

CURRENT AFFAIRS

WEEKLY

WEEK: 5

JULY
2022

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- CHILE MARKS A NOTCH IN INTERNATIONAL CONSTITUTIONALISM
- SC RECOGNIZES THE RIGHT TO BE FORGOTTEN (RTBF) AS PART OF THE 'RIGHT TO PRIVACY'
- ADDING DIGITAL LAYERS FOR DEMOCRATIC GOVERNANCE: A PROFIT OR LOSS
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- 19th century painting of Raja Serfoji traced to U.S. museum
- 'Ashadam Sare' to Goddess Kanakadurga at Sri Durga Malleswara Swamy Varla Devasthanam
- Four tribal revolts President Murmu invoked in her inaugural speech

POLITY AND GOVERNANCE

- Laws covering obscenity in India

INTERNATIONAL RELATIONS

- India-Maldives sign MoU on Judicial Co-operation
- WHO moves to roll out first malaria vaccine in Africa

- Russia, Ukraine sign major grain deal to ease food crisis

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- India-Nambia pact for Cheetahs
- Andhra Pradesh gets a new floating solar power plant on Meghadri Gedda reservoir
- Migratory monarch butterfly (*Danaus plexippus plexippus*) is now Endangered
- India Designates 5 New Ramsar Sites

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- Lessons from Gregor Mendel
- Marburg virus, the Ebola-like outbreak
- China launches second space station module
- Russia to withdraw from International Space Station project after 2024

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- COVID-19: After 2.5 years, Micronesia in the Pacific records its first outbreak

ART & CULTURE

- 'Johar' greeting used by President Droupadi Murmu

POLITY & GOVERNANCE

- What is heteropessimism, and are you suffering from it?

MISCELLANEOUS

- Neeraj Chopra and World athletics silver
- The repechage format introduced by World Athletics for the 2024 Paris Olympics
- 68th National Film Awards

GS SCORE

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— Disclaimer —

The current affairs articles are segregated from prelims and mains perspective, such separation is maintained in terms of structure of articles. Mains articles have more focus on analysis and prelims articles have more focus on facts.

However, this doesn't mean that Mains articles don't cover facts and PT articles can't have analysis. You are suggested to read all of them for all stages of examination.

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SECTION: A

(MAINS)

CURRENT AFFAIRS

THE DRAVIDIAN MOVEMENT AND ARYAN ILLUSION

CONTEXT:

The remarks made by the governor of Tamil Nadu on 'Aryan-Dravidian differences' being geographical and not racial have emerged and fuelled the discussion which has existed for a long.

THE 'ARYANS' AND HINDU NATIONALISM



The German Orientalist **Max Müller** suggested that an Aryan-speaking population introduced Sanskrit language and culture to ancient India



Dayananda Saraswati, founder of the Arya Samaj, argued that the 'Aryas came to this country from Tibet shortly after the dawn of creation'



Bal Gangadhar Tilak argued that the Aryans migrated to India from the Arctic circle in 8000 BC



RSS leader '**Guruji**' **Golwalkar** suggested that Tilak was right about the Arctic origin of the Aryans, but that the North Pole was in India at the time



Swami Vivekanand argued that the Aryans came from India and that ancient India included Afghanistan



Sri Aurobindo believed that Dravidian languages were closely related to Sanskrit

◎ BACKGROUND

- In the past, various leaders have strongly opposed the **Aryan migration theory** and have blamed the British for the emergence and development of the **Aryan-Dravidian distinction**.

Aryan

- Etymologically, the root word '**Arya**' means **noble** or say '**Shrestha**' in Hindi. It has nothing to do with racial identity. It was **Max Muller** who used the term **Aryan** for racial identity.

Dravidian

- Similarly, Dravidian is the term used for people from south Indian affinities. The antiquity of the term Dravida goes back to the time of **Adi Shankaracharya**, who used the term to refer to South India.

The debate over the Aryan-Dravidian Distinction:

- Aryan Invasion and Migration Theory:** This theory which has been floated by the British has attributed to the Aryan- Dravidian distinction and has always been contested by the political class. In the 1850s **Max Muller** introduced the notion of two Aryan races, a western and an eastern one, who migrated from the Caucasus into Europe and India respectively.

- The idea of an "invasion" has been discarded in mainstream scholarship since the 1980s and replaced by more sophisticated models, referred to as the Indo-Aryan migration theory.

- These people spoke **Indo-Aryan languages**, the predominant languages of today's North India, Pakistan, Nepal, Bangladesh, Sri Lanka, and the Maldives.
- It suited the interests of the British to divide Indians based on their racial affiliations, and they cleverly divided Indians into two distinct races saying Dravidians are those living in the South of India.

- ▶ They said that **Dravidians are the original inhabitants of the country**, and they lived in all parts of the country till Aryans arrived in the country from the north and pushed Dravidians downwards in the country so that they remained confined in the south while the Aryans dominated the north and central India.
- ▶ According to the theory the Indians were made to believe that north Indians are descendants of Aryans while south Indians are the descendants of Dravidians.
- ▶ The vast difference in terms of **language, culture, art, and clothing besides food habits** between tribes living in north India and those living in south India helped in confirming this differentiation of races as suggested by the British.
- **Out of India Theory (OIT):** Indigenous Aryanism, also known as the **Indigenous Aryans theory (IAT)** and the **Out of India Theory (OIT)**, is the conviction that the Aryans are indigenous to the Indian subcontinent and that the Indo-European languages radiated out from a homeland in India into their present locations. Pieces of evidence supporting the Out of India Theory which debunks the theory invented by **Max Muller**:
 - ▶ **Archaeological:** Over 7 different ancient sites were discovered. With satellite data, the ancient Sarasvati River and its path were also discovered. And the proximity of those ancient sites lines up close to the path of the ancient Sarasvati River.
 - ▶ **Textual:** The ancient Sarasvati River is important because it is mentioned in the Rig Vedas. And now that river has been found. It links the Rig Vedas to the Sarasvati-Indus Valley Civilization (formerly known as the Indus Valley Civilization).

Evidence against Out of India theory

- Recent **Scientific findings** have conclusively debunked the 'Out of India Theory, which is part of the **larger narrative suggesting that Dravidians and Aryans are ethnically similar** but geographically divided.
- This has posed serious problems to the supporters of recently set out to discover the lost, mystic River Saraswati and to repackage the Indus Valley Civilization as the '**Saraswati Civilization**' without taking into account research that suggests that the language of Harappans could have been Dravidian/Proto-Dravidian.

Non-Sanskrit origins of Dravidian languages:

- Robert Caldwell, in his seminal work, *A Comparative Grammar of the Dravidian Or South-Indian Family of Languages* (published in 1856), offers empirical evidence of the non-Sanskrit origins of Dravidian languages.

• **Robert Caldwell (7 May 1814 – 28 August 1891)** was a missionary for the London Missionary Society. He arrived in India at the age of 24 and studied the local language to spread the word of the Bible in a vernacular language, studies that led him to author a text on the comparative grammar of the South Indian languages.

Dravidian Movement:

- It was a dynamic social movement aimed at destroying the contemporary Hindu social order in its totality and creating a new, rational society without caste, religion, and God.
- Ideologues such as Ayotheethasa Pandithar, Manonmaniam Sundaram Pillai, and M.S. Purnalingam Pillai as well as latter-day '**Justice Party**' leaders such as Dr. T.M. Nair, **P. Theagaraya Chetty**, and **Dr. C. Natesa** Mudaliar championed the socio-political call for the emancipation of non-Brahmin.
- The Justice Party was a political party in the Madras Presidency of British India and was the first backward class mobilization that created social change and political empowerment.

Major Achievements of the movement:

- Empowerment of lower classes
- Gave reservations to various communities in government jobs
- Legislation that allowed Dalits to use all the public space without discrimination
- Temple entries to non-Brahmins were allowed
- Marriages without Brahmin priests and increased acceptance of inter-caste marriages are called self-respect marriages
- The abolition of the Devadasi system
- The party also played a vital role in allowing women to contest elections paving way for Dr. Muthulakshmi Reddy to become the first woman legislator in India
- Initiating the mid-day meal scheme

Outcomes:

- The **movement failed to liberate women as well as the lower caste** and secure equal rights for them. It failed to strengthen the economic condition of the poor and depressed classes. Since the movement was limited to Tamil Nadu, it had very limited influence.
- The Dravidian movement found little takers beyond Tamil Nadu due to a variety of factors such as cultural and ethnic differences among the people of South India.

Present-day political significance:

- The political significance of "**Indigenous Aryanism**". Many scholars note that "**Indigenous Aryanism**" has been adopted by Hindu nationalists as a part of their ideology.
- The proponents of Indigenous Aryanism necessarily engage in "**moral disqualification**" of Western Indology. The same rhetoric is being used in indigenist literature and Hindu nationalist publications.

- Dravidian leaders including **Kalaigarnar M. Karunanidhi** supplemented their social policies with **academic rigor, scientific temper, and rational thinking** — these became the benchmark of Dravidian politics.

◎ CONCLUSION

India is a multi-cultural country, involving multi-ethnic origins, and this has been established by in-depth scholarship on linguistics, mythology, folklore and **anthropology**, archaeology, geology, big history, and **genetics**. It was based on these academic pursuits that linguistic studies established the uniqueness of the Dravidian language family (Telugu, Kannada, Malayalam, Tulu, Tamil, and so on).

Any other theory created by any political or apolitical class must be viewed with suspicion in the face of overwhelming evidence supporting the migration of Indo-European speakers, who were called Aryans, to India almost 4,000 years ago.

LOK SABHA PASSES INDIAN ANTARCTIC BILL, 2022

CONTEXT:

Lok Sabha passes the Indian Antarctic Bill, 2022 aimed at having India's national measures for protecting the Antarctic environment and dependent and associated ecosystem.

About the Indian Antarctic Bill, 2022

- The Indian Antarctic Bill, 2022 was introduced in Lok Sabha on April 1, 2022.
- The bill is in pursuant to **India's accession to the Antarctic Treaty**, the Protocol on Environment Protection (**Madrid Protocol**) to the Antarctic Treaty, and the Convention on the Conservation of Antarctic Marine Living Resources.
- It also seeks to **protect the Antarctic environment and regulate activities in the region.**

Objective of the Bill

- **To provide a harmonious policy framework for India's Antarctic activities** through a well-established legal mechanism, and facilitate activities of the Indian Antarctic program, including management of Antarctic tourism and sustainable development of fisheries.
- It also seeks to **constitute a fund for the welfare of Antarctic research work** and the protection of the environment of the icy continent.

Need for the Antarctic Legislation

- The growing presence of Indian scientists in Antarctica and the commitment to Antarctic research and protection prompted the government to adopt domestic legislation consistent with its obligations as a member of the Antarctic Treaty system.
- These laws will enable India's courts to deal with disputes or crimes committed in parts of Antarctica, and help build credibility vis-à-vis India's participation.

Key features of the Bill

- **Protecting Native Plants:**
 - ▶ There will be a **strict prohibition on damaging native plants**, flying or landing helicopters or operating vessels that could disturb birds and seals, using firearms that could disturb the birds and animals, removing soil or any biological material native to Antarctica, engaging in any activity that could adversely change the habitat of birds and animals, or harm them.

- **Prohibition on introducing Birds not native to Antarctica:**

- ▶ Introduction of animals, birds, plants or microscopic organisms that are not native to Antarctica is also prohibited. Violators can face imprisonment as well as penalties.

- **Strict guidelines to regulate entry in Antarctica:**

- ▶ The bill has **listed strict guidelines** and a **system of permits**, which will be issued by a government-appointed committee, **without which any expedition or individual will not be allowed to enter Antarctica.**
- ▶ The bill has a **provision to establish a committee on Antarctic governance and environmental protection** to monitor, implement and ensure compliance with the relevant international laws, emissions standards, and rules of protection.

- **Protecting Mineral Resources:**

- ▶ The Bill further prohibits drilling, dredging, excavation, or collection of mineral resources or even doing anything to identify where such mineral deposits occur.
- ▶ The only exception is for scientific research with a permit.

- **Provisions for Indian Tour Operators:**

- ▶ The Bill also provides for Indian tour operators to be able to operate in Antarctica after acquiring a permit.
- ▶ There are 40 permanent research stations in Antarctica of which **two – 'Maitri' and 'Bharati'** are Indian.

- **Penalty system that has been introduced:**

- ▶ **Provision of a separate designated court** to try crimes committed in Antarctica.
- ▶ It **sets high penal provision:** the lowest penalty comprising imprisonment between one-two years and a penalty of Rs.10-50 lakh.
- ▶ Extraction of any species native to Antarctica, or introduction of an exotic species to the continent can draw imprisonment of seven years and a fine of Rs.50 lakh.

Prohibited activities:

- Nuclear explosion or disposal of radioactive wastes,
- Introduction of non-sterile soil, and
- Discharge of garbage, plastic, or other substance into the sea which is harmful to the marine environment.

Significance of this Legislation:

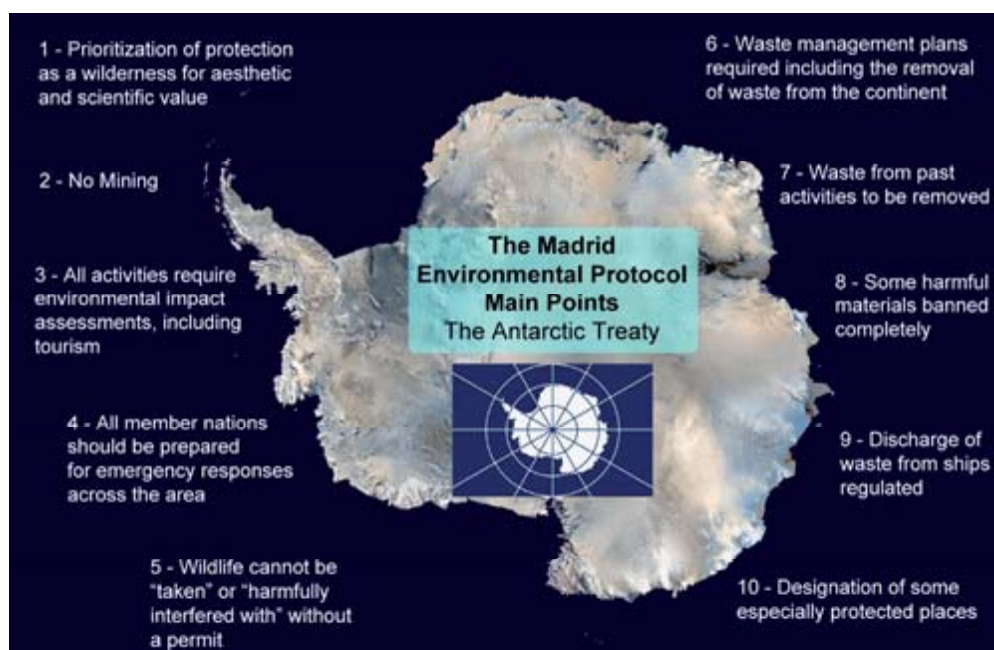
- **To Fulfil Provisions under the Antarctica Treaty:**
 - **India had been a signatory to the Antarctica Treaty since 1983 and that encumbered India to specify a set of laws governing portions of the continent where it had its research bases.**
 - **The Treaty made it mandatory for the 54 signatory countries to specific laws governing territories on which their stations are located.**
- **Preserve the Pristine Nature of the Continent:**
 - India is **also a signatory to treaties** such as the **Convention on the Conservation of Antarctic Marine Living Resources** and the **Commission for Conservation of Antarctic Marine Living Resources.**
 - Both the conventions **enjoin India to help preserve the pristine nature of the continent.**
- **Applicability of Indian laws:** Indian laws will be applicable in the area occupied by Indian institutions and Indian personnel living in that continent.

About Antarctica Treaty:

- The Antarctic Treaty was signed in Washington on **1st December 1959** by the twelve nations that had been active during the IGY (Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, United Kingdom, United States, and USSR).
- The Treaty, which applies to the area south of 60° South latitude, is surprisingly short, but remarkably effective.
- Through this agreement, the countries active in Antarctica consult on the uses of a whole continent, with a commitment that it should not become the scene or object of international discord. In its fourteen articles the Treaty:
- Later, more countries, including India, have become party to the treaty, and today it counts more than 54 members.
- The **Indian Antarctic Programme** is a multi-disciplinary, multi-institutional program under the control of the National Centre for Antarctic and Ocean Research, Ministry of Earth Sciences.
- India officially **acceded to the Antarctic Treaty System in August 1983.**

Objective:

- The main objective of the treaty was that Antarctica is not used for a military activity or there is no other misuse, to ensure the demilitarization of the area.
- The other objective was to prevent nations from indulging in mining activity or any other illegal activity.



About Antarctica:

- Antarctica is **uninhabited except for those manning the nearly 40 permanent stations** established by several countries, including India, for carrying out scientific research.
- India maintains **two research stations on the continent**:
 - **'Maitri'** (commissioned in 1989) at Schirmacher Hills and
 - **'Bharati'** (2012) at Larsemann Hills.
- It has also **launched 41 scientific expeditions every year** thus far. Together with the 'Himadri' station in Svalbard, above the Arctic Circle, India is among an **elite group of countries with multiple research projects** in the Polar Regions.
- Antarctica is Earth's southernmost continent. It contains the geographic South Pole and is situated in the Antarctic region of the Southern Hemisphere.
- At 14,000,000 square kilometres, it is the **fifth-largest continent**.



© CONCLUSION

Environmental monitoring in Antarctica has, for example, led to the discovery of the seasonal depletion of atmospheric ozone over the Antarctic. As the Antarctic Treaty System matures it has become **recognized as one of the most successful sets of international agreements**, setting an example of **peaceful cooperation** for the rest of the world.

As an environmental regime it is unique – an entire continent, which is essentially undisturbed, will remain protected because of the **commitment and cooperation of the Treaty parties**.

Antarctica is a natural reserve that is devoted to science and peace and to ensuring that Antarctica does not become the scene of international discord.

WHO DECLARES MONKEY POX A 'PUBLIC HEALTH EMERGENCY'

CONTEXT:

WHO has issued a Public Health Emergency of International Concern (PHEIC) which will enhance coordination and sharing of resources and information among nations regarding Monkey pox.

- Monkey-pox (MPX) was first discovered in 1958 in colonies of monkeys kept for research, hence the name 'monkey-pox.'

◎ BACKGROUND

- The first human case of monkey-pox was reported in the Democratic Republic of the Congo (DRC) in 1970.
- Recently, an ongoing outbreak of the viral disease monkey-pox was confirmed in May 2022.

◎ ANALYSIS

What is PHEIC?

- A PHEIC is an 'extraordinary event', which constitutes a public health risk to other States through the international spread, and which potentially requires a coordinated international response.

What does declaring a disease PHEIC mean?

- Declaring a PHEIC is the **highest level of alert** that WHO is obliged to declare, and is meant to send a powerful signal to countries of the need for urgent action to combat the spread of the disease.
- It obliges to mobilize resources to help **low- and middle-income** countries in this effort and fund research and development on needed treatments, vaccines, and diagnostics. It also obligates countries to **share information with WHO**.
- PHEIC comes below the Pandemic situation now**, declared as a global health concern after COVID-19 spread across the world.
- Earlier it was only considered '**as Epidemic**' and no Pandemic Word was evolved.

What is the Role of WHO in declaring a PHEIC?

- To declare a PHEIC, the WHO **Director-General** is required to take into account factors that include the risk to human health and international spread.
- They take advice from an **international committee of experts**, the 'IHR Emergency Committee (EC)', one of whom should be an expert nominated **by the State** within whose region the **event arises**.

- Rather than being a standing committee, the **EC is created on an ad hoc basis**. These members are selected according to the disease in question and the **nature of the event**.
- The director-general takes the advice of the EC, following their technical assessment of the crisis using legal criteria and a predetermined algorithm after a review of all available data on the event.
- Upon declaration, the EC then makes recommendations on what actions the director-general and member states should take to address the crisis.
- The recommendations are temporary and require review every three months while in place.

- 2022 Monkey pox:** Previously, the WHO had held an EC meeting on 23 June 2022 regarding the outbreak, which had more than **2,100 cases** in over **42 countries** at that point.
- It didn't reach the criteria for a **PHEIC alert** at that time.

Case count

The seven-day average of daily monkeypox cases worldwide crossed the 500-mark last week. Spain has reported the most number of cases with more than 3,000 reported infections. The graph shows infections in select high-burden countries and cases in India

CUMULATIVE CONFIRMED CASES



SOURCE: OUR WORLD IN DATA

WHO's Early Warning, Alert, and Response System (EWARS):

- Humanitarian emergencies increase the risk of transmission of **infectious diseases** and other health conditions such as severe malnutrition.

