

CURRENT AFFAIRS

Month of
FEBRUARY-2020



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CURRENT AFFAIRS ANALYST

PART-1 (FEBRUARY, 2020)

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SECTION: A
(MAINS)
CURRENT AFFAIRS

INDIA BANS IMPORT OF REFINED PALM OIL

CONTEXT

- India has banned the imports of refined palm oil, a government notification said, as New Delhi tries to curb imports from Malaysia following criticism from Kuala Lumpur on India's actions in the Kashmir region and its new citizenship law-- The Citizenship (Amendment) Act, 2019.

◎ BACKGROUND

- India imports most of its refined palm oil from Malaysia and crude palm oil from Indonesia.
- Indonesia and Malaysia are the top two producers of palm oil, while India is the biggest importer of palm oil.
- Indonesia and Malaysia make up over 85% of global supply but there are 42 other countries that also produce palm oil.
- India has cut import duty on crude palm oil (CPO) and refined, bleached and deodorised (RBD) palm oil, and also moved RBD oil from the "free" to the "restricted" list of imports.
- While curbing oil imports was been under discussion since the Budget presented in 2019.
- Malaysia has also been sheltering since 2017 the Islamic preacher Zakir Naik, who is wanted by India on charges of money laundering, hate speech, and links to terror.

What Is Palm Oil?

- It's an edible vegetable oil that comes from the fruit of oil palm trees; the scientific name is *Elaeis guineensis*.
- Two types of oil can be produced; crude palm oil and palm kernel oil.
- Palm oil is in nearly everything – it's in close to 50% of the packaged products we find in the market.

- It's also odourless and colourless so doesn't alter the look or smell of food products.

What Is The Problem With Palm Oil?

- Palm oil has been and continues to be a major driver of deforestation of some of the world's most biodiverse forests, destroying the habitat of already endangered species like the Orangutan, pygmy elephant and Sumatran rhino.
- This forest loss coupled with conversion of carbon rich peat soils are throwing out millions of tonnes of greenhouse gases into the atmosphere and contributing to climate change.
- There also remains some exploitation of workers and child labour.
- These are serious issues that the whole palm oil sector needs to step up to address because it doesn't have to be this way.

Why Don't We Just Switch To An Alternative Vegetable Oil?

- Palm oil is an incredibly efficient crop, producing more oil per land area than any other equivalent vegetable oil crop.
- Globally, palm oil supplies 35% of the world's vegetable oil demand on just 10% of the land.
- To get the same amount of alternative oils like soybean or coconut oil you would need anything between 4 and 10 times more land, which would just shift the problem to other parts of the world and threaten other habitats and species.
- Furthermore, palm oil is an important crop for the GDP of emerging economies and there are millions of smallholder farmers who depend on producing palm oil for their livelihood.

Has India banned import of Malaysian palm oil because of political reasons?

- The import of RBD palm oil has been restricted, not banned and this is from all countries, not just Malaysia.
- Also, CPO can still be imported freely.
- Under the trade classification system that India follows, except for goods that can be imported only by state trading enterprises (such as Food Corporation of India), all goods whose import is not restricted or prohibited are traded freely.

◎ ANALYSIS

Why is Palm Oil everywhere? What makes it unique than other oils?

- Palm oil is extremely versatile oil that has many different properties and functions which makes it so useful and so widely used.
 - It is semi-solid at room temperature so can keep spreads spreadable
 - It is resistant to oxidation and so can give products a longer shelf-life
 - It's stable at high temperatures and so helps to give fried products a crispy and crunchy texture

- œ Normally, a special licence is required to import a restricted good.
- œ The government has neither specified what the restrictions entail nor issued any licences.

Why does India need so much palm oil?

- œ It is the cheapest edible oil available naturally.
- œ It stays relatively stable at high temperatures, and is therefore suitable for reuse and deep frying.
- œ It is the main ingredient in Vanaspati (hydrogenated vegetable oil).
- œ However, palm oil is not used in Indian homes. That, and the fact that CPO continues to be imported, makes it unlikely that the decision to restrict refined palm oil imports will impact food inflation immediately.

Will restricting imports of RBD palm oil help farmers?

- œ Restricting refined oil imports will not help farmers directly, as they are not involved in the process of refining.
- œ However, the restrictions have caused refined palm oil prices to increase.
- œ If prices continue to hold, farmers will get a better realisation for their crop.
- œ But the timeframe over which the changes in import policy will have an effect on domestic crop realisation is fairly long, given that palm trees take over four years to provide a yield.
- œ Also, if the demand is met entirely by importing and refining CPO, farmers will be left out of the picture.

How will Malaysia be affected?

- œ India has been Malaysia's top import market since 2014, according to industry data.
- œ Last year, India bought 4.4 million tonnes of palm oil from Malaysia, accounting for 24% of all Malaysian palm oil exports.
- œ The second biggest buyer of Malaysian palm oil, China, bought just 2.4 million tonnes last year, while the third largest buyer was Pakistan with 1.08 million tonnes, according to data from the Malaysian Palm Oil Council.
- œ Indonesia, the world's biggest producer of palm oil, boasts lower production costs and has a bigger share of the market in many palm oil-consuming countries. It has also historically offered palm oil at cheaper prices than Malaysia, although recently Malaysian export prices have slumped below Indonesian rates as Indian buyers retreated from the market.

Major Impacts due to Palm oil industry

- œ High scale deforestation to make room for palm plantations.
- œ Orangutan population has decreased by 50 percent as the result of habitat loss from forest clearing for palm plantations.
- œ There are only 6,300 Sumatran orangutans left. A major factor in these deaths being forest clearing for palm production.
- œ Clearing one hectare (about two square acres) of peat forest can release 6,000 tons of carbon dioxide.
- œ The palm oil industry is responsible for about 5,000 land and human rights conflicts.
- œ Only 35 percent of palm growers that are members of the Roundtable on Sustainable Palm Oil are actually certified by the RSPO. Meaning the other 65 percent pay to be "members," but have taken no action to adhere to the RSPO guidelines in their growing practices.
- œ Palm oil ranks among the U.S. Department of Labor's top four worst industries for forced and child labor.

Major Palm Oil producing countries

œ Indonesia

- > Indonesia is by far the largest producer of palm oil, and this is supported by the ever-rising large palm growing areas in the country and export figures.
- > It is estimated that by 2020, the palm oil project in Indonesia will cover approximately 12 million hectares.
- > Indonesia was producing 35% of the world's palm oil in 2012, and India and China are the importers of Indonesia's palm oil.

œ Malaysia

- > Currently, Malaysia is second in palm oil production after Indonesia with its overall production accounting for 39% of the global production, while its palm oil exports account for around 44%.
- > Malaysia possesses large plantations, and as of 2016, the country's total palm oil production amounted to 2.1 million metric tons.
- > Production of Palm oil in the country is categorized into three; private, smallholder, and joint venture.
- > However, the economic activity poses a serious environmental threat in the country by polluting water sources, leading to the loss of biodiversity, and deforestation.
- > Malaysia is the leading exporter of the palm oil with its primary importing countries being the

European Union, Pakistan, China, the US, and India.

appropriate knowledge in managing palm oil, lack of finances, low quality of seedlings, and low rainfall.

œ **Thailand**

- > Thailand is the third top producer of palm oil in the world, and the majority of the producers in the country are the small-scale farmers, who are responsible for 76% of the country's output.
- > The province of Surat Thani had the highest production of palm oil accounting for 26.59% of all the country's production.
- > Most of the palm oil produced in Thailand is used locally, and a small portion is for export.
- > Some of the challenges facing the palm oil production in the country include lack of

Top Palm Oil Producing Countries in the World		
Rank	Country	Production (in metric tons)
1.	Indonesia	36,000,000
2.	Malaysia	21,000,000
3.	Thailand	2,200,000
4.	Colombia	1,320,000
5.	Nigeria	970,000
6.	World	58,800,000

RAMSAR SITES IN INDIA

CONTEXT

- In the latest development, India has added 10 more wetlands to sites protected by the Ramsar Convention. With this, a total of 37 sites in the country have been recognised under the international treaty.

● ANALYSIS:

About the Convention:

- œ The Ramsar Convention is an international treaty for the conservation and wise use of wetlands.
- œ It is named after the Iranian city of Ramsar, on the Caspian Sea, where the treaty was signed on 2nd February 1971.
- œ Known officially as 'the Convention on Wetlands of International Importance especially as Waterfowl Habitat' (or, more recently, just 'the Convention on Wetlands'), it came into force in 1975.
- œ The aim of the Ramsar list is to develop and maintain an international network of wetlands which are important for the conservation of global biological diversity and for sustaining human life through the maintenance of their ecosystem components, processes and benefits.
- œ The convention entered into force in India on 1 February 1982.

World Wetlands Day

- World Wetlands Day is celebrated every year on 2 February. The day marks the date of the adoption of the Convention on Wetlands in the Iranian city of Ramsar on the shores of the Caspian Sea in 1971.
- The 2020 theme for World Wetlands Day 'Wetlands and Biodiversity' is an opportunity to

highlight wetland biodiversity, its status, why it matters and to promote actions to reverse its loss.

What is Montreux Record?

- œ Montreux Record is a register of wetland sites on the Ramsar list, which are facing immediate challenges.
- œ The listed sites are threatened by changes that affect their ecosystem components, processes, benefits and services which characterise the said wetland at a given point in time.
- œ India's two wetlands find a place in the Montreux Record. They are:
 - > Keoladeo National Park, in Rajasthan was designated a Ramsar site in 1981 and listed in the Montreux Record in 1990.
 - > Loktak Lake in Manipur, was declared a Ramsar site in 1990, and indexed in the Montreux Record in 1993.

The new list:

- œ The 10 new ones are Nandur Madhameshwar, a first for Maharashtra; Keshopur-Miani, Beas Conservation Reserve and Nangal in Punjab; and Nawabganj, Parvati Agra, Saman, Samaspur, Sandi and Sarsai Nawar in Uttar Pradesh.
- œ The other Ramsar sites are in Rajasthan, Kerala, Odisha, Madhya Pradesh, Himachal Pradesh, Assam, West Bengal, Jammu and Kashmir, Andhra Pradesh, Manipur, Gujarat, Tamil Nadu and Tripura as given below:

S.No.	Name of Sites	State	S.No.	Name of Sites	State
1.	Asthamudi Wetland	Kerala	2.	Bhoj Wetlands	Madhya Pradesh
3.	Bhitarkanika Mangroves	Orissa	4.	Chandertal Wetland	Himachal Pradesh
5.	Chilka Lake	Orissa	6.	Deepor Beel	Assam
7.	East Calcutta Wetlands	West Bengal	8.	Hokera Wetland	Jammu and Kashmir
9.	Harike Lake	Punjab	10.	Kanjli Lake	Punjab
11.	Keoladeo Ghana NP	Rajasthan	12.	Kolleru Lake	Andhra Pradesh

13.	Loktak Lake	Manipur	14.	Nalsarovar Bird Sanctuary	Gujarat
15.	Point Calimere	Tamil Nadu	16.	Pong Dam Lake	Himachal Pradesh
17.	Renuka Wetland	Himachal Pradesh	18.	Ropar Lake	Punjab
19.	Rudrasagar Lake	Tripura	20.	Sambhar Lake	Rajasthan
21.	Sasthamkotta Lake	Kerala	22.	Surinsar-Mansar Lakes	Jammu and Kashmir
23.	Tsomoriri Lake	Jammu and Kashmir	24.	Vembanad Kol Wetland	Kerala
25.	Wular Lake	Jammu & Kashmir	26.	Sunderbans Wetland	West Bengal
27.	Upper Ganga River (Brijghat to Narora Stretch)	Uttar Pradesh			

- œ With this, a total of 37 sites in the country have been recognised under the international treaty.
- œ Wetlands declared as Ramsar sites are protected under strict guidelines.

The perks of being declared as 'Ramsar site':

Being declared as 'Ramsar Site' is beneficial for various reasons. The title will focus on:

- œ conservation and wise use of the wetland
- œ receive national and international cooperation for conservation and management
- œ receive Central funding
- œ boost in tourism
- œ employment generation for locals and bring economic benefits for surrounding areas due to increased tourism
- œ awareness creation for the conservation of other wetlands in the state

What are Wetlands?

- œ According to the Convention, wetlands include almost any habitat where water is key to the environment and its wildlife.
- œ Wetlands include swamps, marshes, billabongs, lakes, salt marshes, mudflats, mangroves, coral reefs, fens, peat bogs, or bodies of water - whether natural or artificial, permanent or temporary.
- œ Water within these areas can be static or flowing; fresh, brackish or saline; and can include inland rivers and coastal or marine water to a depth of six metres at low tide. There are even underground wetlands.
- œ Anywhere from estuaries, lakes and rivers to underground aquifers, mangroves, coral reefs and rice paddies count.

The spread of Wetlands in India:

- Indian Space Research Organisation (ISRO) has carried out a National Wetland Inventory and Assessment using Indian remote sensing satellites during 2006-2011 and subsequently brought out **national- and state-level wetland inventory atlases**.
- A total of 757,060 wetlands have been mapped in the country. The total wetland area estimated is 15.26 million hectares, which is around 4.63% of the geographical area of the country.

Significance of Wetlands:

- œ **Balancing ecosystem:** Wetlands provide a wide range of important resources and ecosystem benefits such as food, water, fibre, groundwater recharging, water purification, flood moderation, erosion control and climate regulation. They are also one of the major supplies of freshwater.
- œ **Biodiversity hotspot:** The wetlands support rich biodiversity and help stabilise water supplies, cleanse polluted waters, protect shorelines, and recharge groundwater aquifers.
- œ **Food basket:** Wetlands play an integral role in the ecology of the watershed. The combination of shallow water, high levels of nutrients and primary productivity are ideal for the development of organisms that form the base of the food web and feed many species of fish, amphibians, shellfish and insects.
- œ **A safe habitat:** They are multifunctional habitats—they nurture a great diversity of life. They are also important as feeding and breeding grounds for migratory birds.
- œ **Climate protection:** Wetlands store carbon within their plant communities and soil instead of releasing it to the atmosphere as carbon dioxide. Thus wetlands help to moderate global climate conditions.

- œ **Flood protection:** Wetlands function as natural sponges that trap and slowly release surface water, rain, snowmelt, groundwater and floodwaters, which lowers flood heights and reduces erosion.

Challenges:

- œ **Exploitative developmental activities:** Wetlands in India are under threat due to urbanisation and land-use changes, municipal and industrial pollution and global climate change, which is an important determinant of loss and change in wetland ecosystems.
- œ Various factors such as infilling for agriculture and construction, pollution, overexploitation of resources, invasive species and climate change threaten their existence.
- œ **Lack of protection & recognition:** In India, forests have been historically protected since colonial times, while wetlands have been ignored from long. Over the years people who were traditionally involved in managing wetland sare no more there. Even in the way, wetland systems were considered by the government authorities has changed. All this together has impacted the wetlands and their future.
- œ **Disappearing at a fast rate:** It is estimated that wetlands are vanishing three times faster than forests and their rate of disappearance is increasing. For instance, 87% of wetlands have been lost since the 1700s and 35% have disappeared since the 1970s.

Wetland conservation rules in India:

- œ Recently, the Ministry of Environment has notified the new **Wetland Conservation Rules** that prohibit setting up or expansion of industries, and disposal of construction and demolition waste within the wetlands.
- œ The new Rules also prohibit the conversion for non-wetland uses including encroachment of any kind, besides setting up of any industry and expansion of existing industries within the notified wetlands.
- œ It prohibited:
 - > manufacture, handling, storage or disposal of construction and demolition waste, covered under **the Construction and Demolition Waste Management Rules, 2016**
 - > hazardous substances, electronic waste, covered under **the E-Waste (Management) Rules, 2016**
 - > solid waste dumping and discharge of untreated wastes and effluent from industries, cities, towns, villages and other human settlements, within such bodies.
- œ No doubt, India has ignored its wetlands for long. But there is still some hope as in recent times, there has been a lot of focus on restoring their health. Though not all may get saved there is still a chance for some.

RESOLVING THE BODO ISSUE

CONTEXT

- The Ministry of Home Affairs (MHA), the Assam government and the Bodo groups signed an agreement to redraw and rename the Bodoland Territorial Area District (BTAD) in Assam, currently spread over four districts of Kokrajhar, Chirang, Baksa and Udalguri.

● BACKGROUND

- œ The demand for a separate state for the Bodos has been going on in Assam for close to five decades, with several Bodo overground and militant groups having raised it, leading to recurring agitations, protests and violence.
- œ This was the third Bodo accord to be signed in last 27 years when the violent movement for a separate Bodoland state claimed hundreds of lives, destruction of public and private properties.
 - > **First Accord:** The first Bodo accord was signed with the All Bodo Students Union in 1993, leading to creation of a Bodoland Autonomous Council with limited political powers.
 - > **Second Accord:** In 2003, the second Bodo accord was signed with the militant group Bodo Liberation Tigers, leading to formation of a Bodoland Territorial Council (BTC) with four districts of Assam- Kokrajhar, Chirang, Baksa and Udalguri-called Bodoland Territorial Area District (BTAD).
- œ In the 1990s more than 20,000 Muslims were displaced in Kokrajhar and Bongaigaon districts.
- œ In 1998, a bloody clash between Adivasi and Bodos led to the killings of 50 people and around 500 homes were burnt down.
- œ In 2014, around 80 people were killed during the conflict between Bodo forces and Adivasi people.

● ANALYSIS:

Key-takeaways from the Agreement:

- œ With this agreement, over 1500 armed cadres will abjure violence and join the mainstream.
- œ **Funding:** A Special Development Package Rs. 1500 crores over three years will be given by the Union Government to undertake specific projects for the development of Bodo areas.
- œ **Commission:** It proposes to set up a commission under Section 14 of the Sixth Schedule to the Constitution of India, which will recommend the inclusion or exclusion of tribal population residing in villages adjoining BTAD areas.
 - > In this commission, besides State government

there will be representatives from ABSU and BTC.

- > It will submit its recommendation within six months from the date of notification.

œ **Bodo-Kachari Welfare Council:** The Government of Assam will establish a Bodo-Kachari Welfare Council as per existing procedure.

œ **Associate official language:** The Assam

government will also notify Bodo language as an associate official language in the state and will set up a separate directorate for Bodo medium schools.

- > Although Bodo was included in the Eighth Schedule of the Constitution in 2004, it is yet to receive an official language status.
- > Bodo with Devnagri script will now become Associate official language for the entire state of Assam.

œ As per the agreement, villages dominated by Bodos that were presently outside the BTAD would be included and those with non-Bodo population would be excluded.

œ **Tribal status:** Bodos living in the hills would be conferred a Scheduled Hill Tribe status.

œ **Structural changes:** The name of BTAD will be changed to **Bodoland Territorial Region (BTR)** and it will have more executive, administrative, legislative and financial powers.

- > However, the "memorandum of settlement" does not have any provisions for a separate state.
- > Instead, it seeks to "augment area and powers" of the existing Bodoland Territorial Council and "streamline its functioning".
- > The existing structure of the Bodoland Territorial Council (BTC) will be strengthened with more powers and its seats will be expanded from 40 to 60.

œ **Central University:** A Central university in the name of Upendranth Brahma will be established within Bodoland area.

œ **Institutions:** National Sports University; Institute of Livelihood management, Regional medical institute; tribal university, rural development centre, veterinary college, music and fine art college and

many more centres will be set up in the region to ensure progress.

Signatories to the Agreement:

- œ The Bodoland Territorial Council, All Bodo Students Union (ABSU), various factions of National Democratic Front of Bodoland (NDFB)- Gobindo Basumatary faction, Dhirendra Bodo faction, Ranjan Daymari faction and Saoraigwra faction and the United Bodo Peoples Organization (UBPO) are party to the agreement with the Centre and the Assam.

Who are Bodos?

- œ The Bodo people are the largest tribe of Assam settled in the northern part of the Brahmaputra river valley.
- œ It is estimated that the Bodo tribe comprise 28 percent of Assam's population.
- œ Bodos are an ethnolinguistic community spread across north-east India but are concentrated in Assam.
- œ They speak the bodo language, a mixture of a dialect of Tibetan and Burmese, recognised as one of the twenty-two scheduled languages in the constitution of India.

What is the BTC?

- œ The Bodoland Territorial Council (BTC) is an autonomous body under the Sixth Schedule of the Constitution.
- œ BTC, currently has control over 30 subjects such as education, forests, horticulture but no jurisdiction over the police, revenue and general administration departments, which are controlled by the Assam government.
- œ The area under the jurisdiction of BTC, formed under the 2003 Accord, was called the **Bodo Territorial Autonomous District (BTAD)**.
- œ As per the accord, the BTAD was renamed Bodoland Territorial Region (BTR). BTAD comprises **Kokrajhar, Chirang, Baksa and Udalguri** districts, accounting for 11% of Assam's area and 10% of its population.

Sixth schedule of the Constitution:

- œ The Sixth Schedule of the Constitution of India (Articles 244(2) and 275(1)) provides for decentralized self-governance and dispute resolution through local customary laws in parts of the North East which are mainly tribal areas.
- œ It contains provisions as to the Administration of Tribal Areas in the States of Assam, Meghalaya, Tripura and Mizoram.

	Assam	Sixth Schedule Tripura	Mizoram	Meghalaya
Area Covered	(Tribal Area) North Cachar Hills District & Karbi Anglong District	(Tribal Area) Bodoland Territorial District	(Tribal Area) Chakma District, Mara District & Lai District	(Tribal Area) Khasi Hills District, Jaintia Hills District & Garo Hills District
Jurisdiction	(Autonomous) District Council & (Autonomous) Regional Council	(Autonomous) District Council & (Autonomous) Regional Council		

Significance of the Agreement:

- œ The objective of the agreement is to increase the scope and powers of the BTC and to streamline its functioning; resolve issues related to Bodo people residing outside Bodoland Territorial Area Districts (BTAD); promote and protect Bodo's social, cultural, linguistic and ethnic identities; providing legislative protection for the land rights of tribals; ensure quick development of tribal areas and rehabilitate members of NDFB factions.
- œ It is expected to usher in a new dawn of peace, harmony and togetherness and that those

associated with armed resistance groups would now enter the mainstream and contribute to the nation's progress.

- œ The accord will lead to transformative results for Bodos as it successfully brings together leading stakeholders under one framework and would help Bodo people get access to development-oriented initiatives.
- œ This agreement will facilitate all-round development of the Bodo areas, their language and culture will be protected without compromising the territorial integrity of Assam.

INDIA BRAZIL RELATIONS

CONTEXT

- Jair Bolsonaro, president of Federative Republic of Brazil, visited to India as Indian Prime Minister Narendra Modi's chief guest for the 71st Republic Day.

◎ BACKGROUND:

- œ **Brazilian President** was on a state visit to India during January 24-27, accompanied by ministers, members of parliament, and a large business delegation.
- œ This is the **third time a Brazilian president will be chief guest** at the Republic Day parade.
- œ This is also **Bolsonaro's first visit** to India.
- œ The last time a Brazilian head of state attended Republic Day was in **2004**.
- œ As part of this visit, **India-Brazil Business Forum** was held in New Delhi.
- œ Brazil is the **largest country in South America**. It has a population of 210 million and a \$1.8 trillion economy.

◎ ANALYSIS:

India-Brazil History

- œ **Portugal's Pedro Alvares** was on his way to India and was blown off course, only to discover Brazil in 1500.
- œ He made Brazil a **stop-over to finally reach Goa**.
- œ This led to the **Portuguese association** between India and Brazil and exchange of varied agricultural crops and cattle in the colonial times.
- œ **Brazil opposed India's move in 1961 to liberate Goa** from Portuguese rule.
- œ Ever since then the relationship between the two nations has been lukewarm.
- œ **Trade relationship and diplomacy** eventually developed between the two.
- œ **Diplomatic relations** were established between India and Brazil in **1948**.
- œ In **1967**, both countries condemned the idea of creating **Non-Proliferation Treaty (NPT)**.

Plurilateral fora

- œ Today, both nations are members of plurilateral fora such as **BRICS, IBSA, G-20**, and are members of multilateral bodies such as the **United Nations**.
- œ In 2015, representatives of the five states of BRICS, launched their **New Development Bank (NDB)**.

This was outlined in the **Fortaleza declaration in 2014**.

- œ In 2003, **India, Brazil and South Africa set up IBSA**, an important forum for dialogue among the three emerging countries.
- œ BRICS and IBSA are multilateral groupings that provide these two with a **"soft balancing"** strategy that resents the dominant views of the West.
- œ Both have campaigned for a **UN Security Council permanent seat** for each other.
- œ Brazil played a crucial role in **India-Mercosur Preferential Trade Agreement (PTA)** that improved India's access to the large South American market.
- œ **CELAC**, has marked a new phase in international relations between **India and Latin America**.
- œ Ultimately both nations are considered as **emerging powers with great power aspirations**.

Foreign policy

- œ Like India, Brazil also intends to preserve **autonomy in its foreign policy**.
- œ The Brazilian foreign policy of **reciprocal multilateralism** is in concurrence with India's policy of **strategic autonomy**.

Differences between India and Brazil

- œ While **India** has a history dating back thousands of years, **anciently settled** and a cradle of civilization. **Brazil** on the other hand is a much **younger country**.
- œ The two countries share little in common ethnically or religiously.
- œ Other than in Goa, there is no common language: **Goan Portuguese**
- œ Even in sports, i.e., **Soccer and cricket**, they are very different.
- œ Earlier, **Brazil had approached the WTO against India** for extending support to Indian sugarcane growers.

Commonalities between India and Brazil

- œ Both countries are vigorous **democracies**.
- œ Political landscape is full of **many political parties**.

- œ The press in both countries is robust, free and quite feisty.
- œ **States are politically influential** and economically powerful, and commercial success often requires engagement at both the national and state levels.
- œ Both countries are **rich in human resources**.
- œ Both economies are driven by **expanding middle classes** clamouring for improved public services.
- œ Consumers in both are value-conscious, demanding durability and affordability.
- œ Both countries face **similar challenges in their development curve**.
- œ Both countries are multipolarism-oriented and want to give voice to the '**global south**'.

Dovetailing interests:

- œ Brazil — whose ties with neighbouring Argentina has deteriorated — looks to upgrade its trade partnership with India and tap its **rapidly growing market**.
- œ New Delhi on the other hand is keen to exploit possibilities in resource-rich Latin America. And given that India is energy hungry, it can tap the **oil resources of the region**.

Trade

- œ Brazil is one of the most important trading partners of India in the entire **LAC (Latin America and Caribbean) region**.
- œ Bilateral trade between India and Brazil is currently worth **\$8.2 billion**.
- œ **India to Brazil:** Indian exports to Brazil account for \$3.8 billion, which includes agro-chemicals, synthetic yarns, auto parts, nuclear reactors, boilers, pharmaceuticals and petroleum products.
- œ **Brazil to India:** Brazilian exports to India include crude oil, gold, vegetable oil, sugar, soya oil, and bulk mineral and ores.
- œ The actual commerce between the nations is minuscule. **Total trade value between the two nations has barely grown** since 2004; \$1.5 billion to \$8.2 billion.
- œ Meanwhile, Brazil's **trade with China has ballooned** from \$4 billion to over \$100 billion in the same period.
- œ There is a **lot of potential for trade** to grow between the two nations.
- œ India-Brazil has now set a **target of \$15 billion trade by 2022**.

Bilateral investment treaty

- œ **15 MoUs** were signed during the visit of the President of Brazil.

- œ MoUs of cooperation were signed on **investments, trade facilitation, social security, agriculture, defence and double taxation**.
- œ For benefit of India business and tourism between two countries, **visa free travel** was given to Indians.
- œ India and Brazil signed 15 agreements to cement cooperation in areas ranging from **energy and trade** and **investment to cyber security and information technology**.
- œ **Brazilian investments in India** are mainly in automobiles, IT, mining, energy and biofuel.
- œ **India has invested in Brazil's** IT, pharmaceutical, energy, agri-business, mining and engineering.
- œ The **Social Security Agreement (SSA)** signed between Brazil and India in 2017, will allow investments in each other's **pension funds**.

Defence

- œ Brazil and India signed a bilateral '**Defence Cooperation Agreement**' in **2003** that calls for cooperation in defence related matters, especially in the field of Research and Development, acquisition and logistic support.
- œ Under the framework of the agreement, a '**Joint Defence Committee (JDC)**' has been set-up that meets at regular interval.

Soft power

- œ The first classical Indian art form to come to Brazil was **Bharatanatyam; Odissi, Kathak and Kuchipudi** followed.
- œ India's services in wellness sector like **Yoga and Ayurveda** is expected to grow as Brazil has a strong community of Yoga and Ayurveda practitioners.
- œ Brazil has an **association of Ayurveda (ABRA)**, a non-profit association with offices in 9 states of Brazil and members all over Brazil.
- œ The **third International Congress on Ayurveda** was held from 12 to 15 March 2018 in Rio de Janeiro.

Animal husbandry

- œ **Animal husbandry** was another area that was identified for cooperation.
- œ There is **common genetic heritage in cattle** in India and Brazil.
- œ Both have agreed to **collaborate in assisted reproductive technology** that is expected to help increase dairy production in India.
- œ A **Centre of Excellence in Cattle Genomics** will be set up in India with Brazilian assistance.

Curbing terrorism

- œ Both countries identified **terrorism and climate change** as two such subjects where the share similar opinions.

Energy

- œ **India is one of the world's biggest oil importers**, and needs to diversify its energy needs from the Gulf.
- œ **Iraq remains its top supplier** but in recent times India has started importing more crude from the US (a 72% jump in first five months of 2019).
- œ The **instability in Gulf, US-Iran confrontation and threats of secondary sanctions** from the US may drive India further away from middle-east.
- œ This is where Brazil, one of world's top 10 oil exporters, can be a **big opportunity for India**.

Potential between India and Brazil

- œ **Agribusiness** is the most immediate and obvious opportunity. Complementary growing seasons and

sizeable internal markets make the two countries ideally suited for partnerships in agriculture.

- œ The year-round sugar crushing in both countries can be leveraged to become one of the largest **global sugar producers**.
- œ Promoting Brazilian **ethanol exports** to India will help Indian farmers implement a more efficient ethanol programme that reduces reliance on subsidies and helps improve urban India's air quality.
- œ Opportunities are abound in **clean energy**.
Each could benefit from a cross-fertilization of investment in solar power.

© CONCLUSION

The decade long bilateral strategic partnership between India and Brazil is based on a common global vision, shared democratic values, and a commitment to foster economic growth with social inclusion for the welfare of the people of both countries.

70 YEARS OF CONSTITUTION OF INDIA

CONTEXT

- Constitution of India came into effect on 26 January 1950. This Republic Day marked the 70th anniversary of it. Also, during the many student-led protests against Citizenship Amendment Bill (CAB), Indian Constitution has been a recurring theme.

● BACKGROUND

- œ It's been nearly 70 years after the Constitution of India first came into effect on 26 January 1950.
- œ **CAB protests:** Recently, protesters against Citizenship Amendment Bill (CAB) have in defiance, been reading out preamble of the Constitution; because they believe that fundamental Constitutional principles are being weakened by the ruling government.
- œ **Article 370:** Due to abrogation of Article 370, Jammu and Kashmir will also acknowledge and celebrate the "Constitution Day".
- œ **Fact check:** Constitution of India lies at the foundation of the world's largest democracy.
 - > India's constitution is the longest handwritten document in the world.
 - > It has imbibed in it goodness of constitutions of many countries.

● ANALYSIS:

History

- œ **Drafting Committee:** Drafting Committee was elected by the Constituent Assembly on 29th August 1947.
 - > It held its first meeting on 30th August.
 - > Since August 30th it sat for 141 days.
 - > The first Draft Constitution contained 315 Articles and 8 Schedules.
 - > In its final form, the Draft Constitution contains 395 Articles and 8 Schedules.
- œ **Amendments:** The Constitution of India has gone through more than 100 Constitutional amendments.
 - > Now the Constitution comprises 466 Articles and 13 Schedules.

Endurance

- œ **Longevity:** The longevity of India's Constitution is remarkable, especially when compared with the global experience of national Constitutions.
 - > On an average, Constitutions around the world have lasted only 17 years since 1789.

- œ **Among the few that survived:** Constitutions in the post-colonial countries, which gained independence after World War II, have been particularly fragile.
 - > Pakistan, for example, has had three different Constitutions and large periods of rule without any Constitution.
 - > Among the 12 Asian countries that gained independence soon after World War II and drafted Constitutions, only three Constitutions have survived—India, Taiwan and South Korea.
- œ **Detailed discussions:** Indian Constitution's endurance is attributed to its design and the care with which it was crafted.
 - > Since even before independence (1946), an elected constituent assembly of nearly 300 members spent four years debating and defining every aspect of the Constitution—from the idea of India itself to the finer intricacies of federalism.
 - > There were a total of 11 sessions of the Constituent Assembly.

The final product

- œ **Lengthy:** India's Constitution is a 146,385-worded document. It is longer than any other Constitution in the world.
- œ **Not the most comprehensive:** According to Comparative Constitutions Project (CCP), there are 70 major topics that Constitutions around the world typically cover. No Constitution covers all 70 topics, but some Constitutions come close.
 - > The Constitutions of Kenya and Zimbabwe, for instance, cover more than 80% of these topics.
 - > India's Constitution is sparser (covering 60% of topics), but in line with the global average in coverage (58%).

Parliamentary vs. Presidential

- œ **Separation of powers:** A central function of the Constitution is to separate and delegate between the three branches of governance: legislature, executive and judiciary.
 - > The way Constitutions do this ultimately defines a country's politics, society and even economics.

œ **Parliamentary system:** Framers of the constitution believed that given India's diversity, the country needed a strong government. They felt only a parliamentary system could provide this.

- > Hence, India adopted a system where the elected legislature is responsible for enacting laws, the executive serves as the administrative head of the government, and an independent judiciary is responsible for upholding laws.

œ **Success of parliamentary democracy:** Parliamentary form of democracy tends to be associated with better economic performance and better growth-promoting policies compared to Constitutions which establish presidential systems.

œ **Extent of power:** According to CCP, India's legislature has less power than the average across the 190 countries, but its executive has more power and judiciary has greater independence than global averages.

Rights for citizens

œ **Rights for citizens:** Another basic purpose of any Constitution is the rights it enshrines for citizens. For this, the Indian framers drew inspiration from American and French Constitutions.

- > As per CCP data, American Constitution grants 35 rights, the Indian Constitution grants 44. This is still less than the global average of 50 rights.

œ **Later additions:** Few constitutional rights, such as the right to education, only came after Constitutional amendments.

Duties vs. Rights

œ **Two sides of the same coin:** Mahatma Gandhi said that the true source of rights is duty. If we all discharge our duties, right will not be far to seek.

- > The President said that rights and duties are two sides of the same coin.
- > Our Constitution provides the fundamental right to 'freedom of speech and expression' and it also enjoins upon citizens the duty to safeguard public property and to abjure violence.

œ **Fundamental duties:** By incorporating the provisions relating to Fundamental Duties into the Constitution, Parliament made it abundantly clear that while being alert about their rights, citizens should also be conscious of their duties.

Flexibility

œ **Flexibility** in amending the Constitution is considered to be one of the biggest factors for the Indian Constitution's endurance.

œ **Amendments:** To ensure that the Constitution remains relevant over time, the makers of the Constitution also incorporated provisions allowing future generations to make necessary amendments as may be deemed necessary.

- > Since its inception, the Indian Constitution has been amended 103 times, with the most recent amendment coming in August 2019 (the reorganization of Jammu and Kashmir).
- > In contrast, the American Constitution was last amended in 1992 for only the 27th time.
- > The Supreme Court's ruling in Kesavananda Bharati case, held that basic doctrine of the Constitution cannot be altered.

œ **Dynamism:** Dynamism of our Constitution is reflective in the relationship and synergy between the Union and States. Move towards 'Co-operative Federalism' is an example of this.

Art in the constitution

œ **Calligraphy:** The original copy of the Constitution was carved out of his own hands by the then-famous Calligrapher (calligrapher) Prem Bihari Narayan Raizada.

- > Raizada wrote the constitution in italic style, in which he did not make a single error.
- > Raizada did not take a single penny to write the constitution.
- > He only requested to write his name on every page, and his grandfather's name (from whom he had inherited his calligraphy skills) on the last page. His request was accepted.
- > Several students of Santiniketan worked on the borders that frame each page. Among them were Nand Lal Bose and his disciples.
- > The constitution was written in both Hindi and English languages.

œ **Bose's illustrations:** Bose harnessed a variety of Indian art traditions, including myths and actual history. Illustrations include:

- > Land of forest, desert, sea and mountain start with the seal of a Harappan bull.
- > The forested hermitages of the rishis.
- > Ram, Sita and Lakshman.
- > The great dilemma of what is righteous action is typified Arjun and Krishna.
- > Division of the relics of Buddha from the life of Ashok.
- > Only one female heroine- Rani Lakshmibai of Jhansi.
- > Many styles of Indian art: the wall paintings of Ajanta, Bagh and the book illustrations of Rajasthan, the Mughal, Deccani and Pahari

traditions, the sculptures of Konark, Bharhut, Amaravati, Mahabalipuram and the Chola south.

œ **Farman style:** Constitution as an artefact belongs to a long historical tradition where the most precious manuscripts, 'farmaans' and orders of any kingdom were written by hand and endorsed by the signatures of its ruler.

- > The calligraphy was done in the traditional way, as used to be the case with Mughal and Sultanate manuscripts.
- > It was framed in the hashi'a (borders) style.

œ **Showcase:** Original copies are kept in a glass showcase filled with helium gas in the Parliament House Library.

- > The Showcase was developed jointly by the National Physical Laboratory and the Getty Conservation Institute of America.

œ **Manuscript:** The manuscript of the constitution was written on a sheet of microbial anti-parchment that survived for a thousand years.

- > Its size is 45.7 cm × 58.4 cm.
- > The manuscript consisted of 234 pages, weighing 13 kg.

- > Constitution was printed by the Survey of India in Dehradun.

- > The English version of the constitution is 21,17,369 words in total.

œ **Final copy:** The date of 26 January 1950 was deliberately chosen to implement the constitution, as Purna Swaraj was announced on this day in 1930.

- > 284 members of the Constituent Assembly signed the constitution on 24 November 1949 in the Constitution Hall. There were 15 women members among them.

● **CONCLUSION**

Indian Constitution has also shown remarkable resilience by surviving various assaults on it, especially during the Emergency. The pictures in Indian constitution are based on a history of Indian art from the Harappan civilization up to independence in 1947. Each interprets a specific style from a historical epoch linking the nation with its artistic history. The illustrations must be read not as stills, but as the message they want to impart.

CORONAVIRUS: CHINA'S MYSTERY VIRUS THAT HAS TRIGGERED WORRY

CONTEXT

- A top Chinese scientist has confirmed that the mysterious coronavirus (a type of virus named after its spiky, solar corona-like appearance under an electron microscope) that had killed at least six individuals and infected another 291 in China, can spread between human beings.

◎ BACKGROUND

- œ It is also called the Wuhan Virus.
- œ The first cases emerged in Wuhan in central China's Hubei province.
- œ A large number of patients with unexplained pneumonia were observed.
- œ A coronavirus is a kind of common virus that causes an infection in your nose, sinuses, or upper throat. Most coronaviruses are not dangerous.
- œ Often a coronavirus causes upper respiratory infection symptoms like a stuffy nose, cough, and sore throat.
- œ The coronavirus can also cause middle ear infections in children.
- œ Coronavirus can infect both animals and humans.

Human Coronavirus Types

- œ Coronaviruses are named for the crown-like spikes on their surface.
- œ There are four main sub-groupings of coronaviruses, known as alpha, beta, gamma, and delta.
- œ Coronaviruses are a large family of viruses that can cause diseases ranging from the common cold to Severe Acute Respiratory Syndrome (SARS).
- œ Major types
 - > **Middle East respiratory syndrome coronavirus (MERS-CoV):** caused by a novel coronavirus that was first identified in Saudi Arabia in 2012. MERS-CoV is a zoonotic virus, which means it is a virus that is transmitted between animals and people. Studies have shown that humans are infected through direct or indirect contact with infected dromedary camels. MERS-CoV has been identified in dromedaries in several countries in the Middle East, Africa and South Asia.
 - > **SARS (Severe Acute Respiratory Syndrome):** SARS-CoV is thought to be an animal virus from an as-yet-uncertain animal reservoir, perhaps bats, that spread to other animals (civet cats) and first infected humans in the Guangdong province of southern China in 2002.

What are the symptoms of coronavirus infection?

- œ Common signs include fever, cough, and shortness of breath. Serious infections can lead to pneumonia, kidney failure, and death.
- œ Human-to-human transmission has now been confirmed.
- œ Animals are the outbreak's likely primary source.
- œ Direct contact with farm or wild animals should be avoided.

Why is there concern around the world?

- œ People see a similarity with the SARS outbreak that infected over 8,000 people and killed around 775 in more than 35 countries worldwide in 2002-03.
- œ The source of the virus was traced back to a colony of horseshoe bats living in remote cave in Yunnan province. The virus was carried by civet cats which are sold in markets in China.

Global economic and financial market impact

- œ The outbreak has sent shivers through world financial markets, with investors drawing comparisons to the 2003 SARS (Severe Acute Respiratory Syndrome) outbreak in order to assess its potential economic impact.
- œ Expected annual losses from pandemic risk to be about \$500 billion — or 0.6% of global income — per year, accounting for both lost income and the intrinsic cost of elevated mortality.
- œ Another study by the Commission on a Global Health Risk Framework for the Future estimated that pandemic disease events would cost the global economy over \$6 trillion in the 21st century — over \$60 billion per year.
- œ Despite the disruption to the wider economy, virus outbreaks have tended to benefit pharmaceutical stocks, while tourism and travel-related stocks — hotels, airlines and luxury and consumer goods — tend to get punished.
- œ During the SARS outbreak, retail sales figures in China showed a marked drop-off as consumer spending took a hit.

Why China has emerged as the epicentre of global outbreaks of disease

- œ With a population of nearly 1.4 billion and 50% of the world's livestock, China's ecology poses a risk for emerging, re-emerging, and novel diseases that could threaten China and the rest of the world.
- œ The reason could lie in the busy food markets dotting cities across the country — where fruits, vegetables, hairy crabs and butchered meat are often sold next to bamboo rats, snakes, turtles, and palm civets.
- œ The Chinese taste for exotic meats, and the high population density of cities create the conditions for the spread of zoonotic infections.
- œ Wherever there is close mixing of humans and animals, especially the unregulated handling of blood and other body products, as happens for example in China's animal markets, there are greater chances of transmission of a virus from animals to humans, and its mutation to adapt to the human body.
- œ Ebola outbreak in Africa where wild chimpanzees had the disease. It came into humans after these were killed and consumed. Animal markets are breeding grounds because there is free interchange of pathogens between species and mutations.

What is India's disease outbreak investigation protocol?

- œ The National Health Portal of India lists a 10-step procedure to investigate an outbreak, including preparing for fieldwork, establishing the existence of an outbreak, verifying diagnosis, defining and identifying cases, and communicating findings.
- œ Three Indians have been kept under observation.
- œ Other countries with confirmed cases of 2019-nCoV include Japan, South Korea, Vietnam,

Singapore, Australia, Thailand, Nepal, France, the United States, Malaysia and Canada.

Novel coronavirus cases now 4,500, half as many as SARS cases in 2003

- œ The novel coronavirus outbreak has led to comparisons being drawn to the SARS (severe acute respiratory syndrome) outbreak of 2003, also caused by a coronavirus.
- œ According to the WHO, a total of 8,098 people worldwide became sick with SARS during that outbreak.
- œ Of the 8,098 SARS cases, 774 died. In comparison, of the 4,593 infected by the novel coronavirus so far, 106 have died.

COUNTRY-WISE COUNT

OUTSIDE CHINA

Country	Confirmed cases
Japan	6
South Korea	4
Viet Nam	2
Singapore	7
Australia	5
Malaysia	4
Cambodia	1
Thailand	14
Nepal	1
Sri Lanka	1
US	5
Canada	2
France	3
Germany	1
Total	56

SECTION: B

(PRELIMS)

CURRENT AFFAIRS

REMISSION OF DUTIES OR TAXES ON EXPORT PRODUCT

- ◎ **CONTEXT**
 - Recently, government launched a new scheme called **Remission of Duties and Taxes on Export Product (RoDTEP)**.
- ◎ **ABOUT**
 - **Remission of Duties and Taxes on Export Product (RoDTEP):** RoDTEP is a Rs 50,000-crore exports programme which is supposed to **replace Merchandise Exports From India Scheme (MEIS)**.
 - **Operation delayed:** The operation of RoDTEP was recently delayed. MEIS would remain in force till March 31, 2020.
 - œ RoDTEP was first set to roll-out from 1st January 2020, but recently its roll-out was delayed to next fiscal.
 - œ This delay was done at the behest of **exporters' request to grant them more time** to prepare for a transition from MEIS to the new scheme, given the **operational challenges**.
 - œ The next **foreign trade policy** will contain the broad contours of RoDTEP.

MEIS was WTO-incompatible

- **MEIS** was introduced in the Foreign Trade Policy (FTP) 2015-20 w.e.f. 1st April 2015.
- **Objective:** Its objective was to offset infrastructural inefficiencies and associated costs involved in exporting goods which are manufactured in India, including products manufactured by the MSME Sector.
- **WTO-incompatible:** World Trade Organisation (WTO) panel had determined that India's export subsidies are inconsistent with WTO requirements.
 - œ The ruling of WTO's **Disputes Settlement Body (DSB)** in favour of US against India's export "subsidies" is still pending.
 - œ US claims that India offers **illegal export subsidies** and thousands of Indian companies benefit from it.
- **India's argument:** India rejects claims made by the US
 - œ The entire allocation or potential revenue forgone on account of various such schemes (including MEIS) **doesn't qualify as export subsidies**.
 - œ They are meant to only soften the blow of costly input imports that exporters have been forced to bear due to a **complicated tax structure**.
 - œ Exports are in sync with the best global practices.

RoDTEP scheme

- **Reimburse input taxes and duties:** RoDTEP is expected to adequately incentivize exporters by reducing duties paid on exports and will initiate the refund of various taxes to exporters.
- **WTO compliant:** The new scheme is supposed to reimburse all taxes and duties paid on inputs consumed in exports in sync with the WTO norms.
 - œ The MEIS, exporters have persistently complained, doesn't offset all the taxes, so the new scheme will be beneficial to them when it's implemented.
- **Automatic refund-route:** The new scheme will have a fully automated route for Input Tax Credit (ITC) in the GST to help increase exports in India.
- **Avoid double taxation:** ITC is provided to set off tax paid on the purchase of raw materials, consumables, goods or services that were used in the manufacturing of goods

- of services. This helps in avoiding double taxation and the cascading effect of taxes
- **Attempt to reverse export fall:** It is expected to adequately incentivize exporters by reducing duties paid on exports and will initiate the refund of various taxes to exporters. Measures in the new scheme include:
 - œ Easier priority-sector lending norms for exports
 - œ Greater insurance cover under ECGC
 - œ Lower premium for MSMEs to avail of such cover
- **Costly to the government:** Since potential revenue forgone in the current MEIS is around Rs 40,000 crore a year, RoDTEP is expected to cost the government an additional Rs 10,000 crore annually.

Additional benefits of MEIS and RoDTEP

- œ Both MEIS and RoDTEP seek to free up working capital of exporters.
- œ An electronic refund module will be set up to automatically refund input tax credits.
- œ The move will increase bank credit to exporters under the Export Credit Insurance Scheme.
- œ Exporters will receive a higher insurance cover from banks that offer capital loans

NAGARDHAN EXCAVATIONS: WHY ARE FINDINGS IMPORTANT TO UNDERSTAND VAKATAKA DYNASTY?

◎ **CONTEXT**

- Recent archaeological excavations at Nagardhan in Ramtek taluka, near Nagpur, have provided concrete evidence on the life, religious affiliations and trade practices of the Vakataka dynasty that ruled parts of Central and South India between the third and fifth centuries.

◎ **ABOUT**

- After a 1,500 year-old sealing was excavated for the first time; a new study in Numismatic Digest has tried to understand the Vakataka rule under Queen Prabhavati Gupta.
- Nagardhan is a large village in Nagpur district, about 6 km south of Ramtek taluka headquarters.
- Archaeological remains were found on a surface spread over a 1 km × 1.5 km area.
- A Koteswar temple dating back to the 15th-16th centuries stands on the banks of a stream.
- The existing village sits on top of the ancient habitation.
- The Nagardhan Fort stands south of present-day Nagardhan village.
- This was constructed during the Gond Raja period and later renovated and re-used by the Bhosales of Nagpur during the late 18th and 19th centuries.
- The area surrounding the fort is under cultivation and has archaeological remains.

Why is the excavation important?

- Very little was known about the Vakatakas, the Shaivite rulers of Central India between the third and fifth centuries.
- All that was known about the dynasty, believed to hail from the Vidarbha region, was largely through some literature and copperplates.
- There were assumptions that the excavated site of Nagardhan is the same as Nandhivardhan, the capital city of the eastern branch of the Vakatakas.

- . It was after archaeological evidence from here that Nagardhan was understood to have served as a capital of the Vakataka kingdom.
- . Besides, the scholars have traced archaeological evidence revealing the dynasty's religious affiliations — the types of houses and palaces of the rulers, coins and sealings circulated during their reign, and their trade practices.

What is the significance of these finds?

- . It is the first time clay sealings have been excavated from Nagardhan.
- . The oval-shaped sealing belongs to the period when Prabhavati Gupta was the queen of the Vakataka dynasty.
- . It bears her name in the Brahmi script, along with the depiction of a conch.
- . The 6.40-gram sealing, this is 1,500 years old, measures 35.71 mm by 24.20 mm, with a thickness of 9.50mm.
- . The presence of the conch is a sign of the Vaishnava affiliation that the Guptas held.
- . The sealing was traced on top of a mega wall that researchers now think could have been part of a royal structure at the capital city of the kingdom.
- . So far, no archaeological evidence had emerged about the types of houses or palatial structures of the Vakataka people or rulers.
- . These are strong indicators of Vaishnava signatures on the royal seals of the Vakatakas, reiterate that Queen Prabhavati Gupta was indeed a powerful woman ruler.
- . Since the Vakataka people traded with Iran and beyond through the Mediterranean Sea, scholars suggest that these sealings could have been used as an official royal permission issued from the capital city.
- . Besides, these were used on documents that sought mandatory royal permissions.

What else has been excavated from Nagardhan so far?

- . Earlier results from the excavations here had traced evidence in the form of ceramics, ear studs of glass, antiquities, bowls and pots, a votive shrine and tank, an iron chisel, a stone depicting a deer, and terracotta bangles.
- . Some terracotta objects even depicted images of gods, animals and humans, along with amulets, scotches, wheels, skin rubbers and spindle whorls.
- . An intact idol of Lord Ganesha, which had no ornaments adorned, too was found from the site.
- . This confirmed that the elephant god was a commonly worshipped deity in those times.
- . On the means of living of the Vakataka people, researchers found animal rearing to be one of the main occupations.
- . Remains of seven species of domestic animals — cattle, goat, sheep, pig, cat, horse and fowl — were traced in an earlier study by the team.

PEACE TO PROSPERITY

◎ CONTEXT

- . US President, Donald Trump, launched with Israeli PM, Benjamin Netanyahu, a peace plan for advancing Israeli-Palestinian peace negotiations.

◎ ABOUT

- . **Peace to Prosperity:** A vision to improve the lives of the Palestinian and Israeli people, commonly known as the Trump peace plan, is a proposal by the Trump administration bearing the stated **intention of resolving the Israeli–Palestinian conflict**.
- . Donald Trump formally unveiled the plan in a White House press conference alongside Israeli Prime Minister Benjamin Netanyahu on January 28, 2020.

