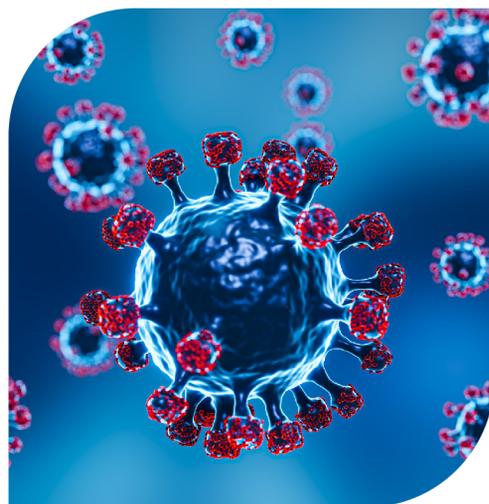


CURRENT AFFAIRS MAGAZINE

APRIL 2022

- Recombinant Variants of SARS-CoV-2
- The Languages India Speaks
- Cryptos & a CBDC are Not the Same Thing
- Revisiting Death Penalty Jurisprudence



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1. Educrat IAS Mains DNA from The Hindu & The Indian Express

1.1 Punjab's Claim on Chandigarh

- Punjab's chief minister moved a resolution in the Assembly, seeking the immediate transfer of Chandigarh to Punjab.
- The long-standing dispute between Punjab and Haryana over Chandigarh flared up after the Centre notified Central Service Rules for employees in Chandigarh instead of the Punjab Service Rules.

How did Chandigarh become the capital of Punjab?

- After Partition, Shimla was made the temporary capital of Indian Punjab. Prime Minister Jawaharlal Nehru wanted a modern city to replace Lahore as Punjab's capital, and the idea of Chandigarh was conceived.
- In 1953, the capital was officially moved from Shimla to Chandigarh.

When was Punjab reorganized and Chandigarh became a Union Territory?

- The Punjab Reorganization Act of 1966 carved out the new state of Haryana from undivided Punjab, created the new Union Territory of Chandigarh under the direct control of the Centre, and transferred the hill territories of Punjab to Himachal Pradesh.
- Chandigarh was identified as the capital of Punjab but it became the common capital of both Punjab and Haryana, and properties were divided between the states in the ratio of 60:40.

Chandigarh Issue in Punjab and Haryana

- Since 1966, the lack of full rights to its capital has remained a major issue in Punjab politics.
- It has featured in all major developments, whether it is the 1973 Anandpur Sahib resolution, Dharam Yudh Morcha (of Akali Dal with J.S. Bhindranwale) and the 1985 Rajiv-Longowal Accord.
- On the other hand, in Haryana, all parties present a common position asserting their claim to the city and have objected to any move which associates Chandigarh solely with Punjab.

What has been the Central Government's stand on Punjab?

- At the time of the 1966 Act, the Union government with Indira Gandhi as Prime Minister indicated that the UT status to Chandigarh was temporary and that it would be transferred to Punjab.
- According to the 1985 Rajiv-Longowal Accord, Chandigarh was to be handed over to Punjab on January 26, 1986, but this was never fructified after the assassination of Longowal and the long period of militancy till the mid-1990s.
- However, recently, the Centre notified Central Service Rules for employees in the Union Territory instead of the Punjab Service Rules. This development could indicate a shift in the Central government's position.

1.2 Building Faith in India's Investigative Agencies

- The police and investigative agencies may have de-facto legitimacy, but as institutions, they are yet to gain social legitimacy.
- Police should work impartially and focus on crime prevention.
- The CBI possessed immense trust of the public in its initial phase.
- But with the passage of time, like every other institution of repute, the CBI has also come under deep public scrutiny. The need of the hour is to reclaim social legitimacy and public trust.

Issues affecting the system and causing delay in trial:

- Lack of infrastructure, lack of sufficient manpower, inhuman conditions, especially at the lowest rung, lack of modern equipment.
- Questionable methods of procuring evidence, officers failing to abide by the rule book and the lack of accountability of erring officers.
- Lack of public prosecutors and standing counsels, undue imprisonment of undertrials, change in priorities with the change in the political executive, cherry-picking of the evidence, and repeated transfers of officers.

Way forward:

- Break the nexus with political executive: The first step to reclaim social legitimacy and public trust is to break the nexus with the political executive.

- Reform of the police system is long overdue in our country.
- Comprehensive law: Our investigative agencies still do not have the benefit of being guided by a comprehensive law.
- Independent and autonomous investigative agency: The need of the hour is the creation of an independent and autonomous investigative agency.
- Umbrella organisation: There is an immediate requirement for the creation of an independent umbrella institution, so as to bring various agencies like the CBI, SFIO, and ED under one roof.
- One additional safeguard that needs to be built into the scheme, is to have separate and autonomous wings for prosecution and investigation, in order to ensure total independence.
- Ensure women's representation: An issue that needs addressing at this stage is the representation of women in the criminal justice system.

1.3 Reforming Death Penalty

The Supreme Court has initiated a procedure to review the process of the death penalty.

About:

- Capital punishment or the death penalty is a legal penalty for some crimes under the Indian Penal Code or other laws.
- In the Code of Criminal Procedure (CrPC), 1898 death was the default punishment for murder and mandated the judges to give reasons in their judgment if they desired to give life imprisonment instead of the death penalty.
- With the amendment of CrPC in 1973, life imprisonment became the norm and the death penalty was to be imposed only in extraordinary cases and required 'special reasons'.
- The amendment also divided a criminal trial into two stages; one for conviction and another for sentencing.
- The Code of Criminal Procedure, 1973, also contains a provision that the court must write "Special reasons" justifying the sentence and mention why an alternative sentence would not meet the ends of justice.

Process:

- After the decision by the Session Court, a high court needs to confirm the death sentence.
- Special leave petition: After the death sentence is confirmed by the High Court, an appeal by Special Leave Petition under Article 136 of the Constitution may be filed with the Supreme court.
- Under Article 136, the Supreme Court decides whether the special leave petition deserves to be heard as an appeal or not.
- Curative petition: The Supreme Court may allow a curative petition to reconsider its judgment or order if it is established that there was a violation of principles of natural justice or suspicion of bias in the role of a judge.
- The curative petition would be circulated before the same bench which decided on the review petition.
- Articles 72 and 161 of the Constitution give power to the President of India and the Governor to grant pardons and to suspend, remit or commute sentences in certain cases.
- In cases where the death sentence is awarded, The convict should be allowed to use all the legal remedies available such as appeal, review and mercy petitions.

Arguments in support of Capital punishment:

- All Guilty people deserve to be penalised in proportion to the severity of their crime.
- Real justice requires people to suffer in a way suited for the crime. Every criminal must get what their crime deserves and in the case of murder they deserve death.

Arguments against capital punishment:

- Capital punishment is revenge rather than punishment and is a morally doubtful concept.
- Against Real or Proportional justice, as the criminal suffers for many years before execution, it makes the punishment more severe.
- There is always a risk of executing the innocent due to mistakes or defects in the justice system.
- The death penalty doesn't seem to deter people from committing serious crimes.
- The Law Commission of India recommended abolishing the death penalty, except in terror cases.

Way Forward:

- In India, the current position regarding death sentences is quite a balanced one. But the broad judicial discretion given to the court has resulted in an extremely uneven judgment in similar cases; this does not represent a good picture of the Indian Judiciary.

- The principle laid down in cases like Bachan Singh or Machhi Singh has to be strictly followed so that the person convicted for an offence of identical nature is awarded a punishment of an identical degree.

1.4 Rupee-Rouble Trade Arrangement

- Rupee-rouble trade is a payment mechanism which can allow Indian exporters to be paid in Indian rupees for their exports to Russia instead of standard international currencies such as dollars or euros.
- Under this arrangement, a Russian bank will need to open an account in an Indian bank while an Indian bank will open its account in Russia.
- Both sides can then mutually agree to hold currency worth a specified amount in the local currencies in their respective accounts.
- If the specified amount is say, \$100 million, then the Russian bank's account in India will have rupees worth that amount while the Indian bank's account in Russia will have roubles worth that amount.
- Once the payment mechanism is in place, the Indian exporter can be paid in rupee from the Russian bank's account in India and imports from Russia can be paid for with roubles from the Indian bank's account in Russia.

How critical is the rupee-rouble mechanism for India?

- It is important for India to have an alternative payment mechanism in place with Russia as the US, the EU and the UK have blocked at least seven Russian banks from accessing the Society for Worldwide Interbank Financial Telecommunication (SWIFT).
- An estimated \$500 million is pending for goods already shipped by Indian exporters and it is now not possible to get the payment through the regular SWIFT channel.
- Since transaction with Russia cannot be carried out in international currencies such as the dollar or the euro, a rupee payment mechanism will determine if the trading will continue or not.

Issues:

- The fluctuation in the value of rouble could make it difficult to implement the rupee-rouble payment mechanism.
- Firstly, it will be difficult to decide a fair exchange rate between the rupee and the rouble.
- Moreover, if the value of the rouble continues falling sharply, then trading may not happen as the rouble in the Indian bank's Russian account will lose value.
- if the sanctions turn product-specific, then it may be difficult for India to use this arrangement
- The world would see this as an arrangement by India to by-pass the sanctions post-Russia's invasion of Ukraine
- The US and the EU are already unhappy with India for abstaining at the UN Security Council and the UN Human Rights Commission on all resolutions that criticise Russia for invading Ukraine
- If India helps Russia flout economic sanctions, it may then be accused of siding with Russia and this could hurt New Delhi's diplomatic relations with the Western powers.

1.5 Areas under AFSPA Regime Reduced: Home Ministry

The Union Home Ministry has considerably reduced the "disturbed areas" under the Armed Forces (Special) Powers Act (AFSPA) in Assam, Manipur and Nagaland.

Issues:

- Power to kill: Section 4 of the Act granted officers the authority to "take any action" even to the extent to cause the death.
- Protection against prosecution: This power is further bolstered by Section 6 which provides that no legal sanction can be instituted against the officer, except with the previous sanction of the Central Government.
- Sexual Misconduct by Armed Forces: in conflict zones, legal protection for women was neglected.
- it is contravention to the:
 - Right to Life and Personal Liberty (Article 21) and
 - Federal structure of the Constitution since law and order is a State subject

Armed Forces Special Powers Act, to put it simply, gives armed forces the power to maintain public order in "disturbed areas."

AFSPA gives armed forces the authority use force or even open fire after giving due warning if they feel a person is in contravention of the law.

The Act further provides that if "reasonable suspicion exists", the armed forces can also arrest a person without warrant; enter or search premises without a warrant; and ban the possession of firearms.

Supreme court observations:

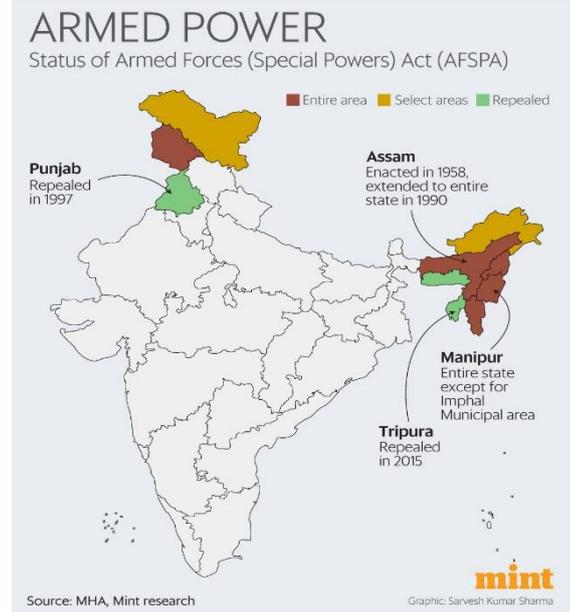
- It clarified that the bar under Section 6 would not grant “total immunity” to the officers against any probe into their alleged excesses.
- The judgment noted that if any death was unjustified, there is no blanket immunity available to the perpetrator(s) of the offense.
- Justice B.P. Jeevan Reddy Commission: recommended that AFSPA be repealed.
- Additionally, it recommended that appropriate provisions be inserted in the Unlawful Activities Prevention Act, 1967 (UAPA) instead.

The Central Government or the Governor of the State or administrator of the Union Territory can declare the whole or part of the State or Union Territory as a disturbed area.

These are places where “the use of armed forces in aid of the civil power is necessary”.

Why removed:

- Various parts of northeast have seen a reduction in insurgency.
- A number of major groups were already in talks with the government and these talks received traction during the current regime.
- In Nagaland, all major groups are at advanced stages of concluding agreements with the government.
- In Manipur, insurgency as well as heavy militarisation have been on the decline since 2021, when SC started hearing PIL on extra judicial killings



1.6 Demand for Restoring the Old Pension Scheme

Many states are trying to restore Old Pension Scheme and discontinue the National Pension System (NPS).

What is the Defined Pension Benefit Scheme (old)?

- The scheme assures life-long income, post-retirement.
- Usually the assured amount is equivalent to 50% of the last drawn salary.
- The Government bears the expenditure incurred on the pension.
- The scheme was discontinued in 2004.

What is the National Pension System (NPS)?

