

November (Week 4)

INDEX

Contents

| | |
|--|----|
| Prelims | 3 |
| NATIONAL | 3 |
| Elephant collaring | 3 |
| Indore keeps cleanest city tag for fifth year..... | 3 |
| Trilateral exercise ‘Dosti’ | 4 |
| Life expectancy lower for urban poor, says study | 4 |
| INS Vela..... | 6 |
| New Crypto Bill..... | 7 |
| Rani Gaidinliu..... | 8 |
| India, U.S. commit to linking economies across sectors | 9 |
| PESA Act..... | 10 |
| Over 50% of Bihar population multidimensionally poor: NITI | 11 |
| Agriculture bills | 12 |
| Three-rate GST structure | 14 |
| Scorpene class submarine INS Vela | 15 |
| NFHS says women outnumber men | 16 |
| The Bharat Gaurav scheme | 17 |
| INTERNATIONAL | 19 |
| Sri Lanka Cabinet clears China’s role in terminal project..... | 19 |
| The ‘Matosinhos Manifesto’ | 19 |
| Australia’s controversial Religious Discrimination Bill..... | 20 |
| White dwarf with fastest spin | 21 |
| How climate change causes ‘divorce’ among albatrosses? | 22 |
| Mains | 23 |
| GS II | 23 |
| Will Pak. law on Kulbhushan Jadhav help India’s position?..... | 23 |
| Judicial Transfers..... | 24 |
| Keeping a close eye on China’s nuclear capabilities | 25 |
| Making Ayurveda a real science..... | 27 |
| A close reading of the NFHS-5..... | 29 |
| GS III | 31 |
| Why is India’s coal usage under scrutiny? | 31 |



| | |
|---|----|
| Reforming the fertilizer sector | 32 |
| Road to data protection law | 34 |
| In perspective, farm distress and the demand for guaranteed MSP | 36 |
| The road to a Himalayan blunder..... | 38 |
| Current Affairs Quiz | 40 |



Prelims

NATIONAL

Elephant collaring

(Source: [Indian Express](#))

Context: Recently, a wild elephant was radio-collared for the first time in Assam's Sonitpur district by the state's Forest Department, in collaboration with NGO World Wildlife Fund (WWF)-India. The joint initiative is being described as a step to study and mitigate human-elephant conflict in the state. Experts say the exercise is challenging, and even runs the risk of having a low success rate. Yet, the forest department is planning to collar at least five elephants in high-conflict habitats in the coming months.

What are radio-collars?

- Radio collars are GPS-enabled collars that can relay information about an elephants' whereabouts. They weigh roughly 8 kg and are fitted around the elephant's neck.
- According to a WWF blog, collaring includes identifying a suitable candidate (generally an adult elephant), darting it with a sedative, and fitting a collar around the elephant's neck, before the animal is revived.
- Additionally, the team also attaches an accelerometer to the collar to "understand what exactly an elephant is doing at any given time (running, walking, eating, drinking, etc)".

How does radio-collaring help?

- The objectives are twofold. Information from the GPS would help us track and study the movement patterns of the herd, across regions and habitats.
- We will know where they are moving, which corridors they frequent, if the habitat is sufficient, if it needs protection, etc. This would help in understanding what is driving the conflict.
- The second objective is incidental. The collars would serve as an early warning system, and if people know which direction an elephant is moving, they can prepare accordingly.
- Villagers and forest officials will know about approaching elephants... very much how weather forecasting works. And this would help mitigate conflict incidents.
- However, the main objective is long-term study of movement patterns, says experts. Gradually, as habitats are shrinking and traditional corridors are not in use anymore, it is imperative to study the range of travels and make an inventory of the new habitats. This is where collaring can come in.

Indore keeps cleanest city tag for fifth year

(Source: [The Hindu](#))

Context: Indore was ranked the cleanest city for the fifth consecutive year by the Union Ministry of Housing and Urban Affairs in its annual cleanliness ranking.

Details:

- The Swachh Survekshan Awards, 2021 handed out by President Ram Nath Kovind included the cleanest State honour for Chhattisgarh for the third time, in the category of States with more than 100 urban local

bodies. Prime Minister Narendra Modi's constituency, Varanasi, won the award for the cleanest "Ganga city".

- Among cities, Surat and Vijayawada secured the second and third place, respectively. The Ministry said the survey was carried out in 4,320 cities over 28 days, where feedback from 4.2 crore persons was recorded.
- Of States with over 100 urban local bodies (ULBs), Maharashtra and Madhya Pradesh were ranked second and third respectively.
- Jharkhand was judged the cleanest State with less than 100 ULBs, followed by Haryana and Goa.
- Of cities with population less than 1 lakh, Maharashtra's Vita was the cleanest, followed by Lonavala and Sasvad.
- The New Delhi Municipal Council's area was ranked the cleanest in the category of cities with 1-3 lakh population.
- Noida was named the cleanest among medium-sized cities, that is with 3 lakh to 10 lakh population.
- Among the big cities with population of 10 lakh to 40 lakh, Navi Mumbai was ranked the cleanest.

Trilateral exercise 'Dosti'

(Source: [Indian Express](#))

Context: *The 15th edition of the biennial trilateral coast guard exercise 'Dosti' involving India, the Maldives and Sri Lanka is underway in the Maldives. 2021 marks 30 years since these exercises were first launched.*

Details

- For many years after it was first launched in 1991, these exercises were bilateral, involving the Indian and the Maldives Coast Guards. In 2012, however, Sri Lanka joined these exercises for the first time and since then, it has been a trilateral exercise.
- The scope of these exercises are wide-ranging.
- If there is a maritime accident, or if there is an ecological disaster like an oil spill, sometimes the coast guard of one nation cannot tackle it alone.
- These exercises help develop a better understanding of the other nation's coast guard operations and how to enhance coordination during different kinds of missions. "Maritime security is a kind of thing where you need cooperation and one nation, one coast guard can't do much," Dr. Sultana explained.
- There are limitations and regulations involving international law, for instance the Exclusive Economic Zones (EEZ). Then there is the continental shelf which also has specific rules.
- Under international law, as stated in Article 76 of the Law of the Sea Convention, this maritime zone consists of the seabed and subsoil that extends to the outer edge of the continental margin, or to a distance of 200 nautical miles if the outer edge of the continental margin does not extend up to that distance.
- According to a document issued by the US State Department, "The continental shelf and the exclusive economic zone (EEZ) are distinct maritime zones." The extended continental shelf is not an extension of the EEZ, the document states.

Life expectancy lower for urban poor, says study

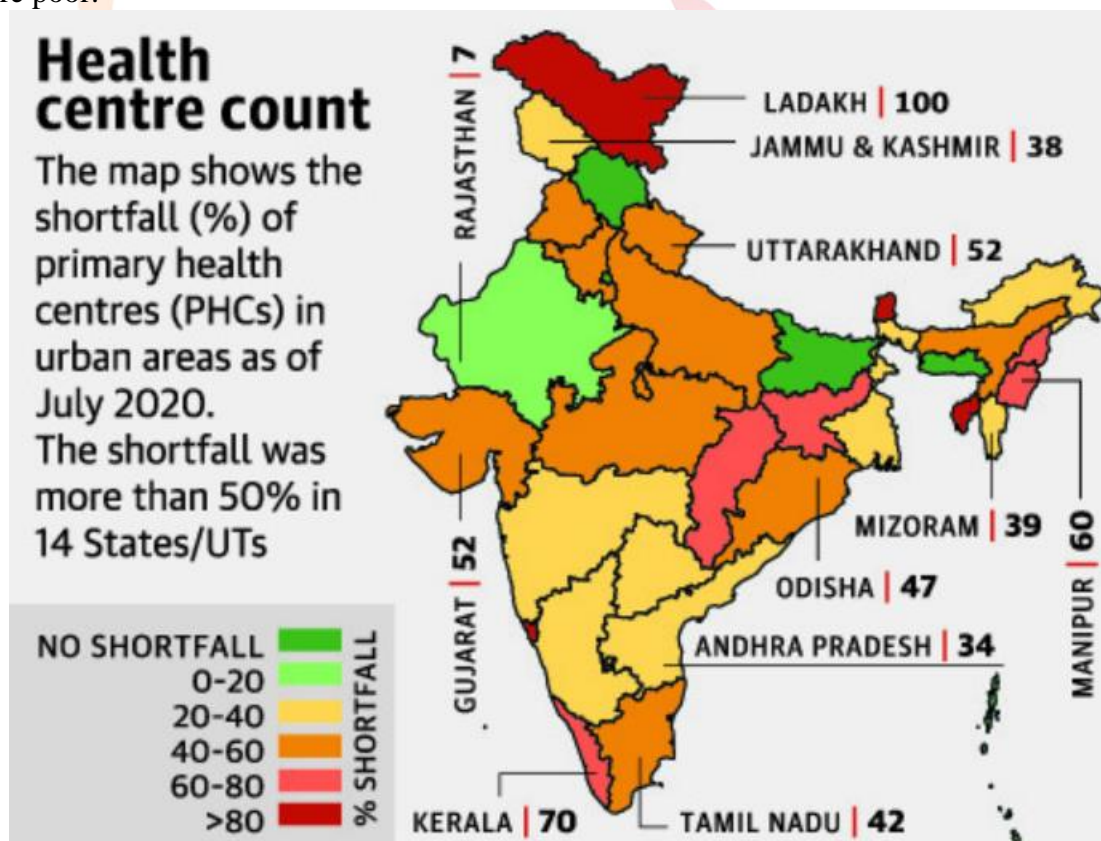
(Source: [The Hindu](#))



Context: Life expectancy among the poorest is lower by 9.1 years among men and 6.2 years among women from the corresponding figures for the richest in urban areas, noted a report released recently by Azim Premji University in collaboration with 17 regional NGOs across India.

Details:

- The report, “Healthcare equity in urban India”, explores health vulnerabilities and inequalities in cities in India. It also looks at the availability, accessibility and cost of healthcare facilities, and possibilities in future-proofing services in the next decade.
- It notes that a third of India’s population lives in urban areas, with this segment seeing a rapid growth from about 18% (1960) to 28.53% (2001) and 34% (in 2019). Close to 30% of people living in urban areas are poor.



- The study also draws insights from data collected through interactions with civil society organisations in Mumbai, Bengaluru, Surat, Lucknow, Guwahati, Ranchi and Delhi.
- This also included an analysis of the National Family and Health Surveys, the Census, and inputs from State-level officials on the provision of healthcare.
- The report, besides finding disproportionate disease burden on the poor, also points to a chaotic urban health governance, where the multiplicity of healthcare providers both within and outside the Government without coordination are challenges to urban health governance.
- The other key findings include a heavy financial burden on the poor, and less investment in healthcare by urban local bodies.

Steps to be taken

- The report calls for strengthening community participation and governance; building a comprehensive and dynamic database on the health and nutrition status, including comorbidities of the diverse, vulnerable populations; strengthening healthcare provisioning through the National Urban Health



Mission, especially for primary healthcare services; and putting in place policy measures to reduce the financial burden of the poor.

- It also advocates for a better mechanism for coordinated public healthcare services and better governed private healthcare institutions.
- “As urbanisation is happening rapidly, the number of the urban poor is only expected to increase. A well-functioning, better coordinated and governed healthcare system is crucial at this point,” the report says.

INS Vela

(Source: [Indian Express](#))

Context: *Vela, the fourth submarine of P75 of the Indian Navy, will be commissioned by Navy chief Admiral Karambir Singh at the naval dockyard. This will be the second addition to the Indian Navy's fleet of warships after INS Vishakapatnam's commissioning.*

What is Project 75?

- Conceptualised for the acquisition for 25 submarines at the time of the IK Gujral government, P 75 evolved into a 30-year plan for building submarines.
- In 2005, India and France signed a \$ 3.75 billion contract for building six Scorpene class submarines.
- The executing company on the Indian side is Mazgaon Docks Ltd, and on the French side, it is DCNS, which is now called Naval Group.
- The project has been dogged by delays and questions over the reluctance of the French government to act on the commitment for “transfer of technology” that was an integral part of the contract.
- As a result, the first of the six subs, INS Kalvari, was commissioned five years behind schedule, in 2017.

What has been the progress so far?

- After Kalvari, two more submarines under the contract, INS Khanderi and INS Karanj, were commissioned. Vela is the fourth, and sea trials are ongoing for Vagir, while the sixth, Vagsheer, is under construction.

How did Vela get its name?

- Vela is named after a decommissioned submarine Vela, which served the Navy from 1973 to 2010. The earlier Vela belonged to Foxtrot class submarine of Soviet origin.

What is the carrying capacity of Vela?

- Naval sources said the submarine can take up to eight officers and 35 men.

What are the weapons on Vela?

- The submarine is equipped with C303 anti torpedo countermeasure system, and can carry up to 18 torpedoes or Exocet anti-ship missiles or 30 mines in place of torpedoes.

What is Vela's home base?

- Vela will be commissioned into the Indian Navy's western command, and will be based in Mumbai.

Did Covid-19 delay Vela's commissioning?

- The sea trials of Vela were delayed due to COVID 19, which led to a delay in its commissioning.

What are the dimensions of Vela and its engine power?

- Vela has a length of 67.5 metres and height of 12.3 metres. The beam measures 6.2 metres. It can reach a top speed of 20 knots when submerged and a surface top speed of 11 knots.
- The submarine has four MTU 12V 396 SE84 diesel engines and 360 battery cells for power, and has a silent Permanently Magnetised Propulsion Motor.
- The hull, fin and hydroplanes are designed for minimum underwater resistance and all equipment inside the pressure hull is mounted on shock-absorbing cradles for enhanced stealth.
- Vela is a diesel-electric powered attack submarine, designed to act as “sea denial” as well as “access denial” warfare to the adversary.
- The submarine can engage in offensive operations across the entire spectrum of naval warfare, including anti-surface warfare, anti-submarine warfare, intelligence gathering, mine laying and area surveillance.