- œ Palestinian representatives were not invited.
- . The plan was **authored by a team led by Trump's son-in-law**, Senior Advisor to the President of the United States, **Jared Kushner**.
- . Both the West Bank settlers' Yesha Council and the Palestinian leadership rejected the plan.
 - œ Yesha Council rejected the plan because it envisaged a Palestinian state.
 - œ While Palestinian leadership rejected the plan arguing that it is too biased in favour of Israel.
- . **The plan is divided into two parts, an economic portion and a political portion.**
 - œ On June 22, 2019, the Trump administration released the economic portion of the plan, titled "Peace to Prosperity".
 - œ The political portion was released in late January 2020.
- . According to White House, the vision is **security-focused**, and provides both **self-determination and significant economic opportunity for Palestinians**.
 - œ It also provides positive benefits to the Hashemite Kingdom of Jordan, the Arab Republic of Egypt and countries throughout the region.

Background (as per the Peace Plan)

- . **Israelis and Palestinians** have both suffered greatly from their long-standing and seemingly interminable conflict.
- . Palestinians have aspirations that have not been realized, including **self-determination**, improvement of their standard of living, social betterment, and a respected place in the region, as well as among the nations of the world.
- . The State of Israel has made peace with two of its neighbours.
 - œ It made peace with the **Arab Republic of Egypt in 1979**
 - œ It made peace with the **Hashemite Kingdom of Jordan in 1994**.
- . In 1993, the State of Israel and the Palestine Liberation Organization reached the first of several interim agreements, known collectively as the **Oslo Accords**.
- . One of the most significant understandings within those agreements provided for security **cooperation between the Israel Defense Forces (the "IDF") and the Palestinian Authority Security Forces (the "PASF")**.

Details of the Peace Plan

- . **Israeli sovereignty over settlements:** According to the proposal, Israeli government would **immediately annex the Jordan Valley and West Bank settlements**, while committing not to create new settlements in areas left to the Palestinians for at least four years.
 - œ While Trump administration clarified that no such immediate green light had been given.
 - œ No decision would take place before new elections and a new government had been formed.
- . Would give Palestinians all the power to govern themselves but not the powers to threaten Israel.
- . This necessarily entails limitations of certain sovereign powers in the Palestinian areas (henceforth referred to as the **"Palestinian State"**) such as:
 - œ maintenance of Israeli security responsibility
 - œ Israeli control of the airspace west of the Jordan River.
- . This Vision creates **a realistic Two-State solution** in which a secure and prosperous State of Palestine is living peacefully alongside a secure and prosperous State of Israel in a secure and prosperous region.

- . **Opportunities for regional cooperation:** If implemented, this Vision can lead to **direct flights** between the State of Israel and its neighbours, the **transport of people and commerce** and the unlocking of opportunities for millions of people to visit religious sites sacred to their faiths.
- . **Status on State of Palestine:** The Trump plan proposes a State of Palestine with a capital on the outskirts of East Jerusalem.
 - œ The plan is offering the Palestinians a state, a future State of Palestine, which will be not established up to four years into the execution of the plan.
 - œ The plan would be conditional on Palestinians taking steps to become self-governing.
 - œ However, the sovereignty the State of Palestine would possess is disputed.

Palestinian argument

- . Palestinians fear that the plan seeks to use **economic incentives to bribe them** into accepting Israeli occupation, in what could be an Israeli aim to annex the majority of the West Bank and most of the Jordan Valley, a strategic and fertile strip of territory.

THE DEBATE OVER UN'S NEW RULES FOR SHIPS IN THE ARCTIC REGION

◎ **CONTEXT**

- . **The International Maritime Organization (IMO), the shipping agency of the United Nations, has banned ships from using fuels with sulphur content above 0.5 per cent, compared with 3.5 per cent previously.**

◎ **ABOUT**

- . Environmental activists called for a ban on the use of new low sulphur marine fuel in the Arctic region
- . Green groups have cited new research which shows that blends of very low-sulfur fuel oil (VLSFO) contribute to highly polluting black carbon emissions in the environment.
- . The International Maritime Organization (IMO), the shipping agency of the United Nations, issued new rules aiming to reduce sulphur emissions, due to which ships are opting for newer blends of fuels.

What do the new IMO rules say?

- . The IMO has banned ships from using fuels with sulphur content above 0.5 per cent, compared with 3.5 per cent previously.
- . Sulphur oxides (SOx), which are formed after combustion in engines, are known to cause respiratory symptoms and lung disease, while also leading to acid rain.
- . The new regulations, called IMO 2020, have been regarded as the biggest shake up for the oil and shipping industries in decades. It affects more than 50,000 merchant ships worldwide.
- . The new limits are monitored and enforced by national authorities of countries that are members of the International Convention for the Prevention of Pollution from Ships (MARPOL) Annex VI.
- . Under the new policy, only ships fitted with sulphur-cleaning devices, known as scrubbers, are allowed to continue burning high-sulphur fuel.
- . Alternatively, they can opt for cleaner fuels, such as marine gasoil (MGO) and very low-sulphur fuel oil (VLSFO).

The cleaner fuel options

- . Of the two cleaner fuels, ship-owners were expected to opt for MGO, which is made exclusively from distillates, and has low sulphur content.

- . However, many are reportedly choosing VLSFO, which has better calorific properties and other technical advantages.
- . There are complaints against VLSFO as well, as testing companies have claimed that high sediment formation due to the fuel's use could damage vessel engines.
- . A paper by Germany and Finland finds that VLSFO, with 0.5 per cent sulphur content, can contain a large percentage of aromatic compounds, thus having a direct impact on black carbon emissions.
- . Black carbon, which is produced due to the incomplete combustion of carbon-based fuels, contributes to climate change.
- . The Clean Arctic Alliance, which has called for the ban, has said that an increase in black carbon emissions would accelerate the melting of Arctic sea ice and impact the earth's climate.
- . It has called for a shift to distillate fuels, like MGO.

ABOLITION OF LEGISLATIVE COUNCIL

◎ **CONTEXT**

h has become the latest State to favour the alteration of the status quo regarding the Upper House, in an Assembly resolution for its Legislative Council's abolition.

◎ **ABOUT**

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• **India's bicameral system:**

- . India has a bicameral system i.e. two Houses of Parliament:
 - œ the upper House (Rajya Sabha)
 - œ the lower House in (Lok Sabha)
- . The Constitution of India (Article 168 & Article 169) provides for the bicameral legislature in certain States.
 - œ Under Article 168, states can have either one or two Houses of the legislature.
 - œ Article 169 leaves the choice of having a Vidhan Parishad to individual states.
- . At the state level, the equivalent of the Rajya Sabha is the Legislative Council (Vidhan Parishad) and that of Lok Sabha is the Legislative Assembly (Vidhan Sabha).

Who decides on the bicameral system?

- . The Constitution of India does not force a bicameral legislature on states. It allows states the option of having a second House.
- . The State Assembly has to pass a resolution for the creation of the Council by a majority of its total membership.
- . Thereafter, the Parliament (under Article 169) has the power to create or abolish the Legislative Council on the basis of a resolution adopted by the special majority in the Assembly of the concerned State.

How many states have abolished the Legislative Council?

- . A second house—a state legislative council (Vidhan Parishad), with unelected members—has always been a point of contention throughout history.
- . Assam was the first state to abolish its state legislative council. The state passed a resolution for the same in 1947.
- . After Assam, West Bengal had abolished its legislative council in 1969 and Punjab abolished it in 1970.
- . The Andhra Pradesh legislative council, with 58 members, was first abolished in 1985. It was revived in March 2007.

- . As of today, five states have Legislative Councils: **Telangana, Bihar, Maharashtra, Karnataka** and **Uttar Pradesh**.
- . Jammu and Kashmir had a Council until the state was bifurcated into the Union Territories of J&K and Ladakh.

The need of second house:

In Favour:

- . At state level, the second house of the legislature assumes significance for two main reasons:
 - œ The second house acts as a check on hasty actions by the popular elected House.
 - œ It ensures individuals who might not be cut out for the rough-and-tumble of direct elections too are able to contribute to the legislative process.

Against:

- . The idea of Legislative Councils is centred on three broad arguments:
 - œ They can be used to park leaders who have not been able to win an election.
 - œ They can be used to delay progressive legislation.
 - œ They would strain state finances.

The reason behind the decision:

- œ Since the bifurcation of Andhra Pradesh in 2014, the Council has had 58 members.
- œ The Legislative Council is dominated by the opposition party with 32 members.
- œ The ruling party has only nine members. With the numbers not expected to change for at least two more years, the government can have a tough time carrying out Legislative business.
- œ The state government is already facing the heat with the Council trying to put spokes in its plan to create three capitals and pursue a decentralised development model for the State.

GLOBAL TALENT COMPETITIVE INDEX 2019

◎ CONTEXT

- **India has moved up eight places to the 72nd position in the 2020 Global Talent Competitiveness Index that measures and ranks countries based on their ability to grow, attract and retain talent.**

◎ ABOUT

- Launched for the first time in 2013, the Global Talent Competitiveness Index (GTCI) is an annual benchmarking report that measures the ability of countries to compete for talent.
- . It provides a wealth of data and analysis that helps decision makers develop talent strategies, overcome talent mismatches and become more competitive in the global marketplace.
- . This new GTCI report focuses on Global Talent in the Age of Artificial Intelligence.
- . The index includes 70 variables and covers 132 countries.
- . The six metrics used to decide a country's rank are - enable, attract, grow, retain, vocational skills and global knowledge skills.

Global findings of the Index:

- . Switzerland topped the list of 132 countries, followed by the US and Singapore.

- . The Index was topped by Switzerland, the US and Singapore.
- . Top 10 league table: Other countries in the top 10 include Sweden at the 4th position, Denmark (5th), the Netherlands (6th), Finland (7th), Luxembourg (8th), Norway (9th) and Australia (10th).
- . In the BRICS grouping, China was ranked 42nd, Russia (48th), South Africa (70th) and Brazil at 80th position.
- . The report said the gap between high income, talent-rich nations and the rest of the world is widening. More than half of the population in the developing world lack basic digital skills.

On India's position:

- . India has secured 72nd place in the index while last year the country was ranked at 80th position.
- . Although more could be done to improve the country's educational system (68th in Formal Education), India's key strength relates to growing (44th) talent, primarily by virtue of the possibilities for Lifelong Learning (40th) and Access to Growth Opportunities (39th).
- . Its highest-ranked sub-pillar, however, is Employability (28th), but the ability to match labour market demand and supply stands in contrast to the country's poor Mid-Level Skills (113th), which result in a mediocre score in Vocational and Technical Skills (76th).
- . India's greatest challenge is to address its weak ability to attract (92nd) and retain (95th) talent.
- . With regard to the former pillar, there is a need to strengthen the role of minorities and women in order to raise the level of Internal Openness (104th).
- . As for the latter pillar, India's low scores in the indicators that relate to quality of life (Lifestyle, 115th) fall well short of its more positive showing in Sustainability (53rd).
- . India's biggest challenge is to improve its ability to attract and retain talent.
- . There is a need to address its poor level of Internal Openness in particular with respect to weak gender equality and low tolerances towards minorities and immigrants and its disappointing showing in lifestyle indicators.

Significance of the Index:

- . The index addresses the growing need to better understand the 'sweet spot' where people and technology will cooperate, how rapid digitalisation will impact business and talent, and the skills needed for individuals to thrive in the workplace of the future.
- . GTCI help decision-makers across governments, business, and civil society to understand the challenges and opportunities that technological developments present.

INTERNET SHUTDOWNS

◎ CONTEXT

- **The Supreme Court gave a landmark judgement on the internet shutdown in Kashmir. The court ruled indefinite internet shutdown in Kashmir unwarranted and amounting to abuse of power.**

◎ ABOUT

- **Internet shutdown in Kashmir:** The government had imposed a communications lockdown in Jammu & Kashmir since August 2019.
 - œ The shutdown which lasted **more than 150 days** is the longest such outage in any democracy.
 - œ The shutdown was aimed to control unrest after abrogating **Article 370** of the Constitution.

- œ Mobile phone connections were also cut, but have been restored in most places.
- . **Other cases of internet shutdown:** The Centre has frequently used internet shutdowns as a tool to quell dissent in troubled parts of the country.
 - œ Internet was curbed in parts of the National capital and in areas of Assam and Uttar Pradesh as protests raged against a new citizenship law.
 - œ There have been at least 381 documented instances of internet shutdown in India in the last nine years; 319 of those cases have occurred since 2017.
 - œ In matter of internet shutdown, India is deemed third worst-hit after Iraq and Sudan.
- . **Challenging government decision:** Government's decision was challenged by Journalist Anuradha Bhasin and politician Ghulam Nabi Azad.
 - œ Finally, a 130-page judgment was delivered in this regard by Justice N.V. Ramana, R. Subhash Reddy and B.R. Gavai.

Government's argument

- . **Necessary:** The Centre had justified internet restrictions after abrogation of provisions of Article 370.
 - œ Government shut down internet as a preventive step to secure lives of citizens.
- . **Peace maintained through the transition phase:** According to the government it is due to the preventive steps taken that neither a single life was lost nor a single bullet fired, while J&K transitioned from being a state to Union Territory.
- . **Border infiltration:** Internet shut down was necessary to prevent terrorists sponsored by Pakistan from fuelling unrest and violence in Kashmir.
 - œ The current wave of militancy in Kashmir is being fuelled by terrorist groups recruiting young Kashmiris via internet and social media.

Supreme Court ruling

- . **Impermissible:** The Supreme Court ruled that indefinite internet ban in Jammu & Kashmir is impermissible.
- . **Abuse of power:** Repeated use of section 144 of CrPC amounts to 'abuse of power'.
 - œ Reasons have to be given for imposing Section 144 and magistrate should balance rights of individual with state interest when issuing such orders.
- . **Orders to be put in public domain:** The bench ordered the Jammu and Kashmir administration to put in public domain all orders that can then be challenged in a court of law.
- . **Constitutionally protected right:** The court ruled that right to access internet is constitutionally protected and internet can be shut down only in exceptional circumstances.
 - œ The value of liberty is important and not negotiable.
 - œ The access to internet being a fundamental right is a means of getting information.
 - œ People have a right to know, as a part of Article 19(1)(a).
- . **No repetitive use of Section 144:** The court argued against government's repetitive use of Section 144, holding that there needs to be an emergency for invocation of the provision, and mere expression of disagreement cannot be a ground.
- . **Violation of telecom rules:** An indefinite suspension of the internet was a violation of the country's telecoms rules.
 - œ Indefinite suspension is against Temporary Suspension of Telecom Services (Public Emergency or Public Service) Rules, 2017.
 - œ Principle of proportionality must be adhered to and must not extend beyond necessary duration.

- **Slow technological pace:** With greater mobility of technology and artificial intelligence, there has to be a catch up with technology as well. Curbing internet amounts to slowing the pace of technological development.
- **Freedom of press:** The Right of freedom of press was seen as a way for people to gain information from the press. Press and people are intertwined for purpose of information.
- **Right to Information:** Any order under Article 144, must be transparent for people to know and with a possibility of a challenge to those orders.
- **Subject to Judicial review:** The judgement asks larger questions pertaining to the exercise of statutory powers such as Section 144.
 - œ The judgement is not questioning the right of the government but the extent to which the government can shut down internet. It has also made a shutdown subject to judicial review.
 - œ The judgement does not transgress into the domain of executive.
 - œ There is a mandamus for court to review government's actions.

List of statutes concerning the judgement

- Code of Criminal Procedure Code, 1973
- Indian Penal Code, 1860
- Indian Telegraph Act, 1885
- Temporary Suspension of Telecom Services, (Public Emergency or Public Safety) Rules, 2017
- Information Technology Act, 2000
- Right to Information Act, 2005

Criticism for internet shutdown

- The internet blackout and restrictions on movement has severely **disrupted the lives** of millions.
- It has impacted everything, from **college admissions** to **businesses filing tax returns**.
- The unavailability of internet has also **severely impacted businesses**.
- According to ICRIER, internet shutdown had **cost the Indian economy about \$3.04 billion**.
- According to Cellular Operator Association of India (COAI), **mobile carriers lost about \$8 million a day** for shutdown in any of the 22 circles where they operate in the country.

◎ **CONCLUSION**

- The judgement is very seminal, progressive, and also not unaware of the societal interests. It strikes a very careful balance between rights and liberty on one hand and the need to protect citizens on the other, through the state. Supremacy of the Constitution and value of human beings was upheld through this judgement.

WHAT IS ANTICIPATORY BAIL, FOR WHICH SC HAS REMOVED TIME LIMITS?

◎ **CONTEXT**

- The Supreme Court ruled that no time restriction should ordinarily be fixed for anticipatory bail and that it can continue even until the end of the trial.

◎ ABOUT

- The protection granted under **Section 438** of the Code of Criminal Procedure (CrPc) "should not invariably be limited to a fixed period", a five-judge Constitution bench headed by Justice Arun Mishra said.

What is anticipatory bail?

- . Black's Law Dictionary describes 'bail' as procuring "the release of a person from legal custody, by undertaking that he shall appear at the time and place designated and submit himself to the jurisdiction and judgement of the court."
- . In the 1973 case *Supt. and Remembrancer of Legal Affairs v. Amiya Kumar Roy Choudhry*, the Calcutta High Court explained the principle behind giving bail: "The law of bails... has to dovetail two conflicting demands, namely, on one hand, the requirements of the society for being shielded from the hazards of being exposed to the misadventures of a person alleged to have committed a crime; and on the other, the fundamental canon of criminal jurisprudence viz. the presumption of innocence of an accused till he is found guilty."
- . As opposed to ordinary bail, which is granted to a person who is under arrest, in anticipatory bail, a person is directed to be released on bail even before arrest made.
- . Section 438 of the Code of Criminal Procedure, 1973, lays down the law on anticipatory bail. Sub-section (1) of the provision reads: "When any person has reason to believe that he may be arrested on an accusation of having committed a non-bailable offence, he may apply to the High Court or the Court of Session for a direction under this section; and that Court may, if it thinks fit, direct that in the event of such arrest, he shall be released on bail."
- . The provision empowers only the Sessions Court and High Court to grant anticipatory bail.

Rationale behind anticipatory bail

- . Anticipatory bail became part of the new CrPC in 1973 (when the latter replaced the older Code of 1898), after the 41st Law Commission Report of 1969 recommended the inclusion of the provision.
- . The necessity for granting anticipatory bail arises mainly because sometimes influential persons try to implicate their rivals in false cases for the purpose of disgracing them or for other purposes by getting them detained in jail for some days... Apart from false cases, where there are reasonable grounds for holding that a person accused of an offence is not likely to abscond, or otherwise misuse his liberty while on bail, there seems no justification to require him first to submit to custody, remain in prison for some days and then apply for bail.
- . In the 1980, *Gurbaksh Singh Sibbia vs State of Punjab* case, a five-judge Supreme Court bench led by then Chief Justice Y V Chandrachud ruled that S. 438 (1) is to be interpreted in the light of Article 21 of the Constitution (protection of life and personal liberty).
- . It may perhaps be right to describe the power (of anticipatory bail) as of an extraordinary character... But this does not justify the conclusion that the power must be exercised in exceptional cases only, because it is of an extra-ordinary character.

Conditions while granting anticipatory bail

- . While granting anticipatory bail, the Sessions Court or High Court can impose the conditions laid down in sub-section (2).
 - œ A condition that the person shall make himself available for interrogation by a police officer as and when required.
 - œ A condition that the person shall not, directly or indirectly, make any inducement, threat or promise to any person acquainted with the facts of the case so as to dissuade him from disclosing such facts to the Court or to any police officer.
 - œ A condition that the person shall not leave India without the previous permission of the Court.
- œ Such other condition as may be imposed under sub-section (3) of section 437, as if the bail were granted under that section.

ACCRETION BURST EVENT

◎ CONTEXT

- In a latest development, astronomers have found that the funnelling of matter into a forming star happens at different rates over time. Sometimes the forming star swallows up a huge amount of matter, resulting in a burst of activities in the massive star. This is called an accretion burst event.

Key-highlights of the findings:

- The international group of scientists, for the first time in history has been able to trace by masers and examine the subluminal propagation of a thermal radiation 'heatwave' emanating from an accreting high-mass protostar of the high-mass protostar **G358-MM1**.
- The object is eight times the mass of the sun; located at a distance of about 22,000 light years from Earth.
- High-mass stars radically rebuild their surroundings and thus redetermine the structure and evolution of galaxies. One of the modern hypotheses is that high-mass protostars grow due to episodic accretion (an increase in mass due to the influx of matter from the surrounding objects).
- Large fragments of the surrounding matter fall on the star, dying in bright flashes.

What is Accretion Burst Event?

- Accretion burst event is incredibly rare. Till now, only three such events have been observed, out of all the billions of massive stars in the Milky Way.
- After the first detection of an accretion burst, in 2016, astronomers from around the world agreed in 2017 to coordinate their efforts to observe more.
 - œ Reported bursts have to be validated and followed up with more observations, and this takes a joint, global effort – which led to the formation of the **Maser Monitoring Organisation (M2O)**.
- In January 2019, astronomers at Ibaraki University in Japan noticed that one such massive protostar, **G358-MM1**, showed signs of new activity. The masers associated with the object brightened significantly over a short period of time.
 - œ Follow-up observations with the Australian Long Baseline Array revealed something astronomers are witnessing for the first time – a blast of heat-wave coming from the source and travelling through the surroundings of the forming big star.
 - œ Blasts can last for about two weeks to a few months.

What is Maser?

- A maser (microwave amplification by stimulated emission of radiation) is the microwave (radio frequency) equivalent of laser.
- Masers are observed using radio telescopes and most of them are observed at centimetre wavelength. They are very compact.
- A maser flare can be a sign of an extraordinary event such as the formation of a star.
- Since 2017, radio telescopes in Japan, Poland, Italy, China, Russia, Australia, New Zealand and South Africa (HartRAO, in the country's Gauteng province) have been working together to detect a flare stimulated by a burst in the funnelling of materials into a massive star.

Formation of Stars:

- Stars are giant, luminous spheres of plasma. There are billions of them — including our own sun, in the Milky Way Galaxy.

- . Stars are born within the clouds of dust and scattered throughout most galaxies. A familiar example of such as a dust cloud is the Orion Nebula.
- . Turbulence deep within these clouds gives rise to knots with sufficient mass that the gas and dust can begin to collapse under its own gravitational attraction.
- . As the cloud collapses, the material at the center begins to heat up.
- . Known as a protostar, it is this hot core at the heart of the collapsing cloud that will one day become a star.
- . As the cloud collapses, a dense, hot core forms and begins gathering dust and gas. Not all of this material ends up as part of a star, the remaining dust can become planets, asteroids, or comets or may remain as dust.

Significance of the findings:

- . The recent findings will help the astronomers to develop and test theories to explain how high-mass stars gain their mass.
- . Furthermore, these findings promote the advantages of maser observations in understanding high-mass-star formation.

BIOROCK OR MINERAL ACCRETION TECHNOLOGY

◎ CONTEXT

- **The Zoological Survey of India (ZSI), with help from Gujarat’s forest department, is attempting for the first time a process to restore coral reefs using biorock or mineral accretion technology.**

Locating the biorock:

- . Biorock is the name given to the substance formed by electro accumulation of minerals dissolved in seawater on steel structures that are lowered onto the sea bed and are connected to a power source, in this case solar panels that float on the surface.
- . A biorock structure has been installed one nautical mile off the Mithapur coast in the Gulf of Kachchh.
- . The location for installing the biorock had been chosen keeping in mind the high tidal amplitude in the Gulf of Kachchh.
- . The low tide depth where the biorock has been installed is four metres, and at high tide it is about eight metres.

About the technology:

- . Mineral Accretion Technology is a coral reef restoration technology that utilizes low voltage electricity to improve the health and growth rates of corals and other marine organisms.
- . The technology works by passing a small amount of electrical current through electrodes in the water.
- . When a positively charged anode and negatively charged cathode are placed on the sea floor, with an electric current flowing between them, calcium ions combine with carbonate ions and adhere to the structure (cathode).
- . This results in calcium carbonate formation. Coral larvae adhere to the CaCO_3 and grow quickly.
- . Fragments of broken corals are tied to the biorock structure, where they are able to grow at least four to six times faster than their actual growth as they need not spend their energy in building their own calcium carbonate skeletons.

What are Coral Reefs?

- . Coral reefs are the large number underwater structures composed of the skeleton of the colonial marine invertebrates known as 'coral'.
- . Each individual coral animal is called a '**polyp**'. Most of them live in groups of thousands of genetically identified polyps that form a '**colony**', which is created by a process called **budding**, where the original polyp grows copies of itself.
- . Coral are invertebrates belonging to group of **Cnidarians**. They are generally classified into two groups:
 - œ **Hard or hermatypic corals**: They extract calcium carbonate from seawater to create a hard, durable exoskeleton that protects their bodies.
 - œ **Soft corals**: They are flexible organisms and resembles trees and plants.

Threat to Coral Reefs:

- . **Ocean warming**: Corals cannot survive in high water temperature. Global warming has already led to increased levels of coral bleaching.
- . **Pollution**: Pollution arising from urban and industrial waste, sewage, agrochemicals, and oil pollution are poisoning reefs increases the level of nitrogen in seawater, causing an overgrowth of algae, which smothers reefs by cutting off their sunlight.
- . **Destructive Fishing Practices**: Destructive fishing practices such as cyanide fishing, dynamite fishing, bottom trawling, and muro-ami, bottom-trawling are some greatest threats to cold-water coral reefs.
- . **Overfishing**: Overfishing adversely affects the ecological balance of the coral reef, disturbing the food chain.
- . **Sedimentation**: Furthermore, erosion caused by construction, mining is leading to increased sediment in rivers, which ends up in the ocean. In addition to this, the destruction of mangrove forests, which generally trap large amounts of sediment, is exacerbating the problem.

Significance of the initiative:

- . **Sustainability**: The initiative of coral restoration using biorock technology could potentially help to sustain the earlier successes.
- . **Strengthening corals**: The technology helps corals, including the highly sensitive branching corals, to counter the threats posed by global warming.

DHANUSH, INDIA'S FIRST INDIGENOUS LONG-RANGE ARTILLERY GUN

◎ CONTEXT ◎ ABOUT

- . The Dhanush gun system was showcased for the first time at the 71st Republic Day parade.
- . Dhanush, the 155 mm/45-calibre gun system is a towed Howitzer designed indigenously by the Ordnance Factory Board (OFB).
- . It is the first long-range artillery gun to be produced in India and has been billed as a success of the government's **Make in India** initiative.
- . **Hitting range**: The gun has a maximum range of 36.5 km and has the capability of automatic alignment and positioning.
- . It is equipped with:
 - œ an inertial navigation-based sighting system
 - œ an auto-laying facility
 - œ an onboard ballistic computation

- œ an advanced day and night direct firing system
- . Apart from the above, the gun is also fitted with an inertial navigation system with global positioning system- (GPS) based gun recording and auto-playing, an enhanced tactical computer for onboard ballistic computations, an onboard muzzle velocity recording, an automated gun sighting system equipped with the camera, thermal imaging and laser range finder.
- . **Joint effort:** It is a joint effort by the OFB, the Army, Defence Research and Development Organisation (DRDO), Directorate General Quality Assurance, PSUs Bharat Electronics Limited, SAIL, and private firms.

Desi-Bofors:

- . Dhanush is an improved version of the FH-77B 155 mm/39-calibre field howitzers that were originally produced by AB Bofors of Sweden, which is now BAE Systems.
- . It is compatible with all **North Atlantic Treaty Organization (NATO)** 155 mm ammunition system.
- . Referred to as 'desi Bofors', Dhanush is the first long-range artillery gun to be produced under the 'Make in India' initiative.
- . A comparison chart of Technical features of Dhanush is as given below:

Feature	155mm FH77B BOFORS	DHANUSH
Gun Recording	Collimator & Director	Inertial Navigation System Based
Gun Laying	Manual	Auto Laying
MV Recording	Off Board	On Board
Ballistic Calculations	At Battery Command Post	On Board
Gun Computer	Not Available	Enhanced Tactical Computer
Hydraulics	Original	Modified for Auto Laying
Gun Laying	Mechanical-Hydraulics	Electronics-Hydraulics
Sighting	Panoramic / Day / Night	CCD Camera/TI/1RF
Communication	Radio Based	Compatible with SHAKTI and STAR V

Significance of Dhanush for India:

- . **Difficult terrain:** Dhanush's lightweight (13 tonnes), makes it easy to mobilize in hilly terrain and remote areas.
- . **Operational in all climatic conditions:** Being a versatile weapon, it can operate in all climatic conditions.
- . **Enhancing the Army's power:** It is the first long-range artillery gun to be produced in the country. It will significantly enhance the Army's firepower.

Other important display:

- . Other than Dhanush artillery, the **Anti-Satellite (ASAT) missile** also made an appearance for the first time.
 - œ With space becoming a vital dimension of any country's economic and military superiority, A-SAT (Anti-Satellite) weapons play a critical role in providing the necessary strategic deterrence.
 - œ In March last year, the Defence Research Development Organisation (DRDO) launched '**Mission Shakti**', India's first A-SAT mission and demonstrated its anti-satellite technology.
- . The **K9 Vajra**, another indigenous gun system inducted in the Indian Army, was also seen at the parade this year.

- The short-span bridging system and the **Sarvatra Bridge system** was also displayed.
- Heavylift helicopter **Chinook** and attack helicopter **Apache**, both recently inducted in the Indian Air Force (IAF), also made a debut in the parade.
 - œ The Chinooks can airlift diverse loads in remote locations.
 - œ The Apache, on the other hand, is a versatile helicopter capable of firing air to air and air to ground missiles, rockets and front gun aided through fire control radar which can unleash havoc on the adversary.

NASA'S SPITZER SPACE TELESCOPE

◎ **CONTEXT**

- **NASA is ending its Spitzer Space Telescope mission, which observed the universe in infrared for 16 years.**

◎ **ABOUT**

- The **Spitzer Space Telescope (SST)**, formerly known as 'Space Infrared Telescope Facility' (SIRTF), is an **infrared space telescope**.
 - œ It was launched in 2003.
 - œ It retired on 30 January 2020.
- **Naming of the telescope:** Unlike most telescopes that are named after famous deceased astronomers, the new name for SIRTF was obtained from a contest open to the general public.
 - œ Keeping with NASA tradition, the telescope was renamed after its successful demonstration of operation.
- **Mission plan:** The planned mission period was to be 2.5 years, with an extendable period depending upon exhaustion of **on-board liquid helium supply**.
 - œ Spitzer was launched from Cape Canaveral SLC-17B aboard a Delta II 7920H rocket.
- **Shut down:** NASA is shutting down SIRTF; which was its long-lasting space observatories.
 - œ The telescope had been wandering through space for nearly two decades.
 - œ NASA has run out of money to fund the spacecraft.
 - œ In 2018 it had cost roughly \$12 million to operate the telescope.
 - œ In 2017, NASA made an unsuccessful attempt to search for private organizations to take over Spitzer.
- **Infrared Science Archive (IRSA):** All Spitzer data, from both the primary and warm phases, are archived at the Infrared Science Archive (IRSA).

Lyman Spitzer

- Earlier, the telescope was named in honour of **astronomer Lyman Spitzer**, who had promoted the concept of space telescopes in the 1940s.
 - œ He has been cited for his pioneering contributions to rocketry and astronomy.
- **Extra-terrestrial observatory:** In 1946 Spitzer described the advantages of an extra-terrestrial observatory, and how it could be realized with available or upcoming technology.

Functioning

- **Helium supply:** Liquid helium is needed to cool the telescope to very low temperatures.

- œ Low temperatures are needed in order to operate; otherwise most of the instruments will not be usable.
- . **Orbit path:** It follows a heliocentric instead of geocentric orbit, trailing and drifting away from Earth's orbit at approximately 0.1 astronomical units per year (a so-called "earth-trailing" orbit).
- . **Earth-trailing orbit:** The spacecraft is in more or less the same orbit as Earth, lagging behind the planet as it travels around the Sun.
 - œ Spitzer gets farther and farther from Earth each year and doesn't warm up from the heat coming off our planet.
 - œ That way it stays nice and cool.
 - œ For an extra layer of coolness, Spitzer is launched to space with a special liquid helium coolant, which helped to keep the spacecraft and its instruments at a frigid temperature of -459 degrees Fahrenheit (or -273 degrees Celsius).
- . **Low temperatures:** Anything that emits a lot of heat also emits a lot of infrared light, which means there are plenty of sources that can come up in observations.
 - œ Earth's atmosphere is a source of infrared light, which makes it difficult to observe the Universe in infrared from the ground.
 - œ If the telescope gets too warm, the infrared light it emits can also be a source of confusion.
 - œ Hence, cold telescopes like Spitzer in space.
- . **Primary mirror:** The primary mirror is 85 centimetres (33 in) in diameter, f/12, made of beryllium and was cooled to 5.5 K (−268 °C; −450 °F).
- . **Three instruments:** The satellite contains three instruments that allow it to perform astronomical imaging.
 - œ Photometry from 3.6 to 160 micrometers.
 - œ Spectroscopy from 5.2 to 38 micrometers.
 - œ Spectrophotometry from 5 to 100 micrometers.
- . **Infrared visibility:** Spitzer's charge has been to observe infrared light, a type of light that humans can't see, but can sense as heat.
 - œ Objects that are faint and super cold can still be seen by the infrared light that they produce, so Spitzer can show us things that might otherwise seem invisible.

Achievements of SIRT

- . Spitzer took images of some of the **coldest and most ancient objects** in the Universe.
- . It proven to be a remarkable tool for learning more about the **cosmos**.
- . Helped discover **newly forming stars**, new rings of Saturn, and even an **entire solar system** around 40 light-years away.
- . The telescope revealed a **new ring around the planet Saturn**.
- . **Old stars and galaxies** were Spitzer's specialty, as well as **extra cold objects** that may be cold by human standards, but are actually warmer than the backdrop of our extra cold Universe.
- . Spitzer could spot baby stars in the middle of forming, which are too faint to see but observable in infrared.
- . The **North America Nebula** seen in visible and infrared light was taken from Spitzer Image.
- . Despite being offline, Spitzer could still help scientists make **more discoveries in the future**.
- . The entire archive of observations made by the telescope will be available to anyone who wants to use it.

- It's possible that **even more great finds** are hiding in these records.

Spitzer Warm Mission

- Spitzer operated in its "cold mission" for 5.5 years, well beyond the 2.5 years that NASA had hoped.
- But eventually, the spacecraft ran out of the liquid helium coolant, which prompted Spitzer's warm mission.
- The telescope warmed up, but it didn't warm up very much.
- It wasn't able to observe as much as it could before.
- Its biggest find during its warm phase: the discovery of an entire solar system of seven Earth-sized planets, orbiting a star called TRAPPIST-1.

TRAPPIST-1 Star

TRAPPIST-1 is a planetary system, located 12 parsecs away from the Solar system (39 light years), and is 12 times less massive than the Sun and only slightly larger than the planet Jupiter. There are at least seven rocky planets orbiting the star.

NASA observatories

- Spitzer is one of four space telescopes operated by NASA known as the Great Observatories.
 - œ Compton Gamma Ray Observatory
 - œ Chandra X-ray Observatory
 - œ Hubble Space Telescope.
 - œ Spitzer Space Telescope
- Combined, the four telescopes were meant to observe the Universe in as many wavelengths of light as possible — ranging from the visible light that we can see, to the kinds of light our eyes cannot register.
- **James Webb Space Telescope:** NASA's next great space observatory, the James Webb Space Telescope is in making.
 - œ Designed to study the Universe in infrared, the James Webb will be the most powerful space telescope ever made.
 - œ It will be able see back in time to the beginning of the Universe.

POLIO COMEBACK IN A NUMBER OF COUNTRIES: SHOULD INDIA BE WORRIED?

◎ CONTEXT

- In the last one year or so, polio has made a comeback in countries such as the Philippines, Malaysia, Ghana, Myanmar, China, Cameroon, Indonesia and Iran, mostly as vaccine-derived polio infection.

◎ ABOUT

- **The Polio disease**
 - Polio, or poliomyelitis, is a disabling and life-threatening disease caused by the poliovirus.
 - The virus spreads from person to person and can infect a person's spinal cord; causing paralysis (can't move parts of the body).
 - It can spread easily from person to person.
 - The World Health Organisation (WHO) aim is to eradicate polio completely and, if this

happens, it will be only the third disease to have been beaten in this way, after smallpox and rinderpest.

- . Nigeria, Pakistan, and Afghanistan are the only three countries in which polio has not successfully been stopped.

Symptoms

- . Most people who get infected with poliovirus will not have any visible symptoms.
- . About 1 out of 4 people with poliovirus infection will have flu-like symptoms.
- . It may include
 - œ Sore throat
 - œ Fever
 - œ Tiredness
 - œ Nausea
 - œ Headache
 - œ Stomach pain
- . A smaller proportion of people with poliovirus infection will develop other, more serious symptoms that affect the brain and spinal cord.

- . **Paresthesia** (feeling of pins and needles in the legs)
- . **Meningitis** (infection of the covering of the spinal cord and/or brain) occurs in about 1 out of 25 people with poliovirus infection
- . **Paralysis** (can't move parts of the body) or weakness in the arms, legs, or both, occurs in about 1 out of 200 people with poliovirus infection

Transmission

- . Poliovirus is very contagious and spreads through person-to-person contact.
- . It lives in an infected person's throat and intestines.
- . Contact with the feces (poop) of an infected person.
- . Droplets from a sneeze or cough of an infected person.

Vaccine

- . There are two vaccines available to fight polio:
 - œ inactivated poliovirus (IPV)
 - œ oral polio vaccine (OPV)
- . IPV consists of a series of injections that start 2 months after birth and continue until the child is 4 to 6 years old. The vaccine is made from inactive poliovirus. It is very safe and effective and cannot cause polio.
- . OPV is created from a weakened form of poliovirus. It is low cost, easy to administer, and gives an excellent level of immunity. However, in very rare cases, OPV has been known to revert to a dangerous form of poliovirus, which is able to cause paralysis.

Which are the countries that have seen polio outbreaks in recent months?

- . In December, 2019, the Ministry of Health in Malaysia announced the country's first case of polio since 1992.
- . In September last year, the Philippines had declared an outbreak of polio.
- . Both caused by vaccine-derived poliovirus type 2.

- . Last month, the CDC published a list of Asian countries where polio outbreaks have been reported. These are Afghanistan, Burma (Myanmar), China, Indonesia, Malaysia, Pakistan, Papua New Guinea and the Philippines. Except for Afghanistan and Pakistan, all these countries are new entrants into the list.

Where does India stand?

- . In January 2014, India was declared polio-free after three years on zero cases, an achievement that is widely believed to have been spurred by the successful pulse polio campaign in which all children were administered polio drops.
- . Lessons from the programme were later incorporated in Mission Indradhanush to bump up India's immunisation campaign, and with great success.
- . India introduced the injectable polio vaccine in the Universal Immunisation Programme. This was to reduce chances of vaccine-derived polio infection, which continues to happen in the country.

Polio-free V/S Eradication

- . There are three variants of the polio virus, numbered 1 to 3.
- . For a country to be declared polio-free, wild transmission of all three kinds has to be stopped.
- . For eradication, cases of both wild and vaccine-derived polio infection to be reduced to zero.

POLYCRACK TECHNOLOGY

◎ CONTEXT

- **Indian Railways has commissioned the country's first governmental waste to energy plant in Mancheswar Carriage Repair workshop at Bhubaneswar in East Coast Railway.**

◎ ABOUT

- **The Waste-To-Energy Plant:**
 - . This Waste to Energy Plant, a patented technology called **POLYCRACK**, is first-of-its-kind in Indian Railways in India.
 - . While this is the first such plant over railways, it is the fourth in the country. The first plant is a small one with capacity of 50 kg/day set up by Infosys at Bangalore in 2011.
 - . The second one is at Moti Bagh, Delhi in 2014 with a capacity of 50 kg per day. The third one set up at Hindalco in 2019 with 50 kg capacity per batch.
 - . It is world's first patented heterogeneous catalytic process which converts multiple feed stocks into hydrocarbon liquid fuels, gas, carbon and water.
 - . **Important features:** Polycrack has the following advantages over the conventional approach of treating solid waste:
 - œ Pre-segregation of waste is not required to reform the waste. Waste as collected can be directly fed into Polycrack.
 - œ It has high tolerance to moisture hence drying of waste is not required.
 - œ Waste is processed and reformed within 24 hours.
 - œ It is an enclosed unit hence the working environment is dust free.
 - œ Excellent air quality surrounding the plant.
 - œ Biological decomposition is not allowed as the Waste is treated as it is received.
 - œ The foot print of the plant is small hence the area required for installing the plant is less when compared with conventional method of processing.
 - œ All constituents are converted into valuable energy thereby making it Zero Discharge Process.

- œ Gas generated in the process is re-used to provide energy to the system thereby making it self-reliant and also bring down the operating cost.
- œ There is no atmospheric emission during the process unlike other conventional methods except for combustion gases which have pollutants less than the prescribed norms the world over.
- œ Operates around 450 degrees, making it a low temperature process when compared with other options.
- œ Safe and efficient system with built-in safety features enables even an unskilled user to operate the machine with ease.
- œ Low capital cost and low operating cost.
- œ Fully automated system requires minimum man power.

How the waste will be processed?

- . Polycrack Plant can be fed with all types of Plastic, Petroleum sludge, Un-segregated MSW (Municipal Solid Waste) with moisture up to 50%, E-Waste, Automobile fluff, Organic waste including bamboo, garden waste etc., and Jatropha fruit and palm bunch.
- . Waste generated from Mancheswar Carriage Repair Workshop, Coaching Depot and Bhubaneswar Railway Station will be feeder material for this plant.
- . The process is a closed loop system and does not emit any hazardous pollutants into the atmosphere.
- . The combustible, non-condensed gases are re-used for providing energy to the entire system and thus, the only emission comes from the combustion of gaseous fuels.
- . The emissions from the combustion are found to be much less than prescribed environmental norms.
- . This process will produce energy in the form of Light Diesel Oil which is used to light furnaces.

INDIA HUMAN DEVELOPMENT SURVEY

◎ CONTEXT

- **A new study by the India Human Development Survey (IHDS) suggests consumption growth may have moderated in recent years but may not have declined.**

◎ ABOUT

- **NSS report:** Leaked portions National Sample Survey (NSS) on consumption expenditure suggested that consumption declined in real terms between 2011-12 and 2017-18.
 - œ The results were held back by the National Statistical Office (NSO).
 - œ NSO claims that there were serious data quality issues with the 2017-18 survey.
- **IHDS report:** A study by researchers from the National Council of Applied Economic Research (NCAER) and the University of Maryland show findings contrary to NSS.
 - œ Consumption spending has grown between 2011-12 and 2017.
 - œ Yet, the pace of growth is significantly lower (in real per capita terms) compared to the growth between 2004-05 and 2011-12.

IHDS study

- **Assessment of living standards:** IHDS provides an independent assessment of changes in living standards for a panel of 4828 households across Rajasthan, Bihar and Uttarakhand.
- **Per capita incomes grew:** Per capita incomes grew by 3.5% per annum between 2011-12 and 2017.
 - œ The same households experienced per capita income growth of 7.2% per annum between 2004-5 and 2011-12.

- . **Per capita consumption expenditure grew:** Per capita consumption expenditure grew by 2.7% per annum over the same period.
 - œ The same households experienced and per capita consumption growth of 4% per annum between 2004-5 and 2011-12.
- . **Increase in ownership of vehicles:** There is a consistent increase in ownership of vehicles over the two time-periods.
 - œ While ownership of cars and motorcycles rose 11 percentage points to 22 percent between 2004-05 and 2011-12, the same figure went up 10 percentage points between 2011-12 and 2017

Consumption spending

- . Whether consumption spending has grown fast, grown slowly, or actually declined has huge **implications for economic policy-making**.
 - œ And in the absence of data, it is difficult to design a sound economic policy.
- . **The spurt in consumption may not indicate a boom though.** This could well be due to catch up consumption for items families were unable to buy during the cash crunch created by demonetization.
 - œ Or it could be purchases taking place to avert paying Goods and Services Tax (GST).

Demonetisation impact

- . **Demonetisation shock:** One of the challenges facing the interpretation of consumption data stems from short-term shock caused by demonetization.
- . **Cash crunch:** The demonetization of high-value currency notes, implemented in November 2016, led to a tremendous cash crunch.
- . **Low purchasing power:** It adversely affected the purchasing power of consumers and incomes of small businesses and informal workers.
- . **Temporary in nature:** The cash crunch affected how much money households could spend, but it was temporary in nature.
 - œ Families made adjustments by reducing discretionary expenditure without affecting expenditure on food, health and education.

Caution

- . **Small sample:** IHDS study is based on a relatively small sample of 4828 households across three states interviewed in 2004-5, 2011-12, and 2017.
- . **No subsequent interviews:** Only 81% of the households initially interviewed in 2004-5 could be contacted for subsequent interviews.
- . **More urban households lost:** While the sample was randomly drawn in 2004-5, more urban households were lost than rural households, making this a selective sample.
- . **Small coverage:** Unlike NSS which collects detailed data on over 500 consumption items, the IHDS groups these items into 52 categories providing a somewhat rough estimate of consumption expenditure.

© CONCLUSION

- . IHDS study indicates that India's growth story may not have collapsed altogether.
- . Consumption has also witnessed a similar slowdown but it has not declined in absolute terms.
- . The boom phase of 7-8% growth in household incomes was over by 2011-12 and has moderated since then.
- . The study suggests modest growth, and highlights the need to ensure credible survey data to guide public policies.

MISCELLANEOUS

CURRENT AFFAIRS

INDIA'S FIRST UNDERWATER METRO

- . Kolkata Metro Rail Corporation has nearly completed the country's first underwater metro project.
- . The length of river crossing is 520 metres and the internal diameter of each tunnel is 5.55 metres. With this it will become the first underwater transportation tunnel in the country.
- . The 520 m twin tunnel has been built 30 m below the riverbed, and it is estimated that those commuting from Howrah to Mahakaran metro station will need around a minute as the train is expected to pass this tunnel at a speed of 80km/hour.
- . The underwater train will connect the Howrah and Mahakarn Railway Stations.

LALA LAJPAT RAI

- . Lala Lajpat Rai's 155th birth anniversary celebrated on January 28, 2020.
- . Born in Punjab on January 28 1865, Lala Lajpat Rai was a part of the famous 'Lal-Bal-Pal' trio. Bal Gangadhar Tilak and Bipin Chandra Pal were the other members.
- . The United States of America: A Hindu's Impression, Arya Samaj, Young India, England's debt to India are some of the books written by the freedom fighter.
- . In 1928, Rai led the non-violent march against the Simon Commission, set up by the British rulers. The slogan "Simon, go back!" became famous during the Independence movement
- . In 1921, Rai founded the Servants of the People Society, which was a non-profit welfare organization, in Lahore.
- . The society was shifted to Delhi after 1947. The organisation has many branches in India and is now known as Lok Sevak Mandal.

NATIONAL GIRL CHILD DAY

- . Started by the Ministry of Women and Child Development and the Government of India in 2008, the National Girl Child Day is celebrated on January 24.
- . The idea behind marking the day is to raise awareness about discrimination girls face, the support they need and equal access to education, and good health.

SHAMLAT LAND

- . The state government of Punjab has recently approved an amendment to the Village Common Land (Regulation) Rules, 1964, allowing panchayats to sell shamlat land to industrial houses, entrepreneurs, businessmen, and companies for setting up micro, small and medium industrial units.
- . Shamlat is one of three categories of common land in Punjab villages. 'Shamlat' land is owned by the village panchayat. Of the other two categories:
- . 'Jumla mushtraka malkan' is land in a common pool made with villagers' personal contributions, and is managed by the panchayat.
- . 'Gau charan', too belongs to the panchayat, and is for cattle grazing.
- . Over time, however, all such lands have come to be known as shamlat land. Shamlat land is mainly used for cultivation, and is allotted for this through an open auction that is conducted by the Rural Development and Panchayat Department every year.

CURRENT AFFAIRS ANALYST

PART-2 (FEBRUARY, 2020)

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SECTION: A

(MAINS)

CURRENT AFFAIRS

RBI INTRODUCES LONG-TERM REPO OPERATIONS (LTRO)

CONTEXT

- . Recently, the Reserve Bank of India (RBI) decided to introduce long-term repo operations (LTRO) and revised its liquidity management framework to facilitate the transmission of monetary policy actions and flow of credit to the economy.

● ANALYSIS:

- œ The central bank will conduct **long-term repos operations (LTROs)** of **one- and three-year tenors** for up to a total amount of **Rs. 1 lakh crore** at the **policy repo rate**.
- œ LTROs conducted under this scheme will be **in addition to the existing** Liquidity Adjustment Facility (**LAF**) and Marginal Standing Facility (**MSF**) operations.
- œ **Objective:** This is a direct incentive by RBI to boost credit growth, even as the monetary policy committee (MPC) earlier kept benchmark rates unchanged because of uncertainty in the inflation outlook.
 - > Credit lending in the economy is at low levels. India's credit growth slowed to 7.1% in 2019.
- œ **External Benchmark System:** Earlier, the central bank mandated all banks to link their floating rate loans to an external benchmark instead of the marginal cost-based lending rate (MCLR).
 - > After the introduction of external benchmark system, most banks linked their lending rates for housing, personal and micro and small enterprises (MSEs) to the policy repo rate of the RBI.
- œ LTROs will be conducted on **CBS (E-KUBER) platform**.
- œ RBI's action is **reminiscent of the European Central Bank's (ECB's)** unequivocal promise of funds to the banking system in 2011.
- œ **Measures used by RBI:**
 - > **Cash reserve ratio (CRR) norms were also eased** for new retail loans to improve credit flow.
 - > **Revised the liquidity management framework**, and finalized weighted average call rate (WACR) as the single operating target.
 - > RBI also **abolished the daily variable rate reverse repo** and replaced it with a daily fixed-rate reverse repo.
- œ **An Accommodative Monetary policy during**

Policy Committee (MPC) cut the repo rate by 110 basis points in four consecutive meetings. In its 5th meeting, MPC kept the repo rate unchanged.

- > A repo rate cut means that RBI will lend money to commercial banks at a lower rate.
- > A lower repo rate will reduce cost of borrowing for commercial banks.
- > This incentivises commercial banks to lend money to businesses at a lower interest rate.
- > At a lower rate of interest, businesses will borrow more, and more liquidity is injected into the economy.

A liquidity adjustment facility (LAF) is a tool used in monetary policy, primarily by RBI, which allows banks to borrow money through repurchase agreements (repos) or for banks to make loans to the RBI through reverse repo agreements. This arrangement manages liquidity and was introduced as a result of the Narasimham Committee on Banking Sector Reforms (1998). Marginal Standing Facility (MSF) is a new LAF window created by RBI in its credit policy of May 2011. MSF is the rate at which the banks are able to borrow overnight funds from RBI against the approved government securities.

● ANALYSIS:

Why was External Benchmark System introduced?

- œ **MCLR had replaced base rate regime:** The MCLR-based regime had replaced the earlier base rate regime to provide transparency in the transmission of monetary policy decisions.
- œ **Marginal cost-based lending rate:** MCLR is an **internal benchmark rate** that depends on various factors such as fixed deposit rates, source of funds and savings rate. The price of loan comprises the MCLR and spread/profit margin of the bank.
- œ **Problem with MCLR regime:** When RBI cut the repo and reverse repo rates, banks did not pass the full benefits to borrowers. It is not that banks did not cut their MCLR. They did albeit by a much

- > MCLR system is opaque since it is an internal benchmark that depends on the way a bank does its business.
- > Due to internal benchmarking of loan price, policy rate cuts often don't reach the borrowers.
- > **Unmatched policy transmission:** In December 2019, one-year median MCLR has declined by 49 basis points since February while RBI cut the repo rate by 135 basis points cumulative in the same period.
- œ **External Benchmark Regime:** Under the new regime, interest rate for floating loan will immediately respond to changes in repo rate or Treasury bill rate. Banks were free to choose from any of the external benchmark mentioned below:
 - > RBI's policy repo rate
 - > Government of India 3-Months Treasury Bill yield published by the **Financial Benchmarks India Pvt Ltd (FBIL)**
 - > Government of India 6-Months Treasury Bill yield published by the FBIL
 - > Any other benchmark market interest rate published by the FBIL
- œ **Loans to medium enterprises also linked to external benchmark:** RBI has decided to link pricing of loans by scheduled commercial banks for the micro, small and medium enterprises to an external benchmark like the repo rate with effect April 1, 2020.
- œ **Note:** Banks were free to charge a spread, i.e., margin and risk premium over and above the external benchmark.