- The scheme is applicable to all new recruits joining the Central Government service (except armed forces) from April 1, 2004.
- On the introduction of NPS, the Central Civil Services (Pension) Rules, 1972 was amended.
- It is a scheme, where employees contribute to their pension corpus from their salaries, with matching contributions from the government.
- The funds are invested in earmarked investment schemes through Pension Fund Managers.
- At retirement, they can withdraw 60% of the corpus, which is tax-free and the remaining 40% is invested in annuities, which is taxed.
- It can have two components — Tier I and II.
- Tier-II is a voluntary savings account that offers flexibility in terms of withdrawal, and one can withdraw at any point of time, unlike Tier I account.
- Private individuals can opt for the scheme.

In 2019, the Finance Ministry said that Central government employees have the option of selecting the Pension Funds (PFs) and Investment Pattern in their Tier-I account.

Why in news now?

- In Feb, Rajasthan CM announced restoration of the old pension scheme for the government employees, who joined the service on or after January 1, 2004.
- The announcement meant that the National Pension System (NPS) would be discontinued in the State.

- The center had maintained that restoration of the old system would cause an unnecessary financial burden on the government.

Cons of NPS

- Forfeiture of pension: The NPS scheme was created by the Government of India, in order to stop all the defined pension related benefits that it gave to its employees.
- NPS restricts all kinds of withdrawals, before the subscriber reaches the age of 60 years.
- No tax benefits: The NPS corpus, which the subscriber can use for buying annuity or for drawing pensions, is taxable, when the schemes matures.
- Limit on investment: The subscriber cannot invest more than 50% of his or her total investment in the NPS account, towards the equities.
- No guarantee: While NPS is a government scheme, the corpus is created according to the returns, which are generated under the corporate bonds, government securities, and the equity.

1.7 Recombinant Variants of SARS-CoV-2

The World Health Organization (WHO) has flagged the emergence of a new variant of the SARS-CoV-2 virus — the XE recombinant.

How are variants created?

- SARS-CoV-2, the virus that causes COVID-19, is an RNA virus which evolves by accumulating genetic errors in its genome.
- These errors are produced when the virus infects a person and makes copies of itself inside the host's cells.
- These errors (otherwise called mutations) are therefore a by-product of replication of SARS-CoV-2 inside the cell and may be carried forward as the virus continues to infect people.
- When viruses having a specific set of errors or mutations infect a number of people, this forms a cluster of infections descending from a common parental virus genome and is known as a lineage or a variant of the virus.

Who names these variants?

The PANGO network, an open global consortium of researchers from across the world, provides a system for naming different lineages of SARS-CoV-2.

What is a recombinant variant?

- Recombination occurs when, in extremely rare situations, two different lineages of the virus co-infect the same cell in the host and exchange fragments of their individual genomes.
- This generates a descendent variant having mutations that occurred in both the original lineages of the virus.
- Recombination of lineages happens in a variety of other viruses, including those that cause influenza, as well as other coronaviruses.
- Such recombination events occur typically in situations where two or more lineages of SARS-CoV-2 may be co-circulating in a certain region during the same time period.
- This co-circulation of lineages provides an opportunity for recombination to occur between these two lineages of SARS-CoV-2.
- Although recombination has been detected in SARS-CoV-2, it has not yet impacted public health in a unique way.

Since recombinations are extremely rare occurrences, it is unclear how and why the viruses recombine. It is, therefore, important to track the recombination of SARS-CoV-2 lineages because it may lead to the generation of a viral lineage that is better at infecting people or transmitting from host to host.

1.8 Who are Denotified Tribes (DNTs)?

- These are communities who are the most vulnerable and deprived.
- Denotified tribes (DNTs) are communities that were 'notified' as being 'born criminal' during the British regime under a series of laws starting with the Criminal Tribes Act of 1871.
- They mostly belong to the medieval period Banjaras.

Many commissions and committees constituted since Independence have referred to the problems of these communities. These include the:

- Ananthasayanam Ayyangar Committee in 1949 (it was based on the report of this committee the Criminal Tribes Act was repealed)
- Kaka Kalelkar Commission (also called first OBC Commission) constituted in 1953
- In 1965, an Advisory Committee constituted for revision of the SC and ST list under the chairmanship of B N Lokur referred to denotified tribes
- The B P Mandal Commission constituted in 1980.
- A National Commission for De-notified, Nomadic and Semi-Nomadic Tribes (NCDNT) was constituted in 2006 by the then government, headed by Balkrishna Sidram Renke and submitted its report in June 2008.
- The Renke commission estimated their population at around 10.74 crore based on Census 2001.

Why in news now?

- While a number of these tribes are categorised under SC, ST and OBC, many are not.
- The standing committee report in Parliament has cited a statement by the Secretary, Department of Social Justice and Empowerment, that 269 DNT communities are not covered under any reserved categories.
- These communities are frequently left out because they are less visible and difficult to reach.

What is DWBDNC, and what is its role?

- The DWBDNC stands for the Scheme for welfare of Denotified, Nomadic and Semi Nomadic communities (DWBDNC).
- The DWBDNC was constituted on February 21, 2019 under the chairmanship of Bhiku Ramji Idate.
- Also, a committee has been set up by the NITI Aayog to complete the process of identification of the de-notified, nomadic and semi-nomadic communities (DNCs).

1.9 Indonesia's Palm Oil Crisis, and its Implications for India

The world's largest producer and exporter of palm oil, Indonesia, is facing domestic shortages, leading to price controls and export curbs.

What is Oil Palm?

- Palm oil is an edible vegetable oil derived from the mesocarp of the fruit of the oil palms.
- The oil is used in food manufacturing, in beauty products, and as biofuel.

Plausible factors:

- Ukraine and Russia together account for nearly 80% of the global trade in sunflower oil, quite comparable to the 90% share of Indonesia and Malaysia in palm.
- Russia's invasion of Ukraine has resulted in port closures and exporters avoiding Black Sea shipping routes.
- Sanctions against Russia have further curtailed trade in sunflower oil, the world's third most exported vegetable oil after palm and soybean.
- The Indonesian government has, since 2020, made 30% blending of diesel with palm oil mandatory as part of a plan to slash fossil fuel imports.
- Palm oil getting increasingly diverted for bio-diesel is leaving less quantity available, both for the domestic cooking oil and export market.

Impact on India

- India is the world's biggest vegetable oils importer.
- Indonesia has been India's top supplier of palm oil, though it was overtaken by Malaysia in 2021-22 (see above table).
- The restrictions on exports, even in the form of levy, take into cognizance Indonesia's higher population (27.5 crores, against Malaysia's 3.25 crore) as well as its ambitious biofuel program.
- To that extent, the world – more so, the bigger importer India – will have to get used to lower supplies from Indonesia.

1.10 Russia Suspended from UN Human Rights Council Membership

- Russia's three-year term as member of the Council began on January 1, 2021.

- With membership on the Council comes a responsibility to uphold high human rights standards.
- It is this responsibility that Russia is alleged to have wilfully violated in Ukraine.

India stayed absent. Why?

- India questioned the process by which the move to suspend Russia took place given that it happened before the international probe into the massacre.
- New Delhi's point is that it should have been brought before the Human Rights Council first, and not the UNGA.
- This is a signal to the West that due process has not been followed.

About UN Human Rights Council

- The UNHRC is an inter-governmental body within the United Nations system, which is responsible for strengthening the promotion and protection of human rights around the world.
- It addresses and makes recommendations on situations of human rights violations, and can discuss all thematic human rights issues and situations.
- Mechanism of Universal Periodic Review to assess the human rights situations in all UN Member States.
- Its Complaint Procedure, allows individuals and organisations to bring human rights violations to the Council's attention.

1.11 RBI Shift on Monetary Policy

The Monetary Policy Committee (MPC) of the Reserve Bank of India (RBI) on Friday gave a surprise, with a formal start to policy normalisation.

RBI on the path of policy normalisation:

- Focus on target of 4% +/- 2%: While the MPC voted unanimously to remain accommodative, the focus would now be on "withdrawal of accommodation.
- The Liquidity Adjustment Facility (LAF) corridor was narrowed back to the conventional 0.25 percentage points from the earlier extraordinary pandemic widening in late March 2020.
- The cap of the erstwhile corridor was the repo rate and the floor was the reverse repo.
- Now, while the repo rate was held at 4.0 per cent and the latter at 3.35 per cent, the floor of the corridor was increased by 0.4 percentage points from 3.35 per cent.

Reasons for unexpected tightening of policy:

- Given that inflation is likely to average 6.1 per cent in Q4 of FY22, this increases the risk of inflation remaining above the 6 per cent upper target for three consecutive quarters, necessitating an explanation to the government by the MPC.
- One possible reconciliation with modest GDP growth is continuing weakness in services, which is also borne out by channel checks.
- Certainly, continuing high inflation is likely to lead to some demand destruction, which will act as an automatic stabiliser.
- A relatively loose fiscal policy is likely to offset some of this reduced demand, particularly with continuing subsidies to lower-income households.
- In a rising rate cycle, with a large borrowing programme of the Centre and state governments, interest rates on sovereign bonds are likely to increase without a measure of support from the RBI through Open Market Operations (OMOs).
- This will entail injecting more liquidity into an already large surplus, which might add to inflationary pressures.
- The introduction of the overnight Standing Deposit Facility (SDF) was a significant measure in this context.
- Unlike the reverse repo facility, the RBI will not need to give banks government bonds as collateral against the funds they deposit.

What are the implications?

- Interest rates will begin to increase but, for bank borrowers, this is likely to be a very gradual process.
- For corporates and other wholesale borrowers, who also borrow from bond markets, this increase is likely to be faster as the surplus system liquidity is gradually drained.

1.12 Who is a Flight Risk?

- A lookout circular is issued to prevent a person from leaving the country.
- It is issued by various agencies and government bodies to the Bureau of Immigration with details of the person.
- The BOI maintains a register of such circulars which is informally called exit control list.
- The BOI is expected to inform the person against whom it is issued when they reach immigration.
- BOI is not authorised to arrest or detain anyone. The action is decided by agency that has issues LOC.
- An LOC is valid for only a year and has to be re issued.

Who can issue such a circular?

- LOC can be issued by officer not below the rank of Deputy secretary to the GOI, or an officer of joint secretary in state government, or DM, or SP etc.
- LOC can be issued by police, CBI, NIA, Enforcement directorate, CBDT, IB, RAW, directorate of revenue intelligence, Narcotics control bureau, CBEC.
- Detaining agency has to give reason for LOC
- Recourse to LOC is to be taken in “cognizable offences under IPC or other penal laws”. If there is no cognisable offence under such laws, the LOC subject cannot be detained.
- Home ministry added in 2011 “exceptional situations” where LOC can be issued without complete parameters.

What law governs LOC?

- There is no specific law but guidelines by Home Ministry exist.
- There is no specific provision for informing the subject that LOC has been issued till the subject reaches immigration.
- The aim of LOC is only to prevent a person from leaving. The agency may or may not arrest the person.
- Court can quash an LOC if it has not been issued in a prescribed format or by authorised agency, or if it feels that grounds for issuance are not fulfilled.

1.13 Supporting Rhe Care Economy

- Care work encompasses direct activities such as feeding a baby or nursing an ill partner, and indirect care activities such as cooking and cleaning’.
- Whether paid or unpaid, direct or indirect, care work is vital for human well-being and economies.
- Unpaid care work is linked to labour market inequalities, yet it has yet to receive adequate attention in policy formulation.
- Greater investment in care services can create an additional 300 million jobs globally, many of which will be for women.
- In turn this will help increase female labour force participation and advance Sustainable Development Goal (SDG) 8.

Gaps in the current policies:

- Maternity leave: Maternity leave is a universal human and labour right.
- Yet, it remains unfulfilled across countries. India fares better than its peers in offering 26 weeks of maternity leave, against the ILO’s standard mandate of 14 weeks that exists in 120 countries.
- However, this coverage extends to only a tiny proportion of women workers in formal employment in India, where 89% of employed women are in informal employment
- While paternity leave is recognised as an enabler for both mothers and fathers to better balance work and family responsibilities, it is not provided in many countries, including India.
- Access to quality and affordable care services such as childcare, elderly care and care for people with disabilities is a challenge workers with family responsibilities face globally.
- Limited implementation: While India has a long history of mandating the provision of crèches in factories and establishments, there is limited information on its actual implementation.

Way forward:

- India spends less than 1% of its GDP on the care economy; increasing this percentage would unfurl a plethora of benefits for workers and the overall economy.
- The ILO proposes a **5R framework** for decent care work centred around achieving gender equality. The framework urges the Recognition, Reduction, and Redistribution of unpaid care work, promotes Rewarding care workers with more and decent work, and enables their Representation in social dialogue and collective bargaining.

1.14 Why central services cannot be exempted from reservation for disabled?

- In a case that the SC is currently hearing, the petitioner has challenged a notification issued by the Department of Empowerment for Persons with Disabilities
- The impugned notification exempts all categories of posts in the Indian Police Service, the Delhi, Andaman and Nicobar Islands, Lakshadweep, Daman and Diu and Dadra and Nagar Haveli Police Service, as well as the Indian Railway Protection Force Service from the mandated 4 per cent reservation for persons with disabilities under the Rights of Persons with Disabilities Act, 2016.