New Crypto Bill

(Source: [The Hindu](https://www.thehindu.com/news/national/new-crypto-bill/article17444441.ece))

Context: *The Union Government will introduce a Bill to regulate cryptocurrency and ostensibly ban all private cryptocurrencies, along with 25 other pieces of legislation, in the winter session of Parliament that begins on November 29. The Cryptocurrency and Regulation of Official Digital Currency Bill, 2021, which is yet to be officially approved by the Cabinet, seeks to create a facilitative framework for creation of the official digital currency to be issued by the Reserve Bank of India.*

Pilot project

- The central bank is looking at launching a pilot project for an official digital currency soon.
- “The Bill also seeks to prohibit all private cryptocurrencies in India. However, it allows for certain exceptions to promote the underlying technology of cryptocurrency and its uses,” according to the stated purport of the Bill in a Lok Sabha bulletin and the tentative list of the government’s legislative business for Rajya Sabha.
- So far, the precise contours of the Bill are not in the public domain and no public consultations have been held.
- The Finance Ministry has been tight-lipped on the Bill, which had been readied for the Cabinet’s approval as early as August.

No details

- Media queries about who would be held responsible if investors betting on crypto assets that are liberally advertised, were to make heavy losses, have been met with silence.
- When Prime Minister Narendra Modi chaired a meeting on November 13, to assess the regulatory prospects for cryptocurrencies with the top brass of the central bank and the Ministries of Home Affairs and Finance, a consensus was reached to stop ‘attempts to mislead the youth through over-promising and non-transparent advertising’
- It was also resolved that unregulated crypto markets cannot be allowed to become avenues for money laundering and terror financing. A close watch and pro-active steps are necessary for the sector, the Government had determined.
- When the Standing Committee on Finance met cryptocurrency stakeholders, industry representatives agreed with the need for regulation of the crypto market but were unable to answer several questions raised by parliamentarians.
- Apart from the proposed cryptocurrency law, the government has also listed a Bill to repeal the three contentious farm laws of 2020, as promised by Prime Minister Modi last Friday, after they had triggered an year-long protest from a section of farmers. The Government has also listed the Electricity

(Amendment) Bill, 2021, which seeks to remove all cross-subsidies and make all consumers pay the actual cost of supply.

Rani Gaidinliu

(Source: [Indian Express](#))

Context: Union Home Minister Amit Shah virtually *laid the foundation stone for the ‘Rani Gaidinliu Tribal Freedom Fighters Museum’* in Manipur’s Tamenglong district.

The museum project

- The museum project was sanctioned by the Ministry of Tribal Affairs, Government of India in 2019 at an estimated cost of Rs 15 crore.
- Official sources said that the museum would help preserve and exhibit artefacts related to the tribal freedom fighters, involved in different stages of the fight against the British colonial rule like Anglo-Manipuri War, Kuki-Rebellion, Naga-Raj movements, among others.
- However, with the proposal in its nascent stage, the details of the project report is yet to be finalised.
- The proposed museum will be set up in Rani Gaidinliu’s birthplace, Luangkao Village in Tamenglong district.



Rani Gaidinliu, the daughter of the hills

- A spiritual and political leader, Rani Gaidinliu, of the Rongmei tribe, was born on January 26, 1915 at Luangkao village, now in Taosem Sub-Division under Tamenglong District of Manipur.
- At 13, she became associated with freedom fighter and religious leader, Haipou Jadonang, and became his lieutenant in his social, religious and political movement. Jadonang, who was also a Rongmei, started the ‘Heraka movement’, based on ancestral Naga religion, and envisioned an independent Naga kingdom (or Naga-Raja).
- Rani Gandiliu’s association with Jadonang prepared her to fight the British. After the execution of Jadonang, she took up the leadership of the movement — which slowly turned political from religious.
- Rani started a serious revolt against the British and was eventually imprisoned for life. She was released after 14 years, in 1947.
- Acknowledging her role in the struggle against the British, Jawaharlal Nehru called her the “Daughter of the Hills” and gave her the title “Rani” or queen. She passed away on February 17, 1993 at her native village Luangkao.
- But before that, she was bestowed a number of honours including the Tamrapatra in 1972, Padma Bhushan in 1982, Vivekananda Sewa Summan in 1983, and Stree Shakti Puraskar in 1991. She posthumously was awarded the Bhagwan Birsa Munda Puraskar in 1996. The Government of India also issued a commemorative stamp in her honour in the same year.
- The Indian Coast Guard commissioned a Fast Patrol Vessel “ICGS Rani Gaidinliu” in 2016. In 2015, the Centre, on her birth anniversary, issued commemorative coins of Rs 100 and a circulation coin of Rs 5 in her honour.

Legacy

- According to Imphal-based historian Professor N Joykumar Singh, Rani Gaidiliu was one of the few women political leaders who exhibited outstanding courage during the colonial period, despite limitations.
- Unlike Jadonang, whose approach was inclined to be “millenarian”, Rani orchestrated for the need of an armed movement against colonial rule.
- Historians even hailed Rani’s movement as a significant event in the freedom struggle that inspired many, said Singh, adding that in 1938, the Nikhil Manipur Maha Sabha, the first political party of Manipur during the British colonial rule adopted a resolution to free Rani Gaidinliu from prison.

India, U.S. commit to linking economies across sectors

Context: *The United States and India committed to integrating their economies across sectors to harness the untapped potential of the bilateral relationship, at the Trade Policy Forum convened after a gap of four years.*

Details:

- Co-chaired by Commerce and Industry, Textiles, Consumer Affairs and Food & Public Distribution Minister Piyush Goyal and U.S. Trade Representative, Ambassador Katherine Tai, the Forum resolved to take economic ties between the two countries to the ‘next high level’ and exchanged views on ‘potential targeted tariff reductions’.
- The two sides decided to activate working groups of the Trade Policy Forum (TPF) on agriculture, non-agriculture goods, services, investment, and intellectual property to meet frequently and address issues of mutual concern in a mutually beneficial manner.
- The idea is to deliver tangible benefits to farmers and businesses of both countries by resolving outstanding market access issues.

Mutual market access

- Specifically, the Forum has decided to forge an agreement to facilitate U.S. market access for mangoes, grapes, and pomegranates, pomegranate arils from India, and reciprocate with similar access in the Indian market to cherries, pork/pork products and alfalfa hay for animal feed from the United States.
- Discussions will also be held on enhancing market access for products such as distillers’ dried grains with solubles from the U.S. and resolving market access concerns for water buffalo meat and wild caught shrimp from India.

‘Restore GSP benefits’

- The Indian side has sought restoration of the GSP (Generalized System of Preferences) benefits by the U.S. and said this would help industries from both sides in integrating their supply chain efficiently. The United States noted it ‘for suitable consideration’, an official statement said.
- The Forum also agreed on the significance of negotiating a Social Security Totalization Agreement in the interest of workers from both sides, and pursuing further engagements for reaching such an agreement.
- The agreement, being pursued for over a decade, would allow workers from both countries to move their retirement savings.



Bolstering ties | The Indo-U.S. Trade Policy Forum decides to take economic ties to the 'next high level'

| | |
|--|--|
|  <p>MARKET ACCESS India seeks easier market access for its mangoes, grapes and pomegranates; U.S. seeks quid pro quo for cherries, pork products and alfalfa hay</p> |  <p>HOPE FOR IT WORKERS India, U.S. to restart talks on agreement to help professionals in both countries move statutory social security contributions back home</p> |
|  <p>ACTION PLAN Working groups on agriculture, non-agriculture goods, services will meet frequently</p> |  <p>POST-COVID PLAN Both sides to work with allies to secure pharmaceutical manufacturing base</p> |



Minister of Commerce and Industry Piyush Goyal with U.S. Trade Representative Katherine Tai in New Delhi.
▪ SPECIAL ARRANGEMENT

- The absence of such an agreement particularly affects Indian IT workers in the U.S., who lose billions of dollars in U.S. social security contributions that they cannot repatriate home.
- With the WTO ministerial meeting coming up next week, India and the U.S. also discussed collaboration and constructive engagement in various multilateral trade bodies, including the WTO and the G20 for achieving a shared vision of a transparent, rules-based global trading system among market economies and democracies.
- The Forum also decided to find mutually agreed solutions on outstanding WTO disputes between the two countries.
- Ms. Tai and Mr. Goyal directed the TPF working groups to develop plans of action for making substantive progress by March 2022.
- The plans would include identifying specific trade outcomes that could be finalised for an inter-sessional TPF meeting to be held by mid-2022.

PESA Act

(Source: [Indian Express](https://www.indianexpress.com))

Context: The Chhattisgarh government has formulated draft rules under PESA Act, 1996, terming it the Chhattisgarh Panchayat Provisions (Extension of the Scheduled) Rules, 2021. The draft rules were circulated to departments before a meeting of MLAs was called by Panchayat Minister T S Singh Deo. The draft rules are soon expected to be put before the cabinet, after amendments are made based on suggestions from the departments.

What is the PESA Act, 1996? Why are its rules being formed in the state now?

- The Panchayat (Extension of the Scheduled Areas) Act, 1996 or PESA, was enacted by the Centre to ensure self-governance through gram sabhas (village assemblies) for people living in scheduled areas.
- It legally recognises the right of tribal communities, residents of the scheduled areas, to govern themselves through their own systems of self-government, and also acknowledges their traditional rights over natural resources.
- In pursuance of this objective, PESA empowers gram sabhas to play a key role in approving development plans and controlling all social sectors.



- This includes the processes and personnel who implement policies, exercising control over minor (non-timber) forest resources, minor water bodies and minor minerals, managing local markets, preventing land alienation and regulating intoxicants among other things.
- State governments were required to amend their respective Panchayat Raj Acts without making any law that would be inconsistent with the mandate of PESA.
- In Chhattisgarh, the Congress government made PESA an election issue, and promised laws under the Act, instituting devaluation of power, and strengthening the gram sabhas at the village level.
- Almost a year ago, Singh Deo as the panchayat minister started a series of consultations, organised with village-level representatives of all the scheduled areas.
- The minister heard the tribal representatives, who discussed the intricacies of 10 broad topics ranging from dispute resolution to mining, and from management of markets to management of minor forest produce. After layered consultations, a draft of the rules in nine chapters was prepared.
- Six states have formed the PESA laws, and Chhattisgarh would become the seventh state if the rules are enacted.

Why are rules under PESA important? What topics will be covered?

- PESA rules enable the residents of scheduled areas to strengthen their village-level bodies by transferring power from the government to the gram sabha, a body of all the registered voters of the village.
- The powers of gram sabhas include maintenance of cultural identity and tradition, control over schemes affecting the tribals, and control over natural resources within the area of a village.
- The PESA Act thus enables gram sabhas to maintain a safety net over their rights and surroundings against external or internal conflicts. Without proper rules, its implementation is not possible as it is an exercise in decentralising the power from institutionalised structures, back to the village residents.
- The laws, once formed, will give gram sabhas the power to take decisions not only over their customs and traditionally managed resources, but also on the minerals being excavated from their areas. The rules state that the gram sabha will have to be kept informed by any and all agencies working in their village, and that the gram sabha has the power to approve or stop the work being done within the village limits.
- The rules also give power to the gram sabhas over management of resources over *jal, jangal, zameen* (water, forest and land), the three major demands of tribals; minor forest produce; mines and minerals; markets; and human resources.
- The gram sabha would have the powers to monitor and prohibit the manufacturing, transport, sale and consumption of intoxicants within their village limits. It also has a duty to maintain peace and resolve conflicts arising in the village, while protecting tribal customs and traditions, and encouraging customs like *ghotul*.

Over 50% of Bihar population multidimensionally poor: NITI

(Source: [The Hindu](#))

Context: *With more than 50% of the population in Bihar identified as “multidimensionally poor”, the State has the maximum percentage of population living in poverty among all the States and the Union Territories, according to Government think tank NITI Aayog’s Multidimensional Poverty Index (MPI).*

Details:

- As per the index, 51.91% of the population in Bihar is poor, followed by Jharkhand (42.16%), Uttar Pradesh (37.79%), Madhya Pradesh (36.65%) and Meghalaya (32.67%). On the other hand, Kerala



registered the lowest poverty levels (0.71%), followed by Puducherry (1.72%), Lakshadweep (1.82%), Goa (3.76%) and Sikkim (3.82%).

- Other States and Union Territories where less than 10% of the population is poor include Tamil Nadu (4.89%), Andaman & Nicobar Islands (4.30%), Delhi (4.79%), Punjab (5.59%), Himachal Pradesh (7.62%) and Mizoram (9.8%).
- “The development of the National Multidimensional Poverty Index of India is an important contribution towards instituting a public policy tool which monitors multidimensional poverty, informs evidence-based and focused interventions, thereby ensuring that no one is left behind,” NITI Aayog Chairman Rajeev Kumar said in the foreword.
- He said India’s national MPI measure uses the globally accepted and robust methodology developed by the Oxford Poverty and Human Development Initiative (OPHI) and the United Nations Development Programme (UNDP).
- “Importantly, as a measure of multidimensional poverty, it captures multiple and simultaneous deprivation faced by households.”

Agriculture bills

(Source: [Indian Express](#))

Context: After the nearly year-long agitation by farmers, mostly from Punjab, Haryana and Uttar Pradesh, Prime Minister Narendra Modi Friday announced that Centre will repeal the three contentious farm laws. The farmers have been protesting against the Farmers’ Produce Trade and Commerce (Promotion and Facilitation) Act, 2020; Essential Commodities (Amendment) Act, 2020; and Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020 alleging that the laws will lead to the abolishment of the minimum support price (MSP) regime and leave them at the mercy of big corporates.

