **Behavioral insights and change:** It focuses on research addressing human behavior that affects AMR, including ways to combat it.



– Economics and policy: It takes into account the cost-effectiveness of an AMR investment case, financial sustainability, and long-term financial impact.

Significance of the agenda: It will serve as a guide for countries, research institutes and funding bodies to support One Health AMR research.

- It will also allow policymakers, researchers, and the multidisciplinary scientific community to collaborate across sectors.

40. <u>High Courts not empowered to issue a direction for invocation of Article 355 of the</u> <u>Constitution, rule judges</u>

Source: The post is based on the article "High Courts not empowered to issue a direction for invocation of Article 355 of the Constitution, rule judges" published in The Hindu on 5th July 2023

What is the News?

Madras High Court has held that the High Courts under <u>Article 226 do not have the</u> power to issue a direction to the Centre to invoke Article 355.

What is Article 355?

Article 355 of the Constitution deals with an emergency provision by which the Centre can intervene and protect a state against external aggression or internal disturbance.

It is part of emergency provisions contained in Part XVIII of the Constitution of India, from Article 352 to 360.

What was the case before Madras High Court?

A petition was filed in the Madras High Court seeking orders to invoke Article 355 in Tamil Nadu in the wake of alleged failure to maintain public peace during the search and arrest of the minister.

The petitioner sought an order from the High Court to the secretary to the governor to forward a representation to the President's office to invoke Article 355 so that the Centre could intervene in the affairs of the state government.

What did the Madras High Court rule?

The High Court dismissed the petition.

It said that the **High Courts does not have the power to issue directions to the Centre to invoke Article 355 of the Constitution** as it is part of the policy decision on the part of the Executive.

Any direction would be in violation of the theory of separation of power.

Article 355 appeared to have been inspired both by the **US and the Australian Constitution**.

The underlying principle behind the insertion of Article 355 was to ensure that the Centre would interfere in the administration of provincial affairs by and under a constitutional obligation.

The court also held that the incident of IT officials being mobbed **would not qualify as an internal disturbance** under the purview of Article 355.

It said that the expressions: 1) 'internal disturbance' could only refer to a sense of **domestic chaos** (could take the colour of a security threat) and 2) 'external aggression' would require a large-scale public disorder (endangering the security and administration of the State).



41. National Research Foundation's vision: A chance at genuine innovation

Source: The post is based on the article "National Research Foundation's vision: A chance at genuine innovation" published in "Indian Express" on 7th July 2023.

News: The article discusses the establishment of the National Research Foundation (NRF) as recommended by the National Education Policy 2020 (NEP-2020) in India.

Read – <u>India's National Research Foundation (NRF): Needs, significance and challenges-</u> <u>Explained, pointwise</u>

The NRF is expected to seed, grow, and promote research and development (R&D) and foster a culture of innovation throughout Indian universities, colleges, institutions, and R&D laboratories.

What are challenges that may still arise after the establishment of NRF?

First, India's R&D spending is low, at only 0.65% of GDP, compared to over 2% in developed and East Asian economies.

Second, the majority of the government R&D funding is through core grants, with the DRDO, DoS, and Department of Atomic Energy (DAE) being the top recipients. While only a small percentage (5.8% in 2016-17) is spent on extramural grants, vital for R&D in universities and institutions of higher learning. The extramural grants from DST-SERB and DBT have been the lifeline for R&D in the universities and institutions of higher learning in the country.

Third, the static extramural grant funding, despite a significant increase in institutes and doctoral students, has hampered quality doctoral training.

Fourth, India does not have a competitive grant system, despite global prevalence of such systems.

Moreover, there was underutilization of funds extramural grant funding in 2021-22 due to bureaucratic issues.

The mention of agriculture is missing from the stated goals, which seems like an oversight.

What should be done?

The success of the NRF will depend on its ability to manage a large number of projects in a timely and fair manner, and to secure funding from non-government sources.

A competitive grant system can expedite research in emerging interdisciplinary areas and encourage collaborative work.

42. Selective ban of messaging apps may be looked at: TRAI

Source: The post is based on the article **"Selective ban of messaging apps may be looked at: TRAI**" published in **The Hindu** on **8th July 2023**

What is the News?

The Telecom Regulatory Authority of India (TRAI) has opened discussions on regulating over-thetop (OTT) communication service providers such as WhatsApp, Facebook, Telegram and Signal.

TRAI would also discuss the possibility of selectively banning OTT services in places where an Internet shutdown would otherwise have been imposed.

Why does TRAI want regulation for OTT communication services?

Firstly, telecom operators and OTT platforms such as WhatsApp offer similar services. But they are not bound by the same requirements – as a result, there is a need for regulatory parity.



