

# December (Week 1)

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# **Prelims**

### **NATIONAL**

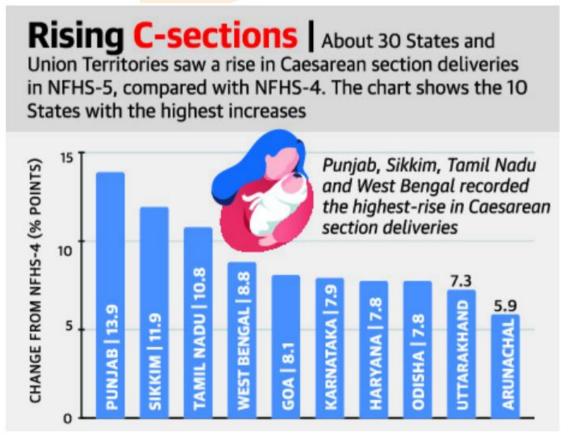
# 'One in two deliveries in private hospitals through C-section'

(Source: The Hindu)

**Context:** One in two women who go to a private hospital undergoes a Caesarean section (C-section), according to the latest National Family Health Survey (NFHS) data.

### **Details:**

- The increasing trend in private medical facilities, which have seen a rise in such operations from 40.9% to 47.4%, has led to a jump in pan-India numbers from 17.2% in 2014-2015 to 21.5% in 2019-2020, according to NFHS-5.
- This means that one in five women who go to any medical facility, private or public, undergoes a C-section.



- When medically justified, a C-section can effectively prevent maternal and perinatal mortality and morbidity.
- According to the World Health Organization, the ideal rate is between 10% and 15%.
- When the rates rise towards 10% across a population, the number of maternal and newborn deaths decreases.
- When the rate goes above 10%, there is no evidence that mortality rates improve.



- There are many States and Union Territories where private hospitals conduct seven or eight out of 10 deliveries through C-section.
- These include West Bengal (82.7%), Jammu and Kashmir (82.1%), Tamil Nadu (81.5%), Andaman and Nicobar (79.2%) and Assam (70.6%). While many of these States have had a poor record in the past too, there are many others that have seen a big jump in such surgeries.
- These include Assam (17.3 percentage points increase to 70.6%), Odisha (17 percentage points 70.7%), Punjab (15.8 percentage points to 55.5%), Tamil Nadu (12.5 percentage points to 63.8%) and Karnataka (12.2 percentage points to 52.5%). As many as 26 States and Union Territories have shown a rise in private hospitals.
- The deliveries have also increased in public hospitals but this could partly be due to an increase in institutional deliveries in such facilities from 52.1% in 2014-2015 to 61.9% in 2019-2020.
- States with the biggest surge across public health facilities are Sikkim (12.3 percentage points to 30.4%), Punjab (12.1 percentage points to 29.9%), Goa (11.6 percentage points to 31.5%), Chandigarh (10.9 percentage points to 30.4%) and Tamil Nadu (9.7 percentage points to 36%).
- The rates rose from 11.9% to 14.3% for public health facilities across the country.
- At the other end of the spectrum is Bihar, which has only 3.5% C-sections in public health facilities, indicating inability to provide critical care to prevent maternal and infant deaths.
- There are different factors at play for the rise in the operations, say experts. Women having babies at a later age, increase in in-vitro fertility and sedentary lifestyle of mothers are some of the reasons. "There are also caregiver and hospital factors.
- Doctors doing solo practice and delivering 20-25 babies in a month can't stay awake in the night so they prefer to schedule an operation. As far as corporate hospitals are concerned, there is an emphasis on more numbers and doctors spending 20-30 days on 10 deliveries is frowned upon," says Dr. Rinku Sengupta Dhar, consultant and head, Maternity Programs, Sitaram Bhartia Hospital.
- Different interventions are needed for public and private hospitals as well as for different parts of the country, says Subhasri Balakrishnan, member, Common Health a coalition for maternal health and safe abortions.
- "C- section audits must be strictly enforced in public hospitals, whereas in private sector there is a need to check widespread commercialisation by regulating medical practices and costs. But there are also States with an unmet need for C-sections where they are needed to prevent maternal deaths and poor foetal outcomes. Such States need an overall improvement in the health system such as more number of anaesthetists, specialists and blood banks."

## **Uttarakhand's Char Dham Act**

(Source: <u>Indian Express</u>)

**Context:** Chief Minister Pushkar Singh Dhami announced the withdrawal of the Char Dham Devasthanam Management Act. The decision will lead to the abolition of Uttarakhand Char Dham Devasthanam Management Board, which has been facing protests from priests and other stakeholders of four shrines and Vishwa Hindu Parishad (VHP).

# What is the Uttarakhand's Char Dham Act and when was it enacted?

- The Uttarakhand government in December 2019 then led by Trivendra Singh Rawat– had tabled the Uttarakhand Char Dham Shrine Management Bill, 2019, in the state Assembly.
- The bill was aimed at bringing the Char Dham of Badrinath, Kedarnath, Gangotri and Yamunotri and 49 other temples under the purview of a proposed shrine board. The bill was passed in the Assembly and became the Uttarakhand Char Dham Devasthanam Management Act, 2019.



- Under the same Act, the Trivendra government constituted the Uttarakhand Char Dham Devasthanam Board on January 15, 2020. As per the Act, the Chief Minister is the chairman whereas the minister for religious affairs is the vice-chairman of the board. Two MLAs of Gangotri and Yamunotri are members on the board along with the Chief Secretary. A senior IAS officer is the Chief Executive Officer.
- Under this board, there are 53 temples, including four shrines Badrinath, Kedarnath, Gangotri and Yamunotri and other temples located around these shrines.
- The shrine board was constituted as the highest governing body for the management of the temples with powers to frame policies, execute provisions of the Act, budget formulation and sanction expenditure, among others.
- The board was also empowered to give directions for the safe custody, prevention and management of funds, valuable securities, jewellery and properties vested in the temples.
- Before the constitution of the Board, the Shri Badrinath-Shri Kedarnath Act, 1939 was in place for the management of two shrines Badrinath and Kedarnath and Shri Badrinath- Shri Kedarnath Mandir Samiti for 45 temples. The Samiti was chaired by a government-appointed person whereas an official of all India service used to be the CEO.
- In Gangotri and Yamunotri, management of the shrines was earlier in the control of local trusts and the government was not getting any share from the donations made by devotees.

# **The Dam Safety Bill**

(Source: <u>Indian Express</u>)

Context: The Dam Safety Bill was passed by Parliament amid strong objections from the Opposition. While it was passed by the Lok Sabha in August 2019, it was cleared by Rajya Sabha. The Opposition sought that it be sent to the Parliamentary Standing Committee for further scrutiny. However, a motion to this effect was defeated in the House.

### What is the Dam Safety Bill?

- The Bill proposes to help all states and Union Territories adopt uniform dam safety procedures.
- It aims to "provide for surveillance, inspection, operation and maintenance of the specified dam for prevention of dam failure-related disasters, and to provide for institutional mechanism to ensure their safe functioning and for matters connected therewith or incidental thereto."
- A National Committee on Dam Safety with a three-year tenure, comprising the chairman of the Central Water Commission, a maximum of 10 representatives of the central government in the ranks of joint secretary, a maximum of seven representatives of the state governments, and three experts, will be formed as part of the Act.
- A state dam safety organisation will be formed as well, which will be responsible for the dam safety.
- This organisation is empowered to investigate and gather data for proper review and study of the various features of the design, construction, repair and enlargement of dams, reservoirs and appurtenant structures
- The state dam safety organisation must also report events such as dam failures to the National Dam Safety Authority and also maintain records of major dam incidents of each specified dam.
- The National Dam Safety Authority, to be headquartered in Delhi, will be formed under the Act. It will be headed by an officer not below the rank of Additional Secretary to the Government of India to deal with problems relating to dam engineering and dam safety management.

### **Context of Dam Safety Bill**



- Most of the dams in India are constructed and maintained by the states, while some of the bigger dams are managed by autonomous bodies such as Damodar Valley Corporation or Bhakra Beas Management Board of Bhakra-Nangal Project.
- The Centre has presented the Dam Safety Bill, 2018 against the backdrop of over 5,200 large dams in India and about 450 dams under construction right now.
- "Due to lack of legal and institutional architecture for dam safety in India, dam safety is an issue of concern. Unsafe dams are a hazard and dam break may cause disasters, leading to huge loss of life and property," said a June 13 statement, revealing the Cabinet approval for the enactment of the Bill.
- However, during deliberations by the Centre in 2016 to collect feedback from states on the Bill, then Tamil Nadu chief minister J Jayalalithaa had raised questions on the clause talking about the National Dam Safety Authority.

# Punjab's six agro-climatic zones

(Source: Indian Express)

Context: Amid talk of MSP guarantee and Punjab's urgent need to break away from the wheat-paddy cycle, experts feel that the state must follow cropping pattern as per its agro-climatic and soil conditions to protect the environment while increasing farmers' income. According to Punjab Agriculture University (PAU), Ludhiana, there are six agro-climatic zones in Punjab which include Sub-Mountain Undulating Region, Undulating Plain Region (UPR), Central Plain Region (CPR), Western Plain Region (WPR), Western Region (WR) and Flood Plain Region (FPR).

### THE ZONES

- In Zone 1 and 2, district like Pathnakot, Ropar, Mohali, Gurdaspur, and Hoshiarpur are included and in Zone 3 districts like Amritsar, Tarn Taran, Kapurthala, Jalandhar, Ludhiana, Fatehgarh Sahib, Patiala and Sangrur are included.
- In Zone 4, Ferozepur, Moga, Barnala, and Faridkot are the parts while in Zone 5, Mukatsar, Fazilka, Bathinda and Mansa are included and in Zone 6, the parts of various districts along with Beas, Sutlej, Ravi, Ghaggar rivers are included which are the flood-prone.
- In these zones all agro-climatic conditions, rainfall pattern, distribution, soil texture are taken into account to have a suitable cropping pattern, said experts, adding that temperatures and humidity levels are also little bit different from each other in all these zones.

### WHAT THEY OFFER

- In Zone 1 and 2, mostly kandi belt of the state's five districts including Pathankot, Hoshiarpur, Nawanshahr, Ropar and Mohali, there are large sub-mountainous tracts along the Shivalik foothills. The temperatures are cold, humid to sub-humid, and semi-arid to humid and the rainfall varies between 165 mm to over 1000 mm.
- The soil of these areas is suitable to grow vegetables, wheat, maize, basmati sugarcane, jowar, bajra, barley etc.

### FORWARD PLAN

• Though as per the climatic conditions we have a cropping pattern for all the six regions of the state, but still the over usage of fertilisers and over exploitation of ground water for decades need for research and development work for modifying this cropping pattern further and having an ideal cropping system to help the farmers growing their incomes.



• The government wants to divide the whole state into zones according to the soil fertility and the respective suitable produce and for that a vision document is being prepared which will be adopted in the state to bring good reforms in the agriculture sector of the state.