Farmers’ Produce Trade and Commerce (Promotion and Facilitation) Act, 2020

- Government claimed that the Act will give farmers “freedom of choice to sell to anyone and anywhere”. Farmers said there was nothing new in the law as a major percentage of agricultural produce was already being sold outside the APMC (agricultural produce market committee) regulated yards.
- The APMC market yards, however, set the benchmark rates through the daily auctions and offered reliable price signals to the farmers.
- Farmers said that the law would lead to two markets and two different sets of rules. A key problem with the Act is the creation of a practically unregulated market in the “trade area” along side an already existing regulated market in APMC market yards, subject to two different laws, different regimes of market fees, and different sets of rules which would lead to the exploitation of farmers over issues such as rates, weighing, grading and moisture measurement of produce among others.
- The Act has no provision to regulate the traders. Any person with a PAN (permanent account number) is eligible to procure grains from the markets at their own price and hoard the produce.
- Instead of making provisions of registration to regulate the traders, the farmers alleged that the Centre was trying to pass the buck on to the state governments to regulate the traders in the proposed amendments, which were later proposed during farm union’s meeting with Union government. Farmers said that even in the proposed amendment the market area was not defined clearly.
- “There was a fear among farmers that with creation of private mandis the existing APMCs will go and government will do away with the public procurement system under MSP regime and everything will be controlled by the big corporates and big farmers,” said Prof Sukhpal Singh, Principal Economist, (Marketing) Punjab Agriculture University (PAU), adding that with this Centre “overrides and undermines” the role of state governments.
- There was no provision under which farmers could approach a court of law in case of any fraud by the traders. They could only approach the SDM or Deputy Commissioner.

- Later, Centre proposed to amend the law to provide the provision to farmers to approach civil court.

Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020

- The government claimed that the law will remove intermediaries from the farming. In Punjab, arhtiyas (commission agents) act as intermediaries between the government or private players and farmers for procuring their produce.
- The farmer bodies, however argued that the new law will bring multiple middlemen in the new system and claimed that the legislation does not protect farmers' interest.
- They said Sections 2 (g), (ii) Sec.2 (d), Sec.3 (1) (b), Sec 4(1), 4(3), and 4(4) of the law will create various types of middlemen.
- For instance, the Section 2 (g) says: "A farm agreement is to be an agreement between a farmer and a sponsor or a sponsor or any third party prior to the production or rearing of any farming produce of a predetermined quality, in which the sponsor agrees to purchase such farming produce from the farmer and to provide farm services".
- Farmers argued that the third party in this section has been left undefined and it can be any person or intermediary and in such a situation it would lead to creation of multiple intermediaries such as commercial agents, arhatiyas and village touts .
- They also said the words "sponsor" in Section 2 (g) (ii) and "farm service provider" in Section 3 (1) (b) were not clearly defined. Further, Section 4 (1) & Section 4 (3) used several such words which could lead to creation of other middlemen within the system.
- "Section 10 says 'an aggregator or farm service provider may become a party to the farming agreement'. 'Aggregator' means any entity, including a farmer producer organization (FPO) that acts as an intermediary between a farmer or a group of farmers and a sponsor and provides aggregation related services to both farmers and sponsor," pointed farm unions.
- In Bihar, following doing away with APMC Act, several village level touts, and small and big traders started controlling the crop purchase from the farmers, said farm unions.

Essential Commodities (Amendment) Act, 2020

- The farmers said this law is not only anti-farmer but also anti-human, anti-poor and anti-consumer. They said people will die of hunger if it was implemented. Even Centre "overruled" the provisions of this law at least twice in past one year.
- The preamble of this Act says that its purpose is "enhancing income of farmers" as the Essential Commodity (EC) Act 1955 didn't talk about farmers or their incomes. There was no restriction under the ECA on farmers or FPOs from stocking produce and selling it. The restriction was on agri-business companies and traders, which have the means to stock farmers' produce.
- "Such restrictions were removed for all food commodities, which gave traders freedom to purchase and store any quantity, hence indulging in hoarding. Therefore it should be called 'Food Hoarding (Freedom for Corporates) Act'," the All India Kisan Sangharsh Coordination Committee (AIKSCC) had said, adding it will lead to complete market domination by big companies, which would dictate terms to farmers .
- "It has been established that when there is a price rise in the retail market, the benefit is not passed on to the farmers, who sell at low prices mostly. The high prices of commodities eventually affect the end consumers," said farm bodies. When unlimited stocking of the essential commodities like cereals, pulses, oilseed, onion, potato will take place, the consumer will feel the price pinch.
- Jagmohan Singh Patiala, general secretary Bharti Kisan Union (BKU) Ekta (Dakaunda) said that this law affects the urban and rural poor consumers who get grains under Public Distribution System (PDS).
- "People will die of hunger if this is implemented. While the government claims that the Acts have got nothing to do with the procurement under existing MSP regime, in the EC Amendment Act, it is stated that 'nothing contained in this sub-section shall apply to any order relating to the PDS or the Targeted

PDS (TPDS), made by the Government under this Act or under any other law for the time being in force’,” he said, adding that the law does not state that PDS will continue.

- Also, it qualifies the non-applicability to PDS and TPDS “for the time being in force” and this “time being in force” is very sinister, Jagmohan Singh added.
- “Even if the government gives some cash to the people, who get grains from PDS, to purchase the commodities from the market, it will not work owing to several reasons including price fluctuation,” he added.

Three-rate GST structure

(Source: [The Hindu](#))

Context: The Government can rationalise the GST rate structure without losing revenues by rejigging the four major rates of 5%, 12%, 18% and 28% with a three-rate framework of 8%, 15% and 30%, as per a National Institute of Public Finance and Policy (NIPFP) study.

Details:

- The findings of the NIPFP, an autonomous think tank backed by the Finance Ministry, assume significance as the GST Council has tasked a Group of Ministers, headed by Karnataka CM Basavaraj S. Bommai, to propose a rationalisation of tax rates and a possible merger of different tax slabs by December to shore up revenues.

Rejigging rates | The current GST regime with four key tax slabs can be smoothly replaced by a three-rate structure without the exchequer losing revenues, says study

| CURRENT GST RATE STRUCTURE | POSSIBLE REVENUE-NEUTRAL RATES |
|----------------------------|--|
| 5% | 8% |
| 12% | 15% (merging the 12% and 18% slabs) |
| 18% | |
| 28% (for demerit goods) | 30% |
| Total rates - 8 | Total rates - 7 (assumes no changes in special rates) |

- Multiple rate changes since the introduction of the GST regime in July 2017 have brought the effective GST rate to 11.6% from the original revenue neutral rate of 15.5%, Finance Minister Nirmala Sitharaman pointed out at the last Council meeting in September.
- Merging the 12% and 18% GST rates into any tax rate lower than 18% may result in revenue loss. Our study proposes that the GST Council may consider a three-rate structure by adopting 8%, 15% and 30% for revenue neutrality.
- The nature of rate changes has also meant that over 40% of taxable turnover value now falls in the 18% tax slab, thus any move to dovetail that slab with a lower rate will trigger losses to the tax kitty that need to be offset by marginal hikes in other remaining major rates — 5% and 28%.



- If the revenue loss from merging the 12% and 18% slabs were to be met by just hiking the rate on demerit or sin goods, the highest GST rate would have to be raised to almost 38%. The lowest standard rate will have to be raised from 5% to about 9%.
- Currently, the GST regime levies eight different rates, including zero for essential goods and special rates of 0.25% on diamonds, precious stones and 3% on gems and jewellery.
- The NIPFP paper assumes these rates remain unchanged after noting that raising rates on 'high-value low volume goods' like precious stones and jewellery 'may encourage unaccounted (undisclosed) transactions and therefore revenue leakages'.
- Restructuring GST rates is a timely idea to improve revenues, Mr. Mukherjee said, adding that it was important to sequence the transition to the new rate structure so as to minimise the costs associated with tax compliance, administration and economic distortions.
- If the GST rate structure prevailing at its onset in July 2017 was restored last year, additional GST revenues of nearly ₹1.25 lakh crore could have accrued in 2020-21, estimates the NIPFP paper.

Scorpene class submarine INS Vela

(Source: [The Hindu](#))

Context: *Vela, the fourth submarine of P75 of the Indian Navy, was Thursday commissioned by Navy chief Admiral Karambir Singh at the naval dockyard. This will be the second addition to the Indian Navy's fleet of warships after INS Vishakapatnam's commissioning.*

Details:

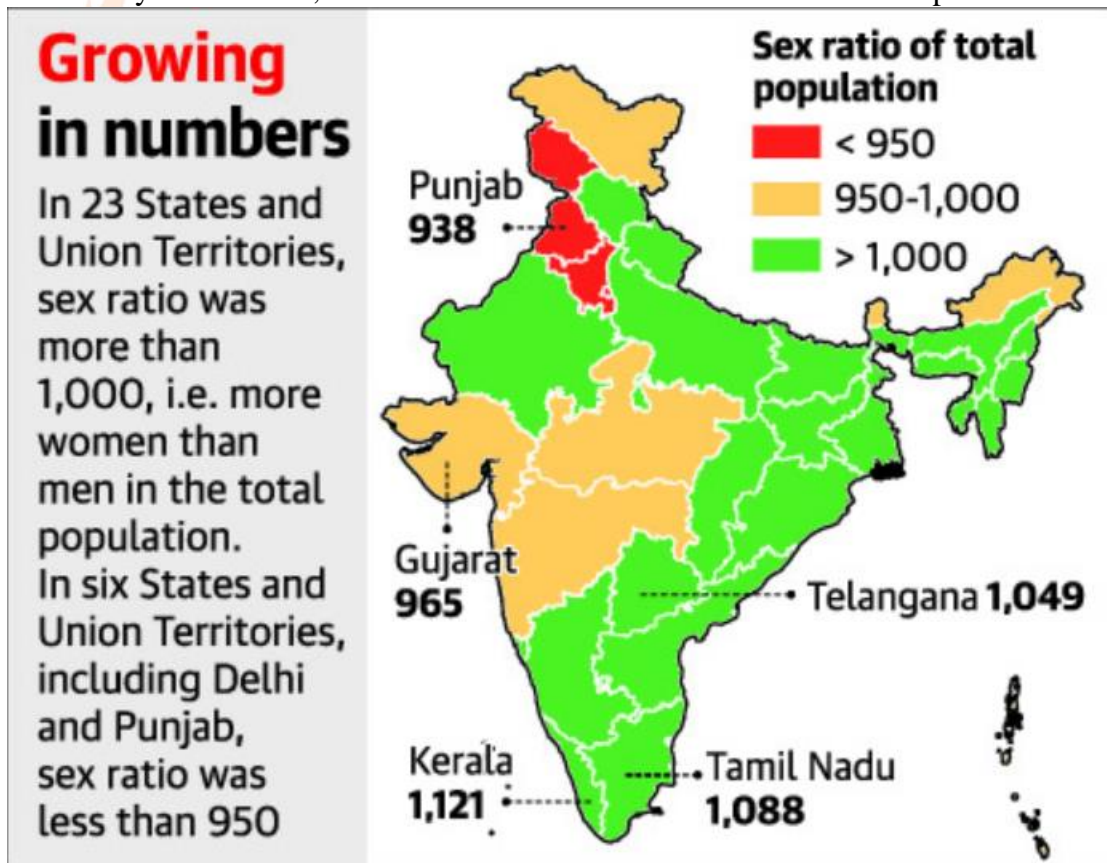
- Conceptualised for the acquisition for 25 submarines at the time of the IK Gujral government, P 75 evolved into a 30-year plan for building submarines.
- In 2005, India and France signed a \$ 3.75 billion contract for building six Scorpene class submarines.
- The executing company on the Indian side is Mazgaon Docks Ltd, and on the French side, it is DCNS, which is now called Naval Group.
- The project has been dogged by delays and questions over the reluctance of the French government to act on the commitment for "transfer of technology" that was an integral part of the contract.
- As a result, the first of the six subs, INS Kalvari, was commissioned five years behind schedule, in 2017.
- After Kalvari, two more submarines under the contract, INS Khanderi and INS Karanj, were commissioned. Vela is the fourth, and sea trials are ongoing for Vagir, while the sixth, Vagsheer, is under construction.
- Vela is named after a decommissioned submarine Vela, which served the Navy from 1973 to 2010. The earlier Vela belonged to Foxtrot class submarine of Soviet origin.
- Naval sources said the submarine can take up to eight officers and 35 men.
- The submarine is equipped with C303 anti torpedo countermeasure system, and can carry up to 18 torpedoes or Exocet anti-ship missiles or 30 mines in place of torpedoes.
- Vela will be commissioned into the Indian Navy's western command, and will be based in Mumbai.

NFHS says women outnumber men

(Source: [The Hindu](#))

Context: The fifth edition of the National Family Health Survey (NFHS) has confirmed signs of a demographic shift in India. For the first time since the NFHS began in 1992, the proportion of women exceeded men: there were 1,020 women for 1,000 men. In the last edition of the survey in 2015-16, there were 991 women for every 1,000 men.

- Only the decadal Census is considered the official marker of population trends in India and has a wider surveillance programme.
- The NFHS surveys are smaller, but are conducted at the district level and are a pointer to the future.



Only improved

- However, sex ratio at birth for children born in the past five years only improved from 919 per 1,000 males in 2015-16 to 929 per 1,000, underscoring that boys, on average, continued to have better odds of survival than girls.
- Most Indian States and Union Territories (UTs) had more women than men, the NFHS-5 shows. The States that had fewer women than men included Gujarat, Maharashtra, Arunachal Pradesh, Haryana, Madhya Pradesh and Punjab and Union Territories such as Jammu & Kashmir, Chandigarh, Delhi, Andaman and Nicobar Islands, Dadra and Nagar Haveli, and Ladakh.
- All of these States and UTs, however, showed improvements in the population increase of women.
- A State-wise breakup of the NFHS data also show that India is on its way to stabilising its population, with most States and UTs having a Total Fertility Rate (TFR) of less than two.
- A TFR of less than 2.1, or a woman on average bearing two children over a lifetime, suggests that an existing generation of a people will be exactly replaced. Anything less than two suggests an eventual decline in population over time.



- Only six States — Bihar, Meghalaya, Manipur, Jharkhand and Uttar Pradesh — have a TFR above two. Bihar has a TFR of three which, however, is an improvement from the 3.4 of the NFHS-4. Again, the TFR in all States has improved in the five years.

