

Current Affairs Update (March 1-7)

National

Cauvery-Vellaru-Vaigai-Gundar river linking project

Karnataka is readying itself to wage a legal battle in the Supreme Court against Tamil Nadu's ambitious **Cauvery-Vellaru-Vaigai-Gundar river linking project**. The 262 km river-linking project will divert 6,300 cubic feet of surplus water during floods and increase the groundwater levels in the state's southern districts to meet drinking water needs.

What's the issue? Tamil Nadu is trying to utilise surplus 45 Tmcft of water. Karnataka Government says, "this project is not in accordance with **the Interstate River Water Disputes Act**. According to the Act, surplus water should also be adjudicated and the tribunal has to decide on it.

Inter-State River Water Disputes Act, 1956:

1. According to its provisions, if a State Government makes a request regarding any water dispute and the Central Government is of opinion that the water dispute cannot be settled by negotiations, then a Water Disputes Tribunal is constituted for the adjudication of the water dispute.
2. The act was amended in 2002, to include the major recommendations of the Sarkaria Commission.
3. The amendments mandated a one-year time frame to setup the water disputes tribunal and also a 3-year time frame to give a decision.

Provisions related to interstate river water disputes:

Entry 17 of State List deals with water i.e. water supply, irrigation, canal, drainage, embankments, water storage and water power.

Entry 56 of Union List empowers the Union Government for the regulation and development of interstate rivers and river valleys to the extent declared by Parliament to be expedient in the public interest.

Article 262: In the case of disputes relating to waters, it provides

Clause 1: Parliament may by law provide for the adjudication of any dispute or complaint with respect to the use, distribution or control of the waters of, or in, any inter-State river or river valley.

Clause 2: Parliament may, by law provide that neither the Supreme Court nor any other court shall exercise jurisdiction in respect of any such dispute or complaint as mentioned above.

National Population Register (NPR)

It is a **Register of usual residents** of the country. It is being prepared at the local (Village/sub-Town), sub-District, District, State and National level under provisions of **the Citizenship Act 1955 and the Citizenship (Registration of Citizens and issue of National Identity Cards) Rules, 2003.**

It is **mandatory for every usual resident of India to register in the NPR.**

Objective: To create a comprehensive identity database of every usual resident in the country.

The NPR was **first collected in 2010 and then updated in 2015.**

Who is a usual resident? A usual resident is defined for the purposes of NPR as a person who has resided in a local area for the past 6 months or more or a person who intends to reside in that area for the next 6 months or more.

INS Utkrosh

It is an Indian naval air station under the joint-services Andaman and Nicobar Command of the Indian Armed Forces. It is located near naval base INS Jarawa, on Port Blair in the Andaman & Nicobar Islands.

It is the first naval air station in the Andaman and Nicobar Islands.

International

India and 17 countries face U.S. Anti-Dumping Tax

The United States Department of Commerce is all set to tax aluminium sheet exporters from the 18 countries including India after the department determines that these countries had benefited from subsidies and dumping. This decision was taken by the US Department of Commerce after several U.S. aluminium alloy manufacturers complained that they were being harmed because of imports at the lower prices.

About Dumping

When a country or company exports any product at a price which is lower in the foreign importing market as compared to the price in the domestic market of the exporters is called as Dumping. The dumping has the ability to flood the market with product prices which are considered to be unfair. The dumping process is legal as per the norms of the World Trade Organization (WTO). However, action can be taken of the foreign country can show the negative effects that any exporting firm has caused to its domestic producers.

Anti-Dumping Measures

Countries use several tariffs and quotas in order to protect their domestic producers from dumping. Some of them are listed below:

1. Anti-dumping duty (ADD)

The customs duty which is applied on the imports with the objective of providing a protection against the dumping of goods which are being sold at prices lower than the normal value is called as “Anti-Dumping Duty”. This price is charged by the foreign producers for the comparable sales in their own countries.

2. Countervailing duty

The custom duty on products which have received the subsidies provided by the government in the exporting country or the originating country is called the countervailing duty. It is imposed so as to counter the negative impact of import subsidies which in turn protect the domestic producers.

Chabahar Day

The Ministry of External Affairs (MEA) stated that, India will commemorate the ‘Chabahar Day’ on March 4, 2021 on the margins of the ongoing Maritime India Summit 2021 which is being held in Delhi from March 2 to March 4. The virtual event will witness the participation of ministers from Afghanistan, Iran, Armenia, Russia, Kazakhstan and Uzbekistan.

Chabahar Port: It is a seaport in Chabahar which is located in south-eastern Iran in the Gulf of Oman. The port serves as the only oceanic port of Iran. The port comprises of two separate ports namely the Shahid Beheshti and Shahid Kalantari. The port was first proposed by last shah of Iran in the year 1973. The first phase was opened in 1983 during the Iran–Iraq War.

EX Desert FLAG VI

Ex Desert Flag is an annual multi-national large force employment warfare exercise hosted by the United Arab Emirates Air Force.

The Indian Air Force is participating for the first time in Exercise Desert Flag-VI along with the air forces of the United Arab Emirates, the United States of America, France, Saudi Arabia, South Korea and Bahrain.

Science-Tech & Environment

PSLV-C51 mission successful on National Science Day

Launch site: Satish Dhawan Space Centre SHAR, Sriharikota

Launch vehicle: PSLV-C51



Vivek Career Academy SCO 385, Sector 8, Panchkula

No of satellites launched: 19

Main Payload: Amazonia-1 (Brazil)

Nature of satellite: Earth Observation Satellite

Applications: Monitoring deforestation in the Amazon region and analysis of diversified agriculture across the Brazilian territory.

Other payloads: Four from IN-SPACE and fourteen from NSIL. The fourteen satellites from NSIL carried were the commercial satellites from India (1) and USA (13).

Highlights: PSLV-C51/Amazonia-1 is the first dedicated commercial mission of NewSpace India Limited (NSIL), a Government of India company under Department of Space.

With this launch, the total number of customer satellites from foreign countries placed in orbit by PSLV is 342 satellites from 34 countries.

A copy of the 'Bhagavad Gita' is also being sent with the spacecraft after being placed in a SD (secured digital) card.

The first launch of 2021 took place on the day when Sir CV Raman announced his revolutionary discovery of the 'Raman effect' in 1928 (National Science Day)

National Science Day

28th February is celebrated as National Science Day (NSD) in India. NSD is celebrated to commemorate discovery of **the 'Raman Effect'**, which led to **Sir C.V. Raman winning the Noble Prize**.

The first National Science Day was celebrated on February 28, 1987.

Theme: "Future of STI: Impacts on Education, Skills, and Work".

Snow Leopard conservation in India

India has been conserving snow leopard and its habitat through **the Project Snow Leopard (PSL)**. The snow leopard inhabits the higher Himalayan and trans-Himalayan landscape in the five states of Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, and Arunachal Pradesh. India is also party to **the Global Snow Leopard and Ecosystem Protection (GSLEP) Programme since 2013**.

For conservation, India has identified **three large landscapes, namely**, Hemis-Spiti across Ladakh and Himachal Pradesh; Nanda Devi – Gangotri in Uttarakhand; and Khangchendzonga – Tawang across Sikkim and Arunachal Pradesh.

Project Snow Leopard (PSL) was launched in 2009 to promote an inclusive and participatory approach to conserve snow leopards and their habitat.

Snow Leopard is in the list of 21 critically endangered species for **the recovery programme of the Ministry of Environment Forest & Climate Change.**

Protection: Snow leopards are categorized as ‘Vulnerable’ by IUCN and in the Schedule I of the Indian Wildlife (Protection) Act 1972. They are listed in Appendix I of the Convention on International Trade in Endangered Species (CITES) and the Convention on Migratory Species (CMS), revealing the need for the highest conservation status to the species, both globally and in India.

“Loyal Wingman”

“Loyal Wingman” is the first military aircraft that has been designed and manufactured in more than 50 years in Australia. This first military aircraft make its flight under the supervision of Boeing test pilot who was monitoring it from the ground control station located in South Australia.

The Royal Australian Air Force (RAAF) and Boeing Co have announced on March 2, 2021 that they completed the first flight test on a pilotless fighter-like jet which was designed to operate in concurrence the with crewed aircraft.

Arktika-M satellites

The Russian Space agency, Roscosmos, has successfully launched its first ever Arctic-monitoring satellite that will monitor the Arctic’s climate and environment.

Pavilion Laptops

The Computer maker HP has developed its first ever consumer PC using the plastic waste in ocean. The company has manufactured the Pavilion 13, Pavilion 14, and Pavilion 15 Laptops using the ocean-bound plastics.

World Wildlife Day

The world is observing and celebrating the World Wildlife Day 2021 on March 3, 2021. The day is being celebrated under the **Theme-** Forests and Livelihoods: Sustaining People and Planet. This theme was decided by United Nations.

The United Nations General Assembly (UNGA) has passed a resolution at its 68th session on December 20, 2013. In its resolution UN 68/205, the UNGA decided to proclaim the March 3 as World Wildlife Day 2021. This proclamation was suggested by Thailand. March 3 was chosen because the day marks the “adoption of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)”. The CITES was adopted on March 3, 1972 to raise awareness and benefit the fauna and flora.

Species Recovery Programme

The **National Board for Wildlife and Union Ministry of Environment, Forest and Climate Change** last month included **the caracal**, a medium-sized wildcat found in parts of Rajasthan and Gujarat, in **the list of critically endangered species**. The recovery programme for critically endangered species in India now includes 22 wildlife species.

About Caracal: Besides India, the caracal is found in several dozen countries across Africa, the Middle East, Central and South Asia. While it flourishes in parts of Africa, its numbers in Asia are declining.

The iconic ears are what give the animal its name — caracal comes from the Turkish karakulak, meaning ‘black ears’. In India, it is called siya gosh, a Persian name that translates as ‘black Ear’.