# What is 'Greater Tipraland'?

(Source: <u>Indian Express</u>)

Context: Several tribal outfits in Tripura have joined hands to push their demand for a separate state for indigenous communities in the region, arguing that their "survival and existence" was at stake. They staged a dharna at Jantar Mantar on November 30 and December 1 with the demand, which at least three political parties – the Congress, Shiv Sena and AAP – have promised to take up with the Union government. Among the political parties that have come together for the cause are TIPRA Motha (Tipraha Indigenous Progressive Regional Alliance) and IPFT (Indigenous People's Front of Tripura), which had so far been rivals in the electoral fray.

## What is their main demand?

- The parties are demanding a separate state of 'Greater Tipraland' for the indigenous communities of the north-eastern state.
- They want the Centre to carve out the separate state under Article 2 and 3 of the Constitution. Among the 19 notified Scheduled Tribes in Tripura, Tripuris (aka Tipra and Tiprasas) are the largest.
- According to the 2011 census, there are at least 5.92 lakh Tripuris in the state, followed by Reangs (1.88 lakh) and Jamatias (83,000).

### What does the Constitution say?

- Article 2 of the Constitution deals with admission or establishment of new states.
- "Parliament may by law admit into the Union, or establish, new States on such terms and conditions, as it thinks fit," it states.
- Article 3 comes into play in the case of "formation of new States and alteration of areas, boundaries or names of existing States" by the Parliament.

### How did the demand originate?

- Tripura was a kingdom ruled by the Manikya dynasty from the late 13th century until the signing of the Instrument of Accession with the Indian government on October 15, 1949.
- The demand mainly stems from the anxiety of the indigenous communities in connection with the change in the demographics of the state, which has reduced them to a minority. It happened due to the displacement of Bengalis from the erstwhile East Pakistan between 1947 and 1971.
- From 63.77 per cent in 1881, the population of the tribals in Tripura was down to 31.80 per cent by 2011.
- In the intervening decades, ethnic conflict and insurgency gripped the state, which shares a nearly 860-km long boundary with Bangladesh.
- The joint forum has also pointed out that the indigenous people have not only been reduced to a minority, but have also been dislodged from land reserved for them by the penultimate king of the Manikya dynasty Bir Bikram Kishore Debbarman.

What has been done to address the grievances of indigenous communities?



- The Tripura Tribal Areas Autonomous District Council (TTADC) was formed under the sixth schedule
  of the Constitution in 1985 to ensure development and secure the rights and cultural heritage of the tribal
  communities.
- The TTADC, which has legislative and executive powers, covers nearly two-third of the state's geographical area.
- The council comprises 30 members of which 28 are elected while two are nominated by the Governor.
- Also, out of the 60 Assembly seats in the state, 20 are reserved for Scheduled Tribes.
- 'Greater Tipraland' envisages a situation in which the entire TTADC area will be a separate state.
- It also proposes dedicated bodies to secure the rights of the Tripuris and other aboriginal communities living outside Tripura.

# What's in ART, Surrogacy Bills

(Source: <u>Indian Express</u>)

**Context:** Lok Sabha passed the Assisted Reproductive Technology Regulation Bill, 2020, which makes provisions for the safe and ethical practice of assisted reproductive technology (ART) services in the country. Another key bill to safeguard the reproductive rights of women — the Surrogacy (Regulation) Bill, 2019 — was passed by Lok Sabha on August 5, 2019. This one was referred to a Select Committee, which recommended that the ART Bill should be brought first, so that all the highly technical and medical aspects could subsequently be addressed in the Surrogacy (Regulation) Bill, 2019.

### What is the difference?

- The Surrogacy (Regulation) Bill relates to surrogacy, an infertility treatment, where a third person, a woman, is the surrogate mother. In ART, treatments can be availed by the commissioning couple themselves and it is not always necessary that a third person is involved.
- Surrogacy is allowed for only Indian married couples. ART procedures are open to married couples, live-in partners, single women, and also foreigners. A 2015 notification prohibits commissioning of surrogacy in India by foreigners or OCI or PIO cardholders, but NRIs holding Indian citizenship can avail surrogacy. Foreigners can visit India under medical tourism to avail ART services.
- Under the Surrogacy Bill, there will be a National Surrogacy Board that will be involved in policymaking, and act as a supervisory body, and State Boards that will act as executive bodies. The ART Bill provides for a National Board, with the powers vested in a civil court under the Code of Civil Procedure
- According to the Health Ministry, the estimated number of clinics practising surrogacy in India is likely less than 1,000, while that of those practising ART is likely more than 40,000.

# Why was the ART Bill felt necessary?

- The growth of ART clinics in India is among the highest in the world, and these are a key part of medical tourism. These offer gamete donation, intrauterine insemination, in-vitro- fertilisation, intracytoplasmic sperm injection, and pre-implantation genetic diagnostic.
- India does not have standard protocols of ART clinics yet. Amid questions raised on their ethical, medical, and legal aspects, Lok Sabha passed the Bill that provides for regulation and supervision of ART clinics and ART banks.

### What is an ART bank?



- Under the Bill, ART will include all techniques that attempt to obtain a pregnancy by handling the sperm or the oocyte outside the human body, and transferring the gamete or the embryo into the reproductive system of a woman.
- It defines an ART bank as an organisation set up to supply sperm or semen, oocytes, or oocyte donors to ART clinics or their patients.
- ART services will apply to women above the legal age of marriage and below 50, and to men above the legal age of marriage and below 55.

### How will ART services be regulated?

- NATIONAL BOARD: It will advise the Centre on policy matters. It will review and monitor rules and regulations, and recommend any changes. It will set the minimum standards of physical infrastructure, laboratory and diagnostic equipment and expert manpower to be employed by clinics and banks. State boards will coordinate the implementation of the guidelines.
- NATIONAL REGISTRY: It will have a central database on all clinics and banks in the country, including nature and types of services provided, and the outcome of these services. The registry will provide the data to National Board for making policies and guidelines.
- **REGISTRATION AUTHORITY:** It will have the chairperson, who will be an officer above the rank of Joint Secretary in the Health Department; a vice-chairperson, who will be above the rank of the Joint Director in the Health Department; an eminent woman representing a women's organisation; an officer of the Law Department, and, an eminent registered medical practitioner.
  - O The registration authority's functions will include: to grant, suspend, or cancel the registration of ART centres; to enforce the standards and supervise implementation of the law; to investigate complaints of any breach of provisions, to take legal action against the misuse of ART and initiate independent investigations; and to recommend to the National and State Boards on modifying the regulation with changes in technology and social conditions.

### What rules must clinics comply with?

- They have to ensure that the commissioning couples, women, and donors of gametes are eligible for ART procedures, and that the donor is medically tested.
- They will have to provide professional counselling about all the implications and chances of success and inform the couples about advantages, disadvantages, costs, side effects, and risks including that of multiple pregnancies. They will have to establish a grievance cell.
- ART clinics will have to make the commissioning couple or woman aware of the rights of a child born through ART, and ensure all data is kept confidential.
- The Bill says a child born through ART shall be deemed to be a biological child of the commissioning couple.
- The child will be entitled to all the rights and privileges available to a natural child from the commissioning couple, and the donor will have to relinquish all parental rights over the child.

### What are the other safeguards?

- The Bill says the clinic shall not perform any treatment or procedure without the written consent of all the parties seeking ART.
- It mandates an insurance coverage in favour of the oocyte donor by the commissioning couple or woman from an insurance company.
- The insurance will provide a guarantee of compensation for specified losses, damage, complications, or death of the donor during the process.

### What are the regulations on the use and sourcing of gametes and embryos?

• The woman cannot be treated with gametes or embryos derived from more than one man or woman during one treatment cycle.



- Second, a clinic cannot mix semen from two individuals for the procedures.
- Third, the embryos shall not be split and used for twinning to increase the number.
- Also, there will be regulations for the harvest of oocytes or embryos, and the number of oocytes or embryos that may be placed in the uterus of a woman during the treatment cycle.
- The Bill says the ART bank cannot supply the sperm or oocyte of a single donor to more than one commissioning couple.
- Also, the oocyte donor shall be an ever-married woman who has at least one live child of her own with a minimum age of three years.
- She can donate oocytes only once in her lifetime, and not more than seven oocytes are to be retrieved from her. The gamete or embryo of a donor shall be stored for a period of not more than 10 years.

### Will there be testing for disease?

- The Bill mandates that pre-implantation genetic testing shall be used to screen the embryo for known, pre-existing, heritable, or genetic diseases.
- The test will identify genetic defects in embryos created through IVF before pregnancy. The National Board will lay down conditions on pre-implantation testing.



### **INTERNATIONAL**

# **Facebook Protect**

(Source: <u>Indian Express</u>)

**Context:** Facebook Protect, a programme designed to protect accounts of users at high-risk of being targeted by cybercriminals, is now rolling out to India and other countries.

### What is Facebook Protect?

- The Facebook Protect feature will give higher security to users whose accounts on the network are more at risk of cyberattacks and perhaps even state-sponsored attacks.
- The focus is on journalists, human rights defenders, activists and will eventually include government officials as well.
- The feature when turned on will mandate that these accounts use two-factor authentication (2FA), and offer them other security protections as well.
- The programme was first tested in the US in 2018 and expanded more broadly during the US 2020 elections. Facebook says it plans to roll this out to nearly 50 countries by the end of the year.

## So what exactly does Facebook Protect do?

- Facebook's Head of Security Nathaniel Gleicher, explained that users who are within these groups will soon see a prompt from the social media company asking them to turn on the feature.
- The program aims to protect their accounts against cyberattacks with steps such as mandatory 2FA and monitoring the account for additional security.
- "Facebook Protect enables additional automated defenses from our systems to help protect these accounts. We apply increased detection for the types of compromised efforts that human rights defenders, journalists or government officials might face. It also flags these accounts in our internal systems. So we get a report about one of them or we see repeated targeting of one of them we know there could be more at stake," Gleicher explained.

## What happens if someone gets a Facebook Protect prompt, but does not turn it on?

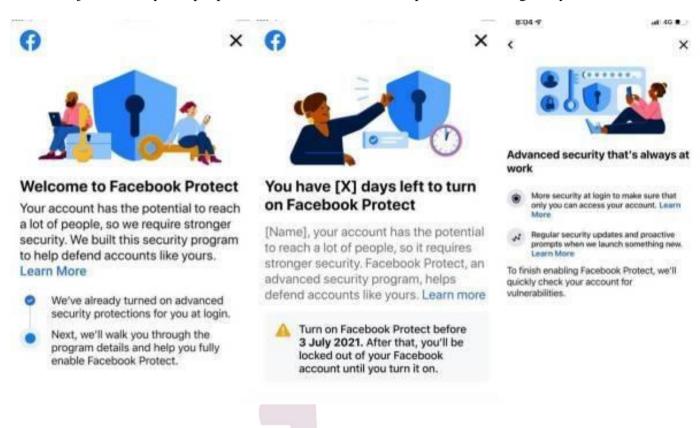
- So this is mandatory. If you get the prompt, meaning your account is deemed high-risk you will have to turn it on.
- It also means you will have to turn 2FA for your Facebook account if you have not done so already.
- Users will have a deadline to accept the prompt. If you do not accept within that time period, you will be locked out of the account. For example, if you are a journalist and your Facebook account does not have 2FA, you will have to turn on the feature. If you do not do so, and the deadline elapses, your account will get locked.
- Remember, no account data is lost; just accessing According to the company, users can get back account access by turning on 2FA and Facebook Protect.