Most populous country

- India is still poised to be the most populous country in the world, with the current projection by the United Nations population division forecasting that India's population will peak at 1.6 billion to 1.8 billion from 2040 to 2050.
- A Government report last year projected that India would overtake China as the world's most populous country around 2031 — almost a decade later than the United Nations projection of 2022.
- A notable exception is Kerala, a State with among the highest ratios of women to men at 1,121 and improvement over 1,049 recorded in the NFHS-4. However, the TFR in Kerala has increased to 1.8 from 1.6. The State has also reported a decline in the sex ratio of children born in the past five years. There were 1,047 females per 1,000 males in 2015-16 that has now declined to 951 per 1,000 males.
- The findings of NFHS-5 from 22 States and UTs covered in Phase-I were released in December 2020, and the remaining comprising Arunachal Pradesh, Chandigarh, Chhattisgarh, Haryana, Jharkhand, Madhya Pradesh, National Capital Territory (NCT) of Delhi, Odisha, Puducherry, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and Uttarakhand were made public on Wednesday.
- The NFHS-5 survey work has been conducted in around 6.1 lakh sample households from 707 districts (as on March, 2017) of the country, covering 724,115 women and 101,839 men to provide disaggregated estimates up to the district level.

The Bharat Gaurav scheme

(Source: [The Indian Express](https://www.thehindu.com/news/national/article4644444.html))

Context: To promote and attract tourism business, the Indian Railways Tuesday launched Bharat Gaurav trains that will be operated by private players and run on theme-based circuits. Through this policy, which offers operators the “Right of Use” of its rakes and infrastructure, the Railways has liberalised and simplified a part of operations that was otherwise carried out mostly by the Indian Railway Catering and Tourism Corporation (IRCTC). While any entity can run these trains, including state governments, it is implied that the policy is targeted at tour operators.

What is the Bharat Gaurav policy?

- According to the Bharat Gaurav policy, any operator or service provider, or virtually anyone, can lease trains from Indian Railways to run on a theme-based circuit as a special tourism package.
- The tenure of the arrangement is a minimum of two years and maximum of the codal life of the coach. The operator has the freedom to decide the route, the halts, the services provided, and, most importantly, the tariff.
- The IRCTC runs such theme-based tourist trains, for instance, the Ramayana Express, which goes on a tour of several places connected to Lord Ram.
- In such packaged tours, typically the passengers stop over at a place, stay at hotels, undertake sightseeing, etc. — all organised by tour operators.
- The Bharat Gaurav operator will also have to propose a similar business model wherein it takes care of local transport, sightseeing, food, local stays, etc. along with operating the trains.
- Anyone can approach Railways to lease the 3033 conventional Integral Coach Factory-design coaches earmarked for this segment. In fact, if the operator finds it feasible, then it can even purchase rakes from Indian Railway production units and run them.

- Each train will have between 14 and 20 coaches (including two guard coaches or SLR). The operator has to, however, take care of end-to-end, comprehensive service like hotel stay, local arrangements, etc.
- These trains cannot be used as ordinary transport trains between an origin and destination.
- The operator can carry out its own furnishings of the interiors of the trains if it wants within safety norms. It can decide what kind of interiors or berth composition it wants. However it cannot tinker with or dismantle critical parts of the coach that has a bearing on safety and operation.
- It can name the circuit, the train and sell advertisement space. It can carry out branding on the exterior and interior of the train. It can tie up with agencies and entities for business development and logistics, etc. It can decide the food and entertainment to add to the experience of the passengers.
- However, it has to be ensured that things that are not allowed by railway laws are also not carried out onboard these trains. For instance, the operator cannot serve alcohol, states the policy.
- The policy is silent on whether non-vegetarian food would be allowed, but officials said there shouldn't be any restriction as it is allowed on the Indian Railway trains.
- The spirit of the policy is to give operators complete freedom to run the business and develop a business model in which Indian Railways will only physically run the trains, maintain them and charge a fee.

'Right of Use' charge

- The annual 'Right of Use' charges calculated on the basis of the type of coach taken and the duration. In Bharat Gaurav scheme, the first year's Right of Use charges have to be paid upfront and the second year's have to be paid 15 days before the completion of the preceding year.
- Delay in payment would result in a penalty equivalent to the bank's prevailing interest rate plus 3 per cent as administrative fee. If it is not paid within 30 days, the Right of Use may be terminated.
- The yearly Right of Use charge for one AC coach varies from Rs 3.5-1.4 lakh depending on class and age.
- A pantry car's Right of Use charge is between Rs 2 lakh and Rs 65,000 depending on the age and type.
- For a non-AC sleeper coach, it is between Rs 1.8 lakh and Rs 96,000. These charges have been fixed for five years after which they may be revised. In case the coaches are owned by the operator or purchased by Railway factories directly, the Right of Use charges will not apply.

INTERNATIONAL

Sri Lanka Cabinet clears China's role in terminal project

(Source: [The Hindu](#))

Context: Sri Lanka has decided to rope in China Harbour Engineering Company (CHEC) to construct the second phase of the Colombo Port's East Container Terminal (ECT), which was earlier to be developed jointly by Sri Lanka, India and Japan, until Colombo reneged on a 2019 trilateral agreement.

Details:

- Prominent Sri Lankan firm Access Engineering and CHEC have won the bid to construct the facility, the Department of Government Information said in a statement.
- CHEC, a subsidiary of the state-owned China Communications Construction Company, is already involved in strategic infrastructure projects in Sri Lanka, including the \$1-billion Colombo Port City coming up near Galle Face — the capital's iconic seafront — and a four-lane elevated highway connecting Colombo's suburbs, with a near-\$1-billion investment.
- The terms of the highway deal allow the state-run Chinese firm to own and run the highway for 15 years before transferring ownership to Sri Lanka.
- With the ECT development project now, China's role in Sri Lanka's ports — China Merchants Port Holdings Company already holds majority stakes at the southern Hambantota Port as well as the Colombo International Container Terminal at the Colombo Port — has further increased.
- CHEC's role at the ECT appears limited to civil works, according to sources familiar with the tendering process.
- The Ministry of Port and Shipping, in its invitation for international bids, said only firms with a domestic majority ownership — over 51% of the state held by Sri Lankan nationals — were eligible to participate. The ECT's development would require construction of an additional 700-metre-long quay wall and infrastructure around it, that was earlier estimated to cost at least \$700 million.
- While India and Japan had earlier agreed to bring in the investment, involving India's Adani Group, the Rajapaksa administration in February scrapped the deal signed by the former Sirisena-Wickremesinghe Government with New Delhi, citing resistance from port worker unions, and the Adani Group's refusal to agree to the terms set by Sri Lanka. India and Japan were quick to express their displeasure.
- Within weeks, Sri Lanka offered the West Container Terminal development project at the same port to the Adani Group, with no known tendering process, in what Colombo called "a compromise".

The 'Matosinhos Manifesto'

(Source: [Indian Express](#))

Context: The European Space Agency (ESA) council approved a manifesto to accelerate the use of space in Europe "to tackle the urgent and unprecedented societal, economic and security challenges faced by Europe and its citizens." At the Intermediate Ministerial Meeting that was held in Matosinhos, Portugal, the Council of Ministers unanimously adopted this resolution that lays down a vision for the continent in terms of maintaining and expanding its activities in space.

A brief history of the ESA

- The ESA is an intergovernmental organisation that was formed in 1975 with the aim of developing Europe's space capabilities. The organisation has 22 member states — Austria, Belgium, the Czech



Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland and the United Kingdom. Slovenia, Latvia and Lithuania are Associate Members.

- ESA notes that between 1945-1950, after the end of the Second World War, when many European scientists left western Europe to work in the US and the Soviet Union, European scientists realised they would be unable to complete solely national projects, and would be unable to compete with major superpowers.
- And so, a need for organising scientific effort was felt. In 1958, two prominent members of the European scientific community recommended that European governments set up a joint organisation for space research.

What resolution has now been passed?

- The resolution defines three “accelerators” to further advance Europe’s space ambitions.
- The first of these accelerators is for the ESA to start working towards the “Space for a Green Future”, so that people are better able to understand the current state of the planet and to develop scenarios and solutions for sustainable life on Earth.
- This is in line with achieving net-zero greenhouse gas emission targets by the year 2050.
- The second accelerator is called “Rapid and Resilient Crisis Response”, and it aims to support governments to act decisively on crises facing Europe, from flooding and storms to wildfires.
- In July, west Germany experienced catastrophic flooding, which was caused by a severe storm and continuous rains that caused rivers and streams to swell up and flood the towns and cities located alongside the banks of the river Ahr in Germany.
- The floods wreaked havoc in nearby areas and caused damage to buildings, infrastructure, the environment and people’s belongings.
- Before this, Germany was witness to extreme flooding in June 2013, which was one of the most severe large-scale flooding seen in the country in nearly six decades. Some other countries were also affected during this time, including Austria, Switzerland, Poland and Hungary, among others. Severe flooding was seen in Germany in August 2002 as well.
- In Greece, in August, thousands of people fled parts of the country due to raging uncontrolled wildfires.
- The latest report of the Intergovernmental Panel on Climate Change (IPCC) has flagged frequent weather events, such as heatwaves, extreme rainfalls and rising sea levels. Some of these factors may influence the way wildfires play out.
- The third accelerator mentioned in the resolution is “Protection of Space Assets”, whose objective is to safeguard ESA astronauts and assets from interference by space debris and space weather.
- Other than this, the council recognised two “inspirators” to reinforce European leadership in science, technology development and inspiration: an icy moon sample return mission and human space exploration.

Australia’s controversial Religious Discrimination Bill

Context: Australian Prime Minister Scott Morrison introduced a contentious piece of anti-discrimination legislation called the “Religious Discrimination Bill” in the parliament’s lower house.

What does the Religious Discrimination Bill say?

- Essentially, the act makes it unlawful to discriminate against a person on the grounds of religious belief or activity in a range of areas of life including work, education, access to premises and the provision of goods, services and accommodation.



- “Discrimination is unlawful if it occurs, for example, because of a religious belief or activity that the person holds or engages in. It is also unlawful if it occurs because of the person’s association with someone else who holds or engages in a religious belief or activity, regardless of whether or not they themselves hold or engage in a religious belief or activity,” the Bill says.
- But the bill also allows faith-based organisations such as religious schools to hire and enrol people from particular faiths. The bill states that religious bodies can give preference, “in good faith, to persons who hold or engage in a particular religious belief or activity”.
- It goes on to say that “...a religious body does not discriminate against a person under this Act by engaging, in good faith, in conduct that a person of the same religion as the religious body could reasonably consider to be in accordance with the doctrines, 26 tenets, beliefs or teachings of that religion.”
- Because of this clause, the bill has alarmed some LGBTQI groups and some legal experts who say that the bill will discriminate against gay teachers and students, The Sydney Morning Herald reported.
- It also reported that on the other hand, religious schools have welcomed the provisions of the bill for providing a clear national framework that will allow them to “proactively hire staff of their own faith, and create consistency by overriding patchy state laws.”

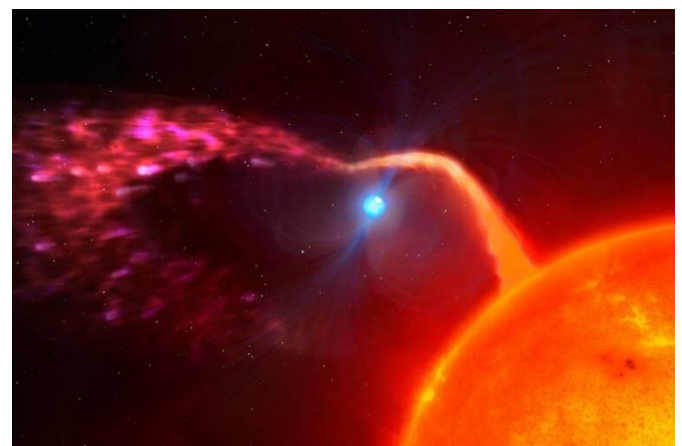
White dwarf with fastest spin

(Source: [Indian Express](http://www.indianexpress.com))

Context: *A white dwarf star that completes a full rotation once every 25 seconds is the fastest spinning confirmed white dwarf, according to a team of astronomers.*

Details:

- They have shown that it is an extremely rare example of a magnetic propeller system: The white dwarf is pulling gaseous plasma from a nearby companion star and flinging it into space at around 3,000 kilometres per second.
- It is only the second magnetic propeller white dwarf to have been identified in over 70 years, thanks to a combination of powerful and sensitive instruments.
- Put into context, one rotation of the planet Earth takes 24 hours, while the equivalent on J0240+1952 is a mere 25 seconds.
- That’s almost 20% faster than the confirmed white dwarf with the most comparable spin rate, which completes a rotation in just over 29 seconds.
- The study was led by the University of Warwick with the University of Sheffield. It has been published in the journal Monthly Notices of the Royal Astronomical Society: Letters.
- A white dwarf is a star that has burnt up all of its fuel and shed its outer layers, now undergoing a process of shrinking and cooling over millions of years.





- This particular star, named LAMOST J024048.51+195226.9 — or J0240+1952 — is the size of the Earth but is thought to be at least 200,000 times more massive. It is part of a binary star system; its immense gravity is pulling material from its larger companion star in the form of plasma.

How climate change causes ‘divorce’ among albatrosses?

Context: A new study published in *Proceedings of the Royal Society B* has provided evidence of the effect of environmental conditions on the longevity of relationships — among a population of albatrosses. It suggests that environmental conditions cause splits between black-browed albatrosses in the South Atlantic, which otherwise have long-term monogamous relationships.

So, how exactly can a changing environment cause these birds to split up?

- The researchers say “divorce” is triggered by breeding failure and that it yields some reproductive benefits, particularly for females which are more likely to find new partners and attain a higher breeding success.
- They say their results suggest divorce in long-lived monogamous sea populations is an adaptive strategy.
- The researchers analysed a long-term demographic dataset of the black-browed albatross population in the Falkland Islands, a group of remote islands in the South Atlantic about 483 km from the South American mainland. The researchers’ objective was to see if “divorce” was affected by environmental variability over the years. They collected data on their breeding behaviour starting 2003 from New Island, Falklands, which is home to about 15,500 pairs of albatrosses.
- The study says the “divorce rate” in the study population varied substantially across years and was directly modulated by temporal environmental variability. Higher “divorce rates” were recorded in lower-quality years, it says.
- It says all the modelling techniques adopted consistently show that “divorce” is triggered by breeding failure, “but, crucially, that it is also promoted by environmental harshness”.
- Hence, in light of the dramatic extent of the current climatic changes, the environmentally driven disruptions of the breeding processes of socially monogamous populations might represent an overlooked consequence of global change, with repercussions on demography and population dynamics.