- An effective disease surveillance system is essential to detecting disease outbreaks quickly before they spread, cost lives, and become difficult to control.
- WHO's Early Warning, Alert, and Response System (EWARS) is designed to **improve disease outbreak detection** in emergency settings, such as in countries in conflict or following a natural disaster.
- It is a simple and cost-effective way to rapidly set up a disease surveillance system.

It is made up of three components i.e.

- Data Hub
- Mobile
- Exchange

Some other diseases in past were declared as PHEIC

- 2009- swine flu
- 2014- polio
- 2014 -Ebola
- 2016 -Zika virus
- 2020 -COVID-19

What is Monkey pox?

- Monkey-pox (MPX) is a **viral zoonotic disease** with symptoms similar to smallpox, although with less clinical severity.

- **Zoonotic diseases** are caused by harmful germs like **viruses, bacteria, parasites, and fungi**. These germs can cause many different types of illnesses in people and animals, ranging from mild to serious illnesses and even death.

- It is a potentially serious viral illness that typically involves flu-like symptoms, swelling of the lymph nodes, and a rash that includes bumps that are initially filled with fluid before scabbing over.
- Illness could be confused with a sexually transmitted infection like syphilis or herpes, or chickenpox.
- Symptoms of it range from; Swollen lymph nodes, Fever, Headache, Body aches, and Profound weakness.

Vaccine and Drug availability:

- Two vaccines licensed by the **S. Food and Drug Administration (FDA)** are available for preventing monkey-pox infection - **JYNNEOS (also known as Imvamune or Imvanex) and ACAM2000**.
- **Serum Institute of India (SII)**, has said that they are planning to develop an mRNA vaccine against monkeypox in association with its global partner Novavax.
- An antiviral that was developed to treat smallpox (**tecovirimat**) was approved in January 2022 by the European Medicines Agency for the treatment of monkeypox. However, the WHO is not certain about its therapeutics' success of it.

CHILE MARKS A NOTCH IN INTERNATIONAL CONSTITUTIONALISM

CONTEXT

Chile drafted its Constitution which promises a more egalitarian democracy with inclusivity.

◎ BACKGROUND

- Chile was engulfed **with protests in 2019**.
- Protest theme:** Social inequality, the cost of living, and probity in governance.
- Ultimate demand:** to write and adopt a new constitution which will be made by the people of Chile themselves as per most of the world's constitutions.
- They wanted to get rid of **Pinochet's Constitution** which created inequality in the country.

Pinochet's constitution:

- The Chilean constitution was drafted under the military regime of **General Augusto Pinochet, in 1980**.
- It is noted for embodying the '**Chicago School Economics**' i.e. market deregulation was encoded into the constitution and not just a policy choice.
- One of the striking elements of this feature is the **privatization of water** as a constitutional imperative.
- Over the decades, Chile has become one of the most unequal countries in the world.

About Chile:

- Chile is officially known as the **Republic of Chile**.
- Its capital is **Santiago**
- It is a South American country occupying a narrow strip of land between the Andes to the east and the Pacific Ocean to the west.
- Chile is a multiethnic society, home to people of many different ethnic backgrounds.

Geographical importance:

- It borders Peru to the north, Bolivia to the northeast, Argentina to the east, and the Drake Passage in the south.
- The Atacama Desert is one of the driest places in the world and touches Chile in its northern side and is a source of sodium nitrate fertilizer.
- It owes its aridity due to a constant temperature inversion of the cool north-flowing **Humbolt Ocean current**.

Economic importance:

- Copper town: Chuquicamata** is the World's largest copper town in Chile.
- Lithium triangle:** The Lithium Triangle is a region of the Andes rich in lithium reserves around the borders of Argentina, Bolivia, and Chile.

Constituent Assembly:

Chile has constituted a new directly elected Constituent Assembly to frame a new constitution. This representation in the assembly is inclusive in the sense:

- 51% women representation:** The constituent assembly constituted to frame the new constitution for Chile, comprises of 51% women representatives, a step to bridge the gender gap.
- 17 reserved seats for the Indigenous seat:** Chile's new Constituent Assembly has also reserved 17 seats for the indigenous people, securing their voice and rights.
- Inclusive Representation:** The constituent assembly has also included people from across the socio-economic and geographical spectrum of Chile, sexual minorities, etc.

What are some striking features of the draft constitution?

- Catalogue of rights:** New draft constitution provides a catalogue of basic socio-economic rights, e.g., the Right to education; Workers' rights; Gender Identity rights; DE commodification of water.
- Autonomous institutions:** Various independent institutions have been introduced by the new draft to maintain the idea of democracy and rule of law.
- Guarantee of citizen initiatives:** Guarantee has been provided to the citizen initiatives including Indigenous initiatives for introducing and changing laws in Parliament.

Is the Chilean constitution a document with a vision?

The Chilean draft Constitution not only draws upon past wisdom, but it is also a future-facing document as well for the following reasons:

- **Recognized the pervasive role of Technology:** The new constitution stipulates the existence of a National Data Protection Authority, which indicates that the government recognizes the threats of the intrusive nature of technologies as well as guarantees a right to digital connectivity.
 - The need for an independent data protection body is being felt in countries across the world, and the draft Constitution's move to enshrine it within the constitutional text is, therefore, important.
- **Acknowledges the gravity of the climate crisis:** The draft Constitution acknowledges the issue of the climate crisis and constitutionalizes the important principles of international environmental law, such as inter-generational equity.
- **Guarantees Right to nature:** It guarantees a right to nature, which is something that courts in different countries, from India to New Zealand, have recently explored.

Chilean Constitution - Amalgamation of past wisdom, and experience across the globe:

Some of the draft's striking features include which is notable are:

- **Lists basic socio-economic rights:** the right to education, gender identity rights, workers' rights, and the de-commodification of water.
- **Autonomous institutions and independent of the government**
- **Citizen initiatives:** It guarantees indigenous initiatives for bringing changes in the laws.

These elements are vital for sustaining the **culture of constitutionalism**.

What are the criticisms?

- Critics, such as The Economist, have termed it a '**woke**' document- that it is 'going too far' and is risking economic irresponsibility.

- The newspaper also criticized the document for its '**woolly language**', guaranteeing 'decades of squabbling' about what the provisions mean.
- The document is also criticized as being **less growth-friendly** than the current constitution.
- **Socio-economic rights could inflate the budget.** This is because it requires the establishment of several new bodies, without addressing how they would be funded.

◎ WAY FORWARD:

- **Inclusive document:** In the draft Chilean Constitution in its historical and present context, a remarkable picture emerges: this is a document, drafted through an intensely inclusive, participatory, and egalitarian process, which in its substantive content both draws upon the wisdom of the past and looks to the future.
- **Model for the modern world:** It is, in many ways, a model for how Constitutions in the modern world ought to be drafted, and a lesson to the rest of the world; and if it is approved in the referendum of September 4, it will rightly be hailed as a historic triumph in the annals of global constitutionalism.

India- Chile Relations

- Chile is India's window to Latin America and the Pacific Alliance.
- Chile is the fifth largest trading partner of India in the Latin American region.
- India- Chile signed the Preferential Trade Agreement in 2017 to enhance trade.
- The bilateral trade is growing and stood at USD 2.8 billion in 2017-18.
- India and Chile are partners in the International Solar Alliance.
- Both countries cooperate extensively in multilateral fora and share similar views on climate change/renewable energy issues and on expansion and reforms of the UNSC (United Nations Security Council).
- India- Chile has signed three Memorandum of Understandings (MoUs) in the fields of -mining, culture, and disability.

SC RECOGNIZES THE RIGHT TO BE FORGOTTEN (RTBF) AS PART OF THE 'RIGHT TO PRIVACY'

CONTEXT:

The Centre has told the Delhi High Court that the right to be forgotten is 'evolving', which was held in the Supreme Court's landmark Judgement in 2017 as a facet of the 'Right to Privacy'.

◎ BACKGROUND:

- The right to be forgotten, also known as the right to erasure, was established in the European Union in 2014.
- In India, the Personal Data Protection Bill, 2019 provides for a mechanism to implement this concept, though it is not an absolute right.
- In 2017, a nine-judge constitution bench headed by then Chief Justice JS Khehar ruled that the Right to privacy is an intrinsic part of the Right to Life and Personal Liberty under **Article 21** and entire Part III of the Constitution.

◎ ANALYSIS

What is the Right to be forgotten?

- It is the right to have publicly available personal information removed from the internet, search, databases, websites, or any other public platforms, once the personal information in question is no longer necessary, or relevant.

- The RTBF gained importance after the 2014 decision of the Court of Justice of the European Union ("CJEU") in the Google Spain case.
- In the Indian context, the Supreme Court in **Puttaswamy v. Union of India**, 2017 noted that the RTBF was a part of the broader right of privacy.
- The RTBF emerges from the right to privacy under Article 21 and partly from the right to dignity under Article 14.

What is the Right to Privacy?

- In the **Puttaswamy v. Union of India case, 2017**, the Right to Privacy was declared a fundamental right by the Supreme Court.
- The right to privacy is protected as an intrinsic part of the right to life and personal liberty under Article 21 and as a part of the freedoms guaranteed by Part III of the Constitution.

Reasons for a Right to Be Forgotten Request

1. Data exists on the internet that is old, outdated, or otherwise not currently relevant
2. The data subject decides that the data controller no longer has rights to access their data and data isn't in the public domain
3. Someone stole the data or changed the data
4. A judge or other judicial body ruled this data deleted



VARONIS

Decisions of High Courts

- The Delhi High Court is still hearing petitions regarding the right to be forgotten, while the Kerala and Orissa high courts have also passed judgments relating to this right.
- The **Kerala High Court similarly in 2021** allowed the deletion of such personal details from Google search results.
- However, the 'right to be forgotten' has various **shapes and shades**, the passing of protective orders would depend on the facts and circumstances of each case as per **Google India's** counsel argued in the high court.

“We are of the view that the ambit and parameters of the provisions of IPC Sections 124A, 153A and 505 would require interpretation, particularly in the context of the right of the electronic and print media to communicate news and information, even those that may be critical of the prevailing regime in any part of the nation —Supreme Court

How does the judgment impact, different stakeholders?

- **For Citizens:** The citizen will benefit from the judgment as they will be allowed to preserve their personal details from being in Public.
 - Citizens no longer need to file a case in order to request for information from search engines to be removed.
- **For Tech-giants:** Tech **Giants like Google, Twitter, and Facebook** have opposed this judgment, as they say, they can't remove every detail of its user or regulate the content flowing.
- **For Government:** Government has a mixed reaction to this, as they say, there are many norms already inconsistent with privacy.

Some issues involved with this Judgement

- **Privacy vs. Information:** It brings the person's right to be left alone, derived from Article 21, directly in conflict with the rights of the media to report on issues, flowing from Article 19.
- **Enforceability against Private Individuals:** This raises the question of whether fundamental rights can be enforced against the private individual, which is generally enforceable against the state.
 - **Article 15(2), Article 17, and Article 23** are the only provision in the constitution of India that protects a private act of a private party that is challenged based on its violation of the Constitution.
- **Doubtful Judgements:**

Laws in other countries

- The **European Union in 2018** adopted the **General Data Protection Regulation (GDPR)**, in which it provides for the right to the erasure of certain categories of personal data — that which is considered no longer necessary, that for which consent has been withdrawn or processing of which has been objected to, personal data unlawfully processed, and data where there is a legal obligation for erasure.
- **In Russia in 2015** enacted a law that allows users to force a search engine to remove links to personal information on grounds of irrelevancy, inaccuracy, and violation of law, while Turkey and Siberia have also given the recognition it to 'some extent'.
- Courts in Spain and England have also given verdicts on the subject.

Government Intervention in India

- **Personal Data Protection Bill 2019:** To provide for the protection of privacy of individuals relating to their Personal Data and to establish a Data Protection Authority of India for the said purposes and the matters concerning the personal data of an individual.
 - Framed on the recommendations of **B N Srikrishna Committee (2018)**.
- **Information Technology Act, 2000:** Provides for safeguard against certain breaches in relation to data from computer systems. It contains provisions to prevent the unauthorized use of computers, computer systems, and data stored therein.

What is the position in India?

- The right to privacy has already been recognized as a fundamental right in the **K S Puttaswamy judgment (2017)** and the '*right to be forgotten*' is evolving in India.
- The **Personal Data Protection Bill, 2019** contains provisions for the doctrine of the 'right to be

forgotten'. As of now, no laws have been passed in this regard.

© CONCLUSION

The Supreme Court of India opined under the **Ram Jethmalani vs Union of India** case that "it is important that human beings should be allowed domains of freedom that are free of public scrutiny unless they act unlawfully." 'Right to be forgotten' is a fairly new concept in India and is expected to take some more time before we can see it in the Law books.

ADDING DIGITAL LAYERS FOR DEMOCRATIC GOVERNANCE: A PROFIT OR LOSS

CONTEXT

Democratic governance mechanisms are becoming more receptive to the potential of Information Communication Technologies (ICT) to achieve good governance in its implementation. However, is it benefitting people or either making it tough for them.

◎ BACKGROUND

- The Government of India established the **Department of Electronics in 1970**.
- The first major step towards e-Governance in India was the establishment of the **National Informatics Centre (NIC) in 1977**.
- This was followed by the launch of **NICNET in 1987**.
- The District Information System of the National Informatics Centre (DISNIC) program was launched to computerize **all district offices** in the country.
- Thus, NICNET was extended to all district headquarters by 1990.
- A **National Task Force on Information Technology** and Software Development was constituted in May 1998.
- In the year **1999**, a **separate ministry** was created for **Information and Technology**. Information **Technology (IT) Act** was passed by the Indian Parliament in the year **2000**.

What is E-Governance?

- People's voice is the **key driver** of democracy and listening to that voice is the key test of good governance.
- The motive to provide good governance and the revolution **in information and communication technology** have transformed public governance throughout the world. This has led to the formation of a new form of governance by the name of **e-governance**.
- E-Governance is the application of ICT (Information and Communications Technology) to government functioning in **order to create 'Simple, Moral, Accountable, Responsive and transparent' (SMART) governance**.

Interactions in e-Governance

There are **4 kinds** of interactions in e-governance, namely:

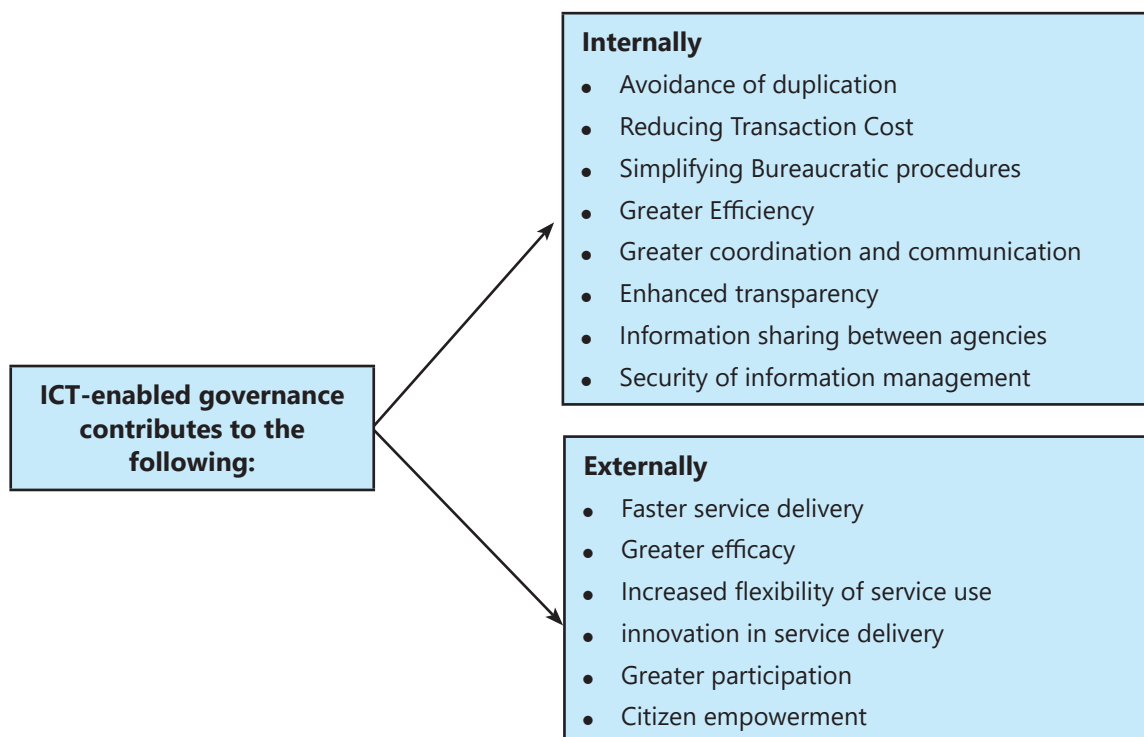
- **G2C (Government to Citizens):** Interaction between the government and the citizens.

- ▶ This enables citizens to benefit from the efficient delivery of a large range of public services.
- ▶ The primary aim is to make the government citizen-friendly.
- **G2B (Government to Business):** It enables the business community to interact with the government by using e-governance tools.
 - ▶ The objective is to cut red-tapism which will save time and reduce operational costs. This will also create a more transparent business environment when dealing with the government.
 - ▶ The G2B initiatives help in services such as licensing, **procurement, permits, and revenue collection**.
- **G2G (Government to Government):** Enables seamless interaction between various government entities.
 - ▶ This kind of interaction can be between various departments and agencies within government or between two governments like the union and state governments or between state governments.
 - ▶ The primary aim is to increase efficiency, performance, and output.
- **G2E (Government to Employees):** This kind of interaction is between the government and its employees.
 - ▶ ICT tools help in making these interactions fast and efficient and thus increase the satisfaction levels of employees.

Significance:

India, being one of the largest countries **democratically, demographically, and geographically** faces a huge **challenge in the application of e-governance** to empower its citizens and for overall economic development, **more specifically in the rural areas**.

What are the challenges associated with E-Governance in India?



- **Challenges in Interoperability:** Interoperation among ministries and departments is difficult, and it becomes a hurdle for processing and sharing data. Most of the e-governance services are being offered by **state or central governments** that are not integrated.
- **Linguistic Barriers:** A challenge due to the diversity of the country. The majority of the rural population cannot use the project led by the government because they use English or Hindi as their primary language. This enforces the need to do **governance in the local language**.
- **Digital Illiteracy:** Due to a lack of **technical awareness** and related knowledge most of them are incapable of using the facilities provided by the government.
- **Lack of Digital Infrastructure:** Lack of connectivity in rural areas through the internet and maintaining the continuous supply of electricity is a great challenge for effective e-governance.
- **Authentication:** It is very important to know the right use of the services or it may be misused by private competitors.
- **Privacy Issues:** Online transactions and privacy issues are becoming increasingly prominent. Insurance, banking, utility bill payments, all these services are provided by e-Government.
- **Lack of Effective Grievance Redressal Mechanism:** There are serious challenges in the absence of a timely and effective grievance redressal mechanism.

- In particular, biometric recognition errors, errors in online e-governance applications like National Mobile Monitoring Software that records attendance of MGNREGA workers at work sites.

What should be done to overcome these challenges?

- **Unique identity for all:** With the implementation of initiatives such as AADHAAR, NeGP (National e-Governance Plan), and SWANs (State Wide Area Network), it is expected that e- Governance services will reach all corners of the country and all sections of society.
- **Generating awareness:** There is a need for generating widespread awareness among the public at large. The success of e- Governance lies in increasing the number of electronic interactions between citizens and the government and not merely in building the infrastructure of e-Governance.
- **Integration of Ministries and Departments:** Integrating several ministries and departments responsible will align the work and reduce **time for better policy implementation**.
- **Deployment of Intermediaries:** For ensuring strategic coherence among planners and beneficiaries.
 - E-Governance is expected to maximize citizen satisfaction by not just improving the responsiveness of public service delivery mechanisms but also by augmenting citizens' participation in governance mechanisms.

- ◉ **Citizen-centric approach:** Involvement of citizens in decision-making will make the policies better and it will address the real challenges.

Important Government Interventions

National E-governance Plan: The National e-Governance Plan takes a holistic view of various e-Governance initiatives across the country.

- ◉ It seeks to lay the foundation and provide the impetus for the long-term growth of e-Governance within the country.
- ◉ The National e-Governance Plan was launched by the **Department of Information Technology (DIT) and the Department of Administrative Reforms & Public Grievances (DAR&PG)** on the recommendations of the Second Administrative Reforms Commission.
- ◉ NeGP is monitored and coordinated at the highest level by the National e-Governance Advisory Group.
- ◉ It is headed by the **Minister of Communications & Information Technology**, Government of India.
- ◉ NeGP implementation involves setting up of common and **support IT infrastructure** such as:
 - State Wide Area Networks (SWANs),
 - State Data Centres (SDCs),

- Common Services Centres (CSCs) and
- Electronic Service Delivery Gateways.