Why is RBI introducing LTRO now?

- œ **Increase liquidity in event on non-accommodative stance of MPC:** Keeping in view the inflationary pressures, MPC in its 5th meeting kept the repo rate unchanged. This gave RBI a chance to use other measures that are essentially outside the ambit of MPC.
 - > To overcome the impact of an absent rate cut, and add impetus to the slowing economy RBI resorted to measure of LTRO.
- œ **Availability of durable liquidity:** Rs. 1 lakh crore will be injected into the banking system that will enable banks to reduce their lending rates.
 - > The 1 trillion borrowed by banks under this special window will be locked in at the current repo rate of 5.15%.
 - > Basically, this means banks can give the RBI government bonds and borrow money for 1 and 3 years at a fixed rate.

- œ **Lower cost of funds for banks:** Funds are being given at the policy rate (repo rate), which is relatively cheaper than the prevailing market rates.
 - > This will bring down cost of funds for banks without effectively cutting deposit rates.
 - > It is expected to bring down short-term rates and boost investment in corporate bonds, as corporate borrowing rates will fall.
- **Ensure Monetary Transmission:** It is an effort by the RBI to ensure better monetary policy transmission and make effective the transmission of earlier repo rate cuts.
- **Manage bond yields:** This, along with other measures of RBI like 'Operation Twist' will help RBI manage bond yields.

Neutral Monetary policy: Neutral Monetary policy refers to central bank (read RBI) keeping such rate or range of rates, which are consistent with full employment, trend growth, and stable prices. An economy in this state doesn't need to be stimulated or slowed by a monetary policy.

Accommodative Monetary policy: An Accommodative monetary policy occurs when a central bank attempts to expand the overall money supply to boost the economy when growth is slowing (as measured by GDP).

What was the immediate impact of LTRO?

- œ **Fall in short-term bond yields:** Shorter duration **government bond yields plunged** on after RBI announced LTRO.

Benefits of LTRO

- œ **Increased flow of credit to productive sectors:** This should encourage banks to undertake maturity transformation smoothly and seamlessly so as to augment credit flows to productive sectors.
- œ **Improve growth:** This step demonstrates RBI's intent towards supporting growth.
- œ **Will act against inflationary pressures:** Given the elevated headline inflationary pressures, this measure will be an incentive for banks to lock medium-term funding at currently low (repo) rates.

CRR reduced for certain segments

- œ **CRR is currently at 4% of net demand and time liabilities (NDTL)** or a sum of the bank's deposits and borrowings.
 - > Banks must set aside CRR with RBI, but do not earn any interest on it.

- > The lower the CRR requirement, the better it is for banks, as they can lend that much more and earn interest on it.
- œ To improve credit flow, **RBI temporarily removed the cash reserve ratio (CRR)** for every new retail loan made to finance **automobiles, homes, and to small businesses**.
 - > Cheaper money helps spur credit demand.
- œ This will make it attractive for banks to lend to retail and small businesses.
- œ **It essentially translates into a short-term cut in CRR.**
- œ This scheme will be available for new loans given till 31 July 2020.

Revised liquidity management framework

- œ **Surplus liquidity:** Liquidity in the banking system is currently estimated at a surplus of a massive 3.6 trillion.
- œ **Revised liquidity management framework:** RBI revised the existing liquidity management framework through which it ensures adequate liquidity in the system.
 - > This was done so that sufficient credit is provided to all productive sectors in the economy, and excess liquidity in the system is channelized to supply adequate credit.
- œ **WACR as the single operating target:** According to the revised framework, RBI finalized weighted average call rate (WACR) as the single operating target. The call rate is the interest rate at which banks lend overnight money to each other.
 - > RBI will ensure enough liquidity to **anchor the call rate at around the repo rate**.
 - > This means that if the call rate inches above the repo rate, it would signal liquidity deficit and the central bank will bring its tools to infuse liquidity.
 - > Similarly, if the call rate is below the repo rate, it would mean the banking system has surplus liquidity. In that case, the central bank can operate to suck out the liquidity through its operations.
- œ **No need to maintain 1% of NDTL:** With WACR being the single operating target, the liquidity provision of RBI to maintain 1% of net demand and time liabilities (NDTL), does not arise.
 - > Hence, RBI withdrew the current provision of maintaining assured liquidity of 1% of net demand and time liability (NDTL).

- œ **Introduced a variable 14-day term repo/reverse repo operation:** Under the new framework, RBI has withdrawn the daily fixed rate repo and 14-day term repos and, instead, introduced a variable 14-day term repo/reverse repo operation, which will be conducted to coincide with the cash reserve ratio maintenance cycle.
 - > Owing to surplus liquidity, banks participate in lending excess reserves to RBI in exchange of G-Sec.
 - > Earlier banks used to dump unlimited amounts of excess cash with the RBI at daily fixed reverse repo rates.
 - > Within the new framework, now banks have to decide every 14 days how much excess cash they will need for CRR and other purposes and lend the balance for 14 days to RBI.
 - > Many banks will be afraid to give away all their excess cash to RBI for 14 days fearing demand coming up.
 - > Hence, they will park relatively less money with RBI and more money will be available for supply of credit.
- œ The introduction of LTRO is likely to **make reverse repo rate as the operative policy rate** over a point of time.
 - > It can be seen through WACR's recent drifted towards the reverse repo rate (lower bound), effectively bringing down cost of bank funds just as a rate cut would have.

Liquidity management corridor Under the new framework, the earlier **liquidity management corridor** is retained, with the marginal standing facility (MSF) rate as its upper bound (ceiling) and the fixed rate reverse repo rate as the lower bound (floor), with the policy repo rate in the middle of the corridor.

© **CONCLUSION**

- œ RBI introduction of LTRO is more of a credit policy than monetary policy. Monetary policy's effectiveness in driving credit and overall growth is limited, keeping in mind that the inflation is currently high. It needed some direct measures to ensure credit reaches to the sectors where there is requirement.

RAJYA SABHA SELECT COMMITTEE ON SURROGACY (REGULATION) BILL

CONTEXT

- The Rajya Sabha Select Committee has recommended 15 major changes in Surrogacy (Regulation) Bill, 2019.

● BACKGROUND

- œ The roots of Indian surrogacy have its traces in the history and provided evidence of being a century-old procedure.
- œ The procedure became a successful practice in India with the birth of the world's second and India's **first IVF baby Kanupriya alias Durga** who was born in Kolkata on October 3, 1978.
- œ The business of commercialized surrogacy in India began in 2002, and the country quickly became one of the top surrogacy destinations for foreign couples.
- œ First effort to regularize this sector was done in 2005 when the Indian Council for Medical Research (ICMR) gave first guidelines for accreditation, supervision and regulation of ART clinics.
- œ In 2008 Supreme Court of India stressed the need of legislation to govern the surrogacy.
- œ Then in 2009 Law Commission of India submitted **228th Report** on the need for legislation to control surrogacy and strongly recommended for prohibiting commercial surrogacy and allowing ethical altruistic Surrogacy services by enacting a suitable legislation.
- œ In 2010 ICMR revised the guidelines and proposed a legal agreement between commissioning parent, prospective surrogate and ART clinic before commencing the process.
- œ In 2015 Ministry of Health and Family Welfare invited suggestions to revise the draft of the ART bill which is still pending.
- œ In 2015 Government of India prohibited commercial surrogacy and closed the doors for foreign nationals, NRI and POI.
- œ In 2019, the Surrogacy (Regulation) Bill was passed by the Lok Sabha but had to be referred for re-assessment to the 23-member select committee on November 21, 2019, as several Rajya Sabha members found certain clauses contentious such as allowing only altruistic surrogacy with a near relative as a surrogate.
- œ For now, surrogacy is in the process of being regulated, with commercial surrogacy is completely prohibited.

● ANALYSIS:

What is Surrogacy?

- œ Surrogacy is a method of **assisted reproduction** where **intended parents** work with a **gestational surrogate** who will carry and care for their baby(ies) until birth.

- œ In the practice, one woman carries the child for another with the intention that the child should be handed over after birth.

How does it work?

- Through In vitro fertilization (IVF), embryos are created in a lab at a fertility clinic.
- Sometimes the intended parents use their own genetic material. Sometimes, an egg donor is required.
- At the fertility clinic, 1-2 embryos are implanted into a gestational carrier, who carries the baby(ies) to term.

- œ Such a surrogacy arrangement may be **altruistic** or **commercial** in nature.

- œ Intended parents use surrogacy to start or grow their families when they can't do so on their own.

Facts & Figures:

- According to a 2015 Ernst and Young study, around 27.5 million couples in the reproductive age group are infertile and about 1% (about 2,70,000 infertile couples) seek infertility evaluation.
- Of the people seeking remedy for infertility, 20-25% undergo IVF treatment and of that small group, one percent may require surrogacy.
- Ten to Twelve per cent of surrogacy is commissioned because of irreversible destruction of the uterus due to TB, 8% because of the absence of uterus, 12% because of multiple failed IVF cycles, 12% because of multiple miscarriages, 10% because of removal of the uterus due to cancers, fibroids, etc.

Methods of Surrogacy:

- œ **Traditional Surrogacy:** In this process egg used is of a surrogate mother, thus she becomes the biological mother of a child.
- œ **Gestational Surrogacy:** In this process, surrogate mother's eggs are not used. Eggs and sperms used are either donated by intended parents or other persons. The surrogate mother has no biological link with the child.
- œ **Commercial Surrogacy:** It includes surrogacies in which payment exceeding basic medical expenses and insurance covers are paid.

- œ **Altruistic Surrogacy:** It does not include payment of any monetary compensation other than basic medical expenses and insurance coverage.

What was in the Surrogacy (Regulation) Bill, 2019?

The Surrogacy (Regulation) Bill, 2019 defines surrogacy as a practice where a woman gives birth to a child for an intending couple with the intention to hand over the child after the birth to the intending couple. The important provisions of the Bill are as given below:

- œ **Regulation:** The Bill prohibits commercial surrogacy, but allows altruistic surrogacy.
- œ **Purpose:** Surrogacy is permitted when it is:
 - > for intending couples who suffer from proven infertility
 - > altruistic
 - > not for commercial purposes
 - > not for producing children for sale, prostitution or other forms of exploitation
 - > for any condition or disease specified through regulations
- œ **Eligibility criteria:** To obtain a certificate of eligibility from the appropriate authority, the surrogate mother has to be:
 - > a close relative of the intending couple
 - > a married woman having a child of her own
 - > 25 to 35 years old
 - > a surrogate only once in her lifetime
 - > possess a certificate of medical and psychological fitness for surrogacy
- œ Further, the surrogate mother cannot provide her own gametes for surrogacy.
- œ **Parentage:** A child born out of a surrogacy procedure will be deemed to be the biological child of the intending couple.

Unsolved issues in the Bill:

Some major issues still continue to remain unsolved. Among them are:

- œ **Medical expenses:** In the Bill, medical expenses have not been defined. It may include home care (physical, mental, social).
- œ **Undefined criteria:** As per the bill, an only close relative will be eligible to be the surrogate mother. There is no clear definition for this.
- œ **Irrelevant clause:** The intending couple needs to be married for at least five years and is Indian citizens. Five years is also an arbitrary figure and not based on any science.

- œ **Excluding PIOs & foreigners:** It denies surrogacy for residents of Indian origin living abroad but is close relatives.

The major recommendations:

The government sent the Surrogacy (Regulation) Bill, 2019, to a 23-member select committee of the Rajya Sabha for review. The major recommendations of the Committee are as follow:

- œ **Allowing single women:** To allow single women (widow or a divorcee and Persons of Indian Origin) to avail of surrogacy.
- œ **Insurance coverage:** To increase insurance coverage for the surrogate mother from the 16 months proposed in the Bill to 36 months as the procedure of surrogacy poses the risks of medical complications and health hazards, post-partum (after delivery).
- œ **No need to be a close relative:** To remove the requirement of surrogate mother to be a “close relative” as this requirement restricts the availability of surrogate mother and affects the genuinely needy persons.
- œ **Changing definition of infertility:** To delete the definition of “infertility” as “the inability to conceive after five years of unprotected intercourse” on grounds that it was too long a period for a couple to wait for a child.
 - > There may be certain proven medical conditions such as the absence of uterus by birth, non-functional uterus, removal of the uterus due to cancer, fibroids etc. or patients with a chronic medical condition where normal pregnancy is ruled out and it is medically proven beyond any doubt that surrogacy is the only option.
- œ **Parentage & Custody:** To protect the interests of the child born through surrogacy, the order regarding the parentage and custody of the child, issued by a Magistrate, shall be the birth affidavit for the surrogate child.
- œ **Allowing PIOs:** To allow Persons of Indian Origin (PIOs) to avail surrogacy in the country after obtaining a certificate of recommendation from the surrogacy boards.
- œ **Modifying the definition of altruistic surrogacy:** To modify the definition of altruistic surrogacy to cover “other prescribed expenses” on nutritional food required, maternity-wear, and important things for the wellbeing and upkeep of the surrogate mother.
- œ **Proper data collection:** To make responsible appropriate authorities of the central and state governments to submit data on a number of surrogacy procedures, surrogacy clinics and all related aspects to the **National Board on Surrogacy** so as to develop a proper database which helps in monitoring and regulation of surrogacy in the country.

- œ **Improving terms of experts involved:** To enhancing the term of experts on the surrogacy boards from one year as proposed in the bill to three years and officials of sufficiently higher rank to be the Chairman and Vice-Chairman of Appropriate Authorities as they deal with vital issues concerning surrogacy.

Assisted Reproductive Technologies (Regulation) Bill (ART):

- œ The Select Committee recommended that the **Assisted Reproductive Technologies (Regulation) Bill (ART)**, which is awaiting Cabinet approval, may be taken up before the Surrogacy (Regulation) Bill, since the ART Bill primarily deals with technical, scientific and medical aspects, including the storage of embryos, gametes, oocytes, etc. as contained in the Surrogacy Bill.

Challenges to Surrogacy:

- œ **Unawareness:** A surrogate mother is largely unaware of existing legal or medical procedures and the risks involved in the process.
- œ **No legal recognition:** Perhaps the most awful disadvantage is that surrogate mother is not legally recognized as “workers” in India since they do not sell mental or manual labour in the traditional sense of the term. Consequently, they do not have any legal rights.
- œ **No international recognition:** There are no internationally recognised laws for surrogacy, so many parents and children can be left vulnerable - or even stateless.
- œ **Profit-making profession:** In India, surrogacy is a \$2.3-billion industry which allowed medical practitioners to earn huge profits, without any rules and regulations governing their practice.

- œ **Risk to life:** Surrogacy puts the lives of poor women, who rented out their wombs to a surrogate couple to earn a living, at great risk due to repeated pregnancies.
- œ **Exploitation of Fundamental Rights:** The practice destroys the surrogate mother’s fundamental rights. While the surrogate mother gets a very small amount, doctors and other professionals thrive on huge profits.
- œ **Injustice:** While the surrogate mother could not refuse to give up the child, the intended parents had the right to refuse the child.

Regulation across the world:

- œ The status of surrogacy is varied across countries, ranging broadly from:
 - > unregulated (Chile, Iran, Colombia, Japan, Sweden, Nigeria etc.) to altruistically and commercially legal (Russia, Kazakhstan etc.)
 - > altruistically legal but commercially illegal (Belgium, Denmark, the UK, New Zealand, South Africa etc.)
 - > both altruistically and commercially illegal (Germany, France etc.).

In the given situation, there is a strong need to address all the pitfalls in the law before its enactment. Rather than bans, governments should consider laws that uphold surrogate mothers’ sense of dignity and bodily integrity. Surrogate mothers should be treated as full human beings who have the right to choose how they get pregnant, the right to opt-out of medical interventions, the right to refuse cesarean surgeries, and the right to maintain contact with the babies they birthed.

DEENANATH KAUL NADIM

CONTEXT

- Recently, Finance Minister Nirmala Sitharaman recited a Kashmiri poem during her Budget speech. There were few other poets who came alive in Budget 2020.

◎ BACKGROUND:

- Finance Minister recited a **Kashmiri verse** during her Budget 2020 presentation in the Parliament.
 - This first citation was of a poem 'Myon Vatan' (My Motherland) by **Deenanath Kaul Nadim**. The short verse paraphrases to talk about the nation "blooming like a lotus in Dal Lake".
- The three major themes of Budget 2020 are **aspirational India**, a **caring society** and **economic development for all**.
- In reference to asking farmers to adopt organic fertilizers, **Tamil poet Auvaiyar's** advice, "**aaathichoodi**" was quoted.
 - It translated means one must first till one's land and then eat.
- Quote on good governance included **Tamil poet and philosopher Thiruvalluvar's 'five jewels'** required for a good country: freedom from illness, wealth generation, farm productivity, happiness, and good defences.
- Kalidasa's Raghuvamsa** was also quoted. Just as Surya collects vapour from little drops of water, so must a government collect taxes—lightly.

◎ ANALYSIS:

Fact about Deenanath Kaul Nadim

- Deenanath Kaul Nadim was born in March **1916** in **Srinagar**.
- Influenced by:** He was influenced by the works of 14th century mystic poet of Kashmir, **Lal Ded, or Lalla**.
- He was at the centre of **Kashmir's progressive movement** between **1930s and 1950s**.
- Nadim won the **Sahitya Akademi award in 1987**, a year before his death on April 8, 1988.
- Nadim has written poems in **Urdu, Hindi, English and Kashmiri**.
- Interestingly, **Kaul was a leftist**, a Communist Party leader and also an admirer of Pandit Jawaharlal Nehru.
- He was closely associated with the **National Conference party** founded by Sheikh Mohammad Abdullah.

Origin of cultural movement in Kashmir

- The **Renaissance of Kashmiri literature**, as of several other Indian literatures, is closely linked with **post-independence literary activities**.
- The **political events in Kashmir**, especially the **1947 attack by Pakistan**, resulted in mobilization of Kashmiri writers and other artists in defence of their valley.
- The **first onslaught** came around **October 22, 1947**. In response, the **Cultural Front** was hastily organized. For the first time artists were assigned a role in a period of turmoil and aggression.
 - The Cultural Front had **three units; for writers, actors and painters**.
- These units played an impressive and unprecedented role in keeping up public morale by taking the message of **secularism, communal harmony and patriotism** to the people in their own language in **both rural and urban areas**.

Further developments

- Radio Kashmir:** The establishment of **Radio Kashmir on July 31, 1948**, provided a daily forum and great opportunity for **use and development of Kashmiri language**.
 - Radio Kashmir used Kashmiri - until then generally called a "vernacular" - in a variety of new contexts.
- New literary forms:** The implication of the new roles for the language was that creative writers seriously attempted those literary forms which had been neglected earlier, for example **drama, short stories and discursive prose**.
 - Until this time the main literary form was poetry and the dominant themes were nationalism (defined rather narrowly), Kashmiri identity, and religious harmony.
- In 1958, the Jammu and Kashmir Academy for Art, Culture and Languages** was founded; it provided further encouragement.
- Dina Nath Nadim:** It was during this unexpected political turmoil in the otherwise calm valley that Dina Nath Nadim came into the limelight. He has remained in the forefront of the Kashmiri literary scene ever since.

Early life

- œ **Nadim's mother had a significant influence** on his growth as a poet, especially after his father Pandit Shankar Kaul died when Nadim was only eight years old.
- œ Nadim's widowed mother would sing the **Vaks of Lalla** and would recite **Lilas of other poets**.
- œ Her repertoire of Kashmiri poems was large since she originally **came from a village Muran** where the **oral tradition of poetry** was part of the culture.
- œ Nadim was educated in **local schools with intermittent breaks**.
- œ He matriculated in 1930, received his B.A. in 1943, and earned a Bachelor of Education degree in 1947.

Literary work

- œ During his time, there is **no published collection** of Nadim's work; he was somewhat indifferent about assembling one.
- œ **SHIHIL KUL** - a **collection of Nadim's poems** has been published since, for which the poet was honoured with Sahitya Akademy Award.
- œ Most of his poems were either presented in **poetic symposia** (musha'ira or kavisammelan) or **published in local journals**.
- œ The total number of his poems is around **one hundred and fifty** including those in English, Hindi, and Urdu.
- œ Like his predecessors and some contemporaries, **his decision to write in Kashmiri was a late one**.
- œ Nadim's poetic career did not really start until late 1930's; before that he had composed some poems in English.
- œ **Influences:** Between 1938 and 1946, he wrote mainly in Urdu - and some poems in Hindi - under the influences of the **Kashmiri Pandit poet Brij Narain Chakbast, Josh Malihabadi and Ehsan bin-Danish**.
 - > This was essentially a period of apprenticeship under the ideological influences of Hinduism, Sufis and Khayyam.

1. **Nadim was trying to discover himself and his linguistic medium. He finally selected Kashmiri for, as he has said, "my mother tongue has greater claim on me."**

Concentration on works in Kashmiri

- œ Nadim had written his **first Kashmiri poem in 1942 on "Maj Kasir"** ("Mother Kashmir"), an appropriate topic for a time when Kashmir was passing through a critical phase with the mass

movement slogan **"Quit Kashmir"** challenging the established **Dogra dynasty**.

- œ A handful of Kashmiri writers were expressing political sentiments ornately embroidered with gul-o-bulbul imagery, but Nadim did not become fully part of the movement until 1946.
- œ **Political works:** It was then in a musha'ira (poetic symposium) organized by a fellow poet, Arif, that Nadim read the poem Sonth ("The Spring").
 - > Then followed Aravali Prarakhna and Grav ("A Complaint"): poems of patriotism, revolution and freedom. Here he is asking the kinds of questions which members of the progressive writer's movement were already asking in other parts of India.
- œ Consider, for example:
 - > Why should the share of a labourer be stolen by a capitalist?
 - > Why should a honey-bee circle the flowers and take away their honey?
- œ This theme was not new for Indian poetry but it was new for Kashmiri.

National Cultural Front

- œ The next phase came suddenly and unexpectedly in **1947 and 1948**, when **Maharaja Hari Singh left the state destitute** at the time of Pakistan's instigated invasion on Kashmir.
- œ **National Cultural Front:** This attack **mobilized the Kashmiris; writers and artists** organized themselves under what was called the National Cultural Front.
 - > These themes demanded new poetic forms and an extension of the earlier stylistic range of Kashmiri.
- œ **Poetry as a call to Kashmiri youth:** Borders of the state had turned into battle fields; poets turned to patriotism, and poetry was used as an awakening call to Kashmir's youth. Here Nadim was again in the forefront.
- œ **Even the titles of some of his poems are suggestive of turmoil of the period**, for example, Tsi Mir-i Karavan ban ("You Become the Leader of the Caravan"), Naray Inqalab ("The Call for Revolution"), Me Chu H'ondti Misalman beyi Insan Banavun ("I have to turn Hindus and Muslims into human beings again"), Servani Sund Khab ("The Dream of Sherwani"), and Pritshun Chum ("I Must Ask").
- œ Like many of his contemporaries, Nadim also **joined the Communist Party**. His elder **contemporary Mahjur** had already become a **"fellow traveller."**

Nadim's political activism

- œ Nadim's political activism continued during this period. He was active in **defence of world peace**, and was elected the **General Secretary** of the **State Peace Council (1950)**.
- œ He participated in the Indian Peace Conferences of 1951 and 1952. His pacifism is based on his "hope of tomorrow," which he expresses in Me Cham Ash Paghic.
- œ Political poems with personalised themes: While these are "political" poems with a socialist background, the themes have been personalized. The result is that, even as "political pieces," they do not sound like slogan mongering.

Process of Kashmirization

- œ **Blank verse:** In 1950 Nadim provided a contrast with the traditional Kashmiri poetic forms by introducing blank verse in Bi G'aviniAz ("I Will Not Sing Today").
 - > This new poetic form caught the imagination of Kashmiris - literate and illiterate.
 - > Other poets, considering it emancipation from rigid formal poetic constraints, soon followed this style.
- œ **RahamanRahi's** G'avun Chum ("I Have to Sing") clearly shows Nadim's influence.
- œ This effect is created neither by Persianization nor by Sanskritization; rather, this firmly establish the **process of Kashmirization**.

Important contributions and experimentations

- œ **Trivanzah ("Fifty-three"):** Another stylistic innovation, in the form of the dramatic monologue,

came in Trivanzah ("Fifty-three"). These innovations excited the younger writers.

- œ **First opera in Kashmiri:** In 1953 Nadim's experimentation took a different form; he wrote the first opera in Kashmiri, BomburtiYambirzal ("The Bumblebee and the Narcissus"). The theme depicted the ultimate triumph of good over evil.
- œ **Reviving the Vak form:** In the 1960s, after trying new forms such as free verse, the sonnet, etc., Nadim came back to native folk tradition, and the well-established Vak form which had reached its culmination in Lalla.
- œ **Fireflies:** Nadim experimented with poetic compositions which he terms zit'nl ("fireflies"). In this new form he **followed the Japanese haiku style**, comprising **seventeen syllables** in three lines with 5, 7 and 5 syllables each.
- œ **Pointillism or neo- impressionism:** In Zalir'Zal ("The Cobwebs") Nadim introduces pointillism or neo- impressionism.

© CONCLUSION

DeenanathKaulNadim was an epoch-maker and trend-setter in Kashmiri poetry and prose. Not many of Nadim's contemporaries could think of the literary innovation that he did, which explains why his contemporary Lone says, they "were not only influenced by Nadim, but also inspired to write in his vein. Some of them went to the extent of copying his style while some adopted his themes in their poems."

OPERATION VANILLA - HUMANITARIAN MISSIONS IN IOR, TOWARDS STRENGTHENING SOFT POWER

CONTEXT

- . India sent an amphibious warship, INS Airavat, to Madagascar in the Indian Ocean Region to help in rescue efforts after the island nation was hit by a cyclone.
-

◎ BACKGROUND

- œ As part of Operation Vanilla, the Navy delivered clothing, food and medicines, and also provided diving and communication assistance for evacuation.
- œ This was done after an appeal is made by Madagascar President to deal with unprecedented situation caused by floods.

Look at Indian Navy's Peacetime Efforts in IOR

- œ In March 2019, the Navy deployed four warships for relief operations, when Mozambique was hit by Cyclone, Idai. Indian naval teams played a stellar role in search and rescue operations and even set up medical camps.
- œ A few months later, the Navy sent two warships to Japan to assist in rescue efforts following Typhoon Hagibis.
- œ A year earlier, Indian vessels had delivered urgent medical assistance to Sulawesi, Indonesia, after it was struck by a high-intensity earthquake. Operation SamudraMaitri was launched after a telephonic conversation between Indian Prime Minister and Indonesian President.
- œ The Navy's new humanitarian approach, many say, is a maritime manifestation of Prime Minister's vision for the IOR, christened SAGAR (Security And Growth for All in the Region).

The Origin Goes Back To 2004

- œ It was in the aftermath of the 2004 tsunami that naval commanders first recognized the importance of large-scale relief and rescue missions.
- œ For over a decade, considerable resource and energy has been spent developing specialist capability and skills for naval humanitarian operations.
- œ The Navy reached out to countries across the Indo-Pacific Region, with greater deployment of assets, personnel and specialist equipment, showcasing its ability to undertake complex and diverse missions.
- œ Some of the India's benign efforts were the evacuation of over 1,500 Indian expatriates and 1,300 foreign nationals from Yemen in 2015.
- œ In 2018, India evacuated 38 Indians stranded in the cyclone-hit Socotra Island.

First Responder Concept - Towards Soft Power

- œ Navy's humanitarian impulse stems from a desire to be a linchpin (vital) of security in the IOR.
- œ It is the concept of 'first responder', with the capability and willingness to provide assistance.
- œ It has the potential to create an extended sphere of Indian influence in the IOR.
- œ It helps India project as 'soft power'.

How India's Humanitarian Gestures Are Different from Other Countries?

- œ Other countries like U.S. and China have in their inventory hospital ships fully equipped for medical assistance.
- œ India deploys regular warships and survey ships converted for medical aid.
- œ India's improvised platforms do not match the U.S. Navy's medical ship USNS Mercy or the China's Peace Ark that enable specialized medical services on a more visible scale.

India Needs To Be Cautious

- œ Prolonged presence of front-line warships in foreign waters has the potential to make partners anxious.
- œ Naval powers must be deployed discreetly.
- œ The mission should not appear geopolitical and the motives should not be misunderstood and the assistance provided should be efficient and cost effective.

Conclusion

- œ As natural disasters in the IOR become more frequent and intense, India's regional security role is likely to grow exponentially.
- œ At the forefront of disaster scenarios, the Indian Navy and Coast Guard would find themselves undertaking demanding missions.
- œ Humanitarian operations could serve as a springboard for a larger cooperative endeavour in the maritime commons.

INTERIM REPORT OF 15TH FINANCE COMMISSION: CONTINUITY AND FISCAL FOLLOW THROUGH.

CONTEXT

- The 15th Finance Commission has recommended maintaining States' share in the divisible pool of tax collections at the same level of 42% for 2020-21.

● **BACKGROUND**

- œ To factor in the changed status of the erstwhile State of Jammu & Kashmir, the rate at which funds may be shared with the States has been reset at 41%.
- œ This is after adjusting 1 percentage point for the needs, including special ones of the two new Union Territories of J&K and Ladakh.
- œ An official said that the actual pool of funds available to States will be equivalent to what they were receiving from the 42% share granted by the 14th Finance Commission, as the number of States is now 28 instead of 29.
- œ The one percentage point reduction is what would have been earmarked for J&K as a State.

Main aspects of 15th finance commission

- œ **Vertical Devolution:** It recommends the distribution of the net proceeds of taxes of the Union between Union and the States.
- œ **Horizontal Devolution:** It allocates among the States the proceeds of the Vertical Devolution.
- œ **Post Devolution Revenue Deficit Resources To Local Bodies:** Article 280 (3) (bb) and Article 280 (3) (c) of the Constitution mandate the Commission to recommend measures to augment the Consolidated Fund of a State to supplement the resources of Panchayats and Municipalities based on the recommendations of the respective State Finance Commissions (SFCs). This also includes augmenting the resources of Panchayats and Municipalities.
- œ **Grants:** It has to look at the States, where the devolution alone could not cover the assessed gap. It takes into account the expenditure requirements of the States, the tax devolution to them and the revenue mobilisation capacity.
- œ **Disaster Management:** Allocations for disaster management are also done.

Recommendations for six years by the 15th Finance Commission

- œ 15th Finance Commission was appointed on November 27, 2017.
- œ Originally, it was to submit report by October 30, 2019 for five years i.e., for the period 2020-21 to 2024-25.
- œ Now, Finance Commission is submitting two reports. Interim Report for 2020-21 and the Main Report covering the period of five years beginning April 1, 2021 and ending March 31, 2026.
- œ The first report was placed in Parliament.

Why The Recommendation Period Is For Six Years This Time?

- œ **Dimension 1:** The abolition of Statehood to Jammu and Kashmir required the Commission to make an estimation excluding the Union Territory.
- œ Dimension 2:
 - > The deceleration in growth and low inflation has substantially slowed down the nominal GDP growth, which is the main tax base proxy.
 - > Making projections of tax revenues and expenditures based on this could have posed serious risks.
- œ **Dimension 3:** Moreover, poor revenue performance of tax collection and more particularly Goods and Services Tax, combined with the fact that the compensation agreement to the loss of revenue to the States was effective for only two years of the period covered by the Commission's recommendations (till 2022) posed uncertainties.

Summary of the Recommendations

1. Changes in the horizontal devolution methodology

> Major changes:

- . In addition to income distance, population, area and forest cover, it has used two additional factors, demographic performance and tax effort.
- . It assigned 15% weight to the 2011 population.
- . It reduced the weight of income distance to

45%, it increased the weight to forest cover and ecology to 10%.

- . Demographic performance is given 12.5% and tax effort is given 2.5%.

> Towards balancing

- . By keeping the weight of 2011 population at 15% and giving additional 12.5% to demographic performance, which was the inverse of fertility rate, the Commission has shown sensitivity to the concerns of these States.

> Consequences

- . In the relative shares in tax devolution, among the major States, the biggest loser is Karnataka. The other States which lost heavily include Uttar Pradesh, Kerala, Telangana and Andhra Pradesh.
- . Kerala and Andhra Pradesh have post-devolution gaps and hence qualify for revenue deficit grants.

> What are the reasons?

- . The major reason for Karnataka and Kerala losing on devolution is that their per capita income growth has been faster than most other States.
- . The difference from the highest per capita income in both Karnataka and Kerala is just about 10% now as compared to 34% and 23%, respectively for the two States, when the 14th Finance Commission made the recommendation.

2. Revenue deficit grants

- > It also recommended revenue deficit grants for the States, which had post-devolution gaps.
- > It has not deviated from the past practice even though the terms of reference given to the Commission indicated, "The Commission may also examine whether revenue deficit grants be provided at all".

3. Grants to Panchayats

- > The recommended grants for panchayats amount to Rs. 60,750 Cr.
- > All the three layers of panchayats will receive the grant and 50% of the grant is tied to improving sanitation and supply of drinking water, the remaining is untied. However the 14th FC recommended one-tenth of the grants to be performance-based.

4. Grants to municipalities

- > In the case of municipal bodies, Rs. 9,229 Cr is allocated to cities with a million-plus population and the remaining Rs. 20,021 Cr is allocated to other towns.

5. Disaster relief

- > The Commission recommended the creation of Disaster Mitigation Fund at the Central and State levels.
- > For disaster management, a total of Rs. 28,183 crore has been determined, of which the Central contribution will be Rs. 22,184 crore.
- > Inter-State allocation is made based on past expenditures, area and population and disaster risk index.

Other sectoral recommendations

- œ For 2020-21, it has recommended Rs. 7,735 crore for improving nutrition, based on the number of children in the 0-6 age group and lactating mothers.
- œ It also proposed to give grants for police training, maintenance of the Pradhan Mantri Gram Sadak Yojana roads, strengthening the judicial system and improving the statistical system.
- œ It also presented a broad framework for recommending monitorable performance grants for agricultural reform, development of aspirational districts and blocks, power sector reforms and incentives to enhance trade including exports and pre-primary education.

CONCLUSION

The real challenge is to design and dovetail sectoral and performance grants with the existing plethora of Central Sector and Centrally Sponsored Schemes.

GRAM NYAYALAYAS

CONTEXT

- The Supreme Court has asked state governments to issue notifications establishing “Gram Nyayalayas” within four weeks and also asked the High Courts to accelerate consultation with department concerned on the matter.

◎ BACKGROUND

- A bench headed by **Justice N.V. Ramana** took into account that except Kerala, Maharashtra and Rajasthan, Gram Nyayalayas are not functional in many states, though all had been issued notice.
- The Parliament in 2008 passed an Act for setting up of “Gram Nyayalayas” to enable access to justice to citizens at the doorstep, especially at the grass roots level, and to ensure socio-economic factors do not stand as an impediment for securing justice.
- Many states including Gujarat, Haryana, Telangana, West Bengal, Uttarakhand, Chhattisgarh and Odisha are yet to file affidavits even after the apex court order in October last year.
- In view of the above, the court directed the states, who have not yet issued notifications for establishing the Gram Nyayalayas, to issue the same.
- In the January 29 order, the top court said the aforementioned states should file their affidavits, subject to deposit of Rs 1 lakh by each of the above-mentioned states with the Registrar (Judicial) of the court.

◎ ANALYSIS

What are Gram Nyayalayas?

- The law envisages that a Gram Nyayalaya be established for every Panchayat at the intermediate level or a group of contiguous Panchayats at the intermediate level in a district, which will be in addition to other courts established under any law.
- Gram Nyayalayas are mobile village courts in India established for speedy and easy access to justice system in the rural areas of India.
- They are aimed at providing inexpensive justice to people in rural areas at their doorsteps.
- Each Nyayalaya will be presided over by a judicial officer who is eligible to be appointed as judicial magistrate of the first class.

- Every such appointment is to be made by the State government in consultation with the High Court of that State.
- With Article 40 of the Constitution of India (Directive Principles of State Policy) and the 73rd amendment of the Constitution, under Article 243, Gram Panchayats got the status of ‘**local self-government**’.

Salient features of the Gram Nyayalayas Act, 2008:

- The Ministry of Law had set up Gram Nyayalays in 2009 to provide a cost-effective forum at the grass-root level for the poor living in villages to settle legal matters. It was established by the Gram Nyayalayas Act, 2008.

◎ ESTABLISHMENT:

- The Gram Nyayalaya shall be established for every Panchayat at intermediate level or a group of contiguous Panchayats at intermediate level in a district or where there is no Panchayat at intermediate level in any State, for a group of contiguous Panchayats.
- The seat of the Gram Nyayalaya will be located at the headquarters of the intermediate Panchayat; they will go to villages, work there and dispose of the cases.
- Head of the Gram Nyayalayas:
- The Nyayadhikaris who will preside over these Gram Nyayalayas are strictly judicial officers and will be drawing the same salary, deriving the same powers as First Class Magistrates working under High Courts.
- He shall be appointed by the State Government in consultation with the High Court.

◎ JURISDICTION:

- The Gram Nyayalaya shall be a mobile court and shall exercise the powers of both Criminal and Civil Courts.

- œ The Gram Nyayalaya shall try criminal cases, civil suits, claims or disputes which are specified in the First Schedule and the Second Schedule to the Act.
- œ The Central as well as the State Governments have been given power to amend the First Schedule and the Second Schedule of the Act, as per their respective legislative competence.
- œ The Gram Nyayalaya shall exercise the powers of a Civil Court with certain modifications and shall follow the special procedure as provided in the Act.
- œ The Gram Nyayalaya shall try to settle the disputes as far as possible by bringing about conciliation between the parties and for this purpose; it shall make use of the conciliators to be appointed for this purpose.

© SUMMARY PROCEDURE:

- œ The Gram Nyayalaya shall follow summary procedure in criminal trial.
- œ The judgment and order passed by the Gram Nyayalaya shall be deemed to be a decree and to avoid delay in its execution; the Gram Nyayalaya shall follow summary procedure for its execution.

Where states stand?

- œ About 18 states have failed to constitute any Gram Nyayalayas over the past ten years, frustrating the object of the Act to provide 'access to justice' to all.
- œ So far only 11 states have taken steps to notify Gram Nyayalayas.
- œ At present, only 208 'Gram Nyayalayas' are functioning in the country as against 2,500 estimated to be required by the 12th five-year plan.

Why states are avoiding Gram Nyayalayas?

- œ Major reasons behind the non-enforcement include financial constraints, reluctance of lawyers, police and other government officials.
- œ Finance is the main stumbling block because no state wants to burden its exchequer.
- œ Apart from finance and political will, lack of coordination between high courts and state governments has also delayed setting up of gram nyayalaya.

Modernization of Gram Panchayats:

- œ After the Constitutional Amendment 73rd Act came into existence, the modernization of the

Panchayat System started.

- œ However, the journey of the decentralized way of governing localities started with **Lord Ripon's Resolution (1882)** and continues till date with the most popular and comprehensive study report by the **BR Mehta committee (1957-58)**, **Ashok Mehta Committee (1978-80)** and **Sarkaria Commission (1988)**.
- œ While decentralisation has been realised in many other spheres, the journey began in the justice dispensation system only with the passing of the Gram Nyayalaya Act, 2008.
- œ After almost 12 rounds of studies conducted by the Law Commission of India itself, the nation got Gram Nyayalayas Act in 2008 which was enforced on 7th Jan 2009.
- œ These major incidents brought a major shift in the paradigm and the reformation and modernization of the Panchayati Raj System.
- œ Non-establishment of Gram Nyayalayas frustrates statutory rights provided to citizens under the Act as well as the constitutional right of rural citizens to access to justice under Articles 14 and 21 of the Constitution of India.

Significance of Gram Nyayalayas:

- œ The setting up of Gram Nyayalayas is considered as an important measure to reduce arrears and is a part of the judicial reforms. It is estimated that Gram Nyayalayas can reduce around 50% of the pendency of cases in subordinate courts and can take care of the new litigations which will be disposed within six months.
- œ The second premise on which the gram nyayalaya initiative rests is that diversion of disputes away from the formal, expensive and slow existing legal system towards a relatively informal, localized model of dispute resolution has justice enhancing consequences.
- œ The gram nyayalayas are not only going to divert the existing disputes away from the civil and criminal court system and thereby speed up dispute resolution in the legal system. Instead they are likely to spawn a new arena where disputes which were hitherto resolved through other dispute processing mechanisms will now enter the legal system.

SECTION: B
(PRELIMS)
CURRENT AFFAIRS

ASSET MONETISATION PROGRAMMES

◎ CONTEXT

- In Budget 2020, The government proposed to use tax SOPs to nudge overseas investors towards its upcoming asset monetization schemes.

◎ ABOUT

- **Overseas investors for asset monetisation programmes:** Government did not make major announcements for the infrastructure sector and, instead, proposed to use tax SOPs to push overseas investors towards its upcoming asset monetization programmes.
- **Lower allocation to key infra sectors:** A reading of the expenditure budget shows that the government's total allocation to four key infrastructure segments—roads, airports, railways and civil aviation—is nearly 4% lower for FY21 than the revised budget estimates of 4,64,928 crore spent on these sectors in FY20.
- **Low allocation towards capital spending:** According to ICRA the budgetary allocation towards capital spending for the ministry of road transportation and highways for FY21 was around 18% lower than what was required to fund the government's flagship Bharatmala programme.
 - œ Even Internal and Extra Budgetary Resources (IEBR), which includes market borrowings and asset monetization, for **National Highways Authority of India (NHAI)**—the nodal agency that builds India's roads— **had a lower budget allocated for FY21**, against in FY20.
- **Focus on capital conservation:** The government seems to be in capital conservation mode and is focusing on implementing existing projects already announced before than taking up any new project.
 - œ There is thrust on asset monetization.
 - œ There are plans to privatize more roads and one major port.
- **Upcoming projects:** Government will focus on development of 2,500km of **access-control highways**, 9,000km of **economic corridors**, 2,000km of **coastal and land port roads**, and 2,000km of **strategic highways**.
 - œ The **Delhi-Mumbai expressway** and two other packages will be completed by 2023 and the **Chennai-Bengaluru Expressway** will also be started.
 - œ Four station re-development projects.
 - œ 148km-long Bengaluru Suburban Transport project.
 - œ Expansion of National Gas Grid.

Asset Monetisation Programme

- The **Department of Investment and Public Asset Management (DIPAM)** is working on restructuring and **asset monetisation of public sector enterprises** for better management and competitiveness in the present world.
- **Cabinet has approved procedure and mechanism for Asset Monetization** of Central Public Sector Enterprises (CPSEs)/Public Sector Undertakings (PSUs)/other Government Organizations and Immovable Enemy Properties.
- **Objective:** The objective of the asset monetization programme of the Government of India is to **unlock the value of investment made in public assets which have not yielded appropriate or potential returns so far**.
- **Procedure and Guidelines:** Guidelines for asset monetisation programme include principles and mechanism for capital restructuring of CPSEs regarding **payment of dividend, issue of bonus shares, and buyback of shares by CPSEs**.
 - œ It shall apply to all corporate bodies where government of India has controlling interest.
 - œ The focus of these guidelines is on optimum **utilization of funds by CPSEs to spur economic growth**.

- . **Asset Monetization** is a way of getting more cash on the balance sheet and reducing the debt-to-capital ratios that are crucial to rating agencies.
- œ **Sale proceeds (for example, disinvestment proceeds)** can be used to acquire additional operations, stabilize costs, or revitalize existing properties, retire existing debt to increase revenue production; there are no restrictions on the use of the funds.

Mechanism

- . Government is hoping to **get fresh capital back into the system** to develop Greenfield assets.
- . The government is offering **tax breaks** to overseas investors, particularly **sovereign wealth funds** and **pension funds**, to invest in domestic infrastructure.
- . **Equity support to IIFC and NIIF**: Allocation of 22,000 crore as equity support to India Infrastructure Finance Company Ltd (IIFC) and National Investment and Infrastructure Fund (NIIF) which can leverage this fund infusion 2-3 times to invest in public infrastructure.
- . **Means of raising capital from the public market**
 - œ Privatizing operating infrastructure assets.
 - œ Toll-operate-transfer agreements with private investors
 - œ Setting up Infrastructure Investment Trusts (InvITs)
- . **Incentives to foreign investors**:
 - œ 100% tax exemption to the interest, dividend and capital gains income.
- . **Criticism**: However, experts say that this class of investors **tends to buy operating assets**, leaving under-construction and Greenfield projects devoid of any funding.

Greenfield and brownfield investments

- . Greenfield and brownfield investments are two types of foreign direct investment.
- . With Greenfield investing, a company will build its own, brand new facilities from the ground up.
- . Brownfield investment happens when a company purchases or leases an existing facility.

NATIONAL LOGISTICS POLICY

◎ **CONTEXT**

- . Union Minister of Commerce and Industry of the policy reviewed the draft **National Logistics Policy and proposed action plan for implementation prepared by the Department of Logistics, Ministry of Commerce and Industry**.

◎ **ABOUT**

- . The draft National Logistics Policy has been prepared in consultation with the Ministries of Railways, Road Transport and Highways, Shipping and Civil Aviation and forty-six Partnering Government Agencies (PGAs).
- . **Objective**: To streamline rules, address supply-side constraints, lower logistics costs and ensure greater competitiveness for Indian products worldwide.
- . **National Logistics e-marketplace**: A National Logistics e-marketplace will be created as a one stop marketplace.
 - œ It will involve simplification of documentation for exports/imports and drive transparency through digitization of processes involving Customs, PGAs, etc., in regulatory, certification and compliance services.

- . **Institutional Framework for policy:** For purpose of the new logistics framework, four committees/councils will be constituted:
 - œ **National Council for Logistics**, chaired by the Prime Minister.
 - œ **Apex inter-ministerial Committee**, chaired by the Minister of Commerce and Industry.
 - œ **India Logistics Forum** chaired by the Commerce Secretary with representation from key industry/business stakeholders and academia.
 - œ **Empowered task force** on logistics will be created, as a standing committee chaired by the head of the Logistics Wing.

Need for National Logistics Policy

- . **Unregulated and fragmented logistics sector:** India's logistics sector has remained fragmented and unregulated, despite its centrality to economic growth.
- . **Complex sector:** The sector is very complex with more than 20 government agencies, 40 PGAs, 37 export promotion councils, 500 certifications, 10000 commodities, 160 billion market sizes along with 12 million employment base.
 - œ The **national logistics policy will clarify the roles** of the Union government, state governments and key regulators
- . **High cost:** The cost of logistics for India is about 14 per cent of its GDP and it is far higher as compared to other countries.
- . **Lack of adequate infrastructure:** Almost 25-30% of fruits and vegetables produced in India are wasted due to lack of cold chain infrastructure

The draft National Logistics Policy

- . **Optimise modal mix:** The draft policy has sought to optimize the modal mix (road-60%, rail-31%, water-9%) to global benchmarks (road - 25-30%, rail - 50-55%, water - 20-25%) and promote the development of multi-modal infrastructure.
- . **Logistics Wing:** The policy recommends setting up a Logistics Wing that will be the nodal agency tasked to **identify key projects for driving first mile and last mile connectivity** and to optimize the modal mix to identify commodity and corridor for the most cost-effective mode of transport.
- . **Logistics centre of Excellence:** Encourage industry, academia and government to come together to create a logistics Centre of Excellence, and drive innovation in the logistics sector.

Objectives of the Logistics Policy:

- . Providing an **impetus to trade and hence economic growth** by driving competitiveness in exports.
- . **Doubling employment** in the logistics sector by generating additional 10-15 million jobs and focus on **enhancing skills** in the sector and encouraging gender diversity.
- . Improve India's ranking in the **Logistics Performance Index**.
- . **Strengthening the warehousing sector** in India by improving the quality of storage infrastructure including specialized warehouses across the country.
- . **Reducing losses due to agro-wastage** to less than 5% through effective agro-logistics.
- . Providing impetus to **MSME sector** in the country through a **cost-effective logistics network**.
- . Promoting **cross regional trade on e-commerce platforms** by enabling a seamless flow of goods.
- . Encouraging adoption of **green logistics** in the country.

Benefits

- Impetus to employment and growth: The Indian logistics sector provides livelihood to more than 22 million people and improving the sector will facilitate 10% decrease in indirect logistics cost, leading to a growth of 5 to 8% in exports.
- **Growth potential in logistics sector:** Further, it is estimated that the worth of Indian logistics market will be **around \$215 billion in the next two years**, compared to about \$160 billion at present.

◎ WAY FORWARD

- The development of multi-modal logistics parks and rules to do with motor vehicle movement, come under the ambit of state governments. So, there is need of alignment between the Centre and states, for better implementation and coordination of this policy.

REVISED BANKING REGULATION ACT

◎ CONTEXT

- Recently, the Union Cabinet approved amendments to the Banking Regulation Act to empower the central bank to have greater control over cooperative banks.

◎ ABOUT

- The Union cabinet cleared **changes in Banking Regulation Act** to give **RBI wider powers**.
- **Ambit:** The amendments will apply to all **urban co-operative banks** and **multi-state cooperative banks**.
 - œ They will **not be applicable to rural cooperatives**.
 - œ The changes **will cover nearly 1,500 cooperative banks** and will be implemented in a phased manner.
- **Objective:** This was done in order to prevent malpractices, ensure better regulation, prevent frauds such as the one seen at Punjab and Maharashtra Co-operative Bank Ltd (PMC).
 - œ Amendment to Banking Regulation Act **aims to strengthen cooperative banks** and avoid PMC Bank like crisis.
- **PMC scam:** Due to PMC scam lakhs of customers faced difficulties in withdrawing their money due to restrictions imposed by the RBI.
 - œ Urban cooperative banks reported nearly 1,000 cases of fraud worth more than 220 crore in past five fiscal years.
- **Current regulations:** Cooperative banks are currently under dual control of Registrar of Cooperative Societies and RBI.
 - œ The **role of registrar of cooperative societies includes incorporation, registration, management, audit, supersession of board and liquidation**.
 - œ **RBI is responsible for regulatory functions** such as maintaining cash reserve and capital adequacy, among others.
- **New changes:** The administrative role will continue to be done by the Registrar of Cooperative Societies.
- **Implications**
- **Audit under RBI norms:** Cooperative banks will be brought under the regulation of the RBI. They will be audited according to RBI's norms.
 - œ Cooperative banks will now be required to meet **stricter capital norms**.
 - œ The amendments will now give **legislative powers to the central bank**.
- **Appointments with permission of RBI:** Appointments of chief executives will also require permission from the banking regulator, as is the case for commercial banks.

- . **RBI takeover in case of stress:** Central bank can supersede the board and take control, in consultation with state government, if any cooperative bank is under stress.
- . **Improve financial stability:** To strengthen the Cooperative Banks, amendments to the Banking Regulation Act will help increase professionalism, enable access to capital and improving governance and oversight for sound banking through the RBI.
 - œ Observing the new changes will help strengthen financial stability.

Additional Measures

- . **Increased deposit insurance:** In order to ensure that depositors' money is safe, Budget 2020 permitted the Deposit Insurance and Credit Guarantee Corporation (DICGC) to increase deposit insurance coverage for a depositor, which is now Rs 1 lakh, to Rs 5 lakh per depositor.

Facts about Cooperatives

- . **Rural cooperatives are under state-policies:** RBI has considerable control over urban cooperative bank but has a limited control over the rural cooperative banks which are guided by state-level policies.
- . **Assets of rural cooperatives are higher:** As per RBI's Trends and Progress in Banking Report, as of March-end 2018, rural co-operative banks accounted for 64.7 percent of the total assets of cooperatives.
 - œ **Rural cooperatives are also more in number** as compared to urban cooperative banks.