Historical Evidences:

It finds mention in **Abul Fazl’s Akbarnama**, as a hunting animal in the time of Akbar (1556-1605). Descriptions and illustrations of the caracal can be found in medieval texts such as **the Anvar-i-Suhayli, Tutinama, Khamsa-e-Nizami, and Shahnameh**.

Himalayan serow

It is a Himalayan mammal, somewhere between a goat and an antelope. It has been confirmed as the newest creature to be spotted in Assam.

It was spotted in the 950-sq.km Manas Tiger Reserve on December 3. Categorized as ‘vulnerable’ in the IUCN Red List of Threatened Species. It is listed under Schedule I of The Wildlife Protection Act, 1972, which provides absolute protection.

Simlipal Forest Fire

It is a tiger reserve situated in the Mayurbhanj district of Odisha in the northern part. The reserve derives its name from Simul tree (silk cotton tree). It comprises of an area of 5,569 sq km. The reserve was declared a biosphere reserve in June 1994 by the Government of India.

Economics

Asian Infrastructure Investment Bank (AIIB)

It is a multilateral development bank with a mission to improve social and economic outcomes in Asia and beyond. The Parties (57 founding members) to agreement comprise the Membership of the Bank.

It is **headquartered in Beijing**. It commenced operations in January 2016.

There are more than 100 members now. Fourteen of the G-20 nations are AIIB members including France, Germany, Italy and the United Kingdom.

Voting Rights: China is the largest shareholder with 26.61 % voting shares in the bank followed by India (7.6%), Russia (6.01%) and Germany (4.2 %). The regional members hold 75% of the total voting power in the Bank.

Why in news? Centre signs \$304 million pact with AIIB for power transmission network in Assam. The fund will be utilised for the ‘Assam Intra-State Transmission System Enhancement Project’, aiming to improve reliability, capacity and security of the power transmission network in the state.

PMI

PMI or a Purchasing Managers’ Index (PMI) is **an indicator of business activity — both in the manufacturing and services sectors**. It is a survey-based measures that asks the respondents about changes in their perception of some key business variables from the month before.

It is calculated separately for the manufacturing and services sectors and then a composite index is constructed. A figure above 50 denotes expansion in business activity. Anything below 50 denotes contraction. Higher the difference from this mid-point greater the expansion or contraction.

Ease of Living Index (EoLI)

The Housing and Urban Affairs Ministry has released the final rankings of Ease of Living Index (EoLI) 2020. The Ease of Living Index (EoLI) is an assessment tool that evaluates **the quality of life and the impact of various initiatives for urban development**.

It provides a comprehensive understanding of participating cities across India based on quality of life, economic-ability of a city, and its sustainability and resilience.



How were the cities ranked? The analysis categorises them into:

1. Million+ populated cities (those with a population of more than a million).
2. Less than Million populated cities (those with a population of less than a million) along with all the cities under the Smart Cities Program.

EoLI 2020 ranking:

Million+ category: Bengaluru emerged as the top performer followed by Pune, Ahmedabad, Chennai, Surat, Navi Mumbai, Coimbatore, Vadodara, Indore, and Greater Mumbai.

In the Less than Million category: Shimla was ranked the highest in ease of living, followed by Bhubaneswar, Silvassa, Kakinada, Salem, Vellore, Gandhinagar, Gurugram, Davangere, and Tiruchirappalli.

State GK

Haryana's quota law

The Haryana government recently notified a new law that requires 75% of private sector jobs in the state reserved for local candidates. In July 2019, the Andhra Pradesh government had passed a similar law, which was challenged in court.

Haryana State Employment of Local Candidates Bill, 2020 highlights:

It requires private companies to set aside for domiciles 75% of jobs up to a monthly salary of Rs 50,000 or as may be notified by the government from time to time.

The law is applicable to all the companies, societies, trusts, limited liability partnership firms, partnership firms and any person employing 10 or more persons and an entity, as may be notified by the government from time to time shall come under the ambit of this Act.

What are the legal issues in such laws?

1. **The question of domicile reservation in jobs:** While domicile quotas in education are fairly common, courts have been reluctant in expanding this to public employment. It raises questions relating to **the fundamental right to equality of citizens.**
2. The issue of **forcing the private sector to comply with reservations in employment.** For mandating reservation in public employment, the state draws its power from Article 16(4) of the Constitution. But, the Constitution has no manifest provision for private employment from which the state draws the power to make laws mandating reservation.
3. It may not be able to withstand judicial scrutiny on the touchstone of **Article 19(1)(g).**

What is the government's rationale in bringing such laws?

1. **Public sector jobs constitute only a minuscule proportion of all jobs.** Therefore, talks about extending the legal protections to the private sector to really achieve the constitutional mandate of equality for all citizens has been on.
2. Since **private industries use public infrastructure in many ways** — from accessing land through subsidised allotment to receiving credit from public banks, tax exemptions and in many cases subsidies for fuel etc, the state has a legitimate right to require them to comply with the reservation policy.

Do other countries take such affirmative action in employment?

Affirmative action is adopted in many countries in the context of race and gender.

1. For example, in the US, although there is no statutory requirement for employers to have quotas, courts can order monetary damages and injunctive relief, including “such affirmative action as may be appropriate”, for victims of discrimination.
2. The Employment Equity Act in Canada also protects minority groups, especially aboriginals from discrimination in federally regulated industries, even in the private sector.

Concerns and challenges ahead:

1. It poses challenges for industrial development and private investment in Haryana.
2. It could also provide a shield to some firms indulging in unethical practices to retrench the existing workforce.
3. Investors and businesses may start moving out of the state in search for best human resources.
4. Against the spirit of the Constitution, which gives citizens of India the freedom to work anywhere in the country.

Madhya Pradesh Tourism introduces Night Safari

The state of Madhya Pradesh has introduced the night safaris in the three national parks in Madhya Pradesh on March 4, 2021. The three parks include the Bandhavgarh National Park, Kanha National Park and Pench National Park.

Current Affairs Update (March 8-14)

National

SC seeks States' views on 50% cap on quota

The Supreme Court has decided to examine whether **the Indira Sawhney verdict of 1992** needs a relook. In 1992, the Supreme Court fixed reservation for the marginalised and the poor in government jobs and educational institutions at 50%, except in “extraordinary circumstances”.

However, over the years, several States, such as **Maharashtra and Tamil Nadu**, have crossed the Rubicon and passed laws which allow reservation shooting over 60%.

Recently, a five-judge Bench set up to hear the challenge to **the Maratha quota law**, decided **not to confine the question of reservation spilling over the 50% limit to just Maharashtra**. The Bench expanded the ambit of the case by making other States party and inviting them to make their stand clear on the question of whether reservation should continue to remain within the 50% boundary or not. Since the Indra Sawhney verdict gives a pass to breach of the 50% quota rule only in exceptional circumstances, the court will have to test if the Maharashtra law qualifies to be an exception.

Why 50%? The Other Backward Classes, as identified by the Mandal Commission, make up about 52% of India's population according to the 1931 Census, the last enumeration of castes in the country. The court, however, did not deal with the question of population while ruling that although reservation was fine, it must be capped.

Based on **the 102nd Amendment** to the Constitution, which gives the President powers to notify backward classes, the court will have to look into whether states have similar powers.

The relevance of the Indra Sawhney criteria is also under question in another case in which the validity of **the 103rd Amendment** has been challenged. The 103rd Amendment, passed in 2019, provides for 10% reservation in government jobs and educational institutions for the economically weaker section in the unreserved category.

PLI scheme: Centre's nod for 33 API applications

The government has approved 33 applications with a committed investment of ₹5,082.65 crore under **the production linked incentive scheme** for **active pharmaceutical ingredients**.

What is an API?

Every medicine is made up of two main ingredients — the chemically active APIs and chemically inactive, excipients, which is a substance that delivers the effect of APIs to one's system. API is a chemical compound that is the most important raw material to produce a finished medicine.

In medicine, API produces the intended effects to cure the disease. For instance, Paracetamol is the API for Crocin and it is the API paracetamol that gives relief from body ache and fever. Fixed-dose combination drugs use multiple APIs, while single-dose drugs like Crocin use just one API.

How an API is manufactured?

API is not made by only one reaction from the raw materials but rather it becomes an API via several chemical compounds. The chemical compound which is in the process of becoming an API from raw material is called an intermediate. There are some APIs that pass "through over ten kinds of intermediates in a process when it changes from being a raw material into an API". The long manufacturing process is continued until it is purified and reaches a very high degree of purity.

How India lost its API market to China?

During the early 90s, India was self-reliant in manufacturing APIs. However, with the rise of China as a producer of API, it captured the Indian market with cheaper products and it eventually led to high economies of scale for China.

China created a low-cost API manufacturing industry. The industry was backed by the low cost of capital followed by aggressive government funding models, tax incentives. Their cost of operation is one-fourth of India's cost. Even the cost of finance in China is 6-7 per cent against India's 13-14 per cent. So, due to low-profit margins and non-lucrative industry, Indian pharma companies over the years stopped manufacturing APIs.

Declaration Of World Heritage Sites By UNESCO

Ministry of Culture said: '**Dholavira: A Harappan City**' has been submitted for nomination of World Heritage Site in 2019-2020. Nomination dossiers of '**Santiniketan, India**' and '**Sacred Ensemble of Hoysalas**' have been submitted to UNESCO for the year 2021-22 cycle.

At present, India has **38 World Heritage Properties**. Besides, India has **42 sites listed under Tentative List** which is a pre-requisite condition for inscription as World Heritage Site.

Swarnim Vijay Varsh

The Indian Naval Ships are all set to make the first-ever visit to historic port town of Mongla in Bangladesh. The ships will make part of the 'Swarnim Vijay Varsh' celebration which will be commemorating 50 years of the 1971 liberation war against Pakistan.

'Maitri Setu'

The 'Maitri Setu' is a bridge that has been built in the River Feni. Feni river flows between the Indian boundary in the state of Tripura and Bangladesh. The name 'Maitri Setu' has been chose to symbolize the growing bilateral relations and friendly ties between both the countries. The construction of the bridge was done by the "National Highways and Infrastructure Development Corporation Ltd". The total cost of the bridge project is Rs. 133 Crores. It is a 1.9 Km long bridge that connects the Sabroom in India with Ramgarh in Bangladesh.