Mission of e-Kranti:

- ◉ It is to ensure a Government-wide transformation by delivering all Government services electronically to citizens through integrated and interoperable systems via multiple modes while ensuring efficiency, transparency, and reliability of such services at affordable costs.
- ◉ Its approach is fully aligned with the **Digital India program**.
- ◉ The program management structure approved for the Digital India program would be used for monitoring the implementation of **e-Kranti** and also for providing a forum to ascertain views of all stakeholders, overseeing implementation, resolving inter-Ministerial issues, and ensuring speedy sanction of projects.

◎ CONCLUSION

Dr. APJ Abdul Kalam, former President of India has 'a visionary in the field of e-Governance'. E-governance would enable the government to discharge its functions more effectively. However, this would require the government to change itself – its processes, its outlook, laws, rules, and regulations, and also it is way of interacting with the citizens.

FOOD SHOULD REACH THE HOMES OF EVERY MIGRANT WORKER: SC

CONTEXT

The Supreme Court, in an application seeking compliance with its judgment regarding the problems and miseries of migrant labourers, indicated that modalities have to be worked out by the Central and State Governments to ensure that migrant workers are provided ration at any cost.

What is the issue?

- This case was originally taken up *suo motu* by the apex court during the pandemic and the ensuing lockdowns in light of distress and problems being faced by migrant workers.
- Last year Supreme Court directed all states and Union Territories (UT) to implement the **One Nation, One Ration Card (ONORC) system** by 31st July 2021.
 - ▶ The scheme allowed the migrant labourers to be covered under the **National Food Security Act (NFSA)** to access food at any fair price shop with its ration card in any part of the country.

Courts observation

- The welfare schemes devised by the Centre should reach a maximum number of workers and the state governments will have to cooperate and assist the Union of India.
- SC was critical while making the judgment and slammed the government for not managing the issue well.
- **Ensuring justice for the migrants is the duty of the elected government**, the court can only push the cart, but the government has to drive it.

NFSA covers up to 75 percent of the rural population and 50 percent of the urban population under **Antyodaya Anna Yojana (AAY)** and priority households. However, this number is based on the census of 2011. There has been a **15 percent increase** in the population eligible for ration cards and they are deprived.

Importance of Migrants:

- There are around 38 crore workers engaged in the unorganized sectors (**National Statistics Office (NSO)** data of 2017-2018).
- These unorganized workers did not have any permanent source of employment and engaged themselves in small-time vocations and occupations at various places away from their native places.

- Contributions of these labourers towards different projects, and industries, make considerable additions to the economic development of the country
- In a report titled, **"Migration in India 2020-21"** the survey gives an account of the state of migration and migrants from July 2020 to July 2021.
 - ▶ It surveyed a total of 1,13,998 migrants and shows that 51.6% of rural migrants migrated from urban areas in the aftermath of the pandemic.

Constitutional Provisions and Legislations for migrant workers in India:

- **Right to Food:** The **fundamental right to life under Article 21 of the Constitution** may be interpreted to include the right to live with human dignity, having the right to food, and other basic necessities.
- **Other important legislation:**
 - ▶ The Employees' Compensation Act, 1923
 - ▶ Payment of Wages Act, 1936
 - ▶ Minimum Wages Act, 1948
 - ▶ The Maternity Benefit Act, 1961
 - ▶ Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979
 - ▶ The Unorganised Workers' Social Security Act, 2008

What are the issues faced by migrant workers?

- **Major issues:** Below are the major challenges faced by the migrant workers in India (especially the unorganized workers)
 - ▶ low wages
 - ▶ physical and sexual exploitation
 - ▶ Lack of safety in the workplace
 - ▶ No job security

- **Lack of policy implementation:** Although, the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979 was enacted to regulate the condition of service of inter-state labourers in Indian labour law but this is the least implemented Act among all the legislations

What needs to be done?

- **Identification of migrant labourers:** The creation of a credible real-time database of inter-state migrant workers is crucial.
- **Data Requirement:** Extensive data need to be culled out from the **e-shram portal**, where 27.95 crore workers have registered, to see how many own a ration card.
 - This will not only help to work out policies in a better way but ensure how much progress a particular scheme or policy has made.

About the e-Shram portal:

- The formation of the e-Shram portal came after the Supreme Court directed the Government to complete the registration process of unorganized workers so that they can avail the welfare benefits given under various government schemes.
- Governments in States/UTs are supposed to conduct registration of unorganized workers across the country.

- **Alternative Schemes:** There is a high probability that many will remain uncovered from existing schemes.
 - **Over 75% of migrant workers in the State do not possess ration cards.**
 - **Maharashtra has covered only 36% of migrant workers in the State.**
 - So those without cards should be provided rations either through the *National Food Security Act* or through some other scheme.

- **Free Distribution of Dry ration without insistence on identity proof,** as many are still distant from the coverage of various schemes.
- **Community kitchens:** Community kitchens will be of the community, run by the community & for the welfare of the community.
 - It will be built on 4 pillars of **Quality, Hygiene, Reliability & Spirit of Service.** It will help us realize the goal that no one Sleeps Hungry.
 - **Additional Procurement:** Additional grains can be procured by states at the Food Corporation of India to support the existing schemes as many times states struggle to buy rations at market rates.

Government Initiatives:

- **National Career Service portal:** It has been created as a one-stop solution that provides a wide array of employment and career-related services to the citizens of India.
- **Pradhan Mantri Shram Yogi Maan-Dhan (PM-SYM):** It is aimed at ensuring old age protection for unorganized workers.
- **Garib Kalyan Rojgar Abhiyan**
- **Pradhan Mantri SVANIDHI Scheme**
- **Pradhan Mantri Garib Kalyan Yojana**
- **One Nation One Ration Card**
- **Financial assistance to Building and Other Construction workers etc.**

◎ CONCLUSION

The Supreme Court specifically said that two people are very important. First is the farmer i.e. the agriculturist and the second is migrant workers. Migrants have a definite role in building the nation. Their rights cannot be ignored at all and the only solace they want is that the government must take care of them and their families. No citizen should die of hunger and food should reach the homes of every migrant worker.

SC: CAN'T DENY ABORTION RIGHTS TO AN UNMARRIED WOMAN

CONTEXT:

Supreme Court has allowed an unmarried woman to seek termination of Pregnancy with the remarks that *"Abortion Can't Be Denied Because Woman Is Unmarried"*.

About the Issue

- The petitioner had told the court that the pregnancy was a result of a consensual relationship and that she wanted to terminate the pregnancy because her partner had refused to marry her.
- She also told the court that she feared stigmatization as a single, unmarried woman.
- The **Delhi HC bench said it cannot allow what the law prohibits** – access to termination of pregnancy between 20-24 weeks for an unmarried woman, **just because her relationship status has changed**.
- The two-judge bench of the Delhi High Court has also observed that it would **"amount to killing the child."**

Supreme Court's View on the matter

- **The Petitioner should not be denied the benefit on the ground that she is an unmarried woman**.
- The Parliamentary intent is not to confine the benefits to situations arising out of matrimonial relationships.
 - ▶ It noted that a widow or a divorced woman is allowed to terminate pregnancy in the term of 20-24 weeks.

A bench led by Justices DY Chandrachud observed that the Delhi High Court took an **"unduly restrictive"** view of the provisions of the Medical Termination of Pregnancy Rules while declining the woman interim relief.

- As a relief, the Supreme Court has passed an **ad-interim order** to allow the unmarried woman to **abort her pregnancy of 24 weeks arising out of a live-in relationship**.

What is India's law on abortion?

- **Section 312 of the Indian Penal Code, 1860, criminalizes voluntarily "causing miscarriage"** even when the miscarriage is with the pregnant woman's consent, except when the miscarriage is caused to save the woman's life.

- **In 1971, The Medical Termination of Pregnancy Act (MTP Act)** was introduced to **"liberalize" access to abortion** since the restrictive criminal provision was leading to women using unsafe and dangerous methods for termination of pregnancy.

Conservative Approach of the legislators: Parliamentary debates on the MTP Act reveal that legislators were concerned that a **"liberal"** abortion law would **promote sexual promiscuity amongst women**. Addressing this concern, the government, through its ministers, assured Parliament that **"by far the greatest number of women who seek abortion are married"**.

- The MTP Act allowed termination of pregnancy by a medical practitioner in two stages.
 - ▶ For termination of pregnancy up to 12 weeks from conception, the opinion of one doctor was required.
 - ▶ For pregnancies between 12 and 20 weeks old, the opinion of two doctors was required.
- Later on, due to **the expansion of the access to safe and legal abortion services** on humanitarian and social grounds to ensure universal access to comprehensive care, certain amendments were introduced.
- **In 2021, Parliament amended the law** and allowed for termination under the opinion of one doctor for pregnancies up to 20 weeks. For pregnancies between 20 and 24 weeks, the amended law requires the opinion of two doctors.

What does the MTP Act say in such a matter after the 2021 amendment?

- After the introduction of an amendment in 2021, the Medical Termination of Pregnancy Act uses the word **"partner"** instead of **"husband"**. This shows the **legislative intent** to cover **"unmarried women"** under the Act.
- "The use of words **"woman or her partner"** shows an intention to cover unmarried woman which is **in consonance with Article 14 of the Constitution**."

- **“Rule 3B” of Rules annexed to the MTP Act**, which was amended in 2021, **specifies seven categories of women who are eligible for termination between 20-24 weeks.**
 - ▶ survivors of sexual assault or rape or incest
 - ▶ minors
 - ▶ those who have a change of marital status during the ongoing pregnancy (widowhood and divorce)
 - ▶ women with physical disabilities
 - ▶ mentally ill women
 - ▶ women carrying a malformed foetus that has a substantial risk of being incompatible with life
 - ▶ and women with pregnancy in humanitarian settings or disasters or emergencies as may be declared by the government

Shortcomings of the Legislation

- The law recognizes the change in circumstances of the relationship status between a pregnant woman and her spouse, for example, the case of divorce and widowhood.
- **It does not envisage the situation for unmarried women.** It was under these premises or gaps in the law that the petitioner before the Supreme Court falls in and the *‘unduly restrictive views’* on **Rule 3B under the MTP Act, of Delhi High Court.**

Medical Termination of Pregnancy (MTP) Amendment Act, 2021:

- The **Medical Termination of Pregnancy Act, 1971 (“MTP Act”)** was passed due to the progress made in the field of medical science with respect to safer abortions. It provides universal access to reproductive health services.

- The **new Medical Termination of Pregnancy (Amendment) Act 2021** expands the access to safe and legal abortion services on therapeutic, eugenic, humanitarian, and social grounds to ensure universal access to comprehensive care.
- **India amended the MTP Act 1971** to further empower women by providing comprehensive abortion care to all.

What are the guidelines for terminating pregnancies falling in the 20–24-week category?

- For termination of pregnancies between 20-24 weeks old, the opinion of two doctors is required.
- They would have to determine **“if the continuance of the pregnancy would involve a risk to the life of the pregnant woman or of grave injury to her physical or mental health”** or
- There is a **“substantial risk”** that if the child were born, it would suffer from such physical or mental abnormalities as to be seriously **“handicapped”**, before agreeing to terminate the woman’s pregnancy.

◎ CONCLUSION

Any pregnancy occurring as a result of a **failure of any device or method used by any woman or her partner for the purpose of limiting the number of children or preventing pregnancy**, the anguish caused by such pregnancy may be presumed to constitute a **grave injury to the mental health of the pregnant women.**

In 1971, when The MTP Act was enacted, it was essentially **framed with a moralistic lens** that **put married women in focus**. The 2021 amendment has not much changed that view. Allowing a woman to suffer an unwanted pregnancy would be contrary to the intent of the law enacted by Parliament.

EGG, BANANA, CHIKKI IN MIDDAY MEALS TO ADDRESS 'MALNUTRITION'

CONTEXT

The state government of Karnataka has now agreed to provide boiled eggs, bananas, or groundnut chikki for 46 days of the academic year to Children from Classes 1 to 8.

◎ BACKGROUND

- The state government implemented the pilot program in aspirational districts (most backward) through Karnataka School Education and Literacy Department and district administration.
- Under the pilot programme, the government is already providing these items to students of Kalyana Karnataka districts like Bidar, Ballari, Yadgir, Koppal, Kalaburagi, Raichur, and Vijayapura along with the midday meals for students in Classes 1 to 8.

Why it was needed?

- Successive surveys in the state have been pointing out the high prevalence of malnutrition, anemia, and low immunity among children in many parts of the state.

- The **National Family Health Survey-V** found that 35% of children under five were stunted, and around 20% were wasted.

About Mid-Day Meal Scheme:

- MDMS is amongst the largest initiatives in the world to enhance the nutrition levels of school-going children through hot cooked meals.
- It is the **largest school feeding programme** of its kind in the world, covering students enrolled in government schools from **Classes 1 to 8**.
- The goal is to enhance the nutritional levels of the children and also their enrolment in the formal education system.
- Under the **Convention on the Rights of the Child**, to which India is a party, India has committed to yielding "adequate nutritious food" for children.

ADDITIONAL FOOD ITEMS SERVED TO CHILDREN

STATE	FOOD	NUMBER OF DAYS/WEEK
Andhra Pradesh	Egg/Banana, Chikki	5, 3
Bihar	Egg	1
Gujarat	Milk (12 dists, 26 blocks)	5
Haryana	Milk	3
Jharkhand	Egg/Seasonal fruit	2
Karnataka	Hot flavoured milk	5
Kerala	Boiled egg/Banana, Milk	1, 2
Madhya Pradesh	Milk	3
Maharashtra	Banana/Soya biscuit/Rajgira laddu/Chikki	1
Odisha	Egg	2
Punjab	Sweet kheer	1
Rajasthan	Seasonal fruit, Hot milk	1, Daily
Tamil Nadu	Egg/Banana	Daily
Telangana	Egg	3

Note: For 2021-22, Source: Parliament Question



STATE	FOOD	NUMBER OF DAYS/WEEK
Uttar Pradesh	Seasonal fresh fruit	1
Uttarakhand	Egg/Fruit/Milk/Gud papdi/Ramdana ke laddu	1
West Bengal	Egg/Cheese/Mushroom	1

Is mid-day meal under NFSA?

- **Yes, the Midday Meal Scheme is covered by the National Food Security Act, 2013.** NFSA covers up to 75% of the rural population and 50% of the

urban population under Antyodaya Anna Yojana (AAY) and priority households.

- **NFSA 2013:** It is not just a scheme, but a legal entitlement of all school-going children in primary

and upper primary classes, through the **National Food Security Act (NFSA), 2013**.

- The program supplies **free lunches** on working days for children in primary and upper primary classes of:
 - ▶ Government schools,
 - ▶ Government-aided schools,
 - ▶ Local body Education Centres,
 - ▶ Education Guarantee Scheme, and alternate innovative education centers,
 - ▶ Madarsa and Maqtabas supported under Sarva Shiksha Abhiyan,
 - ▶ National Child Labour Project schools are run by the Ministry of labour.

How did the Mid-Day-Meal Scheme come into existence?

- The programme was **first introduced in 1925 for disadvantaged children in Madras Municipal Corporation**.
- **Post-Independence**, Tamil Nadu was the first state to introduce the **MDM scheme** in the 1960s.
- The Central scheme to provide meals to school children began in 1995, however, most states just limited themselves to **providing dry rations**.
- The union government launched it as a **centrally sponsored scheme** on a pilot basis in 1995 for children in Classes 1 to 5.
- **By October 2007**, MDMS had been scaled **up to Class 8**.

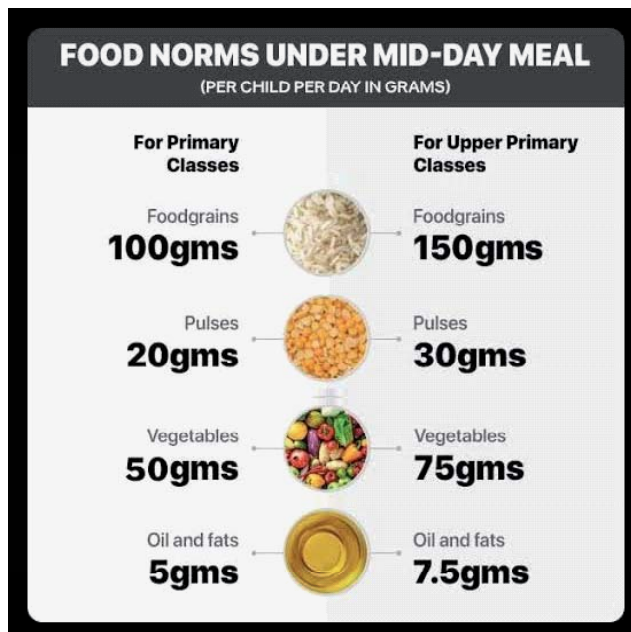
Supreme Court Order: The Game Changer (People's Union of Civil Liberties vs Union of India and Others (2001)).

- A Supreme Court order of 2001 provided for all states to introduce cooked meals.
- The Supreme Court order specified the states to provide "at least 300 calories and 8-12 grams of protein each day of school for a minimum of 200 days in a year".

Current Status:

- The current version of the programme, was renamed **PM Poshan Shakti Nirman or PM Poshan in 2021**.
- **The scale of Coverage:** The scheme covers 11.80 crore children across Classes 1 to 8 (age group 6 to 14).
- **Coverage of expenditure:** Under the rules, the allocation of Rs.4.97 per child per day (primary

classes) and Rs.7.45 (upper primary) are shared in a 60:40 ratio with states and UTs with a legislature, and 90:10 with the North-eastern states, Jammu and Kashmir, Himachal Pradesh and Uttarakhand, while the Centre bears 100% of the costs in UTs without legislature.



The table below shows the required dietary norms as stated by the Central Mid-Day Meal Scheme:

Components	Primary	Upper Primary
Calories	450 Cal	700 Cal
Protein	12 grams	20 grams
Micro-nutrients	Adequate quantities of micro-nutrients like Iron, Folic Acid, Vitamin-A etc.	

What are the associated issues and challenges?

- **Corrupt Practices:** There have been instances of plain chapattis being served with salt, mixing of water in milk, food poisoning, etc.
- **Caste Bias and Discrimination:** Food is central to the caste system, so in many schools, children are made to sit separately according to their caste status.
- **Menace of Malnutrition:** According to the **National Family Health Survey-5**, several states across the country have reversed course and recorded worsening levels of child malnutrition.
 - ▶ India is home to about 30% of the world's stunted children and nearly 50% of severely wasted children under the age of five.

- **Global Nutrition Report-2021:** According to the recently released **Global Nutrition Report** (GNR, 2021), India has made no progress on anaemia and childhood wasting.
 - ▶ Over half of Indian women in the age group 15-49 years are anaemic.
- **Global Hunger Index (GHI) 2021:** India has slipped to the 101st position in the **Global Hunger Index (GHI) 2021** of 116 countries, from its 2020 position of 94th.
- **No Continuity:** The schools do not function during holidays and vacations which deprives children of their one daily meal.
- **Dietary Choices:** Some states, such as Arunachal Pradesh, find it costly. In Karnataka, proposals to add eggs have been fiercely resisted in the past by Lingayat and Jain seers.

Proposed changes in the scheme

- The scheme is **proposed to be extended** to students studying in **pre-primary or Balvatikas** in Government and Government-aided primary schools in addition to all the 11.80 crore children from elementary classes.
- The concept of **Tithi Bhojan** will be encouraged extensively.
- **Tithi Bhojan** is a community participation programme in which people provide special food to children on special occasions/festivals.
- **School Nutrition Gardens** in schools to give children first-hand experience with nature and gardening. The harvest of these gardens is used in the scheme providing additional micro nutrients. School Nutrition Gardens have already been developed in more than 3 lakh schools
- **Social Audit** of the scheme is made **mandatory** in all the districts.
- **Special provision** is made for providing

supplementary nutrition items to children in aspirational districts and districts with a high prevalence of Anemia.

- **Cooking competitions** will be encouraged at all levels right from the village level to the national level to promote ethnic cuisine and innovative menus based on locally available ingredients and vegetables.
- **Vocal for Local for Atmanirbhar Bharat:** Involvement of Farmers Producer Organizations (FPO) and Women Self Help Groups in the implementation of the scheme will be encouraged. Use of locally grown traditional food items for a fillip to local economic growth will be encouraged.
- **Field visits for progress monitoring and inspections** will be facilitated for students of eminent Universities / Institutions and also trainee teachers of Regional Institutes of Educations (RIE) and District Institutes of Education and Training (DIET).

Best Practices being followed in the State of Karnataka for effective implementation of the scheme:

- The state has introduced "**Ksheera Bhagya Yojana**" by providing 150 ml. of Hot milk to students from 1st to 10th standards, 5 days a week.
- **Only women** are appointed as cooks with preference given to widows, single mothers, and destitute women.
- **Rain water harvesting** for improving ground water management.