Secondly, Telecom service providers (TSPs) need a service license for offering voice and SMS services. On the other hand OTT communication service providers offer voice call, and messaging and video call services similar to the services provided by TSPs, without any such licence.

Thirdly, Telecom service providers in India are regulated by several laws including Indian Telegraph Act, 1885, the Wireless Telegraphy Act, 1933 and Telecom Regulatory Authority of India Act, 1997 and have to adhere to requirements such as lawful interception. Such requirements are not applicable on OTT services currently.

Fourthly, OTT services do not financially contribute towards increasing telecom services penetration in the country unlike the operators who have to pay towards the Universal Service Obligation Fund (USOF).

Why is TRAI exploring selective banning of OTT apps?

TRAI has said that shutdown of telecommunications or the Internet can have significant ramifications for a country's economy.

It also disrupts critical services such as education and healthcare. Consequently, such a shutdown affects the life and livelihood of the citizens of the country.

This has been cited as a reason to explore selectively banning OTT apps as opposed to the whole Internet.

What does the draft telecom Bill prescribe for OTT services?

Draft Telecom Bill provides for the inclusion of new-age over-the-top communication services like WhatsApp, Signal and Telegram in the definition of telecommunication services.

As per the draft bill, providers of telecommunication services will be covered under the licensing regime, and will be subjected to similar rules as other telecom operators.

This issue has been under contention for several years now with telecom service providers seeking a level-playing field with OTT apps over communication services such as voice calls, messages, etc where operators had to incur high costs of licenses and spectrum while OTT players rode on their infrastructure to offer free services.

43. Explainer: What is the Farmers Distress Index?

Source: The post is based on the article "Explainer: What is the Farmers Distress Index?" published in Down To Earth on 6th July 2023

What is the News?

Central Research Institute for Dryland Agriculture (CRIDA), an institution under the Indian Council of Agricultural Research (ICAR) has developed an early warning system called 'farmers distress index'.

What is the Farmers Distress Index?

Aim: To minimize the agrarian distress in the form of crop loss / failure and income shock. This will help in decreasing farmer suicides.

Working of the index: The index methodology involves going through local newspapers, other news platforms and social media platforms for any report on incidence of farmers distress like localised cases of issues with debt repayment, death by suicide, pest attacks, drought, floods, migration, among others.

- Following this, contacts of farmers from the area will be collected to conduct telephonic interviews, which will have 21 standardized questions to gauge early signs of distress.



- Based on these questions, the degree of distress will be identified. The index will have values from 0-1. A value between 0-0.5 will indicate 'low distress', 0.5-0.7 will indicate 'moderate' distress and above 0.7 will indicate 'severe' distress.

– If the index is severe, it will identify which component among the seven is more severe and contributes maximum to farmers' distress.

Significance of the index: The index will help in anticipating agrarian distress and prevent its spread from a few farmers to the village or block level by pre-warning different stakeholders, including central, state, local and also non-government agencies about the future occurrence of farmers distress in a particular block / district so that they can take timely preventive measures.

44. <u>Outstanding performance by India in United Nations Economic and Social Commission for</u> Asia Pacific's (UNESCAP) Global Survey on Digital and Sustainable Trade Facilitation

Source: The post is based on the article "Outstanding performance by India in United Nations Economic and Social Commission for Asia Pacific's (UNESCAP) Global Survey on Digital and Sustainable Trade Facilitation" published in PIB on 7th July 2023

What is the News?

United Nations Economic and Social Commission for Asia Pacific's (UNESCAP) has released the Global Survey on Digital and Sustainable Trade Facilitation 2023.

What is the Global Survey on Digital and Sustainable Trade Facilitation?

UNESCAP has been conducting the Global Survey on Digital and Sustainable Trade Facilitation since 2015.

Aim: To review the progress of trade facilitation reforms in their respective Member States.

Parameters: The survey covers WTO Trade Facilitation Agreement (TFA) along with set of nearly 60 trade facilitation measures categorized into eleven sub-groups, namely: 1) Transparency 2) Formalities 3) Institutional arrangement and cooperation 4) Transit facilitation 5) Paperless trade 6) Cross-border paperless trade 7) Trade facilitation for SMEs 8) Agricultural trade facilitation 9) Women in trade facilitation 10) Trade finance for trade facilitation and 11) Trade facilitation in times of crisis.

The survey is fact-based rather than perception-based. A three-step approach to data collection and validation is generally followed, implemented over a 6-month period every 2 years.

What are the key findings of the survey related to India?

India has positioned itself at the forefront of global trade facilitation efforts with an impressive score of 93.55% in 2023 vis a vis 90.32% in 2021.

India is now the best performing country amongst all the countries of the South Asia region. The overall score of India has been greater than many developed countries including Canada, France, UK, Germany etc.