### Why the stress on 2FA? Does it really protect against attacks?

- According to Facebook's head of security, only 4 per cent of all users on the platform have 2FA turned on, and the feature remains underutilised.
- For those who do not know, 2FA means that in order to access the account from a new device, you will need a login code either via SMS or from a third-party authenticator app such as Google Authenticator.



- 2FA can be a very useful defense mechanism for all accounts, not just high-risk. Because in order to login to the account on a new device, this code is needed. If hackers do somehow gain access to your password, then at least they cannot gain entry till they get the one time password or code.
- Facebook's head of security also revealed that so far more than 1.5 million accounts who are at risk have enabled the feature.
- Out of these, nearly 950,000 accounts had only newly enrolled in two-factor authentication, which shows just that very few people had it turned on in the first place, even though they were at risk.



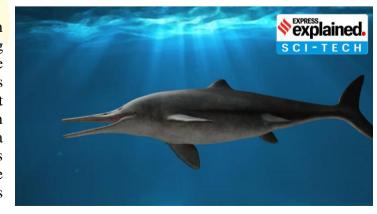
# Kyhytysuka sachicarum

(Source: <u>Indian Express</u>)

**Context:** An international team of researchers has discovered a new marine reptile. The specimen, a metrelong skull, has been named Kyhytysuka sachicar<mark>um</mark>.

### **Details:**

"We decided to name it Kyhytysuka which translates to 'the one that cuts with something sharp' in an indigenous language from the region in central Colombia where the fossil was found, to honour the ancient Muisca culture that existed there for millennia," a statement from McGill University quoted Dirley Cortés, a graduate student under the supervision of Hans Larsson and Carlos Jaramillo of the Smithsonian Tropical Research Institute, as saying.





# **Mains**

**GS II** 

# Have India and U.S. resolved tariff and visa issues?

(Source: The Hindu)

Context: U.S. Trade Representative Katherine Tai and India's Commerce and Industry Minister Piyush Goyal this week co-chaired the U.S.-India Trade Policy Forum, which was reconvened after a gap of four years. Resolving to take economic ties to the "next high level", the two sides exchanged views on 'potential targeted tariff reductions' and decided to activate the forum's working groups on agriculture, non-agriculture goods, services, investment, and intellectual property.

### What is the agreement on digital services?

- Both countries said they had reached an agreement on a transition from the existing Indian equalisation levy on digital services as part of the new multilateral tax solution under the OECD/G20 Inclusive Framework.
- This, the U.S. Treasury Department said, would allow the U.S. to terminate measures adopted in response to the Indian equalisation levy.

# Why is the resumption of trade talks significant?

• The resumption of the Trade Policy Forum and the decision to activate the working groups augur well for trade ties to the extent that the two sides now have a mechanism to come to grips with their differences, lay out their positions and work towards reaching negotiated compromises. The aim is to arrive at solutions to multiple contentious issues.

### What are the major issues dogging the ties?

- A February 2020 article by Alyssa Ayres of the New York city-based Council on Foreign Relations, titled 'A field guide to U.S.-India trade tensions', lists eight key areas of disagreement.
- The newest, and in many ways one of the most significant roadblocks, has been the size of the trade deficit that the U.S. faces in its trade relationship with India, an issue that the Donald Trump administration made into a central element of its approach to overall trade policy.
- In a bid to narrow the deficits, which for merchandise trade with India stood at about \$23.5 billion in 2019, the Trump administration had in 2018 imposed new tariffs on steel and aluminium imports from several nations, including India.
- The Indian Government, in turn, announced retaliatory tariffs that it then subsequently operationalised after the U.S. removed India from the list of developing countries eligible for favoured access under its Generalized System of Preferences (GSP).
- The tariff increases are still in place, and on India's stand seeking restoration of the GSP, the U.S. has sought to toss the onus on a decision to its lawmakers in Congress.
- The other major sticking points pertain to agricultural products, an area where the differences have appeared most intractable and abiding over time, including the U.S. demand for market access for its dairy products, and intellectual property rights, which is again one of the oldest sources of friction.
- It harks back to the U.S. first putting India on its 'priority watch list' of countries with serious deficiencies in protecting IPR under its Special 301 report. Other issues are investment barriers, Indian



price controls on medical devices, the digital economy and its related taxation issues, and vitally for New Delhi, the U.S. approach to visas for India's professionals and skilled workers in the services sector.

## How have the two sides sought to reduce friction?

- India's decision to join the OECD/G20 Inclusive Framework on adopting a common multilateral approach to taxation has helped engender a solution to one of the roadblocks: the government's decision to transition the equalisation levy it imposed on e-commerce transactions over time gives the U.S. side room to withdraw or substantially lower some of the tariffs it had raised as a response.
- The ministerial-level talks also led to some decisions to ease access for some select agricultural products from both sides.
- Separately, India has adopted the Trade Margin Rationalization approach to price regulation on certain medical device products as a means to protect both consumer and supplier interests, and this has been acknowledged by Washington.

# What will a legal guarantee of MSP involve?

(Source: The Hindu)

**Context:** After a year-long agitation on the borders of Delhi, protesting farm unions under the banner of the Samyukt Kisan Morcha have achieved their headline demand, namely the repeal of three contentious laws seeking to reform the storage and marketing of agricultural produce. However, farmers say this is only a half-victory and are pushing for their other major demand for providing a legal guarantee that all farmers will receive remunerative prices for all their crops.

### How many crops does the minimum support price cover?

- The Central Government sets a minimum support price (MSP) for 23 crops every year, based on a formula of one-and-a-half times production costs.
- This takes into account both paid-out costs (A2) such as seeds, fertilizers, pesticides, fuel, irrigation, hired workers and leased-in land, as well as the imputed value of unpaid family labour (FL).
- Farm unions are demanding that a comprehensive cost calculation (C2) must also include capital assets and the rentals and interest forgone on owned land as recommended by the National Commission for Farmers.
- There is currently no statutory backing for these prices, nor any law mandating their enforcement. The government only procures about a third of wheat and rice crops at MSP rates (of which half is bought in Punjab and Haryana alone), and 10%-20% of select pulses and oilseeds.
- According to the Shanta Kumar Committee's 2015 report, only 6% of the farm households sell wheat and rice to the government at MSP rates. However, such procurement has been growing in the last few years, which can also help boost the floor price for private transactions.

### Why do farmers want a law on MSP?

- In a letter to Prime Minister Narendra Modi, the SKM said MSP based on a C2+50% formula "should be made a legal entitlement for all agricultural produce, so that every farmer of the country can be guaranteed at least the MSP announced by the government for their entire crop". Within the SKM, there are different ideas of how this demand would play out.
- The All India Kisan Sabha, for instance, says most of the cost should be borne by private traders, noting that both middlemen and corporate giants are buying commodities at low rates from farmers and slapping on a huge mark-up before selling to end consumers. The Left-affiliated farm union has



- suggested a law which simply stipulates that no one neither the Government nor private players will be allowed to buy produce from the farmer at a rate lower than MSP.
- Other unions, however, have said that if private buyers fail to purchase their crops, the Government must be prepared to buy out the entire surplus at MSP rates, involving a much larger burden on the exchequer, although no one has yet laid out the specific fiscal implications.
- The demand is popular not just within the SKM, but even among unions which support the BJP-led Central government. The RSS-affiliated Bharatiya Kisan Sangh held its own agitation in September, complaining that the current MSP regime largely benefits only two States.
- It demanded a law to guarantee remunerative prices for all farmers to be calculated according to the varied input rates in 15 different agro-climatic zones. All farmers groups seeking a legal backing for MSP also want it extended to fruit and vegetable farmers who have been excluded from benefits so far.

# What is the Government's position?

- While announcing the decision to repeal the farm laws last week, the Prime Minister announced the formation of a committee to make MSP more transparent, as well as to change crop patterns often determined by MSP and procurement and to promote zero budget agriculture which would reduce the cost of production but may also hit yields.
- The panel will have representatives from farm groups as well as from the State and Central Governments, along with agricultural scientists and economists.
- Both the Prime Minister and the Agriculture Minister have previously assured Parliament that the MSP regime is here to stay, even while dismissing any need for statutory backing.
- A policy paper by NITI Aayog's agricultural economist Ramesh Chand, which is often quoted by Agriculture Ministry officials, argues, "Economic theory as well as experience indicates that the price level that is not supported by demand and supply cannot be sustained through legal means." It suggests that the States are free to guarantee MSP rates if they wish, but also offers two failed examples of such a policy.
- One is in the sugar sector, where private mills are mandated to buy cane from farmers at prices set by the Government. Faced with low sugar prices, high surplus stock and low liquidity, mills failed to make full payments to farmers, resulting in an accumulation of thousands of crores worth of dues pending for years.
- The other example is a 2018 amendment to the Maharashtra law penalising traders with hefty fines and jail terms if they bought crops at rates lower than MSP. "As open market prices were lower than the (legalised) MSP levels declared by the State, the buyers withdrew from the market and farmers had to suffer," says the paper, noting that the move was soon abandoned.

# **Does data protection Bill have safeguards on privacy?**

(Source: The Hindu )

Context: The Joint Parliamentary Committee on the Personal Data Protection Bill submitted its report on November 22. The Personal Data Protection Bill, 2019, stems from the 2017 judgment of the Supreme Court in the Puttaswamy vs. Union of India case that recognised privacy as a fundamental right protected by the Constitution. The committee, which had been deliberating on the Bill since it was introduced in Parliament in 2019, has made several recommendations for modifying the draft. However, it steered clear of the main sticky points such as government access to private data, leading to dissent notes from panel members from the Opposition.

# What has the JPC left untouched?



- The committee has retained Section 35 of the Bill. It gives the Government the right to authorise any of its agencies to circumvent the provisions of the law if it finds it necessary to do so under "public order", "sovereignty", "friendly relations with foreign states" and "security of the state".
- It is being interpreted as essentially a carte blanche for the Union Government to act as it wishes when it comes to accessing data on citizens. The draft Bill leaves it to the Government to frame the rules for oversight and safeguards for this provision.
- The critics of this provision, particularly the dissenting JPC members, are seeking judicial oversight and a more detailed prescription for the agencies that can access the data and the conditions under which they can do so.
- The final JPC report does not favour any change in this provision. The JPC also leaves untouched the state's ability to process personal data without consent, as allowed under Section 12. The JPC has also left mostly untouched the draft Bill's provisions for data localisation.
- The Bill requires a copy of any user data generated in India to be kept in the country, which critics say is unnecessary and may facilitate surveillance.