U.K. EXPERIENCING RECORD-SMASHING HEAT EVENTS

CONTEXT

The U.K. experienced the warmest-ever night, and preparing for record-smashing day temperatures. These record highs are unprecedented in the European context.

◎ ABOUT

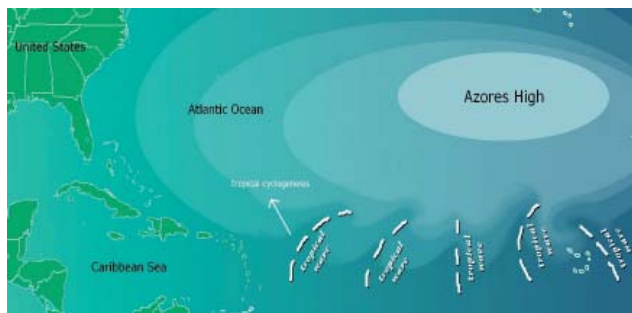
- Britain experienced the country's warmest-ever night on July 19 2022, and braced for a day when temperatures are forecast to hit 40° Celsius (104° Fahrenheit).
- The ongoing heat wave is scorching Europe, a landmass known for mild weather and rain.
- According to the U.K.'s Met Office weather agency, the provisional figures are showing to remain above 25° C (77° F) overnight in parts of the country for the first time.

Why is the UK getting so hot?

- Azores Highs:** The driver for the hot weather is the **Azores High** stretching into Britain from the Atlantic, and this is also known as the '**Bermuda High**'. The other reason is climate change.
- Climate Change:** If someone has to be blamed for such a record high temperature in the region, it has to be Climate change.
 - This is happening when average world temperatures have only risen just over **1degree C** beyond levels seen before many parts of the world became industrialized.
 - One degree doesn't sound much, but we're living in the hottest period for 125,000 years, according to the UN's climate science body, the **Intergovernmental Panel on Climate Change (IPCC)**.
 - The greenhouse gas emissions by the burning of fossil fuels trap heat in our atmosphere, resulting in increased concentration of carbon dioxide in the atmosphere to the highest levels seen for 2 million years.

About 'Azores High' pressure system:

Azores high, also called **Bermuda high**, **Azores anticyclone**, or b, large persistent atmospheric high-pressure centre that develops over the subtropical region of the eastern North Atlantic Ocean during the winter and spring seasons in the Northern Hemisphere.



How is this phenomenon resulting in high temperature?

- The Azores High is also known as **North Atlantic (Subtropical) High/Anticyclone** or the **Bermuda-Azores High**.
- It is a **subtropical high-pressure cell** that moves **westward during the summer and fall** (before winters) when it is known as the Bermuda high.
- The Bermuda high is often associated with warm humid weather in the eastern United States during the summer months.
- The **Bermuda or Bermuda-Azores High** is a **high-pressure system** located over a vast area of the Atlantic Ocean, spanning from the Caribbean to a group of Portuguese islands roughly 1,000 miles from the mainland.
- It has the ability to influence much of the western world's weather, moving tropical storms from the Atlantic basin to the southern United States, Mexico, Central America, and the Caribbean. Then, as far east as northwest Africa, the **UK, and beyond in Western Europe**.
- The **system is semi-permanent** and is most **active during summer**.

Effects of Azores High:

- An annual drying of 5-10 millimetres per year per decade has been recorded in the Iberian Peninsula throughout the second half of the 20th century. A further 10-20% drop in winter precipitation is expected by the end of the 21st century.
- The weather will gradually become "drier, brighter and warmer in the coming months."

- These projected changes make **agriculture in the Iberian region** some of the most vulnerable in Europe. The study projected:
 - Olive-growing regions in southern Spain will suffer a 30% decline in production by 2100.
 - Cultivation areas in grape-growing regions across the Iberian Peninsula will shrink 25% - 99% by 2050 due to severe water deficits that will render land unsuitable for viticulture.

Iberian Peninsula:

- The Iberian Peninsula also known as Iberia, is a **peninsula in southwestern Europe**, defining the westernmost edge of Eurasia.
- It is principally divided between Spain and Portugal, comprising most of their territory, as well as a small area of Southern France, Andorra, and Gibraltar



Challenges:

- Infrastructure designed for mild climate:** Britain's transport infrastructure, some of it **dating from Victorian times**, "just wasn't built to withstand this type of temperature.
 - It is years away from replacing the existing infrastructure with the kind of infrastructure that could withstand the extreme heat.
- Increased frequency of extreme weather events:** Climate experts warn that global warming has increased the frequency of extreme weather events.
 - It is a likelihood of temperatures in the U.K. reaching 40° C (104° F) is now 10 times higher than in the pre-industrial era.
- Wild Fires:** Drought and heat waves tied to climate change have also made wildfires harder to fight.
 - Thousands of people have been evacuated from their homes since wildfires broke out in tinder-dry pine forests a week ago.
- The affected region is increasing:** Hot weather has gripped southern Europe, in addition to northern Europe, triggering wildfires in Spain, Portugal, and France.
- Air conditioning:** Less than 5% of homes in the U.K. have to air-condition. It's a sharp contrast to the U.S., where the figure hovers above a whopping 90%.
 - Absence of cooling centers:** Air-conditioned cooling centers are virtually absent in the U.K. and they provide life-saving shelter for vulnerable people during heat waves.
- House Design:** According to U.K. government figures, one in six homes in England date from before 1900, while 46% were built between 1930 and 1982.
 - Many older houses are built with brick and have no—or very small—air cavities, and it becomes harder and more expensive to retrofit older houses with air-conditioning.
- Poor Urban Planning: "Urban heat island effect",** amplifies the already scorching heat. That problem may worsen as demand for housing fuels the property development boom in large British cities and green space is being squeezed out further.
- Transportation:** Britain has some of the oldest working railways in the world. The London Underground dates back to 1863, and many of the trains in use are decades old—seven lines still don't have air conditioning.

CONCLUSION

To achieve its **target of net zero**, and to manage events of high temperatures, U.K. government should be **reconfiguring buildings** and cities to **promote "passive" methods of cooling**—insulation, shading, and tree planting—rather than energy-guzzling cooling systems. The government has set a lot of targets and put a lot of policies in place but there is "scant evidence" that these goals will be delivered if **timely interventions** are not made.

KARNATAKA TOPS NITI AAYOG INNOVATION LIST

CONTEXT:

Karnataka has bagged the top rank in NITI Aayog's India Innovation Index, 2021, which determines innovation capacities and ecosystems at the sub-national level.

◎ ABOUT

- The **India Innovation Index** is released by NITI Aayog and the Institute for Competitiveness every year.
- The index attempts to create an extensive framework for the continuous evaluation of the innovation environment in all States and Union Territories; it ranks them based on their scores.
- This is the third edition of the Report, which **highlights the scope of innovation analysis in the country by drawing on the framework of the Global Innovation Index**.
- The number of indicators has **increased from 36 (in the India Innovation Index 2020) to 66 (in the India Innovation Index 2021)**.
- **Categories:** The Innovation Index is divided into **three categories**—major states, Union Territories, and hill and North East states.

Indicators Used:

- There are **7 pillars in the index** - **five 'Enabler' pillars** measure the inputs and **two 'Performance' pillars** measure the output.
 - The indicators that the survey uses include the level and quality of education and parameters such as:
 - Several Ph.D. students and knowledge-intensive employment.
 - Enrolment in engineering and technology and several highly skilled professionals.
 - Investment in R&D and number of patents and trademark applications filed.
 - Internet subscribers.
 - FDI inflows, business environment, and safety and legal environment.

Key-highlights of the findings

- **Major States:** Karnataka topped with a score of 18.05 followed by Telangana and Haryana.
 - **Bottom States:** Bihar, Odisha, and Chhattisgarh scored the lowest on the index, which put them at the bottom in the "major States" category. Chhattisgarh ranked last with 10.97 points.

- **Hill and North-East States:** Manipur is leading the category followed by Uttarakhand and Meghalaya. Nagaland ranked last (10th).
- **Union territories/Small States:** Chandigarh is the top performer with a Score of 27.88 followed by Delhi and Andaman and Nicobar.

Reasons for Karnataka topping the Index:

- Karnataka's success is attributed to its peak performance in attracting FDI (Foreign Direct Investment).
- **Karnataka, with a score of 19.06, is the top performer in terms of investment.** This is largely due to its high performance on various indicators, **including FDI inflow**.
- Karnataka received the fourth highest FDI inflow in India, with about ₹30,74,617 (in lakhs) which is about 2.7 percent of its GSDP.
- It was also able to **manage the highest number of venture deals in the country**.
- Karnataka also scores high in the '**Performer**' dimension, with the highest share of **ICT exports** and **GI registrations**.
- The **percentage of schools with ICT labs** increased from about 29% to about 46%.
- **With the robust network of academic institutions**, industries, human capital, and the recent boom of startups that the state has been able to produce more. All this has been reflected in the state's 'performers' whereby trademarks and industrial design applications increased.

Challenges

- On average, the country has **not performed well in the knowledge worker pillar**, as much as it has in the human capital pillar.
- The expenditure on **human capital has been unable to create that knowledge base** in the country.
- Innovation is **skewed against the manufacturing sector** due to the problems pertaining to and the missing middle.
- **Missing middle**, i.e., there are too many tiny, informal enterprises, and too few large, formal ones to employ thousands of people.

Recommendations

- **GDERD (Gross Domestic Expenditure on R&D)** needs **considerable improvement and should touch at least 2%**, which would play an instrumental role in India **achieving the goal of a 5 trillion economy** and further influence its innovative footprint across the globe.
 - Increasing GDERD promotes private sector participation in R&D and **closes the gap between industry demand** and what the country produces through its education systems.
- Countries that spend less on GDERD **fail to retain their human capital in the long run** and the ability to innovate is dependent on the quality of human capital; **India's GDERD as a percentage of GDP (Gross Domestic Product) stood at about 0.7%.**
- The private sector **needs to pick up pace in R&D**, public expenditure is productive up to some extent; once the growth follows a trajectory, **it is desirable to shift to R&D mostly driven by the private sector.**

DO NOT APPLY ESG NORMS BLINDLY ON DEVELOPING COUNTRIES: CEA

CONTEXT

Chief Economic Advisor sated to not to apply ESG standards for developing nations by the global investors.

◎ BACKGROUND

- Investment decisions are traditionally guided primarily by financial parameters.

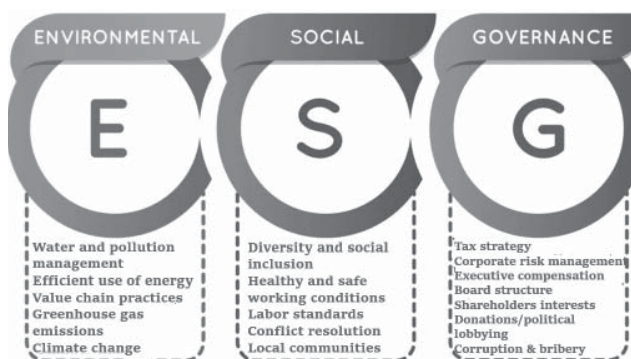
ESG investment space in India

- Till 2018, there were two ESG-themed funds; in 2021, there were 10.
- The assets under management of these mutual fund products increased to over Rs 12,000 crore in 2021 from Rs 3,500 crore in 2019-end.
- However, with growing concerns about climate change, international concerns have emerged to adapt and mitigate its consequences by moving to sustainable development (and thus investment) models.
- Investors are increasingly focusing on sustainability investing, moving away from financial-focused investment models to more socially and environmentally responsible long-term investment trends.
- As a result, the demand for environmental, social and governance (ESG) investments has grown significantly globally.
- However, there is currently no specific set of rules that describe ESG and, importantly, it is more than just compliance.

and action leadership around energy usage, waste management, and natural resources conservation.

relationship and reputation with its employees, customers, stakeholders, institutions and the larger community.

manages with the proper management structure, executive compensation and ensuring stakeholder rights, especially employees, shareholders and customers.



How does India view ESG compliance?

In 2021, SEBI issued a circular containing details of a new sustainability-related reporting requirements called the **Business Responsibility and Sustainability Report**, which brings India's sustainability reporting to **global reporting standards**.

◎ ANALYSIS

What are ESG Goals?

- The Environmental, Social and Governance (ESG) goals are a set of standards for company operations that compel companies to adopt better governance, ethical practices, environmental practices, and social responsibility.

Environmental	Social	Governance
Environmental is all about an enterprise focus	Social deals with an enterprise	Governance is all about how an enterprise

- In 2013, India became the first country to mandate corporate social responsibility with the **Companies Act of 2013**.
- SEBI in India plays the role of market regulator, regulating securities, and protecting the interests of the stakeholders in the market.
- SEBI is also **responsible for the implementation of an efficient ESG policy mechanism**.
- In 2021, SEBI replaced the existing BRR reporting requirement with a more comprehensive integrated mechanism, the Business Responsibility and Sustainability Report (BRSR).

- ▶ It will be compulsorily applicable to the top 1,000 listed entities (by market capitalization) from FY2022-2023 onwards.
- The BRSR requires listed entities to provide information on their performance in accordance with the nine principles of the 'National Guidelines for Responsible Business Conduct' (NGBRC).

How are other countries doing it?

- The European Union, for instance, has asked industry and financial institutions to factor in ESG in decision-making and disclosures.
- Countries like the UK and New Zealand have already transitioned from voluntary to mandatory climate-related financial disclosures.

What are the hurdles in the way?

- Complex ESG requirements
- Issues related to data privacy and cyber security.
- Lack of enough skilled ESG human resources

Why developing nations are relying on non-renewable source of energy?

- **Low gestation period:** Non-renewable source of energy like coal, has low gestation period providing energy security to the country.
- **Labour intensive:** The non-renewable source of energy involves various steps and methodology in the process of energy utilisation, which are labour intensive in nature.
- **Employment opportunity:** The developing nations are labour abundant nations with high population growth rate. The non-renewable source of energy involves labour intensive industries in the process, which serves as the employment opportunity to the available human resource.
- **Available infrastructure:** Non-renewable source of energy are the conventional source of energy which has gained several developments. The developing nations are availed with the infrastructure which can support the energy generation through conventional source of energy.
- **Cost efficient:** The past developments on the conventional process has reduced the cost of the energy production. Developing nations with low or middle income get an opportunity to produce electricity in an efficient manner.

Why is it necessary to implement ESG norms?

- **Revenue growth:** ESG compliance helps companies expand existing markets and provide new growth avenues as part of their blue ocean strategy.

- **Better public image:** ESG-compliant companies have easy access to resources – natural, financial, human talent, etc. – at lower costs.
 - ▶ ESG is critical to raising funds, and free access to additional resources is equally important in countries like India, where companies face strong opposition from local communities and launch new projects in their reserved areas.
- **Long-term sustainability:** Adherence to the ESG framework encourages companies to seek more sustainable investment opportunities that create competitive advantage in the long term.
 - ▶ Companies with lower carbon emissions, reduced waste, optimal water use, higher job creation and relatively better information will score high in the ESG index.
- **Increase Employee Productivity:** Integrating ESG into the corporate ecosystem instills a "purpose-driven life" in employees to excel at work.
- **Cost/Risk Reduction:** Complying with ESG standards such as shareholder grievance redressal, human rights and gender diversity by companies will lead to fewer penalties and enforcement actions.
- **High-value business:** ESG is important as it creates high value, drives long-term returns, and global stakeholders are paying attention to the topic.
- **Responsibility towards society:** Businesses today are expected to have an extra layer of ethics and moral duty towards the society. ESG helps gaining trust and goodwill.
- **Other benefits**
 - ▶ Increases top-line revenue
 - ▶ Costs are reduced as a result
 - ▶ Increasing employee productivity and attracting talent

What are the developing nations will face in implementation of ESG norms?

Implementation of ESG norms will enable a paradigm shift in the energy production, thus resulting into several challenges for developing nations:

- **Infrastructural constraints:** Developing nations are not availed with proper infrastructure to shift the energy security from one source to another source.
- **Financial crunches:** The developing nations with low and middle income have a fund constraint which will provide a potential barrier to the transitional model.

- **Cost inefficient:** Non-conventional source of energy has not gained any severe and transformative R&D making it costlier for the low income and middle income countries.
- **Unemployment:** ESG norms increases the productivity of the labours, thus in the run period labours will be unemployed by the employees.
- **The lack of standardization** of reporting requirements across borders can create difficulties in harmonizing ESG principles, frameworks and considerations.
- Additional challenges related to the transparency, consistency, relevance and comparability of ESG

standards may also pose obstacles to the smooth implementation of an ESG reporting framework.

What should be done?

Governments in India need to step in much more saliently. Three things are specifically important:

- **Good rules and standards** for what ESG means so that this does not lead to green washing or impact washing.
- **Setting up the right kind of meta-governance structures** that allow verification by independent third parties.
- **Focus on producing high quality data** from satellites and mobile phones that can enable tracking and monitoring.

TO PROMOTE DIGITAL BANKS, NITI AAYOG PROPOSES REGULATORY FRAMEWORK

CONTEXT

NITI Aayog has released a paper titled “Digital Banks: A Proposal for Licensing & Regulatory Regime for India.” It suggested establishing a framework for the licensing and regulation of Digital Banks.

What are key findings of the report?

- India has made rapid progress in financial inclusion (FI) in recent years thanks to the Pradhan Mantri Jan Dhan Yojana (PMJDY) and India Stack.



- However, credit penetration continues to be a policy issue, especially for the country's 63 million or for SMEs (micro, small and medium enterprises).
- The Unified Payments Interface (UPI), which has seen unprecedented adoption, has advanced FI.
- As of October 2021, UPI has recorded over 4.2 billion transactions totalling Rs.7.7 trillion.
- In addition, FI has led to direct benefit transfer (DBT) through applications like PM-KISAN and expansion of microcredit options for street vendors through PM-SVANIDHI.
- India is about to implement its own open banking architecture.
- By developing a model regulatory framework and policy for digital banking, India will have a chance to cement its place as a world leader in fintech while addressing many of the public policy challenges it faces.

Road map Proposed by the Report for digital banks:

- The report recommends a carefully calibrated three-step approach for a digital bank license by the Reserve Bank of India (RBI):
 - In the first phase**, the applicant should be granted a limited digital bank license with restrictions in terms of volume/value of customers served and the like.
 - In the second phase**, the licensee will be placed in a regulatory sandbox by the RBI.

- Third stage**, the issuance of a “complete” digital banking license will be granted based on the licensee's satisfactory performance in the regulatory sandbox, including significant, prudent and technological risk management.
- Capital Requirement:** A digital bank may be required to bring a minimum of ₹ 20 crore of paid-up capital in the limited phase. A full-fledged digital merchant bank will need to bring in ₹200 crore after moving out of the sandbox.
- Regulatory standards:** Digital banks will be subject to prudential and liquidity standards at the same level as existing commercial banks.

Why digital banks are required?

- Despite the rapid progress India has made in advancing its financial inclusion agenda, the lack of financial deepening remains a challenge, particularly with regard to the small business lending agenda.
- According to the latest MSME Census (2015-2016), there are 63.88 million unregistered MSMEs in India.
- A significant portion of these 63.88 million people remain uninsured and continue to rely on informal money markets for funding, such as money lenders (quick disbursements without documentation) and money funds (delayed disbursements but lower interest rates than money lenders).

What are the potential challenges that digital banks will face?

- Revenue generation
- Viability
- High cost of capital
- Penetration

What are the recommendations of the report?

- A limited digital bank license would be issued, with limits on the number and value of customers it could serve, among other things.
- Adding the licensee to the regulatory sandbox framework created by the Reserve Bank of India.

- A "full-scale" digital bank license will only be granted if the licensee performs satisfactorily in a regulatory sandbox that includes operational, prudential and technological risk management.

Assessing the positives and negatives

Positive	Negative
<ul style="list-style-type: none"> • Low-cost-to-income ratio • Round the clock service • Paperless transactions 	<ul style="list-style-type: none"> • Risk of digital frauds • Credit risk

- | | |
|--|---|
| <ul style="list-style-type: none"> • Promotion of digital India • Transparency in transaction • Real time details | <ul style="list-style-type: none"> • Operational risk • Money laundering • Terror financing • Digital privacy |
|--|---|

◎ WAY FORWARD

- Bridging the digital gap
- Increasing the internet penetration
- Increasing the accessibility to the hinterlands
- Increasing digital literacy
- Infrastructural development

‘WEATHER MODIFICATIONS BY CHINA NEED MORE DISCUSSIONS ON ITS ETHICS’

CONTEXT:

China has conducted over half a million weather-modification operations during the last two decades and it is raising ethical and social issues.

What is the issue?