India has achieved a perfect score of 100% in four key areas: Transparency, Formalities, Institutional Arrangement and Cooperation, and Paperless Trade.

India has witnessed a substantial improvement in the score for "Women in Trade Facilitation" component from 66.7% in 2021 to 77.8% in 2023 thereby indicating commitment to gender inclusivity and the empowerment of women in the trade sector.

This outstanding recognition reflects India's continuous efforts to streamline trade procedures and improve transparency through initiatives such as Turant customs, single window interface for facilitation of trade (SWIFT), pre-arrival data processing, e-Sanchit, and coordinated border



management.

45. <u>Ministry of Education releases report on Performance Grading Index 2.0 for States/UTs for</u> the year 2021-22

Source: The post is based on the article "Ministry of Education releases report on Performance Grading Index 2.0 for States/UTs for the year 2021-22" published in PIB on 7th July 2023

What is the News?

The Union Ministry of Education has released a report on Performance Grading Index 2.0 for States/UTs for the year 2021-22.

What is the Performance Grading Index?

The Performance Grading Index is prepared by the Department of School Education & Literacy, Ministry of Education. It was first released for the year 2017-18.

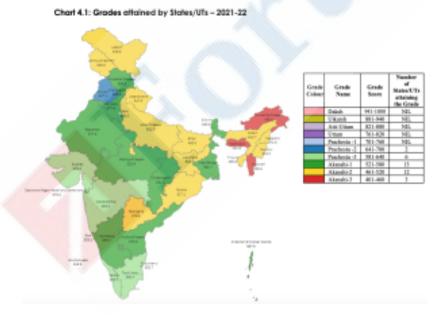
It assesses the performance of the school education system at the State/UT level by creating an index.

The PGI 2.0 structure comprises total weightage of 1000 points across 73 indicators, which are grouped under 2 Categories viz., Outcomes and Governance & Management.

These categories are further divided into 6 domains, viz., Learning Outcomes (LO), Access (A), Infrastructure & Facilities (IF), Equity (E), Governance Processes (GP) and Teacher Education & Training (TET).

Scores obtained by States/UTs have been classified into 10 grades with the highest achievable Grade is Daksh, which is for State/UT scoring more than 940 points out of a total of 1000 points. The lowest grade is Akanshi-3 which is for a score up to 460.

What are the key findings of Performance Grading Index 2.0 for 2021-22?



Source: PIB None of the States/UTs has attained the highest Grade i.e Daksh.



Only 2 States and UTs, namely Punjab and Chandigarh have attained Grade Prachesta -2 (score 641-700).

The three poorest performing States/UTs Akanshi 3 are Arunachal Pradesh, Meghalaya and Mizoram.

The maximum and minimum scores obtained by the States/UTs in 2021-22 are 659.01 and 420.64 respectively. The deviation between the maximum and minimum scores obtained by States/UTs is 23.8% of the maximum points, indicating that states such as Arunachal Pradesh, Meghalaya and Mizoram has to put more effort to reach the top slot. This disparity was 51 % in 2017-18.

46. Microplastics can alter gut microbiome, cause intestinal inflammation: FAO

Source: The post is based on the article "Microplastics can alter gut microbiome, cause intestinal inflammation: FAO" published in Down To Earth on 5th July 2023.

What is the News?

The Food and Agriculture Organization (FAO) has found that Microplastics and nanoplastics considerably impact human and animal gut microbiomes as well as the environment.

What are Microplastics and Nanoplastics?

Microplastics (0.1 to 5 000 μ m) and nanoplastics (0.001 to 0.1 μ m) are tiny plastic particles that have potential effects on the environment, animals and human health.

Micro- and nanoplastics are generated from both primary and secondary sources.

Primary sources are those that deliberately created micro- and nanoplastics for consumer and industrial uses, such as exfoliants in cleansers, cosmetics, as drug delivery particles in medicines, and industrial air blasting.

Macroplastic products that disintegrate into micron-sized and smaller particles are the secondary source of micro- and nanoplastics. They occur both terrestrially and in the aquatic environment.

How do microplastics and nanoplastics enter the human body?

There are three key routes for microplastics and nanoplastics to end up in the human body:

Inhalation: Inhaled airborne microplastics originate from urban dust, and include synthetic textiles and rubber tyres.

Ingestion: Microplastics will be ingested as they are prevalent in the food chain and water supplies.

Skin contact: Skin membrane was too fine for microplastics or nanoplastics to pass through. But it is possible for them to enter through wounds, sweat glands or hair follicles.

How do microplastics and nanoplastics impact human and animal gut?

Microplastics and nanoplastics considerably impact human and animal gut microbiomes as well as the environment.