Joint Exercise Dustlik

Second Edition of Joint Exercise Dustlik between Indian Army and Uzbekistan Army is being held in India.

INS Karanj

The Indian Navy has inducted into service the third Scorpene-class conventional diesel-electric submarine called INS Karanj. INS Karanj is the part of Six Scorpene submarines which are being built under Project-75. It was built by Mazagon Dock Limited.

Under the project-75, the first submarine of the class called INS Kalvari was commissioned in the month of December, 2017. The second submarine called INS Khanderi was commissioned in the month of September, 2019. The fourth submarine INS Vela was launched in May, 2019. In the month of November 2020, the fifth submarine called Vagir was commissioned.

Bajrang Punia

Indian wrestler, Bajrang Punia, has regained the world number one ranking. He gained his ranking after winning second successive gold medal at Matteo Pellicone Ranking Series.

Tirath Singh Rawat

Tirath Singh Rawat is new CM of Uttarakhand. The Chief Minister is **appointed by the governor. 164 of the Constitution** provides that there shall be a Council of Ministers with the Chief Minister at its hand to aid and advise the governor. T

The CM is elected through a majority in state legislative assembly by a vote of confidence in legislative assembly. He is elected for five years and hold office during the pleasure of Governor. He is appointed by governor and swearing in is also done before the governor.

Mithali Raj

The veteran Indian women's cricketer Mithali Raj has become the first Indian woman cricketer that has completed 10,000 international runs in all the cricket formats. She also become the second woman cricketer at the international level to complete 10000 runs.

International

El Salvador becomes first central American country to be declared malaria-free

El Salvador has become **the first country in central America and the third in all Americas** to get the malaria-free certificate from the World Health Organization (WHO) in recent years.

Malaria elimination certificate is awarded to a country when the chain of indigenous transmission of the disease has been disrupted nationwide for at least three consecutive years. The only other countries in the WHO Regions of Americas to have eliminated malaria in recent years are **Paraguay (2018) and Argentina (2019)**.

Hazaras

They are a Persian-speaking ethnic group native to, and primarily residing in, the mountainous region of Hazarajat, in central Afghanistan. Hazaras are considered to be one of the most oppressed groups in Afghanistan.

Non-Fungible Token

It is a special type of cryptographic token which represents somethings which are unique. These tokens are not mutually interchangeable. This is opposite to the cryptocurrencies such as bitcoin. It is a type of crypto-asset that represents several numbers of assets such as tickets, artforms, and music. Such type of asset is gaining its popularity because several investors and enthusiasts are interested to spend a large sum of money on items which only exist digitally. These tokens are used to create digital scarcity and digital ownership. It can also be used in online gaming, crypto art and digital collectibles.

Why in news? The American rock band called Kings of Leon has released a music album recently. The music album was launched as a non-fungible token (NFT). Thus, the band has become the first ever to distribute the digitised art.

Cairn wins nod from five courts for \$1.4 bn award

Courts in five countries (the U.S., the U.K., the Netherlands, Canada and France) have given recognition to an arbitration award that asked India to return \$1.4 billion to Cairn Energy plc.

Cairn Energy had moved courts in nine countries to enforce its \$1.4 billion arbitral award against India, which the company won after a dispute with the country's revenue authority over a retroactively applied capital gains tax.

Case background: Cairn had challenged the Indian government seeking taxes over an internal business reorganisation using the 2012 retrospective tax law, under the UK-India Bilateral Investment Treaty. In

2011, Cairn Energy sold its majority stake in Cairn India to Vedanta Ltd, reducing its stake in the Indian company to about 10 per cent. In 2014, the Indian tax department had demanded Rs 10,247 crore (\$1.4 billion) in taxes.

Implications:

The registration of the award is the first step towards its enforcement in the event of the government not paying the firm. Once the court recognises an arbitration award, the company can then petition it for seizing any Indian government asset such as bank accounts, payments to state-owned entities, airplanes and ships in those jurisdictions, to recover the monies due to it.

Virus passport

Launched by China. Basically, it is a health certificate programme for Chinese international travellers. The digital certificate shows a user's vaccination status and virus test results.

Although the certificate is meant for travel in and out of China, it is currently only available for use by Chinese citizens, and it is not yet mandatory. There is also no indication authorities in other countries will use it when Chinese travellers go abroad.

Science-Tech & Environment

FSSAI guidelines on GMO Crops

FSSAI issued an order on February 8 setting the permissible limit for **genetically modified organisms (GMO)** in imported food crops at 1%. However, trade organisations have said that this threshold is unacceptably high. It amounts to an advocacy for zero presence of GMO in food and some other consumables.

GMO regulation in India:

The task of regulating GMO levels in imported consumables was initially with **the Genetic Engineering Appraisal Committee (GEAC)** under the Union environment ministry.

Its role in this was diluted with the enactment of **the Food Safety and Standards Act, 2006** and **FSSAI was asked to take over approvals of imported goods.**

Genetically Modified Organism: In GMO, **genetic material (DNA) is altered or artificially introduced using genetic engineering techniques.** Genetic modification **involves the mutation, insertion, or deletion of genes.**

Inserted genes usually come from a different organism (e.g. In Bt cotton, Bt genes from bacterium *Bacillus thuringiensis* are induced). Genetic modification is done to induce a desirable new trait which does not occur naturally in the species.

India's Initiative to Tackle Forest Fire

National Action Plan on Forest Fires (NAPFF): It was launched in 2018 to minimise forest fires by informing, enabling and empowering forest fringe communities and incentivising them to work with the State Forest Departments.

The Forest Fire Prevention and Management Scheme (FPM) is the only centrally funded program specifically dedicated to assist the states in dealing with forest fires.

Whale shark

The whale shark is **the largest living species of fish and is endangered**, according to **the International Union for Conservation of Nature**. It is protected under **the Wildlife Protection Act**.

The whale shark has a lifespan of around 130 years and has a unique pattern of dots on its body. It can grow up to 10 metres in length and weigh around 20 tonnes.

Habitat: Whale sharks are found in all the tropical oceans of the world. Whale sharks are found along the coast of India.

Why is Turkey's Salda Lake called 'Mars on Earth'?

The scientists are looking for the signs of ancient life on the Red Planet with the help of data gathered by the NASA's rover Perseverance which is exploring the surface of Mars. Scientists find that the data collected on the mission is much closer to home at the Salda lake located in southwest Turkey.

The American space agency, NASA, stated that the minerals and rock deposits at Salda lake are the nearest match on earth with the deposits on the Jezero Crater where the spacecraft landed. The Jezero Crater is believed to be once flooded with water. The Information which was gathered from Lake Salda would help the scientists to search for the fossilised traces of microbial life which is preserved in the sediment which were deposited around the delta and the long-vanished lake. Scientists are of the view that, these sediments around the lake were eroded from large mounds which are formed with the help of microbes and are called as microbialites.

China-Russia Planetary Pact

China and Russia have recently signed a planetary pact. This plan for a joint lunar space station was unveiled on March 9, 2021. This pact was signed between the countries because Russia seeks to regain the glory of space pioneering which was there in the Soviet times while China geared up its own extra-terrestrial ambitions. Russia was once the one among the top countries of space travel. The glory of

Russia has been captured by China and the United States. Both of these countries have achieved major success in space exploration and research.

Under the collaboration, Russia's first modern lunar lander called "Luna 25" has been scheduled to launch on October 1, 2021.

Cloning of black-footed ferret (America's most endangered mammal)

Name of clone: Elizabeth Ann

Technique: Cloned from the genes of an animal that died more than 30 years ago (cryopreserved at the San Diego Frozen Zoo)

Background: Once widespread across the American West, black-footed ferret (the continent's only native ferret) numbers had plummeted to near extinction by the late 20th century. They are nocturnal, and they exclusively eat prairie dogs.

IUCN Red List status: Endangered

Practice question: Discuss the promises and perils of using biotechnology for conservation of endangered species.

Future prospect: Concept of de-extinction, of (eventually) using biotechnology to resurrect the likes of the woolly mammoth or the passenger pigeon. Hope of restoring genetic diversity

Criticism of bioengineering in conservation: 'moral hazard' fear that the ability to revive species will reduce the incentive to protect existing endangered wildlife.

Arribada

Olive Ridley female turtles have started moving to the Gahirmatha beach in the Kendrapara district in Odisha. They are arriving at the beach to lay eggs which is described as the phenomenon called 'arribada'. Arribada is a Spanish term which describes the unique natural heritage of these marine species which converge on the nesting ground to lay eggs.

Gahirmatha Beach is a beach located in the state of Odisha. It separates the Bhitarkanika Mangroves from Bay of Bengal. It is the only marine wildlife sanctuary in Odisha.

Olive Ridley female turtles is the second-smallest known species across the world. The species is also the most abundant of all the sea turtles across the world. It is found in the warm and tropical waters especially in the Pacific and Indian Oceans. It is also found in the warm waters of Atlantic Ocean.

CCUS technology

The United Nations report have called to scale up the carbon capture, use and storage in light with the Paris Agreement on Climate change which aims for the net-zero emissions goal in order to limit the

global warming. The scaling-up “carbon capture, use & storage” (CCUS) technology comprises of the component like capturing the CO₂ emissions from the coal and gas power plants. It also seeks to capture carbon emissions from the heavy industry for its deep underground storage or reusing it. United Nations Economic Commission for Europe (UNECE) stated that deployment of CCUS technology on a large scale would permit the countries to decarbonize these sectors.

State GK

No-trust vote

The no-confidence motion moved by the Congress against the Bharatiya Janata Party-Jannayak Janta Party coalition government in Haryana has been defeated by 55 votes to 32.

What is a No-Confidence Motion?

A Council of Ministers is collectively responsible to the Legislative Assembly and it remains in office till it enjoys the confidence of majority. Therefore, a motion of no-confidence is moved to remove the council of ministers and to remove the government from the office.