### What does it say on social media?

- The JPC has suggested that any social media that is not an intermediary be treated as a publisher. Under India's Information Technology Act, an intermediary is a website or service that only receives, stores, and transmits information online, without any sort of selection or curation of the content.
- Such intermediaries enjoy "safe harbour" protection from being held liable for the content that they are hosting or transmitting.
- A publisher, however, is legally liable for the content that it is hosting. In its report, the JPC says it is of the "strong view that these designated intermediaries may be working as publishers of the content in many situations", making choices on what content is being shown to whom.
- The JPC has also suggested a regulatory body for social media on the lines of the Press Council of India. This will have major implications for companies like Facebook. What it will mean for freedom of speech online also remains to be seen.
- The draft Bill already places social media in a separate class of intermediaries when it comes to data protection, adding provisions for voluntary verification of accounts.
- The modes for verification of accounts are to be prescribed by the Government, which leads to the question of who will be excluded and who will be allowed to be verified, and about the repercussions of not being verified.
- Critics of this provision also see it as being misplaced in a data protection legislation. They say that social media is best handled within the ambit of the Information Technology Act itself.

### Has the ambit of the Bill been changed?

- According to the JPC recommendation, the Bill should cover both personal and non-personal data. Non-personal data would include the traffic information that Google Maps collects and other such information.
- The JPC has even recommended changing the name of the Bill as the Data Protection Bill, 2021, dropping the word 'personal'. This takes the Bill beyond its original ambitions, as laid down by the B.N. Srikrishna Commission that worked on drafting it in the wake of the Puttaswamy verdict.

EWS criteria rethink

(Source: The Hindu )

**Context:** The Union Government has decided to revisit the criteria set out for eligibility for its 10% reservation under the economically weaker sections (EWS) category within a month. The main criterion is a family income ceiling of ₹8 lakh. The decision came after the Supreme Court closely questioned it on how it arrived at the income figure, while considering a challenge to the implementation of 27% reservation for the Other Backward Classes and 10% for the EWS under the all-India quota for medical admissions.

### How was EWS reservation introduced?

- The 10% reservation was introduced through the 103rd Constitution Amendment and enforced in January 2019. It added Clause (6) to Article 15 to empower the Government to introduce special provisions for the EWS among citizens except those in the classes that already enjoy reservation.
- It allows reservation in educational institutions, both public and private, whether aided or unaided, excluding those run by minority institutions, up to a maximum of 10%. It also added Clause (6) to Article 16 to facilitate reservation in employment.
- The new clauses make it clear that the EWS reservation will be in addition to the existing reservation.
- The Constitution initially allowed special provisions only for the socially and educationally backward classes.
- When the Congress Government tried to introduce a 10% quota for the poorer among the general category, the Supreme Court struck it down, saying there is no provision in the Constitution for reservation on the basis of an economic criterion.
- Through this amendment, the Government introduced the concept of 'economic backwardness' for a new class of affirmative action programmes for those not covered by or eligible for the community-based quotas.

### What are the criteria to identify the section?

- The main criterion is that those above an annual income limit of ₹8 lakh are excluded (income from all sources such as salary, business, agriculture and profession for the financial year prior to the application) of the family (applicants, their parents, siblings and minor children).
- Possession of any of these assets, too, can take a person outside the EWS pool: five or more acres of agricultural land, a residential flat of 1,000 sq.ft. and above, a residential plot of 100 square yards and above in notified municipalities, and a residential plot of 200 square yards and above in other areas.

### What are the court's questions about the criteria?

- The court has been intrigued by the income limit being fixed at ₹8 lakh per year, as it is the same figure for excluding the 'creamy layer' from OBC reservation benefits.
- A crucial difference is that those in the general category, to whom the EWS quota is applicable, do not suffer from social or educational backwardness, unlike those classified as the OBC.
- Therefore, the question the court has raised is that when the OBC category is socially and educationally backward and, therefore, has additional impediments to overcome, "would it be arbitrary to provide the same income limit both for the OBC and EWS categories."
- In line with the Supreme Court's known position that any reservation or norms for exclusion should be based on relevant data, the Bench wants to know whether the criteria for the EWS were arrived at based on any study.
- For instance, whether the per capita income or GDP in all States, or the difference in purchasing power in the rural and urban areas, were taken into account while a single income limit was formulated for the whole country. There are other questions as to whether any exercise was undertaken to derive the exceptions such as why the flat criterion does not differentiate between metropolitan and non-metropolitan areas.

### What is the current status of the EWS quota?



- The reservation for the EWS is being implemented by the Union Government for the second year now. Recruitment test results show that the category has a lower cut-off mark than the OBC, a point that has upset the traditional beneficiaries of reservation based on caste.
- The explanation is that only a small number of people are currently applying under the EWS category one has to get an income certificate from the revenue authorities and therefore the cut-off is low.
- However, when the number picks up over time, the cut-off marks are expected to rise. The EWS quota remains a controversy as its critics say it reduces the size of the open category, besides breaching the 50% limit on the total reservation.

# Small grant but a big opportunity for local bodies

(Source: The Hindu)

**Context:** In early November 2021, a potentially game-changing and transformative development went by, almost unnoticed — the release of ₹8,453.92 crore to 19 States, as a health grant to rural and urban local bodies (ULBs), by the Department of Expenditure, the Ministry of Finance. This allocation has been made as part of the health grant of ₹70,051 crore which is to be released over five years, from FY2021-22 to FY2025-26, as recommended by the Fifteenth Finance Commission. The grant is earmarked to plug identified gaps in the primary health-care infrastructure in rural and urban settings. Of the total ₹13,192 crore to be allocated in FY 2021-22, rural local bodies (RLBs) and ULBs will receive ₹8,273 crore and ₹4,919 crore, respectively.

### **Significance**

- The allocation in FY2021-22 is relatively small by some comparisons. It would be 2.3% of the total health expenditure (both public and private spending together) of ₹5,66,644 crore in India and 5.7% of the annual government health expenditure (Union and State combined) of nearly ₹2,31,104 crore (both figures for 2017-18), the most recent financial year for which national health accounts data are available
- This grant is equal to 18.5% of the budget allocation of the Union Department of Health and Family Welfare for FY 2021-22 and around 55% of the second COVID-19 emergency response package announced in July 2021.
- Yet, it is arguably the single most significant health allocation in this financial year with the potential to have a far greater impact on health services in India in the years ahead.

### **Good intentions gone wrong**

- In 1992, as part of the 73rd and 74th Constitutional Amendments, the local bodies (LBs) in the rural (Panchayati raj institutions) and urban (corporations and councils) areas were transferred the responsibility to deliver primary care and public health services.
- The hope was this would result in greater attention to and the allocation of funds for health services in the geographical jurisdiction of the local bodies.
- Alongside, the rural settings continued to receive funding for primary health-care facilities under the ongoing national programmes.
- However, the decision proved a body blow, specially to urban health services. The government funding for urban primary health services was not channelled through the State Health Department and the ULBs (which fall under different departments/systems in various States) did not make a commensurate increase in allocation for health.
- The reasons included a resource crunch or a lack of clarity on responsibilities related to health services or completely different spending priorities.
- Most often, it was a varied combination of these factors. The well-intentioned legislative step inadvertently enfeebled the health services more in the urban areas than the rural settings.



- In 2005, the launch of the National Rural Health Mission (NRHM) to bolster the primary health-care system in India partly ameliorated the impact of RLBs not spending on health. However, urban residents were not equally fortunate.
- The National Urban Health Mission (NUHM) could be launched eight years later and with a meagre annual financial allocation which never crossed ₹1,000 crore (or around 3% of budgetary allocation for the NRHM or ₹25 per urban resident against ₹4,297 per person per year health spending in India).
- In 2017-18, 25 years after the Constitutional Amendments, the ULBs and RLBs in India were contributing 1.3% and 1% of the annual total health expenditure in India.
- In urban settings, most local bodies were spending from less than 1% to around 3% of their annual budget on health, almost always lower than what ULBs spend on the installation and repair of streetlights. The outcome has not been completely surprising.
- Both urban and rural India need more health services; however, the challenge in rural areas is the poor functioning of available primary health-care facilities while in urban areas, it is the shortage of primary health-care infrastructure and services both.

#### Some obstacles

- Urban India, with just half of the rural population, has just a sixth of primary health centres in comparison to rural areas. Contrary to what many may think, urban primary health-care services are weaker than what is available in rural India.
- Regular outbreaks of dengue and chikungunya and the struggle people have had to undergo to seek COVID-19 consultation and testing services in two waves of the novel coronavirus pandemic are some examples.
- The low priority given to and the insufficient funding for health is further compounded by the lack of coordination between a multitude of agencies which are responsible for different types of health services (by areas of their jurisdiction).
- A few years ago, there were a few reports of three municipal corporations in Delhi refusing to allocate land for the construction of mohalla clinics (an initiative of the State Health Department) and even the demolition of some of the under-construction clinics.
- It is in this backdrop that the Fifteenth Finance Commission health grant the urban share is nearly five-fold that of the annual budget for the NUHM and rural allocation is one-and-a-half-fold that of the total health spending by RLBs in India is an unprecedented opportunity to fulfil the mandate provided under the two Constitutional Amendments, in 1992. However, to make it work, a few coordinated moves are needed.

### **Essential steps**

- First, the grant should be used as an opportunity to sensitise key stakeholders in local bodies, including the elected representatives (councillors and Panchayati raj institution representatives) and the administrators, on the role and responsibilities in the delivery of primary care and public health services.
- Second, awareness of citizens about the resp<mark>onsi</mark>bilities of local bodies in health-care services should be raised. Such an approach can work as an empowering tool to enable accountability in the system.
- Third, civil society organisations need to play a greater role in raising awareness about the role of LBs in health, and possibly in developing local dashboards (as an mechanism of accountability) to track the progress made in health initiatives.
- Fourth, the Fifteenth Finance Commission health grants should not be treated as a 'replacement' for health spending by the local bodies, which should alongside increase their own health spending regularly to make a meaningful impact.
- Fifth, mechanisms for better coordination among multiple agencies working in rural and urban areas should be institutionalised. Time-bound and coordinated action plans with measurable indicators and road maps need to be developed.



- Sixth, local bodies remain 'health greenfield' areas. The young administrators in charge of such RLBs and ULBs and the motivated councillors and Panchayati raj institution members need to grab this opportunity to develop innovative health models.
- Seventh, before the novel coronavirus pandemic started, a number of State governments and cities had planned to open various types of community clinics in rural and urban areas. But this was derailed. The funding should be used to revive all these proposals.