- **China's stubbornness** to play with the environmental phenomenon is not hidden from the world. It has conducted over half a million weather-modification operations between 2002 and 2012, but now the operations have raised ethical and social issues.
- From artificial rain to artificial snowfall, the list can go on. It has left no environmental component where its intrusion is not evident.

Past claims and events of China:

- **Weather-modification program:** In 2020, Beijing said it would expand its weather-modification program to generate artificial rain or snowfall over an area exceeding 5.5 million square kilometres — more than 1.5 times the total size of India.
 - ▶ The authoritarian regime has made the weather-modification program in China even faster and more dramatic.
- **Beijing Olympics, 2008:** China used weather modification to prevent rainfall.
- **China's cloud seeding:** China has been conducting regular cloud seeding around Shiyangin Hebei Province to supply water to the north — Greater Beijing Region, which is critical for the country.
 - ▶ It allegedly caused a blizzard in 2009, resulting in extensive damage, economic loss, and a few deaths.
 - ▶ The weather modification is fixed in Shiyang. Cloud seeding is regularly done to produce enough water to transfer to Beijing.
- **Solar geoengineering:** China is doing intensive solar geoengineering research, which requires global attention.
- **Tianhe ("Sky River"):** Qinghai-Tibet plateau, Asia's biggest freshwater reserve. Chinese scientists are working on the ambitious Tianhe ("Sky River") plan to divert water vapour northwards from the Yangtze River basin to the Yellow River basin, where it would become rainfall.

What is weather modification?

- Weather modification (also known as weather control) is the act of intentionally manipulating or altering the weather.
 - ▶ The most common form of weather modification is **cloud seeding**, which increases rain or snow, usually to increase the local water supply.
- Weather modification can also have the **goal of preventing damaging weather**, such as hail or hurricanes, from occurring; or of **provoking damaging weather against the enemy**, as a tactic of military or economic warfare like **Operation Popeye**, where clouds were seeded to prolong the monsoon in Vietnam.

United Nations on Weather Modification

- Weather modification in warfare has been banned by the United Nations under the **Environmental Modification Convention**.
- The **Environmental Modification Convention (ENMOD)**, formally the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques is an international treaty prohibiting the military or other hostile use of environmental modification techniques having widespread, long-lasting or severe effects.
- **Status:** The Convention is signed by 48 States, of which 16 have not ratified it. India ratified this convention on December 15, 1978.
 - ▶ **North Yemen** became the first state to deposit the treaty on 20 July 1977. The treaty came into force and closed for signature on October 5, 1978.
- **Compliance:** *Article V of the Convention* provides for a consultation mechanism to solve any problem arising in relation to the objectives and the application of the provisions of the Convention.

Ethical Issues related to Environmental Modifications:

- Any action pertaining to **Environmental Modifications** confronts serious ethical issues of fairness and responsibility across individuals, nations, generations, and the rest of nature.

- The Climatic changes originating from the environmental modifications are **dominantly intergenerational**. This “**perfect moral storm**” poses a profound challenge to humanity. It brings together **three major challenges to ethics**:

- ▶ **The tragedy of the commons**: The ‘tragedy of the commons’ refers to the situation when individuals, acting rationally in their own self-interest, nonetheless act irrationally as a collective group by irreparably depleting a resource that is owned in common. China’s action is a potential example of ‘the tragedy’ on a global scale.
- ▶ **Skewed Vulnerabilities**: For many of the most vulnerable countries and people who are not a part of China’s actions regarding weather modification, appears to be seriously unfair and casts a notable shadow over the champions of environmental justice.
- ▶ **Intergenerational Ethics**: Intergenerational ethics, also called **obligations to future generations**, branch of ethics that considers if present-day humanity has a moral obligation to future generations to aim for environmental sustainability.

Can China Use Weather as a Weapon?

- China has a long history of establishing dominance over natural resources through gigantic engineering projects and using them as strategic assets, for example, the **Three Gorges Dam**.
- India is dependent on the river that follows the Tibetan plateau, China’s weather modification program in the **Qinghai-Tibet plateau** portends more challenges.
- Analysis of satellite images that showed how **China has been altering the Galwan river’s ecosystem** to gain an upper hand in the **Galwan region** and so it won’t be much of a surprise if project Tianhe starts disturbing the ecosystem, weather, environment changes in the Indian states of Sikkim, Arunachal Pradesh, Himachal Pradesh, Uttarakhand as well as Union Territory of Ladakh and gain political mileage over the region.

Silence of global community over Weather Modifications:

- **Weather modification occurs in the air**, where there are **no boundaries**. This impacts international politics and we need more imagination to deal with geopolitics.
- It is **debatable in terms of international issues** because there is no good global setting to discuss it. China conducts weather modifications and the consequences are felt in neighbouring nations, it can cause conflicts.

- So, more research is needed and more dialogues between countries need to be conducted as soon as possible.
- It is also important to note that the UN in 1976 passed the **ENMOD Convention** which prohibits military or any other hostile use of Environmental Modification Techniques and **China is a participating member**. This makes it more important, and the global community must start considering it more seriously than ever.

Impacts of weather modifications

- **Weather modifications have both physical and social science dimensions**: Scientists have different views about these dimensions.
 - ▶ A lot of research has been done about the **physical dimension**. The **social science dimension deserves more attention**. For example, excess snow produced from cloud seeding can result in deaths, triggering a human-induced disaster.
- **Conflict of interests**: there is a correlation with ecological modernization, where technology is regarded as the best solution to environmental problems but at the time the technology in the lack of data acts as a precursor to man-made disasters. The authoritarian regime in China can control the viewpoints of all scientists.
 - ▶ Some people regard **geo-engineering as a quick solution to climate change**. There is nothing wrong while looking at **weather modification as an extension of geo-engineering**, but swinging like a pendulum in either direction.
- **Earth’s system is very dynamic**: It is not like conducting experiments in a laboratory. So, we need more research to make it more precise. We also need more space for discussions on the social consequences and moral or ethical issues.

◎ CONCLUSION

The actions of **China in weather modifications have no territorial limits**. The mighty Brahmaputra floods its banks every year. Earlier, the floods that come “normally” around June, started as early as April. They will also leave later- floods now last for six months. The ethical question arises, who should be held responsible for such disastrous environmental phenomenon across the globe.

Weather-Modifications in the backdrop of geoengineering raise questions about its consequences. Extensive research, data sharing, and global cooperation are needed to answer questions on who will benefit from it, who will suffer and how to compensate those who do.

Section: B

(SPECIALS)

CURRENT AFFAIRS

BEING SARNA: A FIGHT TO DEFINE TRIBAL IDENTITY IN JHARKHAND

CONTEXT:

Tension among the tribal-dominated villages in Jharkhand for inclusion of the 'Sarna dharma code' in the religion column in the next census of 2021.

Details:

- Recently an agitation too pledges to intensify their struggle to get the government recognition to the '**Sarna dharma code**' and held a mass prayer at Jantar Mantar (New Delhi) seeking blessings of their deities and revered leaders.
- The members, the majority of whom belonged to the Santhal tribe, raised their demands under the aegis of the **Adivasi Sengel Abhiyan** (tribal empowerment campaign). It consists of more than 250 scheduled tribes-dominated blocks from 50 districts of Jharkhand, Bihar, Odisha, West Bengal, and Assam.
- They have been demanding recognition of it as a distinct religion for decades. At present, under the census, there are codes for only six religions: Hinduism, Islam, Christianity, Sikhism, Buddhism, and Jainism. While filling in these columns, a **tribal resident has to identify himself or herself as one of these or as 'others'**, but cannot specify his / her religion as a different one.

What is the Sarna religion?

- The followers of Sarna are nature worshippers who believe in protecting the forest areas. The holy grail of the faith is "*Jal, Jungle, Zameen*".
- They worship nature and do not practice idolatry.
- There is neither Varna system in their society or any sort of inequality.
- There practice follows natural laws and are not codified ones.

Population:

- It is believed that 50 lakh tribal people in the entire country put their religion as 'Sarna' in the 2011 census, although it was not a recognized code.
- For the Census 2011, the National Commission for Scheduled Tribes did recommend the addition of this code.

Threats to Sarnas:

Distortion of Identity:

- The community members have highlighted the fear of subsuming their distinctive culture and identity under the umbrella of Hinduism and Christianity by "brainwashing" the poorest tribal people.
- Indoctrination:** It is alleged that on the lines of Christian missionaries, now the Hindu groups have started converting poor tribal communities in malicious ways, which is challenging the very nature of what tribal people believe Sarnaism to be and how it should be practiced.
- It begins with the promise of elementary schools, pucca homes for villagers, and roads and electricity for the village.
- The danger of Homogenization:** Hindus worship different gods and believe that they are the manifestation of nature, which tribal people worship. This endangers the belief of Sarna's existence as an indigenous faith.
- Ideological encroachment:** The physical encroachment begins, starting with establishing Hindu temples at Sarna places of worship and culminating in the erasure of traditional tribal rituals and practices.
- Maheshpur village in district Gumla which is inhabited by Kharia people, a hunter-gatherer tribe who had been praying (**Sarna sthal**) at a two-acre patch of land has been reduced to a 200 sq ft plot of land. The majority of the plot has been taken over by a Hindu temple.

Who is an Adivasi?

- The criteria prescribed by the Union Government to identify a person as a member of a Schedule Tribe are:
 - indications of primitive traits,
 - distinctive culture,
 - geographical isolation,
 - the shyness of contact with the community at large, and
 - backwardness
- But the High Courts and the Supreme Court have observed, that these may not be the most appropriate or sufficient conditions to identify a person of tribal origin.

Need for separate code make:

- The protection of their language and history is an important aspect of tribals.
- Between 1871 and 1951, the tribals had a different code. However, it was changed around 1961-62.
- Experts say that when today the entire world is focusing on reducing pollution and protecting the environment, it is **prudent that Sarna becomes a religious code** as the soul of this religion is to protect nature and the environment.

Problems/Threats to the Tribal Community:

- Loss of cultural practices/ritual
- Impoverishment and unemployment
- No constitutional recognition for some tribes
- Land Alienation
- Poverty and Indebtedness
- Health and Nutrition
- Eviction in the name of conservation

Government efforts since independence:

- Since independence, the government has initiated several Five-Year Plans, programmes, policies, and laws and has made efforts for gradual socio-economic development of Scheduled Tribes, but they remain the weakest sections of the society.
- During these various Five-Year Plans, there has been a considerable increase in the fund allocation for the tribal areas. But most of the tribals were not able to draw benefits from the facilities provided by the government because of large-scale corruption among officials and improper implementation of tribal development schemes.
- The majority of the tribal people are not even aware of the development schemes implemented by government agencies. Without creating awareness among the tribal people, it is difficult to achieve better results.

◎ CONCLUSION:

These Adivasis are neither Hindus nor Christians. They have our way of life, religious practices, customs, culture, and religious thoughts, different from any other religion. The Sarna code movement is positioning itself as an answer to the question raised by the Supreme court: Who is Adivasi and what are the elements of tribal identity to be considered as Tribal.

It is high time the respective governments began duly acknowledging the critical role tribal people play in the conservation, preservation, and safeguarding of the richness of local biodiversity. The role of ecology/nature in building nationalism or regional pride through 'nature-based' symbols cannot be sidelined. The passing of the Sarna code is a form of 'eco-nationalism'.

Section: C

(Prelims)

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A DECADE OF SWARA SAMRAT FESTIVAL

◎ CONTEXT:

The 10th edition of Swara Samrat festival is being celebrated as a centennial of sarod maestro Ustad Ali Akbar Khan.

About the event

- **Swara Samrat festival** (also known as **SSF**) is a **four-day** annual mega festival of **Indian classical music and dance**.
- This festival is the brainchild of Sarod maestro **Pandit Tejendra Narayan Majumdar**, his wife, **Manasi Majumder** and their son **Indrayuddh Majumder**.
- The festival is dedicated to **Swara Samrat Ustad Ali Akbar Khan**.
- It generally held during the winters in **Kolkata, India**. This event is going to be for the year **2020-21**. This year it will be organised in **Delhi**.
- Awards are given for both **Music** and **Dance**.



Swara Samrat Ustad Ali Akbar Khan

- Ali Akbar Khan was born in Shibpur, a small hamlet in present-day Bangladesh, on April 14, 1922 to Acharya Baba Allaiddin Khan and Madina Begum.
- Ali Akbar Khan (known more familiarly as Khansahib) was regarded as a "musician's musician."
- He was the master of the sarod (a 25-stringed, fretless instrument), in the **Maihar gharana** (ancestral tradition), and was known for his incredible breadth of artistry and knowledge.



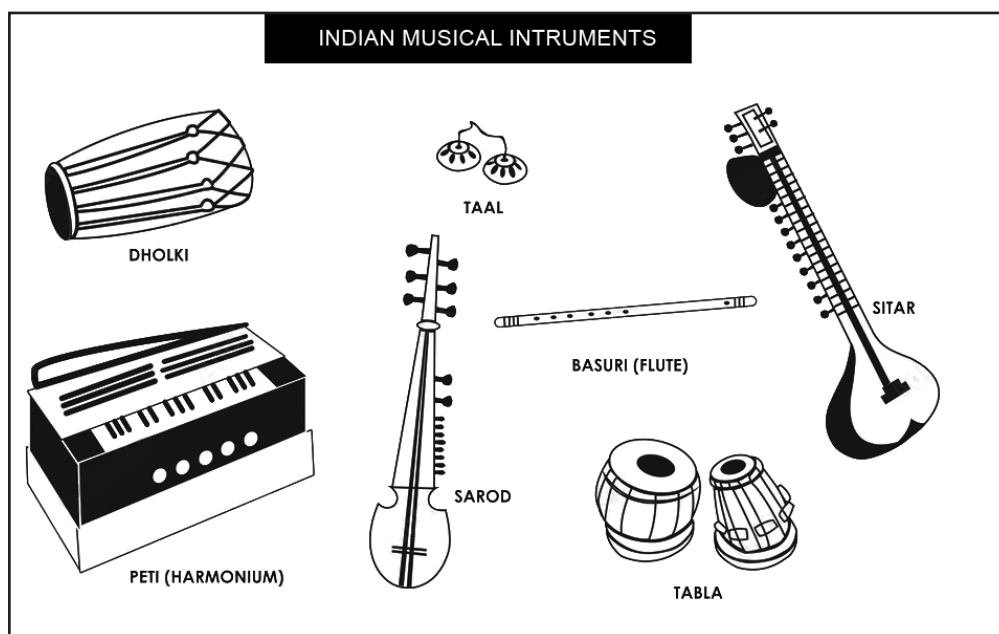
Some major Awards

- In 2018, SSF honored **Janaab Abul Khair Litu** (Chairman, Bengal Foundation, Bangladesh) with the **SSF Lifetime Achievement Award** for his enormous contribution to the propagation, promotion and facilitation of proper training of Indian Classical Music & Dance as well as other forms of Arts across **Bangladesh**.

- In **2019–20**, **Pandit Vijay Kichlu**, an eminent musician, musicologist, music producer and founder of **ITC Sangeet Research Academy** was honoured with the **SSF Lifetime Achievement** Award for his lifelong contribution to the entire fraternity of Indian classical music and dance across India and abroad.

Hindustani Classical Music

- Hindustani music is one of the two principal types of **South Asian classical music**.
- (The other principal type, **Karnatak music**, is found in the Dravidian-speaking region of southern India.)
- It is found mainly in the northern three-fourths of the subcontinent, where **Indo-Aryan languages** are spoken.
- The roots of Hindustani Music is traced to the emergence of **Dhrupad & Dhamar**. It further developed into Vocal & Instrumental Streams.
- Further emergence of **Khayal** from **Dhrupad** as a result of influence of the Mughal Kingdom, Classical Music underwent a change in character, moving from Temples to the Courts.
- Names like **Miyan Tansen** have been one of the greatest influence on the Hindustani Style.
 - **Instruments:** The most prominent instruments of Hindustani music are the:



- **Sitar** (a long-necked fretted lute with about 30 melodic, drone, and sympathetic strings)
- **Sarod** (a short-necked unfretted lute with sympathetic and drone strings)
- **Sarangi** (a bowed fiddle)
- **Shehnai** (an oboe like wind instrument)
- **table** (a set of two drums played by one musician, the right-hand drum carefully tuned)
- **tambura** (a large long-necked lute with four strings, used only to play the supporting drone, a single repeated chord)

Styles of Singing

Various styles of singing in the North Indian Style are Dhrupad, Khayal, Thumri, Tarana and Tappa.

- **Dhrupad:** The most ancient form. "Dhruva" means fixed & "Pada" means text.
- **Khayal:** The most popular form of singing at present, 'Khayal', an urdu word means imagination.
- **Thumri:** A Form of light Classical Music, developed during the later part of the Mughal rule, Thumri allows for extreme flexibility and freedom.
- **Tarana:** Like khayal, tarana has sthayi & antara but difference lies that it uses syllables like nadir, tanana, yalali etc.
- **Tappa:** Also a form of light Classical Music, it originates from Punjab and is richly ornamental, with quick turn of phrases and incessant volleys of Taans emerging from each word, in a swinging rhythm.



हिन्दुस्तानी संगीत का विभाजन ध्रुपद, धमार, खयाल, तराना, ठुमरी, दादरा, टप्पा आदि में किया गया है।

19TH CENTURY PAINTING OF RAJA SERFOJI TRACED TO U.S. MUSEUM

◎ CONTEXT:

A rare 19th century painting of Raja Serfoji and his son Sivaji, which was stolen from Saraswathi Mahal, Thanjavur, a few years ago, has been traced by Idol Wing CID police to the Peabody Essex Museum in USA.

Historical Background

- The rulers of **Thanjavur** had been devoid of absolute power during the British Raj in India.
- Raja Serfoji had placed by the British on the throne over his step brother Amar Singh died in
- His only son Sivaji ruled **until 1855**.
- As there were no male successor in the kingdom, Thanjavur became a part of **Lord Dalhousie's** infamous '**Doctrine of Lapse**', and it got absorbed into **British-ruled Indian provinces**.

What is Doctrine of Lapse?

- The Doctrine of Lapse was an annexation policy followed widely by Lord Dalhousie when he was India's Governor-General from 1848 to 1856.

- The doctrine stated that any princely state under the vassalage of the company will how its territory annexed should the ruler of the said state fail to produce an heir. The doctrine and its application were regarded by many Indians as illegitimate.

© ABOUT

- According to some historians, the painting of Raja Serfoji and his son, was probably painted between **1822 and 1827** and kept in the **Saraswathi Mahal**.
- **In 1918**, the Saraswathi Mahal Library was opened to the public.
- Efforts were made to microfilm and catalogue the contents in **1965 when Indira Gandhi**, who was then Information and Broadcasting Minister, sanctioned the fund for the library's development.



- Despite this, there exists **no record** to show the disappearance of the painting from the mahal.
- The painting was purchased **in 2006** from an international antique dealer **Subash Kapoor** who was arrested by the State police in **2011** on charges of smuggling several **antiques/artefacts**.

In 2006, the painting was sold to **Peabody Essex Museum (PEM)** in USA. PEM is one of several major art institutions worldwide that had purchased items from India.

Timeline of the History of Indian Art

↓ ↓ ↓ ↓ ↓
Indian Art from Early Indian Art Medieval Indian 15th-19th Century Contemporary and
Ancient Time Art Art Art Modern Indian Art

Significance of Ancient Indian Art forms

- **Painting** is one of the most delicate forms of art giving expression to human thoughts and feelings through the media of **line and colour**.
- Many thousands of years before the dawn of history, when man was only a cave dweller, he painted his rock shelters to satisfy his aesthetic sensitivity and creative urges.
- Among Indians, the **love of colour and design** is so deeply ingrained that they created paintings and drawings even during the earliest periods of history for which we have **no direct evidence**.

Indian Painting Principles

- India of the **1st century BCE** had seen the evolution of the '**Shadanga**' or the Six Limbs of painting, which are considered as the prime principles of the art even today.
- These limbs were actually six different points which emphasized what all artists needed to infuse in their artworks to achieve greater effectiveness and appeal.
- These 'Six Limbs' have been translated as follows:
 - **Rupabheda**: The knowledge of appearances.
 - **Pramanam**: Correct perception, measure and structure.
 - **Bhava**: Action of feelings on forms.
 - **Lavanya Yojanam**: Infusion of grace and artistic representation.
 - **Sadrisyam**: Similitude.
 - **Varnikabhanga**: Artistic manner of using the brush and colours.

These principles were found even in Vatsyayana's Kamasutra.

The subsequent development of painting by the Buddhists indicates that these 'Six Limbs' were put into practice by Indian artists.

They are the basic principles on which the painting as a art was founded.

'ASHADAM SARE' TO GODDESS KANAKADURGA AT SRI DURGA MALLESWARA SWAMY VARLA DEVASTHANAM

◎ **CONTEXT:** Police Commissioner and MLA of Andhra Pradesh with other officials offered 'Ashadam Sare' to Goddess Kanaka durga at Sri Durga Malleswaraswamy Vaarla Devasthanam.