Constitutional provisions:

According to the **Article 75** of the Indian Constitution, council of ministers shall be collectively responsible to the Lok Sabha and as per **Article 164**, the council of ministers shall be collectively responsible to the Legislative Assembly of the State.

Lok Sabha/Legislative Assembly can remove the ministry from the office by passing a **no-confidence motion**. Lok Sabha **Rule 198 specifies the procedure for a motion of no-confidence**.

What is the procedure to move a No-Confidence Motion?

Against the Government, a **motion of No-Confidence Motion can be introduced only in the Lok Sabha** under rule 198.

There should be a minimum of 50 members to accept the motion. If not, then the motion fails. Before 10 am, any member may provide written notice.

The motion of no-confidence is read by the Speaker within the House and asks all those favouring the motion to rise. If 50 MPs are there in favour then the Speaker could allot a date for discussing the motion. But this has to be done within 10 days. Then, the motion is put to vote and can be conducted through Voice Vote, Division of Votes or other means.



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If the government loses a confidence motion or if the no-confidence motion is accepted by the majority then the government has to resign.

What are the conditions related to no-confidence motion?

It can be moved only in the Lok Sabha or state assembly as the case may be. It cannot be moved in the Rajya Sabha or state legislative council. The no-confidence motion is moved against the entire Council of Ministers and not individual ministers or private members.

Current Affairs Update (March 15-21)

National

SIPRI Report (2016-20)

SIPRI: Stockholm International Peace Research Institute

Top 5 Arms Exporters: US (37%), Russia (20%), France(8.2%), Germany(5.5%) and China(5.2%)

Top 5 Arms Importers: Saudi Arabia (11%), India (9.5), Egypt (5.8), Australia (5.1) and China (4.7).

India's performance:

1. India accounted for 0.2% of the share of global arms exports during 2016-20, making the country the world's 24th largest exporter of major arms.
2. India's import of arms decreased by 33%
3. India's top three arms suppliers during 2016-20 were Russia (accounting for 49% of India's imports), France (18%) and Israel (13%)

Padyatra to commemorate salt march

Prime Minister Narendra Modi has flagged off the foot march to re-enact the historic Mahatma Gandhi-led Salt March, while launching the **'Azadi Ka Amrut Mahotsav', the government's initiative to mark 75 years of India's Independence.**

The march from Sabarmati Ashram in Ahmedabad to Dandi in Navsari district, a distance of 386 km, will take 25 days. It will mark **the 91st anniversary of the historic march against the tax on salt imposed by the British in India.**

History: On March 12, 1930, Mahatma Gandhi embarked a historic Salt March from Sabarmati Ashram in Gujarat's Ahmedabad to the village of Dandi in the state's coastal area to protest against the steep tax the British levied on salt.

The Salt March began on March 12, 1930 and continued till April 6, 1930. It was a 24-day Salt March, which was non-violent in nature, is historically significant as **it led to the mass Civil Disobedience Movement.** Upon reaching the seashore in Dandi, Mahatma Gandhi broke the law by producing illegal salt.

NOTA (None of the Above)

The Supreme Court has asked the Centre and the Election Commission of India to respond to a plea that fresh elections should be conducted in constituencies where the highest number of votes polled are NOTA (None Of The Above).

Petitioner's demands: Candidates 'rejected' by voters should not be fielded again in the fresh polls. The electorate will be armed with **the "right to reject"** and this shall provide a better choice of candidates to pick from.

Challenges: If voters kept rejecting candidates, Parliament/Assembly seats would continue to remain vacant, affecting legislative functioning. Political parties could also influence voters to not vote in a particular constituency.

NOTA in Rajya Sabha: The Supreme Court, in 2018, held that the NOTA option is meant only for universal adult suffrage and direct elections and not for polls held by the system of proportional representation by means of the single transferable vote as done in the Rajya Sabha.

The court held that making NOTA applicable in Rajya Sabha elections is contrary to **Article 80(4) of the constitution** and the Supreme Court's judgment in PUCL v Union of India (2013).

What are electoral bonds?

Electoral Bond is a financial instrument for making donations to political parties. The bonds are issued in multiples of Rs. 1,000, Rs. 10,000, Rs. 1 lakh, Rs. 10 lakh and Rs. 1 crore **without any maximum limit**.

State Bank of India is authorised to issue and encash these bonds, which are valid for fifteen days from the date of issuance. These bonds are redeemable in the designated account of a registered political party.

The bonds are available for purchase by any person (who is a citizen of India or incorporated or established in India) for a period of ten days each in the months of January, April, July and October as may be specified by the Central Government.

A person being an individual can buy bonds, either singly or jointly with other individuals. Donor's name is not mentioned on the bond.

World's highest railway bridge

It is being constructed over the Chenab river in Jammu and Kashmir. The ₹1,250-crore bridge will be 359 metres above the Chenab river bed. The rail line is expected to be 35 metres taller than the Eiffel Tower. Once completed, it will surpass the record of the Beipan river Shuibai railway bridge (275 m) in China.

Amicus curiae

Amicus Curiae, which literally translates as friend of the court, is a neutral lawyer appointed by the court to assist it in cases which require specific expertise. They are advocates appointed to assist the court in adjudication of important cases.

European Union joins India's CDRI

The European Union (EU) comprising of 27 members has joined the "Coalition for Disaster Resilient Infrastructure (CDRI) initiative" of India. CDRI is an international coalition of countries, United Nations (UN) agencies, private sectors, multilateral development banks and academic institutions. The initiative aims to promote the disaster-resilient infrastructure.

The CDRI Initiative was launched by the Prime Minister Narendra Modi in the year 2019. The initiative was launched at the UN Climate Change Summit. It also supports the sustainable development. The initiative also focuses on developing the disaster-resilience in the ecological, social, and economic infrastructure.

International

Quad Summit

The quadrilateral security dialogue **includes Japan, India, United States and Australia**. First-ever leadership summit of the quad grouping was held virtually.

Outcomes of the meet: The Quad members agreed to ensure "equitable" access to vaccines. They also observed that the Indo-Pacific region should be governed in accordance with human rights. The leaders also discussed the challenge posed by China.

Spain Passes Law to legalise Euthanasia

The Parliament of Spain has passed and voted in favour of law that legalises the euthanasia on March 18, 2021. Thus, the country has become one among few nations that allow the terminally-ill or gravely-injured patients to end their life. Following this, Spain has become the fourth European nation which has decriminalise the assisted. The other four EU Nation include **Belgium, Netherlands and Luxembourg**.

The Spanish legislation will allow the passive euthanasia in which the medical staff will intentionally end a life to relieve the suffering. This will be done by halting the life serving medical treatment. The law has also allowed the assisted suicide in which the patient will carry out the procedure of ending life.

Russia deploys Giant Space Telescope in Lake Baikal

Russian scientists have launched one of the biggest underwater space telescopes of the world on March 13, 2021. This underwater space telescope was deployed deep into universe from pristine waters of

Lake Baikal. The telescope has been designed to observe the smallest known particles called neutrinos. The telescope has been named as “**Baikal-GVD**”.

The Baikal telescope will rival Ice Cube which is a giant neutrino observatory under the Antarctic ice at the US research station located at the South Pole.

Lake Baikal: It is a rift lake located in the southern Siberia, Russia. The lake is located between the Irkutsk Oblast in the northwest and Buryat Republic in the southeast. It is the **largest freshwater lake by volume** across the world. It comprises of **22 to 23% of the fresh surface** water of World. The lake comprises of more water than all the North American Great Lakes combined. The lake is also the **World’s deepest lake** with the maximum depth of 1,642 m. It is also the oldest lake of the world. With respect to the surface area, it is the seventh-largest lake across the world.

Digital Green Certificate

The European commission has unveiled a “digital green certificate” that could allow EU citizens who have been vaccinated, tested negative or recovered from Covid-19 to travel more freely within the bloc.

The digital document will contain a QR code and can be carried on a mobile phone. It has deliberately not been called a “vaccine passport” because some member states felt that would discriminate against those who had not yet been offered a shot.

Science-Tech & Environment

TraceBioMe Project

Council of Scientific and Industrial Research-National Institute of Oceanography (CSIR-NIO), Goa, has launched the “TraceBioMe Project” in order to map the genetic diversity of organisms.

This project is supported the CSIR. It would also help in mapping the effect of micronutrients apart from tracing the metals deposited on them in the Indian Ocean. It will also forecast the extensive sampling of water, planktons, sediments and several organisms in different parts of Indian Ocean.

Significance of the project: The data generated through this project would help in achieving the SDG 14 goals. The SDG 14 aims to conserve and sustainably use the resources of oceans, seas and marine.

Commission for Air Quality Management (CAQM)

Nearly five months after its setup, the central government’s “**Commission for Air Quality Management**” or **CAQM** in National Capital Region and its Adjoining Areas has been shut down due to lapsing of the ordinance.

Background: The Centre dissolved it after five months as the ordinance lapsed after failing to become an act. The erstwhile **Environment Pollution (Prevention and Control) Authority, or EPCA** had been dissolved to make way for the Commission.

Benzene pollution

Petrol refuelling stations are a major source of benzene emissions, volatile organic compounds, and particulate matter 2.5 concentration. Therefore, installation of vapour recovery system is an important step in improving air quality. The committee recommended that this is to be implemented in coordination with the Petroleum and Explosives Safety Organization [PESO] shortly.

Sources of Benzene:

1. Automobile and petroleum industry.
2. Incomplete combustion of coal oil, petrol and wood.
3. Found in cigarette smoke and charcoal boiled food.
4. Also present in particleboard furniture, plywood, fibreglass, flooring adhesives, paints, wood panelling.

Project RE-HAB (Reducing Elephant-Human Attacks using Bees)

Project RE-HAB: Reducing Elephant-Human Attacks using Bees

It is an initiative of the **Khadi and Village Industries Commission (KVIC)**. It is a sub-mission under KVIC's National Honey Mission. It intends to create "bee fences" to thwart elephant attacks in human habitations using honeybees. The pilot project has been launched in **Kodagu, Karnataka**.