### A much-awaited springboard

- India's health system needs more government funding for health.
- However, when it comes to local bodies, this has to be a blend of incremental financial allocations supplemented by elected representatives showing health leadership, multiple agencies coordinating with each other, increased citizen engagement in health, the setting up of accountability mechanisms and guiding the process under a multidisciplinary group of technical and health experts.
- The Fifteenth Finance Commission health grant has the potential to create a health ecosystem which can serve as a much-awaited springboard to mainstream health in the work of rural and urban local bodies. The Indian health-care system cannot afford to and should not miss this opportunity.

# A capital functioning from different regions

(Source: The Hindu )

**Context:** The Andhra Pradesh Decentralisation and Inclusive Development of All Regions Repeal Bill, 2021, aiming to repeal the earlier laws that stipulated a three-capitals plan for the State, was passed by the Andhra Pradesh (A.P.) Assembly on November 22, 2021. That the current government would like to introduce a comprehensive, complete, and better Bill afresh is indicative of its resolve to utilise decentralisation for an inclusive A.P.

# **Decentralised development**

- Andhra Pradesh was bifurcated into A.P. and Telangana under the Andhra Pradesh Reorganisation Act of 2014 with the capital, Hyderabad, going to Telangana.
- Soon after, the Union Ministry of Home Affairs constituted the K.C. Sivaramakrishnan Expert Committee to come up with a strategy for the new capital of A.P. After State-wide public consultations and studies, the committee recommended the trifurcation of primary capital functions.
- In doing so, it advocated a decentralised model of development as against the 19th century visions of concentrating wealth in select centers to create megacities like Chennai, Bengaluru and Hyderabad.
- The State has three distinct regions with uneven socio-economic development. The Rayalaseema region in the south-west, comprising the Chittoor, Kadapa, Anantapur and Kurnool districts, has dismal development indices.
- Similarly, the culturally rich Vizianagaram and Visakhapatnam to the north-east support vast forest tracts and tribal belts that are deprived of development.
- In both these areas, deficiency of basic services, inadequate social and physical infrastructure and low employment opportunities pose serious challenges. In contrast, coastal A.P., comprising nine districts, is a better developed region. The regional imbalance is further compounded by a similar spatial imbalance of urban settlements.
- Locating the capital at Vijayawada would further the asymmetry as historically, such developments have inhibited the aspirations of other urban settlements. The suggested trifurcation provided an opportunity to correct the regional imbalance and redistribute wealth.
- However, the then A.P. government chose to ignore the recommendations of the committee and selected an area of Vijayawada, which was specifically classified as unsuitable by the committee. The



unsuitability was premised on the area being a part of the floodplains of the Krishna River; supporting fertile agricultural land; and having soil that is not conducive for construction.

- Instead, the government chose to opt for a green field city Amravati as its capital, but not without losing out on the opportunity to correct spatial imbalances in regional development and settlement patterns in the State.
- Decentralised development spatial and administrative has been advocated by many committees since the 1950s through the 1980s to be finally enacted as the 73rd and 74th Amendments to the Constitution. The distribution of the capital functions to several locations is one way of decontrolling development.
- It is neither a new nor a novel idea. Maharashtra, for example, performs its capital functions from Mumbai, Pune and Nagpur. In Madhya Pradesh, while the executive and legislative functions are performed from the capital at Bhopal, the High Court is located at Jabalpur with Circuit Benches at Indore and Gwalior, respectively.
- Jammu and Srinagar have been performing the capital functions for the State (now Union Territory) of Jammu and Kashmir.
- While Uttar Pradesh functions from Prayagraj (Allahabad) and Lucknow, Uttarakhand has declared that Gairsen would be its summer capital. South Africa has three capitals: Pretoria (executive); Bloemfontein (judicial); and Cape Town (legislative). None of these functions is in Johannesburg, the largest city in the country.
- The historically perpetuated regional imbalances in A.P. as well as its elongated shape necessitate a 'multi-nodal region'.
- In 2019, the then government revisited the decision on Amravati. It appointed yet another committee with a mandate to suggest a "comprehensive development strategy for all-round balanced development of the state, including the Capital". The committee's views were aligned with the earlier committees' views on decentralising capital functions while also recommending a scaling down of the proposed works at Amravati.
- Here we would like to draw out the subtle, yet critical, difference between decentralised capitals and decentralising capital functions. While the former assumes three capitals anchored around the functions of the executive, the legislature and the judiciary, the latter connotes one seat of capital symbolically and physically with the three functions being performed in different locations. Both the committees have recommended the latter.
- Embedded within this thinking are the objectives of creating pluralisation of services and/or conduits for services and the attendant dispersal of geographic space, one that responds to regional development needs.
- The second committee too premised its recommendations on the understanding that the State, while well-endowed with natural resources, showcases regional variations that need corrective measures. An emerging imperative therefore was to trigger development in the Rayalaseema districts as well as the north-eastern belt while simultaneously reducing pressure on the coast.
- In line with these imperatives, the second committee recommended distributed development and decentralised governance. The already functioning Grama Sachivalayams ensuring administration at the lowest level underpinned this recommendation.

### Two principles

- Guiding the decentralising capital functions recommendation were two foundational principles.
  - First, development interventions should derive from the 'genius' of the geography rather than externally imposed, contextually blind suggestions.
  - O Second, while focusing on infrastructural development, there should be 'positive constraints' in order to protect the natural resource base that must be mapped.
- Deriving from these guiding principles, the committee reiterated the earlier committee's recommendations of decentralising capital functions (as against three capitals). In the proposed



decentralised 'capital functions' strategy, the committee recommended that the Amravati-Mangalagiri complex host the Legislative Assembly (winter), Governor's seat and the Chief Minister's camp office.

- The Secretariat was proposed at the Visakhapatnam Metropolitan Region (VMR), preferably away from the coast and away from Visakhapatnam city, closer to Vizianagram. The High Court was to be located at Kurnool.
- High Court benches were proposed in the Amaravati–Mangalagiri complex and the VMR. The idea was to trigger a just model of development while taking services to people.
- The recommendations of both the committees to distribute capital functions predates the pandemic which has exposed the massive inequalities both at the national and State levels and the fallacies of centralising growth. While the pandemic is a reminder that urbanisation must be a balanced, equitable and inclusive process, floods and droughts are a warning against urbanising the floodplains of our rivers.



### **GS III**

# India's informal economy has not shrunk

(Source: The Hindu )

**Context:** According to a recent State Bank of India (SBI) Research report, the informal economy in India has been shrinking since 2018. Formalisation, the report says, has taken place through the gross value-added (GVA) route, consumption through increased digital payments, and the employment route. Let's examine each of these.

#### **Details:**

- The report claims that the share of the informal sector is just 15-20% in 2021 compared to 52.4% in 2018.
- If that was the case, India would have become a 'miracle' economy overnight, since no upper-middle-income economy in Latin America or the ASEAN or any low-middle-income country has achieved this kind of transformation.
- On the other hand, since the COVID-19 outbreak, informality of enterprises and workers has increased in all such economies.
- There is an internationally recognised definition of informality of enterprises and workers. In the 15th International Conference of Labour Statisticians (1993) of the International Labour Organization, household enterprises not constituted as separate legal entities independently of the households or household members that own them, and for which no complete accounts are available, are categorised as informal enterprises.
- In the 17th Conference (2003), informal workers were defined as those without social security. Based on these definitions, internationally, comparable estimates of both types of informality are available. India's levels are 80% and 91%, respectively. The latter is higher because there are also informal workers within formal enterprises.

### Misleading claim

- The SBI study adopts multiple definitions of formality (digitisation, registration in GST, cashless payments), which are not used by anyone.
- These could be possible instruments of encouraging formality, but cannot separately or even together be equated with formality. The SBI study confuses the shrinking of the informal sector's share of the GDP due to demonetisation and COVID-19's impact on the economy with formalisation.
- The informal sector was adversely impacted by the lockdowns and the consequent economic contraction. The sectors that were most impacted by the lockdowns were those with higher informality.
- Even formal sector activities which are considered informal (outsourcing and contractual activities) were curtailed heavily during the lockdowns.
- The decline in informal activities might be the cause of the fall in share of the informal sector of the GVA. To term this as formalisation is misleading at best and cruel at worst.
- We don't know if this GVA fall is temporary or permanent. It has clearly led to a fall in employment, especially in the non-farm sector, while the share of agricultural workers in total employment rose sharply between 2018-19 and 2019-20 (NSO's Periodic Labour Force Survey).
- Agriculture is almost entirely informal for enterprises as well as workers. Catastrophically, for already informal workers, the absolute number of workers in agriculture rose from 200 to 232 million between 2018-19 and 2019-20.
- This was a reversal of the trend of structural transformation in employment underway since 2004-05 shown by the first-ever absolute fall in workers in agriculture from 2012 to 2019.



### **Registration on e-Shram**

- Another reason that the SBI claims that informality declined is the number of workers registered in the new e-Shram portal. Since the portal's launch, over 9.9 crore unorganised workers have registered themselves.
- However, registration means documentation, not formalisation, of workers. Workers who are 'formal' receive social security benefits. Giving such benefits is not the objective of the portal; the objective is to develop a national database of unorganised workers.
- After registration on the portal, the workers receive a card with a 12-digit unique number, which is good. The government has announced linking accident insurance with e-Shram registration.
- At present, there is no credible database for India's unorganised workers. In 2020, government pleaded helplessness in providing numbers pertaining to the number of migrant workers who had suffered or died during the lockdowns. These migrant workers were and are part of the broad unorganised sector.
- Mere registration under this portal does not guarantee access to institutional social security benefits or coverage under labour laws. Benefits such as Provident Fund, gratuity and maternity benefits will remain outside the reach of unorganised workers as conceptualised in the Social Security Code of 2020.
- All these instruments were and are available only to establishments with 10 or 20 or more workers. Also, the SBI study notes that West Bengal tops the list in registration. This is no surprise. Over 1.3 crore unorganised workers are already registered under various social security schemes in West Bengal. A share of them is now registering themselves on the new portal.
- Further, the formal sector has been treated as a homogenous entity in the study. In reality, there are various layers within the formal sector. Not all workers engaged in the formal sector are 'formal'. There has been large-scale informalisation of the formal sector over the last three decades through contractualisation and outsourcing of labour.
- Among wage workers, the proportion of non-permanent, casual and contract workers increased in the organised sector from 1999-00 to 2011-12. It marginally decreased after that but the pandemic once again changed the numbers.
- Thus, a significant portion of the output attributed to the formal sector is actually produced by an informal workforce within the formal sector.