Issues:

- **Against combat and non-combat classification:**
 - On the same day as the issuing of the impugned notification, the Department also issued another notification exempting from the purview of reservation under the RPwD Act posts only of “combatant” nature in the paramilitary police.
 - This classification between combat and non-combat posts was premised on a clear recognition of the fact that persons with disabilities are capable of occupying non-combat posts in the central forces.
 - The Department has offered no justification as to why this classification would not hold good as regards the services covered in the impugned notification.
- **Against the identification of posts suitable for reservation for the disabled:**
 - The Ministry of Social Justice and Empowerment had identified a range of ministerial/civilian posts as being suitable for reservation for the disabled.
 - The impugned notification goes against this identification exercise, by virtue of its blanket character.
- **Exercise of power:**
 - As per the RPwD Act, the grant of any exemption has to be preceded by consultation with the Chief Commissioner for Persons with Disabilities.
 - However, the office of the chief commissioner has been lying vacant for many years, with the secretary in the Department officiating in that role.

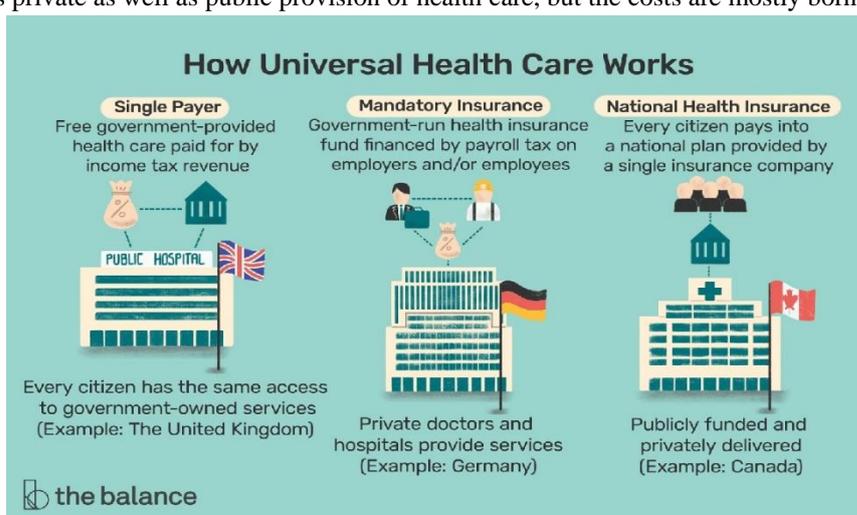
1.15 Healthcare as an Optional Public Service (HOPS)

Universal health coverage:

- Universal health coverage means that all people have access to the health services they need, when and where they need them, without financial hardship.
- It includes the full range of essential health services, from health promotion to prevention, treatment, rehabilitation, and palliative care.
- Currently, at least half of the people in the world do not receive the health services they need.
- It provides for social insurance- It allows private as well as public provision of health care, but the costs are mostly borne by the social insurance fund(s) so that everyone has access to quality health care.
- The social insurance is one where insurance is compulsory and universal, financed mainly from general taxation, and run by a single non-profit agency in the public interest

HOPS:

- HOPS refers to the framework for UHC that would build primarily on health care as a public service.
- The idea is that everyone would have a legal right to receive free, quality health care in a public institution if they wish.
- The main difficulty with the HOPS framework is to specify the scope of the proposed health-care guarantee, including quality standards.



What are the challenges associated with social insurance?

- Absence of public health centres- In the absence of public health centres, there is a danger of patients rushing to expensive hospitals making the system wasteful and expensive.
- Costs- Containing costs is a major challenge with social insurance, because patient and health-care provider have a joint interest in expensive care.
Even small co-payments often exclude many poor patients from quality health care.
- Regulating private health-care providers- A crucial distinction needs to be made between for-profit and non-profit providers.
For-profit health care is deeply problematic because of the conflict between the profit motive and the well-being of the patient.

Pros	Cons
<ul style="list-style-type: none"> • Lowers overall health care costs • Lowers administrative costs • Standardizes service • Creates a healthier workforce • Prevents future social costs • Guides people to make healthier choices 	<ul style="list-style-type: none"> • Less financial incentive to stay healthy • Long wait times for elective procedures • Doctors incentivized to cut care to lower costs • Health care costs may overwhelm government budgets • Government may limit services with low probability of success

1.16 Understanding Software Copyright and Licences

Software licensing

- A copyright gives a creator the legal right to own, distribute and profit from his or her creative work.
- There are different kinds of software licences that allow free use of software:

<p style="text-align: center;">Proprietary License</p> <ul style="list-style-type: none"> • There is proprietary software which is to be purchased as a one-time transaction or as yearly licences. • A popular example is Microsoft Windows which is purchased along with the computer or Microsoft Office 	<p style="text-align: center;">Creative Commons licence (CC)</p> <ul style="list-style-type: none"> • It is in public domain: any software or work that is in CC can be used and distributed free of cost. • For example, Wikipedia
<p style="text-align: center;">Permissive Software licence</p> <ul style="list-style-type: none"> • It is popular in the software developer community and in the commercial world. • This licence allows free use and modification of software. 	<p style="text-align: center;">Apache licence</p> <ul style="list-style-type: none"> • The Apache licence is maintained by the Apache Software Foundation which is a non-profit entity. • Many popular and powerful softwares like Spark (used in Big Data) have been developed under Apache licence.

What are Open Software?

- All free and permissive software licences are similar to Free and Open Source Software (FOSS).
- In the software community, 'open source' means any of the above non-proprietary licences.
- Open source software packages are developed and maintained by programmers from around the world.

Is the Internet free?

- To access and to create content on the internet, there are costs involved such as infrastructure costs like network cost and the cost to host and maintain the content.
- However, the core of the internet itself is free: it is free to use ideas like linking contents on the internet, transferring them with a network software protocol and adopting the associated standards like maintaining the website address

1.17 What are Weapons of Mass Destruction (WMD)?

- While there is no single, authoritative definition of a WMD in international law, the expression is usually understood to cover nuclear, biological, and chemical (NBC) weapons.

- WMD can be any nuclear, radiological, chemical, biological, or other device that is intended to harm a large number of people.

India's 2005 WMD Act defines-

- "Biological Weapons" as "microbial or other biological agents, or toxins...of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes.
- "Chemical Weapons" as "toxic chemicals and their precursors" except where used for peaceful, protective, and certain specified military and law enforcement purposes.
- The Act was passed to meet an international obligation enforced by the UN Security Council Resolution (UNSCR) 1540 of 2004.

What has the Amendment added to the existing Act?

- The Amendment expands the scope to include prohibition of financing of any activity related to WMD and their delivery systems.
- To prevent such financing, the Central government shall have the power to freeze, seize or attach funds, financial assets, or economic resources of suspected individuals (whether owned, held, or controlled directly or indirectly).

Could the Amendment become troublesome to people on account of mistaken identity?

- The new legislation could make existing business entities or people in the specific sector susceptible to a case of mistaken identity.
- The External Affairs Minister, however, assured the House that such chances were minimal since identification of concerned individuals/entities would be based on a long list of specifics

Other measures for Control over use of WMDs:

- Among them are the Geneva Protocol, 1925, that banned the use of chemical and biological weapons; and the Biological Weapons Convention, 1972, and Chemical Weapons Convention, 1992, which put comprehensive bans on the biological and chemical weapons respectively.
- India has signed and ratified both the 1972 and 1992 treaties.

What is the UNSCR 1540?

- UNSCR 1540 established binding obligations on all UN member states under Chapter VII of the UN Charter.
- Nations were mandated to take and enforce effective measures against proliferation of WMD, their means of delivery and related materials to non-state actors.

UNSCR 1540 enforced three primary obligations upon nation states —

- To not provide any form of support to non-state actors seeking to acquire WMD, related materials, or their means of delivery;
- To adopt and enforce laws criminalising the possession and acquisition of such items by non-state actors;
- To adopt and enforce domestic controls over relevant materials, in order to prevent their proliferation.

Comprehensive Nuclear-Test-Ban Treaty:

- CTBT was negotiated at the Conference on Disarmament in Geneva and adopted by the United Nations General Assembly in 1996.
- The Treaty intends to ban all nuclear explosions – everywhere, by everyone.
- It was opened for signature in 1996 and since then 182 countries have signed the Treaty, most recently Ghana has ratified the treaty in 2011.

Fissile material cut-off treaty:

- FMCT is a proposed international agreement that would prohibit the production of the two main components of nuclear weapons: highly-enriched uranium (HEU) and plutonium.
- An FMCT would provide new restrictions for the five recognized nuclear weapon states (NWS—United States, Russia, United Kingdom, France, and China), and for the four nations that are not NPT members (Israel, India, Pakistan, and North Korea).

Nuclear Security Contact Group

- The NSCG was established in 2016.
- The NSCG or “Contact Group” has been established with the aim of facilitating cooperation and sustaining engagement on nuclear security after the conclusion of the Nuclear Security Summit process.
- Convening annually on the margins of the General Conference of the International Atomic Energy Agency (IAEA), and, as may be useful, in connection with other related meetings

Nuclear Suppliers Group

- NSG is a group of nuclear supplier countries that seeks to contribute to the non-proliferation of nuclear weapons through the implementation of guidelines for nuclear exports and nuclear-related exports.
- The NSG was set up as a response to India’s nuclear tests conducted in 1974.
- The aim of the NSG is to ensure that nuclear trade for peaceful purposes does not contribute to the proliferation of nuclear weapons.

1.18 The Languages India Speaks

The suggestion that states should communicate with each other in Hindi rather than English, while stressing that Hindi should not be an alternative to local languages has sparked the debate of “Hindi imposition”.

How widely is Hindi spoken in India?

- The 2011 linguistic census accounts for 121 mother tongues, including 22 languages listed in the 8th Schedule of the Constitution.
- Hindi is the most widely spoken, with 43.6% of the population, declaring it as their mother tongue.
- The next highest is Bengali, mother tongue for 8%— less than one-fifth of Hindi’s count (Chart 2).
- In terms of the number of people who know Hindi, the count crosses more than half the country.

Has it always been this widespread?

- Hindi has been India’s predominant mother tongue over the decades, its share in the population rising in every succeeding census.
- A number of mother tongues other than Hindi have faced a decline in terms of share, although the dip has been marginal in many cases.
- For example, Bengali’s share in the population declined by just 0.14 percentage.

What explains Hindi’s high numbers?

- One obvious explanation is that Hindi is the predominant language in some of India’s most populous states, including Uttar Pradesh, Madhya Pradesh and Bihar.
- Another reason is that a number of languages are bracketed under Hindi by census enumerators.
- EG: under Hindi, they have listed nearly 65 mother tongues. Among them is Bhojpuri, and 5 crore people have reported Bhojpuri as their mother tongue, but the census has decided that Bhojpuri is Hindi.

And how widely is English spoken?

- Although English, alongside Hindi, is one of the two official languages of the central government, it is not among the 22 languages in the 8th Schedule.
- In terms of mother tongue, India had just 2.6 lakh English speakers in 2011 — a tiny fraction of the 121 crore people counted in that census.

1.19 Hits and misses: India’s Solar Power Energy Targets

India is likely to miss its 2022 target of installing 100 gigawatts (GW) of solar power capacity a/c to a report. This is because of rooftop solar lagging behind.

India’s solar policy:

- In 2015, the target was revised to 100GW and in August 2021, the government set a solar target of 300GW by 2030.
- India currently ranks fifth after China, U.S., Japan and Germany in terms of installed solar power capacity.
- As of December 2021, the cumulative solar installed capacity of India is 55GW.

- Within the 55GW, grid-connected utility-scale projects contribute 77% and the rest comes from grid-connected rooftop and off-grid projects.
- As of April, only about 50% of the 100GW target, consisting of 60GW of utility-scale and 40GW of rooftop solar capacity, has been met.

Reasons for rooftop solar adoption not meeting targets:

- In its early years, India's rooftop solar market struggled to grow, held back by lack of consumer awareness, inconsistent policy frameworks of the Centre/ State governments and financing.
- **Factors impeding rooftop-solar installation include:**
 - Pandemic-induced supply chain disruption to policy restrictions
 - Regulatory roadblocks
 - Limits to net-metering (or paying users who give back surplus electricity to the grid)
 - Taxes on imported cells and modules
 - Unsigned power supply agreements (PSAs) and banking restrictions
 - Financing issues plus delays in or rejection of open access approval grants and
 - The unpredictability of future open access charges

Significance of solar power to India's commitment:

- Solar power is a major prong of India's commitment to address global warming according to the terms of the Paris Agreement, as well as achieving net zero, or no net carbon emissions, by 2070.
- PM at the COP Glasgow, in November 2021, said India would be reaching a non-fossil fuel energy capacity of 500 GW by 2030 and meet half its energy requirements via renewable energy by 2030.
- To boost the renewable energy installation drive in the long term, the Centre in 2020 set a target of 450GW of RE capacity to be achieved by 2030, within which the target for solar was 300GW.

1.20 Looming Power Crisis in India

Temperatures have shot up across many parts of the country with the early onset of summer, leading to a rise in the demand for power. Instances of power outages have been reported in several states.

Why is there a concern around power supply?