◎ **ABOUT**

- This holy shrine of Goddess Durga is a **Swayambhu (self-manifested)**.

- It is the **second largest** temple in **Andhra Pradesh**.
- **Kanakadurgamma Temple** situated on the banks of **River Krishna** in Vijayawada.
- It is situated on **Indrakeeladri Hills**.
- The Mythological significance of the place is learned from the **story that Arjuna prayed to Lord Shiva on these Hills**.

'Ashadam Sare':

- Hundreds of devotees visit Sri Durga Malleswara Swamy Varla Devasthanam at top of Indrakeeladri to mark the beginning of **Pavitra Ashada Sare Utsavalu**.
- **The annual Sare festivities**: Large number of devotees will visit the temple and **offer Saree** to Goddess Kanaka Durga.
- On the first day, **temple priests and officials** under the supervision of chief priest Vishnubhotla Siva Prasada Sharma presented the Sare.
- They participated in the procession from **Gosala** of Sri Kanaka Durga.

Significance of the Temple

- The temple of Kanaka Durga the Goddess of **power, riches and benevolence** and the presiding deity of **Vijayawada** is thronged by lakhs of pilgrims for worship during the "**Navarathri**" festival.
- The ancient temple of Kanaka Durga, abounds with legends of historical interest.
- Goddess is looking towards **north-east** with cool smile and bliss. Because of which the devotees are blessed with whatever they pray for.
- This is **only temple** in the world where the main diety (moola varlu) are decorated in forms of Sri Saraswati, Sri Maha Lakshmi, Sri Bala Tripura Sundari, Sri Rajarajeswari, Sri Mahishasura mardini, Sri Durga devi, Sri Annapurna devi, Sri Gayatri, Sri Lalitha Tripura Sundari.
- Here **Durga** is on the **right side of Malleswara** as against the tradition of Goddesses taking their position on the **left of their consorts**.

Bhakti Tradition links

- **Adi-Sankaracharya** visited the temple and installed the Srichakra and initiated worship of Kanaka Durga in **vedic ways**, and avoided **animal sacrifice**.

FOUR TRIBAL REVOLTS PRESIDENT MURMU INVOKED IN HER INAUGURAL SPEECH

- ◎ **CONTEXT:** Droupadi Murmu scripted history by becoming the country's first tribal and only the second woman to occupy the country's highest constitutional office.
- ◎ **ABOUT:** Addressing the nation after being sworn-in, President Murmu spoke about her journey from a small tribal village in Odisha to the Rashtrapati Bhavan. She also invoked four tribal revolutions that she said had strengthened tribal contribution to the freedom struggle.

Santhal revolution

- On June 30, 1855, over 10,000 Santhals were mobilised by their leaders — Kanho Murmu, Chand Murmu, Bhairab Murmu and Sidho Murmu – to revolt against the East India Company over oppression by revenue officials, zamindars, and corrupt moneylenders.

- The seeds of the protracted rebellion, however, were sown in 1832 where the East India Company created Damin-i-koh region in the forested belt of Rajmahal hills, and invited the Santhals to settle there.
- Over the years, Santhals found themselves at the receiving end of exploitative practices aided by the British.
- After the rebellion broke out in 1855, both sides continued clashing till the uprising was crushed in 1856.
- The British defeated the Santhals using modern firearms and war elephants in decisive action in which both Sidho and Kanho died.

Paika rebellion

- In several recent descriptions, the 1817 Paika Rebellion in Odisha's Khurda is referred to as the "original" first war of Indian Independence.
- That year, the Paikas – a class of military retainers traditionally recruited by the kings of Odisha – revolted against the British colonial rulers mainly over being dispossessed of their land holdings.
- In the run-up to the revolt, the British had dethroned and exiled the Khurda king in 1803, and then started introducing new revenue settlements.
- For Paikas, who were into rendering martial services in return for hereditary rent-free land (nish-kar jagirs) and titles, this disruption meant losing both their estates and social standing.
- The trigger for the revolt came as some 400 Kondhs descended from the Ghumusr area to rise against the British.
- Bakshi Jagabandhu Bidyadhar Mohapatra Bharamarbar Rai, the highest-ranking military general of the banished Khurda king, led an army of Paikas to join the uprising of the Kondhs.

Kol Mutiny

- The Kols, alongwith other tribes, are inhabitants of Chhotanagpur. This covered Ranchi, Singhbhum, Hazaribagh, Palamau and the western parts of Manbhum.
- The trouble in 1831 started with large-scale transfers of land from Kol headmen to outsiders like Hindu, Sikh and Muslim farmers and money-lenders who were oppressive and demanded heavy taxes.
- The Kols resented this and in 1831, under the leadership of Buddho Bhagat, the Kol rebels killed or burnt about a thousand outsiders.
- Only after large-scale military operations order was restored.

Bhil uprising

- After the British intruded into the Bhil territory in Maharashtra's Khandesh region, the tribals pushed back fearing exploitation under the new regime in 1818.
- The revolt was led by their leader, Sewaram and was brutally crushed using the British military might.
- This uprising again erupted in 1825 as the Bhils sought to take advantage of reverses being suffered by the British in the first Anglo-Burmese war.

LAWS COVERING OBSCENITY IN INDIA

◎ CONTEXT:

Based on a complaint by a Mumbai-based NGO, the Mumbai Police registered an FIR against actor Ranveer Singh recently for sharing photographs from an apparently nude photoshoot that he did with 'Paper' magazine.

Obscenity:

- The word obscene comes from the Latin word obscenus, which means foul, repulsive, or detestable.
- Obscenity is a term that is used to describe words that usually have a connection with sexual morality but now it extends to images or actions that offend most people.
- The word obscenity is from one of those words whose meanings are vague or not clear in our Indian Law. What is obscene content or not totally depends upon the lawyers and the judges and how they interpret the word obscene.
- It is true that the definition of word obscenity would change from time to time. What is obscene in the present day should not be treated as obscene in the future.

What sections of the law have police applied against Ranveer Singh?

The police have invoked Sections 292, 293 and 509 of the Indian Penal Code (IPC), along with Section 67A of the IT Act.

- **Section 292** (Sale, etc. of obscene books, etc) says that "a book, pamphlet, paper, writing, drawing, painting, representation, figure, or any other object shall be deemed to be obscene if it is lascivious or appeals to the prurient interest.
- **Section 293** (Sale, etc., of obscene objects to young person) says that "whoever sells, lets to hire, distributes, exhibits or circulates to any person under the age of twenty years any such obscene object...or offers or attempts so to do, shall be punished on first conviction with imprisonment of either description for a term which may extend to three years, and with fine which may extend to two thousand rupees.
- **Section 509** (Word, gesture or act intended to insult the modesty of a woman) states "whoever, intending to insult the modesty of any woman, utters any word, makes any sound or gesture, or exhibits any object, intending that such word or sound shall be heard, or that such gesture or object shall be seen, by such woman, or intrudes upon the privacy of such woman, shall be punished with simple imprisonment for a term which may extend to one year, or with fine, or with both"
- **Sections 67A** of the Information Technology Act lays down the punishment for publishing or transmitting of material containing sexually explicit act, etc., in electronic form.

INDIA-MALDIVES SIGN MOU ON JUDICIAL CO-OPERATION

◎ CONTEXT:

The Union Cabinet recently approved the signing of a memorandum of understanding (MoU) in the field of judicial cooperation, between India and Judicial Service Commission of Maldives.

- This is the eighth MoU signed between India and other countries in the field of Judicial Cooperation.

India and Maldives:**■ Background**

- India and Maldives share ethnic, linguistic, cultural, religious and commercial links.
- India was among the first to recognize the Maldives after its independence in 1965 and later established its mission at Male in 1972.
- Maldives' proximity to the west coast of India and its situation at the hub of commercial sea-lanes running through the Indian Ocean, and its potential to

allow a third nation's naval presence in the area imbues it with significant strategic importance to India.

- India has a pre-eminent position in the Maldives, with relations extending to virtually most areas.
- India's policy of 'Neighbourhood First' and Maldives' policy of 'India First' seem to be in absolute sync with each other.

Neighborhood First Policy:

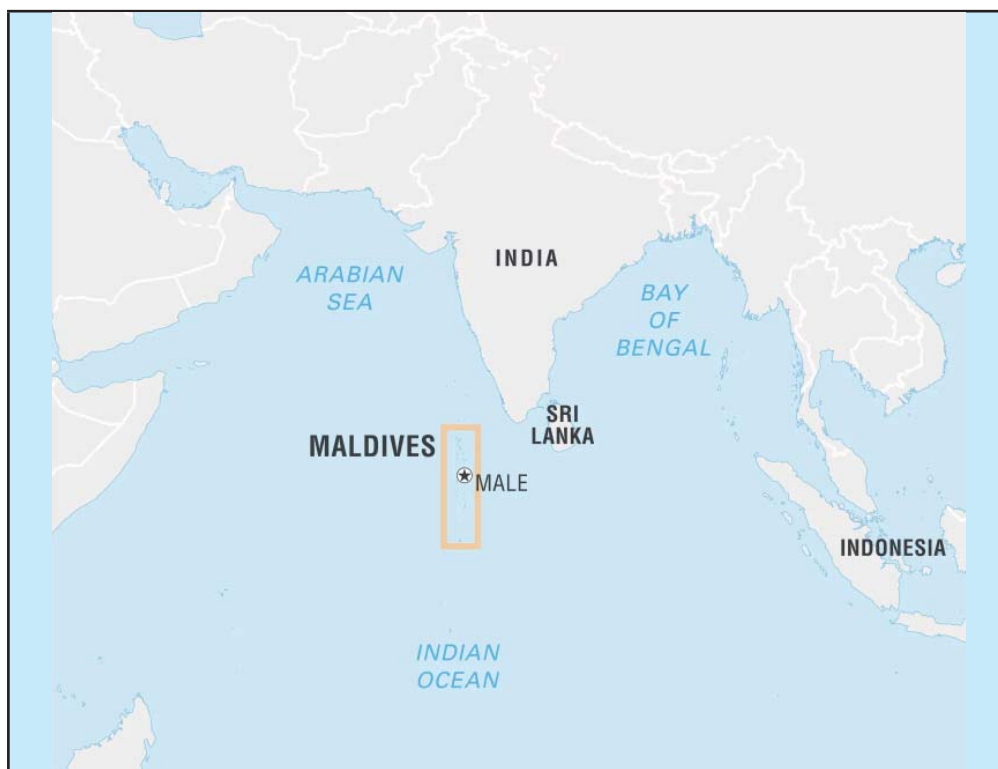
- It is a core component of India's foreign policy, focuses on peaceful relations and collaborative synergetic co-development with its South Asian neighbors of the Indian subcontinent encompassing a diverse range of topics, such as economic, technology, research and education, connectivity (digital, surface and air transport, energy grid connectivity, logistic chains, etc.), space program, defense security, environment and climate challenge.
- It is important to note that the broad bilateral ties between the two countries rest on the foundation of mutual trust, understanding and sensitivity to each other's concerns.

■ Significance of the Maldives for India

- **Strategic Importance:** The Maldives is geographically positioned like a '**toll gate**' between the **western Indian Ocean** chokepoints of the **Gulf of Aden** and the **Strait of Hormuz** on the one hand, and the **eastern Indian Ocean** chokepoint of the **Strait of Malacca** on the other.
- **Economic Value:** It is situated at the hub of commercial sea-lanes running through the Indian Ocean. More than 97% of India's international trade by volume and 75% by value passes through the region. It's potential to allow a third nation's naval presence in the area.
- **Political and Regional Security:**
 - ▶ Since China's naval expansion into the Indian Ocean, Maldives significance has steadily grown and now it's at the heart of international geopolitics.
 - ▶ Moreover, the Maldives is an important aspect of India's 'Neighbourhood First' policy.
 - ▶ 'India First' has been a stated policy of the Government of Maldives.
 - ▶ Maldives is a member of the South Asian Association for Regional Cooperation (SAARC) and the South Asia Sub-regional Economic Cooperation (SASEC).
- **Indian Community in Maldives:** There is a significant Indian diaspora in the Maldives. Innumerable Indians work across the hospitality, education, and health-care sectors of the Maldives economy.

Quick facts about Maldives

- The Republic of the Maldives is located in the **Indian Ocean**.
- It is an archipelago comprising approximately **1,200 islands** with a geographical spread over **90,000 sq.km**
- Incorporating some 26 atolls, the Maldives is one of the world's most geographically dispersed countries, and is a **99 per cent water-nation**.
- Maldives is the **lowest-lying country** on the planet. With the highest elevation being just 2.3 meters (7 feet 7 inches) above sea level, the archipelago has the world's lowest naturally-occurring 'highest-point'.



WHO MOVES TO ROLL OUT FIRST MALARIA VACCINE IN AFRICA

© **CONTEXT:** World Health Organization announced the rollout of the world's first authorized malaria vaccine in three African countries

About the Vaccine

- The WHO recommendation is for **RTS, S - or Mosquirix** - a vaccine developed by **British drug maker GlaxoSmithKline**.
- The active ingredient in Mosquirix is made up of proteins found on the surface of **Plasmodium falciparum parasites (PFP)**.
- RTS, S aims to start the immune system in the early stages of malaria when PFP enters the bloodstream through a mosquito bite and infects liver cells.
- The RTS malaria vaccine, S / AS01 is used to prevent **falciparum malaria** in children living in regions with moderate to high transmission.
 - Falciparum, the most common form of malaria in Africa.
- It is the first vaccine and the only one that shows partial protection against young children.
- The malaria vaccine should be given in a 4-dose program to children from five months of age to reduce the incidence of malaria and the burden.
- The vaccine adds to the development of the malaria tool and can help get malaria control back on track.
- It also helps prevent liver infection with the **Hepatitis B virus**.

Malaria

- Malaria is a life-threatening disease caused by parasites transmitted to humans through the bite of female **Anopheles mosquitoes**.
- It is **preventable** and **curable**.
- Over the past two decades, 11 countries have been WHO-certified free of malaria:
 - United Arab Emirates (2007)
 - Morocco (2010)
 - Turkmenistan (2010)
 - Armenia (2011)
 - Sri Lanka (2016)
 - Kyrgyzstan (2016)
 - Paraguay (2018)
 - Uzbekistan (2018)
 - Algeria (2019)
 - Argentina (2019)
 - El Salvador (2021)

RUSSIA, UKRAINE SIGN MAJOR GRAIN DEAL TO EASE FOOD CRISIS

◎ CONTEXT:

In the first deal between Russia and Ukraine ever since the former invaded the latter in February, the two nations signed a UN-mediated deal that will allow the export of 5 million tonnes of grain per month from three Ukrainian ports.

- Russia invaded Ukraine in February 2022, against its action of joining NATO alliance.
- This has led to global disorder and violation of Human rights at an extent.

Key highlights of the Deal

- Signed in **Istanbul**, the deal will allow ships carrying grain — and monitored and inspected by a **Joint Coordination Committee**.

- **Bosphorus strait** is a natural strait, located in **northwestern Turkey**, connecting the **Black Sea** to the **Sea of Marmara**.
- Also known as the **Strait of Istanbul**, this water way links the European part of the city from its Asian part and thus remains as a very strategic waterway in the region.
- Its importance lies in the fact that is a significant shipping route that links the **Black Sea** with the world's oceans.

- It comprised the representatives of **Turkey, Ukraine, Russia and the UN** who have pass through a **safe corridor in the Black Sea**, onwards through the **Bosphorus** in order to reach global markets.

- The deal, valid initially for **120 days** but can be extended for a similar period unless either Russia or Ukraine announces their intention to terminate it.
- Currently, about **20 million tonnes of grain** is stuck at Ukrainian ports due a sea blockade enforced by the Russian navy.

Ukraine and Russia sign UN-backed deal to begin exporting grain from blockaded Black Sea ports



Under the terms of the deal

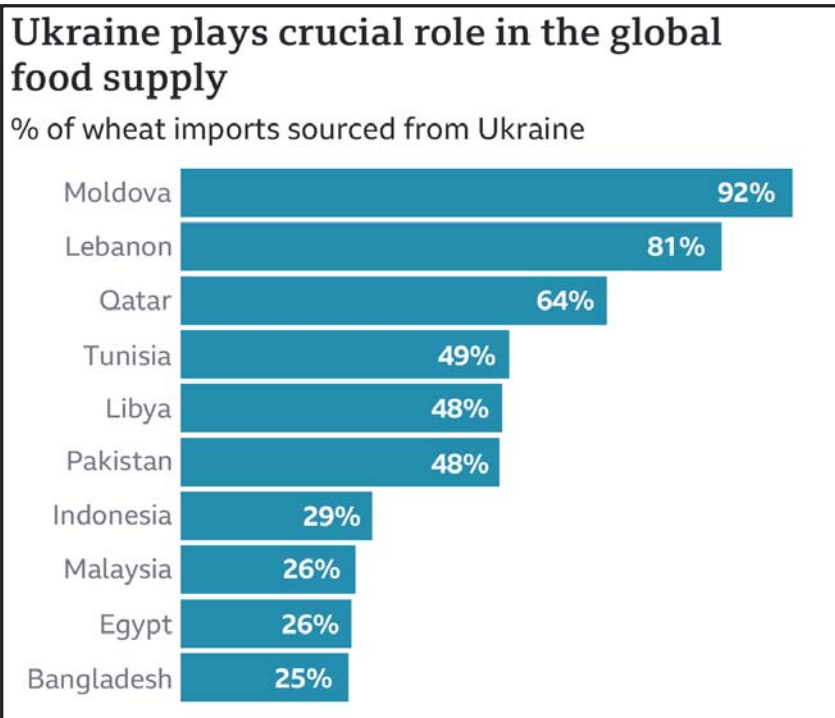
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| 1
A coalition of Turkish, Ukrainian and UN staff would monitor the loading of grain onto ships and ensure they are not carrying weapons | 2
Ukrainian vessels would guide commercial vessels along safe paths through mined areas along the coast | 3
Vessels would be monitored by the same coalition as they cross the Black Sea towards the Bosphorus Strait |
|---|---|---|

Significance

- **Support for Ukraine to survive war impacts:** The deal will provide a great support for the Ukrainian economy as the summer harvest season is in full swing there, it will help cool

down food prices globally that have risen sharply due to shortage of food grains from the country called the **world's food basket**.

- **Support Global supply chain:** According to estimates, the choking of food-grain supplies from Ukraine put in peril the food security of between **400 million to 800 million people** globally, with a real risk of vast populations of several countries facing hunger — such as in **Somalia, Yemen and Sudan**.



INDIA-NAMIBIA PACT FOR CHEETAHS

◎ CONTEXT:

India and Namibia signed a memorandum of understanding (MoU) for reintroduction of cheetahs into the historical range in India.

Key-points

- The MoU aims to facilitate Cheetah conservation in both countries by way of exchange of expertise, sharing of good practices in the field of wildlife conservation, use of technology and sustainable management of biodiversity.
- According to the pact, India will also train Namibian candidates in wildlife management courses at the **Wildlife Institute of India (WII)**.
- **The Environment Ministry in collaboration with the WII and National Tiger Conservation Authority** has identified **Kuno National Park in Madhya Pradesh** for the reintroduction of cheetah, where the first eight cheetahs are expected to be translocated from Africa.
- The first batch of cheetahs comprising **four male and as many female cheetahs** will arrive from Namibia in August.
- While the current carrying capacity for **Kuno National Park is a maximum of 21 cheetahs**, once restored the larger landscape can hold about 36 cheetahs.
 - The carrying capacity can be further enhanced by including the remaining part of the Kuno Wildlife Division (1,280 sq km) through prey restoration.

- The Ministry will also launch extensive awareness campaigns among the local communities and villages, encouraging them to be stakeholders in the project.
- Cheetah managers and biologists from Africa will train Indian conservationists and forest officers.
- The main goal of the Cheetah reintroduction project in India is to establish viable cheetah metapopulation in India that allows the cheetah to perform its functional role as a top predator and provides space for the expansion of the cheetah within its historical range thereby contributing to its global conservation efforts.

Cheetah in India

- The cheetah is the only large carnivore to have gone extinct in India, primarily due to hunting and habitat loss.
- **Maharaja Ramanuj Pratap Singh Deo** of Korea, Madhya Pradesh, is widely believed to have killed the last three recorded cheetahs in India in **1947**.
- **In 1952, the Indian government officially declared the Cheetah extinct in the country.**



Demand for Reintroduction of Cheetah

- **The State Wildlife Board of Andhra Pradesh** was the first to suggest the policy in **1955**, on an experimental basis in two districts of the state.
- **In the 1970s, the Department of Environment** formally requested Iran, which had **300 Asiatic cheetahs** at the time, for some cheetahs.
 - However, the Shah of Iran was deposed before any deal could be reached.
- Attempts to bring cheetahs to India were revived **once more in 2009**, and the **Wildlife Trust of India** conducted a meeting to discuss the feasibility of cheetah reintroduction.
 - Several sites were chosen, of which **Kuno-Palpur National Park** was seen as the most suitable.
 - This was because the area had a large habitat area available and significant investments had already been made to displace the villagers inhabiting the site.