### A blurred distinction

- The systematic dismantling of employer-employee relations in the labour market blurs the distinction between formal and informal. The entire edifice of the formal sector is based on informal workers. There are layers of intermediaries between the employers and the workers to create a disconnect between them. Such a disconnect is deliberate rather than organic.
- For example, the majority of the output in construction is attributed to the formal sector. But most workers in the construction sector are informal. They don't have access to social security benefits or protective labour laws. They remain informal throughout their lives even though their contribution is attributed to the formal sector.
- Thus, contrary to what has been asserted in the research, the formal sector's contribution has been overestimated and the informal sector's contribution has been underestimated.
- Eighty-four per cent of Indian non-farm establishments are informal by their own account. Some might get registered under miscellaneous laws but that does not imply that they have become formal.
- Registration under the Factories Act or Employees' Provident Fund or State insurance means that these organisations are formal as the organisation needs 10 or 20 employees to be registered under these laws.
- But mere registration under other acts like local municipal acts or tax laws does not indicate formalisation.
- Thus, the SBI's claim that significant formalisation has occurred in India is unfounded.



# The many challenges before trade unions

(Source: The Hindu)

**Context:** The repeal of the three farm laws has set in motion expectations, if not talks, about the possible revival of other agitations, such as the one against the Citizenship (Amendment) Act, and the repeal of the contentious Labour Codes passed in 2019-20. Trade unions have intensified their agitation against the Codes in the wake of the government's decision to repeal the farm laws.

#### **Details:**

- There were significant factors responsible for the farmers' victory apart from the well-known political reasons for which the farm laws were repealed.
- In industrial or social conflicts, staying power, unflinching solidarity, political legitimacy, social visibility, and the capacity to inflict hurt to the opponents all matter in effecting favourable outcomes for the agitators.
- All these conditions characterised the farmers' agitation.
- The protests enjoyed political legitimacy as the government had passed the three laws without consulting the farmers' groups and had also not referred the laws to the Parliamentary Standing Committee (PSC).
- We need to assess the possible revival of the protests of the industrial workers for repeal of the Labour Codes while considering these aspects.

### **Problems with the Codes**

- The Central Trade Unions (CTUs) have criticised the Codes on three principal grounds. The Labour Codes were passed with little debate and discussion as the Opposition parties had staged a boycott in the Lok Sabha then.
- Trade unions, including the Bharatiya Mazdoor Sangh (BMS), criticised the Central government for not holding adequate consultations with them on the Codes contrary to the government's claims.
- The absence of effective dialogue contradicts the International Labour Organization treaty, the Tripartite Consultation (International Labour Standards) Convention of 1976 (C.144), which India had ratified in February 1978. The Labour Codes contain many clauses that deprive labourers of hard-won labour rights.
- The Codes merit repeal for other major reasons as well. The drafting is shoddy and incomplete. The Codes are an insult to the collective legal and industrial relations intelligence in the country.
- The government introduced changes in major contentious clauses (hire and fire, contract labour) which were not based on robust empirical evidence; diluted good clauses (standing orders and inspections); made matters unduly complex (industrial tribunal, minimum wages) and made promises that were not backed by credible systems (social security fund, universal minimum wages and social security).
- Liberalisation of thresholds relating to major legal aspects (contract labour, hire and fire, standing orders) and the act of retaining existing thresholds even after several decades (provident fund, medical insurance) would intensify informalisation of the workforce.
- The government has left many substantive and procedural clauses to the rule-making processes which result in considerable divergences as States frame different rules on the same subject. These will introduce chaos in the governance of industrial relations.
- As opposed to the success of farmers' protests, the failure of the trade unions' agitations in achieving
  their demands present a conundrum. In fact, there exists an organised consultative framework due to the
  aforementioned ILO Convention. Trade unions have a long history and most of them have political
  affiliations.



- Though declining, trade unions still command a claimed membership of 90-100 million, which includes unorganised workers.
- The CTUs claimed that 150 to 250 million workers participated in the recent countrywide strikes. If that is the case, they should have shaken the government and had the Codes repealed, which did not happen.
- So, what ails the industrial working class's cause?

### Why strikes are unsuccessful

- The CTUs are divided thanks to their political affiliations. Out of the 12 major CTUs, 10 have been jointly spearheading agitations calling for the repeal of all four Codes while the BMS has been conducting its own limited agitation: it is fine with the Wage and Social Security Codes but demands "review" of the Industrial Relations and the Occupational Safety, Health and Working Conditions Codes.
- Again, thousands of enterprise-based unions lacking political consciousness do not always support the CTUs' agitations. The claimed strikes resulted in symbolic acts of nominal consultations with the CTUs by the United Progressive Alliance or National Democratic Alliance governments. The reform mandate was always alive.
- Second, though the CTUs for long succeeded in blocking labour law reforms at the national level, substantial reforms of laws and inspections have happened at the regional level.
- Further, with the sly support of the government, employers have been able to achieve labour flexibility (the rampant contractualisation of the workforce) denied to them by formal laws. Hence, the Labour Codes matter less even if they are repealed.
- Third, though there are around 400 million unorganised and informal workers, they are scattered and not organised in a consolidated manner to mount significant political opposition and demand labour market securities. More informality thanks to labour reforms will further hurt unions' agitational power.
- Fourth, unlike farmers, the industrial workers cannot organise longer and larger strikes as they would lose their jobs and wages. The presence of the huge army of underemployed or unemployed and informal workers weakens their bargaining power.
- At best, they can organise short protests. In short, their strikes do not hurt either the economy or the government. The failures of the Railway strike of 1974 and the Bombay textile workers' strike of 1982-83 haunt the labour movement.
- Fifth, a larger labour reforms agenda comprising privatisation, flexible labour markets, etc. are supported and even pushed by global financial institutions like the World Bank and the International Monetary Fund. Many countries are witnessing labour reforms. Unions are fighting in essence against the neoliberal order for which they require intellectual sinews.
- Sixth, the four Codes were scrutinised by the PSC. It is another matter that the Codes did not reflect several of the PSC's recommendations or included clauses not mentioned in the draft Bills sent to the PSC.
- These procedural deficiencies may not be perceived as stark as those related to the farm laws. Finally, the 'hurt' government and the powerful reform-lobbying interest groups would ensure that there would not be more rollbacks, including of the Codes.
- In the wake of these realities, unions must come up either with agitational strategies to hurt the electoral image and prospects of the government and economy and/or exploit the possibility of legally challenging the Codes as has been done in case of gig workers.
- The delay in implementing the Codes thanks to adverse economic conditions or possibly due to political factors can be a short-term consolation, if any.



# **Boosting green hydrogen**

(Source: The Hindu)

**Context:** Prime Minister Narendra Modi recently announced that India would aim for net-zero carbon emissions by 2070. The announcement was given credence by the country's solar achievements since 2015. India is the only major economy whose policies and actions are on track to limit global average temperature rise below 2°C above pre-industrial levels, as envisioned in the Paris Agreement.

### India has a head start

- As of now, 75% of India's energy demand is met by coal and oil, including imports. This is expected to increase. Therefore, the synergy between renewable energy and green hydrogen must be tapped to tackle the dependence on fossil fuel and take greater advantage of India's solar capacity.
- Hydrogen green hydrogen, in particular is a crucial weapon in India's arsenal to fight climate change as it improves the long-term energy storage capabilities of renewable energy. The simplest element in the periodic table is also the most promising solution to decarbonise sectors like cement, steel, and refineries.
- "Hydrogen can provide the lowest-cost decarbonization solution for over a fifth of final energy demand by mid-century contributing a cumulated reduction of 80Gt of CO2 and is thus an essential solution to reach the 1.5°C climate scenario," read a recent statement from the Hydrogen Council. Several major economies which are adopting legislation to reduce carbon emissions are also catalysing global efforts towards transitions to green hydrogen.
- A low-carbon source of energy is required to generate hydrogen through electrolysis the splitting of a water molecule into hydrogen and oxygen. The hydrogen produced is coded with a colour, depending on the method of its production.
- While hydrogen generated through renewable energy sources is green, it is blue when the carbon generated from the process is captured and stored without dispersing it in the atmosphere. When the carbon is not captured, the generated hydrogen is labelled grey.
- Nearly 70% of the investments required to produce green hydrogen through electrolysis goes into generating renewable energy. With India's solar capacity increasing nearly 3,000 times in less than a decade, the cost of solar energy has reached a low of ₹2 per kWh. This gives India a unique head start in scaling up the use of green hydrogen.
- India can reduce its carbon emissions and make a dent in its annual import bills by developing a value chain for hydrogen from its production to its diverse applications, including production technologies, storage, transport and distribution, infrastructure (ports, refuelling stations), vehicular applications, and electricity/gas grid.

#### **Solutions**

- Government funding and long-term policies that attract private investments within the standards and a progressive compliance framework are essential to boost green hydrogen. Hydrogen's cross-sectoral capabilities should be exploited according to each sector's cost and ease of adoption.
- A few key sectors with low transition costs, such as refineries, fertilizers and natural gas, should be
  mandated to use hydrogen to bring down costs as part of near-term goals. New demand from steel,
  cement and road mobility should be mandated as part of medium-term goals. Heavy-duty vehicles
  should receive State and Central incentives.
- Shipping, aviation, energy storage and solutions towards power intermittency should be mandated to use green hydrogen in the long run.
- Enforcing time-bound mid- and long-term policies would inspire the private sector to invest more in green hydrogen and give the boost it requires in its nascent stages.



- India's current grey hydrogen production is six million tonnes per annum, which is around 8.5% of global annual production. India should replace this with green hydrogen and reduce dependence on imported ammonia.
- It should aim to produce 4-6 million tonnes of green hydrogen per annum by the end of the decade and export at least 2 million tonnes per annum. India has already taken the first step with the Indian Oil Corporation floating a global tender to set up two green hydrogen generations units at the Mathura and Panipat refineries.
- At present, more than 30 countries have hydrogen road maps and over 200 large-scale hydrogen projects across the value chain. If all the projects come to fruition, total investments will reach \$300 billion in spending by 2030.
- Governments worldwide have committed to more than \$70 billion in public funding, according to Hydrogen Council, to develop a hydrogen economy.
- With its abundant and cheap solar energy, India has the upper hand to tap into these investments and lead global efforts in transitioning to green hydrogen.

# A launch window for India as a space start-up hub

(Source: The Hindu)

**Context:** The great space race of the 20th century was kicked off by the Soviet Union's launch of Sputnik in 1957. It was a competition between the world's great powers, a test of their ideologies, which proved to be a synecdoche of the entire Cold War between the capitalist United States and the socialist Soviet Union. The space race is on again, but this time, private players are on the power field to take the next leap for mankind and democratise space usage to build commercial value. This has huge implications for original equipment manufacturers (OEMs) in the space sector in India and is a promising venture for global investors.

# India, a very marginal player

- Last year, according to a report, the Government of India created a new organisation known as IN-SPACe (Indian National Space Promotion and Authorisation Centre) which is a "single window nodal agency" established to boost the commercialisation of Indian space activities.
- A supplement to the Indian Space Research Organisation (ISRO), the agency promotes the entry of the Non-Government Private Entities (NGPEs) in the Indian space sector.
- The agency will also felicitate a swift on-boarding of private players in the sector through encouraging policies in a friendly regulatory environment and by creating synergies through already existing necessary facilities, the report says.
- Today, the space economy is a \$440 billion global sector, with India having less than 2% share in the sector.
- This is despite the fact that India is a leading space-faring country with end-to-end capabilities to make satellites, develop augmented launch vehicles and deploy inter-planetary missions.
- While total early-stage investments in space technologies in FY21 were \$68 billion, India was on the fourth place with investments in about 110 firms, totalling not more than \$2 billion.