- The demand for power has soared.
- Several states, including Andhra Pradesh, Madhya Pradesh, Punjab, Haryana, Telangana, and Maharashtra, are facing power outages.
- The coal stock with power generation companies (gencos) is not adequate to meet the rising demand.

How bad is the coal shortage?

- Normally, a power plant must maintain 26 days of coal stock.
- However, at present, several power plants are reporting critical levels of coal stock.
- Data from the Central Electricity Authority (CEA) shows that 97 power plants out of the 173 that the CEA tracks have critical levels of coal inventory.
- Several factors have led to the shortage, including the stagnation of production by Coal India Ltd (CIL) after the bumper production in FY15 and FY16.
- There seems to be a tussle between the Centre and coal-rich states, which delay environment and land acquisition clearances.
- High dues of discoms towards gencos and the eventual delay in gencos paying CIL has complicated the scenario.

How has the Centre responded?

- CIL has made efforts to raise supply to the power sector by reducing its dispatch to other industries.
- The power ministry said that to avoid long-distance transport, a 'tolling' facility would be allowed.
- In this system, state gencos can allow other thermal power plants near a coal mine to utilize their coal linkages to generate and transmit power back.
- This is an easier alternative compared to transportation.

Is coal shortage the only reason for a power crisis?

- The lack of railway rakes to transport coal is also a major problem.
- The state power distribution companies (discoms) have also not been able to clear their dues to power generation companies.
- The covid-19 pandemic has now weakened the finances of many states, raising doubts about the ability of state-owned discoms to clear their dues.

1.21 What is the ‘Long Period Average’, IMD’s Benchmark for Monsoon Prediction?

India is likely to receive a normal monsoon for the fourth consecutive year, the India Meteorological Department (IMD) said in its first Long Range Forecast (LRF) for this year.

What is Long Period Average (LPA)?

- The IMD predicts a “normal”, “below normal”, or “above normal” monsoon in relation to a benchmark “long period average” (LPA).
- LPA refers to the average rainfall recorded from June to September for the entire country, the amount of rain that falls every year varies from region to region and from month to month.
- The IMD’s prediction of a normal monsoon is based on the LPA of the 1971-2020 period, during which India received 87 cm of rain for the entire country on average.
- It has in the past calculated the LPA at 88 cm for the 1961-2010 period, and at 89 cm for the period 1951-2000.

Why LPA is needed?

- Because annual rainfall can vary greatly not just from region to region and from month to month, but also from year to year within a particular region or month.
- An LPA is needed to smooth out trends so that a reasonably accurate prediction can be made.
- A 50-year LPA covers for large variations in either direction caused by freak years of unusually high or low rainfall, as well as for the periodic drought years.
- It also takes into account the increasingly common extreme weather events caused by climate change.

1.22 The Economics of Oil Bonds

- Over the last one year, as retail prices of petrol, diesel and other petroleum products have surged, the government has attracted criticism.
- Finance Minister has sought to counter such criticism by claiming that the current government cannot bring down taxes (and, as a consequence, prices) because it has to pay for the oil bonds issued by the previous regime.

What are oil bonds?

- An oil bond is an IOU, or a promissory note issued by the government to the OMCs, in lieu of cash that the government would have given them so that these companies don’t charge the public the full price of fuel.
- An oil bond says the government will pay the oil marketing company the sum of, say, Rs 1,000 crore in 10 years.
- And to compensate the OMC for not having this money straightaway, the government will pay it, say, 8% (or Rs 80 crore) each year until the bond matures.
- Thus, by issuing such oil bonds, the government of the day is able to protect/ subsidise the consumers without either ruining the profitability of the OMC or running a huge budget deficit itself.

Why were they issued?

- When fuel prices were too high for domestic consumers, governments in the past often asked oil marketing companies (OMCs) to avoid charging consumers the full price.
- But if oil companies don’t get paid, they would become unprofitable.
- To address this, the government said it would pay the difference.
- But again, if the government paid that amount in cash, it would have been pointless, because then the government would have had to tax the same people to collect the money to pay the OMCs.
- This is where oil bonds come in.
- There are two components of oil bonds that need to be paid off: the annual interest payment, and the final payment at the end of the bond’s tenure.
- By issuing such bonds, a government can defer the full payment by 5 or 10 or 20 years, and in the interim just pay the interest costs.

1.23 Food Vaccine as a Right, more so for TB Patients:

Lack of patient-centric TB treatment:

- With more drug arsenals such as rifampicin, ethambutol, pyrazinamide, the fight against TB bacteria continued, which became multidrug resistant.
- The regimes and the mode of delivery of drugs were changed to plug the loopholes of non-compliance of patients.
- Blister packs of a multi-drug regime were provided at the doorstep, and the directly observed treatment/therapy (DOT) mechanism set up.

Role of nutrition in dealing with TB

- India has around 2.8 million active cases. It is a disease of the poor.
- And the poor are three times less likely to go for treatment.
- The fact is that 90% of Indians exposed to TB remain dormant if their nutritional status and thereby the immune system, is good.
- When the infected person is immunocompromised, TB as a disease manifests itself in 10% of the infected.
- The 2019 Global TB report identified malnutrition as the single-most associated risk factor for the development of TB, accounting for more cases than four other risks, i.e., smoking, the harmful use of alcohol, diabetes and HIV.

Way forward

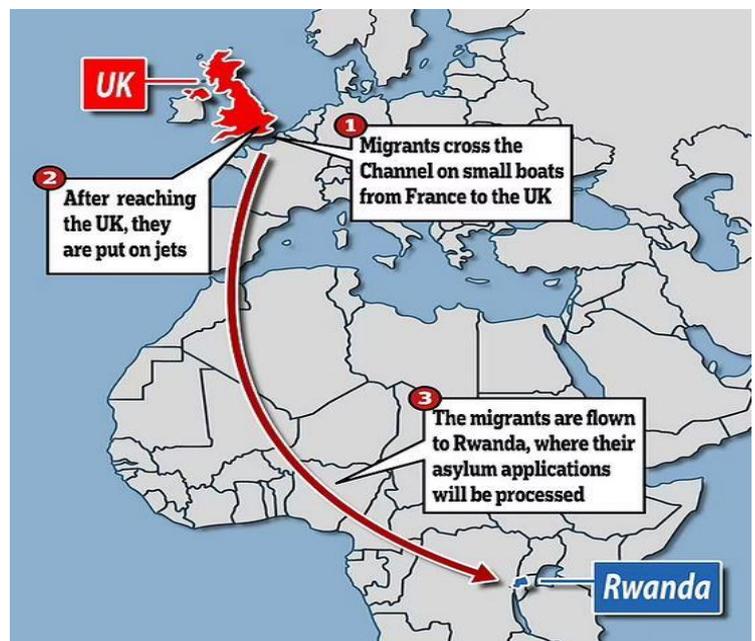
- Chhattisgarh initiated the supply of groundnut, moong dhal and soya oil, and from April 2018, under the Nikshay Poshan Yojana of the National Health Mission.
- All States began extending cash support of ₹500 per month to TB patients to buy food. This amount needs to be raised.
- Nutrition education and counselling support: Without simultaneous nutrition education and counselling support, this cash transfer will not have the desired outcome.

1.24 Why is UK sending Asylum Seekers to Rwanda?

Britain has signed an agreement with Rwanda to send asylum seekers to the East African nation.

Immigration crisis:

- Since 2018, the number of refugees and asylum seekers making dangerous crossroads between Calais in France and Dover in the United Kingdom has increased significantly.
- Most of these migrants and asylum seekers come from war-torn countries such as Sudan, Afghanistan and Yemen, or developing countries such as Iran and Iraq.
- The 2021 Nationality and Border Bill, still under consideration in the United Kingdom, allows the UK Government to withdraw citizenship without notice from anyone in an "exceptional circumstance".
- The Rwanda Accord is the operationalization of one of the bill's purposes, which is to prevent illegal entry into the UK.



Rwanda deal:

- Under this agreement, Rwanda promises to accept asylum seekers arriving in the United Kingdom after January 1, 2022, who have used method of illegal cross-border migration.
- Rwanda will serve as a holding center for asylum seekers while the Rwandan government makes decisions about asylum seekers and resettlement applications in Rwanda.
- As part of that, Rwanda accepts people without criminal records rather than minors.
- The deal aims to combat "people smugglers", who often charge exorbitant prices from vulnerable migrants to put them on unseaworthy boats from France to England that often led to mass drownings.

- The UK will pay Rwanda £ 120m as part of the "Economic Transformation and Integration Fund" and will also cover the operating costs and undecided amount of each migrant.

Issues:

- There is a risk that refugees and asylum seekers will be transferred to a third country without appropriate safeguards.
- Refugees are traded like goods and sent abroad for processing.
- Such an agreement shifts responsibility for asylum, avoids international obligations, and goes against the wording and spirit of the 1951 Convention.
- Rwanda also has a well-known track record of extrajudicial killings, suspected death in custody, illegal or arbitrary detention, torture and abusive charges, especially against critics and dissidents.

1.25 Cryptos & a CBDC are Not the Same Thing

- The Reserve Bank of India Governor emphasized two things in February. First, "private cryptocurrencies are a major threat to our financial and macroeconomic stability." Second, "these cryptocurrencies have no underlying assets (assets). The RBI states:
- Cryptocurrency surges are threatening RBI's position in the economic financial system, which is based on blockchain technology that central banks cannot regulate and is entrepreneurial.
- Due to the decentralized nature of cryptocurrencies, it allows private companies to distribute cryptocurrencies that can function as assets and money.
- The overall valuation of crypto has recently exceeded \$ 2 trillion. This exceeds the value of gold held in the world.
- Prohibition issue: Cryptography that works on the net can only be banned when all countries are gathered. Still, tax havens can make crypto work, which contradicts the global consensus.

Crypto as currency:

- A currency is a token used in market transactions.
- Paper currency derives its value from state backing.
- Cryptos are a string of numbers in a computer programme. And, there is no state backing.
- Their acceptability to the well-off enables them to act as money. So, cryptos acquire value and can be transacted via the net. This enables them to function as money.
- Solving the problem of double payments: fiat currencies, once used, can no longer be used again in any way other than counterfeiting, as they are no longer in possession of the spender.
- However, the software on your computer can be used repeatedly. Blockchain and crypto have solved the problem by developing protocols such as Proof of Work and Proof of Stake.

CBDC is not a solution:

- Central Bank Digital Currency (CBDC) is a legal tender, not a cryptocurrency, so it does not solve the RBI problem.
- Blockchain enables decentralization. But central banks don't want that. In addition, central banks want to exclusively issue and control fiat currencies on their own. But in theory, anyone can "mine" to create a new coin.
- It seems impossible for the CBDC to solve the "double payment" problem and turn it into a cryptocurrency for central control (not just the digital version of the currency).
- Transaction validation: Centralized CBDC requires RBI to validate all transactions. This is not currently being done. When a note is published, RBI does not trace its use in the transaction. Tracking it is very complicated and encryption like the CBDC can be useless unless a new secure protocol is developed.

1.26 WHO & Traditional Medicine

First-of-its-kind WHO Global Centre for Traditional Medicine (GCTM) in Jamnagar, Gujarat is being established.

What is Traditional Medicine?

- The WHO describes traditional medicine as the total sum of the "knowledge, skills and practices indigenous and different cultures have used over time to maintain health and prevent, diagnose and treat physical and mental illness".
- Its reach encompasses ancient practices such as acupuncture, ayurvedic medicine and herbal mixtures as well as modern medicines.
- According to WHO estimates, 80% of the world's population uses traditional medicine.
- This includes practices and treatments such as yoga, Ayurveda, and siddha that were historically part of the Indian tradition, as well as other treatments such as homeopathy that have been part of the Indian tradition for many years.

Why has the WHO felt the need to advance knowledge of traditional medicine?

- Almost all WHO members have reported widespread use of traditional medicine.
- These member states have asked for its support in creating a body of reliable evidence and data on traditional medicine practices and products.
- The WHO has found that the national health systems and strategies do not yet fully integrate traditional medicine workers, accredited courses and health facilities.
- It has stressed the need to conserve biodiversity and sustainability as about 40% of approved pharmaceutical products today derive from natural substances.

What is GCTM?

- GCTM aims to focus on evidence-based research, innovation, and data analysis to optimize the contribution of traditional medicine to global health.
- The focus is on the development of norms, standards and guidelines in the technical field of traditional medicine.
- It aims to set guidelines and standards for traditional medicines and help countries build comprehensive, safe and high-quality healthcare systems.
- GCTM supports efforts to implement WHO's Traditional Medicine Strategy. It acts as a hub, focusing on building a "strong evidence base" for policies and "helping countries properly integrate them into the healthcare system".

1.27 Health Star Rating System of FSSAI for Packaged Food

- In February, the FSSAI decided to adopt the "health-star rating system", which gives a product 1/2 a star to 5 stars, in its draft regulations for front of package labelling (FOPL).
- The HSR format ranks a packaged food item based on salt, sugar, and fat content and the rating will be printed on the front of the package.
- The underlying premise of the HSR is that positive ingredients such as fruits and nuts can offset negative nutrients such as calories, saturated fat, total sugar, sodium to calculate the number of stars ascribed to a product.

What is FoPL?