Mains

GS II

Will Pak. law on Kulbhushan Jadhav help India's position?

(Source: [The Hindu](#))

Context: Recently, Pakistan's Parliament passed the International Court of Justice (Review and Reconsideration) Bill, 2021, granting the right of appeal to Kulbhushan Jadhav, former Indian Navy officer on death row on espionage and other charges. India expressed misgivings about the law, saying it still does not fulfil the terms laid down by the International Court of Justice (ICJ) in its July, 2019 ruling which included the provision that India be allowed consular access to Jadhav.

When was he arrested?

- Kulbhushan Jadhav was arrested in March 2016 and charged with espionage and sabotage against Pakistan's security installations. The case received attention as it came soon after the January 2016 Pathankot terror strike that India blamed on Pakistan-based terrorists.
- Pakistan blamed India for sponsoring cross-border terrorism targeting Balochistan. India maintained that Jadhav was a former Navy official and that he had been denied rightful access to legal counsel. The Pakistani law is another episode in the protracted legal process that began when India approached the ICJ.

What had India argued at the ICJ?

- India had argued at the ICJ in May 2017 that Jadhav had been denied his rights under the Vienna Convention and Pakistan had "failed to inform" New Delhi about his arrest.
- The law passed on November 17 at a joint session of the two Houses of Pakistan's parliament is being presented by the Imran Khan government as proof of Islamabad complying with the ICJ ruling.

What did the ICJ rule?

- In April 2017, a year after his arrest, Jadhav was sentenced to death by a military court in Pakistan for alleged acts of sabotage. India moved the ICJ and pointed out that Pakistan had failed to provide consular access to Jadhav.
- In its observations of May 18, 2017, the ICJ asked Pakistan to take "all measures at its disposal" to ensure that Jadhav is not executed pending its final decision. It observed that Pakistan had violated Article 36 of the Vienna Convention by not allowing India consular access to Jadhav and by denying his right to a proper legal representation.

Will this law help Jadhav access his legal counsel?

- The law will end up as mere paper work if Pakistan fails to provide verifiable legal access to Jadhav. India has already expressed its misgivings.
- The Ministry of External Affairs said the law is a repeat of the International Court of Justice (Review and Reconsideration) Ordinance, 2020, that Delhi had rejected as inadequate for meeting the goals stated in the ICJ's observations of July 2019.
- India said the ordinance did not "create the machinery of an effective review and reconsideration" as mandated by the ICJ.

- The Ministry of External Affairs pointed out in a statement that the law of November 2021 has actually codified the Ordinance of May 2020 without removing the shortcomings. India maintains that Pakistan cannot provide a “fair trial” for Jadhav.

Why has Pakistan made this move now?

- Pakistan’s Law Minister Farogh Naseem said Pakistan anticipated that India was planning to go to the ICJ again to file a contempt notice against Pakistan and that this law had averted or pre-empted this possible Indian move.
- Following this new law, Pakistan is likely to claim that it has not just complied with the verdict of the ICJ but has also enshrined it as a law.
- Pakistan’s former High Commissioner Abdul Basit has pointed out that Pakistan agreed to accept the jurisdiction of the ICJ during the government of Prime Minister Nawaz Sharif of the Pakistan Muslim League (Nawaz) and that the present government of Prime Minister Imran Khan is dealing with a legacy issue.
- It, therefore, appears that the law is also a move to settle a domestic political discord between Mr. Khan and the principal Opposition party, led by Maryam Nawaz, daughter of Mr. Nawaz Sharif.

Judicial Transfers

(Source: [The Hindu](#))

Context: *The transfer of Chief Justice Sanjib Banerjee from the Madras High Court to the Meghalaya High Court has given rise to a controversy over the question whether judicial transfers are made only for administrative reasons or have any element of ‘punishment’ behind them. In 2019, Justice Vijaya K. Tahilramani, another Chief Justice of the Madras High Court who was transferred to Meghalaya, chose to resign.*

What does the Constitution say on the transfer of judges?

- Article 222 of the Constitution provides for the transfer of High Court judges, including the Chief Justice. It says the President, after consultation with the Chief Justice of India, may transfer a judge from one High Court to any other High Court.
- It also provides for a compensatory allowance to the transferred judge. This means that the executive could transfer a judge, but only after consulting the Chief Justice of India. From time to time, there have been proposals that one-third of the composition of every High Court should have judges from other States.

What is the Supreme Court’s view on the issue?

- In *Union of India vs. Sankalchand Himatlal Sheth* (1977), the Supreme Court rejected the idea that High Court judges can be transferred only with their consent.
- It reasoned that the transfer of power can be exercised only in public interest; secondly, the President is under an obligation to consult the Chief Justice of India, which meant that all relevant facts must be placed before the Chief Justice of India; and thirdly, that the Chief Justice of India had the right and duty to elicit and ascertain further facts from the judge concerned or others.
- In *S.P. Gupta vs. President of India* (1981), also known as the ‘Judges’ Transfer Case’ and, later, the First Judges Case, the Supreme Court once again had an opportunity to consider the issue. Among other issues, it had to consider the validity of the transfer of two Chief Justices as well as a circular from the Law Minister proposing that additional judges in all High Courts may be asked for their consent to be appointed as permanent judges in any other High Court, and to name three preferences.



- The Minister's reasoning was that such transfers would promote national integration and help avoid parochial tendencies bred by caste, kinship and other local links and affiliations.
- The majority ruled that consultation with the Chief Justice did not mean 'concurrence' with respect to appointments.
- In effect, it emphasised the primacy of the executive in the matter of appointments and transfers. However, this position was overruled in the 'Second Judges Case' (1993). The opinion of the Chief Justice of India, formed after taking into the account the views of senior-most judges, was to have primacy. Since then, appointments are being made by the Collegium.

What is the current procedure for transfers?

- As one of the points made by the 'Second Judges Case' was that the opinion of the Chief Justice of India ought to mean the views of a plurality of judges, the concept of a 'Collegium of Judges' came into being.
- In the collegium era, the proposal for transferring a High Court judge, including a Chief Justice, should be initiated by the Chief Justice of India, "whose opinion in this regard is determinative".
- The consent of the judge is not required. "All transfers are to be made in public interest, i.e., for promoting better administration of justice throughout the country."
- For transferring a judge other than the Chief Justice, the Chief Justice of India should take the views of the Chief Justice of the court concerned, as well as the Chief Justice of the court to which the transfer is taking place.
- The Chief Justice of India should also take into account the views of one or more Supreme Court judges who are in a position to offer their views in the process of deciding whether a proposed transfer should take place.
- "In the case of transfer of a Chief Justice, only the views of one or more knowledgeable Supreme Court judges need to be taken into account." The views should all be expressed in writing, and they should be considered by the Chief Justice of India and four senior-most judges of the Supreme Court, which means, the full Collegium of five. The recommendation is sent to the Union Law Minister who should submit the relevant papers to the Prime Minister. The Prime Minister then advises the President on approving the transfer.

What makes transfers controversial?

- Transfer orders become controversial when the Bar or sections of the public feel that there is a punitive element behind the decision to move a judge from one High Court to another.
- As a matter of practice, the Supreme Court and the government do not disclose the reason for a transfer.
- For, if the reason is because of some adverse opinion on a judge's functioning, disclosure would impinge on the judge's performance and independence in the court to which he is transferred.
- On the other hand, the absence of a reason sometimes gives rise to speculation whether it was effected because of complaints against the judge, or if it was a sort of punishment for certain judgments that inconvenienced the executive.

Keeping a close eye on China's nuclear capabilities

(Source: [The Hindu](#))

Context: *The PRC's nuclear capabilities, in particular, are undergoing a fundamental transformation and a shift seems to be evident in both the quantity and the quality of the PRC's atomic arsenal. Even before the release of the CMPR, there was significant concern globally about the trajectory of China's strategic capabilities. Confirmation provided by the CMPR reveals four specific areas where change is underway — quantitative strength, atomic yield, delivery capabilities and posture.*

Low-yield weapons, concerns

- First is the size of the PRC's nuclear arsenal, which is set to increase. Hitherto, the PRC's nuclear arsenal has hovered at roughly 200 nuclear warheads, half of which directed at the United States (U.S.). By 2027, the CMPR estimates that this number is likely to increase to 700 weapons consisting of varying yields which is three and half times the current Chinese warhead strength.
- Second, the PRC is likely to privilege expansion in the direction of low-yield weapons. Low-yield weapons have been an area of interest and development for the PRC. They are weapons meant for battlefield use during conventional military operations and against conventional targets such as concentrations of armoured, artillery and infantry forces. Lower yield warheads help the PRC avoid causing collateral damage. Prior to the release of the CMPR, evidence that the PRC was testing low-yield devices has periodically surfaced in years past.
- In April 2020, the U.S. State Department's Findings on Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments drew attention to the PRC's deliberate opacity in the use of explosive containment chambers and excavations at its Lop Nur nuclear facility to test low yield weapons and Beijing's refusal to grant permission to access data from its International Monitoring System (IMS) stations to the Data Centre under the operational authority of the Preparatory Commission for the Comprehensive Nuclear Test-Ban Treaty Organization (CTBTO).
 - Actions of this kind have evoked strategic concern and increasingly confirm that China's atomic arsenal consists of a large number of low-yield weapons ideal for battlefield use.
- Third, these low-yield nuclear warheads are also likely to find their way into a key delivery capability — the PRC's Dong-Feng-26 (DF-26) ballistic missile. This missile has already undergone deployment at Korla in the Xinjiang region in Western China. It is an Intermediate-Range Ballistic Missile (IRBM) which is launched from a Transporter Erector Launcher (TEL). Indeed, the DF-26 has featured in extensive training exercises west of Jilantai in inner Mongolia. In addition to the DF-26, China has also developed the JL-2 Submarine Launched Ballistic Missiles (SLBMs) with a range of 7,200 kilometres capable of striking targets across continental Asia.

A key shift

- Finally, China's move towards a Launch on Warning (LoW) nuclear posture marks an important shift in the PRC's commitment to ensuring that no adversary doubts its response in the event of a nuclear first strike.
- A higher alert posture not only risks reducing the threshold for nuclear use in the form of preemption but it could also sow the seeds of miscalculation and unintended nuclear use.

Delhi needs to be cautious

- The PRC's nuclear competition with the United States will have a cascading effect. For India there are some serious implications with China's increasingly minatory nuclear military capabilities.
- First, the size of China's nuclear arsenal complicates the potency of India's nuclear arsenal and it is especially true in the face of the PRC's pursuit of missile defences in the form of the HQ-19 interceptors, which are specifically designed and developed to execute mid-course interception of medium-range ballistic missiles.
- A significantly larger Chinese nuclear arsenal paired to missile defences will limit damage to the PRC and more menacingly threatens the survivability of the Indian nuclear arsenal.
- Reinforcing this is Beijing's pursuit of a Launch on Warning (LoW) posture. Such a posture reduces the decision time for any Indian retaliatory nuclear strike in the heat of a war or crisis and places pressure on India to pursue its own LoW.
- Despite Beijing's pursuit of No First Use (NFU), which is reversible, the PRC could also significantly degrade an Indian retaliatory strike if China chooses to resort to First Use (FU) of nuclear weapons, and even worse outrightly decapitate India's nuclear forces. Indian strategic planners will have to think about the quantitative nuclear balance and India's nuclear posture vis-à-vis the PRC.



Additions, surveys by China

- Finally, India must pay close attention to the sub-surface leg of the PRC's nuclear arsenal. Despite the COVID-19 pandemic, the Chinese have added two new Type 094 (Jin class) SSBNs/nuclear-powered ballistic-missile submarines to their existing fleet.
- The maritime dimension of China's nuclear capabilities might not be an immediate strategic challenge but will potentially become one in the coming years for New Delhi. The Chinese Navy has carried out bathymetric and ocean mapping surveys in the Indian Ocean crucial to the execution of sub-surface military operations.
- The Bay of Bengal whose sea depth is very conducive for nuclear submarine missions will leave India exposed to a Chinese atomic pincer from the maritime domain in addition to the continental domain.
- New Delhi will have to specifically watch the pattern in the People Liberation Army Navy's (PLAN) nuclear submarine deployments and address the deficit in its subsurface nuclear delivery capabilities.

Making Ayurveda a real science

(Source: [The Hindu](#))

Context: *Ayurveda has gained popularity in recent years, but a lot is still to be done to ensure that it stands the scrutiny of science. The COVID-19 pandemic has been a major challenge for science in general and hence, 'How did Ayurveda deal with the pandemic?' becomes a pertinent question to ask.*

Rampant misinformation

- During the pandemic, we encouraged self-medication among the public by advocating preparations like decoctions. Thus, the message that unscrupulous, excessive and prolonged use of any medicine could be harmful was lost. We did not educate the public on the identification of the correct herbs, though we encouraged their consumption.
- For example, Giloy (*Tinospora cordifolia*) and Dalchini (*Cinnamomum zeylanicum*) are two plants where correct identification matters. Sometimes, *Tinospora crispa* and *Cassia cinnamon* are mistakenly identified as Giloy and Dalchini, which could be harmful.
- Almost every Ayurveda physician came up with his/her own formulations as a purported cure for COVID-19. Many lab reports suggesting clinical improvements with Ayurveda interventions were shared on different social media platforms. However, most of them could not make it to peer-reviewed journals.
- Thousands of COVID-19 cases treated by Ayurveda physicians could have provided good data that could have been further analysed. Even though the Ministry of Ayush came up with an online case registry, our fraternity could not make any meaningful use of it.
- Many clinical trials for testing Ayurveda interventions came up for COVID-19 and a few even got published. To show the efficacy of a new intervention in a condition where spontaneous recovery is more than 95%, one needs a large sample size and a robust study design.
- In most of these trials, the Ayurveda interventions were either in addition to Indian Council of Medical Research (ICMR) protocols or, when used as independent interventions, they were administered in mild to moderate cases only.
- Even governmental agencies widely publicised a few patent and proprietary formulations that were tested insufficiently, and drew flak from the scientific community for doing so.
- Scientifically speaking, 'immune boosting' is a vague and potentially misleading term. During the pandemic, every other Ayurveda pharmacy came up with its own patent and proprietary formulation that supposedly boosted immunity.
- The common public was made to believe that Ayush interventions were safe, of preventive value, and effective in treating the disease. But most of these claims lacked credible evidence.