It entails installing bee boxes along the periphery of the forest and the villages with the belief that the elephants will not venture anywhere close to the bees and thus avoid transgressing into human landscape. This idea stems from the elephants' proven fear of the bees.

The 'World Air Quality Report 2020'

It is a report on air quality released by Swiss organisation, IQAir. The global cities ranking report is based on PM2.5 data from 106 countries, which is measured by ground-based monitoring stations, most of which are operated by government agencies.

Air Pollution in Indian cities:

1. **Delhi is the world's most polluted capital:** Although Delhi's air quality improved by nearly 15 per cent from 2019 to 2020, the city still ranked as the 10th most polluted city in the world and the most polluted capital.
2. **22 of the world's 30 most polluted cities** including Delhi are in India.

3. Ghaziabad is **the second most polluted city in the world after Xinjiang in China.**
4. **The eight Indian cities in the top 10 list are** — Bulandshahar, Birsakh Jalalpur, Noida, Greater Noida, Kanpur, Lucknow (all in UP), Bhiwari in Rajasthan and Delhi.
5. **Major sources of India's air pollution include** transportation, biomass burning for cooking, electricity generation, industry, construction, waste burning and episodic agricultural burning.

Global Scenario: India is the third most polluted country in 2020, unlike in 2019, when its air was the fifth most noxious. Bangladesh and Pakistan were the countries in 2020 with worse average PM2.5 levels than India, said the report. China ranked 11th in the latest report.

Artificial photosynthesis

Researchers from **the Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)** have developed an integrated system that can capture carbon dioxide (CO₂) and convert it into solar fuel. They have named this process as **artificial photosynthesis (AP)** — which they feel can aid mitigate effects of emissions made by use of fossil fuels.

Working: This artificial photosynthesis (AP) harnesses solar energy and converts the captured carbon dioxide to carbon monoxide (CO) (using a photosensitizer), which can be used as a fuel for internal combustion engines. Here, scientists are essentially conducting the same fundamental process in natural photosynthesis but with simpler nanostructures. This process of converting CO₂ into solar fuel also generates oxygen from water.

Economics

India's foreign exchange reserves now world's fourth largest

India's foreign exchange reserves surpass Russia's to **become world's fourth largest.** India's reserves, enough to cover roughly 18 months of imports, have been bolstered by a rare current-account surplus, rising inflows into the local stock market and foreign direct investment.

China has the largest reserves, followed by Japan and Switzerland on the International Monetary Fund table.

"Insurance Amendment Bill 2021"

The Rajya Sabha has passed the "Insurance Amendment Bill 2021". The Bill will amend the Insurance Act, 1938. The bill will increase the limit of foreign direct investment (FDI) from 49 percent to 74 percent in Indian insurance companies. The bill also comprises of the provision for removal of restrictions on ownership & control on the insurance companies.

Vehicle Scrapping Policy

The Union Minister of Road Transport and Highways, Nitin Gadkari, has introduced the Vehicle Scrapping Policy on March 18, 2021 in the Lok Sabha which will come into effect from April 1, 2021.

Under the policy, personal vehicles will have to undergo the fitness tests at the automated centres after 20 years. On the other hand, the commercial vehicles will have to undergo the fitness test after 15 years. If the vehicles failed to pass the fitness test for three times, the owner would not be able to drive it on the road.

US Becomes India's Second Biggest Oil Supplier

The United States has become the second biggest oil suppliers of India by overtaking Saudi Arabia. This shift comes after the refiners boosted cheaper U.S. crude purchases to a record levels in order to offset the OPEC+ supply cuts. India is the third biggest oil importer and consumer in the world.

State GK

Panel on mythical Sarasvati River

The Centre has reconstituted an advisory committee to chalk out a plan for studying the mythical **Sarasvati river** for the next two years, after the earlier panel's term ended in 2019. The ASI had first set up the committee on December 28, 2017 for a period of two years.

Composition of the committee:

The committee would be chaired by the Culture Minister and include officials from the Culture, Tourism, Water Resources, Environment and Forest, Housing and Urban Affairs Ministries; representatives of the Indian Space Research Organisation; officials from the governments of Gujarat, Haryana and Rajasthan; and an ASI official.

About Saraswati: The river, which had **originated from Kapal tirth in the Himalayas in the west of Kailash**, was flowing southward to Mansarovar and then taking a turn towards west.

The river flowed through **Haryana, Rajasthan and North Gujarat. It also flowed through Pakistan** before meeting Western Sea through Rann of Kutch and was approximately 4,000 km in length.

The river had two branches: western and eastern. The Himalayan-born Satluj "of the PAST", which flowed through the channels of present-day Ghaggar-Patialwali rivulets, represents the western branch of the ancient river.

On the other hand, Markanda and Sarsuti represented the western branch of Saraswati, known as Tons-Yamuna. The confluence of the branches was near Shatrana, 25 km south of Patiala. And suddenly, it flows crossing the desert (Rann of Kutch) and meet gulf of western sea.

Historical evidence: The Sarasvati River is one of the main Rigvedic rivers mentioned in the scripture Rig Veda and later Vedic and post-Vedic texts.

Book 6 of the Rig Veda includes a hymn called **the 'Nadistuti Sukta'**, which sings praises of the Saraswati as being "perfect mother, unsurpassed river, supreme goddess".

Haryana passes Bill to Recover Damages from Protesters

Haryana Assembly has passed the "Haryana Recovery of damages to property during disturbance to public Bill, 2021" on March 18, 2021 to recover the compensation from the protesters if they cause damage to property.

The bill was passed by a voice vote. The Bill provides for the recovery of damages to properties which is caused by the persons during disturbances to public order by the assembly, lawful or unlawful means like riots and violent disorder. The bill also comprises of the provision to constitute the Claims Tribunal in order to determine the liability, assess the damages caused and to compensate for the damage. The bill is not meant for people's democratic right of holding protest but for the people who damage the public and private property.

The Uttar Pradesh was the first state that passed a bill for the recovery from the people who damage the public property during agitation and protests

National Institutes of Food Technology Entrepreneurship and Management Bill, 2019

The Rajya Sabha passed the National Institutes of Food Technology Entrepreneurship and Management Bill, 2019, that confers the status of **national importance on two food technology institutes at Kundli in Haryana and Thanjavur in Tamil Nadu.**

The bill facilitates these institutes in terms of providing instruction, research, and knowledge dissemination in the field of food science and technology. The Bill also provides for a Board of Governors, which will act as the principal executive body of the institutes and a Council for coordinating activities and facilitating interactions for performance improvement.

Current Affairs Update (March 22-28)

National

Ken-Betwa Interlinking Project Dam

Chief Ministers of Madhya Pradesh and Uttar Pradesh have signed a historic agreement to implement the **Ken Betwa Link Project (KBLP)**.

Conceived as a **two-part project**, this is **the country's first river interlinking project**. It is perceived as a **model plan for similar interstate river transfer missions**.

The project aims to transfer surplus water from the Ken river in MP to Betwa in UP to irrigate the drought-prone Bundelkhand region spread across the districts of two states mainly Jhansi, Banda, Lalitpur and Mahoba districts of UP and Tikamgarh, Panna and Chhatarpur districts of MP.

Key facts: Ken and Betwa rivers originate in MP and are the tributaries of Yamuna. Ken meets with Yamuna in Banda district of UP and with Betwa in Hamirpur district of UP.

Rajghat, Paricha and Matatila dams are over Betwa river. Ken River passes through Panna tiger reserve.

Benefits of interlinking:

- Enhances water and food security.
- Proper utilisation of water.
- Boost to agriculture.
- Disaster mitigation.
- Boost to transportation

Concerns: Construction of Daudhan dam will submerge 10% of the critical tiger habitat of Panna Tiger Reserve. This in turn would affect the tiger conservation efforts. The height of the dam will have effect on the nesting sites of the vultures.

Voter Verifiable Paper Audit Trail (VVPAT)

The Election Commission has decided to use **Voter Verifiable Paper Audit Trail (VVPAT)** along with Electronic Voting Machines (EVM) at all the Polling Stations in the upcoming assembly elections in four states and Union territory.

VVPAT: Voter verifiable paper audit trail (VVPAT) is a method of providing feedback to voters using EVMs. A VVPAT is intended as **an independent verification system** for voting machines designed to allow voters to verify that their vote was cast correctly, and to provide a means to audit the stored

electronic results. It contains the name of the candidate for whom vote has been cast and symbol of the party/individual candidate.

Significance:

- The VVPAT helps to detect potential election fraud or malfunction in the Electronic Voting Machine.
- It provides a means to audit the stored electronic results. It serves as an additional barrier to change or destroy votes.
- The EVMs with VVPAT system ensure the accuracy of the voting system with fullest transparency and restores the confidence of the voters.
- EVMs and VVPATs also speed up the election process as counting votes on EVMs takes much lesser time than counting paper ballots.

‘Jal Shakti Abhiyan: Catch the Rain’ campaign

Prime Minister Narendra Modi on March 22, 2021 launched ‘Jal Shakti Abhiyan: Catch the Rain’ campaign for conserving water and stressed that every penny of MGNREGA funds be spent on rain water conservation till the monsoon arrives. The ‘Catch the Rain’ campaign will be undertaken across the country, in both rural and urban areas.

World Water Day was celebrated on March 22, 2021. Celebrated on March 21 every year since 1993, the day focuses on the importance of freshwater and raises awareness of the 2.2 billion people living without access to safe water. It is about taking action to tackle the global water crisis. ‘Valuing water’ is this year’s theme.

Covishield Dose Interval to be increased

The health Ministry has decided to increase the interval between first and second doses of Covishield to up to eight weeks in the ongoing covid-19 vaccination drive. This decision was taken following the data of the global trials of AZD122 which shows that extending the duration of doses to 12 weeks has increased its efficacy much more. While the interim findings reported following the trials in the US, Chile and Peru that the vaccine had an efficacy of 79 percent even when second dose of the vaccine was given four weeks after its first dose.