- In India, packaged foods have detailed nutritional information on the back of the pack (BOP), but no FoPL.
- In contrast, FoPL can encourage people to eat packaged foods in a healthy way.
- It can also affect purchasing behaviour.

What justified India's HSR assessment?

- Visual Bluff: Many Indian consumers do not read the information behind the packaged food.
- NCD Burden: India also has a heavy NCD burden, which contributes to approximately 5.87 million (60%) of all deaths in a year.
- Healthy Food Choices: HSR encourages people to make healthy choices and has the potential to make fundamental changes in society.
- Supreme Court Order: In June 2021, a PIL was submitted to the Supreme Court requesting the government to develop guidance on HSR and food and beverage impact assessments.

Which category of food item will have HSR?

All packaged food items or processed food will have the HSR label.

These will include chips, biscuits, namkeen, sweets and chocolates, meat nuggets, and cookies.

However, milk and its products such as chenna and ghee are EXEMPTED as per the FSSAI

Disputes against the evaluation of health stars:

- Negative warning: Some experts opposed the use of the HSR model in India, suggesting that consumers might tend to take this as an affirmation of the health benefits rather than as a negative warning of ill effects.
- Experts instead claim that "warning labels" are not that effective in different countries. They said that the HSR system introduced in countries like Australia and New Zealand did not make a meaningful change in behaviour.
- The HSR system also "misrepresents nutrition." Algorithms that add and subtract nutrients do not fit into our understanding of biology. For example, the inclusion of fruit in fruit drink juice cannot offset the effects of sugar added to the body.

1.28 How the Central and State Governments Procure Wheat?

- The main purpose of procuring a central pool is to ensure MSP and national food security by making food available to vulnerable people at affordable prices.
- The center will procure wheat by paying the announced minimum support price (MSP) for the crop.
- The state does this under two systems:
 - Centralized, non-distributed procurement system
 - Distributed type, also known as DCP

Non DCP	DCP
<ul style="list-style-type: none">• In this system, the Food Corporation of India (FCI) procures wheat directly or through state agencies based on various parameters such as moisture, luster, damage / shrinkage.• In Punjab and Haryana, farmers sell their crops to central authorities or government agencies through arhtiyas (contractors).• Wheat procured by state authorities is handed over to the FCI for storage or transportation to consuming countries.• FCI, the central hub for wheat procurement, pays government agencies for the cost of purchased	<ul style="list-style-type: none">• The decentralised system was brought in the late 1990s to promote local procurement and save the transportation cost and time.• The state government or its agencies procure, store and distribute wheat against the Centre's allocation for targeted PDS and other weaker sections etc. with the state.• The excess stocks procured by the state and its agencies are handed over to the FCI for the central pool.• The expenditure incurred by the state government on the procurement, storage and distribution of stocks under the decentralised system are reimbursed by the Centre.

The role of Arhtiyas :

- In addition to MSP payments, the centre will also refund Arhtiyas fees, administration fees, mandi labour costs, shipping costs, storage and maintenance costs, interest, jute bag costs and statutory taxes.
- The cost of excess inventory given to the FCI will be reimbursed to the state government or authorities in accordance with the Centre's policy.
- Procurement agencies ensure that the shares brought to Mandis are purchased according to the specifications set by the government and farmers are not forced to sell their crops under MSP.
- But if the farmer gets a better price from a private player, he is free to sell it to them.

1.29 Effective & Efficient: The Insolvency and Bankruptcy Code

The performance of the Insolvency and Bankruptcy Code (IBC) has been under intense scrutiny.

Grounds for criticism of IBC:

The norm has been criticized in three main ways:

- Payment delay: There is an excessive delay in the payment process.
- Liquidation: There were more liquidations than the resolution.
- Low salvage volume: Salvage volume under the IBC is not important and leads to more conversation than effective structural reforms.

Is the criticism about the delay justified?

- Assessing IBC based only on the average time taken to resolve successful cases does a substantial disservice to how much more efficient the IBC is compared to the previous regimes.
- It is calculated by taking a simple average of time taken on each completed case. This is one of the metrics used by the Insolvency and Bankruptcy Board of India (IBBI) to compare the IBC regime with the earlier Board of Industrial and Financial Reconstruction (BIFR) regime.
- However, the performance of a bankruptcy resolution should ideally be evaluated along at least three dimensions:
- The average time taken to resolve a case, the fraction of cases resolved within a given timeframe, and the recovery rate conditional on resolution.
- Focusing on a single parameter can lead to an overall underestimation (overestimation) of IBC (BIFR) performance.
- By examining the percentage of cases resolved within a specific time frame, we can see that IBC took significantly less time than BIFR for each percentage of all cases resolved in each game.
- Total number of cases solved: Since its inception in 1987, the BIFR has resolved less than 3,500 cases while the IBC, since it was launched in 2016, resolved about 1,178 cases until it was suspended at the onset of the COVID pandemic.

- The bottom line is straightforward: The IBC has significantly outperformed the earlier BIFR regime in terms of the speed of resolution.

1.30 Finding Workable Solutions to India-Sri Lanka Fisheries Issue

Background of the problem

- Many fishermen have been arrested and their boats have been detained by Sri Lankan authorities as some of Tamil Nadu's fishermen adjacent to Palk Bay continue to cross the International Maritime Border (IMBL).
- In addition to poaching in Sri Lanka's territorial waters, the use of mechanized bottom trawls is another issue between fishermen in both countries.
- Use of Mechanized Bottom Trawling: This fishing method was once encouraged by Indian authorities, but is now considered very harmful to marine ecosystems.
- Reason for Violation: Tamil Nadu fishermen face the real problem of lack of fishing grounds after the June 1974 IMBL demarcation. When you lock yourself in the waters of India, the area available for fishing, apart from shallow waters, is filled with rocks and coral reefs.

Way forward

- Transition to deep-sea fishing: While Indian fishermen can present a road map for their transition to deep sea fishing or alternative methods of fishing, the Sri Lankan side has to take a pragmatic view that the transition cannot happen abruptly.
- Alternative livelihood measures: There is a compelling need for the Central and State governments to implement in Tamil Nadu the Pradhan Mantri Matsya Sampada Yojana in a proactive manner.
- The scheme, which was flagged off two years ago, covers alternative livelihood measures too including seaweed cultivation, open sea cage cultivation, and sea/ocean ranching.
- Joint Fisheries Research: The JWG's agreement on joint fisheries research is a welcome development and should be commissioned urgently.
- Institutional Mechanisms: At the same time, both countries need to explore the possibility of establishing permanent stakeholder institutional mechanisms to regulate local fishing activities.
- Use of common cultural, linguistic and religious threads: People from both countries, especially fishermen, share a common linguistic, cultural and religious thread, all intended to resolve conflicts. Can be used as a target.

1.31 What Laws Govern Tapping a Phone; What are The Checks in Place?

How are telephones used in India?

- In the landline era, mechanically connected lines are swapped to route the voice signal of a call.
- When the exchange was digitized, tapping was done via a computer.
- Today, when most conversations take place over mobile phones, authorities make a request to the service provider.
- Service providers are legally required to record conversations at designated numbers and make them available in real time via a connected computer.

Who can tap phones?

- The State Police have the powers to tap phones.
- Ten Central agencies are authorised to do so: Intelligence Bureau, CBI, Enforcement Directorate, Narcotics Control Bureau, Central Board of Direct Taxes, Directorate of Revenue Intelligence, National Investigation Agency, R&AW, Directorate of Signal Intelligence, and the Delhi Police Commissioner.
- Tapping by any other agency would be considered illegal.
- Phone tapping in India is governed by The Indian Telegraph Act, 1885.
- Section 5(2) says that "on the occurrence of any public emergency, or in the interest of the public safety", phone tapping can be done by the Centre or states.
- There is an exception for the press: "press messages intended to be published in India of correspondents accredited to the Central Government or a State Government shall not be intercepted or detained, unless their transmission has been prohibited under this sub-section".

Who allows it?

- Rule 419A of the 2007 Indian Telegraph (Revised) Regulation states that telephone wiretapping orders "must not be given except at the order of the Chief Cabinet Secretary."

- In the case of the state government, it can be approved by the minister of the state government in charge of the Ministry of home.
- The order has to be conveyed to the service provider in writing; only then can the tapping begin.

What happens in an emergency?

- In unavoidable circumstances, such an order may be issued by an officer, not below the rank of a Joint Secretary to the GoI, who has been authorised by the Union Home Secretary, or the State Home Secretary.
- For example, during the 26/11 attacks in Mumbai, the authorities had no time to follow the complete procedure, and so a mail was sent to the service provider by the Intelligence Bureau.

What about misuse:

- Tapping orders are valid for up to 60 days unless cancelled early.
- It can be extended, but it cannot exceed a total of 180 days.
- At the Centre, the committee is headed by the Cabinet Secretary with the Law and Telecom Secretaries as members.
- In states, it is headed by the Chief Secretary with the Law and Home Secretaries as members.
- The committee is expected to meet at least once in two months to review all interception request.
- When the Review Committee is of the opinion that the directions are not in accordance with the provisions referred to above it may set aside the directions.
- It may order for destruction of the copies of the intercepted message.

1.32 Academic Collaboration between Indian and Foreign Universities

The University Grants Commission (UGC) has simplified the procedure for enabling academic collaborations between Indian and foreign higher educational institutions.

What did UGC propose?

- UGC has decided to allow certain Indian institutions of higher education to enter into a Memorandum of Understanding (MoU) with foreign institutions to offer dual, joint or partnership programs.
- To qualify for such academic collaboration, the Indian college, institute or university must figure among the top global 1,000 QS World University or Times Higher Education rankings or have emerged as one of the top 100 universities under the National Institutional Ranking Framework (NIRF).
- Likewise, the foreign collaborator institution must also have figured among the 1,000 global top QS or Times Higher Education Rankings.
- Once notified, the new regulation would supersede the University Grants Commission (Promotion & Maintenance of Standards of Academic Collaboration between Indian and Foreign Educational Institutions) Regulations, 2016.
- How will the courses with foreign collaboration be offered?

<p>As per the 2021 draft rules, for enrolling in dual degree programmes, prospective students must meet the admission requirements of both the Indian and foreign institutions and shall apply to and be admitted separately to both the institutions. Besides, the students must earn at least 50% of total credits from the Indian institution.</p>	<p>For the twinning degree programme, a student can get up to 30% course credit utilisation of the total course from the collaborating foreign university.</p>	<p>For the joint and dual degree programmes, the students shall be permitted to get more than 30% of the total course credits from the university or institution abroad</p>
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What are the merits of this measure?

- Qualifying Indian institutions will now be free to collaborate with foreign universities.
- For students the cost of education with international exposure would come down.
- Institutions that are committed to academic excellence will provide the students an opportunity for advanced learning with global expertise.
- Private autonomous colleges and deemed universities are most likely to utilise this opportunity to enter into agreements for twinning or dual / joining degree programmes with foreign institutions, flaunting them in their brochures to attract students.
- The UGC may have to monitor the quality of academic delivery in such programmes.

1.33 Politics of Freebies in India

- The term Freebies is not new; rather it is a prevalent culture in Indian politics (in the name of socialism).
- The political parties are always trying to outdo each other in luring the Indian voters with assorted freebies.
- Example: Promise of Rs 15 lakh in our bank accounts, Free TV, Laptops, Loan waivers

Why are such policies popular among the public?

- failure of our economic policies to create decent livelihood for a vast majority of Indians.
- Employment surveys have shown that employment growth initially slowed down from the 1990s, and then has turned negative over the past few years
- Increased cost of living, increasing consumerism etc.

Impact of such policies:

- While freebies can be seen as a broader part of welfare agenda of government, its use for vote bank politics has actually hampered its credibility.
- It can be agreed that a democracy requires popular support for its rule to continue. The sops and freebies to the poor buy it the requisite votes.
- But the democratic process of election and election promises should be clear. It should not control voters thought.

Pros	Cons:
<ul style="list-style-type: none">• Social investment: Aid to the poor is seen as a wasteful expenditure. But low interest rates for corporates to get cheap loans or the 'sop' of cutting corporate taxes are never criticized.• Socialistic policy: This attitude comes from decades of operating within the dominant discourse of market capitalism.• Election manifesto: Proponents of such policies would argue that poll promises are essential for voters to know what the party would do if it comes to power and have the chance to weigh options.• Welfare: Economists opine that as long as any State has the capacity and ability to finance freebies then its fine; if not then freebies are the burden on economy.• Other wasteful expenditure: When the Centre gives incentives like free land to big companies and announce multi-year tax holidays, questions are not asked as to where the money will come from.	<ul style="list-style-type: none">• Never ending trail: The continuity of freebies is another major disadvantage as parties keep on coming up with lucrative offers to lure more number of votes to minimize the risk of losing in the elections.• Burden on exchequer: People forget that such benefits are been given at the cost of exchequer and from the tax paid.• Ultimate loss of poors: The politicians and middlemen wipe away the benefits and the poor have to suffer as they are deprived from their share of benefits which was to be achieved out of the money.• Inflationary practice: Such distribution freebie commodity largely disrupts demand-supply dynamics.• Lethargy in population: Freebies actually have the tendency to turn the nation's population into: Lethargy and devoid of entrepreneurship.