### The hurdles

- Another aspect to throw light on is the extensive brain drain in India, which has increased by 85% since 2005. This can be linked to the bottlenecks in policies which create hindrances for private space ventures and founders to attract investors, making it virtually non-feasible to operate in India.
- Currently, a report on a leading news portal says: the reason for the lack of independent private participation in space includes the absence of a framework to provide transparency and clarity in laws.



- The laws need to be broken down into multiple sections, each to address specific parts of the value chain and in accordance with the Outer Space Treaty (or the United Nations resolution, the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies).
- Dividing activities further into upstream and downstream space blocks will allow legislators to provide a solid foundation to products/services developed by the non-governmental and private sectors within the value chain, it adds.

### Licences, liability

- It says: "with the technicalities involved in the space business, timelines on licensing, issuance of authorisation and continuous supervision mechanism need to be defined into phases, like in France, where there are four obtainable licences in addition to case-by-case authorisation, with lack of clarity surrounding costs".
- Another crucial aspect of space law is insurance and indemnification clarity, particularly about who or which entity undertakes the liability in case of a mishap.
- In several western countries with an evolved private space industry, there is a cap on liability and the financial damages that need to be paid.
- In fact, space operators are required to hold insurance of up to AUD\$100 million under Australian space law

### As a part of the system

- Currently, many of the private entities are involved in equipment and frame manufacturing, with either outsourced specifications or leased licences.
- However, to create value, Indian space private companies need to generate their intellectual property for an independent product or service (e.g. satellite-based broadband) with ISRO neither being their sole or largest customer nor providing them IP and ensuring buy-backs (which was how most suppliers in the Indian space ecosystem were born over the last three decades). This will help open the door to global markets.
- Mature space agencies such as the National Aeronautics and Space Administration (NASA) of the United States, China's China National Space Administration (CNSA), and Russia's Roscosmos (Roscosmos State Corporation for Space Activities) seek support from private players such as Boeing, SpaceX and Blue Origin for complex operations beyond manufacturing support, such as sending crew and supplies to the International Space Station.
- These companies have revolutionised the space sector by reducing costs and turnaround time with innovation and advanced technology. For such purposes, NASA and the CNSA award a part of their annual budget to private players. Until 2018, SpaceX was a part of 30 missions of NASA, getting over \$12 billion under contract.
- India currently stands on the cusp of building a space ecosystem and with ISRO being the guiding body, India can now evolve as a space start-up hub for the world. The sector is in the embryonic stage where the possibilities are limitless with a scope to build a feasible business model.
- Already 350 plus start-ups such as AgniKul Cosmos, Skyroot Technologies, Dhruva Space and Pixxel have established firm grounds for home-grown technologies with a practical unit of economics.
- However, to continue the growth engine, investors need to look up to the sector as the next "new-age" boom and ISRO needs to turn into an enabler from being a supporter. To ensure that the sky is not the limit, investor confidence needs to be pumped up and for the same, clear laws need to be defined.



# COP26 pledges need a new climate of cooperation

(Source: The Hindu)

**Context:** As world leaders converged in Glasgow for the COP26 (October 31-November 12, 2021), there were some notable absentees. The Presidents of China and Russia, Xi Jinping and Vladimir Putin, leaders of the world's second and fourth largest carbon emitters, failed to make it to Glasgow. Hence, understandably, all eyes fell upon India, the world's third largest carbon emitter, and which included what kind of commitment Prime Minister Narendra Modi would be making.

### **Details:**

- There was cautious optimism when India finally announced its net zero target, even though India's pledged deadline is 2070 two decades after than the desired deadline of the year 2050.
- After the net zero target, the United States and Europe led the next biggest climate goal, the Global Methane Pledge, to bring down global methane levels significantly by 2030; this was signed by as many as 104 countries.
- Despite being the third-largest methane emitter, India was not signatory. India also was not part of the pledge to deforestation despite hosting the world's largest contiguous mangrove forest: the Sundarbans.

### Pursuing green energy

- India has been a promoter of green energy to reduce carbon emission. Although the country is yet to significantly transit to renewable energy, accounting only 22.5% of nationwide electricity production, India has been leading the global movement towards solar power.
- The country cofounded the International Solar Alliance (ISA) along with France an alliance with more than 120 countries to promote solar energy.
- To strengthen India's stand for renewable energy like solar energy, India has signed to the Glasgow Breakthrough Agenda in this year's COP26 along with over 35 other nations to promote clean energy and make it more affordable.
- Compared to China's 28.4%, the U.S.'s 19.8% and some North European country's 100% transition to renewable energy for power, there is much room for improvement in India.
- However, there are two key struggles that India has to deal with when transitioning to green energy: the consumption of the world's second largest population base and the lack of adequate available renewable energy options.
- Countries such as Iceland and Norway have the privilege to depend almost entirely on hydroelectricity adequate enough for a small population such as theirs.
- Countries with a similar population scale to India such as China and the U.S. have been relying significantly on nuclear power to cut down on carbon emissions which India cannot facilitate due to not being a member of the Nuclear Suppliers Group. India did commit to transiting to green energy for meeting at least half of nation-wide power consumptions.
- However, the country requires significant measures to do so, which includes bringing down the cost of renewable energy to make it more affordable and attractive to the general public and private businesses.
- The Indian government has been promoting green energy to abide by its COP21 climate commitments. The Government plans to make wide use of hydrogen fuel as a better substitute of fossil fuels and is promoting renewable energy such as solar powered energy production by reducing tariffs and even providing for subsidising which are falling.
- The Indian renewable energy industry is up against an immense financial challenge with a recent report estimating the requirement of ₹2.61 trillion to install a balance capacity to achieve its target of 175 gigawatts of renewable power by the year 2022.

### Difficult choices for the South



- India has faced numerous economic adversities in recent years. The country is still reeling from the impact of demonetisation in 2016 that left GDP growth rate falling ever since. Foreign investment in India has also been declining since 2018.
- The COVID-19 pandemic that hit in early 2020 further pushed down GDP growth, severely impacting several industries.
- Scarce resources are being used for economic survival. The Government is desperately trying to aid its economy by subsidising various industries during the COVID-19 pandemic as well as vaccinating its population to prevent another wave as worse as the COVID-19 Delta variant wave that had hit India earlier. The country is going through a resource constraint, having to choose between priorities.
- Meeting climate goals with a population of 1.3 billion while combating the novel coronavirus pandemic has been a challenge for the world's largest democracy. India does not have privilege like its peers from the developed world to financially support all of its economy, people and the climate.
- It is no surprise that Mr. Modi had to ask the international community for a new financial commitment to achieve the climate goals. More so, since the annual \$100 billion pledge by developed countries to the developing countries and Least Developed Countries (LDCs) back in COP16 is yet to be disbursed.
- If powerful developing economies such as India are to play a constructive role in tackling climate change and achieving net zero target, the developed North needs to shore up its support by taking a common responsibility to help developing countries and LDCs to pursue climate goals as they already face the daunting tasks of fighting poverty, providing basic health-care services, and ensuring access to education.
- People without food when they are hungry, medicine and doctors when they are ill, and schools for their children cannot be expected to either relate or appreciate the adversities of climate change being debated in a place and country which most of them have not even heard of and leaders they hardly know.

# Is nuclear energy good for the climate?

(Source: Indian Express )

**Context:** Supporters of nuclear energy say it can help us wean our economies off polluting fossil fuels. No surprise, it's a heated issue. But what about the facts? Can nuclear power really help save the climate?

### **Details:**

- The latest figures on global carbon dioxide emissions call into question the world's efforts to tackle the climate crisis.
- CO2 emissions are set to soar 4.9% in 2021, compared with the previous year, according to a study published earlier this month by the Global Carbon Project (GCP), a group of scientists that track emissions.
- In 2020, emissions dropped 5.4% due to the COVID-19 pandemic and associated lockdowns. Most observers expected a rebound this year — but not to such an extent. The energy sector continues to be the largest emitter of greenhouse gases, with a share of 40% — and rising.
- But what about nuclear? Supporters of the controversial energy source say it's a climate-friendly way to generate electricity. At the very least, it's something we could use until we're able to develop comprehensive alternatives. In recent weeks, particularly during the COP26 climate summit, advocates have been creating a stir online with statements like "if you're against nuclear energy, you're against climate protection" and "nuclear energy is about to make a comeback." But is there anything to it?

Is nuclear power a zero-emissions energy source?



- No. Nuclear energy is also responsible for greenhouse gas emissions. In fact, no energy source is completely free of emissions, but more on that later.
- When it comes to nuclear, uranium extraction, transport and processing produces emissions. The long
  and complex construction process of nuclear power plants also releases CO2, as does the demolition of
  decommissioned sites.
- And, last but not least, nuclear waste also has to be transported and stored under strict conditions here, too, emissions must be taken into account.
- And yet, interest groups claim nuclear energy is emission-free. Among them is Austrian consulting firm ENCO. In late 2020, it released a study prepared for the Dutch Ministry of Economic Affairs and Climate Policy that looked favorably at the possible future role of nuclear in the Netherlands.
- "The main factors for its choice were reliability and security of supply, with no CO2 emission," it read. ENCO was founded by experts from the International Atomic Energy Agency, and it regularly works with stakeholders in the nuclear sector, so it's not entirely free of vested interests.
- At COP26, environmental initiative Scientists for Future (S4F) presented a paper on nuclear energy and the climate. The group came to a very different conclusion. "Taking into account the current overall energy system, nuclear energy is by no means CO2 neutral," they said.
- Ben Wealer of the Technical University of Berlin, one of the report's authors, told DW that proponents of nuclear energy "fail to take into account many factors," including those sources of emissions outlined above. All the studies reviewed by DW said the same thing: Nuclear power is not emissions-free.

### How much CO2 does nuclear power produce?

- Results vary significantly, depending on whether we only consider the process of electricity generation, or take into account the entire life cycle of a nuclear power plant.
- A report released in 2014 by the UN's Intergovernmental Panel on Climate Change (IPCC), for example, estimated a range of 3.7 to 110 grams of CO2 equivalent per kilowatt-hour (kWh).
- It's long been assumed that nuclear plants generate an average of 66 grams of CO2/kWh though Wealer believes the actual figure is much higher. New power plants, for example, generate more CO2 during construction than those built in previous decades, due to stricter safety regulations.
- Studies that include the entire life cycle of nuclear power plants, from uranium extraction to nuclear waste storage, are rare, with some researchers pointing out that data is still lacking. In one life cycle study, the Netherlands-based World Information Service on Energy (WISE) calculated that nuclear plants produce 117 grams of CO2 emissions per kilowatt-hour. It should be noted, however, that WISE is an anti-nuclear group, so is not entirely unbiased.
- However, other studies have come up with similar results when considering entire life cycles. Mark Z. Jacobson, director of the Atmosphere / Energy Program at California's Stanford University, calculated a climate cost of 68 to 180 grams of CO2/kWh, depending on the electricity mix used in uranium production and other variables.