- In my view, the Ayurveda sector should not have succumbed to the pressure to show that Ayurveda works in the treatment of COVID-19. Instead, the sector could have been visualised as a potential workforce.
- People could have been roped in for managing various tasks such as telephonic triaging, teleconsultations and counselling, monitoring home-quarantined patients, and coordinating referral services.
- Though some Ayush hospitals were converted into COVID-19 care centres, most of these facilities managed only mild to moderate cases. This is where a collaboration was required, between Ayush and conventional healthcare professionals.
- The protocols of ICMR and Ayush were disconnected and this is one of the reasons why there was no coordination. Moreover, this workforce could have been used to address the needs of non-COVID-19 patients who suffered the most because of various restrictions.

Questions to be asked

- A group of scientists and physicians has recently started a social media campaign calling all Ayush systems ‘pseudoscience’. These activists conduct chemical analysis of many Ayush formulations and demonstrate that many of these products contain high doses of unwarranted constituents such as antibiotics, corticosteroids and heavy metals.
- They also share publicly the scanned images of the unscientific and outdated content in the textbooks of Ayush graduate programmes. They also publish and share various clinical case reports where adverse events are reported after exposure to Ayush interventions.
- These activities are crucial and need the support from at least those who believe in rational Ayurveda.
- This would make Ayush academicians and policymakers introspect seriously about the current system. Academia, at present, has made Ayurveda a pseudoscience by teaching the young students that whatever is written in ancient texts is the ultimate truth and cannot be challenged. This non-falsifiability renders the system unscientific.
- The only way to make Ayurveda a real science is to present evidence before the scientific community showing that it works. Absence of uniform protocols either for diagnosis or for interventions make Ayurveda too subjective and diverse. An objective evaluation of complex Ayurveda practices is very difficult in the standard accepted format of ‘double blind randomised controlled trials’.
- The practical alternative is to go for longitudinal observational studies. Initially, around 20 different clinical conditions involving different organ systems can be identified, which practitioners are confident of treating.
- A large sample size with a long-term follow-up in a multi-centric design would go a long way in establishing the usefulness of Ayurveda. Most of the knowledge we now have about ischemic heart disease comes from a single longitudinal study going on since 1948, which demonstrates the value of observational studies.

Need for regulation

- Formally, we never teach our graduates patent and proprietary formulations. However, as these graduates set up their clinical practice, they start prescribing these formulations. Most of these products are not backed by reliable trials or even pre-clinical and toxicity data.
- The number of pharmacies that manufacture classical formulations has reduced to a bare minimum over the years, which shows how commercialisation has taken over the sector. This aspect needs to be regulated to ensure that such products go through robust pre-marketing studies. Even classical formulations that contain toxic substances such as heavy metals need to be regulated.
- Further, maintaining only a manageable number of colleges is essential to ensure that all students get good clinical exposure. The indiscriminate growth of new Ayush colleges is another matter of concern.

A close reading of the NFHS-5

(Source: [The Hindu](#))

Context: *The national health and demographic report card is finally completely out. The results from the first phase (conducted between June 2019 and January 2020) of the fifth round of the National Family Health Survey (NFHS-5) were released in December 2020. We now have the key results from the second phase (conducted between January 2020 and April 2021).*

Population has stabilised

- There are many pluses in the report card. A comparison of NFHS-5 with NFHS-4 (2015-16) reveals improvement in several dimensions such as educational attainment, institutional deliveries, vaccinations, infant mortality and much more.
- We can debate later whether the improvements are good enough given the scale and depth of what needs to be done. For now, we need to appreciate the progress, especially given the abysmal state of India's health infrastructure, which has been tragically apparent since the COVID-19 pandemic hit. Given how little India spends on health and education as a share of GDP, these improvements are particularly remarkable.
- The biggest positive headline news from NFHS-5 is that the total fertility rate (TFR), which is the average number of children born to a woman during her lifetime, has been falling over time and is now just below the replacement rate of 2.1. This is true across all States of India. This means that the total population has stabilised.
- Therefore, politicians can strike one thing off their to-do list and devote their energies to urgent health matters, instead of raising the bogey of population explosion to justify coercive population policies. There is absolutely no evidence to justify tying welfare support measures or holding elected office to the number of children.

Data on sex ratio

- Another headline reveals that nationally, there are 1,020 adult women per 1,000 men for the first time. Does this mean that Indian women are no longer “missing”, i.e. does this signal the beginning of the end of another tenacious problem — that of deep-rooted son preference which leads to illegal but pervasive sex-selective abortions as parents repeatedly try for at least one son?
- To gauge this, the key metric to examine would be the sex ratio at birth (SRB). The natural SRB is 105 boys to 100 girls, which typically stabilises to a 50-50 adult sex ratio. If there are pervasive sex selective abortions, leading to a masculine SRB (i.e., more than 105 boys to 100 girls), a part of this imbalance would carry forward into adulthood.
- But adult sex ratio is shaped by many factors other than sex selective abortions. In household surveys, the adult sex ratio might also be affected by sampling errors, arising, for instance, from undercounting migrant males.
- The natural SRB translates to 952 girls per 1,000 boys. Nationally, the SRB has improved from 919 in 2015-16 to 929 in 2019-21, but it is still short of the natural SRB. Major States with low SRBs are spread all over the country: Uttar Pradesh, Haryana, Punjab, Rajasthan, Bihar, Delhi, Jharkhand, Andhra Pradesh, Tamil Nadu, Odisha, Maharashtra.
- While many States have seen an improvement in their SRBs, some have also witnessed a worsening, e.g. Maharashtra, Tamil Nadu and Odisha. Therefore, we need to recognise that the move to a small family size combined with persistent son preference is likely to impede the improvements in SRB.

Anaemia and malnutrition

- A key health indicator that has worsened is the incidence of anaemia in under-5 children (from 58.6 to 67%), women (53.1 to 57%) and men (22.7 to 25%) in all States of India. Anaemia has debilitating effects on overall health, which is why the World Health Organization characterises it as a serious public



health concern; 20%-40% incidence is considered moderate. Indian States show variation: from 39.4% in Kerala to 79.7% in Gujarat: but barring Kerala, all States are in the “severe” category. It is tempting to think of the worsening as the COVID-19 effect.

- However, comparing the changes in anaemia in Phase 1 States (survey done pre-COVID) to Phase 2 States, we see that if anything, the increase in the former (which include Andhra Pradesh, Assam, Bihar, Gujarat, Kerala, Maharashtra, West Bengal, among others) is on average higher than the increase in Phase 2 States (Delhi, Uttar Pradesh, Chhattisgarh, Jharkhand, Rajasthan, Haryana, Tamil Nadu, Madhya Pradesh, Odisha, Punjab, among others).
- The discrepancy between Phase 1 and Phase 2 could reflect differences in actual incidence or survey-related issues.
- There are other instances of clear differences between Phase 1 and Phase 2 results. The three indicators of malnutrition: stunting (low height-for-age), wasting (low weight-for-height) and underweight (low weight-for-age): show an overall improvement. These conditions often occur together.
- Together, these reflect chronic or recurrent undernutrition, usually associated with poverty, poor maternal health and nutrition, frequent illness and/or inappropriate feeding and care in early life. These prevent children from reaching their physical and cognitive potential.
- However, the overall reduction in national estimates of these three measures masks an anomaly. In Phase 1, several States revealed a worsening in one or more of these, whereas in Phase 2, none of the States showed a worsening.
- It would be good to understand if the novel coronavirus pandemic affected the survey in Phase 2, leading to undercounting of incidence, or whether by pure chance, all States in Phase 2 happen to be better performers on the malnutrition count (something that could not have been known at the start of the survey in 2019).
- Also, along with an improvement in these three indicators, we see an increase in the proportion of overweight children, women and men. Being overweight also reflects malnutrition, with serious health consequences in the form of non-communicable diseases.
- In addition to anthropometric measures, lack of adequate nutrition is also measured by micronutrient deficiencies, i.e. lack of vitamins and minerals that are essential for body functions such as producing enzymes, hormones and other substances needed for growth and development. While the NHFS does not have data on this, the issue of micronutrients is related to diets. It would be good to note here that Indian diets display a rich diversity.
- Many traditional diets reflect both local climatic conditions as well as a multiplicity of sources of essential nutrients, such as proteins. Policing of diets, by imposing an unnatural uniformity, and preventing access to animal protein for large sections of Indians that are not traditionally vegetarian is likely to reduce micronutrient diversity and contribute to poor health outcomes.

Notes of caution

- Some analyses have suggested that the rate of progress has slowed down, based on comparisons between NHFS-4 and NHFS-5 to the improvements between the two previous rounds. We would not be able to claim this yet, since comparing changes over a 10-year interval (between NFHS-3 in 2005-06 and NFHS-4) to a five-year interval (between NFHS-4 and NFHS-5) is misleading.
- Some have argued that the poor health outcomes reflect the effect of COVID-19. The data for the second phase of NFHS-5 have been, to a large extent, collected during the highly unusual conditions of the COVID-19 pandemic, but as the evidence on anaemia shows, the deterioration in public health indicators cannot be attributed entirely to the pandemic. COVID-19 might have added fuel to the fire of poor public health, but it did not cause the fire.
- There is much more in the NHFS-5 survey that needs more than a short piece. The survey focuses on women’s empowerment, autonomy and mobility indicators. It shines a spotlight on women’s reproductive health, and reveals, for instance, that caesarian births have increased dramatically.



- In private health facilities, 47.5% births are by C-section (14.3% in public health facilities). These figures are highly unnatural and call into question unethical practices of private health providers who prioritise monetary gain over women's health and control over their bodies.
- The overall evidence is compelling and clear: health ought to be a matter of concern for all political parties and all governments: national and State. The survey highlights deep inequalities in health outcomes. An action plan to improve India's health needs to be inclusive, firm in its commitment, and backed by solid resources.

GS III

Why is India's coal usage under scrutiny?

(Source: [The Hindu](#))

Context: On the final day of the UN Climate Change Conference held in Glasgow, India's Minister for Environment Bhupender Yadav read out a statement promising to "phase down" rather than "phase out" the use of coal. This caused many to raise questions about India's commitment to tackling climate change. Earlier, during the COP26 (Conference of Parties) summit, Prime Minister Narendra Modi had committed to turning India carbon neutral by 2070.

Why must dependence on coal be reduced?

- Since carbon emissions are considered the main culprit in global warming, countries have been committing themselves to turning carbon neutral by various dates.
- One key way to achieve carbon neutrality, wherein countries compensate for their carbon emissions by capturing an equal amount of carbon from the atmosphere, is to reduce dependence on coal. Coal is the most polluting among fossil fuels, and hence, its use in particular has come under scrutiny.

Why is it difficult?

- Coal is used to meet over 70% of India's electricity needs. Most of this coal comes from domestic mines. In FY 2020-21, India produced 716 million tonnes of coal, compared with 431 million tonnes a decade ago. Since FY 2018-19, domestic production has stagnated and has been unable to meet the rising domestic demand, leading to a rise in imports.
- Most of the country's coal production is limited to Chhattisgarh, Odisha, Jharkhand and Madhya Pradesh with a total production of over 550 million tonnes, contributing to over 75% of the country's total coal production.
- The Prime Minister promised to increase non-fossil fuel energy capacity to 500 GW by 2030, meet 50% energy needs from renewable sources and reduce carbon emissions by 1 billion tonnes in a decade. According to an estimate by the Centre for Science and Environment, the promise to reduce emissions by 1 billion tonnes means that India would need to reduce its carbon output by 22% by 2030.
- India now meets about 12% of its electricity needs from renewable sources, and increasing it to 50% by 2030 will be difficult. While some renewable energy sources like solar are cheap, they are unreliable because of the intermittency problem.
- They thus require the use of storage batteries, which adds to the cost. It should be noted that many low-income countries with low savings may not even possess the capital required to invest in renewable energy.

- Further, the damage that coal causes to commonly owned resources like the environment is not factored into its cost.

Is it fair to ask India to phase out coal?

- India has fought attempts by developed countries to impose a cap on its emissions. It has argued that adopting stringent steps to reduce carbon emissions can drag down growth and affect efforts to reduce poverty.
- It should also be noted that per capita carbon emissions of countries such as India and China are still lower than those of many developed countries.
- According to World Bank data of 2018, India produces 1.8 metric tonnes of carbon emissions per capita against 15.2 metric tonnes produced by the U.S. Experts believe India's commitment to phase down coal and become carbon neutral may actually be a rather generous commitment than what developed countries have committed themselves to.
- Critics have also pointed out that the focus on ending the use of coal deflects attention from other fossil fuels such as oil and natural gas that are heavily used by developed countries. They also say developed countries have not made good on their promise made at COP15 in Copenhagen to offer \$100 billion every year to developing countries to achieve net zero emissions.

What lies ahead?

- It is highly unlikely that developing countries like India and China will reduce their coal consumption or even stop it from rising further.
- Coal, after all, is the cheapest and most reliable way to meet their rising energy needs. Some leaders have proposed a carbon tax as an alternative to ensure that the price of coal reflects the cost of the damage it causes to the environment.
- This may turn out to be a more effective approach towards reining in carbon emissions. Coal on average is priced at \$2, while experts believe that it should be priced in the range of \$30 to \$70 to reflect its true cost.
- But such high carbon taxes can cause a drastic fall in coal output and severely affect living standards unless alternative sources of energy step in to fill the gap. India also faces its own set of structural problems in the power sector that will make the transition towards clean energy harder.

Reforming the fertilizer sector

(Source: [The Hindu](#))

Context: Since 1991, when economic reforms began in India, several attempts have been made to reform the fertilizer sector to keep a check on the rising fertilizer subsidy bill, promote the efficient use of fertilizers, achieve balanced use of N, P and K (nitrogen, phosphorus and potassium), and reduce water and air pollution caused by fertilizers like urea.

Increase in subsidy

- The Economic Survey of 1991-92 noted that fertilizer prices remained almost unchanged from July 1981 to July 1991.
- The Union Budget of July 1991 raised the issue prices of fertilizers by 40% on average. But from August that year, this was reduced to 30%, and small and marginal farmers were exempted from the price increase.