Banking Regulation Act, 1949

- . Banking Regulation Act, 1949 is legislation in India that **regulates all banking firms**.
- . Initially, this act was **passed as Banking Companies Act, 1949** and it was applicable to whole of India except Jammu & Kashmir. It became **applicable to Jammu and Kashmir from 1956**.
 - > **Initially, the law was applicable only to banking companies.**
 - > But, 1965 it was amended to make it applicable to cooperative banks and to introduce other changes.
 - > **Primary Agricultural Credit Society and cooperative land mortgage banks are excluded** from the Banking Regulation Act 1949.
- . **RBI control:** RBI regulates and supervises the banking functions of State Cooperative Banks (StCBs)/District Central Cooperative Banks (DCCB)/Urban Cooperative Banks (UCBs) under the various provisions of the Banking Regulation Act, 1949.
- . **Section 56:** In 1965, the Act was amended to **include cooperative banks** under its purview by adding the Section 56. Cooperative banks, which operate only in one state, are formed and run by the state government.
- . **RBI deals with NPAs:** In 2017, government amended the Banking Regulation Act, 1949 by adding provisions for handling cases related to stressed assets or non-performing assets (NPAs) of banks, by initiating insolvency resolution process under the Insolvency and Bankruptcy Code, 2016.
- . **Section 35A:** Section 35A of the Banking Regulation Act, 1949 vests power in the RBI to give directions to banks and can take action, "to prevent the affairs of any banking company being conducted in a manner detrimental to the interests of the depositors or in a manner prejudicial to the interests of the banking company".

PROPOSAL TO AMEND THE DISASTER MANAGEMENT ACT OF 2005

◎ CONTEXT

- . The Union Cabinet is taking up the proposal to amend the Disaster Management Act of 2005.

● ABOUT

• The present Act largely focuses on

- œ Improving preparedness
- œ Providing immediate relief
- œ Protecting infrastructure
- . The main drawback of the present policy is it neglects long-term recovery.

A brief about Disaster Management Act, 2005

- . It was enacted to effectively prevent, mitigate (reducing the severity) and prepare for disasters.
- . It came into being on the heels of three major disasters.
 - œ 1999 - Super cyclone in Odisha
 - œ 2001 - Bhuj earthquake
 - œ 2004 - Indian Ocean tsunami.
- . The Act mandated the creation of the National Disaster Management Authority, State Disaster Management Authorities and District Disaster Management Authorities.
- . It laid down the framework, roles and responsibilities of these bodies to formulate and implement disaster management plans at their levels.

The focus of the act is preparedness, that is:

- . Most States invested in resilient infrastructure, early warning systems and evacuation.
- . This translated into
 - œ timely warnings
 - œ relief shelters and
 - œ massive evacuation exercises
- . All these steps have reduced casualties.
- . NDRF and SDRF have helped in providing immediate relief in the aftermath of disasters.

Long-term recovery

- . Once the hazardous situation is passed, the important aspect is how to ensure recovery.
- . We are seeing disasters from the narrow prism of providing food, water and medicines.
- . At the most, some states are looking at providing shelter.
- . These interventions are crucial, but long-term recovery needs much more.

What is urgently needed?

- . Recovery measures should address inherent vulnerabilities pertaining to livelihoods, education, water, sanitation, health, and ecology of the disaster-affected communities.
- . Intangible losses such as psychosocial needs of the communities should be given equal emphasis.
- . Long-term recovery needs to be thought of alongside development in an integrated comprehensive manner by combining health, skill building and livelihood diversification schemes.
- . This would ensure that communities have, at the very least, recovered to a new normal before the next disaster strikes. This understanding is crucial to the lawmakers looking to amend the Act.

KUMBHABISHEGAM ROW: HOW THE OLD ARYAN-DRAVIDIAN TUSSLE PLAYED OUT IN AN ICONIC TAMIL NADU TEMPLE

◎ CONTEXT

- Tens of thousands of people thronged Thanjavur in Tamil Nadu's Cauvery delta to witness the kumbhabishegam (consecration) ceremony at the Sri Brahadeeswarar Temple.

◎ ABOUT

This enormously significant event was held after 23 years.

- . The judgment delivered the struggle for supremacy between the Sanskrit and Tamil traditions that lies at the heart of several cultural battles in the state — and which also played out in the kumbhabishegam ceremony.

Sri Brahadeeswarar Temple and kumbhabishegam ceremony

- . The consecration ceremony that culminated with the maha poornahuthi or the main puja
- . The Sri Brahadeeswarar Temple (also spelt Brihadisvara, and called Peruvudaiyar Koyil, which translates simply to 'Big Temple') is the most famous of the many temples in Thanjavur.

- The temple, one of the world's largest and grandest, was built between 1003 AD and 1010 AD by the great Chola emperor Raja Raja I (c. 985-1014 AD).
- Holy water brought from the yaga salai — the site of the yajna in the temple compound — was poured on the gold-plated kalasam that tops the 216-foot vimanam over the sanctum sanctorum.
- The other idols at the temple too, were sanctified with holy water from the yaga salai.

About Kumbhabhishekam

- Kumbha-abhishekam is a purification ceremony to sanctify the temple structures and the Deities.
- Kumbha (kalasa) is a pot and the abhishekam -generally means 'bathing' (Sanskrit root word-Shic- to sprinkle – , abhi -all around-).
- When the two words are combined, it 'means ceremonial pouring of sanctified materials.'
- In temple worship, sixty-four worship procedures are recommended by Agama Sastras.
- Of these sixty-four, five upacharas (paadyam, gandham, pushpam, dhoopam, deepam) are of paramount importance.
- These five are then followed by naivedyam, which is distributed to devotees as prasadam.
- Among the five upachara, paadyam, or offer of water is most important.
- This is the reason why during the Kumbha-abhishekam, water contained in pots is first sanctified with Vedic prayers (Theertha kalasa Pooja), after which it is used for abhishekam for the deities and other structures.

THE FIVE 'ICONIC' ARCHAEOLOGICAL SITES MENTIONED IN THE BUDGET

◎ CONTEXT

- The government proposes to set up an Indian Institute of Heritage and Conservation under the Ministry of Culture, and develop five archaeological sites as "iconic sites" with onsite museums in Rakhigarhi (Haryana), Hastinapur (Uttar Pradesh), Sivsagar (Assam), Dholavira (Gujarat) and Adichanallur (Tamil Nadu).

Rakhigarhi

- œ Rakhigarhi in Haryana's Hissar district is one of the most prominent and largest sites of the Harappan civilisation.
- œ It is one among the five known townships of the Harappan civilisation in the Indian subcontinent.
- œ Between 2013 and 2016, excavations were carried out at the cemetery in Rakhigarhi by a team of Indian and South Korean researchers led by Vasant Shinde of Deccan College, Pune.
- œ In one of their excavations, the skeletal remains of a couple were discovered.
- œ Interestingly, of the 62 graves discovered in Rakhigarhi, only this particular grave consisted of more than one skeletal remains and of individuals of the opposite sex together.

Hastinapur

- œ Excavations at Hastinapur, in Meerut district of Uttar Pradesh.
- œ Hastinapur finds mention in the Mahabharata and the Puranas.

- œ One of the most significant discoveries made at this site was of the “new ceramic industry”, which was named the Painted Grey Ware, which as per the report represented the relics of the early Indo-Aryans.
- œ The Painted Grey Ware would be associated with the early settlers on these sites, viz. The Pauravas, Panchalas, etc., who formed a part of the early Aryan stock in India.
- œ Such an association may also explain the synchronism between the appearance of the Painted Grey Ware in the Ghaggar-Sutlej valleys and the probable date of the arrival of the Aryans in that area.”

Sivasagar

- œ In Sivasagar, excavations at the Karenghar (Talatalghar) complex between 2000 and 2003 led to the discovery of buried structures in the north-western and north-eastern side of the complex.
- œ Among the structural remains found at the site were ceramic assemblages including vases, vessels, dishes, and bowls, etc.
- œ Terracotta smoking pipes were also found.
- œ Another excavation site in Sivasagar district is the Garhgaon Raja’s palace.
- œ A burnt-brick wall running in north-south orientation was found, along with the remains of two huge circular wooden posts.

Dholavira

- œ Dholavira in Gujarat is located in the Khadir island of the Rann of Kutch, and like Rakhigarhi is one of the sites where the remains of the Harappan civilisation have been found.
- œ Dholavira is unique because remains of a complete water system have been found here.
- œ The people who lived there for an estimated 1,200 years during the Harappan civilisation are noted for their water conservation system using rainwater harvesting techniques in an otherwise parched landscape.

Adichnallur

- œ Adichnallur lies in the Thoothukudi district of Tamil Nadu.
- œ The urn-burial site was first brought to light during a “haphazard excavation” by a German archaeologist in 1876.
- œ Following this, an Englishman Alexander Rae excavated the site between 1889 and 1905.
- œ Over the years, the site has gained attention because of three important findings: the discovery of an ancient Tamil-Brahmi script on the inside of an urn containing a full human skeleton, a fragment of broken earthenware, and the remains of living quarters.

WORLD’S NEGLECTED TROPICAL DISEASE DAY

◎ CONTEXT

- The first-ever edition of “World Neglected Tropical Diseases Day”(World NTD Day) is launched on 30 January 2020. This initiative brings together various civil society organisations, community leaders, global health experts and policymakers working in the field of NTDs.

◎ ABOUT

- Neglected tropical diseases (NTDs) are a diverse group of communicable diseases that prevail

in tropical and subtropical conditions in 149 countries.

- . NTDs are a diverse set of bacterial, viral, and parasitic pathogens that collectively cause significant illness and debilitation, primarily in impoverished communities of low and middle-income countries.

Types of Neglected Tropical Diseases:

- . **Dengue:** A mosquito-borne infection caused by dengue virus by Aedes mosquitos.
- . **Rabies:** A preventable viral disease transmitted to humans through the bites of infected dogs that is invariably fatal once symptoms develop.
- . **Trachoma:** A chlamydial infection transmitted through direct contact with the infectious eye or nasal discharge, or through indirect contact with unsafe living conditions and hygiene practices, which left untreated causes irreversible corneal opacities and blindness.
- . **Buruli ulcer:** A debilitating mycobacterial skin infection causing severe destruction of the skin, bone and soft tissue.
- . **Yaws:** A chronic bacterial infection affecting mainly the skin and bone.
- . **Leprosy:** A complex disease caused by infection mainly of the skin, peripheral nerves, mucosa of the upper respiratory tract and eyes.
- . **Chagas disease:** A life-threatening illness transmitted to humans through contact with vector insects (triatomine bugs), ingestion of contaminated food, infected blood transfusions, congenital transmission, organ transplantation or laboratory accidents.
- . **Human African trypanosomiasis (sleeping sickness):** A parasitic infection spread by the bites of tsetse flies.
- . **Leishmaniasis:** Disease transmitted through the bites of infected female sandflies that in its most severe (visceral) form attacks the internal organs and in its most prevalent (cutaneous) form causes face ulcers, disfiguring scars and disability.
- . **Taeniasis and neurocysticercosis:** An infection caused by adult tapeworms in human intestines; cysticercosis results when humans ingest tapeworm eggs that develop as larvae in tissues.
- . **Dracunculiasis (guinea-worm disease):** A nematode infection transmitted exclusively by drinking-water contaminated with parasite-infected water fleas.
- . **Echinococcosis:** Infection caused by the larval stages of tapeworms forming pathogenic cysts in humans.
- . **Foodborne trematodiasis:** Infection acquired by consuming fish, vegetables and crustaceans contaminated with larval parasites.
- . **Lymphatic filariasis:** Infection transmitted by mosquitoes causing abnormal enlargement of limbs and genitals from adult worms inhabiting and reproducing in the lymphatic system.
- . **Onchocerciasis (river blindness):** Infection transmitted by the bite of infected. It can lead to visual impairment and permanent blindness.
- . **Schistosomiasis:** Trematode infections transmitted when larval forms released by freshwater snails penetrate human skin during contact with infested water.
- . **Mycetoma:** A chronic, progressively destructive inflammatory skin disease which usually affects the lower limbs.

NTD & the case of India:

- . India tops the number of cases for 11 different neglected tropical diseases such as lymphatic filariasis, visceral leishmaniasis, trachoma, tapeworm, roundworm, hookworm, whipworm, dengue and leprosy.
 - œ WHO data shows that 58% of the newly diagnosed leprosy cases in the world in 2018 were in India. This despite the fact that India officially eliminated leprosy in 2005, reducing its prevalence rate to 0.72 per 10,000 people at the national level.

œ In 2017, there were around 2.8 million new cases of TB, which brought down the global decline of TB. One-third of all TB deaths worldwide happen in India.

Why a 'World Day'?

- . World Neglected Tropical Diseases Day will bring together civil society advocates, community leaders, global health experts and policymakers working across the diverse NTD landscape, and unify partners behind our common goal: to **#BeatNTDs. For good. For all.**
- . **30 January** is the anniversary of the landmark 2012 London Declaration on NTDs, which unified partners across sectors, countries and disease communities to push for greater investment and action on NTDs.
- . World NTD Day will not only honour this incredible show of support but inspire and rally partners each and every year.

BREXIT: FINALLY, UK EXITS EU.

◎ CONTEXT

◎ ABOUT

- **On January 31, 2020 the United Kingdom left the European Union. This was made possible because of the withdrawal agreement.**
- A few years ago, UK voted with 52% of British electorate choosing to exit European Union
- . To ensure an orderly Brexit, EU and UK agreed on a transition period until the end of 2020 at least during which the UK would continue to participate in EU's Customs union and in the single market to apply European Union law, even if it is no longer a member state.

What do you understand by free trade area?

- . Here countries can trade with each other without paying tariffs.
- . But, certain trade restrictions on specific commodities like agriculture may be there.
- . Imported goods have to comply with the law of the land.
- . Deliberations / Negotiations may take several years.
- . Quite often, protectionist measures are taken by various countries.

EU follows single market

- . It allows free movement of goods, services, money and people within the EU as if it is a single country.
- . There are no quotas, tariffs or taxes on trade. EU single market accounts for around 20-25% of global GDP.
- . Regulations cover wide range of issues like packaging, safety and standards and they are applicable throughout the region uniformly.
- . Integration of "Single Market" for goods completed in 1992 and it is still in progress for services.
- . It is possible to setup a business or take a job anywhere within it.

Still, 27 nation of EU are strong

- . 27 Member States are still strong with a single market of 450 million citizens and more than 20 million businesses.
- . It remains the largest trading bloc in the World.
- . It is still the World's largest development aid donor.

European Union's response

- . European Union said that, the new partnership between EU & UK will be finalised after thorough discussions among EU27 Member States.

- . EU looks forward to have the terms and ambitions for achieving the closest possible partnership.
- . It also said that they are bound by history, geography, culture, shared values and principles and strong belief in rules-based multilateralism. Today's global challenges from climate change, cybercrime, terrorism, inequality require collective global response.

MALDIVES REJOINS COMMONWEALTH

◎ **CONTEXT**

- **The Maldives has rejoined the Commonwealth, bringing the total number of nations in the global organisation to 54.**

What is the Commonwealth?

- . The Commonwealth is a voluntary association of 54 independent and equal countries.
- . It is home to 2.4 billion people and includes both advanced economies and developing countries. 32 of our members are small states, including many island nations.
- . Its member governments have agreed to shared goals like development, democracy and peace.
- . The Commonwealth's roots go back to the British Empire. But today any country can join the modern Commonwealth.
- . Eight governments (**United Kingdom, Australia, India, South Africa, Canada, Sri Lanka, New Zealand and Pakistan**) came together on 28 April 1949 to form the **modern Commonwealth**.
- . Since its formation, independent countries from Africa, the Americas, Asia, Europe and the Pacific have joined the Commonwealth.

Background:

- . The republic quit the Commonwealth in 2016 after being threatened with suspension over its human rights record and lack of progress on democratic reform.
- . The island nation has been readmitted after showing evidence of functioning democratic processes and popular support for being part of the family of nations.
- . The Maldives, which last joined the Commonwealth in 1982, will now be part of the Commonwealth heads of government meeting in Kigali, Rwanda, in June.
- . The change came into effect just over an hour after the United Kingdom left the European Union.

Voluntary membership:

- . Members of the Commonwealth can leave at any time, as its membership is purely voluntary.
- . Pakistan left the association in 1972 - only to rejoin in 1989.
- . Similarly, The Gambia left the Commonwealth in 2013 and was allowed to return in 2018.
- . Zimbabwe's membership was suspended in 2002 on the grounds of alleged human rights violations and deliberate misgovernment.

India & the Commonwealth:

- . India became a member of the Commonwealth in 1947, the first with chiefly non-European populations.
- . India's new political interest in the Commonwealth is evident by the participation of Prime Minister Narendra Modi at the 25th Commonwealth Heads of Government Meeting (CHOGM) in London in 2018, marking the first Indian prime ministerial presence in a Commonwealth Summit after nearly a decade.

- . There are few reasons behind India's political interest in the Commonwealth:
 - œ First, the membership of the Commonwealth, virtually spanning the entire globe. For India, membership and prospective leaders of the Commonwealth helps enhance its bilateral ties with individual countries.
 - œ The growing importance of small states for India's foreign policy. A high proportion of Commonwealth members, about 60 per cent, are small states.
 - œ Commonwealth-wide presence of Indian diaspora.
 - œ China is not and will never be a member of the Commonwealth.

Benefits of membership

- . Commonwealth member countries benefit from being part of a mutually supportive community of independent and sovereign states, aided by more than 80 Commonwealth organisations.
- . The Commonwealth Secretariat, established in 1965, supports Commonwealth member countries to achieve development, democracy and peace.
- . It helps to strengthen governance, build inclusive institutions and promote justice and human rights.
- . It deploys experts and observers who offer impartial advice and solutions to national problems.
- . At Commonwealth summits, government leaders are brought together to amplify their voices and achieve collective action on global challenges.
- . Its work supports the **United Nations Sustainable Development Goals** and the **Paris Agreement on Climate Change**.

ESSENTIAL COMMODITIES ACT

◎ **CONTEXT**

- According to Economic Survey 2019-20, Essential Commodities Act is out-dated and must go.

◎ **ABOUT**

- Findings in the **Economic Survey 2019-20** were against **Essential Commodities Act (ECA)** and other "anachronistic legislations" and interventionist government policies, including drug price control, grain procurement and farm loan waivers.
- . **ECA to control onion prices:** In September 2019, the Centre invoked the ECA'S provisions to impose stock limits on onions after heavy rains wiped out a quarter of the kharif crop and led to a sustained rise in prices.
- . **How does ECA work:** Stock limits ensure that onion stocks would be released into the open market and the supply would go up, ensuring prices remain affordable.
- . **ECA has unintended consequences:** The Survey offers examples of stock limits on onion, sugar and pulses, where ECA intervention had little impact, and instead **increased volatility in prices following production/ consumption shocks** — the opposite of what it is intended for.

Arguments against ECA

- . **An archaic law:** Essential Commodities Act has been in existence since 1955, when the economy was very different from what it is today. It was an economy ravaged by famine and food shortages.
- . **Difference between storage and hoarding:** Recently there is evidence of interventions not working. It is because there is a distinction between storage and hoarding.
 - œ As compared to older times, when the economy experiences acute shortages, **today many shortage cases are actually that of hoarding.**

- . **Stock limits led to onion price volatility:** To control soaring prices of onions over the last few months, centre through ECA imposed stock limits on onions. **Instead of decreasing prices, this actually increased price volatility.**
 - œ Although the restrictions on both retail and wholesale traders were meant to prevent hoarding and enhance supply in the market, the Survey showed that there was actually an increase in price volatility and a **widening wedge between wholesale and retail prices.**
 - œ Lower stock limit led traders and wholesalers to immediately offload most of the kharif crop which led to a sharp increase in the volatility.
- . **Disincentivises storage infrastructure development:** With too-frequent stock limits, traders may have no reason to invest in better storage infrastructure in the long run.
 - œ Also, food processing industries need to maintain large stocks to run their operations smoothly. **Stock limits curtail their operations.** In such a situation, large scale private investments are unlikely to flow into food processing and cold storage facilities.
- . **Higher prices of medicines:** Drug Price Control Order issued under the ECA also distorted the market and actually made medicines less affordable.
 - œ The increase in prices is greater for more expensive formulations than for cheaper ones and for those sold in hospitals rather than retail shops.
- . **Rent seeking and Low conviction rates:** Despite many raids conducted under the ECA in 2019, the conviction rate was abysmally low. The ECA only seems to enable rent-seeking and harassment.
- . Farm sector distortions
- . **Arguments against farm loan waivers:** Beneficiaries of farm loan waivers consume less, save less, invest less and are less productive.
- . **Argument against government procurement of food grains:** Government procurement of foodgrains led to a burgeoning food subsidy burden and inefficiencies in the markets.
 - œ It is beneficial to switch to cash transfers instead.

Essential Commodities Act

- . The Essential Commodities Act, 1955 was enacted **to ensure the easy availability of essential commodities to consumers and to protect them from exploitation** by unscrupulous traders.
- . The Act provides for the **regulation and control of production, distribution and pricing** of commodities which are declared as essential.
- . Essential items under the Act include **drugs, fertilisers, pulses and edible oils, and petroleum and petroleum products.**
- . The Act aim at maintaining/increasing supplies/securing **equitable distribution and availability** of these commodities at fair prices.
- . **Centre invokes the ECA Act's provisions** to impose stock limits in case of price/quantity distortions in the market to ensure adequate availability of essential commodities at reasonable prices.
- . **States are the implementing agencies** to implement the EC Act, 1955 and the **Prevention of Black marketing & Maintenance of Supplies of Essential Commodities Act, 1980**, by exercising powers delegated to them.
- . The **list of essential commodities is reviewed from time to time** with reference to their production and supply and in consultation with concerned Ministries/Departments.

- Currently, the restrictions like licensing requirement, stock limits and movement restrictions have been **removed from almost all agricultural commodities**.
- **Exemptions:**Wheat, pulses and edible oils, edible oilseeds and rice are certain exceptions.
- The recent amendment to the **Legal Metrology (Packaged Commodities) Rules 2011** is linked to the ECA. The Government can fix the retail price of any packaged commodity that falls under the ECA.

Arguments for ECA

- Adequate supply:**Given that almost all crops are seasonal, ensuring round-the-clock supply requires adequate build-up of stocks during the season.
 - Without the ECA the common man would be at the mercy of opportunistic traders and shopkeepers.
- Genuine shortages:**There can be genuine shortages triggered by weather-related disruptions in which case prices will move up.
 - So, if prices are always monitored, farmers may have no incentive to farm.
- Difficult to differentiate between hoarding and shortage:** It may not always be possible to differentiate between genuine stock build-up and speculative hoarding.

MEDICAL DETAILS COMPROMISED: RESULT OF DELAYING DATA PROTECTION BILL

◎ **CONTEXT**

- Medical details of over 120 million Indian patients have been leaked and freely available on the internet.

◎ **ABOUT**

- This is as per a recent report published by Greenbone Sustainable Resilience, a German cybersecurity firm.
- What is even more worrying is that the number of data troves containing this sensitive data went up by significant number in the Indian context.
- The updated report also places Maharashtra at the top of the States affected by the leak.

How the leak occurred?

- The leak was facilitated by the fact that the Picture Archiving and Communications Systems (PACS) servers, where these details are stored are not secure and linked to the public Internet without any protection, making them easily accessible to malicious elements. Hence the basic problem is with unsecured PACS servers.

What will happen because of such data thefts?

- There is every possibility for mining for deeper data analysis and creating profiles that could be used for social engineering, phishing, online identity theft among other practices.

Is such leak of public data common in India?

- It is quite common. Recent example is Government websites enabling the download of Aadhaar numbers to electoral data rolls being downloaded in bulk.

Why such problem is coming up in India?

- India still does not have Data Protection Law. European Union has got stringent General Data Protection Regulation; similarly U.S. has Data Protection Regulations.

- Hence India still lacks comprehensive legal framework to protect data privacy.
- The Draft Personal Data Protection Bill, 2019 is yet to be tabled.
- The Bill was prepared after committee of experts chaired by Justice B.N. Srikrishna submitted the recommendations

Thereby, it is the time to bring robust Personal Data Protection Bill without further delay.

NATIONAL STATISTICAL COMMISSION (NSC) BILL 2019

◎ **CONTEXT**

- Recently, in the draft National Statistical Commission (NSC) Bill 2019, government proposed a law to reposition NSC as the nodal body for all core statistical activities of the country.

◎ **ABOUT**

- Facing criticism over the **credibility and independence of India's official statistics**, the government has through the **draft National Statistical Commission (NSC) Bill 2019** proposed a **statutory 'National Statistical Commission'**.
 - œ The new bill proposes to set up a **full-time NSC**, a **permanent secretariat**, **dedicated funds and powers** to supervise core statistical products.
- NSC Bill 2019 envisages **financial autonomy for the commission** through an independent '**National Statistical Fund**', but it would be **bound by directions that the Centre will give** time from time.
 - œ The fund will include resources received by NSC through **government grants, fees and charges**.
- **History:** The draG bill draws on the 2011 report of a committee headed by N.R. Madhava Menon.
 - œ The **Menon committee had first recommended the setting up of an audit and assessment wing under NSC**, to be headed by a "Chief Statistical Auditor".
 - œ The draG bill also retains the **regulatory powers over core statistics** that the Menon committee had envisaged.
 - œ India is a follower of the **UN Statistical Commission** led system since 1948.

National Statistical Commission

- The Government of India through a resolution dated 1st June, 2005 set up the NSC.
- Setting up of the NSC followed Cabinet's decision to accept **recommendations of the Rangarajan Commission**, which reviewed the Indian Statistical System in 2001.
- NSC was constituted with effect from 12th July 2006 with a mandate to **evolve policies, priorities and standards in statistical matters**.
- NSC has four Members besides a Chairperson, each having specialization and experience in specified statistical fields.
- NSC is the apex advisory body on statistical matters, but its **suggestions are not binding on the government**.

Need for a revised NSC

- The **current NSC lacks statutory authority**. In the absence of any legislative framework, NSC faced challenges in implementing its recommendations.
- The **quality of India's official statistics** and its reputation globally has **suffered a steep decline**.

- . Every other data release (or suppression) is **accompanied by controversy**.
 - œ For example, release of the **NSS consumption report** was withheld by the government, on account of **data quality issues**.
- . The current statistical system **lacks the ability to process the large volumes of data** that are being generated even within public agencies.
 - œ Coupled with **lack of incentives for research**, this impedes innovation in the system.

Proposed statutory NSC

- . **Constitution:** According to the draft bill, NSC will consist of nine members. These include:
 - œ The Chairperson
 - œ Five full time member
 - œ Deputy Governor, RBI
 - œ Chief Statistician of India (CSI), appointed by central government.
 - œ Chief Economic Advisor, Ministry of Finance.
- . **Functions:** NSC will advise the **central and state governments**, courts and tribunals on matters relating to government statistics.
 - œ It would conduct **periodical review of all aspects of official statistical system** at various levels.
 - œ Will help evolve national policies, legislative measures, and laying **standards for statistical concepts and methodologies**.
 - œ It will **maintain government statistics data for public distribution**.
 - œ Ensure strong coordination through **close linkage between budget and statistical programming agencies** in order to create robust **rationalized data**.
- . **Suomotu action:** It can take matters suomotu, but the Bill encourages government agencies to proactively bring issues pertaining to the national statistical system for discussion in NSC.
- . **Inquiries, offences and penalties:** The NSC has the power to warn, caution or censure a government agency if:
 - œ It does not comply with the standards of statistical ethics, or
 - œ Any person engaged in government statistics commits professional misconduct, makes a false or misleading statement or material omission in any information furnished to the NSC.
- . **Statistical audit:** The draft Bill establishes the **National Statistical Audit and Assessment Organization** within the NSC.
 - œ It will conduct **periodic statistical audit**.
 - œ It will be **headed by the Chief Statistical Auditor**.

Significance of the Bill

- . **Structured collection of data:** There was a need for the structured collection of data for many government programme interventions in order to **help policy-makers to solve policy-related issues**.
- . **Autonomy:** The revised composition of NSC aims to **reinforce its independence** and align it with the vision and broad contours of national policies and priorities.
 - œ All statistical products, including the GDP series, would be **independently audited**.
- . **Credible Data:** There is dire need for the availability of credible robust data in the public domain, so as to gain the **trust of the people by preventing spread of fake**

unreliable data.

- œ Through proposed NSC government aims to meet this need.
- œ Strengths and weaknesses of the raw data used would come out in open.

Criticism

- . **Will not empower the National Statistical Commission:** It is being argued that the bill doesn't give NSC the autonomy it was meant to have. In the latest draG bill, the executive is part of the body.
 - œ It should have been an independent body **accountable to Parliament and not to any minister** or bureaucrat.
 - œ By giving the statutory backing, there are apprehensions that NSC will lose its independence.
- . **Open to mis-interpretation:** The science of data collection, i.e, the way data is collected and processed will remain same, but people will interpret it in their own way.
 - œ There are concerns related to **quality, correctness, misreporting/misinvoicing and verifiability of data.**

☉ **WAY FORWARD**

- This is the **first step in restoring credibility of the Indian statistical system.**
- . Autonomy must be **complemented with competence.**
- . There should be **more use of upcoming technology** like big data analysis, artificial intelligence, etc.

PRADHAN MANTRI MATRU VANDANA YOJANA

☉ **CONTEXT**

- The government gave away the Pradhan Mantri Matru Vandana Yojana (PMMVY) awards to States, Union Territories, and Districts for best performance, during Matru Vandana Saptah (MVS).

☉ **ABOUT**

- The PMMVY is a maternity benefit programme being implemented in all districts of the country from 01.01.2017.
- . Under PMMVY a cash incentive of **Rs. 5000** is provided directly to the bank/ post office account of **Pregnant Women and Lactating Mothers (PW&LM)** for the first living child of the family subject to fulfilling specific conditions relating to maternal and child health.
- . PMMVY is implemented using the platform of Anganwadi Services Scheme of Umbrella ICDS under the WCD Ministry in respect of States/ UTs implementing scheme through Women and Child Development Department/ Social Welfare Department and through the health system in respect of States/ UTs where the scheme is implemented by Health and Family Welfare Department.
- . PMMVY is implemented through a **centrally deployed web-based MIS software application** and the focal point of implementation is the **Anganwadi Centre (AWC)** and **ASHA/ANM.**

Matru Vandana Saptah (MVS) is a week-long maternity benefit programme which was taken up under PMMVY from December 2-8, 2019 to intensify the implementation of the scheme; create a healthy competition among states/UTs and felicitate states/UTs and districts for exemplary performance in implementation of PMMVY since its inception and during MVS.

How the states have performed?

- . Best performer: In the category of best performance since inception of the Scheme to

States/ UTs having a population of more than 1 crore the first position was awarded to the State of **Madhya Pradesh**, followed by **Andhra Pradesh** and **Haryana** was in the third position.

- . In the same category, among States/ UTs having a population of less than 1 crore **Dadra & Nagar Haveli** is in the first position. Himachal stood second and Chandigarh is in the third position.
- . District-level awards for States/ UTs with a population of more than 1 crore the first position went to Indore in Madhya Pradesh.
- . Kurnool in Andhra Pradesh is in the second position and South Salmara Mankachar in Assam was third.
- . Among the districts of States/ UTs having a population of less than 1 crore the first position went to Serchhip in Mizoram, the second position to Unain Himachal Pradesh and Puducherry were in the third position.
- . **Current law:** Under current law, the worldwide income of an Indian resident is taxable in India. In the case of NRI, only the income earned in India is taxable.
- . **American case:** American citizens who work in foreign countries have the liability to file tax returns and pay taxes in the US—even if they are resident in another country.
 - œ The country where they reside offers credits for the taxes they pay in the US for their local tax obligations, as per bilateral tax treaty rules.

- . **India is world's top recipient of remittances** with its diaspora sending \$79 billion back home in 2018, followed by Mexico and China.
- . The new proposal is **yet to be passed in both houses** of the parliament.

Residential status and Changes proposed

- . **Residential status** of an individual will have to be **tested for each financial year** separately. Individual must meet any of the following conditions and both additional conditions:
 - œ **Conditions:**
 - > You are in India for 182 days or more in the financial year (FY).
 - > You are in India for 60 days or more in the FY and 365 days or more in the four FYs immediately preceding the relevant FY.
 - œ **Additional conditions:**
 - > You are resident in India in two of the 10 FYs immediately preceding the relevant FY.
 - > You are in India for seven years immediately preceding the relevant FY for 729 days or more.
- . **Ordinarily Resident (OR):** If you meet any of the first set of conditions and both the additional conditions, you shall be considered a resident in India.
- . **Resident but not ordinarily resident (RNOR):** If you meet any of the first conditions but do not meet the additional conditions, you shall be considered a RNOR in India.
- . **Non-resident Indian (NRI):** If you do not meet any of the first conditions, you shall be an NRI.
- . **Changes proposed:** From FY 2020-21, a NRI will start becoming 'not ordinarily resident' and in the FY 2024-25, he/she will become an 'ordinarily resident'. This will happen due to the changes proposed in the 'not ordinary resident' condition for an individual in this Budget.
 - œ Budget 2020 has proposed changes in the number of years required for being a resident by an individual to qualify as '**ordinarily resident**' **from at least two years currently to at least four years out of the previous 10 years.**
 - œ Earlier it was possible to be classified as **non-resident** by staying out of the country for 183 days in a year, this has now been, in effect, **enhanced to 245 days.**
 - œ In the first condition, **182 days will be reduced to 120 days** for being regarded as a resident from an income tax perspective.

Implications

- œ **Blow to NRI working in West Asia:** A change in definition of tax residence could end up hitting Indians working abroad, including countries like the UAE which levies no income tax; unless a bilateral treaty bails them out.
- œ NRIs and expats working in countries in West Asia account for a major chunk of foreign remittances received by India.
- . **Bilateral treaties will have final say:** Tax treaties with countries will be decide where NRIs will actually be taxed. Tax treaties will have tie-breaker provisions to decide which country gets taxation rights.
 - œ Tie-breaker rules to decide residence status for taxation rights take into account factors such as the country in which the individual has his house, parents and ancestral home.
 - œ This means NRIs who are resident in both the countries will have to invoke provisions in tax treaties to get relief.
- . **Benefit:** The proposal is part of the larger effort to **target high net worth individuals** who keep moving around countries in such a way to avoid paying their fair share of tax in any country.

- œ Will make it **difficult for NRIs to evade taxes**.
- œ These changes will **widen the tax base** by bringing in more people into the tax net.
- . More resources will be available for **welfare spending**.

PURIFIED TEREPHTHALIC ACID (PTA)

◎ CONTEXT

- The government has announced to abolish in “public interest” an anti-dumping duty that was levied on imports of a chemical called Purified Terephthalic Acid (PTA).

◎ ABOUT

- Purified Terephthalic Acid (PTA) is a crucial raw material used to make various products, including polyester fabrics.
- . PTA makes up for around 70-80% of a polyester product and is, therefore, important to those involved in the manufacture of man-made fabrics or their components. This includes products like polyester staple fibre and spun yarn.
 - œ Cushions and sofas may have polyester staple fibre fillings.
 - œ Some sportswear, swimsuits, dresses, trousers, curtains, sofa covers, jackets, car seat covers and bed sheets have a certain proportion of polyester in them.

What the government has decided?

- . The government has abolished anti-dumping duty on Purified Terephthalic Acid (PTA).
- . The move does away with a previous government decision to block countries like China, Taiwan, Malaysia, Indonesia, Iran, Korea and Thailand from substantially exporting the material — purified terephthalic acid (PTA), to India.

Reason behind the decision:

- . PTA is a raw material for many of the industries. There has been persistent demand from industries that they should be allowed to source PTA at an affordable rate, even if it means importing it.
- . Easy availability of this “critical input” at competitive prices was desirable to unlock “immense” potential in the textile sector, seen as a “significant” employment generator.
- . The duty had meant importers were paying an extra \$27-\$160 for every 1,000 kg of PTA that they wanted to import from countries like **China, Taiwan, Malaysia, Indonesia, Iran, Korea and Thailand**.
- . Removing the duty will allow PTA users to source from international markets. It may make it as much as \$30 per 1,000 kg cheaper than now.

How anti-dumping was imposed on PTA?

- . The anti-dumping duty on PTA was imposed after two domestic manufacturers (MCC PTA India Corp Pvt Ltd and Reliance Industries Ltd) approached the Directorate General of Trade Remedies (DGTR) in 2013.
- . The companies, which submitted that they accounted for over 50% of the domestic PTA industry, had argued that some countries had been exporting the product to India at prices lower than its value in their own domestic markets.
- . This dumping of PTA into the Indian market had a “significant” adverse impact on the domestic industry, they argued.
- . Following an investigation, DGTR agreed with MCCPI and RIL’s claims and imposed anti-dumping duties on PTA imported from South Korea and Thailand in 2014 and 2015, and from China, Indonesia, Taiwan, Iran and Malaysia in 2015 and 2016.

Anti-dumping duty is a tariff imposed on imports manufactured in overseas countries and that are priced below the fair market value of similar goods in the domestic market. The government imposes anti-dumping duty on foreign imports when it believes that the goods are being dumped in the domestic market. This duty is imposed to protect local businesses and markets from unfair competition by foreign imports.

Significance of the move:

- . This announcement has come as a boost for the PTA users and the entire man-made fibre textiles & clothing segment.
- . It would greatly help the country to enhance the global competitiveness, boost exports and also enable the domestic manufacturers to compete with the cheaper imports.

NATIONAL MISSION ON QUANTUM TECHNOLOGIES & APPLICATIONS (NM-QTA)

◎ CONTEXT

- The government in its budget 2020 has announced a National Mission on Quantum Technologies & Applications (NM-QTA) with a total budget outlay of Rs 8000 Crore for a period of five years to be implemented by the Department of Science & Technology (DST).

◎ ABOUT

- The new mission will oversee the development of quantum technologies for communications, computing, materials development and cryptography.
- . It will coordinate the work of scientists, industry leaders and government departments
- . **Implementing authority:** The move will be implemented by the Department of Science & Technology (DST).
- . **Focus area:** The areas of focus for the Mission will be in fundamental science, translation, technology development, human and infrastructural resource generation, innovation and start-ups to address issues concerning national priorities.

Quantum Technology:

- . Quantum technologies are rapidly developing globally with a huge disruptive potential.
- . Quantum technology is a class of technology that works by using the principles of quantum mechanics (the physics of sub-atomic particles), including quantum entanglement and quantum superposition.
 - œ **Quantum entanglement** is when two atoms are connected, or entangled, despite being separated.
 - œ **Quantum superposition** is the theory that sub-atomic particles exist in multiple states simultaneously.
- . It concerns the control and manipulation of quantum systems, with the goal of achieving information processing beyond the limits of the classical world.
- . Quantum technology is opening up new frontiers in computing, communications, cyber security with wide-spread applications.
- . It is expected that lots of commercial applications would emerge from theoretical constructs which are developing in this area.
- . Quantum technology promises improvements to a vast range of everyday gadgets, including:
 - œ more reliable navigation and timing systems
 - œ more secure communications

- œ more accurate healthcare imaging
- œ more powerful computing
- . The next generation transformative technologies that will receive a push under this mission include quantum computers and computing, quantum communication, quantum key distribution, encryption, crypt analysis, quantum devices, quantum sensing, quantum materials, quantum clock and so on.

Significance of the mission:

- . **Super-secure communication network:** The mission may eventually lead to the creation of a super-secure communication network to make online financial transactions hacking-proof besides ensuring full-proof safety of every bit of digital communication.
- . **Solution for complex problems:** Quantum principles will be used for engineering solutions to extremely complex problems in computing, communications, sensing, chemistry, cryptography, imaging and mechanics.
- . **Global recognition:** India's considerable investment in the field places it alongside the United States, Europe and Russia. In 2018, US decided to invest US\$1.2 billion over five years in a national quantum initiative, and in 2016, Europe pledged US\$1.13 billion for quantum technologies. Russia is also spending huge amount on quantum technologies .

VACCINE TO CONTROL CLASSICAL SWINE FEVER

◎ CONTEXT

- . **In order to check fall in pig population in India, the government unveiled a new indigenously developed vaccine for controlling classical swine fever, which is a highly contagious fatal pig disease.**

◎ ABOUT

- . Classical swine fever (CSF), also known as hog cholera, is a contagious viral disease of domestic and wild swine.
- . It is caused by a virus of the **genus Pestivirus** of the family **Flaviviridae**, which is closely related to the viruses that cause **bovine viral diarrhoea** in cattle and **border disease** in sheep.
- . **Clinical signs:** The virus that causes CSF varies in virulence. Some strains are highly virulent and cause acute (i.e. rapid) serious disease. Some strains are of low virulence and cause chronic (i.e. long-lasting) disease, others are intermediate causing sub-acute disease.
- . There is only one serotype of CSF virus (CSFV).
- . CSF is a disease listed by the OIE World Organisation for Animal Health (OIE) Terrestrial Animal Health Code and must be reported to the OIE (OIE Terrestrial Animal Health Code).

The new vaccine:

- . **Developer:** The new vaccine is developed by Uttar Pradesh-based ICAR-Indian Veterinary Research Institute (IVRI).
- . **Cost:** It will be much cheaper than the existing one. It would cost only Rs 2 per dose compared to the current vaccine's rate of Rs 15-20 per dose and imported Korean vaccine rate of Rs 30 per dose.
- . The new vaccine has been developed using Indian strain and lakhs of doses can be produced very easily using the **cell culture technology**.
- . The new vaccine is safe and potent. It does not revert to virulence and provide protective immunity from day 14 of the vaccination till 24 months studied so far.

The need:

- Currently, India does not have enough vaccine for controlling classical swine fever (CSF), which has led to high mortality with annual loss of about Rs 4.29 billion.
- Against the annual requirement of 20 million doses, the availability is only 1.20 million doses, according to the IVRI.
- Although there is no health risk to humans, it is highly transmissible among swine.
- Since 1964 a **lapinized CSF vaccine** is being used in India for controlling the disease. The vaccine is produced by sacrificing large numbers of rabbits for each batch.
- To do away sacrificing of rabbits and increase the productivity, IVRI later developed a cell-cultured vaccine using foreign strain and commercialised it in 2016 and 2018.

Significance of the development:

- Controlling spread:** The vaccine will nip the spread of the virus at animal stage so that it does not pass on to the human population.
- Fulfilling requirement:** This new development will help tide over the huge shortfall in vaccine requirement across the country.
- Lower cost:** CSF is one of the most common diseases affecting pigs, causing high mortality with annual loss of approximately Rs. 430 crore. The new vaccine will help CSF vaccination costs to come down sharply.

DEFEXPO 2020

◎ CONTEXT

- Speaking at DefExpo2020 in Lucknow, Prime Minister set a target of doubling India's defence exports from Rs 17,000 crore currently to Rs 35,000 crore in five years.

◎ ABOUT

- He pitched India as the next defence manufacturing hub.
- He also highlighted that only 270 defence licenses were issued till 2014 and now the number is 460.
- He set a target of boosting MSMEs in defence to 15,000 in the next five years.
- CAG report tabled in Parliament said, soldiers deployed in Siachen and Ladakh were forced to procure recycled high-altitude clothing and boots between 2015 and 2016 due to the budgetary constraints.

Present day ground reality

- Poor performance of defence Public Sector Undertakings. It is incidental to note that India is the second largest buyer of weapons between 2014 and 2018, and it is putting huge burden on the ex-chequer.
- Lack of in roads by the private sector.
- Some of the platforms like missile programmes were successful, but for example, Tejas Light Combat Aircraft took more than three decades to reach induction stage. Indigenisation efforts are quite uneven and slothful (slow).
- Moreover, defence budget minus pensions, this time is around 1.5% of GDP and lowest since 1962.
- With defence salary and pension bills growing, funds for modernization are crunched. The Union Budget for 2020-21 has allocated Rs. 1,33,825 crore to defence pensions.
- This is up by 10½ times in a decade and a half, from Rs. 12,715 crore in 2005-06. The current ratio of military pensioners to serving military personnel is 1.7 to 1, while the ratio of civil pensioners to civil working personnel is 0.56 to 1.

Can India become a defence manufacturing powerhouse?

- . Following aspects need to be kept into consideration
 - œ Making successful the strategic partnership model. Here the Government should give prominence to the private sector.
 - œ Government announced two Defence Industrial Corridors, in Uttar Pradesh and Tamil Nadu. It is not clear at this juncture, how the manufacturing ecosystem will evolve.
 - œ There is a need for creating vibrant American style military-industrial complex. This would entail not just greater private participation, but also create a defence ecosystem involving science and research institutes.
 - œ Our Universities need to be scaled-up so that they can contribute meaningful research towards the defence industry, while attracting the best brains around the World.
 - œ Necessary budgetary allotments with more allocations for capital expenditure.

MISCELLANEOUS

CURRENT AFFAIRS

1st PEEK AT SUN'S POLES

- . A new spacecraft is journeying to the Sun to snap the first pictures of the Sun's north and south poles.
- . Solar Orbiter is an international cooperative mission between the European Space Agency and NASA.
- . ESA's European Space Research and Technology Centre (ESTEC) in The Netherlands manages the development effort.
- . The European Space Operations Center (ESOC) in Germany will operate Solar Orbiter after launch.
- . Solar Orbiter was built by Airbus Defense and Space, and contains 10 instruments: nine provided by ESA member states and ESA.
- . NASA provided one instrument suite, SoloHI and provided detectors and hardware for three other instruments.
- . Launching on a United Launch Alliance Atlas V rocket, the spacecraft will use Venus's and Earth's gravity to swing itself out of the ecliptic plane — the swath of space, roughly aligned with the Sun's equator, where all planets orbit.
- . From there, Solar Orbiter's bird's eye view will give it the first-ever look at the Sun's poles.
- . After years of technology development, it will be the closest any Sun-facing cameras have ever gotten to the Sun

BODO LANGUAGE

- . The new Bodo Accord has declared Bodo language in Devnagri script as an associate official language of Assam.
- . Estimated to have 1.5 million speakers (Census 2011), Bodo is listed in the Eighth Schedule of the Constitution.
- . It is spoken in Assam, where the Bodo tribe constitutes about 5-6% of the population, and in Arunachal Pradesh, Nagaland, Meghalaya, and West Bengal.
- . The new Accord also promises to establish a separate directorate for Bodo medium schools, provincialise schools and colleges in the BTAD (Bodoland Territorial Autonomous District) and establish a Cultural Complex-cum-Centre of Excellence named after the late social activist Bodofa Upendranath Brahma in Kokrajhar for protection and promotion of the language.

CHANGENOW SUMMIT 2020

- . Promoted as the "World Expo of innovations for the Planet", the international Summit ChangeNOW, held under the emblematic glass dome of the Grand Palais in Paris from 30 January to 1 February 2020.
- . ChangeNOW is all about concrete action and innovations that matter: climate change, end of plastic pollution, new forms of agriculture, new models of education, solutions to refugee's crisis, clean energy, sustainable cities, and other solutions to our most urgent global issues.
- . It is the annual reunion for all enthusiasts who want to shake and shape the world we live in.
- . It provided an important opportunity for cities, partners and stakeholders to discuss and raise awareness on the most pressing urban challenges, advocating a people-centred and place-based urban development approach equipped with innovative urban solutions from around the world.
- . In line with the UN Agenda 2030, ChangeNOW 2020 focuses on 8 action areas to tackle the world's urgent environmental and social needs – addressing issues such as clean air and clean water, health and food security, sustainable and accessible energy, biodiversity as well as sustainable consumption and production, global citizenship education and well-being.

INDIGENOUS TECHNOLOGY FOR ARTIFICIAL INSEMINATION

- . Indian Council of Agricultural Research informed that ICAR-National Dairy Research Institute (NDRI), Karnal (Haryana) and Anand Agricultural University, Anand (Gujarat) are undertaking research on basic and applied aspects for developing an alternate method of sexing of cattle semen under a project entitled "Incentivising research in agriculture for developing an alternative method for sexing of semen as the technology" since 2015.
- . Artificial insemination (AI) is the process of collecting sperm cells from a male animal and manually depositing them into the reproductive tract of a female.
- . Artificial insemination is commonly used instead of natural mating in many species of animals because of the many benefits it can reap.
- . This has been found to result in a normal offspring.
- . Artificial insemination is not merely a novel method of bringing about impregnation in females. Instead, it is a powerful tool mostly employed for livestock improvement.
- . By adoption of artificial insemination, there would be considerable reduction in both genital and non-genital diseases in the farm stock.
- . In this process, the semen is inseminated into the female by placing a portion of it either in a collected or diluted form into the cervix or uterus by mechanical methods at the proper time and under most hygienic conditions.

KRISHNAPURAM ONIONS

- . Krishnapuram onions are a variety of export quality onions from Andhra Pradesh.
- . The variety, not too popular in the domestic market and is mainly grown for exports.
- . Krishnapuram onions are not used in kitchen due to their size and pungency.
- . These onions are imported by Thailand, Hong Kong, Malaysia, Sri Lanka and Singapore.
- . Last year government had banned export of onions, when prices of onions in the domestic shot up.
- . The blanket ban on export of onions affected Krishnapuram too, hitting a number of farmers in Andhra Pradesh who did not find too many takers for it in the local market.
- . They are also called Krishnapuram Rose Onions.

LAND BANKS

- . Sick Public Sector Enterprises (PSEs) were told to list land banks (inventory of the real estate) in their possession.
- . It was observed many PSEs did not even maintain fixed asset register properly.
- . Letting sick PSEs raise cash by selling surplus land available with them will help improve their balance sheets.
- . The prices of land at prime locations have not been affected by the liquidity crunch and will be fetching prices close to their earlier prices.
- . In general, Land banking is the practice of aggregating parcels of land for future sale or development.

MARGINAL TAX RATE

- . The marginal tax rate is the percentage of tax applied to your income for each tax bracket in which you qualify.
- . In essence, the marginal tax rate is the percentage taken from your next dollar of taxable income above a pre-defined income threshold.

- . It differs from the average tax rate, which is the total tax paid as a percentage of total income earned.
- . Those who make the least amount of money owe the lowest marginal tax rate.
- . The more money one makes, the higher the marginal tax rate for each bracket in which your income is taxed.

SARAJEVO HAGGADAH

- . Originating in Northern Spain in the second half of the 14th century, the "Sarajevo Haggadah" is a valuable manuscript written on parchment, with superb illuminations.
- . Its origin and journey to Sarajevo, where it has been housed by the National Museum of Bosnia and Herzegovina since the end of the 19th century, are still shrouded in mystery.
- . The Sarajevo Haggadah consists of 142 leaves of extraordinarily thin, bleached calfskin vellum.
- . The Sarajevo Haggadah is divided into three parts:
- . The first part consists of 34 pages with a total of 69 illuminated miniatures depicting Biblical events from the Creation to slavery in Egypt to the succession of Joshua after the death of Moses.
- . The second part consists of 50 pages with the text that is read out loud during Passover, written in medieval Sephardic script.
- . The third part contains poetry by the most prominent Jewish poets of the Middle Ages.
- . The Sarajevo Haggadah was made in Barcelona around the year 1350.
- . It left Spain in 1492 after the Expulsion of the Jews, and surfaced again in Italy in the 17th century.

SMALL BANKS

- . Small Banks are niche banks that focus and serve the needs of a certain demographic segment of the population.
- . The objective of setting up of small finance banks is to further financial inclusion by encouraging savings and ensuring supply of credit to unorganized sector entities, like small business units, small and marginal farmers.
- . They work on the principle of high technology-low cost operations.
- . They were recommended by the Nachiket Mor committee on financial inclusion.
- . They take small deposits and disburse loans. Distribute mutual funds, insurance products and other simple third-party financial products.
- . They can lend up to 75% of their total adjusted net bank credit to priority sector.
- . They cannot lend to big corporates and groups or open branches without prior RBI approval for first five years.
- . They cannot act as business correspondent of any bank.

SOPHISTICATED ANALYTICAL & TECHNICAL HELP INSTITUTES (SATHI)

- . The Department of Science & Technology has launched a unique scheme called "Sophisticated Analytical & Technical Help Institutes (SATHI)".
- . The Scheme aims to address the need for building shared, professionally managed and strong Science and Technology infrastructure in the country which is readily accessible to academia, start-ups, manufacturing, industry and R&D labs.
- . These Centres are expected to house major analytical instruments to provide common services of high-end analytical testing, thus avoiding duplication and reduced dependency on foreign sources. These would be operated with a transparent, open access policy.
- . DST has already set up three such centres in the country, one each at IIT Kharagpur, IIT Delhi and BHU. It is planned to set up five SATHI Centres every year for the next four years.