1.34 Assam – Arunachal Border Dispute

After the recent progress made in Assam-Meghalaya border dispute, Arunachal Pradesh Chief Minister Pema Khandu and his Assam counterpart Himanta Biswa Sarma decided to form district-level committees for settling their inter-state boundary disputes.

Why does Arunachal Pradesh have a boundary dispute with Assam?

- Arunachal Pradesh, which was once a part of Assam, shares an 800-kilometer border with the state.
- The issue dates back to colonial times when the British established the "inner line" rule in 1873, which drew an imaginary border between plains and frontier hills, subsequently known as the North-East Frontier Tracts in 1915.
- The Assam government assumed administrative responsibility for the North-East Frontier Tracts after independence.
- In 1954, it was renamed the North-East Frontier Agency (NEFA), and in 1972, it became the Union Territory of Arunachal Pradesh. It was admitted to the Union as a state in 1987.
- However, before it was separated from Assam, a sub-committee led by then-Assam chief minister Gopinath Bordoloi issued a report in 1951 with suggestions for the governance of NEFA (within Assam).

- According to the Bordoloi committee report, Arunachal Pradesh (then NEFA) transferred roughly 3,648 sq km of the "plain" land of Balipara and Sadiya foothills to Assam's Darrang and Lakhimpur districts.
- Arunachal Pradesh has long claimed that the transfer was made without its people's consent. "It was arbitrary and deficient, and no tribal leader was consulted before the land was transferred. They just chose to construct a boundary between the plains and the hills."

What are the possibilities that a solution will emerge this time?

- The Assam-Meghalaya boundary agreement has raised hopes for the resolution of the Assam-Arunachal boundary dispute.
- Especially with the Centre urging the north-eastern states to resolve their territorial disputes once and for all by August 15, 2022, when the country celebrates 75 years of independence.
- Following the model used to resolve the dispute with Meghalaya, Assam and Arunachal Pradesh have agreed to form district-level committees.
- These committees are tasked with conducting joint surveys in the disputed sectors in order to find tangible solutions to the long-pending issue based on historical perspective, ethnicity, contiguity, people's will, and administrative convenience of both states.
- The two states have agreed to organize 12 such committees, with representatives from the districts that share the line.

1.35 The Goal of an Energy-Secure South Asia

Widening electricity coverage in South Asian nations

- The electricity policies of South Asian countries aim at providing electricity to every household.
- The issues these policies address include generation, transmission, distribution, rural electrification, research and development, environmental issues, energy conservation and human resource training.
- Bangladesh has achieved 100% electrification recently while Bhutan, the Maldives, and Sri Lanka accomplished this in 2019.
- South Asia is reinforcing its transmission and distribution frameworks to cater to growing energy demand not only through the expansion of power grids but also by boosting green energy such as solar power or hydroelectricity

Adapting to renewable

- India leads South Asia in adapting to renewable power, with its annual demand for power increasing by 6%.
- India's pledge to move 40% of total energy produced to renewable energy is also a big step.
- Prime Minister Narendra Modi in his 'net-zero by 2070' pledge at COP26 in Glasgow asserted India's target to increase the capacity of renewable energy from 450GW to 500GW by 2030.

Steps toward SDGs

- Solar power-driven electrification in rural Bangladesh is a huge step towards Sustainable Development Goal 7.
- Energy trade agreements: There are a number of bilateral and multilateral energy trade agreements such as the India-Nepal petroleum pipeline deal, the India-Bhutan hydroelectric joint venture, the Myanmar-Bangladesh-India gas pipeline, the Bangladesh-Bhutan-India-Nepal (BBIN) sub-regional framework for energy cooperation, and the Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline, rumoured to be extended to Bangladesh.

Way forward

- Energy framework: Going forward, resilient energy frameworks are what are needed such as better building-design practices, climate-proof infrastructure, a flexible monitory framework, and an integrated resource plan that supports renewable energy innovation.
- Public-Private Partnership: Government alone cannot be the provider of reliable and secure energy frameworks, and private sector investment is crucial.

1.36 PDS and End of a Global Chapter

2020-21 was one of Indian agriculture's finest moments, as memorable as 1967-68 that inaugurated the Green Revolution. Agriculture was the only sector to grow 3.3 per cent in 2020-21, even as the economy overall contracted by 4.8 per cent.

Increase in grain offtake under PDS:

- NFSA along with PMGKAY has led to a massive jump in grain offtake through the PDS.
- More importantly, this increase has largely taken place in the poorer states.

Provisions under NFSA

The NFSA legally entitles up to 75 per cent of India’s rural and 50 per cent of the urban population- to receive 5 kg of grain per person per month at highly subsidised rates of Rs 2/kg for wheat and Rs 3/kg for rice.

In the wake of the Covid-induced economic disruptions, a new Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY) scheme was launched giving NFSA beneficiaries an extra 5 kg grain per person per month free of cost.

- UP, Bihar and Jharkhand together accounted for 21.6 per cent of national grain offtake in 2012-13, which was pre-NFSA.

PDS reforms in states

- Only a handful of states — Kerala, Tamil Nadu and Andhra Pradesh — had well-functioning PDS till the early 2000s.
- In the late-2000s, Chhattisgarh initiated reforms to curb diversion/leakages by entrusting the running of fair price shops to cooperatives and local bodies (as against private licensees), making timely allocation and supplying grain directly to PDS outlets (bypassing middle-level distribution agencies), and using IT to track dispatches right from procurement centres to points of sale.
- The PDS, indeed, turned out to be the only effective social safety net during the pandemic.
- Some states went beyond rice and wheat.

Challenges

- The expansion of the PDS, especially post-NFSA, was underwritten by the superabundance of rice and wheat in government granaries.
- Official wheat procurement is likely to halve this time from last year’s record 43.3 mt, because of a poor crop sined by the abnormal spike in March temperatures.
- Rice stocks are far more comfortable, though the precarious supply situation in fertilisers raises questions about the prospects for the coming kharif season.
- Looking ahead, the Food Corporation of India’s stocks can probably sustain the pre-2020-21 annual offtake levels of 60-65 mt – enough for NFSA, but certainly not schemes such as PMGKAY.

The USCIRF is an independent, bipartisan body created by the International Religious Freedom Act, 1998 (IRFA) of the US.

It has a mandate to monitor religious freedom violations globally and make policy recommendations to the President, the Secretary of State, and the Congress.

It is a congressionally created entity and not an NGO or advocacy organisation.

It is led by nine part-time commissioners appointed by the President and the leadership of both political

1.37 India’s CPC Designation by The USCIRF

In its 2022 Annual report, the United States Commission on International Religious Freedom (USCIRF) has recommended that India be designated a ‘Country of Particular Concern’ (CPC).

- It has called for “targeted sanctions” on individuals and entities responsible for severe violations of religious freedom by freezing those individuals’ or entities’ assets and/or barring their entry” into the US.

Why does USCIRF want India to be designated as a CPC?

- It has noted that the Indian government escalated its promotion and enforcement of policies —including those promoting a Hindu-nationalist agenda.
- This negatively affects Muslims, Christians, Sikhs, Dalits, and other religious minorities.
- It highlighted the use of the Unlawful Activities Prevention Act (UAPA) against those documenting religious persecution and violence.
- It also criticised the spate of fresh anti-conversion legislations, noting that “national, State and local governments demonised and attacked the conversion of Hindus to Christianity or Islam.”
- However, its recommendations are not binding.

As per IRFA, **CPCs** are countries whose governments either engage in or tolerate “particularly severe violations” of religious freedom.

Such freedoms are defined as systematic, ongoing, egregious violations of the internationally recognized right to freedom of

- This happens because the USCIRF is concerned solely with the state of religious freedom when it makes a recommendation.
- However, the US State Department also takes into account other diplomatic, bilateral and strategic concerns before making a decision on a CPC designation.

What has been India’s reaction?

- This is the third year in a row that India has received a CPC recommendation.
- In 2020, External Affairs Minister S. Jaishankar called the Commission an “Organisation of Particular Concern.”
- US needs to introspect itself on the HR violations by the state authorities on the basis of racism, ethnocentrism and religion (particularly Sikhs).

1.38 State of Unemployment in India

Data from the Centre for Monitoring Indian Economy (CMIE) shows that India’s labour force participation rate (LFPR) has fallen to just 40% from an already low 47% in 2016.

What is the significance of LFPR in India?

- In India, the LFPR is not only lower than in the rest of the world but also falling. This, in turn, affects the UER because LFPR is the base (the denominator) on which UER is calculated.
- The world over, LFPR is around 60%. In India, it has been sliding over the last 10 years and has shrunk from 47% in 2016 to just 40% as of December 2021.
- This shrinkage implies that merely looking at UER will under-report the stress of unemployment in India.

So, what is the correct way to assess India’s unemployment stress?

- When LFPR is falling as steadily and as sharply as it has done in India’s case, it is better to track another variable: the Employment Rate (ER).
- The ER refers to the total number of employed people as a percentage of the working-age population.
- By using the working-age population as the base and looking at the number of people with jobs, the ER captures the fall in LFPR to better represent the stress in the labour market.

Why is India’s LFPR so low?

- The main reason for India’s LFPR being low is the abysmally low level of female LFPR.
- One reason is essentially about the working conditions — such as law and order, efficient public transportation, violence against women, societal norms etc — being far from conducive for women to seek work.
- The other has to do with correctly measuring women’s contribution to the economy.
- There are methodological issues in formally capturing women’s contribution to the economy since a lot of women in India are exclusively involved within their own homes.
- Lastly, it is also a question of adequate job opportunities for women.

1.39 State vs centre on fuel tax:

PM has said that fuel prices were too high in some States ruled by other parties and they were not passing on the benefits of the Centre’s excise duty cut to the people.

Why are states reluctant?

- The reluctance to reduce excise duty and VAT on fuel stems from the fact that it constitutes an important source of revenue for both the Union government and the states.

Labour force consists of persons who are of age 15 years or older, and belong to either of the following two categories:

- i. are employed
- ii. are unemployed and are willing to work and are actively looking for a job

the LFPR essentially is the percentage of the working-age (15 years or older) population that is asking for a job; it represents the “demand” for jobs in an economy.

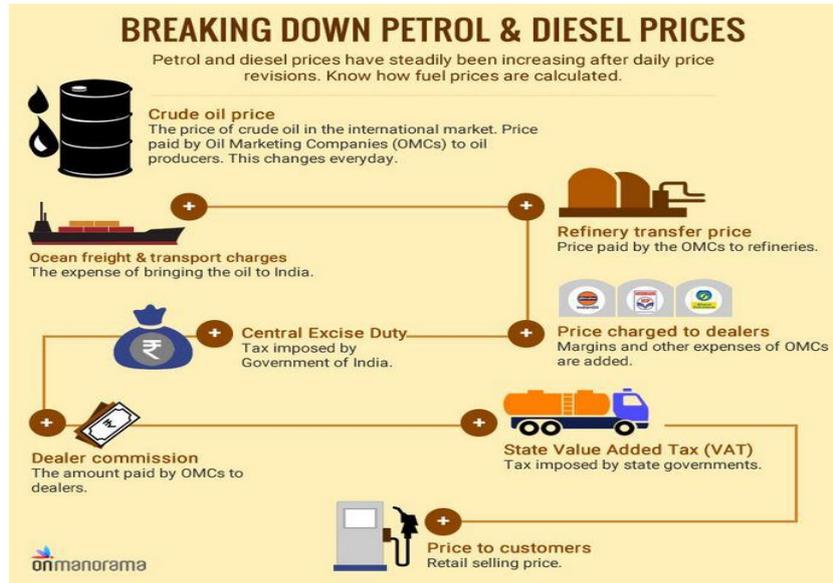
It includes those who are employed and those

The Unemployment Rate (UER), is nothing but the number of unemployed (category 2) as a proportion of the labour force.

- Excise duty on fuel makes up about 18.4 per cent of Centre's gross tax revenues.
- Petroleum and alcohol, on an average, account for 25-35 per cent of the own tax revenue of states

Present taxation of Fuels

- Currently, taxes on petroleum products are levied by both the Centre and the states.
- While the Centre levies excise duty, states levy value-added tax (VAT).
For instance, VAT on petroleum products is as high as 40% in Maharashtra, contributing over ₹25,000 crores annually.
- By being able to levy VAT on these products, the state governments have control over their revenues.
- When a national GST subsumed central taxes such as excise duty and state levies like VAT on July 1, 2017, five petroleum goods – petrol, diesel, ATF, natural gas and crude oil – were kept out of its purview.



1.40 Revisiting Death Penalty Jurisprudence

A Bench of the Supreme Court of India, led by Justice U.U. Lalit, decided to critically examine the routine and abrupt way in which trial judges often impose the death penalty on convicts.

Individualistic approach

- The challenge before the Court in the instant case of Irfan vs State of Madhya Pradesh was to identify the mitigating circumstances and to ensure a convict-centric approach so that the imposition of capital punishment becomes rarer, fairer, and principled.
- According to the Court, “a ‘one size fit for all’ approach while considering mitigating factors during sentencing should end”.
- The Court seemed to think that an individualistic approach that examines the social, economic, emotional, and genetic components that constituted the offender rather than the offence, would go a long way in evolving a just and judicious sentencing policy.