Termination of Session

A sitting of Parliament can be **terminated by adjournment or adjournment sine die or prorogation or dissolution** (in the case of the Lok Sabha).

Adjournment: It suspends the work in a sitting for a specified time, which may be hours, days or weeks.

Adjournment sine die: It means terminating a sitting of Parliament for an indefinite period.

In other words, when the House is adjourned without naming a day for reassembly. The power of adjournment as well as adjournment sine die lies with the presiding officer (Speaker or Chairman) of the House.

Prorogation: The President issues a notification for prorogation of the session after the business of a session is completed and the presiding officer declares the House adjourned sine die. **The President can also prorogue the House while in session.**

Dissolution: Only the Lok Sabha is subject to dissolution. Rajya Sabha, being a permanent House, is not subject to dissolution. A dissolution ends the life of the existing House, and a new House is constituted after general elections are held. **The President is empowered to dissolve the Lok Sabha.**

The Chief Justice of India

Chief Justice of India Sharad A. Bobde has recommended **Justice N.V. Ramana**, the senior-most judge of the Supreme Court, as the next top judge. Justice Ramana is now set to take over as **the 48th Chief Justice of India from April 24.**

Appointment of CJI: The Chief Justice of India is traditionally appointed by the outgoing Chief Justice of India on the day of his (or her) retirement. By convention, the outgoing Chief Justice of India selects the most senior then-sitting Supreme Court judge.

Seniority at the apex court is determined not by age, but by:

1. The date a judge was appointed to the Supreme Court.
2. If two judges are elevated to the Supreme Court on the same day:
3. The one who was sworn in first as a judge would trump another.
4. If both were sworn in as judges on the same day, the one with more years of high court service would 'win' in the seniority stakes.
5. An appointment from the bench would 'trump' in seniority an appointee from the bar.

Sixth Schedule areas

The Union Ministry of Home Affairs (MHA) has informed the Lok Sabha that “presently, **there is no proposal to implement panchayat system in Sixth Schedule areas of Assam**”.

Efforts in this regard- Constitution (125th Amendment) Bill, 2019: Introduced in the Rajya Sabha on February 6, 2019, the Bill provides for elected village municipal councils. The Bill that is still active proposes that **the State Election Commissions would hold elections to the autonomous councils, village and municipal councils.**



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About the Sixth Schedule: It protects tribal populations and provides autonomy to the communities through creation of autonomous development councils that can frame laws on land, public health, agriculture and others.

As of now, 10 autonomous councils exist in **Assam, Meghalaya, Tripura and Mizoram**. This special provision is provided under **Article 244(2) and Article 275(1) of the Constitution**.

Key provisions:

1. The governor is empowered to organise and re-organise the autonomous districts.
2. If there are different tribes in an autonomous district, the governor can divide the district into several autonomous regions.
3. **Composition:** Each autonomous district has a district council consisting of 30 members, of whom four are nominated by the governor and the remaining 26 are elected on the basis of adult franchise.
4. **Term:** The elected members hold office for a term of five years (unless the council is dissolved earlier) and nominated members hold office during the pleasure of the governor.

Citizenship (Amendment) Act, 2019 (CAA)

The government has been granted time till April 9 by Lok Sabha and July 9 by Rajya Sabha to frame rules under the citizenship law. The Citizenship (Amendment) Act, 2019 (CAA) was notified on December 12, 2019 and came into force from January 10, 2020.

About CAA: The objective of the CAA is to grant Indian citizenship to persecuted minorities — Hindu, Sikh, Jain, Buddhist, Parsi and Christian — from Pakistan, Bangladesh and Afghanistan.

Those from these communities who had come to India till December 31, 2014, facing religious persecution in their respective countries, will not be treated as illegal immigrants but given Indian citizenship.

The Act provides that the central government may cancel the registration of OCIs on certain grounds.

Exceptions: The Act does not apply to tribal areas of Tripura, Mizoram, Assam and Meghalaya because of being included in the 6th Schedule of the Constitution. Also areas that fall under the Inner Limit notified under the Bengal Eastern Frontier Regulation, 1873, will also be outside the Act's purview.

Issues surrounding the law:

- It violates the basic tenets of the Constitution. Illegal immigrants are distinguished on the basis of religion.

- It is perceived to be a demographic threat to indigenous communities.
- It makes illegal migrants eligible for citizenship on the basis of religion. This may violate Article 14 of the Constitution which guarantees the right to equality.
- It attempts to naturalise the citizenship of illegal immigrants in the region.
- It allows cancellation of OCI registration for violation of any law. This is a wide ground that may cover a range of violations, including minor offences.

International

India abstains from UNHRC vote on Sri Lanka resolution

The resolution titled 'Promotion of Reconciliation Accountability and Human Rights in Sri Lanka' was adopted by the UNHRC after 22 members out of 47-member Council voted in favour of it.

The resolution against Sri Lanka is for war crimes against Tamils and is among the series of such resolutions the UNHRC has been bringing for a decade. India abstained from voting in 2014 and had voted in favour of a similar resolution in 2012.

The resolution was tabled by the UNHRC's Core Group, which includes the UK, Germany and Canada and wants sanctions to be imposed on Sri Lanka besides listing certain action points for its government.

India's abstention was in contrast to the stand taken by other neighbours of Sri Lanka such as Bangladesh, China, Russia, Pakistan and the Philippines were among those which voted no while Nepal, like India, abstained from the vote.

South China Sea dispute

It is a dispute over territory and sovereignty over ocean areas, and the Paracels and the Spratlys – two island chains claimed in whole or in part by a number of countries.

The Philippine military has ordered the deployment of more navy ships to the South China Sea amid a growing diplomatic row over a fleet of Chinese boats parked near a disputed reef- **Reed Bank**.

Who Claims What?

China: claims by far the largest portion of territory – an area defined by the “nine-dash line” which stretches hundreds of miles south and east from its most southerly province of Hainan.

Vietnam: hotly disputes China's historical account, saying China had never claimed sovereignty over the islands before the 1940s. Vietnam says it has actively ruled over both the Paracels and the Spratlys since the 17th Century – and has the documents to prove it.

Philippines: both the Philippines and China lay claim to the Scarborough Shoal (known as Huangyan Island in China) – a little more than 100 miles (160km) from the Philippines and 500 miles from China.

Malaysia and Brunei: They lay claim to territory in the South China Sea that they say falls within their economic exclusion zones, as defined by UNCLOS – the United Nations Convention on the Law of the Sea. Brunei does not claim any of the disputed islands, but Malaysia claims a small number of islands in the Spratlys

Volcano Bonds

The Danish Red Cross announced that it has launched first of its kind catastrophe bond for the volcano-related disasters in collaboration with the several financial firms. This bond which will enable the disaster relief agency to get the financial aid quickly to those who are suffering because of the eruption of 10 volcanoes namely Chile, Ecuador, Cameroon, Colombia, Mexico, Guatemala and Indonesia.

The project's partners aim to raise \$3 million with the launch of this bond. This money will be transferred to the Denmark's branch of the Red Cross. The Initial investors in the bond are Plenum investments and Schroder Investment Management. The firm specializes in the insurance-linked securities.

Freedom Pineapple Movement

The Foreign Minister of Taiwan, Joseph Wu, recently launched a "Freedom Pineapple" campaign on Twitter in order to condemn the politically-driven ban on the import of pineapples from Taiwan by China. The Taiwanese pineapples have also become a political symbol in the region following the ban.

The Chinese government has banned the import of Pineapples from Taiwan just before the season for pineapple was started in the year 2021. The government has banned the import stating that the imports done in the previous instances had been contaminated with pests. However, this was denied by experts, producers, and the government of Taiwan. The movement's name is inspired from a "Play on Freedom Fries" which is named as the "Freedom pineapples".

Pakal Dul Dam

This is an under-construction concrete-face rock-fill dam. It is being constructed on **Marusadar River** which is a tributary of **Chenab River**. The dam is located in **Kishtwar district of Jammu and Kashmir**. It is being constructed with the objective of generating **1000 MW** of hydroelectric power. The dam will divert water towards south, into power station of the reservoir of DULHasti Dam on Chenab river, through 10 km long headrace tunnel. The project was awarded to consortium of domestic and foreign countries in February 2014. The consortium includes JP Prakash Associate, AFCONS and Bharat Heavy Electricals. Construction of the dam is **opposed by Pakistan** which is of the view that it violates Indus Water Treaty.

Indus Water Treaty:

- It is a Water-Distribution Treaty, signed in Karachi on 1960, between India (Pm Jawaharlal Nehru) and Pakistan (President Ayub Khan), brokered by the World Bank.
- Under the treaty, India has control over water flowing in the eastern rivers– Beas, Ravi and Sutlej.
- Pakistan has control over the western rivers– Indus, Chenab and Jhelum.
- As per the treaty, the water commissioners of Pakistan and India are required to meet twice a year and arrange technical visits to projects' sites and critical river head works.

Science-Tech & Environment

What are Flexible fuel vehicles (FFVs)?

The government of India may soon ask the auto companies in India to manufacture the passenger and commercial vehicles that run on the multiple fuel configuration with the aim of reducing the use of polluting fossil fuels and cutting down the harmful emissions.

In the line, the government is actively looking up after the use of “Flexible Fuel Vehicles” which will ensure the increased use of the bio-fuels to run the vehicles. Flexible Fuel Vehicles (FFVs) are the modified version of the vehicles which can run both on the gasoline and the doped petrol with varying levels of ethanol blends. These vehicles are currently being used in Brazil successfully. FFVs gives people the option to switch the fuel based in the price and convenience.

It is also called as the “dual-fuel vehicle” or a flex-fuel vehicle. FFV is an alternative fuel vehicle which comprises of the internal combustion engine which run on more than one fuel. It usually run on the gasoline blended with either ethanol or methanol fuel. Both of the fuels are stored in same common tank. The engines of the vehicle are capable of burning any proportion of the resulting blend in its combustion chamber. The fuel injection and spark timing are automatically adjusted in accordance with the actual blend detected by the fuel composition sensor. The FFV is different from the bi-fuel vehicles. In the bi-fuel vehicle, two fuels are stored in the separate tanks and engine runs on one fuel at a time.