THE TYLER PRIZE 2020

- . The 2020 Tyler Prize for Environmental Achievement – often described as the ‘Nobel Prize for the Environment’ – has been awarded to conservation biologist Gretchen C. Daily, and environmental economist Pavan Sukhdev, both pioneers in illuminating and quantifying the economic value of our natural environment.
- . These two experts in very different areas of research have played a major role in improving our understanding of nature’s value in supporting human wellbeing.
- . The Tyler Prize for Environmental Achievement is one of the oldest international environmental awards, recognizing individuals who have contributed in an outstanding manner to the scientific knowledge and public leadership to preserve and enhance the global environment.

It is administered by the University of Southern California.

CURRENT AFFAIRS ANALYST

PART-3 (FEBRUARY, 2020)

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SECTION: A

(MAINS)

CURRENT AFFAIRS

COVER UNORGANISED, MIGRANT LABOURERS TOO

CONTEXT

- . The unorganised sector, including contract workers, must be brought under the purview of the bill on the Labour Code on Occupational Safety, Health and Working Condition of Workers, the Parliamentary Standing Committee on Labour has proposed.

● **BACKGROUND:**

- œ The informal sector is an unorganized one which is neither taxed nor monitored by any form of government.
- œ The Economic Survey of 2018-19, released in July 2019, says "almost 93%" of the total workforce is 'informal'.
- œ But the Niti Aayog's Strategy for New India at 75, released in November 2018, said: "by some estimates, India's informal sector employs approximately 85% of all workers".
- œ Meanwhile, as per the International Labor Organization, over 80 per cent of the Indian economy is in the informal sector, while only 6.5 per cent constitutes the formal sector.
- œ Clearly, India's unorganised sector is not the residual sector of the economy. In fact, it is the dominant sector.
- œ To bring labour reforms in the country, the bill on **the Labour Code on Occupational Safety, Health and Working Condition of Workers** was introduced in 2019 in the Lok Sabha.
- œ Then it had been referred to the Standing Committee on Labour which held meetings with stakeholders.
- œ In its report tabled in the Parliament, the Standing Committee on Labour said there should be uniform definitions and clarity in interpretation of the provisions contained in the Code.

● **ANALYSIS:**

What's in the Bill?

- œ The **Labour Code on Occupational Safety, Health and Working Condition of Workers** seeks to regulate health and safety conditions of workers in establishments with 10 or more workers, and in all mines and docks.
- œ It subsumes and replaces 13 labour laws relating to safety, health and working conditions. These laws include: **Factories Act, 1948; Mines Act, 1952; Dock Workers Act, 1986; Contract Labour Act, 1970; and Inter-State Migrant Workers Act, 1979.**

- œ **Conditions:** Welfare facilities, working conditions and work hours for different types of establishments and workers will be prescribed by the central or state governments through rules.
- œ **Occupational safety board:** The Code sets up occupational safety boards at the national and state level to advise the central and state governments on the standards, rules, and regulations to be framed under the Code.
- œ **Special provisions:** The Code creates special provisions for certain classes of establishments such as factories, mines, dock workers, and constructions workers. These include separate provisions on licenses, safety regulations, and duties of employers.
- œ **Coverage:** The Code applies to establishments employing at least 10 workers, and to all mines and docks. It does not apply to apprentices.
 - > Further, certain provisions of the Code such as health and working conditions, apply to all employees.
 - > Employees include workers and all other persons employed in a managerial, administrative, or supervisory role (with a monthly wage of at least Rs 15,000).
- œ Establishments covered by the Code are required to register with registering officers, appointed by the central or state governments.

Key-issues in the Bill:

- œ **Rationale for some special provisions unclear:** The Code replaces 13 laws regulating health, safety and working conditions of workers. While the Code consolidates existing Acts, it falls short of simplifying their provisions.
- œ **Certain workers not covered under the Code:** The Code covers establishments with 10 or more workers. It excludes establishments with less than 10 workers. This raises the question of whether workers in smaller establishments should be covered by health and safety laws.
- œ **Civil Court barred from hearing matters under the Code:** The Code bars civil courts from hearing any matters under the Code.

- œ **Wages not defined:** The Code refers to “wages” in provisions relating to overtime work and calculation of leave. However, it does not define the term. Different laws contain varying definitions of the term ‘wages’.

Significance of the Bill:

- œ **Legal framework on fixed-term employment:** Apart from offering some degree of flexibility on government permissions for retrenchment, the most important aspect of the Bill is that it presents the legal framework for ushering in the concept of ‘fixed-term employment’ through contract workers on a pan-India basis.
- œ **Flexibility:** Currently, companies hire contract workers through contractors. With the introduction of fixed-term employment, they will be able to hire workers directly under a fixed-term contract, with the flexibility to tweak the length of the contract based on the seasonality of the industry.
- œ **Wider reach:** The move to include it in a central law will help in wider reach, and states are expected to follow similar applicability.
- œ **Pan-India impact:** The government had tried a move last year to apply fixed-term employment across “central sphere establishments” in all sectors, but it failed to elicit the desired results as states did not notify similar provisions for it. The Bill now ensures a pan-India impact of this move.

Major recommendations of the Committee:

The major recommendations of the Standing Committee on Labour are as given below:

- œ **Inclusion of all:** While the original bill said the code will not apply to contract workers of the Centre and state governments. The committee has proposed to include all unorganised workforce under the purview of the code.
 - > It would mean extending the code to an estimated 50 crore unorganised workers, including railway porters, construction workers and security guards who do not come under the memberships/purview of most trade unions.
- œ **Inter-state migrant workers:** The committee has also recommended that **inter-state migrant workers** be given the benefit of the proposed safety-health-working conditions under the code bill.
- œ **Extending the line:** Trade Unions work only in the organised sectors and account for only around 8 crore workers. The committee has recommended streamlining and expanding the government’s labour department to reach out to the unorganised sectors and bring such workers under the code purview.

- œ The committee has also asked the government to find ways to ensure enough rest and safety measures for workers in highly mechanised sectors such as software industry, textile, hospitality and media who may need to work more than eight hours a day due to the nature of their work.
- œ In other sectors, the panel is for going by ILO norms that stipulate a maximum of eight hours of work a day.

The “untouched” part:

- œ The committee has left it to the government to find a way to make a distinction between ‘employees’ and ‘workers’, the two categories of the workforce in the bill, by ensuring the deserving sections of workers won’t be left out of the benefits of the code.
- œ Five members of the committee — Husain Dalwai, Dean Kuriakose (Congress), Elamaram Karim (CPM), K Subbarayan (CPI) and M Shanmugham (DMK) — have given a joint note of dissent in which they, among other things, said the working hours can’t exceed eight hours a day for all sections of workers and instead of categorising as ‘employees’ and ‘workers’ everyone in the workforce should be called ‘workmen’ to safeguard against any of them being excluded from the benefits of the code.
- œ The dissent note also said that while the code replaces the Plantation Labour Acts, workers of plantations with a size of less than five acres be excluded from its purview so that such workers continue to get the pre-code benefits.

The need for labour reforms in India:

- œ In the case of India, Labour law reform is necessary as jobs in the manufacturing sector have reduced by 3.5 million between 2011-12 to 2017-18, and economic growth was at a 26-quarter low of 4.5% in the July-September 2019 quarter.
- œ Currently, 44 labour-related laws enacted by the central government deal with wages, social security, labour welfare, occupational safety and health, and industrial relations.
- œ Labour is on the concurrent list, giving both central and state governments the power to legislate, resulting in more than 100 state labour laws.
- œ Most companies in the country find it difficult and impossible to follow this myriad of laws and find ways to subvert them.
- œ No job security: Organised sector is stringently regulated while the unorganised sector is virtually free from any outside control and regulation with little or no job security.
- œ **‘too low’ wages:** Wages are ‘too high’ in the organised sector and ‘too low’, even below the subsistence level in the unorganised sector. This dualistic setup suggests how far the Indian labour market is segmented.

Importance of the informal sector:

- œ In India, the informal sector generates income-earning opportunities for a large number of people and contributes a sizeable portion of the country's net domestic product.
- œ The sector plays a vital role in providing employment opportunity to a large segment of the working force and contributes to the national product significantly.
- œ The share of the formal sector is around 12 -14 percent in our national income while that of the informal sector is more than 30 percent.
- œ The informal forms of organizations are major players in such activities as manufacturing, construction, transport, trade, hotels and restaurants, and business and personal services.
- œ Moreover, the sector plays a significant role in the economy regarding employment opportunities and poverty alleviation.
- œ Reforms are needed for the organised sector as well as the unorganised sector at the earliest to recognise their rights and promote better working conditions.

WHY INDUSTRIAL PRODUCTION HAS CONTRACTED, WHAT IT MEANS FOR THE ECONOMY

CONTEXT

- The fall in IIP comes just a day after the Finance Minister quoted IIP data to argue the emergence of ‘green shoots’ in the Indian economy.

© BACKGROUND

- œ The Ministry of Statistics and Programme Implementation released the December data, which, in turn, shows that the IIP contracted by 0.3 per cent.
- œ In November, the IIP had expanded by 1.8% after witnessing three consecutive months — August, September, and October — of contraction.
- œ A key reason for positive growth in November was the favourable base effect.
- œ The latest contraction would predictably undermine the FM’s assertion about the economy turning around.
- œ On the whole, between April and December 2019, the IIP has now shown a cumulative growth of a meagre 0.5%.
- œ According to the Quick Estimates of IIP released on Wednesday, in terms of industries, 16 out of the 23 industry groups in the manufacturing sector have shown negative growth during the month of December 2019 as compared with the corresponding month of the previous year.
- œ In other words, the contraction continues to be widespread.

What is IIP?

- œ The IIP is an index used to track the performance of the industrial sector in the Indian economy.
- œ It does this by mapping the volume of production.
- œ But since it is an “index”, it targets a basket of industrial products — ranging from the manufacturing sector to mining to energy — and allocates different weights to them.
- œ Then, depending on the production of this basket, it throws up an index value.
- œ The index value is then compared with the value of the index in the same month a year ago to arrive at a percentage growth or decline figure.

How is IIP data read?

- œ There are two ways to understand the IIP data.
- œ One can either drill down the IIP data and look at the sectoral performance — where the whole

industrial sector is divided into three sub-sectors, namely manufacturing, mining and electricity — or look at the use-based classification.

What is the sectoral classification?

- œ In the sectoral classification, manufacturing has the highest weight of 77.6%, mining has 14.4% share and electricity has 8% weight.
- œ In December, while production in mining grew by 5.4%, in manufacturing, which is the biggest chunk, production contracted by 1.2%; electricity contracted too, albeit marginally.

What is the use-based classification?

- œ Within the use-based classification, data is provided for six categories. These are:-
 - > Primary Goods (consisting of mining, electricity, fuels and fertilisers) — this has a weight of 34%
 - > Capital Goods (e.g. Machinery items) — this has a weight of 8%
 - > Intermediate Goods (e.g. yarns, chemicals, semi-finished steel items, etc) — this has a weight of 17%
 - > Infrastructure Goods (e.g. paints, cement, cables, bricks and tiles, rail materials, etc) — this has a weight of 12%
 - > Consumer Durables (e.g. garments, telephones, passenger vehicles, etc) — this has a weight of 13%
 - > Consumer Non-durables (e.g. food items, medicines, toiletries, etc) — this has a weight of 15%.
- œ In December, while production of primary goods and intermediate goods has picked up, that of capital goods has contracted heavily.
- œ This shows there is little demand for new machinery, which in turn shows there is little enthusiasm in the economy to make new investments.
- œ The other three categories also witnessed contraction.

What about green shoots of the economy?

- œ Observers who have tracked IIP for long argued that the key variable from the point of view of

sustained growth or decline is the category of "intermediate goods".

œ That's because it tallies with the order books.

œ If intermediate goods are growing at a sustained pace month after month, then the domestic economy cannot continue to flounder for long.

œ Similarly, if this category shows contraction, sustained growth appears far away.

œ In December, this category has grown by 12.5%; in November it grew by over 17%, in October it grew by over 22% and in September by 7%.

œ As such, there is hope that perhaps the economy has seen its worst.

œ However, the weakness across most other categories continues to be a matter of worry.

ECONOMIC SANCTIONS AS A FOREIGN POLICY TOOL

CONTEXT

. From Iran and Venezuela to Russia and Syria, economic sanctions are vastly preferred over military action or quiet diplomacy. In this context, we analyse economic sanctions as a foreign policy tool and dig deeper into how different countries have been affected by it.

◎ **BACKGROUND:**

- œ **Recent economic sanctions by the US:** As of February 2020, sanctioned countries by United States (either unilaterally or in part) include the **Balkans, Belarus, Burundi, Cuba, Democratic Republic of Congo, Iran, Iraq, Libya, North Korea, Somalia, Sudan, Syria, and Zimbabwe.**
 - > As the wealthiest country in the world, economic sanctions by the US have **far-reaching consequences and global repercussions.**
 - > As of August 2019, the US treasury department's office of foreign assets control had fined 16 companies nearly **\$1.3 billion for sanction violations in 2019 alone.**
 - > Other countries sanctioned by the US include **Venezuela, Russia and Turkey.**
- œ **Economic sanctions - Definition:** Economic sanctions are defined as the withdrawal of customary trade and financial relations with the receiving country, for the sake of foreign and security purposes.
 - > **Sanctions may be comprehensive**, prohibiting commercial activity with regard to an entire country, like the long-standing U.S. embargo of Cuba, **or they may be targeted**, blocking transactions by and with particular businesses, groups, or individuals.
- œ **Rise of secondary sanctions:** Secondary sanctions are designed to **prevent third-parties from engaging with sanctioned countries** on the basis that they will lose access to the sanctioning country.
 - > With the rise of secondary sanctions, a vast number of **new compliance and risk concerns** have emerged, especially for those considered to be **non-US actors.**

◎ **ANALYSIS:**

Economic sanctions as a Foreign policy tool

- œ Economic sanctions are prominently being used in today's foreign policy. Their expanse as a foreign policy tool appears to be **growing at a relentless pace, in terms of scale, scope and complexity.**

- œ **Military action isn't the only option** for countries that are in the midst of a political dispute. Instead, economic sanctions provide an **immediate way for the U.S. to crack down on rogue countries without putting lives on the line.**
- œ As a tool of foreign policy, they are being vastly **preferred over military action or quiet diplomacy.**

Countries facing sanctions and Reasons:

Iran

- œ **Trade embargo:** Following the **Iranian Revolution of 1979**, the Western-friendly Shah of Iran was deposed in favour of a theocratic government.
 - > The **Iranian Hostage Crisis** and other ensuing events pushed the U.S. to levy a trade embargo on Iran.
- œ **Reason:** Sanctions on Iran continue as **political relations with the US** get more strenuous, the **sponsoring of terrorism**, and debates over **enrichment of uranium.**
- œ **Industries affected:** US targets **sources of revenue** used by the Iranian regime. Among others, they target the metals industry, including the largest **steel, aluminium, and iron** manufacturers in Iran.

Cuba

- œ **Longest-standing:** One of the U.S.'s longest-standing and most well-known sanctions is against Cuba. In February 1959, **Fidel Castro** became Prime Minister of Cuba, unseating a **post-revolution Cuban government** that was favoured by the US.
 - > Ironically, the **previous Batista regime** was defeated in part because of a U.S. imposed **arms embargo.**
- œ **Reason:** Since Castro took power, the U.S. has had trade embargoes in place as a **punishment for impediments to democratic rule.**
 - > While Americans aren't generally allowed to trade or travel with Cuban interests, the close geographic proximity—and large Cuban-American population—have ensured that a **number of exemptions exist** for humanitarian work and visiting relatives.

Syria

- œ **Most comprehensive sanctions:** The sanctions campaign applied to Syria by OFAC, HM Treasury, EU, UN, and several other regulatory entities is one of the most comprehensive ever implemented.
- œ **Reason:** Sanctions were imposed in response to the **Syrian government's support of international terrorism and violations against democratic and human rights** in the country.
- œ **Affected areas:** Since first being implemented, the sanctions have been **strengthened several times** due to escalating violence in the region.
 - > Currently imposed sanctions include trade restrictions, travel bans and asset freezes on certain Syrian officials, as well as a ban on Syrian investment by US persons.

North Korea

- œ **Most affected country:** North Korea is arguably the country most brutally affected by U.S. economic sanctions. The U.S. imposed sanctions on North Korea began under President George W. Bush to impose **trade and financial embargos**. The UN also sanctioned the nation.
- œ **Reason:** North Korea's battles with the U.S. started in the 1950s with the US's entry into the Korean War—a move designed to counter the USSR's support for a unified, communist Korea.
 - > North and South Korea continue to technically be at war—albeit under a **ceasefire since 1953**—and the **U.S. maintains stringent trade restrictions** on the country.
- **Panmunjom Declaration:** In 2018, **tensions eased** between the two Korean nations, and the respective leaders signed the Panmunjom Declaration agreeing to **greater cooperation** between the two nations.

Venezuela

- œ **Sanctions:** For more than a decade, the US have imposed sanctions **in response to activities of the Venezuelan government and Venezuelan individuals**. Recently, the US State Department **revoked visas** of hundreds of Venezuelan individuals and their families.
 - > Sanctions were also imposed on **Venezuela's state oil company, government, and central bank**.
- œ **Reasons:** Since 2006, the US Secretary of State has made an annual determination that **Venezuela is not "cooperating fully with US anti-terrorism efforts."** It has imposed varied sanctions related to **drug trafficking, financial sector, anti-democratic actions, human rights violations, and corruption**.

- > Sanctions have increased **economic pressure** on the Venezuelan government, accelerating a **decline in oil production**.

Russia

- œ **Sanctions:** Recently, sanctions were **imposed in 2014 by the US, EU and other countries and international organisations** against individuals, businesses and officials from Russia and Ukraine
- œ **Reason:** International sanctions were imposed on Russia during the **Ukrainian crisis** by a large number of countries following the **Russian military intervention in Ukraine**.
- œ **Russia's response:** Russia responded with sanctions against a number of countries, including a total ban on food imports from the EU, United States, Norway, Canada and Australia.

Turkey

- œ **Threat to impose sanctions:** Recently, US Congress threatened to impose sanctions on Turkey, a NATO ally, in order to punish the government for a military assault on Kurdish regions in northern Syria. **Delivery of state-of-art F-35 stealth fighter jet has been stopped** because **Turkey acquired S-400 missile defence system from NATO adversary Russia**.
 - > In addition, US **arms embargo on the Republic of Cyprus**, which has been in conflict with Turkey since 1974, would be **lifted**.
 - > Companies involved in the **Turkish Stream pipeline** project are to be sanctioned.
 - > US House of Representatives passed a **resolution to recognize the mass murder and displacement of Armenians at the end of the Ottoman Empire as genocide**.
- œ **Turkey's response:** Turkish President **threatened to close down the Incirlik Air Base**, where US troops are deployed, and **Kurecik Radar Station**, which is used by NATO, should the United States impose sanctions.

Why do countries impose Economic sanctions?

- œ **Way to express disapproval:** Economic sanctions are a popular way for large governments to exert their disapproval over one another.
 - > The US sanctions countries that **sponsor terrorism** or perpetrate **human rights violations** on their people.
- œ **Less costly and tangible for the country imposing it:** While wars are costly—both economically and politically—economic sanctions tend to be somewhat less tangible, at least for the country doing the sanctioning.

- œ **Intensive impact on the receiving country:** For the country being sanctioned, results can be enormous and long-lasting. This instrument of foreign policy and economic pressure is preferred over military action and can hit worse.

Implication on sanctioned countries

- œ **The economic cost for businesses:** Doing business is not easy under a sanctions regime. There are many examples of companies being **fined severely** for engaging in business with economically sanctioned countries.
 - > Recently, a company was **fined nearly \$1 million** for violation by its third-party suppliers who sourced some materials from North Korea.
 - > Hence, sanctions can have **adverse economic effects on businesses**.
 - > Sanction violation by a company can cause **public embarrassment, reputational damage and loss of its loyal customer base**.
- œ **Economic cost for the country:** Being the wealthiest country in the world, economic and trade sanctions laid by the US can have **far-reaching repercussions on the receiving country**. Following are a few of them:
 - > Negative impact on the growth of the economy.
 - > Reduce foreign investments flowing into the country.
 - > Reduce the availability of necessary products and services.
 - > Adversely affect the market mechanism.
 - > Lead to the outflow of labour and capital.
 - > Reputational damage at a global level.

- > Loss of foreign trade and income etc.

Issues around the imposition of Economic sanctions

- œ **Lack of clarity:** Complexity, lack of clarity, and conflicting laws that accompany sanctions **question the effectiveness of unilateral sanctions**.
- œ **Impact on global markets:** In today's globalised world, international trade plays a significant role for every country. Imposition of sanction **can cut global supply chains**. Imposition of **sanctions on oil-producing nations has graver consequences** as it causes energy supply disruptions throughout.
 - > Rising importance of **global value chains (GVCs)** is also threatened.
- œ **Overuse of sanctions:** There is a possible threat of overuse of sanctions anytime a country is irked by the actions of another country.

- œ **Questions legal sovereignty:** Resorting to sanctions **by a richer and bigger nation** can be viewed as a **bully**, and raises the question on legal sovereignty of nations on which sanctions are being imposed upon.
- œ **Secondary sanctions:** Recent secondary sanctions added to North Korea as part of the National Defence Authorization Act 2020 could impact Asian businesses without a US footprint.
- œ **Reactionary threat:** On one hand, recent US sanctions are intended to intensify pressure on Iran. On the other, it is increasingly making difficult for the so-called E3 (UK, Germany, and France) to preserve the Iran nuclear deal in its current form.
 - > In response to US back-out, **Iran announced that it would no longer observe certain commitments of the 2015 deal**, in which it had agreed to limit its sensitive nuclear activities.
 - > Such reactionary threats can have serious consequences and start a **never-ending war of sanction impositions**.
- œ **Unintended consequences:** Sanctions, though directed at governments or certain groups, end up **affecting the general population of the country**, who have to bear the final cost of sanction imposition.

Way forward

- œ **Compliance:** To be successful in today's economic environment, every industry must pursue rigorous sanctions compliance programmes and **invest in the development of compliance officers**.
- œ **Following with rigour:** If companies **avoid loopholes** and follow the sanctions with rigour, **they can help deprive those who are subject to sanctions**—in some cases, terrorists, organized crime groups, and those carrying out human rights abuses—of the resources that keep them in business.
- œ **Clarity:** Countries must devise sanctions with clarity, and not make them complex. **Complexity can lead to loopholes**. The clarity in sanctions **will hit those for whom the sanctions are intended** without having unintended consequences.
- œ **Justified exemptions:** Sanction protocols must have justified exemptions such that **supply of basic products and facilities is not denied** to the larger population; like food products, medical supplies etc.

RESERVATION IN PROMOTION FOR SC & ST

CONTEXT

- Reservation in promotion in public posts cannot be claimed as a fundamental right, the Supreme Court reiterated in a judgment.

◎ BACKGROUND

- œ In India, the reservation policy is an age-old policy being practised. Its origin has its roots scattered from the ancient times when the practice of the caste system, untouchability and Varna system was dominant in the society.
- œ Reservation Policy is a process of reserving a certain percentage of seats (maximum 50%) for a certain class (Scheduled Castes, Scheduled Tribes, Backward classes, etc.) in the public sector units, union and state civil services, Union and state government departments and in all public and private educational institutions.

Reservation Policy in Pre- Independence Era:

- œ During the British rule, various elements of reservation in the **Government of India Act of 1909** and the legal origin of Reservation Policy began with lying down of the **Government of India Act, 1919**. Given below are the major policy initiatives that rooted down the concept of reservation in India:

Important Commissions on Reservation:

- œ **Hunter Commission (1882):** The Hunter Commission was appointed in 1882. Mahatma Jyotirao Phule made a demand for free and compulsory education for all along with proportionate reservation/representation in government jobs.
- œ **Kelkar Commission (1953):** The Commission was established in 1953 to assess the situation of the socially and educationally backward class. The report was accepted as far as SCs and STs were concerned. However, recommendations for OBCs were rejected.
- œ **Mandal Commission (1979):** Mandal Commission was established in 1979 to assess the situation of the socially and educationally backward.
- œ **Sachar Committee (2003):** The Sachar Committee headed by Justice Rajinder Sachar, was appointed for preparation of a report on the social, economic and educational status of the Muslim community of India. The Committee, gave its report in 2006 and it clearly found that

the Muslim community was really "seriously lagging behind in terms of most of the human development indicators."

- > **The Government India Act, 1919:** The Act not only introduced several reforms for the Indian Governmental institutions but also addressed many issues of minorities including the formation of **communal electorates**.
- > **The announcement of MacDonald Award:** A significant turn took place from the **Round Table Conference of June 1932**, when **Ramsay MacDonald** (Prime Minister of Britain), proposed the Communal Award, which provided for separate representation for Muslims, Sikhs, Indian Christians, Anglo-Indians, and Europeans.
- > **The Government of India Act, 1935:** The stamping of the provisions of the Poona Pact, 1932 were done in the Government of India Act of 1935 where the reservation of seats for depressed classes was allotted.

Reservation Policy in Post- Independence Era:

- œ The scenario changed in the post-independence era and the reservation policy gained even more momentum.
- œ The Constituent Assembly chaired by **Dr B.R Ambedkar** framed the reservation policy and many Articles (Articles 15, 16) in the Indian Constitution were dedicated for the same.

ANALYSIS:

What is Reservation?

- œ In India, reservation is a system which ensures that individuals born in the castes categorised as SCs and STs and Other Backwards Classes are given priority over **General Category** candidates in recruitment to government jobs, admission in higher educational institutions, and selection of Legislative and parliament members.
- œ The objective of the reservation is to address the historic oppression, inequality and discrimination faced by these communities.

The current scenario of reservation in India:

- œ Today 50% of seats in government-aided

- educational institutions and public jobs are reserved for the SC, ST and, OBCs.
- œ The central government of India reserves 27% of higher education, and individual states may legislate further reservations.
 - œ The current scenario of Reservation in India is:
 - > 15% seats are reserved for Scheduled Castes (SC).
 - > 7.5% of seats are reserved for Scheduled tribes (ST).
 - > 27% seats are reserved for Other backward classes (OBC).
 - > Total constitutional reservation percentage is 49.5% and the rest 50.5% seats are open to all i.e. general, SC, ST And OBC.
- However, there are states laws that exceed this 50% limit and these are under litigation in the Supreme Court.
- œ The most recent development in the reservation system was seen in 2019 when the Union Cabinet has approved of **10%** reservation in educational institutions and jobs for the economically weaker sections (EWS) in the general category. This is the first time that reservations have been suggested for a section of society based only on economic criteria.
 - œ The **Constitution (124th Amendment) Bill** passed by both the houses will be over and above the already existing 50% reservation quotas and will be given to those who do not fall under any reservations as of now.

How does the Indian Constitution deal with Reservation?

- œ **Article 15(4):** It was added by the Constitution (1st Amendment) Act, 1951. It provides for special provision for the advancement of backward classes.
- œ **Article 16(3):** Article 16(3) is an exception to **clause 2 of Article 16** which forbids discrimination on the ground of residence. It provides for reservation of Posts in Public Employment on the Basis of Residence:
- œ **Article 16(4):** Article 16(4) is the second exception to the general rule embodied in Articles 16(1) and (2). It provides for reservation for Backward Classes in Public Employment. It empowers the **state to make special provision for the reservation** in appointments of posts in favour of any backward class of citizens which in the opinion of the State are not adequately represented in the services under the State.
- œ **Fundamental Right:** The Constitution of India provides for the right to equality. A fundamental right, it provides for equality irrespective of

religion, race, gender, caste or place of birth. It also includes the right of equal opportunity in employment as well as the abolition of titles and untouchability.

- œ **Preamble:** The preamble states, "**Equality of status and of opportunity**". Reservation hence seemed to be a justified recourse. It elevated those sections of society that had for generations been neglected. It provided a chance for equal opportunities or status in society and culture.

Important Case:

Indra Sawhney vs. Union of India (The Mandal Case):

- œ In the landmark **Mandal case, Article 16(4-A) (through 77th Amendment)** and **Article 16(4-B) (through 81st Amendment)** inserted into the constitution:
 - > **Clause 4-A:** According to clause 4-A, nothing in this Article shall prevent the state from making any provision for reservation in matters of promotion to any class or classes of posts in the service of state in favour of the SCs and STs which in the opinion of the State, are not adequately represented in the services under the State.
 - > **Clause 4-B:** Clause 4-B seeks to end the 50% ceiling on the reservation for SCs/STs and BCs in backlog vacancies which could not be filled up in the previous years due to the non- availability of eligible candidates.

The Judgement:

- œ A Bench of **Justices L. Nageswara Rao** and **Hemant Gupta** observed that State governments are not bound to make reservations. Even the courts could not issue a mandamus directing States to provide reservations.
- œ **Not a fundamental right:** There is no fundamental right which inheres in an individual to claim reservation in promotions. **Articles 16 (4) and 16 (4-A)** of the Constitution did not confer individuals with a fundamental right to claim reservations in promotion.
- œ The Articles empower the State to make a reservation in matters of appointment and promotion in favour of the Scheduled Castes and Scheduled Tribes only "if in the opinion of the State they are not adequately represented in the services of the State".
- œ The inadequacy of representation is a matter within the subjective satisfaction of the State.
- œ Thus, the State government has discretion "to consider providing reservations, if the circumstances so warrant.

- œ It is settled law that the State government cannot be directed to provide reservations for appointment in public posts. Similarly, the State is not bound to make a reservation for Scheduled Castes and Scheduled Tribes in matters of promotions.
- œ However, if a State wishes to exercise its discretion and make reservation in promotions, it has to first collect quantifiable data showing the inadequacy of representation of a class or community in public services.
- œ If the decision of the State government to provide SC/ST reservation in promotion to a particular public post is challenged, it would have to place the data and prove before the court that reservation

was necessary and does not affect the efficiency of administration.

The court gave the verdict during a case regarding the validity of a 2012 notification by the Uttarakhand government to fill up vacancies in government jobs without giving reservation to the SC/ST communities. The Uttarakhand High Court had struck down the notification and asked the government to provide representation to the specified categories.

- œ The debate and sentiments on reservations continue to play a major role in the case of India. It will not die out any time soon because it permeates into our very social and cultural fabric.

UNIFORM CIVIL CODE - THE DEBATE, THE STATUS

CONTEXT

- Recent observations by the Supreme Court have put the spotlight back on the debate over a Uniform Civil Code. What would such a Code seek to achieve, and what have been the arguments for and against it?

◎ BACKGROUND

- œ A Uniform Civil Code is one that would provide for one law for the entire country, applicable to all religious communities in their personal matters such as marriage, divorce, inheritance, adoption etc.
- œ **Article 44** of the Constitution lays down that the state shall endeavour to secure a Uniform Civil Code for the citizens throughout the territory of India.
- œ Article 44 is one of the directive principles.
- œ These, as defined in Article 37, are not justiciable (not enforceable by any court) but the principles laid down therein are fundamental in governance.
- œ Fundamental rights are enforceable in a court of law.
- œ While Article 44 uses the words "the state shall endeavour", other Articles in the 'Directive Principles' chapter use words such as "in particular strive"; "shall, in particular, direct its policy"; "shall be the obligation of the state" etc.
- œ Article 43 mentions "state shall endeavour by suitable legislation" while the phrase "by suitable legislation" is absent in Article 44.
- œ All this implies that the duty of the state is greater in other directive principles than in Article 44.

What are more important - fundamental rights or directive principles?

- œ There is no doubt that fundamental rights are more important.
- œ The Supreme Court held in *Minerva Mills* (1980): "Indian Constitution is founded on the bedrock of the balance between Parts III (Fundamental Rights) and IV (Directive Principles).
- œ To give absolute primacy to one over the other is to disturb the harmony of the Constitution".
- œ Article 31C inserted by the 42nd Amendment in 1976, however, lays down that if a law is made to implement any directive principle, it cannot be challenged on the ground of being violative of the fundamental rights under Articles 14 and 19.

Does India not already have a uniform code in civil matters?

- œ Indian laws do follow a uniform code in most civil matters – Indian Contract Act, Civil Procedure

Code, Sale of Goods Act, Transfer of Property Act, Partnership Act, Evidence Act, etc.

- œ States, however, have made hundreds of amendments and therefore in certain matters, there is diversity even under these secular civil laws. Recently, several states refused to be governed by the uniform Motor Vehicles Act, 2019.
- œ If the framers of the Constitution had intended to have a Uniform Civil Code, they would have given exclusive jurisdiction to Parliament in respect of personal laws, by including this subject in the Union List.
- œ But "personal laws" are mentioned in the Concurrent List. Last year, the Law Commission concluded that a Uniform Civil Code is neither feasible nor desirable.

Is there one common personal law for any religious community governing all its members?

- œ All Hindus of the country are not governed by one law, nor are all Muslims or all Christians.
- œ Not only British legal traditions, even those of the Portuguese and the French remain operative in some parts.
- œ In Jammu and Kashmir until 2019, local Hindu law statutes differed from central enactments.
- œ The Shariat Act of 1937 was extended to J&K a few years ago but has now been repealed.
- œ Muslims of Kashmir were thus governed by a customary law, which in many ways was at variance with Muslim Personal Law in the rest of the country and was, in fact, closer to Hindu law.
- œ Even on registration of marriage among Muslims, laws differ from place to place.
- œ It was compulsory in J&K (1981 Act) and is optional in Bengal, Bihar (both under 1876 Act), Assam (1935 Act) and Odisha (1949 Act).
- œ In the Northeast, there are more than 200 tribes with their own varied customary laws.
- œ The Constitution itself protects local customs in Nagaland.
- œ Similar protections are enjoyed by Meghalaya and Mizoram.
- œ Even reformed Hindu law, in spite of codification, protects customary practices.

How does the idea of a Uniform Civil Code relate to the fundamental right to religion?

- œ Article 25 lays down an individual's fundamental right to religion; Article 26(b) upholds the right of each religious denomination or any section thereof to "manage its own affairs in matters of religion"; Article 29 defines the right to conserve distinctive culture.
- œ An individual's freedom of religion under Article 25 is subject to "public order, health, morality" and other provisions relating to fundamental rights, but a group's freedom under Article 26 has not been subjected to other fundamental rights
- œ In the Constituent Assembly, there was division on the issue of putting the Uniform Civil Code in the fundamental rights chapter.
- œ The matter was settled by a vote.
- œ By a 5:4 majority, the fundamental rights sub-committee headed by Sardar Vallabhbhai Patel held that the provision was outside the scope of fundamental rights and therefore the Uniform Civil Code was made less important than freedom of religion.

What was the view of Muslim members in the Constituent Assembly?

- œ Some members sought to immunise Muslim Personal Law from state regulation.
- œ Mohammed Ismail, who thrice tried unsuccessfully to get Muslim Personal Law exempted from Article 44, said a secular state should not interfere with the personal law of people.

- œ B Pocker Saheb said he had received representations against a common civil code from various organisations, including Hindu organisations.
- œ Hussain Imam questioned whether there could ever be uniformity of personal laws in a diverse country like India.
- œ B R Ambedkar said, "no government can use its provisions in a way that would force the Muslims to revolt". Alladi Krishnaswami, who was in favour of a Uniform Civil Code, conceded that it would be unwise to enact Uniform Civil Code ignoring strong opposition from any community.
- œ Gender justice was not mentioned in these debates.

How did the debate on a common code for Hindus play out?

- œ In June 1948, Rajendra Prasad, President of the Constituent Assembly, warned Jawaharlal Nehru that to introduce "basic changes" in personal law was to impose "progressive ideas" of a "microscopic minority" on the Hindu community as a whole.
- œ Others opposed to reforms in Hindu law included Sardar Patel, Pattabhi Sitaramayya, M A Ayyangar, M M Malaviya and Kailash Nath Katju.
- œ When the debate on the Hindu Code Bill took place in December 1949, 23 of 28 speakers opposed it.
- œ On September 15, 1951, President Prasad threatened to use his powers of returning the Bill to Parliament or vetoing it.
- œ Ambedkar eventually had to resign.
- œ Nehru agreed to trifurcation of the Code into separate Acts and diluted several provisions.

SECTION: B

(PRELIMS)

CURRENT AFFAIRS

ADDITION OF 3 ENDANGERED INDIAN SPECIES TO THE GLOBAL CONSERVATION LIST

◎ **CONTEXT**

- India has proposed to include three species- the Indian elephant, the Great Indian Bustard and the Bengal Florican in the ‘Appendix I’ of the CMS Convention for ‘migratory species threatened with extinction’.

◎ **ABOUT**

What is the CMS Convention?

- . The Convention on the Conservation of Migratory Species (CMS) of Wild Animals (the Bonn Convention) aims to conserve terrestrial, marine and avian migratory species throughout their range.
- . It is an international treaty, concluded under the aegis of the **United Nations Environment Programme**, concerned with the conservation of wildlife and habitats on a global scale.
- . India became its member in the year **1983**.
- . At present, 173 species from around the world have found protection under the Convention by being part of Appendix 1 of the CMS.

Key-highlights:

- . India is all set to host the Thirteenth Meeting of the **Conference of Parties (COP13)** to the **Convention on the Conservation of Migratory Species of Wild Animals (CMS)** in Gandhinagar (February 15 to 22).
- . The theme of the conference is, “migratory species connect the planet and together we welcome them home”.
- . The session is all set to witness the inclusion of ten new species for protection under the CMS.
- . Among the ten species to be added, there are three Indian species, viz., Asian Elephant, Bengal Florican, and the Great Indian Bustard.

About the species:

The Indian Elephant:

- . There are about 47 lakh elephants in the wild in the 13 range countries, with 60% of them in India.
- . The Indian elephant is struggling to survive in the continually shrinking, degraded and fragmented habitat and is frequently coming into conflict with people, apart from threats of poaching and illegal trade.
- . Since it is known to naturally migrate across international borders; it faces similar challenges in other range countries, and there is a need for concerted action to protect them.

The Great Indian Bustard:

- . Great Indian bustard, (*Ardeotis nigriceps*), a large bird of the bustard family (Otididae), one of the heaviest flying birds in the world.
- . The species is listed in:
 - œ Schedule I of the Indian Wildlife (Protection) Act, 1972,
 - œ CMS Convention
 - œ Appendix I of CITES
 - œ Critically Endangered on the IUCN Red List

Bengal Florican:

- . The Bengal Florican (*Houbaropsis bengalensis*) is a large grassland bird that is Critically Endangered with extinction, due to rapid habitat loss and hunting.
- . Also known as Bengal bustard, it is a bustard species native to the Indian subcontinent, Cambodia, and Vietnam.
- . Both the Great Indian Bustard and Bengal Florican have already been identified as critically endangered which face threats of hunting, and collision with power-lines during their migration to neighbouring countries, especially Pakistan and Nepal.

India & conservation of migratory species:

- . Migratory species move from one habitat at particular seasons for food, sunlight, weather and many other reasons.
- . A migratory route can involve nesting and also requires the availability of habitats before and after each migration.
- . India has also signed non-legally binding MOU with CMS on the conservation and management of **Siberian Cranes (1998), Marine Turtles (2007), Dugongs (2008) and Raptors (2016)**.
- . India provides temporary shelter to several migratory species including **Amur Falcons, Bar-headed Geese, Black-necked cranes, Marine turtles, Dugongs, Humpbacked Whales. The Indian sub-continent is also part of a significant bird flyway network, i.e., the Central Asian Flyway (CAF)** that covers at least 279 populations of 182 migratory waterbird species, including 29 globally threatened species.

Significance of the move:

- . Inclusion of Asian elephant in the global list for international protection under UN's CMS would give the species international conservation importance
- . Moreover, it would enable range countries to collaborate, to protect the species as they naturally migrate across international boundaries.

CAUVERY DELTA AND PROTECTED SPECIAL AGRICULTURE ZONE

◎ CONTEXT

- In a significant decision, the Tamil Nadu government has announced Cauvery delta region as Protected Special Agriculture Zone to prevent implementation of oil exploration projects in the state's rice bowl.

◎ ABOUT

A brief about Cauvery Delta

- . The Cauvery Delta lies at the bottom of the Cauvery river basin. The river Cauvery is the fourth largest river of the southern region and flows from North West to the south-east.
- . Cauvery Delta zone consists of four districts of Nagapattinam, Thanjavur and Thrivavur and parts of the district Trichy, Cuddalore and Puddubottai in Tamil Nadu.
- . Cauvery Delta zone has a total geographical land area of 1.45 million Ha which is equivalent 11% of the area of Tamil Nadu state.
- . In the Cauvery Delta rice is the principal crop; it is either single or double-cropped. A third crop rise is also grown during summer in some parts.
- . Because of plentiful rainfall during North-East monsoon and good irrigation facilities rice is the most suitable from September to December.

- . The landholdings in the delta are quite small with more than 75% are one ha or less. Population growth has progressively diminished the size of landholdings.

Type of season:

- . Tamil Nadu is heavily dependent on monsoon rains and thereby is prone to droughts when the monsoons fail.
- . The climate of the state ranges from dry sub-humid to semi-arid. The state has three distinct periods of rainfall
 - œ The south-west monsoon from June to September, with strong southwest winds
 - œ North-East monsoon from October to December, with dominant northeast winds
 - œ The dry season from January to May
- . The normal annual rainfall of the state is about 945 mm of which 48% is through the North-East monsoon, and 32% through the South-West monsoon.
- . Since the state is entirely dependent on rains for recharging its water resources, monsoon failures lead to acute water scarcity and severe drought.

What is Protected Special Agriculture Zone (PSAZ)?

- . A Special Agricultural Zone is one where agricultural land is preserved for posterity because of its importance to increasing agriculture production and promoting livelihood security for a large number of farm families.
- . The idea is very similar to the theme of the Special Economic Zone. The difference is that there is no statutory backing as yet to the concept of Protected Special Agriculture Zone (PSAZ)

© CONCLUSION

- . Since Climate change is a threat to agriculture, efforts should be taken to mitigate the risk. PSAZ can be a starter at least in drought-prone areas. Once implemented at the micro-level, its findings can be used to scale up the project. While 'Oil' and 'Gas' are essential components of civilization, then so is food security. The tough times call for a coordinated action plan. The Government of India must brainstorm ideas keeping in view the bigger picture.

KERALA BANS CFL AND FILAMENT BULBS

◎ CONTEXT

- Kerala will impose a ban on the sale of compact fluorescent lamps (CFL) and incandescent (filament) bulbs starting November this year as part of sustainable energy policy.

◎ ABOUT

Filament-free project:

- The announcement is in line with the government project of 'Filament-free Kerala' envisaged in 2018 as part of the state's Urja Kerala mission.
- Filament Free Kerala project is for replacing the entire Incandescent Lamps & CFLs of domestic consumers in the state by energy-efficient LED bulbs.
- The project is implemented by the Kerala State Electricity Board Ltd. and Energy Management Centre, Kerala.

In 2018, Kerala has launched '**Urja Kerala Mission**', an aggressive Energy generation and Conservation program - aimed at the integrated development of the electricity sector in the state. It aims at implementing FIVE important projects-Soura, Filament free Kerala, Dyuthi 2021, Transgrid 2.0 and e-safe.

Reason behind the ban:

- The mercury in a fluorescent bulb can be released as both dust and vapour if the light is broken.
- This toxic element is dangerous to people and animals and can easily migrate through the environment in the air, water and soil.
- LED bulbs use about 40% less power than fluorescent lights, and 80% less than incandescent lights, to produce the same amount of light.

Difference between CFL, Incandescent and LED:

	Fluorescent	Incandescent	LED
Longevity	Usually 6,000 to 15,000 hours. Up to 35,000 hours.	2,000 hours	20,000 to 50,000 hours
How they work	Fluorescent bulbs generate light by sending an electrical discharge through an ionized gas.	Incandescent light is emitted by heating the filament present in the bulb	The LED is a light source which uses semiconductors and electroluminescence to create light.
Materials used	Argon, mercury vapour, tungsten, barium, strontium and calcium oxides	Argon, tungsten, filaments	Gallium arsenide (GaAs) and gallium phosphide (GaP)
Cons:	Cannot be used with a dimmer switch Take a few moments to heat up and reach full brightness Contain mercury, a toxic heavy metal Can be sensitive to cold temperatures	energy inefficient short lamp lifetime i.e. about 1000 hours typically warm source of light and hence requires air conditioning to cool the room	Directional light that may not spread as evenly as other sources Currently cost more than CFLs

Why LEDs?

- . Light Emitting Diodes (LEDs) use about 75% less energy than a typical incandescent bulb
- . LEDs contain no mercury and have a much smaller environmental impact compared to CFL bulbs
- . LED Light lasts up to 50 times longer than the conventional halogen light bulb and 10 times longer than a CFL light bulb
- . LED Lights are instant on so they do not require any warm-up time compared to other light bulbs
- . LEDs don't give off heat making it cooler to operate and may even lower your A/C Bill.
- . Switching to LEDs can reduce electricity and maintenance costs of a commercial building by up to 30%
- . An incandescent lamp converts about 10% of the energy fed to it into the light, whereas LEDs convert nearly 100% of the energy they consume as light. LED lights are way more cost-effective than traditional incandescent.

MADHYA PRADESH RADIO-TAGS FIRST-EVER INDIAN PANGOLIN

◎ CONTEXT

- In order to know the species' ecology and develop an effective conservation plan, the Madhya Pradesh forest department has radio-tagged an Indian Pangolin (*Manis crassicaudata*) for the first time.

◎ ABOUT

- **Pangolins:**
 - . Pangolins are uniquely covered in tough, overlapping scales. These mammals eat ants and termites using an extraordinarily long, sticky tongue, and are able to quickly roll themselves up into a tight ball when they feel threatened.
 - . Commonly known as 'scaly anteaters', the toothless animals are unique, a result of millions of years of evolution.
 - . Pangolins evolved scales as a means of protection. When threatened by big carnivores like lions or tigers they usually curl into a ball.
 - . **Species:** There are eight species of pangolins:
 - œ **Asia:** Four of them are found in Asia. They have been listed by the IUCN as **critically endangered**. They are:
 - > **Chinese**
 - > **Sunda**
 - > **Indian**
 - > **Philippine**
 - œ **Africa:** The following four African species have been listed as **vulnerable**:
 - > **the Ground pangolin**
 - > **Giant pangolin**
 - > **White-bellied**
 - > **Black-bellied**

Pangolin habitat map in India:

- . India is home to two species of pangolin. While the Chinese Pangolin (*Manis pentadactyla*) is found in northeastern India, the Indian Pangolin is distributed in other parts of the country as well as Sri Lanka, Bangladesh and Pakistan.

- Both these species are protected and are listed under the **Schedule I Part I of the Wild Life (Protection) Act, 1972** and under **Appendix I of the Convention on International Trade in Endangered Species (CITES)**.
- However, despite protective measures, pangolins in India are widely exploited and traded both domestically and internationally.

Rapid decline in population:

- When threatened by big carnivores like lions or tigers they usually curl into a ball. The scales defend them against dental attacks from the predators.
- However, this unique protection mechanism has now become the main cause of the pangolin's disappearance. The scales are in high demand in China, where they are used in traditional Chinese medicine.
- Pangolins are currently the most trafficked wildlife species in the world. Pangolin meat is also in high demand in China and southeast Asia.
- Consequently, pangolins have seen a rapid reduction in population globally. The projected population declines range from 50 per cent to 80 per cent across the genus.
- All species face declining populations because of illegal trade. In 2016, the 186 countries party to the **Convention on International Trade in Endangered Species (CITES)**, the treaty that regulates the international wildlife trade, voted to ban the commercial trade in pangolins.

The plan:

- The radio-tagging is part of a joint project by the department and non-profit, the **Wildlife Conservation Trust (WCT)** that also involves the species' monitoring apart from other activities.
- The measure comes as the world gets ready to observe the ninth '**World Pangolin Day**' on February 15, 2020.

World Pangolin Day is celebrated on the third Saturday in February, and this year, the special day falls on February 15, 2020. The day is an opportunity for pangolin enthusiasts to join together in raising awareness about these unique mammals — and their plight.

- It is an international attempt to raise awareness about pangolins and bring together various stakeholders to help protect them from extinction.
- This new initiative of radio tagging will hopefully ensure better survival rates of Pangolins in the wild and for sure, it will have a positive impact on the population of this endangered species.

DIVIDEND DISTRIBUTION TAX

◎ **CONTEXT**

◎ **ABOUT**

- Budget 2020 abolished the Dividend Distribution Tax (DDT).**
- Budget 2020** has proposed to make dividend income from shares and mutual funds taxable in the hands of recipients at the applicable income tax slab rates to the individual.
- Called the **Dividend Distribution Tax (DDT)**, it was hitherto levied on dividend income before distribution by the company or mutual fund house.
- Dividend distribution tax is the tax imposed by the Indian Government on Indian companies **according to the dividend paid to a company's investors**.
- Dividend** is the **return given by a company to its shareholders out of profits earned by the company** in a particular year.

- . Dividend constitutes **income in the hands of the shareholders** which ideally should be subject to income tax.
 - œ However, the income tax laws in India provide for an exemption of the dividend income received from Indian companies by the investors by levying DDT on the company paying the dividend.
- . Previously, in addition to corporate tax, companies had to pay DDT at the time of distributing profits to its shareholders.
 - œ The effective DDT rate is **20.56 per cent**.
 - œ Although the government recently reduced the effective corporate tax rate to 25.17/17.16 per cent, **once DDT was factored in**, the effective tax rate for corporates became 37.93 per cent.

Evolution of DDT

- . **System 1:** Historically, the dividend was always **taxable in the hands of shareholders**.
- . **System 2:** Concept of '**DDT**' was for the first time was introduced by the **Finance Act, 1997**.
 - œ Dividend that was subjected to DDT was made exempt in the hands of shareholders.
- . **System 3: Finance Act, 2002, replaced DDT with the earlier system** of taxing dividends in the hands of the shareholder.
- . **System 4:** DDT was then **re-introduced** vide **Finance Act, 2003**.
 - œ Several changes were made to provisions including those that remove the cascading effect of dividends received from subsidiaries, grossing up mechanism, changes in the rate of tax etc.
- . **System 5: In Finance Act, 2016** dividends earned in excess of Rs 10 lakh from domestic companies was made **taxable in the hands of resident individuals, partnership firms, private Trusts, etc.** at 10 per cent (plus surcharge and cess) on a gross basis.
 - œ The tax treaties entered by India with various countries, largely limit taxation on dividends in India at 10 per cent, and **shareholder have the ability to claim credit in its country of residence for tax deducted in India**.
- . **Problems:** Since DDT was levied on the Indian company distributing dividend, it was believed that **tax treaty provisions were ineffective**.
 - œ Also, shareholders faced challenges in claiming credit for DDT in their home country, which typically resulted in high tax cost for foreign shareholders.
 - œ Though the existing system **facilitated easy tax collection**, it was viewed to be **regressive in nature**

Changes made in Budget 2020

- . Budget 2020 **proposes to abolish DDT**. The proposal is to replace DDT with a classical system of taxation i.e. instead of levying DDT on companies; the **tax should be levied in the hands of shareholders**.
- . This will put to an **end to litigation** related to the reduction in the rate of DDT.
- . **Foreign tax credit** in respect of dividend would be available **to non-resident shareholders much easier** than when DDT was payable.
- . The proposal suggests **deduction has to be restricted to 20 percent of dividend income**. No other deductions would be allowed.
 - œ Non-resident shareholders would be able to restrict the tax on the dividend to 5 per cent/10 per cent/15 per cent applying the **beneficial tax treaty provisions**.
 - œ The beneficial tax treaty provisions would be subject **to anti-abuse provisions of the India income-tax law** and provisions of Multilateral Instruments, which is effective from 1 April 2020.

◎ **CONCLUSION**

- The earlier provisions levied a flat tax rate on distributed profits across the board, irrespective of the marginal rate at which the recipient is otherwise taxed. These provisions, therefore, were regressive. Removal of DDT is a welcome and much-expected move, in-line with the recommendations of the Direct Tax Code Panel, which will bring in vertical equity among taxpayers.

THALINOMICS

◎ **CONTEXT**

- The Economic Survey 2020 coined a new term called ‘Thalinomics’ and the government pitched the term as “economics for the common man”.