ANDHRA PRADESH GETS A NEW FLOATING SOLAR POWER PLANT ON MEGHADRI GEDDA RESERVOIR

◎ CONTEXT:

A floating solar power plant commissioned at **Meghadri Gedda reservoir** in Andhra Pradesh's Visakhapatnam.

Key points

- **Renewable energy plant:** It can save coal up to **54000 tonnes per year**.
- **Capacity:** It will produce about **2 million units** of power each year.
- **Developing entity:** **Greater Visakhapatnam Municipal Corporation (GVMC)**
- **Significance:**
 - No need for land acquisition
 - Low-cost energy production
 - Promotion of renewable energy resources

What are Solar Technologies?

- Solar technologies convert sunlight into electrical energy either through photovoltaic (PV) panels or through mirrors that concentrate solar radiation.
- This energy can be used to generate electricity or be stored in batteries or thermal storage.

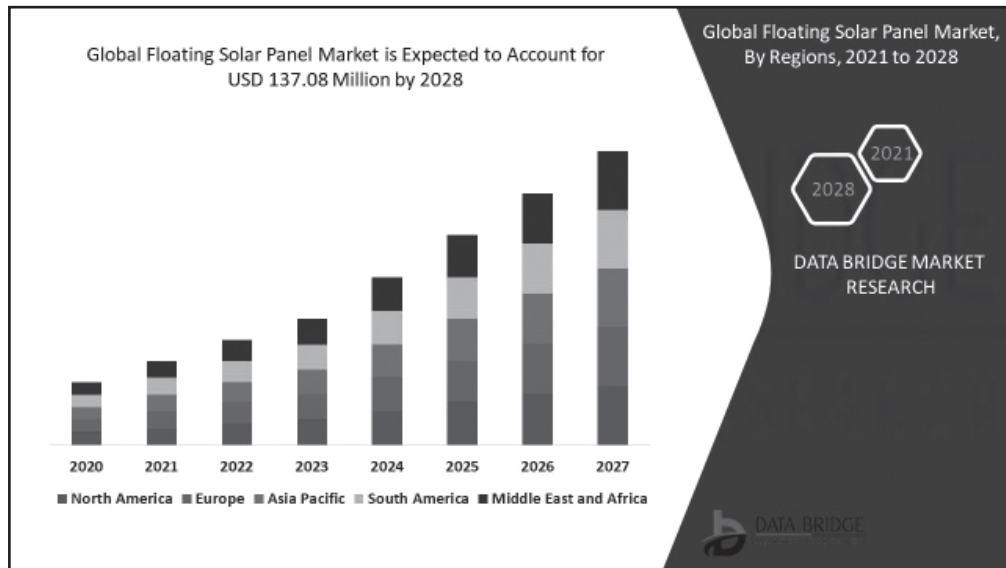
Types of Solar plants in India

- Solar plants can be either;
- **Ground-mounted** or
- Set up on the surface of water-bodies or
- Though these floating farms are a bit more expensive than the traditional ones mounted on land surfaces.

Pros	Cons
<ul style="list-style-type: none">• No need for land,• Increase in Power generation• Easy to maintenance and so on.• Less evaporation and algae bloom	<ul style="list-style-type: none">• Solar panel needs to be prevented from corrosion.• Reduced shelf-life for metal parts used.• Higher cost of installation.• Needs more maintenance• May lead to water pollution

Common Uses of Solar energy

- Photoelectric cells
- Solar power generation
- Solar heating systems



Some other to be commissioned power plants

The renewable energy plants that are likely to be are:

- 25MW floating solar plant at Simhadri thermal power plant near Visakhapatnam
- 92MW floating solar plant at Kayamkulam in Kerala
- 100 MW plant at Ramagundam

Flue-gas desulfurization (FGD)

- It is a set of technologies used to remove **sulfur dioxide (SO₂)** from exhaust flue gases of fossil-fuel power plants.
- It also removes emissions of other sulfur oxide emitting processes such as waste incineration.
- flue-gas desulfurization (FGD) may remove 90 per cent or more of the SO₂ in the flue gases
- Common methods used for FGD
- Wet scrubbing using a slurry of alkaline sorbent, usually limestone or lime, or seawater to scrub gases
- Spray-dry scrubbing using similar sorbent slurries
- Wet sulfuric acid process recovering sulfur in the form of commercial quality sulfuric acid
- SNOX Flue gas desulfurization removes sulfur dioxide, nitrogen oxides, and particulates from flue gases
- Dry sorbent injection systems that introduce powdered hydrated lime (or other sorbent material) into exhaust ducts to eliminate SO₂ and SO₃ from process emissions

MIGRATORY MONARCH BUTTERFLY (DANAUS PLEXIPPUS PLEXIPPUS) IS NOW ENDANGERED

◎ CONTEXT:

The migratory monarch butterfly, a sub-species of the monarch butterfly that travels around 4,000 kilometres across America each year, has been classified 'endangered' in the International Union for Conservation of Nature (IUCN) Red

List of Threatened Species.

◎ ABOUT

- Monarchs, the most recognisable **species of butterfly**, are **important pollinators** and provide various ecosystem services such as maintaining the **global food web**.
- Their population in the continent has declined **23-72 per cent** over the last decade.
- Most of these butterflies are found in the **California coast and forests in central Mexico**.
- A smaller population of the species is also found in countries like **Australia, Hawaii and India**.

Characteristic features:

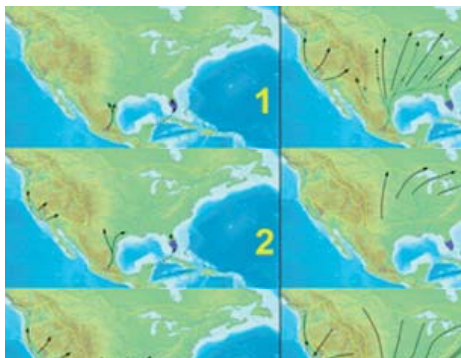
- These butterflies follow a **unique lifestyle**: They traverse the **length and breadth** of the American continent twice a year, feasting on nectar from a **variety of flora**.
- The female monarch butterfly lays each of her eggs individually on the leaf of a **milkweed plant**, attaching it with a bit of glue she secretes.

Milkweed produces glycoside toxins to deter animals from eating them, but monarchs have evolved immunity to these toxins.

- The monarch larvae feed on this **species on hatching**.
- The removal of this breeding ground by farmers because they are 'weed' is an important driving factor for the dwindling numbers.
- More focused strategies such as "planting native milkweed and reducing pesticide use to supporting the protection of overwintering sites", are imperative for a significant and sustainable rebound of the monarch population.



Route for travelling of these Butterfly species

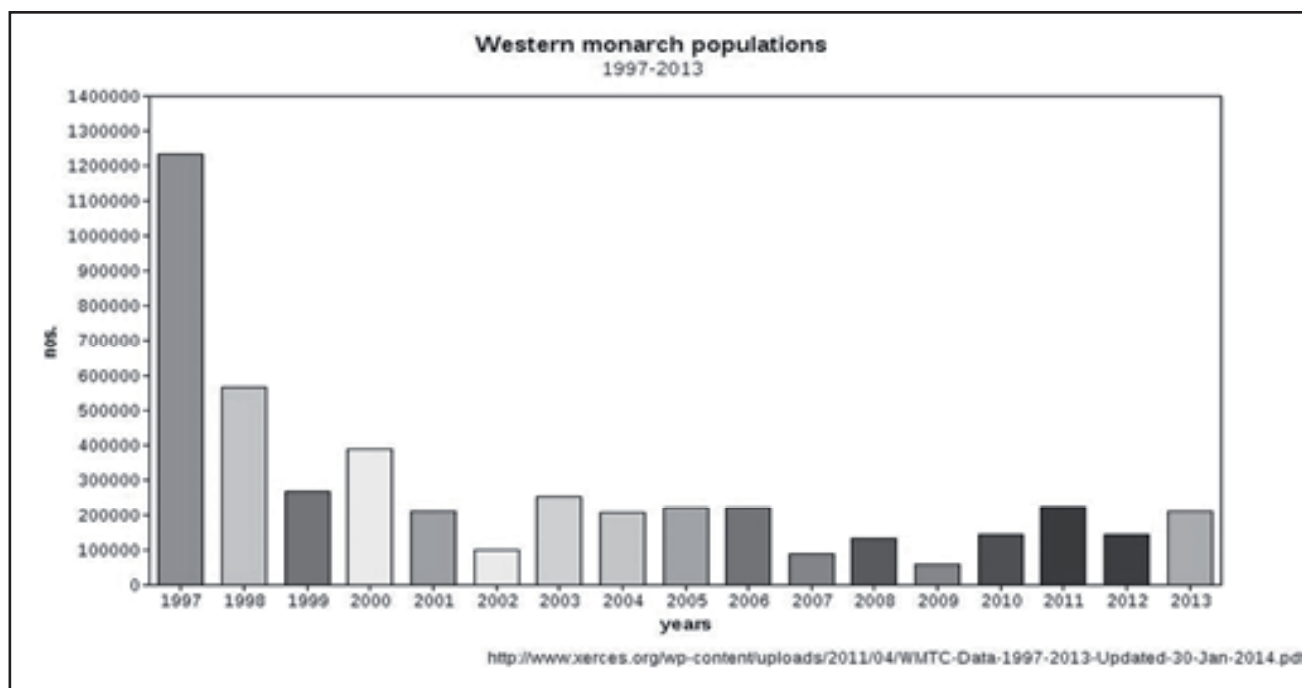


Reason for decline in their Population

- **Climate Change**: Climate change and change in land use pattern has made their survival difficult in the region.

- **Habitat destruction:** Threats to this abundant and popular butterfly species come from habitat loss and food plant destruction.

Continuous reduction in population: Heavy use of **chemical pesticides**, and destruction of the Monarchs' own place in the environment, has significantly reduced populations in some areas.



IUCN red List

- The **IUCN Red List of Threatened Species** (also known as the IUCN Red List or Red Data List), founded in 1964, is the world's most comprehensive inventory of the global conservation status of biological species (**Animal, fungus and plant species**).
- **Purpose of the IUCN Red List Data**
- The information cited in the IUCN Red List is used by various organizations in the following ways:
 - International Agreements such as CITES, Ramsar Convention use the Red List data to make important decisions in sync with the status of nature as and when required.
 - World Bank Group performance standard uses the IUCN Red List data to evaluate the risk of damage to biodiversity due to large-scale infrastructures and global projects.
 - Zoos and National parks use this information to upgrade important policies like parks regulations from time to time.

The following are the **nine categories** of Red list:



INDIA DESIGNATES 5 NEW RAMSAR SITES

◎ **CONTEXT:** India has recently designated five new wetlands of International importance.

◎ **ABOUT:**

- Three wetlands, namely Karikili Bird Sanctuary, Pallikaranai Marsh Reserve Forest & Pichavaram Mangrove of Tamil Nadu, Pala wetland of Mizoram and wetland Sakhya Sagar of Madhya Pradesh have been added to the list.
- The Ramsar sites have been increased from 49 to 54 Ramsar sites.

About New Sites:

■ Karikili Bird Sanctuary:

- Karikili Bird Sanctuary is a 61.21-hectare protected area located in the Kancheepuram District of Tamil Nadu.
- The sanctuary is about 75 km from Chennai, south of Chengalpattu.

■ Pallikaranai Marsh Reserve Forest:

- Pallikaranai wetland is a freshwater marsh located in Chennai, Tamil Nadu.
- It is the only surviving wetland ecosystem of the city and among the few and last remaining natural wetlands of South India.

■ Pichavaram Mangrove:

- Pichavaram mangrove is located in a village near Chidambaram in Cuddalore District of Tamil Nadu.
- The mangrove is one of the largest mangrove forests in India, covering 1100 hectares.

■ Pala wetland:

- The Pala wetland is the largest natural wetland in Mizoram.
- The renowned landmark is surrounded by green woodlands and home to rich diversity of animal species including a range of animals and birds.

■ Sakhya Sagar:

- Sakhya Sagar Lake is an integral part of the beautiful ecology of the Madhav National Park in Shivpuri, Madhya Pradesh.

India's Ramsar Sites:

- India's Ramsar wetlands are spread over 11,000 sq km — around 10% of the total wetland area in the country — across 18 States.
- No other South Asian country has as many sites though this has much to do with India's geographical breadth and tropical diversity.
- The United Kingdom (175) and Mexico (142) — smaller countries than India — have the maximum Ramsar sites whereas Bolivia spans the largest area with 148,000 sq km under the Convention protection.

Ramsar Sites

- These are wetlands deemed to be of "international importance" under the Ramsar Convention.

- It is named after the city of Ramsar in Iran, where the convention was signed in 1971.
- Ramsar sites are trans-boundary in which case more than one Contracting Party is responsible for their conservation and management.
- The inclusion in the list is for-
 - the conservation and sustainable use of wetlands,
 - recognizing the fundamental ecological functions of wetlands and their
 - Economic value.
 - Cultural value
 - Scientific value
 - Recreational value
 - It is also known as the Convention on Wetlands.

Wetland

- A wetland is a distinct ecosystem that is flooded by water, either permanently or seasonally, where oxygen-free processes prevail.
- The primary factor that distinguishes wetlands from other landforms or water bodies is the characteristic vegetation of aquatic plants, adapted to the unique hydric soil.
- Two general categories of wetlands are recognized:
 - Coastal or tidal wetlands
 - Inland or non-tidal wetland

LESSONS FROM GREGOR MENDEL

© CONTEXT:

July 20, 2022, marks the 200th birthday of Gregor Johann Mendel, a revolutionary scientist.

About Gregor Johann Mendel:

- Gregor Johann Mendel was a scientist who is recognized as the **Father and Founder of genetics**.
- Mendel conducted many experiments on the pea plant (*Pisum sativum*) between 1856 and 1863.
- He studied the results of the experiments and deduced many observations. Thus, laws of inheritance or Mendel's laws of inheritance came into existence.
- **Laws of Inheritance:** Mendel's Laws of inheritance can be described as:
 - **The Law of Dominance:** The offspring always exhibits a dominant trait. From the two alleles received from parents, the only dominant allele is expressed.
 - **The Law of Segregation:** The two copies of each chromosome will be separated from each other, causing the two distinct alleles located on those chromosomes to segregate from one another.
 - **The Law of Independent Assortment:** The traits inherited through one gene will be inherited independently of the traits inherited through another gene because the genes reside on different chromosomes that are independently assorted into daughter cells during meiosis.

Gregor Johann Mendel: Father of Genetics

- 1822- 1884
- Austrian monk
- Hybridization Experiment with pea plants.
- Published his results "Translation of the characters" in the natural history of society of brunn
- He is regarded as the 'father of genetics'

**Lessons from Gregor Mendel:**

- **Dedication:** He was an extremely keen student, interested in science and pursued his studies despite the fact that his family was impoverished. **In order to fund his studies, Mendel became a monk.**
- **Defeating failures:** Even though he failed to pass the exam of 'natural history' during his college years, later his contribution revolutionized the field.
- **Courage and Persistence:** He worked with 'Pea' for eight years and by his own admission— he needed "some courage" to persist with them. Ultimately, it led to **three foundational principles of inheritance.**
- **Struggle:** Mendel's findings were not accepted and his records were burnt down when he died. It was only after 35 years of his death that his ideas were rediscovered.

MARBURG VIRUS, THE EBOLA-LIKE OUTBREAK

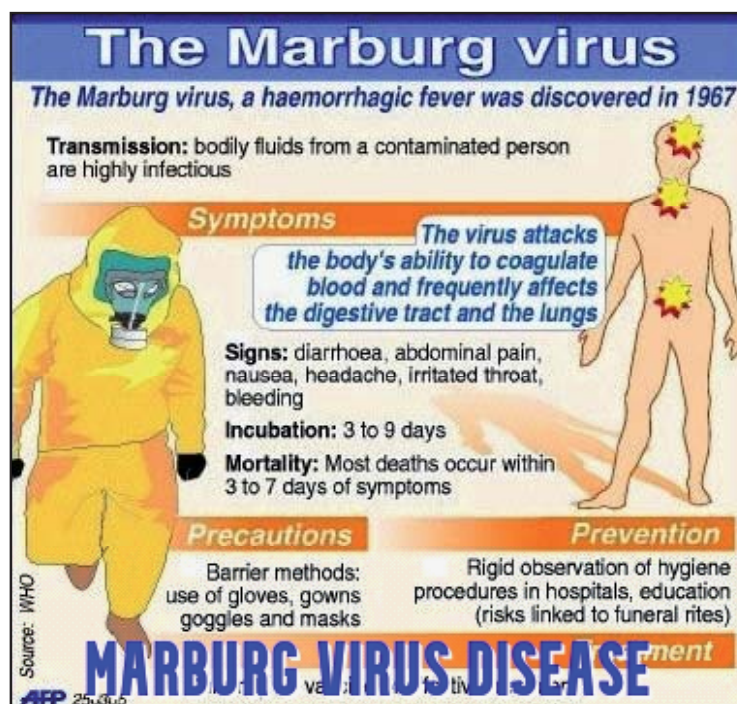
© CONTEXT:

The first two cases of the Marburg virus, a highly infectious Ebola-like disease, have been confirmed officially by Ghana after test results were verified by a Senegal laboratory.

- This outbreak is only the second time that the disease has been detected in West Africa.

About Marburg virus disease:

- According to WHO, Marburg virus disease (MVD), earlier known as Marburg haemorrhagic fever, is a severe, often **fatal hemorrhagic fever.**
- Marburg, like Ebola, is a **filovirus**; and both diseases are clinically similar.
- **Rousettus fruit-bats** are considered the natural hosts for Marburg virus.
- However, **African green monkeys** imported from **Uganda** were the **source of the first human infection.**
- It was **first detected in 1967** after simultaneous outbreaks in **Marburg and Frankfurt** in Germany; and in Belgrade, Serbia.
- The disease has an **average fatality rate of around 50%**



Symptoms:

- Common symptoms of Marburg virus disease include- **high fever, severe malaise, severe headache, Muscle aches and pains.**
- Patients may also see severe **watery diarrhoea, nausea & vomiting, abdominal pain & cramping** on the third day following the contracting.
- These symptoms persist for a week.

Diagnosis

- It can be difficult to clinically distinguish Marburg virus disease (MVD) from other infectious diseases such as malaria, typhoid fever, shigellosis, meningitis and other viral haemorrhagic fevers.
- Confirmation that symptoms are caused by Marburg virus infection are made using the following diagnostic methods:
 - antibody **enzyme-linked immunosorbent assay (ELISA)**;
 - **antigen detection tests**;
 - **serum neutralization tests**;
 - reverse-transcriptase polymerase chain reaction (**RT-PCR**) assay; and
 - Virus isolation by **cell culture**.
- Samples collected from patients are an extreme biohazard risk and laboratory testing on non-inactivated samples need to be conducted under maximum biological containment conditions.
- All biological specimens must be packaged using the triple packaging system when transported nationally and internationally.

Treatment

- **No treatment or vaccine** has been developed for Marburg, yet.
- Patients are treated through **rehydration with oral or intravenous fluids**.