Bacteria found on International Space Station named after Indian scientist

Four species of bacteria have been discovered onboard the International Space Station (ISS), one of which has been named after Indian biodiversity scientist Seyed Ajmal Khan (*Methylobacterium ajmalii*).

Four strains of bacteria belong to the family. While one strain was identified as **Methylobacterium rhodesianum** bacteria, the other three strains were previously undiscovered. These bacteria aid in plant growth.

ISRO Demonstrates Free Space Quantum Communication

The Indian Space Research Organisation (ISRO) has announced on March 22, 2021 that it has successfully demonstrated its free-space Quantum Communication for a distance of 300 metres for the first time in India. It was demonstrated at the Space Applications Centre (SAC) in Ahmedabad in between the two line-of-sight buildings within its campus.

ISRO's demonstration of the Free Space Quantum Communication includes the live video conferencing using the quantum-key-encrypted signals. It is a major milestone to achieve the unconditionally secured satellite data communication using the quantum technologies.

The Quantum Key Distribution technology uses the Quantum Communication technology which ensures the unconditional data security using the principles of the quantum mechanics on the basis of Laws of Physics.

International Day of Forests

The United Nations observes **March 21 as the International Day of Forests**, commemorating the green cover around the world and reiterating its importance.

The theme for 2021 is "Forest restoration: a path to recovery and well-being".

Themes of the International Day of Forests are aimed to fit into **the UN Decade on Ecosystem Restoration (2021-2030)**, which calls for the protection and revival of ecosystems around the world.

Key facts: The United Nations General Assembly proclaimed March 21 as the International Day of Forests (IDF) in 2012. The Day is celebrated by **the United Nations Forum on Forests and the Food and Agriculture Organization of the United Nations (FAO)**, in collaboration with governments, the Collaborative Partnership on Forests and other relevant organisations in the field.

Orphan disease

A rare disease, also referred to as an orphan disease, is any disease that affects a small percentage of the population. Most rare diseases are genetic, and are present throughout a person's entire life, even if symptoms do not immediately appear.

The most common rare diseases recorded in India are: Haemophilia, Thalassemia, sickle-cell anaemia and primary immuno deficiency in children, auto-immune diseases, Lysosomal storage disorders such as Pompe disease, Hirschsprung disease, Gaucher's disease, Cystic Fibrosis, Hemangiomas and certain forms of muscular dystrophies.

Efforts by India towards this: The Union Ministry of Health and Family Welfare has published **a national policy for the treatment of 450 'rare diseases'**. The policy intends to kickstart a registry of rare diseases, which will be maintained by the Indian Council of Medical Research (ICMR).

Under the policy, there are three categories of rare diseases — requiring one-time curative treatment, diseases that require long-term treatment but where the cost is low, and those needing long-term treatments with high cost. Some of the diseases in the first category include osteopetrosis and immune deficiency disorders, among others.

Economics

Salooni maize to get GI tag

The Salooni valley in Chamba district is set to get a recognition at national and international level soon because of its traditional maize varieties.

The Salooni White Maize Organisation, a farmer association that had preserved the traditional varieties of maize, rich in taste and quality, will get a 'geographical indicator (GI) tag shortly.

White maize in particular is considered rich in protein. According to a study, maize is also better for heart. It is rich in vitamins and antioxidants. It is also helpful in controlling diabetes.

Gram Ujala

Under this program **Convergence Energy Services Limited (CESL)**, a wholly owned subsidiary of Energy Efficiency Services Limited (EESL), will distribute high quality LED bulbs, at an affordable cost of 10 rupees per bulb in rural areas.

7 watt and 12-watt LED bulbs with 3 years warranty will be given to rural consumers against submission of working Incandescent bulbs. Each household will get up to 5 LEDs.

The programme will be financed entirely through carbon credits and will be the first such programme in India. The revenue earned from carbon credits will contribute Rs. 60 per LED bulb piece, with the balance Rs. 10 to be paid by the rural consumer.

'International Intellectual Property (IP)' Index

Annual edition of 'International Intellectual Property (IP)' was released on March 23, 2021. India was ranked 40 among 53 global economies in the ninth IP index.

The Index is released annually by 'US Chamber of Commerce Global Innovation Policy Centre (GIPC)'. It evaluates Intellectual Property rights across 53 global economies on the basis of patent, commercialisation of IP assets, copyright policies and ratification of international treaties.

Awards

Pritzker Architecture Prize

Awarded annually to honor a living architect. Founded in 1979 by Jay A. Pritzker and his wife Cindy, the award is funded by the Pritzker family and sponsored by the Hyatt Foundation. It is considered to be one of the world's premier architecture prizes, and is often referred to as the Nobel Prize of architecture.

Social housing architects Anne Lacaton and Jean-Philippe Vassal, founders of French studio Lacaton & Vassal, have been named the 2021 winners of the Pritzker Architecture Prize.

Winners of 67th National Film Awards announced

Best Feature Film: 'Marakkkar Arabikadalinte Simham' (Malayalam);

Best Direction: Sanjay Puran Singh Chauhan ('Bahattar Hoorain');

Best Actress: Kangana Ranaut ('Manikarnika', 'Panga');

Best Actor: Manoj Bajpayee for 'Bhonsle' and Dhanush for 'Asuran' (Tamil);

Best Supporting Actress: 'The Tashkent Files', Pallavi Joshi;

Best Supporting Actor: 'Super Deluxe' (Tamil), Vijaya Sethupathi;

Indira Gandhi Award for Best Debut Film of Director: Helen (Malayalam);

Most Film-Friendly State: Sikkim.

Gandhi Peace Prize 2020

The Ministry of the culture has stated that, the government of India has conferred the Gandhi Peace Prize for the year 2020 on the Bangabandhu Sheikh Mujibur Rahman. The peace prize for the year 2019 was conferred on the late His Majesty Sultan Qaboos bin Said Al Said of Oman.

Bangabandhu Sheikh Mujibur Rahman was the first President of Bangladesh and also became the Prime Minister of Bangladesh, later. He is called as the "Father of the Nation" or "Mujib". Sultan Qaboos, was the longest-reigning leader of the modern Arab world.

Gandhi Peace Prize has been named after Mahatma Gandhi. The award is presented by the Government of India. It is presented as a tribute to the Gandhian Ideals. This award was launched in the year 1995 on the occasion of the 125th anniversary of Mohandas Gandhi. This annual award is given to the individuals and institutions for their contributions in the political, social and economic transformation through non-violence and other Gandhian ideals.

State GK

Tomar king Anangpal II

The government has recently formed a committee to popularise the legacy of 11th-century Tomar king, Anangpal II.

Anangpal II: Belonged to the Tomar dynasty that ruled parts of present-day Delhi and Haryana between the 8th and 12th centuries. Anangpal Tomar II was succeeded by his grandson Prithviraj Chauhan, who was defeated by the Ghurid forces in the Battle of Tarain (present-day Haryana) after which the Delhi Sultanate was established in 1192.

The Tomar dynasty shifted its capital in the 8th century, to Dhillikapuri (Delhi) during the reign of Anangpal II. He gave Delhi its present name and also repopulated it. He built Lal Kot fort and Anangtal Baoli.

Current Affairs Update (March 29-Apr 4)

National

Unique Land Parcel Identification Number (ULPIN) scheme

The **Unique Land Parcel Identification Number (ULPIN) scheme** has been launched in 10 States this year and will be rolled out across the country by March 2022. This plan has been laid out in a parliamentary standing committee report submitted to the Lok Sabha, as part of **the Digital India Land Records Modernisation Programme (DILRMP)** which began in 2008 and has been expanded several times.

About the Scheme: Under the scheme, a 14-digit identification number will be issued to every plot of land in the country.

It is being described as “the Aadhaar for land” — a number that would uniquely identify every surveyed parcel of land and prevent land fraud, especially in rural India, where land records are outdated and disputed.

The identification will be based on the longitude and latitude of the land parcel, and is dependent on detailed surveys and geo-referenced cadastral maps.

Electoral bonds

Announced in the 2017 Union Budget, electoral bonds are **interest-free bearer instruments used to donate money anonymously to political parties.**

Highlights:

- A bearer instrument **does not carry any information about the buyer or payee.**
- **The holder of the instrument** (which is the political party) is presumed to be its owner.
- The bonds are sold in multiples of Rs 1,000, Rs 10,000, Rs 1 lakh, Rs 10 lakh, and Rs 1 crore, and State Bank of India is the only bank authorised to sell them.
- Donors can buy and subsequently donate bonds to a political party, which can encash the bonds through its verified account within 15 days.
- There is **no limit on the number of bonds an individual or company can purchase.**
- If a party hasn't encashed any bonds within 15 days, SBI deposits these into **the Prime Minister's Relief Fund.**

Why have they been challenged?

- The printing of these bonds & SBI commission for facilitating the sale and purchase of the bonds is paid from the taxpayers' money by the central government.
- Anonymity provided to donors of electoral bonds.
- Through an amendment to the Finance Act 2017, the Centre has exempted parties from disclosing donations received through electoral bonds.
- According to transparency activists, these infringe **the citizen's 'Right to Know' and make the political class even more unaccountable.**

What is the EC's stand?

The EC had **objected to amendments in the Representation of the People Act that exempt political parties from disclosing donations** through this route.

In a situation where the contribution received through electoral bonds are not reported, on perusal of the contribution report of political parties, it cannot be ascertained whether the political party has taken any donation in violation of provision under **Section 29(b) of the RP Act** which prohibits the political parties from taking donations from government companies and foreign sources.

Uniform Civil Code

Chief Justice of India (CJI) S A Bobde recently lauded **Goa's Uniform Civil Code**, and encouraged "intellectuals" indulging in "academic talk" to visit the state to learn more about it. UCC in Goa applies in marriage and succession, governing all Goans irrespective of religious affiliation.