◎ **ABOUT**

- The Economic Survey 2020 made a unique attempt to **quantify the cost incurred** in putting together **one complete home-made meal** — the healthy Indian thali.
- Thali prices represent the total money spent on preparing dishes for a meal in a household.
 - œ **Thalinomics** captures the **economics of a plate of food in India**.
- **Rise in Affordability:** Despite recent concerns about rising food prices, the Economic Survey has stated that for a worker, a **vegetarian thali is 29% more affordable** since 2006-07. And affordability of a **non-vegetarian thali improved by 18 per cent**.
 - œ It also looked at an industrial worker's **ability to pay for two thalis a day** for his/her household of **five individuals**.
- **Conclusion:** Basically, the survey attempts to calculate the **cost that an average worker incurs based on his actual plate of food in India**.
 - œ On calculating that cost, the survey concludes that **workers were able to save due to moderation in prices** of items that form part of a regular Indian thali.

Food inflation trends

Food inflation based on CPI declined to a low of 0.1% in 2018-19 against 1.8% in 2017-18, 4.2% in 2016-17 and 4.9% in 2015-16. However, the government revised the inflation projection from 3.5-3.7% in the second half of 2019-20 to 4.7-5.1%.

Calculations

- The analysis is based on data on prices taken from the Consumer Price Index for Industrial Workers (**CPI IW**) for around 80 centres in **25 States/UTs** from April 2006 to October 2019.
- The survey took into account the prices of **cereals** (rice/ wheat), **sabzi** (vegetables, other ingredients), **dal** (pulses with other ingredients) as well as the **cost of fuel**.
- In a non-vegetarian thali, **pulses are replaced by 60 gm of non-vegetarian components** keeping in mind prices of eggs, fresh fish and goat meat.
- It also took into consideration **prices of ingredients such as spices and condiments** such as mustard oil, coconut oil and groundnut oil, turmeric and chillies.
- For fuel, **cooking gas prices as well as firewood prices** were taken into consideration.

State-wise performance

- **Across the board gains:** Both across India and the four regions– North, South, East and West – we find that the absolute prices of a vegetarian Thali have decreased since 2015-16 though it increased during 2019.
 - œ **Exception:** Gains are observed across regions, with the exception of **the Northern Region and Eastern Region in 2016-17** in the case of vegetarian Thali.

- . **Southern region with highest gains:** The highest gain in any year was in the Southern region for a vegetarian Thali in 2018-19 of around 12 per cent of annual earnings of a worker.
- . **Jharkhand thali the cheapest:** Jharkhand emerged as the State with cheapest vegetarian thali during April-October 2019.
 - œ Two vegetarian thalis for a household of five in Jharkhand **required about 25 per cent of a worker's daily wage.**

Results from Thalinomics

- . **Gains:** After 2015-16, an average household of five individuals that eats two vegetarian thalis a day gained around 10,887 on average per year, while a non-vegetarian household gained 11,787 on average per year.
 - œ Gains here are **spends that households saved** on due to **moderation in the prices** of commodities.
 - œ A worker who would have spent **70%** of their daily wage on two vegetarian thalis a day for a household of five **in 2006-07**, would only have to spend **50% of their income for the meals in 2019-20.**
- . **Fall in prices:** Survey said there was a shift in the dynamics of thali prices from 2015-16. Gains are due to significant **moderation in prices of vegetables and dal** from 2015-16 when compared to the previous trend of increasing prices.
- . **Reasons for gains due to reform measures:** Many reform measures were introduced during the period of analysis to enhance the productivity of the agricultural sector as well as **efficiency and effectiveness of agricultural markets** for better and more **transparent price discovery:**
 - œ PradhanMantriAnnadataAaySanraksHanAbhiyan (PM-AASHA).
 - œ PradhanMantriKrishiSinchayeeYojana (PMKSY) - Per DropMore Crop.
 - œ PradhanMantriFasalBimaYojana (PMFBY).
 - œ Soil Health Card.
 - œ E-National Agricultural Market (e-NAM).
 - œ National Food Security Mission (NFSM).
 - œ National Food Security Act (NFSA).
- . **Recent trend is inflationary:** Survey shows that **accelerating food inflation** over the last few months has broken the earlier trend.
 - œ Workers are now forced to use an increasing share of their wages on food.

Challenges

- . **Small sample size:** The calculations deal with workers engaged in the organised manufacturing sector, which form **only 28% of the total manufacturing workforce.**
 - œ It excludes workers from the unorganised sector, as well as rural and agricultural workers.
- . **Fall in incomes:** While it is true that there was a decline in food prices during most of the period since 2015-16, this is also a **period of stagnant or declining rural wages and highest unemployment.**
 - œ Low inflation is meaningless when **real wages are falling in rural areas**, as this means that the poor are not able to consume more as their **incomes are falling.**

POLAR VORTEX AND ITS EFFECTS

◎ **CONTEXT**

- The mild winters in the northern regions of the hemisphere which are particularly south of the Arctic circle have led to the decrease in the energy consumption by the people.

◎ **ABOUT**

What is Polar Vortex?

- . The polar vortex is a large area of low pressure and cold air surrounding both of the Earth's poles.
- . It always exists near the poles, but weakens in summer and strengthens in winter.
- . The polar vortex extends from the tropopause (the dividing line between the stratosphere and troposphere) through the stratosphere and into the mesosphere (above 50 km). Low values of ozone and cold temperatures are associated with the air inside the vortex.
- . The term "vortex" refers to the counter-clockwise flow of air that helps keep the colder air near the Poles.
- . Many times during winter in the northern hemisphere, the polar vortex will expand, sending cold air southward with the jet stream.
- . Often when the polar vortex is strong, temperatures are mild in the mid-latitudes across the Eastern US and Northern Eurasia; and when the vortex is weak, temperatures tend to be cold across the Eastern US and northern Europe and Asia.

What is Strong Polar Vortex?

- . The strong polar vortex is the more common state of the vortex which creates strong low pressure in the Arctic region.
- . Because of the pressure difference between the Arctic and mid-latitudes, air flows into low pressure and this confines the cold air to high latitudes closer to the Arctic.
- . Therefore it is often mild across the Eastern US, Europe and East Asia during winters when the polar vortex is strong.
- . During strong polar vortex, the airflow is fast and in a direction from west to east.
- . Low pressure in the Arctic region is referred to as the positive phase of the Arctic Oscillation (AO), which is also known as the North Atlantic Oscillation (NAO).

Weak polar vortex

- . Occasionally, the polar vortex is disrupted and weakens, due to wave energy propagating upward from the lower atmosphere.
- . When this happens, the stratosphere warms sharply in an event known as sudden stratospheric warming, in just a few days, miles above the Earth's surface.
- . The warming weakens the polar vortex, shifting its location somewhat south of the pole or, in some instances, 'splitting' the vortex up into 'sister vortices'.
- . The split higher up in the atmosphere can give rise to both, sudden and delayed effects, much of which involves declining temperatures and extreme winter weather in the eastern US along with northern and western Europe.

Is global warming responsible for the weakening of polar vortex?

- . It is being hypothesised that the weakening of polar vortex is a result of global warming. Warming leads to melting of polar ice during summer months. The melting ice warms the Arctic Ocean and the heat is radiated back to the atmosphere.
- . In the absence of global warming, there used to be a substantial difference between the temperatures at the poles and in the mid-latitudes.
- . As more and more ice melts in the coming years, more such events can be expected. But very little research on this is available as ice melting is a recent phenomenon.
- . IPCC (Intergovernmental Panel on Climate Change) report says that the polar vortex is expected to become smaller in the coming years.

AFRICA HAS BEEN SPARED SO FAR FROM CORONAVIRUS. WHY?

◎ CONTEXT

- Some 24 countries apart from China have registered cases of the coronavirus, now officially named Covid-19. None of them is in Africa, despite the increasingly tight links between the two regions.

◎ ABOUT

- Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV).
- . A novel coronavirus (nCoV) is a new strain that has not been previously identified in humans.

Chinese in Africa:

- . About 2 million Chinese live and work on the African continent.
- . Africans are also increasingly visiting China for business and study.
- . Before the novel coronavirus outbreak — which is centred on China's Hubei region and its provincial capital of Wuhan — about eight flights a day operated between China and African nations.

- . Chinese travellers made up the biggest group of customers on Ethiopian Airlines, Africa's largest carrier.
- . This booming travel between China and Africa is a possible route for transmission of the new coronavirus, which has killed 1,369 people and infected 46,997 globally, according to the latest WHO figures.

Limited testing

- . A simple explanation could be that the continent simply hasn't had the ability to detect cases up until now.
- . As of late last week, only two African countries — Senegal and South Africa — had laboratories capable of testing and confirming samples for the virus.
- . This situation has changed. Medical teams from more than a dozen African countries met in Senegal last week to learn how to diagnose the new virus.
- . Now 19 African nations are able to test for Covid-19, including Nigeria, Gabon, Cameroon, Ethiopia, Kenya, Zambia and Sierra Leone.
- . The World Health Organization (WHO) has also identified 13 priority countries in Africa with strong links to China and told DW it has dispatched experts to eight of these to help coordinate preparedness efforts.
- . The priority countries have all introduced screenings at airports, as well as some seaports, according to the WHO.
- . In Sierra Leone, more than 30 Chinese who arrived from China last week are under quarantine in Freetown.

Too warm for COVID-19?

- . Another theory is that the continent is too warm for the Covid-19 virus to thrive.
- . Coronaviruses, which include some of the viruses responsible for the common cold and flu, can show something called seasonality — that is, the peak and wane depending on the season.
- . Many cold and flu viruses peak in winter, for example; the droplets sneezed and coughed out by people spread more easily in winter's cold dry air and when people are crowded inside together.
- . They then die down in warmer weather.
- . "When the season is warmer and more humid, the droplets transmitting the [flu virus] tend to fall out of the air more quickly, therefore limiting its transmission.
- . Tropical countries aren't immune from seasonality, with flu peaking in the dry season in countries like Cameroon.
- . However, not all coronaviruses spread through respiratory droplets and Boum cautions that it is too early to tell if Covid-19 is transmitted in a similar fashion.

'Doubt a big outbreak in Africa'

- . But even if the coronavirus makes its way to Africa, It doesn't believe the continent will be as hard hit as China.
- . Droplet diseases don't seem to be as big an issue in Africa. SARS, a respiratory disease that is also a coronavirus, spread through 26 countries in 2003 but failed to gain a hold in Africa.
- . Influenza epidemics are also less intense on the continent.
- . In addition, in Africa people generally don't live crammed together in such densely populated areas and they also spend a lot more time out-of-doors in Africa than they do in northern countries.

LASSA FEVER

◎ CONTEXT

- The Nigerian Academy of Science has called for the current outbreak of Lassa fever in Africa's most populous nation to be declared a national health emergency because of its severity.

◎ ABOUT

- Lassa fever is a viral haemorrhagic disease caused by the Lassa virus (a member of the arenavirus family of viruses) which naturally infects the widely distributed house rat.

Lassa Fever virus is a single-stranded, enveloped RNA virus that belongs to the genus **Mammarenavirus**, of the **Arenaviridae family of viruses**. The natural reservoir for Lassa fever virus is the **Mastomys natalensis rat**.

- **Transmission:** It is transmitted through the urine and droppings of infected rats found in most tropical and subtropical countries in Africa.
- **Communicable:** They are able to contaminate anything they come in contact with. The Lassa virus spreads through human to human contact with tissue, blood, body fluids, secretions or excretions.
- **Symptoms:** A fever is usually the first symptom followed by headaches and coughing, nausea and vomiting, diarrhoea, mouth ulcers and swollen lymph glands.
- **Treatment:** Lassa fever can be fatal, but it can be treated if diagnosed early.

How serious is the current Lassa fever outbreak in Nigeria?

- The current outbreak is serious enough given the worsening trend. It has spread from just two states when it was first diagnosed in 1969 to 23 states in 2019.
- In 2018, the Nigerian Centre for Disease Control reported the largest ever a number of cases in Nigeria, with over 600 confirmed cases and over 170 deaths.
- And the numbers have continued to rise. An alarm was raised over the tripling of the number of suspected cases between 2017 and 2018 only for the reported number of suspected cases to rise in 2019.
- Outbreaks have historically occurred during the dry season – November to April. But in recent years there have also been cases during the rainy season.

What difference would a public health emergency make?

- A recent, and good example, of the difference this can make, was the announcement of a public health emergency in 2014 to tackle the Ebola virus outbreak.
- The announcement led to an emergency mode being activated with the attendant political will and funding which ultimately stopped the spread of the disease within 93 days.
- This is why the Nigerian Academy of Science is calling for more action.
- In particular, it is recommending that an interdisciplinary committee be set up comprising medical and veterinary specialists, epidemiologists, social scientists, media practitioners, community representatives.
- This would be along the lines of an approach known as **One Health**.
- This is rooted in the understanding that human health is affected by interactions between people, the environment and animals.
- Equally important is the need for the government to enhance the capacity of the national laboratory network for reliable and efficient diagnosis of suspected cases.
- This is because only about 20% of suspected Lassa fever cases are usually diagnosed.
- The government should also provide adequate funds for a sensitive disease surveillance and response system. This is a system that ensures disease outbreaks (not just Lassa

fever) are quickly noticed, diagnosed, and appropriate responses or containment measures are started in the shortest possible time.

KALIDASA

◎ CONTEXT

- In the latest Budget 2020, the Finance Minister of India cited some poets in her Budget speech. The famous Kalidasa was also among them.

◎ ABOUT

- Kalidasa's **Raghuvamsha** was quoted by Finance Minister during her Budget 2020 presentation in the Parliament.
 - œ It said that just as **Surya** collects vapour from little drops of water, so must a government collect taxes—lightly.
- The three major themes of Budget 2020 are:
 - œ **Aspirational India**
 - œ **A caring society**
 - œ **Economic development for all**

Facts about Kalidasa

- Kalidasa was a **Classical Sanskrit writer**, widely regarded as the **greatest poet and dramatist in the Sanskrit language of India**.
- Much about his life is unknown, only what can be inferred from his poetry and plays.
- His plays and poetry are primarily based on **the Vedas, the Ramayana, the Mahabharata and the Puranas**.
- His surviving works consist of three plays, two epic poems and two shorter poems.
- His works cannot be dated with precision, but they were most likely authored within the **4th–5th century CE**.
- **Palaeographic evidence:** The earliest paleographical evidence of Kalidasa is found in a Sanskrit inscription dated c. 473 CE, found at **Mandsaur's Sun temple**.
 - œ His name, along with that of **poet Bharavi**, is mentioned in a **stone inscription** dated 634 C.E. **found at Aihole**, located in present-day Karnataka.
- **Influenced:** Kalidasahad great impact on **Rabindranath Tagore**. Meghadutam's romanticism is found in Tagore's poems on the monsoons.
 - œ Father of Modern Medicine **Sir William Osler** always kept on his desk a poem written by Kalidasa.

Theories locating the origin of Kalidasa

- **Himalayas, Ujjain and Kalinga:** Scholars have speculated that Kalidasa may have lived near the Himalayas, in the vicinity of Ujjain, and in Kalinga.
 - œ This hypothesis is based on Kalidasa's detailed **description of the Himalayas in his Kumarasambhava**, the display of his **love for Ujjain in Meghadūta**, and his highly eulogistic descriptions of **Kalingan emperor Hemāngada in Raghuvamsha** (sixth sarga).
- **Kashmir:** **Lakshmi Dhar Kalla** (1891–1953), a Sanskrit scholar and a Kashmiri Pandit, concluded that Kalidasa was **born in Kashmir, but moved southwards**, and sought the patronage of local rulers to prosper. The evidence cited through Kalidasa's writings includes:
 - Description of flora, fauna and geographical features common to Kashmir, but not Ujjain or Kalinga: **saffron plant, deodar trees, musk deer, tarns, glades etc.**

- . Reference to certain legends of Kashmiri origin, such as **Kashmiri text NilamataPurana mentioned in Shakuntala Nikumbha**.
- . Some scholars posit **Garhwal in Uttarakhand** to be Kalidasa's birthplace.

Legends around Kalidasa

- . According to folklore, Kalidasa became a great poet because he sought to **study Purana and other ancient texts in order to seek revenge from a princess** who mocked Kalidasa for being an unintelligent man when he had come to pursue her hand in marriage.
 - œ Challenged by the princess, Kalidasa visited a **Kali temple** and was **inspired to learn Sanskrit**.
 - œ He then wrote three epics **Kumarasambhava, Meghaduta** and **Raghuvamsa**.
- . Another legend is that he **visited Kumaradasa, the king of Sri Lanka** formerly known as Ceylon and, because of some treachery, Kalidasa **was murdered there**.
- . **Theory of multiple Kalidasa:** Some scholars believe that all the works attributed to "Kalidasa" are not by a single person.
 - œ From the 8th and 9th centuries, there may have existed **three noted literary figures that share the name Kalidasa**.

Literary works

- . **Kalidasa wrote three plays:**
 - œ **Malavikagnimitram**(Pertaining to **Malavika and Agnimitra**) tells the story of King Agnimitra, who falls in love with the picture of an exiled servant girl named Malavika.
 - œ **Abhijnanasakuntalam** (Of the recollection of Shakuntala) tells the story of **King Dushyanta** who, while on a hunting trip, meets **Shakuntala**, the adopted daughter of a sage, and marries her. It was among the first Sanskrit works to be translated into English.
 - œ **Vikramorvasiyam** (Urvashi Won by Valour) tells the story of mortal King **Pururavas** and **celestial nymph Urvashi**, who fall in love.
- . **Kalidasa is the author of two epic poems:**
 - œ **Raghuvamsa** is an epic poem about the kings of Raghu dynasty.
 - œ **Kumarasambhava** describes the birth and adolescence of the goddess Parvati, and her marriage with Lord Shiva.
- . **Kalidasa also wrote two khandakavyas (minor poems):**
 - œ **Ritusamhara** describes the six seasons by narrating the experiences of two lovers in each of the seasons.
 - œ **Meghaduta**(The Cloud Messenger)describes the story of a Yaksha trying to send a message to his lover through a cloud. This **poem is elegiac in nature** through which Kalidasa created his own genre of poetry. Kalidasa set this poem to the **mandakranta meter**, which is known for its lyrical sweetness.

UNITED STATES TRADE REPRESENTATIVE (USTR)

© CONTEXT

- . The United States removed India from its list of developing countries that are exempted from investigations into whether they harm American industry with unfairly subsidised exports. The United States Trade Representative (USTR) eliminated a host of countries including Brazil, Indonesia, Hong Kong, South Africa and Argentina

from getting special preferences under the methodology for countervailing duty (CVD) investigations, stating that the previous guidance that dated back to 1998 “is now obsolete”.

◎ ABOUT

• US internal list of developing and least-developed countries:

- . The list is brought by the USTR. The countries are divided into categories of Developing, Developed and underdeveloped. The main criteria for the division of the countries include:
 - œ Share in the world trade
 - œ The number of exports from the countries
- . It is a US-specific list which lists out the countries to get the various trade benefits while carrying out trade with the U.S.A.

Features of the listing of the countries as developing:

- . The countries would be able to exempt from the investigations about the harm to American industry by the bilateral or multilateral trade.
- . These investigations are related to the countervailing duty.
- . The countries would be getting the trade benefits.
- . The countries would be getting the exemptions in the countervailing duties.
- . The countries would be given preference in the Generalised System of Preference (GSP).
- . The Generalised System of Preference will bring about the various duty exemptions to the trade with the USA.
- . The countries will be able to enjoy trade with the USA.
- . There will be lesser trade barriers by the US government while trading with the developing countries.

Position of India:

- . Previously, India was in the category of the developing nation. But USTR has removed India from this list.
- . Now India will not be able to avail the trade benefits which are given to the developing countries.

Why the the decision taken by USTR?

- . The decision has been taken due to a series of decisions taken by the Indian government has led to trade friction between two countries:
 - œ India’s new e-commerce rules — which have impacted American companies like Amazon and Walmart (majority owner of Flipkart).
 - œ Price controls on medical devices (cardiac stents).
 - œ Tariffs on products like smartwatches and high-end mobile phones.
 - œ Lack of greater market access for the U.S. dairy industry.
 - œ The global economic slowdown and the competence of the Indian Industries have affected the decision taken by USTR.

Effect on Indo-US relationship:

- . The decision will further affect the United States-India strategic partnership and highlight the strong and enduring bonds between the American and Indian people.
- . The impact of the GSP will be much greater: India has been the biggest beneficiary of the GSP regime.
- . In 2018, \$6.3 billion of Indian merchandise exports to the U.S. were covered by GSP.
- . The sectors which could face the impact of the withdrawal of the GSP regime are gem and jewellery, leather and processed foods.

- However, India has said that the impact is “minimal”, given that Indian exporters were only receiving duty-free benefits of \$190 million on the country’s overall GSP-related trade of \$5.6 billion.
- This could impact India’s competitiveness in items groups such as raw materials in the organic chemicals sector and intermediary goods in the US market, alongside items such as iron or steel, furniture, aluminium and electrical machinery.
- The impact on small industries in the country could be significant. Such industries would lose their market share in the U.S. without financial support to help them maintain their edge.

◎ **WAY FORWARD**

- As part of bilateral trade discussions between India and US, India had offered a resolution on significant US requests in an effort to find a mutually acceptable way forward but unfortunately that this did not find acceptance by the US. Therefore, like the US and other nations, India shall always uphold its national interest in these matters and should consider significant development imperatives and concerns and its people who also aspire for better standards of living.

THE DIFFERENCE BETWEEN PRIVATE AND GOVERNMENT BILLS IN PARLIAMENT

◎ **CONTEXT**

- A member in Rajya Sabha appeared to abandon his plan of introducing a private member’s Bill on the Uniform Civil Code (UCC), a code that would be applicable to all religious communities in personal matters such as marriage, divorce, inheritance and adoption.

◎ **ABOUT**

What is a private member’s Bill?

- A private member’s Bill is different from a government Bill and is piloted by an MP who is not a minister.
- Individual MPs may introduce private member’s Bill to draw the government’s attention to what they might see as issues requiring legislative intervention.
- An MP who is not a minister is a private member and while both private members and ministers take part in the lawmaking process, Bills introduced by private members are referred to as private member’s Bills and those introduced by ministers are called government Bills.
- Government Bills are backed by the government and also reflect its legislative agenda.
- The admissibility of a private Bill is decided by the Chairman in the case of the Rajya Sabha and the Speaker in the case of the Lok Sabha.
- Before the Bill can be listed for introduction, the Member must give at least a month’s notice, for the House Secretariat to examine it for compliance with constitutional provisions and rules on legislation.
- While a government Bill can be introduced and discussed on any day, a private member’s bill can only be introduced and discussed on Fridays.

Has a private member’s bill ever become a law?

- As per PRS Legislative, no private member’s Bill has been passed by Parliament since 1970.
- To date, Parliament has passed 14 such Bills, six of them in 1956.
- In the 14th Lok Sabha, of the over 300 private member’s Bills introduced, roughly four per cent were discussed; the remaining 96 per cent lapsed without a single dialogue.
- The selection of Bills for discussion is done through a ballot.

UNPARLIAMENTARY” SPEECH AND CONDUCT IN PARLIAMENT

◎ CONTEXT

- In recent times, few instances of heated exchanges in Parliament have brought back recurring questions around ‘unparliamentary’ speech and conduct.

◎ ABOUT

What are Unparliamentary expressions?

- . There are phrases and words, literally in thousands, both in English and in other Indian languages, that are “unparliamentary”.
- . The Lok Sabha Secretariat has brought out a bulky tome titled ‘**Unparliamentary Expressions**’, the 2004 edition of which ran into 900 pages.
- . The list contains several words and expressions that would probably be considered rude or offensive in most cultures; however, it also has stuff that is likely to be thought of as being fairly harmless or innocuous.
- . The state legislatures too are guided mainly by the same book, which also draws heavily from unparliamentary words and phrases used in the Vidhan Sabhas and Vidhan Parishads of India.
- . The book was first compiled in 1999. At the time, references were taken from debates and phrases declared unparliamentary by the pre-independence Central Legislative Assembly, the Constituent Assembly of India, the Provisional Parliament, the first to the tenth Lok Sabhas and Rajya Sabha, state legislatures, and Commonwealth parliaments like that of the United Kingdom.

Who is responsible to keep such word out?

- . The Presiding Officers, Speaker of Lok Sabha and Chairperson of Rajya Sabha, have the job of keeping these bad words out of Parliament’s records.
- . Under Rule 380 of the **Rules of Procedure and Conduct of Business in Lok Sabha**, the Speaker is vested with the power to order expunction of words which, in the opinion of the Speaker, are defamatory or indecent or unparliamentary or undignified from the proceedings of the House.
- . Similarly, the Speaker may order **expunction** of words which are defamatory or insinuatory in nature or levels allegation against a high dignitary or authority or organization.

Do MPs have the freedom to say anything (in the House)?

- . While **Article 105(2)** of the Constitution of India lays down that “**no Member of Parliament shall be liable to any proceedings in any court in respect of anything said or any vote given by him in Parliament or any committee thereof**”, MPs do not enjoy the freedom to say whatever they want inside the house.
- . **Article 121** prohibits discussion in Parliament with respect to the conduct of any Judge of the Supreme Court or of a High Court in the discharge of the duties except upon a motion for presenting an address to the President for the removal in the manner prescribed.
- . Whatever an MP says is subject to the discipline of the **Rules of Parliament**, the “good sense” of Members, and the control of proceedings by the Speaker.
- . These checks ensure that MPs cannot use “defamatory or indecent or undignified or unparliamentary words” inside the House.
- . **Rule 380 (“Expunction”)** of the Rules of Procedure and Conduct of Business in Lok Sabha says: “If the Speaker is of opinion that words have been used in debate which is defamatory or indecent or unparliamentary or undignified, the Speaker may while exercising discretion order that such words be expunged from the proceedings of the House.”

- . **Rule 381** says: "The portion of the proceedings of the House so expunged shall be marked by asterisks and an explanatory footnote shall be inserted in the proceedings as follows: 'Expunged as ordered by the Chair'."

ARSENIC-RESISTANT RICE

◎ CONTEXT

- Researchers have developed and commercialised a rice variety that is resistant to arsenic.

◎ ABOUT

Muktoshri:

- . The new rice variety, Muktoshri, also called IET 21845, was developed jointly by the **Rice Research Station** at Chinsurah coming under West Bengal's **Agriculture** Department and the **National Botanical Research Institute**, Lucknow, over several years.
- . Work on developing the variety started in 2006 and by 2013 the scientists were successful.
- . This variety uptakes very less amount of arsenic from soil and water in comparison to other varieties of rice.
- . The variety yields 5.5 metric tonnes per hectare in the Boro season and 4.5 to 5 metric tonnes per hectare in the Kharif season, respectively.

Arsenic contamination:

- . Arsenic is naturally present at high levels in the groundwater of a number of countries. It is highly toxic in its inorganic form.
- . Arsenic contamination of groundwater is widespread and there are a number of regions where arsenic contamination of drinking- water is significant.
- . Arsenic is one of WHO's 10 chemicals of major public health concern.
- . It is now recognized that at least 140 million people in 50 countries have been drinking water containing arsenic at levels above the WHO provisional guideline value of **10 µg/L (4)**.
- . According to the latest report of the **Central Ground Water Board (CGWB)**, 21 states across the country have pockets with arsenic levels higher than the Bureau of Indian Standards' (BIS) stipulated permissible limit of **0.01 milligram per litre (mg/l)**.
- . In India, arsenic contamination was first officially confirmed in West Bengal in 1983. Close to four decades after its detection, the scenario has worsened, about 9.6 million people in West Bengal are at immediate risk from arsenic contamination in groundwater.
- . **West Bengal** is among the States with the highest concentration of arsenic in groundwater, with as many as 83 blocks across seven districts having higher arsenic levels than permissible limits.

Impacts:

- . **Irreversible damages:** Major impacts of arsenic in water include skin damage, keratosis and skin cancer, cancers of lung and bladder and diseases of the vascular system.
- . **Poisoning:** According to the World Health Organization, long-term exposure to arsenic, mainly through drinking water and food, can lead to poisoning.
- . **A danger to livestock:** Rice husk, containing high levels of arsenic, is being used as fodder for livestock, exposing them to the hazardous impacts of arsenic contamination. This is also leading to a potential risk for humans when they consume cattle based food products.
- . **Cancer-causing agent:** Arsenic poisoning is one of the greatest reasons for the growing cases of cancer for people living in India's Ganga plains. It can lead to the aggravated condition of Cancer.

GENOME INDIA PROJECT

◎ CONTEXT

- The government has cleared an ambitious gene-mapping project that is being described by those involved as the “first scratching of the surface of the vast genetic diversity of India”.

◎ ABOUT

What is a genome?

- . Every organism's genetic code is contained in its Deoxyribose Nucleic Acid (DNA), the building blocks of life.
- . A genome, simply put, is all the genetic matter in an organism. It is defined as “an organism's complete set of DNA, including all of its genes.
- . Each genome contains all of the information needed to build and maintain that organism. In humans, a copy of the entire genome, more than 3 billion DNA base pairs, is contained in all cells that have a nucleus
- . The discovery that DNA is structured as a “double helix” by James Watson and Francis Crick in 1953, for which they won a Nobel Prize in 1962, was the spark in the long, continuing quest for understanding how genes dictate life, its traits, and what causes diseases.

About the Project:

- . The first stage of the project will look at samples of “10,000 persons from all over the country” to form a “grid” that will enable the development of a “reference genome”.
- . **Nodal agency:** The IISc's Centre for Brain Research, an autonomous institute, will serve as the nodal point of the project.
- . **Aim:** Its aim is to ultimately build a grid of the Indian “reference genome”, to understand fully the type and nature of diseases and traits that comprise the diverse Indian population.

Benefits of the Project:

- . The Genome India Project, a collaboration of 20 institutions will enable new efficiencies in medicine, agriculture and the life sciences. The major benefits are as given below:
- . **Improving health:** Several diseases develop through metabolic polymorphisms. If such propensities to disease can be mapped to variations across genomes, it is believed public health interventions can be targeted better, and diseases anticipated before they develop.
- . **Agriculture:** A better understanding of the genetic basis of susceptibility to blights, rusts and pests can make it possible to deter them genetically, and reduce dependence on chemicals.

- . **Mapping the diverse gene pools:** Global science would also benefit from a mapping project in one of the world's most diverse gene pools, which would provide data useful for the mapping of the spread and migration of a range of life forms in the Old World, from plants to humans.
- . **Deep information on evolution:** Traversing from the world's tallest mountain range to warm seas through multiple bio-zones demarcated by climate and terrain, India could provide much information on the interplay of species and genetic groups within them.
- . **A deeper understanding of ecology:** Eventually, a deeper understanding of ecology could emerge from the material thrown up.

Challenges:

- . However, some caution must be exercised in the field of human genetics, because the life sciences sometimes stray into unscientific terrain and heighten political bias.
- . The mapping of brain regions to mental functions spun off the utterly unscientific and racist field of phrenology.
- . In India, a nation driven by identity politics and obsessed with the myths of pristine origins and authenticity, scientific work in mapping genetic groups may become grist to the political mill of the unscientific notion of race.

Hasn't the human genome been mapped before?

- . The Human Genome Project (HGP) was an international programme that led to the decoding of the entire human genome.
- . The HGP was an inward voyage of discovery, led by an international team of researchers looking to sequence and map all of the genes of members of our species.
- . Beginning on October 1, 1990, and completed in April 2003, the HGP gave the ability, for the first time, to read nature's complete genetic blueprint for building a human being.
- . In today's era, mapping of India's genetic landscape is essential for next-generation medicine, agriculture and biodiversity management. This move must be supported at all levels to map the diversity of India's genetic pool and put it on the global map.

VOYAGER 2

◎ CONTEXT

- **In an incredible feat of remote engineering, NASA has fixed one of the most intrepid explorers in human history. Voyager 2, currently some 11.5 billion miles from Earth, is back online and resuming its mission to collect scientific data on the solar system and the interstellar space beyond.**

◎ ABOUT

What is Voyager 2?

- . NASA's Voyager 2 is the second spacecraft to enter interstellar space. It is sister craft to Voyager 1. Both have been travelling through the solar system, and now beyond it, for the last four decades.
- . Both were launched a few weeks apart in 1977 to perform an unprecedented "grand tour" of the outer solar system.
- . Both spacecraft conducted flybys of Jupiter and Saturn, revealing a great deal about the solar system's two biggest planets.
 - œ **Closest approach to Jupiter occurred on March 5, 1979, for Voyager 1; July 9, 1979**
 - œ **Closest approach to Saturn occurred on November 12, 1980, for Voyager 1; August 25, 1981**

- . Voyager 2 then zoomed past Uranus in 1986 and Neptune in 1989; the probe remains the only craft to have gotten up-close looks at either of these “ice giants.”
- . Voyager 1 and Voyager 2 are currently about 13.8 billion miles (22.2 billion kilometres) and 11.5 billion miles (13.5 billion km) from Earth, respectively.
- . Voyager 2 is the furthest away object made by humans: 11.5 billion miles from Earth. Not even light can travel such a distance instantaneously as it does on our planet.
- . It takes more than 17 hours for light to travel from Earth to Voyager 2.

Nation	United States of America (USA)
Objective(s)	Jupiter Flyby, Saturn Flyby, Uranus Flyby, Neptune Flyby
Spacecraft Mass	1,592 pounds (721.9 kilograms)
Mission Design and Management	NASA / JPL
Launch Date	August 20, 1977

What happened to the spacecraft?

- . The spacecraft had run into trouble on January 28, when NASA revealed that it had unexpectedly, and for unknown reasons, shut down.
- . The venerable probe failed to execute a spin maneuver as intended. As a result, two onboard systems remained on longer than planned, sucking up so much energy that Voyager 2 automatically shut off its science instruments.
- . But now, Voyager 2 is back online — gathering and relaying scientific information just as before.

HOW WIDE IS THE GENDER GAP IN SCIENCE?

◎ CONTEXT

- Between 1901 and 2019, 334 Nobel Prizes have been awarded to 616 Laureates in Physics, Chemistry and Medicine, of which just 20 have been won by 19 women.

◎ ABOUT

- February 11 was the **International Day of Women and Girls in Science**, established by the **United Nations** to promote equal access to and participation in science for women and girls.
- While some of the greatest scientists and mathematicians have been women, they remain under-represented in comparison to their male counterparts in higher studies involving science, as well as among the top scientific achievers.

Researchers and achievers

- According to a 2018 fact sheet prepared by UNESCO on women in science, just 28.8% of researchers are women.
- It defines researchers as “professionals engaged in the conception or creation of new knowledge”. In India, this drops to 13.9%.
- Between 1901 and 2019, 334 Nobel Prizes have been awarded to 616 Laureates in Physics, Chemistry and Medicine, of which just 20 have been won by 19 women.
- The double Laureate is Marie Curie, one of just three women who have won in Physics and one of just five in Chemistry, while 12 women have won the Medicine Nobel.
- In 2019, the American mathematician Karen Uhlenbeck became the first woman to win the Abel Prize, following 16 male mathematicians.
- The Fields Medal so far has also been awarded to only one woman mathematician, the late Maryam Mirzakhani of Iran, as opposed to 59 men since 1936.

Women in science courses

- UNESCO data from 2014-16 show that only around 30% of female students select STEM (science, technology, engineering and mathematics)-related fields in higher education.
- Female enrolment is particularly low in information technology (3%), natural science, mathematics and statistics (5%) and engineering and allied streams (8%).
- In India, a 2016-17 NITI Aayog report compared female enrolment in various disciplines over five years, until 2015-16.**
- In 2015-16, 9.3% of female students in undergraduate courses were enrolled in engineering, compared to 15.6% across genders. Conversely, 4.3% of female students were enrolled in medical science, compared to 3.3% across genders.
- Then, at master's and doctoral levels, female enrolment remained lower than overall enrolment, and also fell behind for medical science in three of the five years.
- “This reflects that moving up from UG to a higher degree and research programmes, the restricted presence of women in higher studies and research in science becomes evident for a broader range of disciplines.
- Broadly, women showed a preference for arts; however, female enrolment in science streams rose from 2010-11 to 2015-16.
- The report found that in over 620 institutes and universities, including IITs, NITs, ISRO, and DRDO, the presence of women was 20.0% among Scientific and Administrative Staff, 28.7% among Post-Doctoral Fellows, and 33.5% among PhD scholars.

Why the gender gap?

- Girls excel at mathematics and science-oriented subjects in school, but boys often believe they can do better, which shapes their choices in higher studies.
- In 2015, an analysis of PISA scores by OECD found that the difference in maths scores

between high-achieving boys and girls was the equivalent of about half a year at school.

- . But when comparing boys and girls who reported similar levels of self-confidence and anxiety about mathematics, the gender gap in performance disappeared — when girls were more anxious, they tended to perform poorly.
- . The NITI Aayog report said, **“The problem of entry of women in science is not uniform across disciplines. Interventions geared to popularising subjects such as Engineering or the Physical sciences or Chemistry among female students at the school level in both urban and rural areas might be helpful in changing mind-set.”**

MISCELLANEOUS

CURRENT AFFAIRS

APIARY ON WHEELS

- . Union Minister of Micro, Small & Medium Enterprises has flagged off the Apiary on Wheels.
- . Apiary on Wheels is a unique concept designed by the Khadi and Village Industries Commission (KVIC).
- . It aims to address the challenges faced by the beekeepers by easy upkeep and migration of Bee Boxes having live Bee colonies.
- . This initiative was launched as a part of the National Honey Mission.
 - œ The Honey Mission was launched in 2017 by the Khadi and Village Industries Commission (KVIC).
 - œ **Aim:** To Provide sustainable employment and income to rural and urban unemployed youth by conserving the honeybee habitat and tapping untapped natural resources.

BHUTAN'S "SUSTAINABLE DEVELOPMENT FEE" (SDF)

- . Ending decades of free entry to Indian tourists visiting Bhutan, the government in Thimphu has decided to levy a daily 1,200 (\$17) fee for "regional tourists" from India, the Maldives and Bangladesh, beginning July 2020.
- . The fee, called a Sustainable Development Fee (SDF), is meant to help the government deal with burgeoning numbers in tourist traffic, which it is seeking to regulate through a new tourism policy.

HIGH-SPEED ELECTRIC SCOOTER 'EPLUTO 7G'

- . Pure EV, a start-up incubated at the Indian Institute of Technology, Hyderabad, launched its High-Speed Electric Scooter 'EPluto 7G'.
- . The vehicle offers affordability, long-range, a top speed of 60 KMPH and battery warranty for 40,000 KM.
- . A unique point of this vehicle is that the battery and the vehicle have been designed and developed after factoring in Indian terrain and weather conditions.
- . Pure EV has established a 40,000-square foot state-of-the-art facility, co-located with IIT Hyderabad, for cutting-edge Research and Developing and for large scale production of electric vehicles and electric batteries.

INDONESIA'S MOUNT MERAPI ERUPTS

- . Indonesia's most active volcano, Mount Merapi has erupted again sending ash and smoke more than three miles into the sky.
- . Mount Merapi is an active stratovolcano located on the border between Central Java and Yogyakarta provinces, Indonesia.
- . It is the most active volcano in Indonesia and has erupted regularly since 1548.

INS SHIVAJI

- . President Ram Nath Kovind presented the President's Colour to INS Shivaji in Lonavala, Maharashtra.
- . INS Shivaji houses the Naval College of Engineering which trains officers of the Indian Navy and the Indian Coast Guard.

- It was commissioned on February 15, 1945, as HMIS Shivaji. It is located close to the Bhushi Dam and spreads across 876 acres.
- INS Shivaji motto: Karmasu Kaushalam, which means imbibing the concept of skill at work in all aspects of human endeavour.
- INS Shivaji is commanded by Commodore Ravnish Seth.
- The President's colour is the highest honour bestowed upon any Indian military unit.
- Last year, President Kovind had awarded the President's Colour to the Indian Naval Academy (INA), which was received by Academy Cadet Captain Sushil Singh.

INTERNATIONAL DAY OF ZERO TOLERANCE FOR FEMALE GENITAL MUTILATION

- In order to fight Genital Mutilation, the International Day of Zero Tolerance for Female Genital Mutilation is celebrated on the 6th of February each year.
- The UN first officially commemorated the International Day of Zero Tolerance for Female Genital Mutilation on February 6, 2003.
- Female genital mutilation (FGM) is recognized internationally as a violation of the human rights of girls and women.
- The practice involves the partial or total removal of external female genitalia or other injuries to the female genital organs for non-medical reasons.
- The WHO classifies female genital mutilation into 4 major types.
 - œ **Type 1:** partial or total removal of the clitoral glans (the external and visible part of the clitoris, which is a sensitive part of the female genitals), and/or the prepuce/ clitoral hood (the fold of skin surrounding the clitoral glans).
 - œ **Type 2:** partial or total removal of the clitoral glans and the labia minora (the inner folds of the vulva), with or without removal of the labia majora (the outer folds of skin of the vulva).
 - œ **Type 3:** Also known as infibulation, this is the narrowing of the vaginal opening through the creation of a covering seal by cutting and repositioning the labia minora, or labia majora, sometimes through stitching, with or without removal of the clitoral prepuce/clitoral hood and glans (Type I FGM).
 - œ **Type 4:** This includes all other harmful procedures to the female genitalia for non-medical purposes, e.g. pricking, piercing, incising, scraping and cauterizing the genital area.]

INTERNATIONAL SEARCH AND RESCUE ADVISORY GROUP (INSARAG)

- The National Disaster Response Force (NDRF) has organized the second BIMSTEC Disaster Management Exercise as per the International Search & Rescue Advisory Group (INSARAG) guidelines for familiarization & exercise purposes.
- The International Search and Rescue Advisory Group (INSARAG) was established in 1991.
- It is a network of disaster-prone and disaster-responding countries and organizations dedicated to urban search and rescue (USAR) and operational field coordination.
- It aims to establish standards and classification for international USAR teams as well as a methodology for international response coordination in the aftermath of earthquakes and collapsed structure disasters.
- The Secretariat is located in the United Nations Office for the Coordination of Humanitarian Affairs (OCHA).

KUMBHABHISHEKAM

- The consecration (kumbhabhishekam) of 1,010-year-old Brihadeeswarar Temple or the Big Temple in Thanjavur has been performed with religious fervour and gaiety.
- As per the customs of Hinduism, 'kumbhabhishekam' is done once in 12 years.
- According to the Hindu Religious and Charitable Endowments (HR&CE) department, the temple had 'kumbhabhishekam' in 1010, 1729, 1843, 1980 and 1997.
- Built by: Brihadeeswarar Temple, which is dedicated to Shiva, was built by Raja Raja Chola I (985 CE-1014CE).
- Structure: The structure is an example of Dravidian architecture and it represents the ideology of Tamil civilization and the Chola Empire.
- The temple, which is believed to be built between 1003 and 1010 AD, is also a UNESCO World Heritage Site and also known as Great Living Chola Temples.

LONGEST SPACEFLIGHT BY A WOMAN

- Christina Koch, a US astronaut set a record for the longest single spaceflight by a woman, breaking the old mark of 288 days with about two months left in her mission.
- The US record for longest space flight is 340 days set by Scott Kelly in 2015-2016.
- The world record is 15 months set in the 1990s by a Russian cosmonaut aboard the former Mir space station.

NASA TO HONOUR TUSKEGEE AIRMAN

- As part of its celebration of Black History Month, NASA will honour retired Air Force Col. Charles McGee at a ceremony, in the James Webb Auditorium at NASA Headquarters.
- The event is sponsored by the NASA Headquarters chapter of Blacks in Government.
- McGee, one of the last surviving Tuskegee Airmen and a veteran of World War II, the Korean War and the Vietnam War. Of the 355 Tuskegee pilots who flew in combat, McGee is one of only nine surviving.
- McGee will be joined by NASA astronaut Alvin Drew, also a retired Air Force colonel, who logged more than 612 hours in space on space shuttle Endeavour on the STS-118 mission in 2007 and space shuttle Discovery on STS-133 in 2011.
- McGee is scheduled to receive an honorary promotion to the rank of brigadier general, as authorized by the National Defense Authorization Act for Fiscal Year 2020.

NATIONAL MARITIME HERITAGE COMPLEX (NMHC)

- A world-class National Maritime Heritage Complex will be developed at Lothal, Gujarat.
- The MoU between India and Portugal on National Maritime Heritage Complex, Lothal will pay the way for cooperation between the two countries for showcasing common Maritime Heritage.
- NMHC will consolidate all diverse and rich artifacts from ancient to modern times.
- It will provide access to the public and make them aware of India's rich Maritime Heritage.

NITI AAYOG'S SOCIAL PROTECTION FRAMEWORK

- . Government has formed a Technical Committee headed by the Vice-Chairman of NITI Aayog, Rajiv Kumar to prepare policy prescriptions for an integrated social protection framework.
- . Social protection is defined as the set of policies and programmes designed to reduce poverty and vulnerability by promoting efficient labour markets and enhancing their capacity to protect themselves against hazards and interruption or loss of income.
- . The committee will include senior officials of nodal central ministries delivering social benefits.
- . It will also identify the top five priority areas for the government, which could range from employment and old-age security to health, agriculture and introduction of specific interventions.

CURRENT AFFAIRS ANALYST

PART-4 (FEBRUARY, 2020)

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SCIENCE & TECH.

- . Aditya – L1 Mission
- . Betelgeuse Supernova
- . GISAT-1 mission
- . ISRO to launch an unprecedented 10 earth imaging satellites

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Topics in News

- . 3rd High-Level Global Conference on Road Safety
- . Antarctica recorded the hottest temperature
- . Ethics for Climate Change Regional Conference
- . GEF India adopts “Bharosa Centre” at Warangal
- . NASA Awards Contract to Launch CubeSat to Moon
- . Northrop Grumman Mission
- . North East Sustainable Development Goals Conclave 2020 in Assam
- . Pravasi Bhartiya Kendra
- . SAMPRITI-IX
- . SC/ST Amendment Act, 2018
- . Solar Orbiter Launch
- . Statehood Day of Mizoram and Arunachal Pradesh

SECTION: A

(MAINS)

CURRENT AFFAIRS

INCREASING CREAMY LAYER CEILING FOR OBCS

CONTEXT

- A Group of Ministers (GoM) headed by defence minister Rajnath Singh has been tasked to upwardly revise the gross annual income limit of Rs 8 lakh fixed for defining the creamy layer among Other Backward Classes.

● BACKGROUND:

- œ Originally, reservation for Dalits, Adivasis and the Other Backwards Classes did not specify any income criteria. Neither were any such riders introduced by central or state legislation. The sole basis of reservation was **caste**.
- œ In 1993, it was the Supreme Court of India which brought the concept of the "creamy layer" through its judgement in the **Indira Sawhney case**.
- œ The court said putting in the framework of the "creamy layer" was in keeping with the **basic structure of the Constitution** as it mapped to the **principle of equality**.
- œ Exclusion of such socially advanced members will make the 'class' a truly backward class.
- œ The principle, however, only applied to the **Other Backward Classes**, not Dalits and Adivasis, who are acknowledged as the country's most backward communities.

The Indra Sawhney Case:

- The Indra Sawhney case was decided by a nine-judge bench of the Supreme Court in 1992.
- The case is famous for decisively laying down several landmark propositions such as:
 - > 50% threshold in reservations
 - > the bar against reservations in certain types of posts
 - > the exclusion of 'creamy layer'
- This piece is, however, limited to the debate on using caste as a factor in determining the backwardness of a group and how Indra Sawhney settled this debate to change the course of India's reservation jurisprudence and policy forever.

- œ It is used to refer to the relatively forward and better-educated members of the Other Backward Classes (OBCs) who are not eligible for government-sponsored educational and other benefit programmes.
- œ It would include the children of Supreme Court judges, senior bureaucrats and military officers above the rank of colonel belonging to that community.
- œ The creamy layer test specifies that a candidate must be below a certain income ceiling in order to avail of reservation in government jobs and educational institutions.
- œ The Commission had confined the exclusion of creamy layer only to the OBCs and not the SC/STs. The difference between 'creamy layer' and 'non-creamy layer' is as given below:
 - > **Creamy layer-** whose yearly income is more than Rs 8 lakh or government employees of greater than class 3
 - > **Non-Creamy layer-** Whose yearly income is below Rs 8 lakh or government employees of class 3 or below 3

Mapping the OBCs in India:

- In India, Other Backward Classes (OBCs) constitute a little less than half of the country's electorate and is a vastly heterogeneous group.
- OBC is an umbrella term used for a range of castes and communities that are socially and economically disadvantaged.
- Currently, there is no updated census on the population of OBCs. There is only a caste data census (1931) before independence as the basis of population share of the sub-castes within OBCs.
- The next census, in 2021, is slated to count OBCs for the first time in 90 years.

● ANALYSIS:

What is the creamy layer?

- œ The concept of 'creamy layer' was introduced in 1971 by the **Sattanathan Commission**, which directed that the creamy layer should be excluded from the reservation of civil posts.

Reservation for OBCs:

- œ Reservation for OBCs, unlike that for Scheduled Castes and Scheduled Tribes, was not initially guaranteed in the Constitution and extends only to jobs and education, not to elected representatives.

- œ It draws its roots from the **Mandal Commission**, which was set up in 1979, and its recommendation for 27% OBC quota accepted by the central government in 1990.
- œ In 2006, the reservation was extended to institutions of higher education.

Reservation (%) for different categories:

- **SCs & STs:** 5 percent and 7.5 percent of positions in central government services and central educational institutions are reserved for SCs and STs respectively.
- **OBCs:** 27 percent positions in central government services and central educational institutions are reserved for OBCs.
- **EWS:** With the addition of 10 percent for economically weaker section (EWS), as per the latest Constitution (103rd Amendment) Act, 2019, the percentage of reservations in central government services and educational institutions will now be around 59.5 percentage.
- In reservation to services and educational institutions at the state level, the percentage for SCs, STs and OBCs vary from state to state based on the demographics.

What does the Law say about OBCs?

- œ **Article 15 and 16 of the Constitution of India** which are applicable to the Scheduled Castes (SCs) and Scheduled Tribes (STs) are also applicable to members belonging to the Other Backward Class (OBC).
 - > **Article 15(4):** Nothing in [Article 15] shall prevent the State from making any special provision for the advancement of any socially, and educationally backward classes of citizens of or for the Scheduled Castes and the Scheduled Tribes.
 - > **Article 16(4):** It enables the provision of reservation to Backward Class of citizens, who are not adequately represented in the State.
- œ **Mandal Commission:** The Mandal Commission, which submitted its report in 1980. The Commission recommended seat reservation for OBCs, in addition to the seats reserved for SCs and STs in educational institutions and avenues of public employment.

The ground reality:

- œ Not all castes among the Other Backward Classes (OBCs), entitled to reservations are reaping the same benefits.

- œ As per a recent report, 97 percent of all jobs and admissions, reserved under the OBC category have been claimed by just under 25 percent of sub-castes. 983 communities, 37 percent of the total -- did not get a single job or admission.
- œ Interestingly, just 10 communities in the OBC category have availed of as much as 24.95 percent of jobs and admissions.
- œ As many as 994 OBC sub-castes have a total representation of only 2.68 percent in recruitment and admissions.

Should the reservation be determined by 'economic criteria'?

- œ Reservation is, by definition, a means of ending discrimination based on caste which has been a feature of the Indian society for thousands of years.
- œ It is not a remedy for economic backwardness.
- œ This is why there is no reservation for low-income members of the upper castes.
- œ Reservation is meant to ensure that backward castes are fairly represented in public services, educational institutions and legislatures, and get a share in state power – something denied to them throughout Indian history.
- œ In 1937, when the British Raj reserved legislative seats for Dalits according to a pact between Mohandas Gandhi and BR Ambedkar, it did not specify income criteria.
- œ Neither did independent India's first government place such restrictions on Dalit and Adivasi reservation.
- œ Many commentators have argued that mandating an economic ceiling for reservation misunderstands how caste works: Dalits and Adivasis face discrimination even if they are well-off or educated.

The current situation:

- œ At present, OBCs are entitled to 27% reservation in higher educational institutions and public sector employment if the gross annual income of one's household does not exceed **Rs 8 lakh**.
- œ A person with an annual income of Rs 8 lakh or more is classified as belonging to the 'creamy layer' among OBCs and cannot avail of reservations.
- œ The income criteria are usually reviewed every three years.
 - > In 2013, the gross annual income criteria were raised from Rs 4.5 lakh to Rs 6 lakh.
 - > In 2017, the government raised it to Rs 8 lakh.