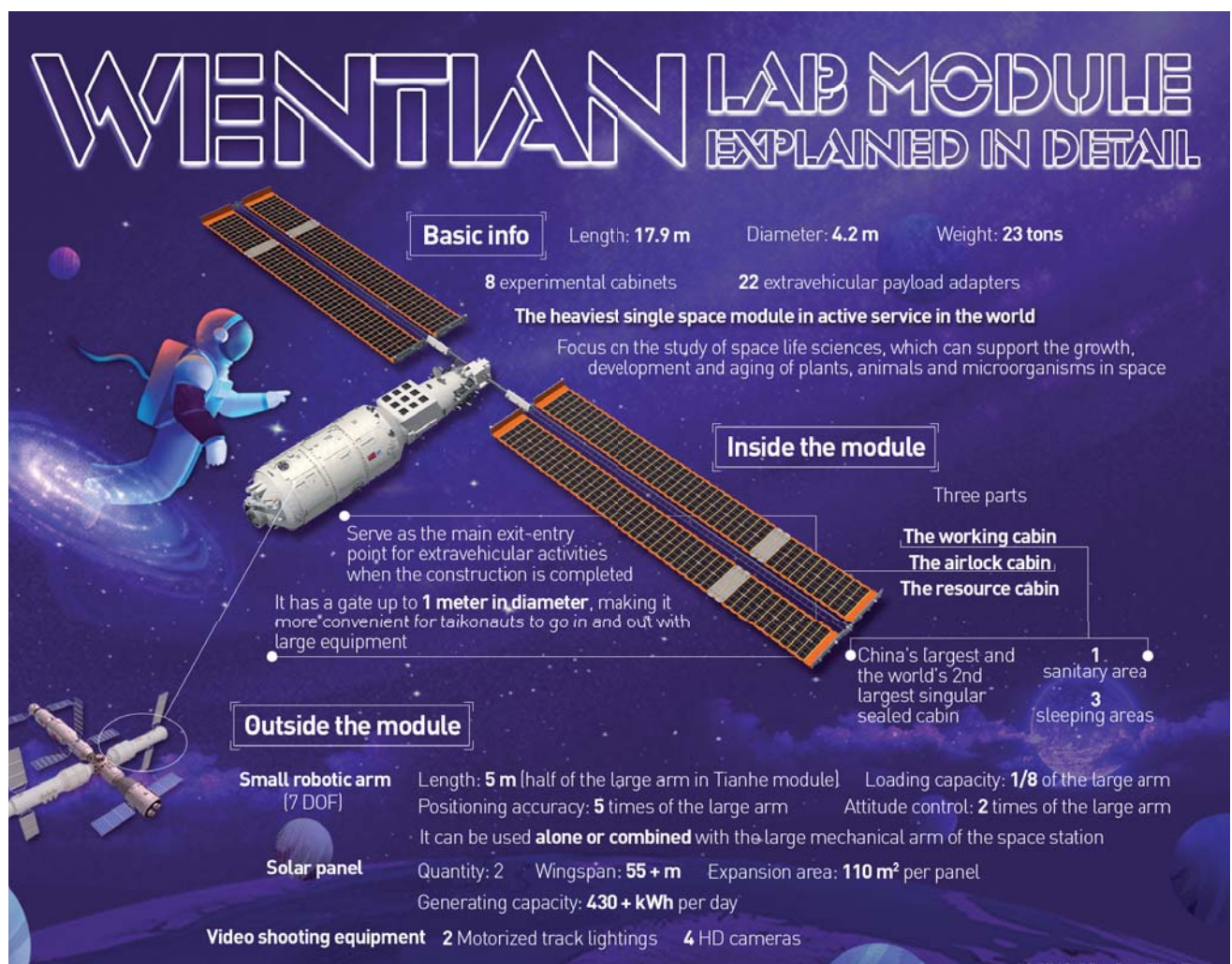
CHINA LAUNCHES SECOND SPACE STATION MODULE

◎ CONTEXT:

China recently launched the second of three modules needed to complete its new space station.

About Wentian lab module:

- It is the largest and heaviest the country ever sent off to its space station complex that's under construction.
- Weighing 23 tonnes, the Wentian lab module is 17.9 meters long with a diameter of 4.2 meters.
- It consists of three parts:
 - a work cabin,
 - an airlock cabin and
 - a resource cabin
- Compared with the Tianhe core module, which is already operating, Wentian is larger and heavier, out competing the core module in power supply and information transmission.
- Wentian was propelled by a Long March 5B rocket from the Wenchang launch centre on China's tropical island of Hainan.



- Beijing launched the central module of its space station Tiangong -- which means "heavenly palace" -- in April 2021.
- Almost 60 feet long and weighing 22 tonnes, the new module has three sleeping areas and space for scientific experiments.
- It will dock with the existing module in space, a challenging operation that experts said will require several high-precision manipulations and the use of a robotic arm.
- Wentian will also serve as a backup platform to control the space station in the event of a failure.
- The final module to complete the space station is scheduled to dock in October, and Tiangong is expected to become fully operational by the end of the year.
- The station will then assume its final T-shape, and be similar in size to the former Russian-Soviet Mir station.
- Its lifespan should be at least 10 years.
- The world's second-largest economy has poured billions into its military-run space programme, with hopes of having a permanently crewed space station and eventually sending humans to the Moon.

RUSSIA TO WITHDRAW FROM INTERNATIONAL SPACE STATION PROJECT AFTER 2024

◎ CONTEXT:

Russia recently announced that it will withdraw from the International Space Station (ISS) project after 2024, signalling an end of an era in one of the last remaining areas of cooperation between Russia and the United States.

About International Space Station:

- A space station is essentially a **large spacecraft** which remains in **low-earth orbit** for extended periods of time.
- The International Space Station is the **only operational space laboratory** as of now.
- It is orbiting the earth in a trajectory that is **about 400 km above the land surface**.
- It is like a large laboratory in space, and allows astronauts to come aboard and stay for weeks or months to carry out experiments in microgravity.
- The ISS has been in **space since 1998**, and has been known for the exemplary cooperation between the five participating space agencies that run it: **NASA (United States), Roscosmos (Russia), JAXA (Japan), ESA (Europe), and CSA (Canada)**.
- It completes **one journey around the earth in about one and a half hours**. In one day, therefore, it **makes about 16 trips around the world**.
- At any given time, **there is a crew of six astronauts on board**. Right now, seven astronauts, four from the United States, two from Russia (it prefers to call them cosmonauts) and one from Germany, are at ISS.
- The facility is used for carrying out a **variety of zero-gravity experiments, space exploratory studies, and technology development**.
- The ISS is **not the first space station to be built and operated**.
- Several smaller space stations have been used earlier, the most famous of which have been the Russian Mir space station that operated in **the 1980s, and the American Skylab**.



The complexity of cooperation:

- One of the most complex engineering projects ever attempted, the International Space Station is made up of **two primary segments, one managed by NASA and the other by Roscosmos**.
- The **U.S. segment**, as it's known, features four huge NASA-supplied solar wings, two on each end of a truss as long as a football field, complex cooling systems, computer networks, high-speed communications systems and 10 pressurized modules
 - The U.S. segment also features four docking ports that can accommodate Northrop Grumman Cygnus cargo ships, Japanese HTV freighters, SpaceX Dragon crew and cargo ships and Boeing's Starliner crew ferry craft.
- The back section of the station, made up of six pressurized compartments, is operated by **Roscosmos**. Four Russian docking ports are currently used by Progress cargo ships and Soyuz crew ferry vehicles.
- One of those, known as **Zarya, connects the U.S. and Russian segments**.
 - It was paid for by NASA but is operated by Russia.
- **Russia provides the propellant and thrusters** needed to keep the outpost in orbit while **NASA** provides most of the station's electrical power, satellite communications and day-to-day stability provided by four massive gyroscopes.

Section: D

(QUICK BYTES)

CURRENT AFFAIRS

COVID-19: AFTER 2.5 YEARS, MICRONESIA IN THE PACIFIC RECORDS ITS FIRST OUTBREAK

◎ CONTEXT:

The Federated States of Micronesia, a small island country in the Pacific is one of the latest places on Earth to experience an outbreak of Covid-19, after two and a half years of successfully protecting itself from the virus.

Federated States of Micronesia:

- A small island country in the Pacific Ocean with a population of just over 0.1 million.
- These are Atoll islands spread across the Caroline Islands in the Pacific Ocean.
- Federated States of Micronesia (FSM) consists of four island states, Yap, Chuuk, Kosrae and Pohnpei (where the capital Palikir is located), all in the Caroline Islands.
 - Also known as the Carolines, it is a scattered archipelago of small islands that are divided between Micronesia and the Republic of Palau.
- FSM is composed of **607 islands** and islets with a total land area of **702 square km**.
 - While this area is rather small, the islands stretch across an estimated 2,900 sq km of sea, giving the nation the **14th largest Exclusive Economic Zone (EEZ)** in the world.



- EEZs grant countries special right over marine resources up to 370 km from their coasts.
- The Federated States of Micronesia shares its sea borders with other small island nations and territories in the Micronesia region like Guam, the Republic of Marshall Islands, Palau, Kiribati, and the Mariana Islands.
- Its larger neighbouring states — separated by large swathes of the Pacific Ocean — include the Philippines in the west, Hawaii in the east, Papua New Guinea and Australia to the south, Japan to the north.

'JOHAR' GREETING USED BY PRESIDENT DROUPADI MURMU

◎ **CONTEXT:** The 15th President of India, Droupadi Murmu, assumed office with a 'Johar' greeting to the country.

About Johar:

- 'Johar', which essentially means 'salutation and welcome'.
- It is used within the tribal communities of Jharkhand, and in parts of Chhattisgarh and Odisha.
- According to several tribal leaders from Jharkhand, the word 'Johar' also means 'paying respect'.
- Tribal communities are nature worshippers and follow Sarna religion code, although it is not an official religion.
- "Juhar" is also one of the rituals of Nuakhai, an agricultural festival celebrated to welcome the new crop.
 - It is a combination of two words - 'nua' means 'new' and 'khai' means 'to eat'.

The tribal communities that use the word 'Johar' for greeting:

- There are 32 tribal communities in Jharkhand who speak different dialects. Almost all, including tribal Christians, use the word 'Johar' along with some other words for salutation.
- Johar, is predominantly used by Santhali, Munda and Ho communities that share some similarities.
- People belonging to the Oraon community use the word 'Jai Dharam', apart from Johar, as a salutation.

Form of 'Johar' salutation:

■ Doboh Johar:

- One of it is 'Doboh Johar', which is used between people where one among them has a higher standing.
- In 'Doboh Johar' there is a ritual where the person with a tumbler full of water bows in front of the person of higher standing.
- The person who bows will touch the earth and in return the other person will wash his/her hand (using water in the tumbler) and let the water drop on the earth.
- The entire exercise means that the hospitality being shown has been accepted.

■ Choh Johar

- Choh Johar is a kind of greeting shown by the elders towards younger ones.
- Choh Johar is different for men and women.
- When a woman performs Choh Johar, she touches chin of the kid with both her hands and then pull it towards itself with the sound of kiss.
 - ▶ This gesture shows that she is taking away all the miseries of the kid.
- When a men does Choh Johar he brings his right hand over his younger ones head and then take it back to its own head.
 - ▶ This is a way of taking away all his sorrows.

■ Bala Johar

- Bala Johar is a special type of Johar (greeting) done by parents and relatives of bride and bridegroom.
- Style of doing Bala Johar by men is different from that of women.
- When it is done by men they stand facing each other holding each other's hand.
 - ▶ Right hand is held by left and vice versa.
 - ▶ Then they gently collide their chests five times in different angles.
- When it is done by women's they bend a little and hold each other's hand and gently collide their heads five times.
 - ▶ This Johar is done when the relatives of bride and bridegroom meets.

WHAT IS HETEROPESSIMISM, AND ARE YOU SUFFERING FROM IT?

◎ CONTEXT:

Recently, an example of heteropessimism is seen when a men trends by #MarriageStrike on Twitter, as the Delhi HC was hearing a plea to criminalise marital rape.

◎ ABOUT

- The term was coined in **2019** by American gender theorist **Asa Seresin**.
- Heteropessimism can be defined as public declarations of dissatisfaction with heterosexual relationships, by people who continue to be in those relationships.
- Heteropessimism consists of **performative disaffiliations** with heterosexuality, usually expressed in the form of **regret, embarrassment, or hopelessness about straight experience**.
- These disaffiliations are "**performative**" does not mean that they are insincere but rather that they are rarely accompanied by the actual abandonment of heterosexuality.

What causes heteropessimism?

- The realisation for heterosexual people that **Marriage** has for gain or loss.
- Here, the disillusionment works at two levels – the simple realisation that the first flush of romance does not last, and the deeper, structural problems of heterosexual relationships, which stem from patriarchy, **gender inequality**, an unfair burden of housework on women, and the pressure of '**provider and protector**' roles on men.

			Assault on women, children (2019)			
	Population (in lakh)	Rate of Crime	State	Incidents/ cases	No of victims	Crime rate/ lakh population
Rajasthan	122.2	55.6	Madhya Pradesh	619	620	5.5
Madhya Pradesh	113.4	46.7	Rajasthan	531	532	4.3
Bihar	165.7	39.5	Bihar	4	4	0
Gujarat	40.7	34.8	Gujarat	82	84	2.0
Uttar Pradesh	413.6	28.6	Uttar Pradesh	776	796	1.9

Source: National Crime Records Bureau Report, Crime In India 2019

The factors associated with heteropessimism

- Heteropessimism has been caused and shaped by larger **social, economic and political currents**.
- **Modern self-dependence concept for Women:** Traditionally, marriage was between the "provider" and the "homemaker". While more women are economically independent, our social conditioning remains rooted in these traditional roles.
- **Over-expectations for Females:** Girls are taught to believe that they will have a life-partner like a prince, which generates over-expectation **of girls from male counterparts**.

Does it influence the patriarchal mind-set?

- The answer to it is **'YES' to some extent**. Litigation on sexual crimes draws from social and caste-based perceptions on what constitutes rape and these are, in turn, based on who is presumed to have access to women's bodies.
- It is the belief that can be the cause of several social issues by Women like marital Rape and Sexual Assault after marriage or while being in a relationship.

NEERAJ CHOPRA AND WORLD ATHLETICS SILVER

◎ **CONTEXT:** Recently, Neeraj Chopra won a historic silver medal at the World Athletics Championships in Oregon, USA.

◎ **ABOUT:** Neeraj Chopra became the first Indian ever to win a silver medal at the World Athletics Championships, as well as only the second Indian medallist at the elite competition after long jump legend Anju Bobby George.

Professional Career:

- In 2013 Neeraj Chopra participated in his first international athletics event in Ukraine as World Youth championships.
- In 2014 he participated in youth Olympics qualification where he won a silver medal by recording a throw of 70m.
- In 2017 he participated in the Asian Athletic Championship where he achieved a gold medal.
- In the 2018, Commonwealth Games he won gold medal and became the first Indian player to win in Commonwealth games.

- In 2021, Neeraj Chopra has won gold at the Tokyo Olympics with a throw of 87.58m in his second attempt, becoming only the second Indian after shooter Abhinav Bindra (2008) to win an individual gold medal in the Olympics.
- The javelin thrower from Haryana also became only the second Indian after Norman Pritchard (1900) and the first post-independence to win an Olympic medal in athletics.

THE REPECHAGE FORMAT INTRODUCED BY WORLD ATHLETICS FOR THE 2024 PARIS OLYMPICS

◎ **CONTEXT:** World Athletics on Monday announced that they were set to introduce a repechage round in individual track events from 200m to 1500m races for the 2024 Paris Olympic Games.

- ◎ **ABOUT:**
- The World Athletics Council ratified the decision and also made the repechage applicable for hurdles events.
 - In the new repechage format, athletes who do not qualify by place in round one heats will have a second chance to qualify for the semi-finals by participating in repechage heats.
 - The athletics events at the Olympics will now consist of a **round one, repechage round, semi-finals and finals**.

What is repechage?

- Repechage essentially means a **second chance**.
- If a sport has repechage, it means that the athlete will get one more chance to compete and move into further rounds and possibly the final, even if they have lost once in the initial rounds.
- **In athletics, the repechage round would mean that every individual event track athlete from 200m to 1500m would race twice at the Olympics.**
- According to World Athletics, the events at the Olympics would now consist of a round one, repechage round, semi-finals and finals. Repechage for the 100m race was not included because the event already has preliminary heats in place.

What are the current rules?

- According to the current rules, athletes qualify when they **place at the top of their heats or post the fastest times in their heat**.

The need for repechage in athletics:

- As it happens, sometimes the **best athletes are not able to reach the final**.
- In some cases, the **sheer quality differential in certain heats** would mean that an athlete could have qualified for further rounds, had they been among other athletes in their category, in a different heat.
- In some cases, rankings or conditions can all take their toll and derail the qualification process of an athlete.
- The **repechage gives a second chance to those athletes. It allows the best quality on display at the final event**.

Which event is it a part of currently?

- Repechage is currently part of **wrestling and taekwondo** at the Olympics in a similar fashion.

- For both events, if a participant loses in the first round and their opponent reaches the final, then that participant would need to wrestle against the finalists' second-round opponent and move up to the bronze medal position.
- The bronze medal is the upper limit of the repechage in wrestling with finalists from both brackets facing each other for a gold medal match.
- Other sports like **rowing and track cycling** also have repechage rounds.

68TH NATIONAL FILM AWARDS

- ◎ **CONTEXT:** Recently, the 68th National Film Awards has been given by the President.
- ◎ **BACKGROUND**
- In 1954, the **National Film Awards** were presented for the first time.
 - The award is given for '**Outstanding contribution to the growth and development of Indian cinema**'.
 - It is the **country's top cinematic honour**.
- ◎ **ABOUT**
- These are among the most prestigious honours bestowed upon persons who have contributed to the **advancement of cinematic art**.
 - These prizes have been given out **annually** since 1954.
 - **Organised by:** The **Directorate of Film Festivals** took over the responsibility of organizing these awards in 1973.
 - The winners are chosen by a **national selection committee** appointed by the government.
 - The awards are presented by India's President, and the winning films are shown to the public.
 - The awards are presented not just to the finest films from India's Bollywood industry, but also to the best films from **other countries**.

List of Awards 2022

- **Best Feature Film:** Soorai Pottru
- **Best Feature Film in Tamil-** Sivaranjiniyum Innum Sila Pengalum
- **Best Choreography:** The award goes to Telugu film – **Natyam**
- **Best Haryanvi Film-** Dada Lakhmi
- **Best Actor:** Ajay Devgan for Tanaji

Categorization of Awards

The following are the **five key categories** for which this award is given:

Name of Awards	Categories
Swarna Kamal Or the Golden Lotus Award (five categories)	<ul style="list-style-type: none"> • Best Feature Film • Best Direction • Best Children's Film • Best Popular film providing wholesome entertainment • Indira Gandhi Award for Best Debutant Director

Rajat Kamal or Silver Lotus Award	There are 25 major categories, such as best feature film, and so on.
Best Feature film in the languages specified in Schedule VIII of the Constitution.	There are 12 different categories, including Hindi, Bengali, and others.
Best Feature film specified in the Languages other than those specified in Schedule VIII of the Constitution	English, Bhojpuri, Kokborok, Monpa, and Tulu among the five categories.

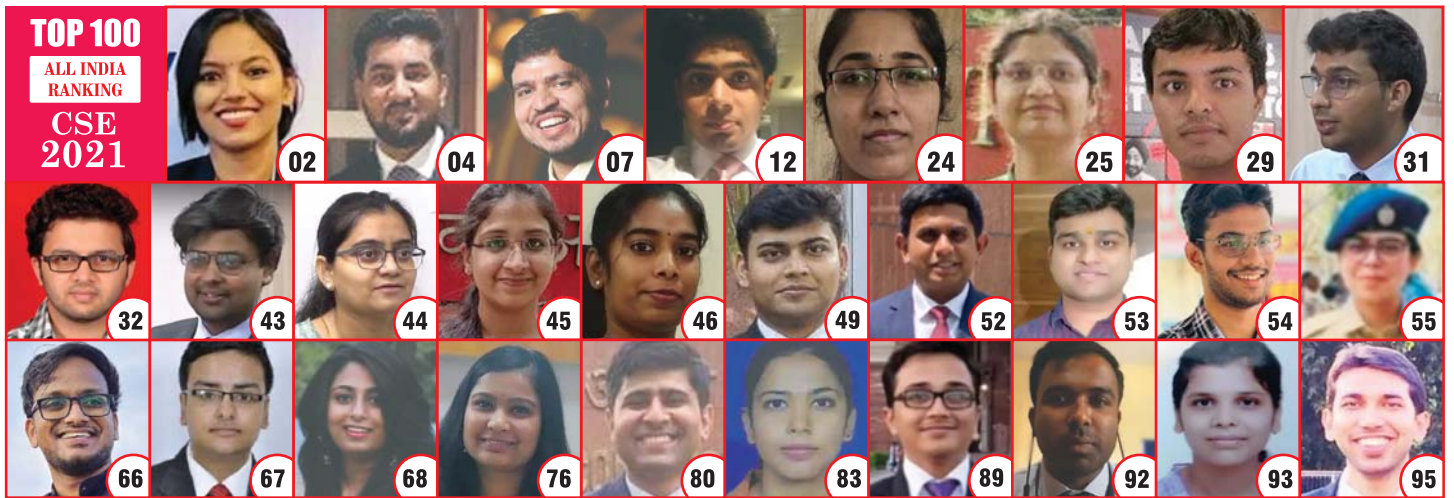
- The famous **Dada saheb Phalke Lifetime Achievement Award** is also presented at the National Film Awards to people who have dedicated their **whole career** to the advancement of Indian cinema.

Other Awards related to Films

- Bharat Ratna
- Padma Awards
- Dadasaheb Phalke awards
- Sahitya Natak academy

Government interventions

National Film Heritage Mission: This mission includes preservation of Film and Non-film material including but not limited to Celluloid, Stills, glass slides, posters, lobby cards, scripts and song books.



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