### How climate-friendly is nuclear compared to other energies?

- If the entire life cycle of a nuclear plant is included in the calculation, nuclear energy certainly comes out ahead of fossil fuels like coal or natural gas. But the picture is drastically different when compared with renewable energy.
- According to new but still unpublished data from the state-run German Environment Agency (UBA) as well as the WISE figures, nuclear power releases 3.5 times more CO2 per kilowatt-hour than photovoltaic solar panel systems.
- Compared with onshore wind power, that figure jumps to 13 times more CO2. When up against electricity from hydropower installations, nuclear generates 29 times more carbon.

### Could we rely on nuclear energy to help stop global warming?



- Around the world, nuclear energy representatives, as well as some politicians, have called for the expansion of atomic power. In Germany, for example, the right-wing populist AfD party has backed nuclear power plants, calling them "modern and clean." The AfD has called for a return to the energy source, which Germany has pledged to phase out completely by the end of 2022.
- Other countries have also supported plans to build new nuclear plants, arguing that the energy sector will be even more damaging for the climate without it. But Wealer from Berlin's Technical University, along with numerous other energy experts, sees takes a different view.
- "The contribution of nuclear energy is viewed too optimistically," he said. "In reality, [power plant] construction times are too long and the costs too high to have a noticeable effect on climate change. It takes too long for nuclear energy to become available."
- Mycle Schneider, author of the World Nuclear Industry Status Report, agrees.
- "Nuclear power plants are about four times as expensive as wind or solar, and take five times as long to build," he said. "When you factor it all in, you're looking at 15-to-20 years of lead time for a new nuclear plant."
- He pointed out that the world needed to get greenhouse gases under control within a decade. "And in the next 10 years, nuclear power won't be able to make a significant contribution," added Schneider.
- "Nuclear power is not being considered at the current time as one of the key global solutions to climate change," said Antony Froggatt, deputy director of the environment and society program at the international affairs think tank Chatham House in London.
- He said a combination of excessive costs, environmental consequences and lack of public support were all arguments against nuclear power.

# Nuclear funding could go toward renewables

- Due to the high costs associated with nuclear energy, it also blocks important financial resources that could instead be used to develop renewable energy, said Jan Haverkamp, a nuclear expert and activist with environment NGO Greenpeace in the Netherlands. Those renewables would provide more energy that is both faster and cheaper than nuclear, he said.
- "Every dollar invested in nuclear energy is therefore a dollar diverted from true urgent climate action. In that sense, nuclear power is not climate-friendly," he said.
- In addition, nuclear energy itself has been affected by climate change. During the world's increasingly hot summers, several nuclear power plants have already had to be temporarily shut down or taken off the grid.
- Power plants depend on nearby water sources to cool their reactors, and with many rivers drying up, those sources of water are no longer guaranteed.
- The much vaunted "renaissance of nuclear power" is anything but when all the facts are taken into consideration, Mycle Schneider told DW. He said the nuclear industry has been shrinking for years.
- "In the last 20 years, 95 nuclear power plants have gone online and 98 have been shut down. If you take China out of the equation, the number of nuclear power plants has shrunk by 50 reactors in the last two decades," Schneider added. "The nuclear industry is not thriving."



# **Current Affairs Quiz**

- 1) Consider the following statements:
  - 1. River Cities Alliance (RCA)is a dedicated platform for river cities in India for sustainable management of urban rivers.
  - 2. Ministry of Earth Sciences and Ministry of Jal Shakti is the nodal agency for implementing the programme.

Select the CORRECT answer code:

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

Answer: a

The Ministry of Jal Shakti along with the Ministry of Housing and Urban Affairs has launched the River Cities Alliance (RCA).

- 2) Consider the following statements about James Webb Telescope:
  - 1. The telescope will hunt for the unobserved formation of the first galaxies, and look inside dust clouds.
  - 2. The collected data will be helpful in finding only the assembly of galaxies and the planetary systems and the origin of life.

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

The collected data will help to find answers to:

- First Light
- Assembly of galaxies
- Birth of stars and proto-planetary systems
- Planetary systems and the origin of life.
- 3) Consider the following statements about Earthquake:
  - 1. Primary or Longitudinal waves are analogous to the light waves.
  - 2. Secondary or Transverse waves are analogous to the sound waves.
  - 3. Surface or Long-period waves originate when secondary waves hits the surface.

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

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

Answer: d

- 4) Consider the following statements with respect to Parliamentary processes:
  - 1. Only the speaker of Lok Sabha can direct an MP to withdraw from the legislative chamber for grossly disorderly conduct.
  - 2. The motion moved by the parliamentary affairs minister for suspending a MP will last until the end of the session.

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: b

- 5) Consider the following statements regarding National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN) Bharat scheme:
  - 1. It aims to cover the learning needs of children above 15 years of age.
  - 2. The scheme will be implemented by the Department of School Education and Literacy.
  - 3. The funding of the scheme will be shared by the centre and state in equal proportions.

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

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

Answer: c

The mission aims to achieve universal foundational literacy and numeracy in primary classes.

- 6) Consider the following statements regarding Ken-Betwa river linking project:
  - 1. The Ken river originates in the state of Madhya Pradesh and the Betwa river originates in the state of Uttar Pradesh.
  - 2. Both Ken and Betwa rivers flow through the Panna tiger reserve.

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: d

### **Ken-Betwa River linking Project**

Ken and Betwa rivers originate in MP and are the tributaries of Yamuna.

Ken River passes through Panna tiger reserve.

- 7) Consider the following statements:
  - 1. The Lomas Rishi cave was excavated during the Asokan period contains the edicts of Asoka.
  - 2. All the caves of the Barabar and Nagarjuni hills were donated as dwellings to Ajivika ascetics.

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: b

The Lomas Rishi cave remained unfinished and hence also contains no edict of Asoka.

- 8) Consider the following statements:
  - 1. The Great Green Wall passes through the Sahel region from Senegal in the West to Djibouti in the East of Africa.
  - 2. The ambition of the initiative is to restore 100 million ha of currently degraded land; sequester 250 million tons of carbon and create 10 million green jobs by 2030.
  - 3. The FLEUVE Project, a flagship programme under the Great Green Wall, is being implemented by the UN Convention to Combat Desertification (UNCCD).

Which of the above statements are correct?



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

Answer: d

- 9) Consider the following statements with respect to cyclones:
  - 1. Cyclones are named by the regional specialised meteorological centres and Tropical Cyclone Warning Centres in every ocean basin across the world.
  - 2. The Indian Meteorological Department (IMD), names the cyclones which develop over the Bay of Bengal, Arabian Sea and North Indian Ocean only.

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: c

# 10) Consider the following statements:

- 1. Polavaram Project is the dam that is being constructed across the Krishna River in Andhra Pradesh.
- 2. Its reservoir also spreads in parts of Chhattisgarh and Orissa.
- 3. It will facilitate an inter-basin transfer of the Krishna river basin through its Right canal.

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

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

Answer: c

### 11) Consider the following statements:

- 1. Pradhan Mantri Mudra Yojana (PMMY) provides loans to the non-corporate, and farm based small /micro-enterprises.
- 2. MUDRA does not lend directly to micro-entrepreneurs/individuals but only through financial institutions.
- 3. Loans provided under the Mudra scheme are collateral free loans.

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

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

Answer: b

It was launched by the government in 2015 for providing loans up to Rs. 10 lakh to the non-corporate, non-farm small/micro-enterprises.

### 12) Consider the following statements:

- 1. The government can terminate the citizenship of an Indian citizen at all times, when the citizen has unlawfully traded with the enemy.
- 2. When a person relinquishes his citizenship, every minor child of that person also loses Indian citizenship.

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: c

## 13) Consider the following statements:

- 1. World Migration Report 2022 is published every year by the International Organization for Migration (IOM) of the United Nations.
- 2. According to the report, more people are being displaced by disasters caused by the changing climate than conflicts.

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: b

It is released by the UN-affiliated International Organization for Migration (IOM).

## 14) Consider the following statements:

- 1. Assisted Reproductive Technology (ART) (Regulation) Bill, 2020 defines ART to include all techniques that seek to obtain pregnancy outside the human body and transferring it into the reproductive system of a woman.
- 2. The Bill provides that every ART clinic and bank must be registered under the National Registry of Banks and Clinics of India.
- 3. A child born through ART will be deemed to be a biological child of the commissioning couple and will be entitled to the rights and privileges available to a natural child.

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

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

Answer: d

### 15) Consider the following statements:

- 1. Atlantification is the increasing influence of Atlantic Ocean in the Arctic Ocean characterized by warm and salty water in the arctic region.
- 2. Atlantification is part of the reason the Arctic is warming faster than any other ocean.

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

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

Answer: d

### 16) Consider the following statements:

- 1. The Scheme for Protection and Preservation of Endangered Languages of India (SPPEL)was instituted by Ministry of Culture in order to protect the Endangered Languages of India.
- 2. The objective of the scheme is to document and archive the country's languages that have become endangered or likely to be endangered in the near future.
- 3. The scheme is monitored by Central Institute of Indian Languages (CIIL) located in Mysuru, Karnataka.

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

a. 1 and 2 only



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

Answer: c

- 17) Consider the following statements with respect to Paika Rebellion:
  - 1. The Paikas belonged to the state of Madhya Pradesh where they revolted against the British.
  - 2. The cause for the rebellion was the new revenue settlements by the British which caused the proprietors to lose their lands to Bengal landlords.

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: b

Paikas had been recruited since the 16th century by kings in Odisha.

- 18) Which of the following is correct with respect to Public Choice Theory?
  - a. Public choice refers to an economic approach towards the study of politics.
  - b. It shows how self-interested behavior of people affects the outcomes of elections and other political processes.
  - c. It predicts trends in public finance, which refers to how governments collect and spend tax money.
  - d. All of the above

Answer: d

- 19) Consider the following statements regarding Protection of Plant Varieties and Farmers Rights Authority (PPV&FRA):
  - 1. The registrant's rights are limited to only production of a variety and not production from a variety.
  - 2. Farmers are not entitled to sell branded seed of a variety protected under this Act.

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: c

- 20) Consider the following statements with respect to Parliamentary procedures:
  - 1. For a starred question the member desires an oral answer from the minister and it cannot be followed by a supplementary question.
  - 2. A question can be addressed to a private member only in the Lok Sabha and such question can be related only to bills, resolutions or other matter for which that member is responsible.
  - 3. A short notice question is raised on an urgent matter of public importance and a written answer is sought.

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

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

Answer: d