What the government is planning?

- œ The government is planning to upwardly revise the gross annual income limit of Rs 8 lakh fixed for defining the creamy layer among Other Backward Classes.
 - œ The GoM is also considering whether the income criteria for classifying creamy layer for OBCs should be different for rural and urban areas. This is not the first time that the proposal has been mooted.
 - œ In 2011, the **National Commission for Backward Classes** had proposed that income criteria for creamy layer should be different as gross income levels were lower in rural areas.
- > It proposed Rs 9 lakh for rural and Rs 12 lakh for urban areas as income limit for creamy layer classification.
 - > However, the proposal was not accepted.
- œ Raising the ceiling of the annual income of OBC families to get benefits of quota would result in a larger pool of candidates being eligible for government jobs and seats in educational institutions. This step would also ensure greater social justice and inclusion for members of the Other Backward Classes.

INDIA-MALDIVES RELATIONS – AN ANALYSIS

CONTEXT

- The Home Minister of Maldives, Mr Sheikh Imran Abdulla, visited India and met Indian Home Minister.

◎ BACKGROUND

- œ **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.

- œ 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.

- œ India has a pre-eminent position in the Maldives, with relations extending to virtually most areas.
- œ Except for a brief period during former President Waheed's administration and to some extent during former President Yameen's regime, when there was a change in approach towards India, all Maldivian Presidents have recognized the importance of India's strategic role in Maldives and worked towards strengthening bilateral relationship with India, with India is seen as a net security provider.
- œ 'India First' has been a stated policy of the Government of Maldives. President Solih, ever since he assumed office in November 2018, has acted on 'India First' in right earnest.
- œ India's relationship with the Maldives is free **of any politically contentious issues**. The one-time

claim of Maldives to Minicoy Island was resolved by the Maritime Boundary Treaty of 1976 between the two countries, whereby the Maldives has recognized Minicoy as an integral part of India.

- œ **India's prompt assistance during the 1988 coup attempt**, led to the development of trust and long-term and friendly bilateral relations with the Maldives. The immediate withdrawal of our troops when they were no longer required assuaged fears of any Indian dominance or territorial aspirations.
- œ India was the first to assist the Maldives during the 2004 Tsunami as well as the water crisis in Malé in December 2014.
- œ Under **Operation NEER**, India immediately rushed bottled drinking water to Malé utilising Air Force aircraft and Navy ships.

◎ ANALYSIS

Areas of Cooperation

- œ **Defence:**
 - > Since 1988, defence and security have been a major area of cooperation between India and Maldives. India has adopted a very flexible and accommodating approach in meeting Maldivian requirements of defence training and equipment.
 - > India provides the largest number of training opportunities for Maldivian National Defence Force (MNDF), meeting around 70% of their defence training requirements,
 - > **'Ekuverin'** is a joint military exercise between India and Maldives.
 - > **Operation Cactus:** In 1988, in response to a request from the Maldives, India activated Operation Cactus to deploy its military and ensure regime continuity in Male.
 - > During the meeting, both the Home Ministers discussed issues of mutual interest in the area of security and law enforcement cooperation.
- œ **Disaster Management:**
 - > The Government of India has provided large-scale assistance to the Maldives in the aftermath of the 2004 Indian Ocean tsunami and during the 2014 Male water crisis.
- œ **Trade and Tourism:**
 - > **India is Maldives' 4th largest trade partner** after UAE, China and Singapore. In 2018, **India was the 5th largest source of tourist arrivals in the Maldives.**

South Asia Subregional Economic Cooperation

- œ The South Asia Subregional Economic Cooperation (SASEC) Program, set up in 2001, brings together Bangladesh, Bhutan, India, the Maldives, Nepal, and Sri Lanka in a project-based partnership to promote regional prosperity by improving cross-border connectivity, boosting trade among member countries, and strengthening regional economic cooperation.
- œ The Asian Development Bank (ADB) serves as Secretariat to the SASEC Program.

> The Maldivian economy is heavily dependent on its tourism sector, which is the major source of foreign exchange earnings and government revenue.

œ Development Assistance Programme:

The major completed and ongoing development assistance projects executed by India are:

- œ **Indira Gandhi Memorial Hospital:** The hospital was built with Indian Grant Assistance in 1995.
- œ **Maldives Institute of Technical Education (now called the Maldives Polytechnic):** The MoU for setting up Maldives Institute for Technical Education (MITE) was signed in March 1992. MITE was completed at a cost of INR 12 Cr and handed over to GoM in September 1996.
- œ **India-Maldives Faculty of Hospitality & Tourism Studies:** The foundation stone for the Faculty was jointly laid by PM Vajpayee and President Gayoom during the former's visit to the Maldives in September 2002. The Faculty was officially handed over to GoM in February 2014.
- œ **Technology Adoption Programme in Education Sector in the Maldives:** The US\$ 5.3 million project fully funded by GoI was launched in June 2011 to provide ICT training to Maldivian teachers and youth and for vocational training. The project concluded in December.

Key Highlights of the HMs Meet

- œ The Ministers welcomed the expansion of bilateral cooperation between India and Maldives in diverse fields including policing and law enforcement, counter-terrorism, counter-radicalization, organized crime, drug trafficking and capacity building.

- œ The Directorate of Enforcement will assist the Maldives in setting up a probe agency like itself and guide the island nation on raising a Prevention of Money Laundering Act, 2002 (PMLA) infrastructure.
- œ The Directorate of Enforcement is a multidisciplinary organization mandated with the task of enforcing the provisions of two special fiscal laws – Foreign Exchange Management Act, 1999 (FEMA) and Prevention of Money Laundering Act, 2002 (PMLA). It is headquartered in New Delhi.

œ **Construction of National Police Academy (ISLES), Addu:** An MoU for setting up the National Police Academy at a cost of INR 98.75 Cr was signed in September 2012. The project cost was later revised to INR 195.05 Cr and construction finally commenced in 2016. As of 18 Aug 2019, the overall physical progress on the project is 48% and financial progress is 40%.

œ **INR 50 Cr grant for bilateral projects and INR 40 Cr for High Impact Community Development Projects (HICDPs)**

œ The assistance of **\$1.4 billion** through a credit line and budgetary support to **the Maldives in 2018 when Ibrahim Mohamed Solih visited India after winning Presidential Election.**

Significance of the Maldives for India

- œ **Strategic Importance:** Maldives' proximity to the west coast of India - Maldives is barely 70 nautical miles away from Minicoy -the southernmost island of Lakshadweep. Lakshadweep group is separated from the Maldives by Eight Degree Channel.
- œ **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.
- œ **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 Subregional Economic Cooperation (SASEC).

œ **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.

© **WAY FORWARD**

- œ The Maldives had drifted away from India's strategic orbit as President Yameen was drawing his country closer to China. He crushed all opposition to his

authoritarian rule with an iron fist, either jailing or exiling his opponents. However, Solih has brought the Maldives again close to India. India must use this time positively to establish sovereign relations with the island nation.

- œ India must use its Diaspora more extensively for strengthening its relations.
- œ India must employ cultural aspects like films, music, and people to people contacts to strengthen the relations.

WHY TRADE WITH THE US MATTERS TO INDIA

CONTEXT

. India and the US have repeatedly resolved to strengthen trade ties — however, attempts at working out a short-term agreement have fallen apart in the past, and tensions have risen over tariffs. What is the current state of play?

◎ BACKGROUND

- œ India's existing and stalled bilateral free trade agreements (FTAs) started to receive attention from the government last year, even as the country worked to conclude the seven-year negotiations to join the Regional Comprehensive Economic Partnership (RCEP), the world's "largest" regional trade pact.
- œ But by backing out of the RCEP, India shut the door on the large "integrated market" that the deal was offering — and increased the pressure on itself to strengthen existing separate trade agreements with each member of the RCEP bloc.
- œ Without these, it may not be able to tap a sizeable portion of the global market; also, it may not be able to easily access the products and services of these countries.
- œ In the backdrop of the global economic slowdown, where India's global exports have fallen consistently, it is important for the country to diversify and strengthen bilateral relations with other markets.
- œ It has set its sights on "large developed markets", improved access to which would help its industry and services sectors.
- œ These include the US, which has, over the last two decades, become a crucial trading partner in terms of both goods and services.
- œ While the US's deficit with India is only a fraction of its deficit with China (over \$340 billion in 2019), Americans have repeatedly targeted the "unfair" trade practices followed by India.
- œ These include the tariffs that India imposes, which the American administration feels are too high.

◎ ANALYSIS

Locating the main sticking points

- œ Negotiations on an India-US trade deal have been ongoing since 2018, but have been slowed by "fundamental" disagreements over tariffs (taxes or duties on imports), subsidies, intellectual property, data protection, and access for agricultural and dairy produce.

- œ The office of the US Trade Representative (USTR) has underlined India's measures to restrict companies from sending personal data of its citizens outside the country as a "key" barrier to digital trade.
- œ The US wants India to strengthen patent regulations, and to ease the limitations American companies investing in India face.

The 'Harley tariffs'

- œ India is a "tariff king" that imposes "tremendously high" import duties, the American administration has complained repeatedly. They have cited the example of Harley-Davidson, the US motorcycle maker. Even after India halved the duty on the bike to 50% in 2018, they said the rate is "still unacceptable".
- œ While it is often assumed that duties on the large-engine motorcycles have put them beyond the reach of most Indian consumers, the fact is that a plant at Bawal in Haryana has been assembling the bikes since 2011, and Harley has still not captured a sizeable chunk of the Indian market.

Steel industry hit

- œ In 2018, the US imposed additional tariffs of 25% on steel and 10% on aluminium imports from various countries, including India.
- œ While India's government claims the impact is "limited", they brought down the US share in India's steel exports to 2.5% in 2018-19 from 3.3% in 2017-18.
- œ In March 2018, India challenged the US decision at the World Trade Organization (WTO).
- œ India held off on imposing retaliatory tariffs until the US struck again — by removing it from a scheme of preferential access to the American market.

GSP axe and response

- œ In 2019, the American administration decided to terminate India's benefits under the Generalised System of Preferences (GSP) scheme, which provides preferential, duty-free access for over \$6 billion worth of products exported from this country to the US.
- œ The decision followed a warning earlier that year after negotiations on a potential trade agreement had broken down.

- œ The US accused India of taking decisions over the previous few years that prevented “equitable and reasonable access” for Americans to its markets.
- œ These included a decision to slash maximum retail prices of life-saving cardiac stents and essential knee implants by 65%-80%, put tariffs on information and communication technology products, and demand that exporters of dairy products certify their produce was derived from animals not fed food containing internal organs. India was the largest beneficiary of the US GSP programme.
- œ While duty-free benefits accrued to only around \$200 million for the billions of dollars worth of exports, India is understood to have asked for restoration of these benefits in the ongoing trade negotiations.
- œ However this year, the USTR classified India as a “developed” country based on certain metrics. It is not clear whether the upgrade from “developing” will impact the restoration of benefits under the GSP scheme.
- œ Removal from the GSP list amidst rising trade tensions prompted India to finally impose retaliatory tariffs on several American imports, including almonds, fresh apples, and phosphoric acid.
- œ This was a significant move and the US approached the WTO against India.
- œ India is one of the largest importers of almonds from the US, having imported fresh or dried shelled almonds.

Farms, medical devices

- œ The US has long demanded greater access for American agriculture and dairy products. For India, protecting its domestic agriculture and dairy interests was a major reason to walk out of the RCEP agreement.

- œ “In the recent past, India has shown its resolve in an international trade deal (RCEP) to protect the interests of its farmers and dairy industry.
- œ Trade negotiations over the last one year have grappled with the issue of improved access for American medical devices firms to India.
- œ India is working to finalise a proposal to move from caps on prices of medical devices to limiting the margins of those involved in the supply of the products.
- œ It is unclear whether this would mean the government might be willing to reconsider its earlier, widely publicised decision to slash, in the public interest, prices of stents and knee implants.
- œ The health cess on imported medical devices announced in the Budget for 2020-21 too, may be seen as a negative for the American side, as the US is among the top three exporters of these categories of products to India.

Some successes so far, some promise ahead

- œ While the United States is among India’s top trading partners for goods, India is its eighth largest.
- œ India’s trade surplus with the US came down to \$16.9 billion in 2018-19, and the surplus could be reduced further through imports of products such as aircraft from American firms.
- œ Experts feel that India and the US could begin with some “low-hanging fruit” to indicate their willingness for a deeper economic commitment.
- œ This includes the US reinstating India’s benefits under the GSP programme, and India doing away with duties on motorcycles.

CRIMINALISATION OF POLITICS

CONTEXT

- A two-Judge Bench of Supreme Court delivered a Judgment on the contempt petitions regarding the criminalisation of politics in India.

◎ BACKGROUND:

- œ The criminalisation of politics was never an "unknown phenomenon" in Indian political system but its presence was seemingly felt in its "strongest form" during the 1993 Mumbai bomb blasts which were the result of a collaboration of a diffused network of criminal gangs, police and customs officials and their political patrons.
- œ The recent judgment is, more or less, an extension of the Supreme Court's 2018 judgment.
- œ In September 2018, the Supreme Court had refused to disqualify politicians against whom criminal charges were pending from contesting elections, and left it to Parliament to frame an appropriate law.
- œ It ordered political parties to publish a nominated candidate's pending criminal cases on their official websites within 48 hours of selection.
- œ However, the directions given by the apex court in 2018 have not succeeded.

election expenditure is the root cause for corruption in India. To gain vote bank, politician uses money power.

The Ruling:

- œ The Bench comprising of Justice RF Nariman and Justice Ravindra Bhat observed that over the last four general elections, there has been an alarming increase in the incidence of criminals in politics.
 - > In 2004, 24% of the Members of Parliament had criminal cases pending against them.
 - > In 2009, the number went up to 30%, in 2014 to 34% and in 2019, 43% of MPs had criminal cases pending against them.
- œ The SC has directed political parties to upload details of pending criminal cases against candidates contesting polls on their website.

◎ ANALYSIS:

The criminalisation of politics:

- œ In India, the Criminalisation of political system can be understood as rising participation of criminals in the electoral process and selection of the same as elected representatives of the people due to the nexus between the criminals and some of the politicians.
- œ **Components:** The criminalisation of our political system has various forms and components such as –
 - > **Muscle Power:** In Indian politics, muscle power is not a new trend rather it has been a fact of life for a long time. Different political parties use muscle power to influence the attitude and conduct of sizable sections of the electorate.
 - > **Gangsters:** In most cases, the voters are too reluctant to take measures that would curtail the criminal activities. Many politicians chose gangster to gain larger vote bank.
 - > **Money Power:** It is a widely accepted fact that the elections to Parliament and State Legislatures are very expensive and this huge

- œ Parties will also publish the details of pending criminal cases against candidates on social media platforms and newspapers.
- œ Political parties will have to specify reasons for selecting candidates having pending criminal cases against them on their website.
- œ Political parties will have to submit a compliance report in this regard to the Election Commission within 72 hours of selecting candidates having pending criminal cases against them.
- œ It directed that the EC shall bring it to the notice of the apex court in case of failure of political parties to comply with its directions.

The present law:

- œ The Representation of Peoples (RP) Act, 1950 is an act to provide for the allocation of seats in, and the delimitation of constituencies for the purpose of elections too, the House of the People and the Legislatures of States, the qualifications of voters at such elections, the preparation of electoral rolls.
- œ According to the prevalent law, the lawmakers and candidates are barred under the Representation of Peoples (RP) Act from contesting elections only after their conviction in a criminal case.

Right to Information Act and Criminalization of Politics:

- œ The **Right to Information Act 2005** is a historical Act that makes Government officials liable for punishment if they fail to respond to people within a stipulated timeframe.
- œ As per the Supreme Court, the right to information - the right to know antecedents, including the criminal past, or assets of candidates - was a fundamental right under Article 19(1) (a) of the Constitution and that the information was fundamental for the survival of democracy.
 - > In its Judgement of 2002, it directed the Election Commission to call for information on an affidavit from each candidate seeking election to Parliament or the State Legislature as a necessary part of the nomination papers.

Should SC venture into the Legislative arena?

There are divergent views on this issue:

œ Centre:

- > The Centre had contended that the judiciary should not venture into the legislative arena by creating a pre-condition which would adversely affect the right of the candidates to participate in polls as there was already the RP Act which deals with the issue of disqualification.

œ Election Commission of India:

- > The Election Commission of India had taken a view which was apparently opposite to the Centre and said that the recommendations for decriminalising politics were made by the poll panel and the Law Commission back in 1997 and 1998, but no action was taken on them.
- > It exhorted the court to issue the direction in the matter besides asking Parliament to make the suitable law.

œ Supreme Court:

- > At present, there is no law in the land that prevents criminally charged persons from standing for elections. In the absence of

such a law, the court could step in and put disqualification criteria.

- > The right to stand for election is not a fundamental right. So, putting some restriction on who can and cannot stand in the election, is not a suppression of '**freedom of speech**' or '**right to livelihood**'.
- > The solution to the criminalisation of politics has to come from the judiciary which has been the guardian angel of democracy. It has to be proactive. The current state of judicial paralysis is a reason why India scores only 0.57 out of 1 regarding 'judicial independence' in the Global State of Democracy Index. The country has also lost too much ground in the Democracy Index compiled by the Economist Intelligence Unit and finds itself at 51st rank, the steepest decline since 2006.

Reasons for Criminalisation of Politics:

Following are the reasons for the criminalization of politics in the Indian political system:

- œ **Unholy nexus between politicians and bureaucracy:** The most important cause of criminalisation of politics is the unholy nexus between politicians and bureaucracy. This undesirable and dangerous relationship between bureaucracy and political leaders opened the door of criminalisation of politics.
- œ **Irrelevant interference:** The interference of politicians in the administration may be regarded as another reason for criminalisation of politics. It is increasing corruption and the net result is politics is, ultimately, criminalised.
- œ **Quota system:** Caste and religion both are equally responsible for the criminalisation of politics. Though there are certain fixed procedures and rules in the promotion, caste and religion both interfere in this process.
- œ **Political system:** The system of party government is also responsible for the criminalisation of politics. On the eve of the general election, the leaders of the party give promises to the electorate. The purpose is to win the election.
- œ **Economic issues:** Un-development, poverty, illiteracy and prismatic nature of Indian social system are collectively responsible for the criminalisation of politics.
- œ **Corruption:** Institutionalization of corruption is an ongoing process in our politico-administrative system because the corrupting of the institutions, in turn, has finally led to the institutionalization of corruption.
- œ **Loopholes in the functioning of ECI:** Election commission merely informs the people about the information related to the candidate.

œ **Denial of Justice and Rule of Law:** Today, there is very little faith in India in the efficacy of the democratic process is actually delivering good governance.

Significance of the decision:

œ **Wise decision & informed choice:** Complete information about criminal antecedents of the candidates forms the “bedrock of wise decision-making and informed choice by the citizenry” as the informed choice was the cornerstone to have a pure and strong democracy.

œ The judgment signified the court’s alarm at the unimpeded rise of criminals, often facing heinous charges like rape and murder, encroaching into the country’s political and electoral scenes.

œ If our executive, legislature and judiciary continue to downplay the threat that criminalisation poses to our democracy, it will not be surprising if the world’s largest democracy degenerates from ‘flawed’ to ‘hybrid’.

DECLINE OF HABEAS CORPUS LAW

CONTEXT

- It is increasingly being argued that Supreme Court orders in Kashmir petitions undermine the spirit of habeas corpus law. In light of this argument, we analyse different facets related to this law.

● BACKGROUND:

œ **Political background:** Amid revocation of **Article 370**, since August 5, 2019, Jammu and Kashmir (J&K) has been placed under a '**communications lockdown**' due to the suspension of mobile internet services.

- > In addition, **political leaders** along with an unknown number of other individuals have been **detained without any legal charges**.

œ **A case of violation of fundamental rights:** Recently, Human right experts from the United Nations called the communication lockdown a form of '**collective punishment**'.

- > Supreme Court of India also recently held the **right to use the internet for freedom of speech and expression and for trade or business** as **constitutionally protected**.
- > On the other hand, **detention violates personal liberty**.

œ **Right to Constitutional Remedies:** There is a right in India which states that a person can move to Supreme Court (SC) if she/he wants to get their **fundamental rights (FR) protected**, as conferred under **Part III of Indian Constitution**. This right comes under **Article 32 for SC**, and **Article 226 for High Court (HC)**. It is known as the **right to constitutional remedies**.

- > Right to Constitutional Remedies is a guarantor of all other FRs available to people of India.
- > **Dr B. R. Ambedkar** said that **Article 32** is the **heart and soul of the Constitution** of India.
- > SC has included it in its **basic structure doctrine**.
- > Right to move to the highest court **cannot be rejected by any court**, except provided by the constitution.

œ **Constitutional Philosophy of Writ Jurisdiction:** An individual whose privilege (FR) is encroached upon by an arbitrary administrative action may approach the Court for a suitable remedy.

- > In this regard, SC has the capacity to **issue writs**, incorporating the idea of **habeas corpus, mandamus, prohibition, quo warranto, and certiorari**, whichever might be suitable.

œ **Current situation:** Many persons have filed **Habeas Corpus writ petition** to the Supreme Court to

seek information on persons apprehended to be under detention in J&K.

● ANALYSIS:

Digging deeper into the issue

œ **Pending cases:** Even with six months since the abrogation of Article 370, habeas corpus cases emerging from Kashmir are still pending.

œ **Delay in hearing the matter:** For example, when Rajya Sabha member Vaiko filed a habeas corpus petition on the detention of Farooq Abdullah on 11 September 2019, the court did not hear the matter immediately. **Notice was issued to the government after six days**, a very long delay for a habeas corpus case, **during which government charged Abdullah under PSA**.

œ **Delay in assigning a bench:** In case of many people detained, they were not even assigned to a bench.

œ **Not asking the right question:** It is increasingly being alleged that SC has failed to ask the government the right questions; i.e. **whether there is detention** as alleged, and **whether such detention is made on legal grounds**.

œ **Workload and overburden:** After weeks of delay in hearing the petitions, SC sent them back to Srinagar HC. The high court is swamped with the workload, with only two judges available to hear urgent habeas corpus matters. **9 of its 17 judgeships are vacant**.

- > SC collegium had not appointed new judges to Srinagar HC.

œ **Arguments made:** According to arguments against the SC, caseload and pendency is a weak excuse because the onus of **prioritizing cases rest on the leadership of the court**. SC decides what cases to hear and which ones to dismiss.

- > Research suggests that **constitutional matters comprised only 5.3%** of all matters heard by the apex court.
- > From **2010 to 2015**, **only 0.2%** of cases were **habeas corpus cases**.
- > So, sending habeas corpus cases back to HC doesn't free up much caseload.

Public Safety Act (PSA)

- œ **Detention law of J&K:** The Public Safety Act (PSA), 1978, of Jammu & Kashmir is an administrative detention law that allows detention of any individual for up to **two years without a trial or charge**.
 - > The Act allows for arrest and detention of people **without a warrant, specific charges**, and often for an **unspecified period of time**.
 - > This Act extends to the **whole of Jammu & Kashmir**.
- œ **Disclosure for reasons of detentions:** In some cases, the Act makes provisions for detained persons to be informed about the reason of custody, and also gives them an opportunity to **make a case against their detention** to the government.
 - > However, detaining authority is **not required to reveal any facts** "which it considers being against the public interest to disclose".

Writ of Habeas Corpus

- œ **Habeas Corpus:** Habeas Corpus is a Latin term which literally means "**you may have the body**."
 - > This writ is in the nature of an **order calling upon the person who has detained another to produce the latter before the Court**, in order to let the Court, know on what ground he has been confined, and to set him free if there is no legal justification for the confinement.
 - > Habeas corpus writ is applicable to **preventive detention** also.
- œ **History:** Habeas corpus is well established as a foundational right against state coercion in India. It dates back to **1775**, when **Sir Elijah Impey**, chief justice of SC in Calcutta, **issued a writ to governor-general Warren Hastings**.
- œ **Legal entitlement to seek remedy:** The principle on which Habeas Corpus functions is that a person illegally detained in **confinement without legal proceedings** is entitled to seek the remedy of habeas corpus.
- œ **Nature of writ:** In deciding whether Habeas Corpus writs are **civil or criminal** in nature, the court would rely on the way of procedures **in which the locale has been executed**.
- œ **Few cases when a writ of Habeas Corpus can be issued:**
 - > Testing the validity of detention under preventive detention laws.
 - > Securing custody of a person alleged to be lunatic.
 - > Securing custody of the minor.
 - > Detention for breach of privileges by the house.

- > Testing the validity of detention by the executive during an emergency, etc.
- œ **Bulwark of individual liberty:** Habeas corpus writ is called bulwark of individual liberty against arbitrary detention.
 - > It has been described as "**a great constitutional privilege**" or "**first security of civil liberty**".
 - > Its most quintessential element is a **speedy and effective remedy**.
 - > This writ can be issued against both public authorities as well as individuals.
- œ **The rule for filing the petition:** A general rule for filing the petition is that a person whose right has been infringed must file a petition. But Habeas corpus is an **exception** and **anybody on behalf of the detainee can file a petition**.
- œ **Can be issued by local courts:** Parliament by law can extend power to issue writs to any other courts (including local courts) for local limits of the jurisdiction of such courts.
- œ **Damages:** When a person is arrested and imprisoned with mischievous or malicious intent his constitutional and legal rights are invaded, the mischief or malice and invasion may not be washed or wished away by his being set free.
 - > In certain appropriate cases, courts have the jurisdiction to **compensate the victim** by awarding suitable **monetary compensation**.

Exceptions to Habeas Corpus

- œ Person against whom writ (or detained) is issued is **not within the jurisdiction of the Court**.
- œ **Court Martial** i.e. the tribunals established under military law.
 - œ To save release of a person who has been **imprisoned by a court for a criminal charge**.
- œ To interfere with a proceeding for **contempt by a Court of record or by Parliament**.
- œ When a person is put into physical restraint under the law unless the **law is unconstitutional or the order is ultra-vires the statute**.

Habeas Corpus Case of 1975

- œ **Ms Indira Gandhi's election result declared void:** In June 1975, former PM Indira Gandhi was convicted of having indulged in wrong practices and her election was declared void, which meant that she couldn't contest any election or hold her office for next six years.
- œ **The emergency was declared:** Ms Gandhi appealed to SC, but SC only granted her a conditional stay. To rise above restraint on her political power by SC, Ms Gandhi requested the President to declare an emergency under **Article 352**, which he did on June 26, 1975.

- > **FR suspended:** This meant that the right to approach the court to enforce Article 14 (right to equality), Article 21 and Article 22 (prevention against detention in certain cases) were suspended.
- > Many leaders from the opposition were arrested under **MISA (Maintenance of Internal Security Act)**.
- œ **Habeas Corpus Case:** Challenging the detentions, petitions were filed in various HCs. Most HCs gave their judgement in favour of these petitions, i.e. writ of Habeas Corpus **cannot be suspended even during an emergency** (Article 359).
- œ **Additional District Magistrate Jabalpur V. Shivkant Shukla case (ADM Jabalpur case):** This compelled Indira Gandhi Government to approach SC. A constitutional bench of 5 judges applied the doctrine of **procedure established by law** and overturned the judgement by high courts, declaring that Article 32 – the right to approach the court to defend FRs – remains **suspended under emergency**.
 - > The judgement thus closed doors of the judiciary for citizen during an emergency.
 - > Hence it established that **personal liberties were not guaranteed in a state of Emergency**.

Reversal on ADM Jabalpur case

- œ **Puttaswamy case:** In 2017, SC reversed itself on ADM Jabalpur case when Justice D.Y. Chandrachud in Puttaswamy case parted judicial ways from his father Y.V. Chandrachud, who was part of the majority ruling that failed to check the power of the executive in ADM Jabalpur.
 - > **Case argument:** The case challenged the Government's proposed scheme for a uniform biometrics-based identity card which would be mandatory for access to government services and benefits.
 - > **Government's defence:** Government, on the other hand, argued that the Constitution did not grant specific protection for the right to privacy.

- > **SC judgement:** SC held unanimously that the right to privacy was a constitutionally protected right.
- > **Reasoning:** Court reasoned that **privacy is an incident of fundamental freedom or liberty guaranteed under Article 21** which provides that: "No person shall be deprived of his life or personal liberty except according to the procedure established by law".

œ **Wider implications of the judgement:** This

is a landmark case which is likely to lead to constitutional challenges to a wide range of Indian legislations with associated implications on **matters of personal liberty, including matters related to detentions**.

Lacunas that still remain

- œ **The urgency in dealing with habeas corpus:** Key aspect of habeas corpus writ is the urgency attached to it. The principal aim of this writ is to ensure swift judicial review of alleged unlawful detention on liberty or freedom of the prisoner or detenu. So any delay in that makes the write-only less effective in spirit.
- œ **Need for improved judicial capacity:** Structurally and procedurally, the court has still to create relevant judicial capacity to hear and dispose-off habeas corpus cases speedily, without which thousands of Indians can remain detained illegally.

© **CONCLUSION**

- œ Even those on different ends of the ideological spectrum would agree that there should be limits to arbitrary state power when it comes to detention. Matters of personal liberty should not get any little attention than others. Supreme Court ought to rethink its caseload and prioritize urgent habeas corpus writ petitions.

CSR: IS INDIA INCREASING SPENDING RESPONSIBLY?

CONTEXT

- Companies can bring meaningful changes in society through the huge Rs 13,624 crore corporate social responsibility funds.

● BACKGROUND

- œ The idea was brought into a legal framework in 2014 when CSR was introduced as a statutory obligation under Section 135 of the Companies Act, 2013.
- œ Under this, every company with an annual net worth of over Rs 500 crore, turnover of over Rs 1,000 crore, or net profit of over Rs 5 crore, must spend at least 2 per cent of its net profit on CSR.
- œ Latest data with the Union Ministry of Corporate Affairs (MCA) shows expenditure on CSR activities has increased from Rs 10,066 crore in 2014-15 to Rs 13,624 crore in 2017-18.
- œ These companies divert a major chunk of the CSR funds towards human development.
- œ A 2019 study by the Indian Institute of Corporate Affairs (IICA), a government think tank that provides holistic advice on issues related to corporate affairs, shows 55 per cent of the CSR funds in the country are spent on human development and social welfare.
- œ However, the focus on economic development and environment sustainable development is relatively poor, the report states. The reason for this is the nature of these sectors.
- œ "Traditionally, sectors such as health and education have a clear blueprint and are easy to undertake.
- œ Moreover, these activities are easily quantifiable which gives companies ready numbers.
- œ But companies have not focused much on environmental activities.

CSR amendments under the Companies (Amendment) Act, 2019

● ANALYSIS

Corporate Social Responsibility in India

- œ India is the first country in the world to make corporate social responsibility (CSR) mandatory, following an amendment to the Companies Act, 2013.
- œ Businesses can invest their profits in areas such as education, poverty, gender equality, and hunger as part of any CSR compliance.
- œ Prior to that, the CSR clause was voluntary for companies, though it was mandatory to disclose their CSR spending to shareholders.
- œ Until now, if a company was unable to fully spend its CSR funds in a given year, it could carry the amount forward and spend it in the next fiscal, in addition to the money allotted for that year.

- œ The CSR amendments introduced under the Act now require companies to deposit the unspent CSR funds into a fund prescribed under Schedule VII of the Act within the end of the fiscal year.
- œ This amount must be utilized within three years from the date of transfer, failing which the fund must be deposited into one of the specified funds.
- œ The new law prescribes for a monetary penalty as well as imprisonment in case of non-compliance.

Philanthropy from a distance

- œ In the initial years of the CSR Act, the MCA observed that companies would execute projects far from their area of operations.
- œ According to the Act, companies should choose local areas for CSR activities, but 73 percent companies were found to be engaged in areas beyond their area of operations.
- œ Maximum expenditure was in industrialised areas, while the least-developed states received the least funds.
- œ The phrase "local area preference" in the Act may have been interpreted as mandatory and not a directory.
- œ Considering this, MCA issued a directive in 2018 for all companies to follow the law in letter and spirit.
- œ State-wise analysis of expenditure reveals the low concentration of CSR activities in poor states.
- œ Jharkhand, Bihar, Chhattisgarh, Madhya Pradesh and Uttar Pradesh received only 9 per cent of the total expenditure from 2014-15 to 2017-18.
- œ These states account for more than 55 per cent of the 117 aspirational districts identified by NITI Aayog.
- œ However, Maharashtra, Karnataka, Andhra Pradesh, Gujarat, Tamil Nadu and Delhi, which account for only 11 per cent of the aspirational districts, received 40 per cent of the total expenditure.
- œ "Companies usually undertake CSR activities in areas where work can be done without any hardship.
- œ This may be the reason that aspirational districts, with their poor infrastructure and development level, are not in the focus of companies.
- œ Further, aspirational districts are not aware of corporates' responsibility towards them.
- œ CSR activities are similarly scarce in the Northeast.
- œ An MCA assessment identifies infrastructural gaps here in basic minimum services such as rail, road, and water and air connectivity.

- œ However, data shows a tiny portion of the funds was spent in the North-East between 2014-15 and 2017-18.
- œ Among the states here, Assam spent the maximum with Rs 653.19 crore. While Manipur spent Rs 24.78 crore and Meghalaya Rs 24.11, Tripura, Nagaland and Mizoram spent as low as Rs 5.88 crore, Rs 3.35 crore and Rs 2.41 crore respectively.
- œ On the other hand, Maharashtra spent a huge Rs 8,468.28 crore during the period.
- œ Five years after the Act was enforced, 70 per cent of the companies still do not have a strategy to implement CSR activities.
- œ According to the law, companies should set up board-level committees, which draw plans for the effective implementation of their projects.
- œ According to the IICA study, if a firm has a CSR policy and committee in place, but does not have an implementation strategy, supports the conclusion that companies are more focused on complying with the law and spending CSR funds rather than making a serious initiative.
- œ Such behaviour could be due to lack of capacity or experience in the development sector.
- œ CSR has a huge potential to improve the lives of a large number of people in the country.
- œ Its Rs 13,624 crore corpus can bring change in a wide variety of sectors.
- œ Therefore, it is crucial that companies do not relegate it as a perfunctory exercise, but make a meaningful contribution to society.

How funds flow in chronological order?

- œ Human development, social welfare get a big bite from the CSR pie, the environment is left with a small share.
- œ Education, differently-abled, livelihood generation
- œ Health, eradicating hunger, poverty and malnutrition, safe drinking water, sanitation
- œ Rural development
- œ Environment, animal welfare, conservation of resources
- œ Nature of projects not mentioned
- œ Prime Minister's National Relief Fund, any other government fund
- œ Gender equality, women empowerment, old age homes, reducing inequalities
- œ Heritage art and culture
- œ Encouraging sports.

SECTION: B

(PRELIMS)

CURRENT AFFAIRS

ECONOMIC IMPACT OF CORONAVIRUS

◎ CONTEXT

- Oxford Economics warned that the spread of Coronavirus to regions outside Asia could cost the global economy 1.3% off global growth in 2020, the equivalent of \$1.1tn in lost income.

◎ ABOUT

- **Coronavirus (CoV):** CoV also known as **CoVID-19** are a large family of viruses that cause illness ranging from the **common cold** to more **severe diseases** such as Middle East Respiratory Syndrome (**MERS-CoV**) and Severe Acute Respiratory Syndrome (**SARS-CoV**).
 - œ A **novel Coronavirus (nCoV)** is a new strain that has not been previously identified in humans.
- **Means of transfer:** Coronaviruses are **zoonotic**, meaning they are **transmitted between animals and people**.
 - œ Several known Coronaviruses are circulating in animals that have not yet infected humans.
- **Originated in China:** On 31 December 2019, the WHO China Country Office was informed of cases of **pneumonia of unknown aetiology (unknown cause)** detected in **Wuhan City**, Hubei Province of China.
 - œ A **novel Coronavirus (2019-nCoV)** was identified as the causative virus by **Chinese authorities** on 7 January.
- **Symptoms:** Common signs of infection include **respiratory symptoms, fever, cough, and shortness of breath and breathing difficulties**.
 - œ In more severe cases, the infection can cause pneumonia, **severe acute respiratory syndrome, kidney failure and even death**.
- **Health impact:** As of 22nd February 2020, **77,816 cases** of Coronavirus have been registered around the world. It has resulted in **2,360 deaths**.
 - œ Currently, COVID-19 is affecting **32 countries** and territories around the world and 1 international conveyance (the “**Diamond Princess**” cruise ship harboured in Yokohama, Japan).
 - œ COVID-19 has already **reached Europe, USA and the Middle East**.
 - œ **Africa does not yet have** any confirmed cases.
 - œ Coronavirus has **reached India** and infected patients were reported from **Kerala**.
- **Economic consequences:** The disease has now turned into a pandemic and as it spreads to different countries, economic damages around the world are mounting. **The maximum impact will be on China**, but **other countries are not immune** to the effects because most economies are now **globally integrated**.
 - œ The outbreak has the potential to cause **severe economic and market dislocation**.

The economic impact of Coronavirus

- **Chinese economy:** China has become an indispensable **part of the global business**. Due to the spread of Coronavirus, various economic activities in China have taken a hit. Businesses are dealing with **lost revenue** and **disrupted supply chains** due to China's **factory shutdowns**. Travel to and from China has also been restricted.
 - œ According to a Reuter's poll of economists, **China's economic growth expected to slow to 4.5% in the first quarter of 2020** – the slowest pace since the financial crisis.
- **Countries most hit:** Based on the value of its exports to mainland China and Hong Kong relative to GDP, **Taiwan is likely to be the hardest hit**, followed by **Vietnam, Malaysia, and South Korea**.

- . **Trade and commerce:** Chinese economy accounts for **16% of global output**. China has grown into the world's factory, churning out products such as **iPhone, cars, luxury products** and driving demand for commodities like oil and copper.
 - œ **Factory shutdowns** are **causing a shortage of products and parts from China**, affecting companies around the world, including **Apple and Nissan**.
 - œ **Unavailability of workers:** Factories delayed opening after the Lunar New Year as workers stayed home to help reduce the spread of the virus.
 - œ **Electronics, consumer goods, chemicals, auto components and pharmaceuticals** are seen as the most **vulnerable sectors**.
 - œ **Pharmaceuticals:** Prices of some bulk drugs have already risen.
- . **Global supply chains:** There is a threat to global supply chains (GVCs). **Qualcomm (QCOM)**, the world's biggest maker of smartphone chips, warned of **uncertainty around demand for smart-phones**, and supplies needed to produce them.
- . Auto parts shortages have **forced Hyundai (HYMTF)** to **close plants in South Korea** and caused **Fiat Chrysler (FCAU)** to make **contingency plans for plants in Europe**.
- . **Automobile sector:** Car plants across China have been ordered to remain closed, preventing global automakers Volkswagen, Toyota (**TM**), Daimler (**DDAIF**), General Motors (**GM**), Renault (**RNLSY**), Honda (**HMC**) and Hyundai (**HYMTF**) from resuming operations in **world's largest car market**.
- . **Oil industry:** The petrochemical sector serves as the **backbone for various other manufacturing and non-manufacturing sectors** such as infrastructure, automobile, textiles and consumer durables. **China is the world's biggest oil importer**. With Coronavirus hitting manufacturing and travel, the International Energy Agency (IEA) has predicted the first drop in global oil demand in a decade, **causing a drop in oil prices**.
- . The oil market is currently facing a situation called '**contango**', wherein spot prices are lower than futures contracts.
- . Industries are realigning their strategy amid energy demand forecasts.
- . **Crude-dependent sectors:** Sectors such as **aviation, shipping, road and rail transportation** are likely to gain from a sudden drop in crude oil prices.
- . **Benefit to oil-importing nations:** Major oil importers such as India will get a better bargain with reduced oil prices.
- . **Case of India:** India is the world's **third-largest oil importer** and fourth-largest buyer of liquefied natural gas (LNG). New oil dynamics can help India **contain its current account deficit**; maintain a stable exchange regime; and consequently inflation. This could be a good time for Indian airlines to make up for losses.
 - œ **Travel industry:** Chinese tourist numbers are now falling sharply as **China bars its citizens from group tours abroad**, and many countries **refuse or restrict the entry of Chinese**.
- . Many **trade shows and sporting events** in China and across Asia have been **cancelled or postponed**.
- . **Popular Chinese destination to lose:** Judging by the size of Chinese visitors' expenditures relative to GDP, popular destinations such as **Thailand, Vietnam, and Singapore** will take the hardest hit. **Japan** will also be adversely affected especially with **Summer Olympic Games** being scheduled to start in **Tokyo** on July 24.
- . **Case of India:** India recently announced the temporary **suspension of the e-visa facility** for Chinese travellers and foreigners residing in China. Since air travel between India and China had grown significantly owing to increased business activities, **business travel segment will take a hit**.
- . **Financial sector:** As infections increase, especially in Asian **financial hubs** such as Hong Kong and Singapore, **financial deals could be disrupted**. It can disrupt economic activities due to **supply-side constraints**, which **will result in market volatility**.

- œ **Gold prices:** Due to fear and uncertainty in markets about the scale and impact of the virus outbreak, gold prices have risen as the **commodity is considered a safe haven**.
- . **India's Trade:** India imports a bulk of its **raw materials from China**. Scarcity of some raw materials will lead to **higher prices**. India must leverage the lower oil prices and increase its exports amidst a shortage of Chinese exports to the world market.
- œ **Rupee value:** Exchange rate (rupee against the dollar) is rising, which is also leading to higher costs.

Economic measures initiated:

- . **China:** People's Bank of China **cut a key interest rate and injected huge amounts of cash** into markets in order to help take the pressure off banks and borrowers. **New tax breaks and subsidies** have been announced to help consumers.
- . Central banks in neighbouring countries including **Sri Lanka, Malaysia, Thailand and the Philippines have cut interest rates** recently.

INDIA'S 'IMPORTED' FOOD INFLATION

◎ **CONTEXT**

- After a period of divergence, domestic and global food prices are rising in tandem. **Coronavirus, global crude prices, and an expected bumper rabi harvest could determine the scenario in the coming months.**

◎ **ABOUT**

- The United Nations Food and Agriculture Organisation's (FAO's) food price index — which is a measure of the change in international prices of a basket of major food commodities with reference to a base period touched 182.5 points in January 2020, the highest since the 185.8 level of December 2014.
- . Also, the year-on-year inflation rate based on this index has risen steadily from 1.13% in August 2019 to 2.86% in September, 5.58% in October, 9.33% in November, 12.22% in December, and now, 11.33% for January 2020.
- . This sharp surge in global food prices is reflected in trends in India as well.
- . Annual consumer food price index (CFPI) inflation stood at just 2.99% in August 2019, before climbing to 5.11%, 7.89%, 10.01%, 14.19% and 13.63% in the succeeding five months.
- . The year-on-year inflation in the wholesale price index for "food articles" began rising somewhat earlier — reaching 7.8% in August 2019 from 2.41% in January last year.
- . Retail and wholesale food inflation rates for December 2019 were the highest since November 2013 and December 2013 respectively. Simply put, since October or so, food inflation has made a comeback, both in India and globally.

Local and 'foreign' factors

- . While the recent rise in domestic food prices has been blamed largely on "local" factors — poor rainfall during the first half of the monsoon season and too much of it thereafter till about mid-November, leading to both reduced/delayed Kharif sowings and damage to the standing crop at maturity/harvesting stage — some of it is also "imported".
- . While global prices can be transmitted to the domestic market too through exports — traders would sell abroad if realisations are better relative to the local market — the government has foreclosed that possibility by banning/restricting onion shipments.

The period of divergence

- . The chart above shows that the domestic CFPI and FAO food price index inflation rates started moving in tandem only from around March 2018, while exhibiting significant divergence in the period prior to that.
- . The FAO index peaked at 240.1 in February 2011 but remained at 200-plus levels until July 2014.

What can happen now?

- . The first is, of course, the novel coronavirus epidemic that has reduced Chinese buying of everything from palm oil and soya bean to milk powder and meat.
- . Palm oil prices in Malaysia have plunged over the last month.
- . The second is crude oil. Brent crude prices had touched \$70 per barrel.
- . The third is the prospect of a bumper rabi (winter-spring) crop in India.
- . The Kharif harvest turned out to be not so good because of excess and unseasonal rain.
- . That same rain, though, has helped boost rabi acreage by 9.5% compared to last year.
- . If Brent crude too, were to rally again — making it attractive for sugarcane and corn to be diverted for ethanol production and also palm oil towards bio-diesel — there could be uncertainty ahead.

WHY IS RBI ALIGNING ACCOUNTING YEAR WITH A FISCAL YEAR?

◎ CONTEXT

- The Reserve Bank of India (RBI) is aligning its July-June accounting year with the government's April-March fiscal year in order to ensure more effective management of the country's finances.

◎ ABOUT

- When it commenced operations on April 1, 1935, with Sir Osborne Smith as its first Governor, the RBI followed a January-December accounting year.
- . On March 11, 1940, however, the bank changed its accounting year to July-June.

- Now, after nearly eight decades, the RBI is making another switch: the next accounting year will be a nine-month period from July 2020 to March 31, 2021, and thereafter, all financial years will start from April, as it happens with the central and state governments.

Why RBI's accounts are important?

- The RBI's balance sheet plays a critical role in the functioning of the country's economy — largely reflecting the activities carried out in pursuance of its currency issue function, as well as monetary policy and reserve management objectives.
- The RBI Act says the central bank "shall undertake to accept monies for the account of the Central Government and to make payments up to the amount standing to the credit of, and to carry out (its exchange), remittance and other banking operations, including the management of the public debt".
- The RBI is the country's monetary authority, regulator, and supervisor of the financial system, manager of foreign exchange, issuer of currency, regulator and supervisor of payment and settlement systems, banker to the central and the state governments, and also banker to banks.

But why is the system being changed?

- The **Bimal Jalan Committee on Economic Capital Framework (ECF)** of the RBI had proposed a more transparent presentation of the RBI's annual accounts, and a change in its accounting year to April-March from the financial year 2020-21.
- It said the RBI would be able to provide better estimates of projected surplus transfers to the government for the financial year for budgeting purposes.
- It is also expected to result in better management of the transfer of dividend or surplus to the government.
- Moreover, as governments, companies, and other institutions follow the April-March year, it will help with effective management of accounting.

What will be the impact of the change?

- The change in the fiscal year could reduce the need for interim dividend being paid by the RBI, and such payments may then be restricted to extraordinary circumstances.
- It will obviate any timing considerations that may enter into the selection of open market operations or Market Stabilization Scheme as monetary policy tools.
- It will also bring greater cohesiveness in monetary policy projections and reports published by the RBI, which mostly use the fiscal year as the base.
- In RBI's balance sheet, while capital and reserve fund is explicitly shown, other sources of financial resilience are grouped under 'Other Liabilities and Provisions' and enumerated via Schedules, making it difficult to arrive at total risk provisions.

OVER 1 LAKH DEATHS IN 29 CITIES DUE TO AIR POLLUTION: STUDY

◎ CONTEXT

- According to a latest Indian study published in a leading international journal, over one lakh deaths in 29 Indian cities may be attributed to the rising PM 2.5 levels.

◎ ABOUT

- The study titled **Cause and Age, Specific Premature Mortality Attributable to PM 2.5 Exposure: An Analysis for Million Plus Cities** is modelled on the basis of the 2015 Global Burden of Disease report.
- This paper has used the 2016 data for the 29 cities as that is the latest year for which the registered all-cause death data is available from the Civil Registration System.

Key-highlights of the Study:

- Delhi tops the list of 29 cities with a million-plus population.
- The study adds that **Ischemic Heart Disease (IHD)** is the leading cause of death accounting for 58% of the PM 2.5 related premature deaths.
- The most affected are children under the age of five and the 'productive age group' of 25-50 years.

Maximum mean
deaths reported in
Delhi- 20,300

Minimum mean
deaths are in
Kota-850

**'Productive age
group'** (25-50 yrs)
is at higher risk of
air pollution related
mortality than old
people

- Exposure to an air pollutant or combination of air pollutants such as PM_{2.5}, NO₂ or ozone is associated with an increased incidence of diseases, including Ischaemic Heart Disease, Chronic Obstructive Pulmonary Disease, lung cancer, lower respiratory infections, premature birth (preterm birth), type II diabetes, stroke and asthma.
- Pre-mature mortality rates due to Lower Respiratory Infection (LRI) in children and Chronic Obstructive Pulmonary Disease (COPD) in adults is substantially higher in the Indo-Gangetic plain where PM 2.5 levels are very high.
- The study also observes that if action is taken rapidly to tackle air pollution, there could be 18% reduction in premature mortality if cities were to attain the National Ambient Air Quality Standards (NAAQS) and a 70% reduction if the WHO standards of PM 2.5 are adhered to.

Pollutant	Impact of pollutant exposure
NO₂	Asthma
	Non-communicable diseases and lower respiratory infections
Ozone	Asthma
	Chronic obstructive pulmonary disease
PM_{2.5}	Asthma
	Chronic obstructive pulmonary disease
	Diabetes caused by chronic diseases
	Ischaemic heart disease
	Lung cancer
	Lower respiratory infections
	Stroke
	Non-communicable diseases and lower respiratory infections
	Other non-communicable diseases and lower respiratory infection

Current situation of pollution in India:

- . According to the World Health Organisation, nine of the 10 most-polluted cities are in India.
- . The status in rural areas is not any better as homes are sites of air pollution due to poor ventilation.
- . Furthermore, surface and groundwater sources, and also the soil in many places are extensively contaminated, especially due to pesticide and fertiliser pollution.
- . In India, air pollution is the third-highest cause of death among all health risks, ranking just above smoking.

Major Pollutant:

- . **PM 2.5:**
 - œ PM 2.5, an atmospheric particulate matter of diameter of fewer than 2.5 micrometres, affects more people than any other pollutant.
 - œ **Major components:** sulfate, nitrates, ammonia, sodium chloride, black carbon, mineral dust and water.
 - œ WHO sets recommended limits for health-harmful concentrations of key air pollution both outdoors and inside buildings and homes, based on a global synthesis of scientific evidence.
 - œ WHO Air Quality Guideline values:

Fine Particulate Matter (PM2.5)	Coarse Particulate Matter (PM10)
10 µg/m ³ annual mean	20 µg/m ³ annual mean
25 µg/m ³ 24-hour mean	50 µg/m ³ 24-hour mean

- . **Ozone:**
 - œ Ozone pollution is a kind of oxide.
 - œ The rays of extremely hot sunlight by responding to the smoke from the vehicles make the ozone pollutant.
 - œ In addition to the smoke coming out of the vehicles, ozone pollution is also produced from the burning of garbage or smoke from the industries.
- . **NO₂:**
 - œ Nitrogen dioxide (NO₂), a byproduct of fossil fuel combustion in vehicles and power plants, and ozone, respectively, contribute to the formation of photochemical smog, which can have significant impacts on human health.
- . In India, air pollution is a major environmental risk to health and a top risk factor responsible for the reduced longevity. The government should urgently form a plan to reduce emissions of the harmful gas. Such planning can lead to substantial gains in life expectancy, and reduction in other well-recognized threats to public health.

NORTHERN EUROPEAN ENCLOSURE DAM (NEED)

◎ CONTEXT

- Scientists have proposed to protect 25 million people and important economic regions of 15 Northern European countries from rising seas. It is called Northern European Enclosure Dam (NEED) enclosing all of the North Sea.

◎ ABOUT

- The scientists have proposed the construction of two dams of a combined length of 637 km

- œ The first between northern Scotland and western Norway. It would be 476 km and with an average depth of 121 m and a maximum depth of 321 m.
- œ The second between France and southwestern England, of length 161 km, and an average depth of 85 m and a maximum depth of 102 m.

- . According to scientists, separating the North and Baltic Seas from the Atlantic Ocean is considered to be the “most viable option” to protect Northern Europe against unstoppable sea-level rise (SLR).
- . They have also identified other regions in the world where such mega-enclosures could potentially be considered, including the Persian Gulf, the Mediterranean Sea, the Baltic Sea, the Irish Sea, and the Red Sea.