Background of the humane and reformist framework:

- The special reason: According to Section 354(3) in the Code of Criminal Procedure, while imposing the capital punishment, the judge should specify “the special reasons” for doing so.
- It was in Bachan Singh vs State of Punjab (1980) that the Constitution Bench suggested a humane and reformist framework in the matter.
- Bachan Singh requires the trial courts not only to examine the gravity of the offence but also the condition and the ‘reformability’ of the accused.
- Not unconstitutional: The Court, in Bachan Singh, refused to declare the death penalty as unconstitutional.
- Shortcomings of Bachan Singh: Bachan Singh did not, in concrete terms, elaborate on the mitigating factors and the methods to gather them to avert the death penalty.
- Nor did it explain the issues such as burden of proof and standard of proof in detail.
- The Bachan Singh principle was followed more in its breach than in compliance even by the Supreme Court.

- In *Ravji vs State of Rajasthan* (1995), the Supreme Court said that it is the nature of the crime and not the criminal which is germane for deciding the punishment.

Issue of misuse and overuse

- Misuse of sedition provision: The Indian experience shows that whenever the Court tries to dilute the harshness of penal provisions by a balancing approach, instead of striking down the provision, the instrumentalities of the state (including the police, the prosecution and the court) continue to overuse or misuse the provisions.
- The Supreme Court endorsed the validity of the sedition law (Section 124A of the Indian Penal Code) with a rider that it could be invoked only when there is an incitement to violence.
- But the state seldom acts based on interpretation of the law.
- Many were booked for the charge of sedition since then for mere words, innocent tweets or harmless jokes.

Social implications

- Disproportionate effect on the poor: In India, as elsewhere, the poor, rather than the rich, are sent to the gallows.
- Mitigating factors not placed: And in the matter of sentencing too, the mitigating factors are either not placed before the trial court or not persuaded adequately to convince the trial judge to avoid the death penalty.
- In the Indian scenario, the legal assistance received by the poor facing serious charges is far from satisfactory.

Way forward:

- Comprehensive report: The Court, in the instant case, will have to evolve a legal device for procurement of a comprehensive report dealing with the socio-economic and hereditary backgrounds of the accused from experts in the fields of social work, psychiatry, psychology, anthropology, etc.
- Across the world, 108 nations have abolished death penalty in law and 144 countries have done so in law or practice, according to the Amnesty Report of 2021.
- Judicial errors: In the Indian context, where judgmental error is quite frequent and the quality of adjudication is not ensured, what is required is a judicial abolition of death penalty.

2. Prelims Booster

1.4.2022

NETRA(Network for space object Tracking and Analysis): Under the project, the ISRO plans to put up many observational facilities: connected radars, telescopes; data processing units and a control centre. They can, among others, spot, track and catalogue objects as small as 10 cm, up to a range of 3,400 km and equal to a space orbit of around 2,000 km. The project will give India its own capability in space situational awareness (SSA) like the other space powers — which is used to ‘predict’ threats from debris to Indian satellites. NETRA’s eventual goal is to capture the GEO, or geostationary orbit, scene at 36,000 km where communication satellites operate. The effort would make India a part of international efforts towards tracking, warning about and mitigating space debris.

Low Earth Orbit: It is relatively closer to the Earth’s surface than other orbits. The altitude from the earth’s surface could be between 160 Km to 1000 Km. It is one of the commonly used orbits. It is used for satellite imaging [The images are of high resolution as the orbit is closer to the surface of the earth.]. The International Space Station (ISS) uses LEO. It is used by remote sensing satellites.

NSSF: National Small Savings Fund in the Public Account of India was established in 1999. The Fund is administered by the Government of India, Ministry of Finance (Department of Economic Affairs) under National Small Savings Fund (Custody and Investment) Rules, 2001, framed by the President under Article 283(1) of the Constitution. The objective of NSSF is to de-link small savings transactions from the Consolidated Fund of India and ensure their operation in a transparent and self-sustaining manner. Since NSSF operates in the public account, its transactions do not impact the fiscal deficit of the Centre directly. National Small Savings Certificate(NSC), Kisan Vikas Patra (KVP) are example of NSSF instruments.

Gig Economy: A gig economy is a free market system in which temporary positions are common and organisations contract with independent workers for short-term engagements. According to a report by Boston Consulting Group, India’s gig workforce comprises 15 million workers employed across industries such as software, shared services and professional services. An estimated 56% of new employment in India is being generated by the gig economy companies across both the blue-collar and white-collar workforce.

Pradhan Mantri Jan Arogya Yojana: PMJAY offers a sum insured of ₹ 5 lakh per family for secondary care (which doesn’t involve a super specialist) as well as tertiary care (which does). For the beneficiaries, this is a free scheme. It is an entitlement-based scheme that targets the beneficiaries as identified by latest Socio-Economic Caste Census (SECC) data. Individuals can walk into any empanelled hospital that can process cashless payments. Once identified by the database, the beneficiary is considered insured. The insurance cost is shared by the centre and the state mostly in the ratio of 60:40.

2.4.2022

Anti-Satellite Test: Under Mission Shakti India completed its first successful attempt at shooting a satellite in lower earth orbit (LEO). In doing so, India has become the fourth country after the US, Russia and China to acquire the capability of space warfare. ASAT propels India to the coveted space-superpower league. India will now have the power to decimate satellites for pure military and strategic purpose. With this missile, India will have the capability to interfere with satellites or engage in direct attacks.

Core Sector Industries: The eight core sector industries include coal, crude oil, natural gas, refinery products, fertiliser, steel, cement and electricity. The eight core industries comprise nearly 40% of the weight of items included in the Index of Industrial Production (IIP). The eight Core Industries in decreasing order of their weightage: Refinery Products> Electricity> Steel> Coal> Crude Oil> Natural Gas> Cement> Fertilizers.

Credit default swap: It is an example of a credit derivative transaction where credit protection is bought and sold. In a Credit Default Swap (CDS), one party agrees to pay another party periodic fixed payments in exchange for receiving ‘credit event protection’, in the form of a payment, in the event that a third party or its obligations are subject to one or more pre-agreed adverse

credit events over a pre-agreed time period. Typical credit events include bankruptcy, failure to pay, obligation acceleration, restructuring, and repudiation/moratorium.

Geostationary Orbit: About 35,786 kilometers above the Earth's surface, satellites are in geostationary orbit. From the center of the Earth, this is approximately 42,164 kilometers. This distance puts it in the high Earth orbit category. At any inclination, a geosynchronous orbit synchronizes with the rotation of the Earth. More specifically, the time it takes for the Earth to rotate on its axis is 23 hours, 56 minutes, and 4.09 seconds, which is the same as a satellite in a geosynchronous orbit. If you are an observer on the ground, you would see the satellite as if it's in a fixed position without movement. This makes geosynchronous satellites particularly useful for telecommunications and other remote sensing applications.

OIC: The Organisation of Islamic Cooperation (OIC) is the second largest intergovernmental organization after the United Nations with a membership of 57 states. It is the collective voice of the Muslim world. It endeavors to safeguard and protect the interests of the Muslim world in the spirit of promoting international peace and harmony among various people of the world. India is not a member of the OIC. However, India was invited as a guest of honour at 46th Session of the Council of Foreign Minister in 2019. 2019 is the 50th anniversary of OIC.

4.4.2022

AFSPA: The Armed Forces (Special Powers) Act (AFSPA) gives armed forces the power to maintain public order in "disturbed areas". They have the authority to prohibit a gathering of five or more persons in an area, can use force or even open fire after giving due warning if they feel a person is in contravention of the law. If reasonable suspicion exists, the army can also arrest a person without a warrant; enter or search premises without a warrant; and ban the possession of firearms. Any person arrested or taken into custody may be handed over to the officer in charge of the nearest police station along with a report detailing the circumstances that led to the arrest.

Specific Export Obligation: Under the Scheme, EPCG Authorizations are issued with actual user condition and import validity of 24 months to import capital goods (except those specified in negative list) for pre-production, production and post-production at zero customs duty, and subject to fulfilment of specific Export Obligation equivalent to 6 times of duties, taxes and cess saved on capital goods, to be fulfilled in 6 years from date of issue of Authorization.

Land Custom Station: The regional economy of South Asian countries sharing land borders is heavily fragmented by trade and transportation barriers. Addressing this, in 2012, India set up the Land Ports Authority of India (LPAI) through the LPAI Act, 2010, under the Ministry of Home Affairs. Land port is an area on the international borders including portions of national, State highways and other roads, and railways. It is notified as land Customs station or immigration check-post under the Customs Act, 1962 or the Foreigners' Act, 1946.

Gangetic Dolphin: Ganges river dolphins live in the Ganges-Brahmaputra-Meghna and Karnaphuli-Sangu river systems of Nepal, India, and Bangladesh. The Ganges river dolphin can only live in freshwater and is essentially blind. They hunt by emitting ultrasonic sounds, which bounces off of fish and other prey, enabling them to "see" an image in their mind. They are also called 'susu'. It is a reliable indicator of the health of the entire river ecosystem. It was recognised as the National Aquatic Animal in 2009, by the Government of India. Indian Wildlife (Protection), Act 1972: Schedule I. IUCN: Endangered. CITES: Appendix I (most endangered). Convention on Migratory Species (CMS): Appendix II (migratory species that need conservation and management or would significantly benefit from international co-operation).

De-dollarization: De-dollarisation refers to reducing the dollar's dominance of global markets. It is a process of substituting US dollar as the currency used for: Trading oil and/ or other commodities, Buying US dollars for the forex reserves, Bilateral trade agreements, Dollar-denominated assets. The dominant role of the dollar in the global economy provides the US a disproportionate amount of influence over other economies. The US has for long used imposition of sanctions as a tool to achieve foreign policy goals. The de-dollarisation is driven by the desire to insulate the Central Banks of the Countries from geopolitical risks, where the status of the US dollar as a reserve currency can be used as an offensive weapon.

5.4.2022

Covovax: Covovax is the Indian version of a Covid-19 vaccine developed by Novavax Inc and manufactured under licence by the Serum Institute of India (SII). It is a recombinant protein vaccine that uses spike proteins to teach the body how to develop immunity against the novel coronavirus. Covovax has greater efficacy as a booster dose than Covishield. Covovax requires two doses and is stable at 2 to 8 degrees Celsius refrigerated temperatures. National Technical Advisory Group on Immunization has recommended the use of Covovax to vaccinate 12-17 years age group.

Blockchain: They are a new data structure that is secure, cryptography-based, and distributed across a network. The technology supports cryptocurrencies such as Bitcoin, and the transfer of any data or digital asset. The technology allows transactions to be simultaneously anonymous and secure, peer-to-peer, instant and frictionless. It does this by distributing trust from powerful intermediaries to a large global network, which through mass collaboration, clever code and cryptography, enables a tamper-proof public ledger of every transaction that's ever happened on the network. Now the technology will be use to check forgery in Caste certificates in Maharashtra. The project is the first of its kind in the country.

Mes Aynak Site: A site that is located 40 km southeast of Kabul, Afghanistan. It is located in the Logar Province's barren region. This region contains the largest copper deposit in Afghanistan. Situated on the Silk Road, a lot of Indian and Chinese products have also been found. There are remains to be found of an ancient settlement that has 400 Buddha stupas, statues, and a monastery complex of 100 acres. Mes Aynak citizens mostly followed Hinduism and Buddhism. From the Kushan era, the earliest dated Buddhist remains have been found. Later they gave way to Uyghur and T'ang Chinese influences.

Splinternet: The splinternet (also referred to as cyber-balkanization or internet balkanization) is a characterization of the Internet as splintering and dividing due to various factors, such as technology, commerce, politics, nationalism, religion, and divergent national interests. In this internet is controlled by autonomous political blocs or any other controlling power—such as tech or e-commerce companies, or countries with diverging national interests tied to nationalism or religion. Example is China's Great Firewall. Russian Sovereign Internet law passed in 2019 also cut off Russia from global internet.

Index for Core Industries: Eight core sectors are: Coal, crude oil, natural gas, refinery products, fertiliser, steel, cement and electricity. These comprise 40.27% of the weight of items included in the Index of Industrial Production (IIP). The eight core sector industries in decreasing order of their weightage: Refinery Products> Electricity> Steel> Coal> Crude Oil> Natural Gas> Cement> Fertilizers. It is compiled and published monthly by the Office of Economic Advisor under Ministry of Commerce & Industries. Base Year 2011-12.

6.4.2022

Look out notice: Lookout Notices are also known as Lookout Circulars (LOC), which are opened to trace absconding criminals. Also, to effectively prevent and monitor the entry and exit of individuals who may be required by law enforcement authorities. The basic guidelines (regarding the publication of the LOCs in relation to Indian citizens) are issued by the Ministry of Home Affairs (MHA). An LOC is issued to make sure that an individual who is absconding or wanted by law enforcement agencies is not able to leave the country. It is mostly used at immigration checkpoints at international airports and seaports by the immigration branch.