Article 44 of the Constitution says that there should be a Uniform Civil Code. According to this article, "The State shall endeavor to secure for the citizens a uniform civil code throughout the territory of India". Since the Directive Principles are only guidelines, it is not mandatory to use them.

Status of Personal Law in India: Personal law subjects like marriage, divorce, inheritance come under **Concurrent list**.

What is uniform civil code?

A generic set of governing laws for every citizen without taking into consideration the religion.

Concern: Cultural diversity cannot be compromised to the extent that our urge for uniformity itself becomes a reason for threat to the territorial integrity of the nation.

International

Rooppur Nuclear power plant

Recently, India made a deal with Bangladesh where Indian companies will develop the transmission lines of Bangladesh Rooppur Nuclear power plant.

About Rooppur Nuclear power plant:

- It is an under-construction **2.4 GWe** nuclear power plant in Bangladesh.
- It is being constructed at Rooppur (Rupppur) in the **Pabna District of Bangladesh**, on the bank of Padma River.
- There are two units of plants which are expected to be completed in 2022 and 2024 respectively. Each will produce 1200MW of electricity.
- It has significance as it will be the **Bangladesh's first nuclear power plant**.
- The Rooppur project is the first initiative under the Indo-Russian deal to undertake atomic energy projects in third countries.
- A **tripartite Memorandum of Understanding (MoU)** in March 2018, was signed at Moscow, Russia between Russia, Bangladesh and India for the Rooppur Nuclear Power Project.
- It will be for the first time when any Indian company will be involved in any nuclear project out of the country. Since **India is not a Nuclear Supplier group (NSG) member**, it cannot participate directly in construction of Atomic power reactors.

Issues discussed during PM 2 day visit to Bangladesh

- **Rohingyas' Issue:** Safe and sustainable facilitation of displaced people from Rakhine.
- **Teesta River:** Requested for early finalization of draft for water sharing of the Teesta & Feni River.
- **BBIN Project:** Facilitation of Bangladesh exports to Nepal and Bhutan via India.
- **Nuclear Power Plant:** Transmission line of Bangladesh's Ruppur Nuclear power plant to be developed by Indian companies.
- **Maitri Diwas:** December 6, on which India formally recognized Bangladesh, will be celebrated as Maîtri Diwas.

Exercise SHANTIR OGROSHENA 2021

It is a multinational military exercise in Bangladesh. Indian army will take part this year. It will be held at Bangladesh to commemorate the birth centenary of Bangladesh 'Father of the Nation' Bangabandhu Sheikh Mujibur Rahman.

Military observers from the USA, UK, Turkey, Kingdom of Saudi Arabia, Kuwait and Singapore will also be in attendance throughout the exercise.

BIMSTEC

17th BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) Ministerial meet, **chaired by Sri Lanka**, was held recently. The meeting drew participation from all **the seven-member States**, including Myanmar which is witnessing a large-scale crackdown against anti-military protesters.

BIMSTEC: In an effort to integrate the region, the grouping was **formed in 1997**. It is a bridge between South Asia and Southeast Asia. It **includes all the major countries of South Asia, except Maldives, Afghanistan and Pakistan**.

Members: Bangladesh, India, Sri Lanka, Thailand, Myanmar, Nepal and Bhutan.

Significance of grouping: Over one-fifth (22%) of the world's population live in the seven countries around it, and they have a combined GDP close to \$2.7 trillion. The Bay also has vast untapped natural resources. One-fourth of the world's traded goods cross the Bay every year.

Why is BIMSTEC important for India?

As the region's largest economy, India has a lot at stake.

- **BIMSTEC connects not only South and Southeast Asia**, but also the **ecologies of the Great Himalayas and the Bay of Bengal**.
- For India, it is a natural platform to fulfil our key foreign policy priorities of **'Neighborhood First' and 'Act East'**.
- For New Delhi, one key reason for engagement is in the vast potential that is unlocked with stronger connectivity. Almost 300 million people, or roughly **one-quarter of India's population, live in the four coastal states adjacent to the Bay of Bengal** (Andhra Pradesh, Orissa, Tamil Nadu, and West Bengal).
- From the strategic perspective, the Bay of Bengal, a **funnel to the Malacca straits**, has emerged a key theatre for an increasingly assertive China in maintaining its access route to the Indian Ocean.
- As China mounts assertive activities in the Bay of Bengal region, with increased submarine movement and ship visits in the Indian Ocean, it is in India's interest to consolidate its internal engagement among the BIMSTEC countries.

Science-Tech & Environment

NISAR

NASA and ISRO are collaborating on developing a satellite called NISAR.

About NISAR:

- The satellite will be launched in 2022 from the Satish Dhawan Space Center in Sriharikota, India, into a near-polar orbit.
- It will **scan the globe every 12 days** over the course of its three-year mission of imaging the Earth's land, ice sheets and sea ice to give an "unprecedented" view of the planet.
- It will detect movements of the planet's surface as small as 0.4 inches over areas about half the size of a tennis court.
- NASA will provide one of the **radars for the satellite**, a high-rate communication subsystem for science data, GPS receivers and a payload data subsystem.
- ISRO will provide the **spacecraft bus**, the second type of radar (called the S-band radar), the launch vehicle and associated launch services.
- NISAR will be equipped with the **largest reflector antenna** ever launched by NASA and its primary goals include tracking subtle changes in the Earth's surface, spotting warning signs of imminent volcanic eruptions, helping to monitor groundwater supplies and tracking the rate at which ice sheets are melting.

Synthetic aperture radar: The name **NISAR is short for NASA-ISRO-SAR**. SAR here refers to the **synthetic aperture radar** that NASA will use to measure changes in the surface of the Earth.

Essentially, SAR refers to a technique for producing high-resolution images. Because of the precision, the radar can **penetrate clouds and darkness**, which means that it can **collect data day and night in any weather**.

Tiger Relocation Project

India's first inter-state tiger translocation project was **initiated in 2018** wherein two big cats, a male (Mahavir) from Kanha Tiger Reserve and a female (Sundari) from Bandhavgarh from Madhya Pradesh were relocated to **Satkosia Tiger Reserve** in Odisha, to shore up the tiger population in the state.

Need for: The relocation was meant to serve two purposes:

1. Reducing tiger population in areas with excess tigers to majorly reduce territorial disputes.
2. To reintroduce tigers in areas where the population has considerably reduced due to various reasons.

Why in News? Recently, Tigress Sundari was relocated back to MP. This was mainly because of severe protests by villagers living on the fringes of the reserve.

Carnivac-Cov Vaccine

The **world's first animal vaccine against the novel coronavirus** has been named as Carnivac-Cov. As per Russian scientists, the use of this vaccine can prevent the development of virus mutations in animals. Carnivac-Cov vaccine for animals has been developed by a unit of Rosselkhoznadzor (Federal Service for Veterinary and Phytosanitary Surveillance).

Mahendragiri

The **Odisha** state government has proposed a **second biosphere reserve** in the southern part of the state at Mahendragiri. It is a mountain in the Gajapati district of the state. It is at an altitude of 1,501 metres. Mahendragiri is also the **second-highest peak** in the state. **Similipal** Biosphere Reserve is the first biosphere reserve of Odisha.

Economics

Global Gender Gap Report 2021

- The **World Economic Forum** has released the Global Gender Gap Report 2021.
- **India** has been **ranked 140th among 156 countries** on the index.
- Most of the decrease has been seen on the political empowerment subindex, where India regressed 13.5 percentage points. The women ministers have declined to 9.1% in 2021 from 23.1% in 2019).
- One of the drivers of this decline is a decrease in women's labor force participation rate, which decreased from 24.8% to 22.3%.
- The share of women in professional and technical roles also decreased to 29.2%.
- In the South Asia region, only two countries- **Pakistan and Afghanistan** have been ranked below India.
- **Iceland** has topped the index for the 12th time and is the most gender-equal country in the world.
- The **top 10** most gender-equal countries are Iceland, Finland, Norway, New Zealand, Rwanda, Sweden, Ireland, and Switzerland.

Awards

Dadasaheb Phalke Award

Rajinikanth has been conferred with the Dadasaheb Phalke Award for the year 2019.

Dadasaheb Phalke award is India's highest award in cinema. It is presented annually at the National Film Awards ceremony by the Directorate of Film Festivals (an organisation set up by the Ministry of Information and Broadcasting).

Prize: The award prize consists of a golden lotus, a cash prize of ₹10 lakh and a shawl. The award is given to people for their "outstanding contribution to the growth and development of Indian cinema".

History: It was first presented in 1969. The first recipient of the award was actress Devika Rani, "the first lady of Indian cinema."

State GK

Haryana amends rules for conduct of business in Assembly

Haryana has amended several provisions under its **Rules of Procedure and Conduct of Business in the Legislative Assembly of the state.**

- During every sitting of the House, **presence of at least two ministers is a must**, which was not maintained at times during discussion on certain Calling Attention Motions or other Business of the House.
- The **members "shall not tear off documents in the House in protest"**. There had been instances where Members occupying opposition benches had torn copies of documents in the House as a mark of protest.
- **A supplementary question shall be held out of order by the Speaker if**, in his opinion- (i) It does not arise from the main Question or its answer; (ii) Instead of seeking information, it gives information; (iii) It seeks confirmation or denial of an opinion; and (iv) It infringes any of the rule regarding question.
- **The Speaker shall allow not more than two supplementary questions to be asked** on any question.

Jail Radio

"Tinka Tinka" foundation has launched 'Jail Radio' project in Haryana jails in collaboration with the State government. Jail Radio is an in-house production run by the inmates. The programmes are broadcast from a studio inside the premises and reach to the inmates through speakers in the barracks. The aim is to bring out the inmates' creativity, give them meaningful engagement.

Need for and significance of the initiative: These inmates would go back to society one day. It is, therefore, important that they are given a meaningful intervention. Many of these repent and regret what happened in the past. They need healing.