- The Economic Survey further noted that even with this 30% increase, fertilizer subsidy remained substantial and needed to be reduced further. Due to opposition to increase fertilizer prices, the increase in the price of urea was rolled back to 17% a year later over the pre-reform price.
- This change disturbed the relative prices of various fertilizers and resulted in a big shift in the composition of fertilizers used in the country in favour of urea and thus N.
- The ratio of use of N:P:K increased from 5.9:2.4:1 in 1991-92 to 9.7:2.9:1 in 1993-94. Farmers tended to move towards balanced use, but policy and price changes reversed the favourable trend a couple of times in the last three decades.
- Thus, little success has been achieved on any of the three fronts. Rather, there has been an uncontrolled increase in subsidies on urea, due both to almost freezing the MRP of urea in different time periods and its rising sale leading to an increase in indiscriminate and imbalanced use of fertilizers.
- Concerned with the adverse environmental impact of certain chemical fertilizers, some sections of society suggest the use of organic fertilizers and biofertilizers instead. There is a growing demand to provide subsidies and other incentives for organic fertilizers and biofertilizers to match those provided for chemical fertilizers.
- Fertilizer subsidy has doubled in a short period of three years. For 2021-22, the Union Budget has estimated fertilizer subsidy at ₹79,530 crore (from ₹66,468 crore in 2017-18) but it is likely to reach a much higher level due to the recent upsurge in the prices of energy, the international prices of urea and other fertilizers, and India's dependence on imports.
- In 2019-20, fertilizer use per hectare of cultivated area varied from 70 kg of NPK in Rajasthan to 250 kg in Telangana. This gap was much wider at the district level. Further, composition of total plant nutrients in terms of the N,P,K ratio deviated considerably from the recommended or optimal NPK mix. It was 33.7:8.0:1 in Punjab and 1.3:0.7:1 in Kerala.
- This also has implications for inter-State disparities in fertilizer subsidy due to high variations in subsidy content, which is highly biased towards urea and thus nitrogen. As a result, the magnitude of fertilizer subsidy among the major States ranges in the ratio of 8:1.
- The government introduced the Nutrient Based Subsidy (NBS) in 2010 to address the growing imbalance in fertilizer use in many States, which is skewed towards urea (N). However, only non-nitrogenous fertilizers (P and K) moved to NBS; urea was left out.
- The total demand for urea in the country is about 34-35 million tonnes (mln t) whereas the domestic production is about 25 mln t. The requirement of Diammonium Phosphate (DAP) is about 12 mln t and domestic production is just 5 mln t. This leaves the gap of nearly 9-10 mln t for urea and 7 mln t for DAP, which is met through imports. The use of Muriate of Potash is about 3 mln t. This is entirely imported.
- In addition, consumption of complex fertilizers (NPK) is about 12-13 mln t, which is largely produced within the country and so the import requirement is only 1 mln t.
- The international prices of fertilizers are volatile and almost directly proportional to energy prices. Besides, cartels of major global producers have a strong influence on prices. Of late, there has been a surge in international prices with urea prices rising to a record level of over \$900 per metric tonne (mt) in November 2021 from nearly \$270 per mt in September 2020.
- Likewise, the international prices of DAP have risen from about \$360 per mt in September 2020 to about \$825 per mt in November 2021. These extraordinary price rises are on account of a sharp upsurge in international energy prices and supply constraints in major producing countries due to robust domestic demand, production cuts and export restrictions. This also coincides with the peak demand for the Rabi season.
- In order to minimise the impact of rise in prices on farmers, the bulk of the price rise is absorbed by the government through enhanced fertilizer subsidy. This is likely to create serious fiscal challenges.
- In the last 20 years, the price of urea has increased to ₹5.36 per kg in 2021 from ₹4.60 in 2001. In the same period, the Minimum Support Price of paddy increased by 280% and that of wheat by 230%. In other words, in 2001, 37.7 kg of wheat was required to buy one bag of urea (50 kg), which has now reduced to 13.3 kg.



- At current prices, farmers pay about ₹268 per bag of urea and the Government of India pays an average subsidy of about ₹930 per bag. Thus, taxpayers bear 78% of the cost of urea and farmers pay only 22%. This is expected to increase and is not sustainable.

The way forward

- In order to address the multiple goals of fertilizer policy, we need to simultaneously work on four key policy areas.
 - One, we need to be self-reliant and not depend on import of fertilizers. In this way, we can escape the vagaries of high volatility in international prices. In this direction, five urea plants at Gorakhpur, Sindri, Barauni, Talcher and Ramagundam are being revived in the public sector.
 - Two, we need to extend the NBS model to urea and allow for price rationalisation of urea compared to non-nitrogenous fertilizers and prices of crops. The present system of keeping the price of urea fixed and absorbing all the price increases in subsidy needs to be replaced by distribution of price change over both price as well as subsidy based on some rational formula.
 - Three, we need to develop alternative sources of nutrition for plants. Discussions with farmers and consumers reveal a strong desire to shift towards the use of non-chemical fertilizers as well as a demand for bringing parity in prices and subsidy given to chemical fertilizers with organic and biofertilizers. This also provides the scope to use a large biomass of crop that goes waste and enhance the value of livestock byproducts. We need to scale up and improve innovations to develop alternative fertilizers. Though compost contains low amounts of nitrogen, technologies are now available to enrich this.
 - Finally, India should pay attention to improving fertilizer efficiency through need-based use rather than broadcasting fertilizer in the field. The recently developed Nano urea by IFFCO shows promising results in reducing the usage of urea. Such products need to be promoted expeditiously after testing.
- These changes will go a long way in enhancing the productivity of agriculture, mitigating climate change, providing an alternative to chemical fertilizers and balancing the fiscal impact of fertilizer subsidy on the Union Budgets in the years to come.

Road to data protection law

(Source: [Indian Express](#))

Context: The Joint Parliamentary Committee (JPP) on the **Personal Data Protection Bill** of 2019 is said to have adopted the final draft. The Bill is slated to be tabled in the Winter Session.

Why does India need a data protection law?

- Amid the proliferation of computers and the Internet, consumers have been generating a lot of data, which has allowed companies to show them personalised advertisements based on their browsing patterns and other online behaviour.
- Companies began to store a lot of these datasets without taking the consent of the users, and did not take responsibility when the data leaked.
- To hold such companies accountable, the government in 2019 tabled the Personal Data Protection Bill for the first time.

What is said to be in the final draft?



- One of the major changes that the final draft of the PDP Bill is believed to have pushed for is to include non-personal data within its ambit, which changes the nature of the Bill from personal data protection to just data protection.
- The final draft is also said to have sought additional compliance for companies that deal exclusively with children's data, by asking them to register with the Data Protection Authority — a regulatory body that will have powers to decide on implementing the law's various provisions.
- A third key aspect that the committee is said to have pushed for is to consider all social media companies as publishers, and to hold them accountable for the content on their platform if they are not acting as intermediaries. It is said to have recommended that no social media company be allowed to operate in India unless the parent company handling the technology sets up an office in India.
- Other aspects such as setting up of an indigenous architecture, which can be an alternative to the internationally accepted SWIFT payment system, are also said to have been suggested.
- A key suggestion said to be made by the JCP, which also received the most dissent from members, is wide-ranging powers for the government such as exempting any agency from application of the law.

KEY TERMS IN DATA PROTECTION

DATA PRINCIPAL: The person to whom the data in consideration belong

DATA PROCESSOR: A person, state, company or any other entity which processes data on behalf of someone else

DATA FIDUCIARY: A person, state, company or any other judicial entity which control the various aspects related to data storage and defines how it can be processed

PERSONAL DATA: Any data set that may contain information that can reveal personal traits of a human

being, and can be used to single out the person

NON-PERSONAL DATA: Data sets which do not contain any personal information and instead have information detailing the larger trends such as the income group of a town, the average age, the male-to-female-population ratio, etc

DATA PROTECTION AUTHORITY: A regulatory body for the Act which can have adjudicating powers and pass executive instructions in cases of conflict between two parties under the Data Protection Act

When will it be tabled?

- Since the final draft has been adopted by all members of the JCP, it is likely to be tabled during the Winter Session.
- However, some of the JCP members have dissented to certain aspects, so some changes are possible before the Bill is tabled in Parliament.

How long has it taken to complete the draft?

- First proposed by the government in 2018, the Bill has been pending for close to three years now. It has seen several changes to the original draft drawn by retired Supreme Court Justice B N Srikrishna, who has said that the revised Bill was "a blank cheque to the state".
- The Bill, which is said to contain 98 clauses, was referred to the JPC headed by BJP MP Meenakshi Lekhi in December 2019. Lekhi was replaced as chairperson with another BJP MP, P P Chaudhary, earlier this year. The 30-member panel got extensions in March and September 2020 as well as a final extension in February 2021.

- Officials from the Ministries of IT, Law and Home Affairs, the Unique Identification Authority of India, National Investigation Agency, Narcotics Control Bureau and the Reserve Bank of India, among others, have deposited before the panel.
- From the private sector, executives from Visa, MasterCard India, Google India, PayTM, Facebook India, Twitter India, Amazon Web Services as well as Amazon India, among others, have made submissions to the panel.

What were their submissions?

- In their meeting with the JPC, Google's representatives had said India should avoid making data localisation a requirement, which had upset the members of the committee.
- Paytm, on the other hand, had said data generated in India should be parked in the country. Cab aggregators such as Ola and Uber, whose representatives appeared before the JPC earlier this month, have supported data localisation norms.
- In November last year, before the JPC had started a clause-by-clause consideration of the Bill, several tech policy groups had written to then chairperson Lekhi, seeking wider consultations on the various aspects of the Bill. The committee, however, went ahead with these deliberations.
- Companies, tech policy groups and even JPC members had also called for reconsideration of the one-size-fits-all approach based on binary age threshold for children, given the vast geographic and cultural diversity of children across the country and their varying maturity levels and needs.

In perspective, farm distress and the demand for guaranteed MSP

(Source: [Indian Express](#))

Context: *Despite the announcement by Prime Minister Narendra Modi committing to repeal the three farm laws, farmers have said their protest will continue — and have written to the PM with their six remaining demands, including, most importantly, a legal mandate for minimum support prices (MSP).*

Guaranteed MSPs

- As the name suggests, MSPs are the prices at which, on paper, the government promises to procure agricultural produce from farmers. At present, the government announces MSPs for 23 crops, but procurement happens only for a few among them. Also, procurement varies quite a lot across states.
- While the government does announce MSPs every year, it is not required to do so by law. The compulsion to procure on MSP is political, not legal. But if there were to be a law backing the MSP regime, the government would lose its existing discretion in choosing not to procure.
- A legal mandate for MSP would force the government to purchase all the produce that any farmer wants to sell at the declared MSP. It would also have to procure from all states, and all crops for which MSPs are announced.

Problem with this

- India has had MSPs for several crops for several decades now, but that has not resolved the problem of agrarian distress. On the other hand, a guaranteed MSP can have quite a few unintended consequences that might make the attempted cure worse than the disease. A good example is from the United States, during the presidency of Jimmy Carter between 1977 and 1981.
- To alleviate the economic condition of dairy farmers, Carter announced that the price of milk would go up by 6 cents per gallon every 6 months. But to maintain these prices, the Carter administration had to increase the demand for milk. It chose to do so by offering to buy as much cheese as anyone would sell to the government at a predesignated price. This was, in essence, a 'guaranteed MSP'.



- As the months and years rolled by, more and more cheese was produced and sold to the government. Dairy farmers were happy with higher milk prices, and kept increasing production far in excess of the real demand. Most of the milk went into making cheese, which was then sold to the government.
- But the government did not know what to do with it. It ran out of space, and had to rent several caves to store the cheese. By 1981, Carter's dairy support programme was costing American taxpayers \$2 billion every year, while the government was stuck with mountains of unutilised cheese.
- The administration of President Ronald Reagan who succeeded Carter stopped the automatic increases in prices, gave the cheese away for free, and paid dairy farmers to cut down on the production of milk.
- In India, the percentage of people involved in agriculture is far higher, and they are far more economically distressed than any Western country. A legally mandated MSP regime is likely to be neither feasible nor sustainable in the long run. Already grain stocks lying with the government are more than twice its buffer requirement, and sometimes end up rotting.

Possible way forward

- It seems logical that instead of bypassing the market by using MSPs, the government should make efforts to enable farmers to participate in the market. However, most Indian farmers have small and marginal landholdings, making them uneconomic. They are poor and indebted, and a large section among those who work in the fields are landless labourers.
- The way forward is to ramp up investment in the agriculture sector. This means better irrigation facilities, easier access to credit, timely access to power, and ramping up warehouse capacity and extension services, including post-harvest marketing. The approach has to be to raise the farmers' bargaining ability and choices before them.
- At a fundamental level, the problem is there are just too many people involved in Indian agriculture for it to be truly remunerative. Agriculture accounts for just 17% of India's GDP while employing 55% of its population. To a great extent, the solution to the economic distress of Indian farmers lies outside agriculture — in boosting India's industrial and services sectors.
- These two sectors can potentially soak up the excess labour that is at present engaged in unremunerative farm activities. Rapid growth of industries and services for the next couple of decades could alleviate India's farm distress. This, however, is not happening. Data show that manufacturing lost half its jobs between 2016 and 2019, even before the Covid-19 pandemic hit.
- Post pandemic, there is a trend of more and more people re-joining agriculture.
- In the short term, many economists argue that the best way to alleviate distress would be to provide direct cash transfers to the rural poor.
- Companies and policy groups had also expressed apprehensions about the possible inclusion of certain clauses related to non-personal data and had told the JCP that it carried a very high risk of re-identification and may lead to legal complications for stakeholders.
- Policy groups had repeatedly objected to the blanket exemptions to the central and state governments along with allied agencies.
- "We are hoping that these provisions have been relooked, especially in the absence of a comprehensive surveillance framework, to introduce some element of oversight," said Kazim Rizvi, founder of public policy group The Dialogue.
- Rizvi said that as per the 2019 draft, the Data Protection Authority had been entrusted with a wide variety of functions ranging from standard-setting to adjudication, which would end up "overburdening" the architecture.
- "The functional and structural independence of India's first data regulator is a key aspect considering the crucial role it plays as the mediator between all vested stakeholders that is citizens, businesses and the government themselves," Rizvi said.