Researchers have studied the effect of microplastics on the gastrointestinal tract and gut microbiota.

It found that injection of these plastics has led to changes in gene markers, biochemical markers, mucus layer, gut permeability, oxidative stress, immune response and liver function.



47. What is causing the mysterious 'gravity hole' in the Indian Ocean?

Source: The post is based on the article "What is causing the mysterious 'gravity hole' in the Indian Ocean?" published in Indian Express on 6th July 2023

What is the News?

Scientists have finally found the reason behind the huge gravity hole in the middle of the Indian Ocean.

What is a Gravity Hole?

A gravity hole, also known as a gravitational anomaly, refers to a specific area where the force of gravity is lower than the average on Earth.

Gravity holes happen as the Earth gravitational field is not uniform due to variations in density and mass distribution.

Gravity Hole in Indian Ocean:

The Indian Ocean is home to one of the giant gravity hole known as the Indian Ocean Geoid Low (IOGL).

It was discovered in 1948 during a ship-based gravity survey by Dutch geophysicist Felix Andries Vening Meinesz.

It is found in a large section of over three million sq. km in the Indian Ocean seafloor, located around 1,200 km southwest of India's southern tip.

It is estimated to have formed approximately 20 million years ago.

What is the reason behind the Gravity Hole in the Indian Ocean?

The researchers discovered that the possible reason for the gravity hole in the Indian Ocean is the plumes of magma.

This phenomena might have originated 120 million years ago when the supercontinent Gondwana land separated.

As the Indian plate separated from the African plate, it smashed into the European plate and the ocean called Tethys was squeezed between the continental plates.

Some parts of these plates are still melting back into the deep Earth's interior and generating low-intensity magma and creating a gravity hole.

48. Govt. to share PM Gati Shakti data

Source: The post is based on the article "Govt. to share PM Gati Shakti data" published in The Hindu on 8th July 2023

What is the News?

Government is working out a mechanism to share data with industry and potential investors about multi-modal connectivity as well as other physical and social infrastructure captured on the PM Gati Shakti platform.

What is PM Gati Shakti?

Click Here to read

What is the institutional framework of PM Gati Shakti?

The institutional framework for rolling out, implementation, monitoring and support mechanism is designed to have a Three-tier system:



Empowered Group of Secretaries (EGOs): It will be headed by Cabinet Secretary and will consist of Secretaries of 18 Ministries as members and Head of Logistics Division as Member Convenor.

– The EGOS has been mandated to review and monitor implementation of the PM Gati Shakti to ensure logistics efficiency.

Network Planning Group (NPG): It is composed of representatives from various connectivity infrastructure ministries and departments.

These representatives include the heads of the network planning division, and their purpose is to ensure unified planning and integration of the proposals.

All logistics and connectivity infrastructure projects requiring investments of over Rs 500 crore are directed through the NPG.

Technical Support Unit (TSU): It is approved for providing the required competencies for the complexities involved in overall integration of networks, enhancing optimization to avoid duplication of works for holistic development of any region as well as reducing logistics costs through micro-plan detailing.

Network Planning Group(NPG) has approved a tot

What is the progress under PM Gati Shakti?

al of 85 major infrastructure projects worth Rs 5.4 lakh crore from various ministries under the PM Gati Shakti initiative.

Among these approved projects, there are 34 from railways, 31 from roads and transport, one from new and renewable energy, four from oil and gas and eight from the Housing and Urban Affairs ministry.

49. Iceland is the world's most peaceful country; check where India stands

Source: The post is based on the article "Iceland is the world's most peaceful country; check where India stands" published in Indian Express on 7th July 2023

What is the News?

The 2023 Global Peace Index(GPI) has been released.

What is the Global Peace Index(GPI)?

Released by: Institute for Economics and Peace (IEP)

Aim: To present the most comprehensive data-driven analysis to date on trends in peace, its economic value, and how to develop peaceful societies.

Countries covered: The index covers 163 countries comprising 99.7 percent of the world's population.

Parameters: It measures the state of peace across three domains: 1) Societal safety and security 2) Ongoing domestic and international conflict and 3) Militarisation.

What are the key findings of the 2023 Global Peace Index(GPI)?

Globally: The average level of global peacefulness has deteriorated by 0.42%.

– Iceland is the most peaceful country in the world – a title it has held since 2008.

- Afghanistan is the least peaceful country in the world for the eighth consecutive year.

India: India has occupied the 126th spot in the rankings, two higher than its previous position.

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- India has experienced an improvement of 3.5 per cent in overall peacefulness over the past year, owing to improvements in violent crime, neighboring countries' relations and political instability.

- Further, the reduction in geopolitical tensions with China owing to the decrease in border incidents as well as less social unrest has led to an improvement in the political instability in India.