The rationale behind

- . The concept of constructing NEED showcases the extent of protection efforts that are required if mitigation efforts fail to limit sea-level rise.
- . While NEED may appear to be “overwhelming” and “unrealistic”, it could be “potentially favourable” financially and in scale when compared with alternative solutions to fight SLR, the research argues.
- . The researchers classify the solutions to SLR into three categories of taking no action, protection, and managed retreat — and submit that NEED is in the second category.
- . While managed retreat, which includes options such as managed migrations, may be less expensive than protection (NEED), it involves intangible costs such as national and international political instability, psychological difficulties, and loss of culture and heritage for migrants.
- . NEED, the paper says, will have the least direct impact on people’s daily lives, can be built at a “reasonable cost”, and has the largest potential to be implemented with the required urgency to be effective.

Viability of NEED

- . The researchers have estimated the total costs associated with NEED at between €250 billion and €550 billion.
- . They referred to the costs of building the 33.9-km Saemangeum Seawall in South Korea and the Maasvlakte 2 extension of the Rotterdam harbour in the Netherlands as examples,

- . If construction is spread over a 20-year period, this will work out to an annual expense of around 0.07%-0.16% of the GDP of the 15 Northern European countries that will be involved.
- . Also, the construction will “heavily impact” marine and terrestrial ecosystems inside and outside the enclosure, will have social and cultural implications, and affect tourism and fisheries.

STATE OF INDIA’S BIRDS 2020

◎ **CONTEXT**

- Recently, a new scientific report, ‘State of India’s Birds 2020 was jointly released by 10 organisations.

◎ **ABOUT**

- State of India’s Birds 2020 (SoIB) was produced using a base of 867 species.
- . It is analysed with the help of data uploaded by birdwatchers to the online platform, eBird.
- . Adequate data on how birds fared over a period of over 25 years (long-term trend) are available only for 261 species.
- . Current annual trends are calculated over a five-year period.
- . The assessment says that
 - œ Over a fifth of India’s bird diversity has suffered strong long-term declines over a 25-year period.
 - œ More recent annual trends point to a drastic 80% loss among several common birds.

Key findings:

- . The State of India’s Birds 2020 (SoIB) assessment raises the alarm that several spectacular birds, many of them endemic to the sub-continent, face a growing threat from loss of habitat due to:
 - œ Human activity.
 - œ The widespread presence of toxins, including pesticides.
 - œ Hunting and trapping for the pet trade.
- . It is highlighted that, for every bird species that were found to be increasing in numbers over the long term, 11 have suffered losses, some catastrophically.
- . 101 species have been categorised as being of High Conservation Concern.
 - œ 59 are based on range and abundance.
 - œ Rest are included from high-risk birds on the IUCN (International Union for Conservation of Nature) Red List.
- . Endemics such as the **Rufous-fronted Prinia, Nilgiri Thrush, Nilgiri Pipit** and **Indian vulture** have been confirmed as suffering a current decline.
- . All except 13 had a restricted or highly restricted range, indicating greater vulnerability to man-made threats.
- . Among widely known species, the common sparrow, long seen as declining in urban spaces, has a stable population overall.
- . The analysis concludes that raptors overall are in decline, with ‘open country’ species such as the Pallid and Montagu Harriers, White-bellied Sea Eagle and Red-necked Falcon suffering the most.

Over three-fourths of the 146 bird species whose populations were tracked over the Last five years declined in numbers, according to The State of India's Birds 2020 report. Interestingly, seven of the top 10 such species were Labelled as being of "least concern" (not a focus of species conservation) by the international Union for Conservation of Nature. One half of the 261 bird species whose populations were tracked over the last 25 years declined in numbers.
By **The Hindu Data Team**

Long-term decrease I The table lists the top five species whose populations have declined the most in the last 2.5 years. For instance, for every 100 **white-rumped Vultur** spotted 25 years ago, only three could be spotted In 2020

Common name	Currently spotted
White-rumped vulture	3 for every 100
Richard's Pipit	7
Indian Vulture	10
Large-billed Leaf Warbler	11
Pacific Golden Plover	12

Short-term decrease I The table lists the five species whose populations have declined the most in the Last five years. For instance, for every 100 **Singing Bushlarks** that could be spotted five years ago, only 76 could be spotted in 2020

Common name	Current	Currently spotted
Singing Bushlark	76	Least concern
Nilgiri Pipit	77	Vulnerable
White-tailed Robin	80	Least concern
Lesser Cuckoo	82	Least concern
Red-headed Vulture	82	Critically endangered

Long-term increase I The table Lists the five species whose populations have increased the most in the Last 25 years. For instance, for every 100 **Rosy Starlings** that could be spotted 25 years ago, 271 could be spotted in 2020

Common Name	Currently spotted
Rosy Starling	271 for every 100
Rock Pigeon	244
Glossy Ibis	240
Plain Prinia	221
Ashy Prinia	205

Short-term increase I The table lists the five species that have seen the maximum increase in their populations in the Last five years. For instance, for every 100 **Rain Quails** that could be spotted five years ago, 133 could be spotted in 2020

Common Name	Currently spotted
Rain Quail	133 for every 100
Ferruginous Duck	133
Greater Crested Tern	124
Hume's Leaf Warbler	117
white-spotted Fantail	116

- The severe long-term decline of vultures is underscored by the report.
- Migratory shorebirds, along with gulls and terns, seem to have declined the most among waterbirds.

Suggestions by the report:

- An update to the Red List of endangered species published by IUCN using the SoIB.
- Collaborative research by scientists and citizens. Targeted research to pinpoint causes of decline.
- Urgent emphasis on habitats of species of high concern, notably grasslands, scrublands, wetlands and the Western Ghats.

THE FUTURE OF EARTH, 2020

◎ **CONTEXT**

- Five global risks that have the potential to impact and amplify one another in ways that may cascade to create a global systemic crisis, have been listed by "The Future of Earth, 2020".

◎ **ABOUT**

- "The Future of Earth, 2020" has been released by the **South Asia Future Earth Regional Office**, Divecha Centre for Climate Change, Indian Institute of Science.

- As many as 222 leading scientists from 52 countries conducted the survey by **Future Earth**, an international sustainability research network.
- The report was prepared with the aim of reducing carbon footprint and halting global warming below 2 degree Celsius by 2050.

South Asia Future Earth Regional Office is hosted by the **Divecha Centre for Climate Change**, Bengaluru, India.

The Divecha Centre for Climate Change was established at Indian Institute of Science in 2009 to understand climate variability and climate change and its impact on the environment.

Future Earth, established in 2015, is an international sustainability research network.

What are the Five Global Risks?

- The report lists the following as the five global risks:
 - œ failure of climate change mitigation and adaptation:
 - œ extreme weather events
 - œ major biodiversity loss and ecosystem collapse
 - œ food crises
 - œ water crises
- Extreme heatwaves can accelerate global warming by releasing large amounts of stored carbon from affected ecosystems, and at the same time intensify water crises and/ or food scarcity.
- The loss of biodiversity also weakens the capacity of natural and agricultural systems to cope with climate extremes, increasing our vulnerability to food crises.

Other highlights of the Report:

- Combination of problems:** Climate breakdown and extreme weather, species loss, water scarcity and a food production crisis are all serious in themselves, but the combination of all five together is amplifying the risks of each, creating a perfect storm that threatens to engulf humanity unless swift action is taken.
- Changing nature of calamities:** The changing nature of bushfires and other calamities around the world is one of the tragic consequences of climate change.
- Economic development:** The great acceleration of economic growth has put enormous pressure on earth systems. The rapid expansion of broad-scale agriculture and extensive mining in some regions has led to deforestation, biodiversity loss and land degradation.
- Unfair use of technologies:** Much existing technology is being used to promote consumption in the pursuit of economic growth, rather than to safeguard ecosystems or to promote just and fair societies.
- Social problems:** The report also warned of social problems that scientists identified as potential major risks for the future. These included the rise of populism and fake news, trends in migration and the rise of artificial intelligence.

The road ahead:

- There is a need to harness investments and financial instruments for sustainable development, including green bonds, sustainability-linked loans and more. The innovative digital sector has immense potential for reducing emissions and empowering people to monitor and protect ecosystems. The sector should be utilised for environment protection. The situation needs

a change in the way risks are getting handled. The world together needs to pay urgent attention to the identified global risks and to ensure they are treated as interacting systems, rather than addressed one at a time in isolation.

CHILD WITNESSES & INDIA'S LEGAL SYSTEM

◎ CONTEXT

- In the Bidar school sedition case, the spotlight has fallen on reports that police questioned children.

◎ ABOUT

- **The Issues:**
 - The **Karnataka State Commission for Protection of Child Rights** has pulled up the district police for violations, including repeated questioning of the children.
 - Additionally, a public interest petition has been filed in the Karnataka High Court seeking a departmental inquiry against the policemen who allegedly questioned the children of Shaheen School, aged between 9 and 12, without the consent of their parents or guardians, and also video-recorded them without consent.
 - The PIL referred to a statement by the Shaheen Alumni Association to say that the children were questioned by policemen carrying guns, which created an "intimidating and fearful environment".
 - The PIL has asked for guidelines to be issued to police regarding the interrogation of minors in criminal proceedings in accordance with the Juvenile Justice Act and United Nations resolutions.

Does Indian Law recognize Child Witnesses?

- Indian jurisprudence has accepted child witnesses as a part of the legal system.
- The interpretation of Section 118 of the Evidence Act allows for a child to be a witness.
- The Supreme Court has, on occasion affirmed that the test of competency, if satisfied by a child even as young as 5 years old, would allow him to be a witness.
- The view of the Supreme Court has been to discard age as a deciding factor in terms of disqualification.
- A child witness must understand the onus of truth and the magnitude of responsibility that is associated with the act of testifying.
- The responsibility to ensure the satisfaction of that onus rests with the Judge.

How do Indian laws address the issue of child witnesses?

- Under **Section 118 of the Indian Evidence Act, 1872**, there is no minimum age for a witness.
- Children as young as three years old have deposed before trial courts in cases of sexual abuse.
- Usually during a trial, the court, before recording the testimony of a child witness, determines his or her competence on the basis of their ability to give rational answers.

Type of cases:

- Trials involving children as witnesses have primarily been in cases of **child sexual abuse**.
- Other criminal cases where children are examined as witnesses have included those where a parent is the victim of violence at home, in the sole presence of the child.
- A child is usually asked questions like their name, the school they study in, and the names of their parents to determine their competency.

International conventions on children:

- . **Convention on the Rights of the Child:** In all actions concerning children, whether undertaken by public or private social welfare institutions, courts of law, administrative authorities or legislative bodies, the best interests of the child shall be a primary consideration.
 - œ India has been a signatory to the **Convention on the Rights of the Child** since 1992, which was adopted by the General Assembly of the United Nations in 1989.
- . **United Nations: Justice in Matters involving Child Victims and Witnesses in Crime: Model Law:** In 2009, the 'United Nations: Justice in Matters involving Child Victims and Witnesses in Crime: Model Law' provided a more specific set of guidelines in the context of child witnesses.
 - œ These guidelines recommend that authorities treat children in a caring and sensitive manner, with interview techniques that "minimise distress or trauma to children".
 - œ They recommend specifically that an investigator specially trained in dealing with children be appointed to guide the interview of the child, using a child-sensitive approach.

1946 NAVAL MUTINY: WHEN INDIAN SAILORS ROSE IN REVOLT AGAINST THE RAJ

◎ CONTEXT

- . Seventy-four years ago on this date, on February 18, 1946, some 1,100 Indian sailors or "ratings" of the HMIS Talwar and the Royal Indian Navy (RIN) Signal School in Bombay declared a hunger strike, triggered by the conditions and treatment of Indians in the Navy.

◎ ABOUT

- . A "slow down" the strike was also called, which meant that the ratings would carry out their duties slowly.
- . The commander of HMIS Talwar, F M King, reportedly addressed the naval ratings as "sons of coolies and bitches", which inflamed the situation further.

1946 naval mutiny: Strike and demands

- . The morning after February 18, somewhere between 10,000-20,000 sailors joined the strike, as did shore establishments in Karachi, Madras, Calcutta, Mandapam, Visakhapatnam, and the Andaman Islands.
- . While the immediate trigger was the demand for better food and working conditions, the agitation soon turned into a wider demand for independence from British rule.
- . The protesting sailors demanded the following things
 - œ The release of all political prisoners including those from Netaji Subhas Chandra Bose's Indian National Army (INA),
 - œ Action against the commander for ill-treatment and using insulting language,
 - œ Revision of pay and allowances to put RIN employees on a par with their counterparts in the Royal Navy,
 - œ The demobilisation of RIN personnel with provisions for peacetime employment,
 - œ Release of Indian forces stationed in Indonesia, and better treatment of subordinates by their officers.

1946 navy mutiny: Upsurge of nationalism

- . The RIN strike came at a time when the Indian nationalist sentiment had reached fever pitch across the country.
- . The winter of 1945-46 saw three violent upsurges: in Calcutta in November 1945 over the INA trials; in February 1946, also in Calcutta, over the sentencing of INA officer Rashid Ali; and, in that same month, the ratings' uprising in Bombay.
- . In his short book, 'The Indian Naval Report of 1946', Percy S Gourgey, a former lieutenant of the Royal Indian Naval Volunteer Reserve, wrote that the chain of events led to the "mounting fever of excitement affecting the whole political climate".
- . One of the triggers for the RIN strike was the arrest of a rating, BC Dutt, who had scrawled "Quit India" on the HMIS Talwar.
- . The day after the strike began, the ratings went around Bombay in lorries, waving the Congress flag, and getting into scraps with Europeans and policemen who tried to confront them.
- . Soon, ordinary people joined the ratings, and life came to a virtual standstill in both Bombay and Calcutta.
- . There were meetings, processions, strikes, and hartals.
- . In Bombay, labourers participated in a general strike called by the Communist Party of India and the Bombay Students' Union.
- . In many cities across India, students boycotted classes in solidarity.
- . The response of the state was brutal. It is estimated that over 220 people died in police firing, while roughly 1,000 were injured.

Significance of the events

- . The RIN revolt remains a legend today.
- . It was an event that strengthened further the determination among all sections of the Indian people to see the end of British rule.
- . Deep solidarity and amity among religious groups were in evidence, which appeared to run counter to the rapidly spreading atmosphere of communal hatred and animosity.
- . However, communal unity was more in the nature of organisational unity than unity among the two major communities.
- . Within months, India was to be devoured by a terrible communal conflagration.

BATTLE OF ÇANAKKALE

◎ CONTEXT

- Recently, Turkish President Recep Tayyip Erdogan pledged to continue his unflinching support for Islamabad's stance on Kashmir. He compared the "struggle" of Kashmiris with that of Turkey in the Battle of Çanakkale.

◎ ABOUT

- **Battle of Çanakkale:** Also known as Gallipoli campaign or Dardanelles campaign, the Battle of Çanakkale is considered to be one of the bloodiest of **World War I**.
- . During this battle, **the Ottoman army faced off against the Allied forces**, leading to the slaughter of many thousands of soldiers on both sides.
- . **History:** In **March 1915**, Winston Churchill, then Britain's First Lord of Admiralty, devised a plan to **take control of the Dardanelles** (strategic strait connecting Sea of Marmara to the Aegean Sea and the Mediterranean Sea), and reach Constantinople (today's Istanbul) at the mouth of Bosphorus.
 - œ By taking Constantinople, Allied forces hoped to break the **Turks**, who had recently entered the war **on the side of Germany**.

- **Participants:** British and French troops as well as **divisions of the Australian and New Zealand Army Corps (ANZAC)**. ANZAC Corps was created early in World War I (1914–18).

Gallipoli campaign

- The Allies carried out a **heavy naval bombardment** of Turkish forts along the shores of Dardanelles, and when that failed, they followed up with what was the **biggest amphibious landing in military history** at the time.
- However, what the British and their allies had hoped would be the turning point in the war **ended up as a catastrophe**.
- In the nine months up to **January 1916**, when the **Allies called off the campaign and evacuated**, more than **40,000 British soldiers** had been killed, along with **8,000 Australians**. On the **Turkish side, some 60,000** had perished.
- **Reason for failure: Lack of sufficient intelligence and knowledge of the terrain**, along with a **fierce Turkish resistance** (Ottoman army), hampered the success of the invasion.

Legacy of the Battle

- The campaign was considered a great **Ottoman victory**.
- In Turkey, it is regarded as a **defining moment in the history of the state**, a final surge in the defence of the motherland as the Ottoman Empire retreated.
- The struggle formed the **basis for the Turkish War of Independence** and declaration of the Republic of Turkey eight years later.
- The campaign is often considered to be the **beginning of Australian and New Zealand national consciousness**.
 œ **April 25, the anniversary of the Gallipoli landings**, is observed as **ANZAC Day** – the day of national remembrance for dead of the war.

SYRI (SYSTEM RISK INDICATOR)

◎ CONTEXT

- In a first anywhere in the world, a court in the Netherlands recently stopped a digital identification scheme for reasons of exclusion. This has a context for similar artificial

intelligence systems worldwide, especially at a time when identity, citizenship and privacy are pertinent questions in India.

◎ ABOUT

What was the scheme?

- . SyRI (System Risk Indicator) is an identification mechanism.
- . The Dutch Ministry of Social Affairs developed SyRI in 2014 to weed out those who are most likely to commit fraud and receive government benefits.
- . Legislation passed by the Dutch Parliament allowed government agencies to share 17 categories of data about welfare recipients such as taxes, land registries, employment records, and vehicle registrations with a private company.
- . The company, called “The Intelligence Agency”, used an algorithm to analyse data for four cities and calculate risk scores.
- . The selective rollout was conducted in low-income and immigrant neighbourhoods, which have a higher number of beneficiaries.
- . Elevated risk scores were sent to relevant government arms, which stores these on government databases for a maximum of two years.
- . The government, in that time period, could open an investigation on the targeted person.

The issue:

- . Recently, a Dutch district court ruled against SyRI (System Risk Indicator), because of data privacy and human rights concerns.
- . While the Hague district court found using new technology to control fraud was acceptable, it held SyRI was too invasive and violative of the privacy guarantees given by European Human Rights Law as well as the EU’s General Data Protection Regulation.
- . Legal criticism alleged that the algorithm would begin associating poverty and immigrant statuses with fraud risk.
- . The court found that opaque algorithmic decision-making puts citizens at a disadvantage to challenge the resulting risk scores. The Netherlands continuously ranks high on democracy indices.
- . The court ruled that SyRI was violative of principles of transparency and data minimisation laid out in their General Data Protection Regulation.
- . Other European tech initiatives have been stalled by the regulation, including a facial recognition system on students in Sweden and France.

How relevant is this for India?

- . Similar to the Supreme Court’s Aadhaar judgment setting limits on the ID’s usage, the Hague Court attempted to balance social interest with personal privacy.
- . However, the Aadhaar judgment was not regarding **algorithmic decision-making**; it was about data collection.
- . The ruling is also an example of how a data protection regulation can be used against government surveillance.
- . India’s pending data protection regulation, being analysed by a Joint Select Committee in Parliament, would give broad exemptions to government data processing in its current form.

. Similar regulations by the US:

- œ India’s proposed regulation is similar to the US in the loopholes that could be potentially exploited.
- œ Hence, attempts to ban facial recognition in cities such as San Francisco have not had the same success as attempts in Europe.
- œ A system somewhat paralleling the Dutch **SyRI** system was a risk-scoring software being used by US court systems to establish bail times.

- œ The US Supreme Court declined to hear a related case in 2017.
- **Global countries taking note of the 'ruling':**
 - œ Digital ID systems are being rolled out at a fast pace in places like **Kenya, Philippines, Nigeria, Mexico**, and more.
 - œ Experts worldwide have been watching the Netherlands case throughout, and agree that the ruling will ripple beyond south Rotterdam.
 - œ The ruling sets a strong legal precedent for other nations to follow. This is one of the first times a court has stopped the use of digital technologies and abundant digital information on human rights grounds.

WHAT SUPREME COURT SAID ON WOMEN IN THE ARMY

◎ **CONTEXT**

- **The Supreme Court on Monday brought women officers in 10 streams of the Army on a par with their male counterparts in all respects, setting aside longstanding objections of the government.**

◎ **ABOUT**

- The induction of women officers in the Army started in 1992.
- They were commissioned for a period of five years in certain chosen streams such as Army Education Corps, Corps of Signals, Intelligence Corps, and Corps of Engineers.
- Recruits under the Women Special Entry Scheme (WSES) had a shorter pre-commission training period than their male counterparts who were commissioned under the Short Service Commission (SSC) scheme.
- In 2006, the WSES scheme was replaced with the SSC scheme, which was extended to women officers.
- They were commissioned for a period of 10 years, extendable up to 14 years.
- Serving WSES officers were given the option to move to the new SSC scheme or to continue under the erstwhile WSES.
- They were to be, however, restricted to roles in streams specified earlier — which excluded combat arms such as infantry and armoured corps.

Key arguments shot down

- The Supreme Court rejected arguments against a greater role for women officers, saying these violated equalities under the law.
- They were being kept out of command posts on the reasoning that the largely rural rank and the file will have problems with women as commanding officers.
- The biological argument was also rejected as disturbing.

The battle in the courts

- In 2003, a PIL was filed before the Delhi High Court for grant of permanent commission (PC) to women SSC officers in the Army.
- In September 2008, the Defence Ministry passed an order saying PC would be granted prospectively to SSC women officers in the Judge Advocate General (JAG) department and the Army Education Corps (AEC).
- The High Court heard 2003, 2006, and 2008 challenges together, and passed its judgment in 2010.
- Women officers of the Air Force and Army on SSC who had sought permanent commission but were not granted that status would be entitled to PC at par with male SSC officers, it ruled.

- . However, this benefit was only available to women officers in service who had instituted proceedings before the High Court and had retired during the pendency of the writ petitions.
- . Women officers who had not attained the age of superannuation for permanently commissioned officers would be reinstated with all consequential benefits.
- . The government challenged the order in the Supreme Court, and even though the High Court judgment did not stay, the Defence Ministry did not implement those directions.
- . While the proceedings were on, the government passed an order in February 2019 for the grant of PC to SSC women officers in eight streams of the Army, in addition to the JAG and AEC, which had been opened up in 2008.
- . But they would not be offered any command appointments and would serve only in staff posts.
- . During the hearing, the government came up with a proposal whereby women officers of up to 14 years of service would be granted permanent commission in line with the letter of February 2019.
- . Women officers with more than 14 years of service would be permitted to serve for up to 20 years without being considered for PC but would retire with a pension, and those with more than 20 years of service would be released with pensionary benefits immediately.

Order and its implications

- . The government put forth other arguments before the Supreme Court to justify the proposal on the grounds of permanent commission, grants of pensionary benefits, limitations of judicial review on policy issues, occupational hazards, reasons for discrimination against women, SSC as a support cadre, and rationalization on physiological limitations for employment in staff appointments.
- . The apex court has rejected these arguments, saying they are "based on sex stereotypes premised on assumptions about socially ascribed roles of gender which discriminate against women".
- . It has also said that it only shows the need "to emphasise the need for change in mindsets to bring about true equality in the Army".
- . The SC has done away with all discrimination on the basis of years of service for grant of PC in 10 streams of combat support arms and services, bringing them on a par with male officers.
- . It has also removed the restriction of women officers only being allowed to serve in staff appointments, which is the most significant and far-reaching aspect of the judgment.
- . It means that women officers will be eligible to the tenant all the command appointments, at par with male officers, which would open avenues for further promotions to higher ranks for them: if women officers had served only in staff, they would not have gone beyond the rank of Colonel.
- . It also means that in junior ranks and career courses, women officers would be attending the same training courses and tenanted critical appointments, which are necessary for higher promotions.

CENTRE BEGINS THE PROCESS OF DELIMITATION OF ASSEMBLY SEATS IN J&K

◎ CONTEXT

- The Central Government has begun the process of delimitation of Assembly constituencies in Jammu and Kashmir.

◎ ABOUT

- Delimitation is the act of redrawing boundaries of Lok Sabha and state Assembly seats to represent changes in population.

- . The main objective of delimitation is to provide equal representation to equal segments of a population.
- . Delimitation literally means the act or process of fixing limits or boundaries of territorial constituencies in a country or a province having a legislative body.
- . The job of delimitation is assigned to a high power body.
- . Such a body is known as Delimitation Commission or a Boundary Commission.
- . In India, such Delimitation Commissions have been constituted 4 times – in 1952 under the Delimitation Commission Act, 1952, in 1963 under Delimitation Commission Act, 1962, in 1973 under Delimitation Act, 1972 and in 2002 under Delimitation Act, 2002.
- . These orders come into force on a date to be specified by the President of India in this behalf.
- . The copies of its orders are laid before the House of the People and the State Legislative Assembly concerned, but no modifications are permissible therein by them.

Process of Delimitation:

- . Under Article 82 of the Constitution of India, the Parliament enacts a Delimitation Act after every Census.
- . Once the Act is in force, the Union government sets up a Delimitation Commission.
- . In 1976, the 42nd Constitutional Amendment was used to stop the delimitation process until 2001.
- . In 2002, based on the 2001 Census delimitation commission was set up to readjust the boundaries of existing Lok Sabha and Assembly seats and reworking the number of reserved seats.
- . Further, in 2002, the 84th Constitutional Amendment was used to freeze the delimitation process until at least 2026.

About Delimitation commission

- . The Delimitation Commission is appointed by the President of India and works in collaboration with the Election Commission of India.
- . The commission is made up of a retired Supreme Court judge, the Chief Election Commissioner and the respective State Election Commissioners.
- . The commission is mandated to:
 - œ Determine the number and boundaries of constituencies to make the population of all constituencies nearly equal and
 - œ Identify seats reserved for Scheduled Castes and Scheduled Tribes, wherever their population is relatively large.
- . The constitution mandates that the orders of commission are final and cannot be questioned before any court as it would hold up an election indefinitely.

WORLD MOTHER LANGUAGE DAY: WHICH IS MOST WIDELY SPOKEN?

◎ CONTEXT

- February 21 is International Mother Language Day. It has been observed since 1999 to promote “linguistic and cultural diversity and multilingualism”, according to the UN.

◎ ABOUT

- UNESCO declared International Mother Language Day in 1999, to commemorate a 1952 protest against West Pakistan’s imposition of Urdu as the official language of East Pakistan (present-day Bangladesh).

- Of the world's 6,000 languages, 43% are estimated as endangered, according to the UN.
- On the other hand, just 10 languages account for as many as 4.8 billion speakers — over 60% of the world population.

INDIATRENDS, 1991-2011

(Speaker of each as % of India population)

Language	1991	2001	2011
Hindi	39.29	41.03	43.63
Bengali	8.30	8.11	8.03
Marathi	7.45	6.99	6.86
Telugu	7.87	7.19	6.70
Tamil	6.32	5.91	5.70
Gujarati	4.85	4.48	4.58
Urdu	5.18	5.01	4.19
Kannada	3.91	6.69	3.61
Odia	3.35	3.21	3.10
Malayalam	3.62	3.21	2.88
Punjabi	2.79	2.83	2.74
Assamese	1.56	1.28	1.26

Facts

- Globally, English remains the most widely spoken language with 1.13 billion speakers in 2019, followed by Mandarin with 1.17 billion.
- Hindi is third with 615 million speakers while Bengali is seventh with 265 million.
- In India, Hindi is the most spoken language with over 528 million speakers in 2011, as per the Census.
- Bengali had 97.2 million speakers in 2011, followed by Marathi (83 million), while other languages with over 50 million speakers are Telugu (81 million), Tamil (69 million), Gujarati (55.5 million) and Urdu (50.8 million).
- Percentage trends from 1991 to 2011 underline the growth of the most widely spoken language, Hindi, which was spoken by 39.29% of the Indian population in 1991, and whose share grew to 43.63% in 2011.
- For other languages in India's top 12, the 2011 percentage share has fallen when compared to that in 1991.

Why February 21?

- UNESCO declared International Mother Language Day in 1999, to commemorate a 1952 protest against West Pakistan's imposition of Urdu as the official language of East Pakistan (present-day Bangladesh).
- Police opened fire on demonstrating Dhaka University students and "some people were killed".
- When thousands thronged the university the next day, police fired again, killing more people.
- In Bangladesh, since 1953, February 21 is observed as Ekushe Day, after the Bengali word for twenty-one.

WORLD TOP 10, 2019 (mn)		INDIA TOP 12, 2011 (mn)	
English	1,132	Hindi	528
Mandarin	1,117	Bengali	97
Hindi	615	Marathi	83
Spanish	534	Telugu	81
French	280	Tamil	69
Standard Arabic	274	Gujarati	55
Bengali	265	Urdu	51
Russian	258	Kannada	44
Portuguese	234	Odia	37
Indonesian	199	Malayalam	35
		Punjabi	33
		Assamese	15

ADITYA – L1 MISSION

◎ CONTEXT

- The Indian Space Research Organization (ISRO) is preparing for its first scientific expedition to study the Sun, Aditya-L1.

◎ ABOUT

- AstroSat**
 - AstroSat was launched in September 2015, by **PSLV-C30** from Sriharikota (Andhra Pradesh).
 - It is the first dedicated Indian astronomy mission aimed at studying **celestial sources in X-ray, optical and UV spectral bands simultaneously**.
 - Aditya-L1 is planned to be launched by the end of 2020. It would be placed into a point in space known as the L1 Lagrange point.
 - Aditya L1 will be ISRO's 2nd space-based astronomy mission after AstroSat, which was launched in 2015.
 - Aditya 1 was renamed as Aditya-L1. The Aditya 1 was meant to observe only the solar corona.

Lagrange Point 1

- Lagrange Points, named after Italian-French mathematician **Joseph-Louis Lagrange**, are positioned in space where the gravitational forces of a two-body system (like the Sun and the Earth) produce enhanced regions of attraction and repulsion.
- The L1 point is about **1.5 million km from Earth or about 1/100th of the way to the Sun**.
- L1 refers to Lagrangian/Lagrange Point 1, one of 5 points in the orbital plane of the Earth-Sun system.
- These can be used by spacecraft to reduce fuel consumption needed to remain in position.
- A Satellite placed in the halo orbit around the Lagrangian point 1 (L1) has the major advantage of continuously viewing the Sun without any occultation/ eclipses.
- The L1 point is home to the Solar and Heliospheric Observatory Satellite (SOHO), an international collaboration project of National Aeronautics and Space Administration (NASA) and the European Space Agency (ESA).

- Launch Vehicle:** Aditya L1 will be launched using the **Polar Satellite Launch Vehicle**

(PSLV) XL with 7 payloads (instruments) on board.

- **Objective:** Aditya L1 will study the:
 - œ Sun's corona (Visible and Near-infrared rays)
 - œ Sun's photosphere (soft and hard X-ray)
 - œ chromosphere (Ultra Violet)
 - œ solar emissions, solar winds and flares
 - œ Coronal Mass Ejections (CMEs)
- **Moreover, it will carry out round-the-clock imaging of the Sun.**

Challenges:

- **Huge distance:** The distance of the Sun from Earth (approximately 15 crore km on average, compared to the only 3.84 lakh km to the Moon). This huge distance poses a scientific challenge.
- **Moving payloads:** Due to the risks involved, payloads in earlier ISRO missions have largely remained stationary in space; however, Aditya L1 will have some moving components which increase the risks of collision.
- **Others:** Other issues are the super-hot temperatures and radiation in the solar atmosphere. However, Aditya L1 will stay much farther away, and the heat is not expected to be a major concern for the instruments onboard.

Significance of the Mission

- Evolution of every planet, including Earth and the exoplanets beyond the Solar System, is governed by its parent star i.e the Sun in our case. **Solar weather and environment affect the weather of the entire system.** Therefore, it is important to study the Sun.
- **Effects of Variation in Solar Weather System:** Variations in this weather can change the orbits of satellites or shorten their lives, interfere with or damage onboard electronics, and cause power blackouts and other disturbances on Earth.
- Knowledge of solar events is key to understanding space weather.
- To learn about and track Earth-directed storms, and to predict their impact, continuous solar observations are needed.
- Many of the instruments and their components for this mission are being manufactured for the first time in the country.

Other Missions to the Sun

- NASA's **Parker Solar Probe's** aim is to trace how energy and heat move through the Sun's corona and to study the source of the solar wind's acceleration.
- It is part of NASA's 'Living With a Star' programme that explores different aspects of the Sun-Earth system.
- The earlier Helios 2 solar probe, a joint venture between NASA and space agency of erstwhile West Germany, went within 43 million km of the Sun's surface in 1976.

BETELGEUSE SUPERNOVA

◎ CONTEXT

- Betelgeuse, the red supergiant star that marks the armpit of Orion the Hunter, has been dramatically and mysteriously dimming for the last six months.

◎ ABOUT

- Betelgeuse is a red supergiant star, located an estimated 642 light-years away.
- **Location:** It's usually the **11th brightest star** in the sky, taking its position as the right

shoulder of Orion. But in the last few months, it's dimmed down to 38% of its usual brightness, now the **24th brightest star** in the sky.

Orion constellation:

- . Orion constellation is named after the hunter in Greek mythology.
- . Orion, which is located on the celestial equator, is one of the most prominent and recognizable constellations in the sky and can be seen throughout the world.
- . In total, Orion is home to 10% of the seventy brightest stars, despite covering only 1.4% of the sky.

- . **Variable star:** Variations are normal for Betelgeuse, and it's known to get dimmer and brighter. It's literally growing and shrinking as the internal temperatures rise and fall pushing the star in and out like a beating heart.
- . **Convective cells:** It has **enormous convective cells** on its surface that boil creating brighter and dimmer regions, and it's constantly blowing out dust that can obscure our view for a time.

What's the reason behind this?

- . Astronomers have captured the unprecedented dimming of Betelgeuse Using ESO's Very Large Telescope (VLT).
- . The stunning new images of the star's surface show not only the fading red supergiant but also how its apparent shape is changing.
- . The red supergiant Betelgeuse has recently dimmed quite dramatically because those two periodic cycles are overlapping at minimal brightness.
- . Beginning in October 2019, astronomers noticed that the brightness of Betelgeuse suddenly began to change. The star was dimming.
- . Once one of the top 10 brightest stars in the sky, its brightness had fallen to 21st place by the end of December 2019.

Is it going to explode?

- . Astronomers have long suspected that the star might explode sometime in the next million years.
- . It's also possible that Betelgeuse has already exploded and we just haven't seen it happen; because the star is 600 light-years away, it takes 600 years after something happens on Betelgeuse for light from that event to reach Earth.
- . But if and when astronomers do witness the star's explosion, it will be the most astonishing astronomy event of all time.
- . When Betelgeuse explodes, turning into a supernova, it will briefly shine even brighter than the full moon. Then, the star will vanish forever.

What is The Very Large Telescope array (VLT)?

- . The **Very Large Telescope array (VLT)** is the flagship facility for **European ground-based astronomy** at the beginning of the third Millennium.
- . It is the **world's most advanced optical instrument**, consisting of four Unit Telescopes with main mirrors of 8.2m diameter and four movable 1.8m diameter Auxiliary Telescopes.
- . The telescopes can work together, to form a giant 'interferometer', the ESO Very Large Telescope Interferometer, allowing astronomers to see details up to 25 times finer than with the individual telescopes.
- . The light beams are combined in the VLTi using a complex system of mirrors in underground tunnels where the light paths must be kept equal to distances less than 1/1000 mm over a hundred metres.

- . With this kind of precision, the VLTI can reconstruct images with an angular resolution of milliarcseconds, equivalent to distinguishing the two headlights of a car at the distance of the Moon.
- . The 8.2m diameter Unit Telescopes can also be used individually.
- . With one such telescope, images of celestial objects as faint as magnitude 30 can be obtained in a one-hour exposure.
- . This corresponds to seeing objects that are four billion (four thousand million) times fainter than what can be seen with the unaided eye.
- . Over their lifetimes, red supergiants (like Betelgeuse) create and eject vast amounts of material even before they explode as supernovae. Today's modern technology has enabled scientists to study these objects, hundreds of light-years away, in unprecedented detail. It gives the opportunity to unravel the mystery of what triggers their mass loss.

GISAT-1 MISSION

◎ **CONTEXT**

◎ **ABOUT**

- **An ISRO GSLV-II rocket will launch the GISAT-1 mission.**
- GISAT-1 is an Indian earth observation satellite to be launched in geostationary orbit. It is tasked with continuous observation of Indian sub-continent and quick monitoring of natural hazards and disaster.
- . GISAT carries an imaging payload consisting of multi-spectral, multi-resolution from 50 m to 1.5 km.
- . It will operate in geostationary orbit above the Southern India region after being launched from Sriharikota, India.
- . The rocket consists of three stages and four liquid engine strap-on rocket motors that use UDMH and N₂O₄.
 - œ **First Stage:** The solid propellant first stage uses Hydroxyl-terminated polybutadiene (HTBP) and has a burn time of around 100 seconds.
 - œ It is important to keep in mind that once a solid motor is ignited, there is no shutting it off.
 - œ **Second Stage:** Also used by the second stage, Unsymmetrical dimethylhydrazine (UDMH) is the fuel of choice which has been used since the 1950s by many rocket companies, and Nitrogen tetroxide (N₂O₄) is the oxidizer of choice.
 - œ **Third Stage:** Finally, the third stage uses more familiar and frequently used propellants, Liquid Oxygen (LOX) as the oxidizer and Liquid Hydrogen (LH₂) as the fuel.
- . Using all the energy from these stages combined, ISRO can launch up to 2500 kg to Geostationary Transfer Orbit (GTO).

Specification:

Height	49.13 m/161.2 ft
Diameter	2.8 m/9.2 ft
Rocket	GSLV Mk II
Manufacturer	Indian Space Research Organization

Destination orbit	Geostationary Transfer Orbit
Launching from	Satish Dhawan Space Center, Sriharikota

What is GSLV Mk II?

- . Geosynchronous Satellite Launch Vehicle Mark-II (GSLV Mk II) is the largest launch vehicle developed by India, which is currently in operation.
- . This fourth-generation launch vehicle is a three-stage vehicle with four liquid strap-ons.
- . The indigenously developed cryogenic Upper Stage (CUS), which is flight-proven, forms the third stage of GSLV Mk II.
- . From January 2014, the vehicle has achieved four consecutive successes.

Significance of the mission:

- . **Informative pictures:** It will provide pictures of the area of interest on a near real-time basis including border areas.
 - œ GISAT will provide near real-time pictures of large areas of the country, under cloud-free conditions, at frequent intervals.
 - œ That is, selected Sector-wise image every 5 minutes and entire Indian landmass image every 30 minutes at 50 m spatial resolution.
- . **Security:** With GISAT-1, the government can keep a constant watch on borders.
- . **Monitoring geographic changes:** Furthermore, it can monitor any change in the geographical condition of the country.

ISRO TO LAUNCH AN UNPRECEDENTED 10 EARTH IMAGING SATELLITES

● CONTEXT

- . The country will send up an unusually large number of 10 earth observation (EO) satellites during 2020-21, according to the latest annual report of the Indian Space Research Organisation for 2019-20.

● ABOUT

- . It includes new categories such as the first Geo Imaging Satellite, GISAT-1.
- . In comparison, only three communication satellites — which is another major category in space infrastructure — and two navigation satellites are planned for the coming financial year starting April.
- . The annual plan mentions 36 missions, another high for a year: these include both satellites and their launchers.
- . The high number also stands out amidst the immediate two years before and after the plan.
- . ISRO says 19 national EO satellites, 18 communication satellites and eight navigation satellites are in service, driving uses from broadcasting, telephony, Internet services, weather and agriculture-related forecasting, security, disaster-time rescue and relief and location-based services.
- . Three of the communication satellites are dedicated to military communication and networking.
- . The EO sats are ostensibly for benign uses such as land and agriculture watch.
- . But their images also have a very important use for the military, for keeping an eye on the borders.

- . The satellites such as RISATs, which carry synthetic aperture radar on them, provide all-weather, 24-hour information to security agencies.
- . The upcoming EO satellites include radar imaging satellites RISAT-2BR2, RISAT- 1A and 2A; Oceansat-3 and Resourcesat-3/3S.

10 earth observation (EO) satellites

- . **GISAT-1:** It is a Geo Imaging Satellite in Geostationary orbit with a high temporal resolution. is primarily meant for near real-time imaging of natural resources and disaster management.
- . **RISAT-2BR2:** It is a high agility X-Band Synthetic Aperture Radar-based satellite. It will provide all-weather, day/night imaging services from space.
- . **OCEANSAT-3:** It will provide continuity of ocean colour data with improvements to continue and enhance operational services like potential fishery zone and primary productivity.
- . **RISAT-1A and 2A:** They will provide continuity of service for RISAT-1 and RISAT-2 respectively.
- . **HRSAT:** It will have a constellation of three satellites. Applications include large scale and cadastral level mapping, urban and rural planning, infrastructure development & monitoring, précising agriculture, disaster management, etc.
- . **RESOURCESAT-3/3A:** The mission is envisaged to provide continuity of data service on an operational basis in the area of Land and Water resources management.
- . **RESOURCESAT-3S/3SA:** These are planned to provide data services for earth resource monitoring with improved resolution and a wide swath.
- . **INSAT-3DS:** It is designed for enhanced meteorological observations, monitoring of land and ocean surfaces, generating a vertical profile of the atmosphere for weather forecasting and disaster warning.
- . **Microsat-2A:** It will meet demands for cartographic applications at cadastral level, urban and rural management, coastal land use and regulation, utility mapping, development and various other GIS applications.
- . **NISAR:** It is being jointly developed by NASA & ISRO. The primary mission goals are: Global coverage of the earth's biomass, cryosphere, for surface dynamics and coastal studies over a period of 3-5 years, Systematic coverage of global environment with 12 days repeat the cycle.

MISCELLANEOUS

CURRENT AFFAIRS

3rd HIGH-LEVEL GLOBAL CONFERENCE ON ROAD SAFETY

- . The 3rd Global Ministerial Conference on Road Safety “Achieving Global Goals 2030” will take place on 19–20 February 2020 in Stockholm, Sweden.
- . Hosted by the Government of Sweden and co-hosted by WHO, the Ministerial Conference will be an opportunity for delegates to share successes and lessons from implementation of the Global Plan for the Decade of Action for Road Safety 2011–2020, chart future strategic directions for global road safety, and define ways to accelerate action on proven strategies.
- . The Ministerial Conference will also provide an opportunity to link road safety to other sustainability challenges.
- . A scheduled pre-meeting, the 2nd World Youth Assembly for Road Safety “Claiming Our Space for Safer Mobility”, will be hosted by YOURS: Youth for Road Safety and co-hosted by WHO on 18 February 2020, bringing together around 200 youth road safety advocates from 80 countries.

ANTARCTICA RECORDED THE HOTTEST TEMPERATURE

- . Antarctica has logged its hottest temperature on record, with an Argentinian research station thermometer reading 18.3C, beating the previous record by 0.8C.
- . The reading, taken at Esperanza on the northern tip of the continent’s peninsula, beats Antarctica’s previous record of 17.5C, set in March 2015.
- . Antarctica’s peninsula – the area that points towards South America – is one of the fastest-warming places on earth, heating by almost 3C over the past 50 years, according to the World Meteorological Organization.
- . The lowest temperature ever recorded in Antarctica – and anywhere on Earth – was at the Russian Vostok station, when temperatures dropped to -89.2C on 21 July 1983.

ETHICS FOR CLIMATE CHANGE REGIONAL CONFERENCE

- . The African Regional Conference of National Ethics and Bioethics Committees took place in Mombasa, Kenya, from 12 to 14 February 2020, under the theme “Ethics of Climate Change”, in preparation for the 13th Global Summit of National Ethics/Bioethics Committees, scheduled to take place in Lisbon, Portugal, from 18 to 20 March 2020.
- . The meeting, hosted by the National Commission for Science Technology and Innovation (NACOSTI), and supported by the Kenya National Commission for UNESCO (KNATCOM), will be organized jointly in partnership with UNESCO and the World Health Organization (WHO), two of the UN agencies institutionally affiliated with the Global Summit process. It is designed to consolidate and harmonize an Africa-wide position.
- . The Global Summit on Bioethics brings together representatives of National Ethics/Bioethics Committee, and other experts in the field (Bioethicists, Philosophers, etc.), every two years, to reflect on the state of the field, and developments therein.

GEF INDIA ADOPTS “BHAROSA CENTRE” AT WARANGAL

- **Gemini Edibles & Fats India Pvt Ltd** (Freedom Healthy Cooking Oils) as a part of their CSR initiative, extend support for setting up of **“Bharosa- Support Centre for Women & Children” at Warangal.**
- This MOU represents the strong relationship between **GEF India and the Telangana Police**, who mutually strive to improve and provide outstanding service to the community. The Bharosa **Centre will be managed by an all-women team.**
- It will be equipped to **facilitate immediate, emergency and non-emergency access to a range of services** including medical, legal, psychological and counselling support under one roof to fight **against any forms of violence against women both in private and public spaces.**
- The Bharosa Centre **will be set up as per the guidelines from the Director-General of Police** to provide a **speedy redressal of grievances ensuring prompt justice to women** in distress.

NASA AWARDS CONTRACT TO LAUNCH CUBESAT TO MOON

- NASA has selected Rocket Lab of Huntington Beach, California, to provide launch services for the Cislunar Autonomous Positioning System Technology Operations and Navigation Experiment (CAPSTONE) CubeSat.
- Rocket Lab, a commercial launch provider licensed by the Federal Aviation Administration, will launch the 55-pound CubeSat aboard an Electron rocket from NASA's Wallops Flight Facility in Virginia.
- After launch, the company's Photon platform will deliver CAPSTONE to a trans-lunar injection.
- CAPSTONE will demonstrate the stability of that orbit, which has never been used by a spacecraft before, to support planning for the Gateway.
- Rocket Lab will use Photon, the satellite bus it is developing based on the Electron rocket's kick stage, to place CAPSTONE on a trajectory to the moon.
- CAPSTONE will use its own propulsion system to enter orbit around the moon and maneuver into that near-rectilinear halo orbit, a process that will take three months.
- The launch will not be Rocket Lab's first mission for NASA. In December 2018 it launched 13 CubeSats for NASA's CubeSat Launch Initiative.
- The launch will also be just the second mission to the moon launched from Wallops Flight Facility.

NORTHROP GRUMMAN MISSION

- A Northrop Grumman Cygnus resupply spacecraft is on its way to the International Space Station with about 7,500 pounds of science investigations and cargo after launching from NASA's Wallops Flight Facility in Virginia.
- The spacecraft launched on an Antares 230+ rocket from the Virginia Mid-Atlantic Regional Spaceport's Pad 0A at Wallops and is scheduled to arrive at the space station on Feb. 18.
- The spacecraft is scheduled to stay at the space station until May.
- This delivery, Northrop Grumman's 13th cargo flight to the space station, the second under its Commercial Resupply Services 2 contract with NASA and designated NG-13, will support dozens of new and existing investigations.

NORTH EAST SUSTAINABLE DEVELOPMENT GOALS CONCLAVE 2020 IN ASSAM

- NITI Aayog is organising “**Sustainable Development Goals (SDG) Conclave 2020: Partnerships, Cooperation and Development of North Eastern States**” in **Guwahati**, in association with the North Eastern Council, Government of Assam, Tata Trusts, United Nations Development Programme (UNDP) and Research and Information System for Developing Countries (RIS).
- The **three-day event from 24th to 26th February 2020**, will take place in **Assam Administrative Staff College, Guwahati** and will see representations from the highest offices of all the State Governments of the North East, Central Ministries, academia, civil society and international development organizations.
- This inaugural session on the first day would be followed by technical sessions on the 25th and 26th. The valedictory address would be delivered by **Ms Shoko Noda, Resident Representative, UNDP India**.
- **NITI Aayog has the mandate of overseeing the adoption and monitoring of SDGs** at the national and sub-national level.

PRAVASI BHARTIYA KENDRA

- The Central government **renamed the Pravasi Bhartiya Kendra and Foreign Service Institute** in the national capital **after former External Affairs Minister Sushma Swaraj**.
- While the Pravasi Bhartiya Kendra has been renamed as **Sushma Swaraj Bhawan**, the Foreign Service Institute will be known as the **Sushma Swaraj Institute of Foreign Service**.
- The announcement is being made on the eve of her **birth anniversary falling on 14th February**.
- Pravasi Bharatiya Kendra was inaugurated by the Hon'ble Prime Minister of India **on October 2, 2016**.
- Sushma Swaraj, who was the External Affairs Minister in the previous BJP-led NDA government, **passed away in August last year**.

SAMPRITI-IX

- Over the past two weeks, with effect from 3 February to 16 February, the Armies of India and Bangladesh participated in joint military Exercise Sampriti IX at Umroi, Meghalaya. This was the 9th edition of the exercise.
- The exercise was aimed at strengthening the military relations between the two countries, which allowed the two armies to understand each other's tactical drills and operating techniques.
- The exercise provided a platform for the personnel of the two countries to share their experiences on counter-insurgency, counter-terrorism operations, and on providing aid to civil authorities for disaster management, especially in the jungle and semi-urban terrains.
- SAMPRITI series of the joint exercise is a very important military & diplomatic initiative between both the nations and the edifice of the trust and friendship between India & Bangladesh. The exercise is hosted alternately by both countries.

SC/ST AMENDMENT ACT, 2018

- The Supreme Court upheld the constitutional validity of the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Amendment Act 2018.
- A three-judge bench, headed by Justice Arun Mishra, upheld the amended Act, which said neither is a preliminary inquiry required before lodging an FIR under the Act nor is approval needed from higher authorities for arrests.

- The amendment also restores the unconditional ban on the grant of anticipatory bail put in place by the March 2018 judgement of the apex court.
- The Parliament had amended the Act to nullify a March 2018 apex court judgement that had diluted the provisions of the Act.

SOLAR ORBITER LAUNCH

- A rocket carrying Solar Orbiter, a probe that will take pictures of the top and bottom of the sun, launched on 9th February 2020.
- It was a successful beginning to a mission that is a collaboration between NASA and the European Space Agency.
- Solar Orbiter is a mission dedicated to solar and heliospheric physics.
- It was selected as the first medium-class mission of ESA's Cosmic Vision 2015-2025 Programme.
- With Solar Orbiter, scientists will for the first time get a good view of the top and bottom of the sun.
- The spacecraft - called Solar Orbiter - is a European Space Agency-led mission - and was assembled at Airbus in Stevenage, England.
- The mission is expected to complete 22 orbits of the sun in 10 years.
- Ulysses, an earlier collaboration between NASA and the European Space Agency launched in 1990, also passed over the sun's poles, but at much farther distances, and it did not carry a camera.
- Occasionally, the sun erupts giant amounts of particles known as coronal mass ejections. The largest one known to hit Earth was the Carrington event in 1859, named after one of the people who observed an intensely bright spot on the sun where the eruption occurred.

STATEHOOD DAY OF MIZORAM AND ARUNACHAL PRADESH

- Prime Minister greeted the people of **Arunachal Pradesh and Mizoram** on their statehood day (**20th Feb 2020**).
- Mizoram was **previously part of Assam until 1972** when it was carved out as a Union Territory.
- It became the **23rd state of India**, a step above Union Territory, on **February 20, 1987**, with the **Fifty-Third Amendment** of the Indian Constitution.
- Arunachal Pradesh which literally means '**land of dawn-lit mountains**' is the Northeastern-most state of the country on the edge of the Himalayas.
- It is the **largest of the Seven Sister States of Northeast**. Statehood day was conferred on Arunachal Pradesh on **Feb 20, 1987**.



VANIK-IAS



OPSC-AAE SELECTIONS OF 2019

3 in Top 10

8 in Top 20

16 in Top 50



1

30 in Top 100

26% Selection from VANIK

1 Selection in Every 4 Selection are from VANIK

ANJALI THAKUR



B.P. Debasis Sahoo



Nibedita Jena



Tanmayee Dash



Biswajit Pattajoshi



Kshanaprava Giri



Jagadish Panda



Abinash Pradhan



Saroj Kumar Dhal



Suchismita Kar



Ananya D. Behera



Paripurna Devi



Pramit Ku. Sahu



K. Anupam Swain



Monalisa Das



Sipamudra Nayak



Shibaneer Maharana



Nalini S. Behera



Banasmita Behera



Adyasha Mallick



Ashis Samantaray



Suprava Matha



Mohan Mondal



Debasmitta Priyadarsini



Prathamika Routray



Renuka Naik



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