The road to a Himalayan blunder

(Source: [The Hindu](#))

Context: *The Char Dham road project, inaugurated by Prime Minister Narendra Modi in 2016, is an ambitious attempt to widen nearly 900 kilometres of hill roads at the cost of ₹12,000 crore. The project, which will be executed by the Ministry of Road Transport and Highways (MoRTH), aims to provide all-weather connectivity to the four major shrines of Yamunotri, Gangotri, Kedarnath and Badrinath. In the enthusiasm for an infrastructural project that will increase pilgrimage tourism from the Indian plains and provide attendant local economic dividends, the government has ignored the facts proven by the many tragic incidents in the hills of Uttarakhand over decades. Rampant construction and its complex interaction with climate change has led to massive landslides and floods in the fragile Himalayan range.*

Timeline of the case

- The project began as a road connectivity project for pilgrim tourists. Now the government argues that it is essential to back up troop and arms movement towards the India-China border. The case is in the Supreme Court.
- The Attorney General argues that wide roads are necessary for the sake of national security in the Garhwal region. The petitioners, residents of the valleys in the Garhwal region, stress on the need for a regulated and narrower intermediate road width with a walking footpath.
- Let's look at the timeline of the case. In 2018, the road-expansion project was challenged by an NGO for its potential impact on the Himalayan ecology.
 - The Supreme Court constituted a high-powered committee (HPC) to examine the issues. In an order in September 2020, the Court said that the carriageway width of the roads cannot exceed 5.5 metres.
 - The Court went by March 2018 guidelines issued by the MoRTH for mountain highways, which set a standard specification of a carriageway width of 5.5m with two-lane structures (7m).
 - In doing so, the Court upheld the minority recommendation of the HPC. In November 2020, the Ministry of Defence (MoD) filed an appeal in which, quoting the MoRTH Affidavit, it asked for "a double-lane road having a carriageway width of 7m (or 7.5m in case there is a raised kerb) with 8-10m formation width" to "meet the requirement of the Army".
 - On December 15, the MoRTH amended its 2018 circular and raised the 5.5m width limit to 10m.
 - The new circular read: "For roads in hilly and mountainous terrain which act as feeder roads to the Indo-China border or are of strategic importance for national security, the carriageway width should be 7m with 1.5m paved shoulder on either side." Why did MoRTH amend the circular way beyond the requirement placed by the MoD?
- These wide roads are being sought to be built in Uttarakhand, which has been a victim of several disasters in the last two decades. It is crucial to note that the terrain of the Himalayas in Uttarakhand is different from the terrain in Ladakh.
- Valleys in Uttarakhand are narrow and close-ended with steep slopes of 60-70 degrees. On the other hand, the valleys in Ladakh have a slope elevation of 30 degrees. Just this year, we saw how the floods in the Dhauliganga, Rishi Ganga and Alaknanda rivers claimed over 200 lives.
- During the monsoons, owing to the massive hill-cutting for the Char Dham road project, several landslides have occurred in the region. Such is the condition of the State that the national highways of the Char Dham project, including ones leading to the border, were closed repeatedly and sometimes for months this monsoon season.
- And so, the question is, why did the MoRTH enter such a fragile terrain with this massive, ambitious project without even doing a basic environment impact assessment, as is mandated? Violations of the



intermediate road width of 5.5m were said to be happening even after the Supreme Court reprimanded the MoRTH. Then, the MoD was brought in to justify the demand for double-lane paved shoulder roads.

- When reprimanded, the MoRTH informed the Supreme Court that the project had been taken up under a different category which is why the 2018 circular was not being followed. Such a bizarre submission should be — and was — rejected by many.
- However, some toed the line of the government and agreed to the double-lane paved shoulder road width.
- Later, it was revealed that the project proponents intend to install toll booths along the Char Dham roads, and that is feasible only with the double-lane paved shoulder road width. Is it the intent of the government to levy a tax on Char Dham yatis?
- In its November 2020 appeal, the MoD had requested a 7m carriageway width with 8-10m formation width. This was supported by the MoRTH in its affidavit.
- The petitioners and the small minority within the Supreme Court-appointed committee recommended an intermediate road width of 5.5m tarred surface which facilitates easy bilateral movement, with a 1.5m walking footpath, which pilgrims and residents of the valley need. The formation width of this design is the same as that proposed by the MoD (8-10 m) with the only difference being a walking footpath.
- What then is the difficulty? When the judges raised this question, the government had no answer. Several violations of the MoRTH came tumbling out and the fact that the MoD was being used to justify the new road width became clear. .
- It is often argued that landslides are a natural consequence of the construction of roads and can be mitigated.
- Similar arguments were made in court about this project too. However, the rainfall this year showed that the mitigation measures are no match to nature's fury. Prevention and regulation of activities seem to be the only effective way of mitigation in these fragile mountains.

Desecrating the Himalayas

- Disaster-resilient, safe and stable infrastructure is the only solution for commuting by road in the hills. But double-lane paved shoulder roads are excessively wide and render the slopes vulnerable.
- The unique Himalayan landscape with steep slopes and sharp gradients is not amenable to human engineering. Any human-induced change beyond the Himalayas' carrying capacity will have an impact on stream run-offs and erosional or depositional processes.
- Considering such vulnerabilities, we need to keep the scale of human-induced disturbances to the minimum level possible. The Char Dham project in its current form goes against all environmental safeguards.
- If the government does not desist from widening the roads under this project, it will be a Himalayan blunder.
- It will significantly reinforce mass wasting processes and erosion rates given the steepness of the slopes, earthquake activity and erosivity of increased monsoonal precipitation. The Himalayas need to be preserved as a nature reserve for future generations. That is why they are known as the 'abode of Gods'. So, why desecrate them?

Current Affairs Quiz

1) Consider the following statements:

1. The ministry of Housing and Urban Affairs is the nodal agency for implementing the Pradhan Mantri Awas Yojana (PMAY) all over India.
2. The beneficiaries are selected only through validation from Socio Economic Caste Census, Gram Sabha and Geo-Tagging.
3. It is a Centrally Sponsored Scheme.

Which of the above statement is/are correct?

- a. 1 and 2 only
- b. 2 only
- c. 1 only
- d. 1, 2 and 3

Answer : b

2) Consider the following statements:

1. The Competition Commission of India is a statutory and quasi-judicial body.
2. The commission is headed by a chairperson and includes six other members who are appointed by the President of India.
3. The amendment to the Competition act, established the competition commission of India and the competition appellate tribunal only.

Select the Correct answer code:

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3

Answer : c

The commission consists of one chairperson and six members as per the competition act who shall be appointed by the Central Government.

3) Consider the following statements:

1. UN Convention on the Law of the Sea (UNCLOS) is the only International convention which stipulated a framework for state jurisdiction in maritime spaces.
2. The legal status for all the maritime zones is one and the same.
3. Within an Exclusive Economic Zone (EEZ), states have sovereign rights for the purpose of exploring and conserving only.

Which of the above statements is/are incorrect?

- a. 2 and 3 only
- b. 1, 2 and 3
- c. 1 and 2 only
- d. 1 and 3 only

Answer : a

4) Consider the following statements with respect to Citizenship (Amendment) Act, 2019 (CAA):

1. The act provides that the central government may cancel the registration of Overseas Citizen of India (OCI) on certain grounds.
2. The act will be implemented in all states of the country.
3. In the areas that fall under the Inner Limit notified under the Bengal Eastern Frontier Regulation, 1873, the CAA will not be implemented.

Which of the above statement(s) is/are correct?

- a. 1, 2 and 3
- b. 1 and 2 only
- c. 1 and 3 only
- d. 2 and 3 only

Answer : c

5) Consider the following statements regarding:

- 1. Matosinhos Manifesto is the brainchild of the National Aeronautics and Space Administration (NASA).
- 2. The manifesto aims to accelerate the use of space in the United States in order to tackle the urgent and unprecedented challenges faced by its citizens.

Which of the above statements is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

It is the brainchild of ESA.

6) Consider the following statements:

- 1. The The Personal Data Protection Bill seeks to provide for protection of personal data of individuals and establishes a Data Protection Authority for the same.
- 2. The Bill governs the processing of personal data by the government only.
- 3. Under the bill, the fiduciaries can process the bill without the consent of the individual.

Select the Correct answer codes:

- a. 1 only
- b. 2 and 3 only
- c. 1 and 2 only
- d. 1, 2 and 3

Answer : a

7) Consider the following statements with respect to Draft Seeds Bill:

- 1. The bill exempts a certain variety of seeds from registration for sale.
- 2. Transgenic varieties of seeds can be registered only after the applicant has obtained clearance under the Environment (Protection) Act, 1986.
- 3. Farmers are allowed to sow, exchange or sell their farm seeds and planting material.
- 4. The bill contains provisions for only the Centre to introduce capping of prices.

Which of the above statements is/are correct?

- a. 1 and 2 only
- b. 1 and 4 only
- c. 3 and 4 only
- d. 2 and 3 only

Answer : d

8) The Global State of Democracy Report is released by:

- a. Institute of Economics and Peace (IEP)
- b. International Institute for Democracy and Electoral Assistance
- c. International Monetary Fund
- d. World Bank

Answer : b

9) Consider the following statements:

1. Central Administrative Tribunal (CAT) exercises jurisdiction only in relation to the service matters of the parties covered by the Administrative Tribunals Act, 1985.
2. The Tribunal is guided by the principles of natural justice in deciding cases and is not bound by the procedure, prescribed by the Civil Procedure Code.
3. The Tribunal has been conferred with the power to exercise the same jurisdiction and authority in respect of contempt of itself as a High Court.

Which of the above statement(s) is incorrect?

- a. 1, 2 and 3
- b. 2 and 3 only
- c. None of the above
- d. 1 only

Answer : c

10) Consider the following statements:

1. The Insolvency and Bankruptcy Code (IBC) provides for the Corporate Insolvency Resolution Process (CIRP), a time-bound process for resolving the insolvency of corporate debtors.
2. The corporate Insolvency Resolution Process can only be initiated by the concerned banks.

Which of the above statement(s) is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : a

11) Consider the following statements with respect to Cross Border Insolvency Framework:

1. It is based on the United Nations Commission on International Trade Laws (UNCITRAL) on cross-border insolvency.
2. Cross-border insolvency provisions will apply to both corporate debtors and individuals.
3. It enables Indian firms to claim their dues from foreign companies while allowing foreign creditors to recover loans from Indian companies.

Which of the above statements is/are correct?

- a. 1 and 3 only
- b. 2 and 3 only
- c. 1 and 2 only
- d. 1, 2 and 3

Answer : a

Cross border insolvency: provisions will apply to corporate debtors and not in personal cases.

12) The State of Food Security and Nutrition is released by -

1. Food and Agriculture Organization
2. International Fund for Agricultural Development
3. United Nations Children's Fund
4. World Food Programme
5. World Health Organization

Choose the correct option.

- a. 1 and 2 only
- b. 1, 2 and 4 only
- c. 3 and 4 only
- d. 1, 2, 3, 4 and 5

Answer : d

13) Consider the following statements with respect to National Family Health Survey (NFHS):

1. The union territory of Dadra and Nagar Haveli and Daman and Diu had the worst urban sex ratio and Delhi had the worst rural sex ratio among all states.
2. Only Tripura has a sex ratio at birth above 1,000 (i.e., more females born than males).

Select the correct answer code:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

14) Which of the following statements is/are correct regarding Digital Service Tax (DST)?

1. These are taxes charged on the revenues that companies generate from providing certain digital services.
2. India, Italy and Turkey are the only nations to charge digital services taxes.
3. Indian companies are exempted from digital service taxes.

Codes:

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3

Answer : d

15) Consider the following statements:

1. National Company Law Appellate Tribunal (NCLAT) is the appellate tribunal to hear and dispose of appeals against any direction issues or decision made or order passed by the Competition Commission of India (CCI).
2. It was formed based on the recommendations of Justice Eradi Committee.
3. It comes under the Ministry of Finance.

Which of the above statements is/are incorrect?

- a. 1 only
- b. 3 only
- c. 2 and 3 only
- d. 1 and 2 only

Answer : b

Ministry of Corporate Affairs is the ministry in charge of NCLAT.

16) Consider the following statements:

1. The 10% EWS (Economically Weaker Section) quota was introduced under the 103rd Constitution (Amendment) Act, 2019 by amending Articles 15 and 16.
2. Only the Centre can provide reservation to the economically weaker section of the society.

Select the Correct answer code:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : a

It enables both Centre and the states to provide reservation to the EWS of society.

17) Consider the following:



1. The aim of the Sovereign Gold Bond (SGB) scheme is to reduce the demand for physical gold and shift the domestic savings used for the purchase of gold into financial savings.
2. The Gold Bonds are issued as Government of India Stock under the Government Securities (GS) Act, 2006.
3. They are issued by Securities and Exchange Board of India (SEBI) on behalf of the Government of India.
4. Both Indian and Foreign residents in India can purchase the bond.

Select the correct answer code:

- a. 1, 3 and 4 only
- b. 2 and 4 only
- c. 1 and 2 only
- d. 3 only

Answer : c

These are issued by the RBI (Reserve Bank of India) on behalf of the Government of India.

18) Consider the following statements:

1. The genomes of organisms are all composed of DNA, whereas viral genomes can be of DNA or RNA.
2. RNA viruses mutate faster than DNA viruses, single-stranded viruses mutate faster than double-strand virus.

Which of the above statements is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

19) Which of the following statements is/are correct with respect to Anti Defection Law?

1. A nominated member is disqualified when he/she joins the political party within six months of their appointment.
2. Anti Defection Law applies when a member elected as independent candidate joins a party.

Code:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : b

20) Consider the following statements with respect to Albatross:

1. They come near the shore only to breed.
2. Like other oceanic birds, albatrosses drink seawater.
3. They usually have long-term monogamous relationships but environmental conditions in recent times cause splits between them.

Which of the statements given above is/are correct?

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3

Answer : d