Biosimilar Medicine: A biosimilar is exactly what its name implies — it is a biologic that is “similar” to another biologic medicine (known as a reference product). Biologics or biological products are medicines made from living organisms through highly complex manufacturing processes and must be handled and administered under carefully monitored conditions. Biologics are used to prevent, treat or cure a variety of diseases including cancer, chronic kidney disease etc. Biosimilars are highly similar to the reference product in terms of safety, purity and potency, but may have minor differences in clinically inactive components. India is one of the leading manufacturers of biosimilars. India developed a new guideline in 2012 for the pre- and post-marketing approval of similar biologics. The guidelines also address the regulation of manufacturing process as well as quality, safety, and efficacy of similar biologics.

Difference between ballistic and cruise missile:

Ballistic Missile	Cruise Missile
<ul style="list-style-type: none"> It is propelled only for a brief duration after the launch. 	<ul style="list-style-type: none"> Self-propelled till the end of its flight.
<ul style="list-style-type: none"> Similar to a rocket engine. 	<ul style="list-style-type: none"> Similar to a jet engine.
<ul style="list-style-type: none"> Long-range missiles leave the earth's atmosphere and reenter it. 	<ul style="list-style-type: none"> The flight path is within the earth's atmosphere.
<ul style="list-style-type: none"> Low precision as it is unguided for most of its path and its trajectory depends on gravity, air resistance and Coriolis Force. 	<ul style="list-style-type: none"> Hits targets with high precision as it is constantly propelled.
<ul style="list-style-type: none"> Can have a very long range (300 km to 12,000 km) as there is no fuel requirement after its initial trajectory. 	<ul style="list-style-type: none"> The range is small (below 500 km) as it needs to be constantly propelled to hit the target with high precision.
<ul style="list-style-type: none"> Heavy payload carrying capacity. 	<ul style="list-style-type: none"> Payload capacity is limited.
<ul style="list-style-type: none"> Can carry multiple payloads (Multiple Independently targetable Re-entry Vehicle) 	<ul style="list-style-type: none"> Usually carries a single payload.
<ul style="list-style-type: none"> Developed primarily to carry nuclear warheads. 	<ul style="list-style-type: none"> Developed primarily to carry conventional warheads.
<ul style="list-style-type: none"> E.g. Prithvi I, Prithvi II, Agni I, Agni II and Dhanush missiles. 	<ul style="list-style-type: none"> E.g. BrahMos missiles

Rules of Origin: 'Rules of Origin' are principles, on the basis of which the source country of a product is established. Based on which tariff concessions or applicable duties are determined. Their importance is derived from the fact that duties and restrictions in several cases depend upon the source of imports.

Phytosanitary Measures: Phytosanitary measures (SPS) under WTO, provides guidelines for member countries to adopt measures related to food safety and animal and plant health from various biosafety risks arising from trade. These risks are usually related to pests and diseases and may come from risks arising from additives, toxins and contaminants in food and feed.

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Zig zag technology: It is a new kiln technology which is being implemented mainly in brick kilns. In the new kiln technology, the bricks are arranged in zig-zag pattern. This allows hot air to cover long path unlike traditional kilns. The heat transfer is improved due to zig-zag pattern. This makes the operation more efficient and reduces coal consumption by 20%. It also uses fans to regulate air. The new Kiln Technology cuts the emissions by 70-80%.

Weapons of Mass Destruction: WMD is a weapon with the capacity to inflict death and destruction on such a massive scale and so indiscriminately that its very presence in the hands of a hostile power can be considered a grievous threat. Recently a bill is being introduced in the Lok Sabha to ban funding of these weapons. Bill also empowers Centre to freeze financial assets of the people involving in such activities

Emergency Usage Listing: The WHO Emergency Use Listing Procedure (EUL) is a risk-based procedure for assessing and listing unlicensed vaccines, therapeutics and in vitro diagnostics with the ultimate aim of expediting the availability of these products to people affected by a public health emergency. This will assist interested UN procurement agencies and Member States in determining the acceptability of using specific products, based on an essential set of available quality, safety, and efficacy and performance data. The procedure is a key tool for companies wishing to submit their products for use during health emergencies. The EUL concerns three product streams (vaccines, therapeutics and in vitro diagnostics), each of which has specific requirements for products to be eligible for evaluation under the EUL procedure.

Electoral Bond Scheme: These bonds are issued in multiples of Rs. 1,000, Rs. 10,000, Rs. 1 lakh, Rs. 10 lakh and Rs. 1 crore without any maximum limit. State Bank of India is authorised to issue and encash these bonds, which are valid for fifteen days from the date of issuance. These bonds are only redeemable in the designated account of a registered political party. The bonds are available for purchase by any citizen of India for a period of ten days each in the months of January, April, July and October as may be specified by the Central Government. A person being an individual can buy bonds, either singly or jointly with other

individuals. The donor's name is not mentioned on the bond. Supreme Court has agreed to take up hearing plea of a pending challenge against Electoral Bonds.

HAL: HAL stands for Hindustan Aeronautics Limited. It is a state owned aerospace and defense company headquartered in Bangalore. Its primary purpose is to design, fabricate and assemble fighter aircrafts, transport aircrafts for Air Force, helicopters etc. HAL and Israel Aerospace limited has entered into a MoU to convert civil passenger aircrafts to multi mission tanker transport aircraft in India.

ISA: Nepal is the latest and 102nd member to be inducted in to International Solar Alliance. The ISA is an intergovernmental treaty-based organisation with a global mandate to catalyse solar growth by helping to reduce the cost of financing and technology. ISA is the nodal agency for implementing One Sun One World One Grid (OSOWOG), which seeks to transfer solar power generated in one region to feed the electricity demands of others. It is an Indian initiative that was launched by the Prime Minister of India and the President of France on 30th November 2015 in Paris, France on the side-lines of the UNFCCC Conference of the Parties (COP-21), with 121 solar resource rich countries lying fully or partially between the tropic of Cancer and tropic of Capricorn as prospective members.

8.4.2022

Clean Energy Ministerial (CEM): India is hosting the Clean Energy Ministerial (CEM) senior officials meetings to discuss on topics such as energy transition, Clean Power, Green Steel, and Hydrogen held as part of meeting. CEM is a high-level global forum of 29 member countries to promote policies and programs that advance clean energy technology through sharing of knowledge and best practices. It brings together the world's leading economies, international organisations and companies to accelerate clean energy transitions. It was established in December 2009 at the UN's Framework Convention on Climate Change conference of parties in Copenhagen.

Prakriti: Union Minister of Environment, Forest & Climate Change (MoEFCC) launched Prakriti mascot to spread awareness among masses about small changes that can be sustainably adopted for a better environment. Also, following initiatives were launched for plastic waste management: National Dashboard on Elimination of Single Use Plastic (SUP) and Plastic Waste Management (MoEFCC). Extended Producer Responsibility (EPR) Portal for Plastic Packaging (CPCB) for improving accountability, traceability, transparency and facilitating ease of reporting compliance to EPR Obligations. Mobile App for SUP Grievance Redressal (CPCB) to empower citizens to check sale/usage/manufacturing of SUP in their area and tackle the plastic menace.

Twin Deficit: Current Account Deficit and Fiscal Deficit (also known as "budget deficit" is a situation when a nation's expenditure exceeds its revenues) are together known as twin deficits and both often reinforce each other, i.e., a high fiscal deficit leads to higher CAD and vice versa.

Geneva Convention: The Geneva Conventions (1949) and their Additional Protocols are international treaties that contain the most important rules limiting the barbarity of war. They protect people who do not take part in the fighting (civilians, medics, aid workers) and those who can no longer fight (wounded, sick and shipwrecked troops, prisoners of war). The first Geneva Convention protects wounded and sick soldiers on land during war. The second Geneva Convention protects wounded, sick and shipwrecked military personnel at sea during war. The third Geneva Convention applies to prisoners of war. The fourth Geneva Convention affords protection to civilians, including in occupied territory. India is a party to the Geneva Convention

ChildLine India Foundation: CIF is the largest network of agencies involved in protection of children. CIF is the nodal agency appointed by the Ministry of Women and Child Development to manage CHILDLINE helpline 1098 - a free, emergency phone service for children in need aid and assistance. It is also the sole agency/body responsible for establishing the CHILDLINE service across the country, monitoring of service delivery and finance, training, research and documentation, creating awareness, advocacy as well as resource generation for the service.

9.04.2022

UNHRC: The Human Rights Council is an inter-governmental body within the United Nations system responsible for strengthening the promotion and protection of human rights around the world. The Council was created by the United Nations General Assembly in 2006. It replaced the former United Nations Commission on Human Rights. The Office of the High Commissioner for Human Rights (OHCHR) serves as the Secretariat of the Human Rights Council. OHCHR is headquartered in Geneva, Switzerland. It is made up of 47 United Nations Member States which are elected by the UN General Assembly (UNGA) Russia has been suspended recently from the council.

NDB: New Development Bank is a multilateral development bank. It was jointly founded by the BRICS countries in 2014, at the 6th BRICS Summit in Fortaleza, Brazil. But it was formally opened on July 2015. The bank was set to support the infrastructure and sustainable development efforts in BRICS grouping and other underserved & emerging economies for a faster development through cutting edge technology and innovation. Its headquarter is at Shanghai, China. NDB had received observer status in the United Nations General Assembly, in 2018. Egypt is the newest member.

Unlawful Activities (Prevention) Act: Passed in 1967, the law aims at effective prevention of unlawful activities associations in India. The Act assigns absolute power to the central government, by way of which if the Centre deems an activity as unlawful then it may, by way of an Official Gazette, declare it so. It has death penalty and life imprisonment as highest punishments. Under UAPA, both Indian and foreign nationals can be charged. It will be applicable to the offenders in the same manner, even if crime is committed on a foreign land, outside India. Under the UAPA, the investigating agency can file a charge sheet in maximum 180 days after the arrests and the duration can be extended further after intimating the court. It also included the provision of designating an individual as a terrorist.

Mission Vatsalya: The Ministry of Women and Child Development has sent its draft guidelines for Mission Vatsalya Scheme to States and Union Territories to seek their suggestions. Mission Vatsalya is one of the new triad of schemes along with Mission Shakti, and Poshan 2.0, that aims at securing a healthy and happy childhood for every child. It focuses on Child Protection Services and child welfare services. It is essentially a renamed version of the pre-existing scheme called Child Protection Services. Objectives of the Mission: To secure a healthy and happy childhood for every child in India. To foster a sensitive, supportive and synchronized ecosystem for the development of children. To assist States/UTs in delivering the mandate of the Juvenile Justice Act 2015

e-Shram portal: Ministry of Labour and Employment launched the e Shram portal. Aim: To register 38 crore unorganised workers such as construction labourers, migrant workforce, street vendors, and domestic workers, among others. The workers will be issued an e-Shram card containing a 12 digit unique number. If a worker is registered on the eSHKAM portal and meets with an accident, he will be eligible for Rs 2.0 Lakh on death or permanent disability and Rs 10 lakh on partial disability.

11.4.2022

Bajajant Panda Committee: It is a committee constituted by the Ministry of Defence constituted a High Level Expert Committee for a comprehensive review of National Cadet Corps (NCC). Objectives of the Committee:

- Committee is to suggest measures to empower NCC cadets to contribute more effectively towards nation building.
- To propose ways for gainful engagement of NCC Alumni for betterment of the organization.
- To recommend best practices of similar international youth organisations for inclusion in NCC curriculum.

Rice Fortification: In this technology, milled rice is pulverized and mixed with a premix containing vitamins and minerals. In India, rice is fortified using extrusion technology. Fortified rice kernels (FRK) are produced from this mixture using an extruder machine. Recently, Cabinet Committee of Economic Affairs has approved the supply of fortified rice in government-run food schemes by 2024 in a phased manner with an aim to combat nutrition deficiency in all states and UTS. Supply of fortified rice through Targeted Public Distribution System (TPDS) will be done under National Food Security Act (NFSA), Integrated Child Development Services (ICDS), PM POSHAN, and other welfare schemes (OWS).

Ramjet Technology: A ramjet is a form of air-breathing jet engine that uses the vehicle's forward motion to compress incoming air for combustion without a rotating compressor. Ramjets work most efficiently at supersonic speeds around Mach 3 (three times the speed of sound) and can operate up to speeds of Mach 6. However, ramjet efficiency starts to drop at hypersonic speeds.

Bhuvan-Aadhar portal: Memorandum of Understanding (MoU) has been signed between UIDAI and ISRO for developing the portal. Bhuvan Aadhar Portal will facilitate complete geographic information storage, retrieval, analysis and reporting for Aadhaar centres, with a high resolution backdrop of natural color satellite images. Unique Identification Authority of India (UIDAI) is a statutory authority established under the provisions of the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016 for issuing Aadhaar cards.

Banarasi Pashmina: Khadi and Village Industries Commission (KVIC) launched Banarasi Pashmina in Varanasi. This is for the first time that Pashmina products are being produced outside the region of Leh-Ladakh and Jammu & Kashmir. Changthangi or Pashmina goats are raised for ultra-fine cashmere wool, known as Pashmina once woven. Changthangi or Pashmina goat is a special breed of goat indigenous to the high altitude regions of Ladakh (domesticated and reared by Changpa nomadic communities). Kashmir Pashmina has been assigned Geographical indication (GI) tag.

12.04.2022

Standing Deposit Facility: In 2018, the amended Section 17 of the RBI Act empowered the Reserve Bank to introduce the SDF – an additional tool for absorbing liquidity without any collateral. By removing the binding collateral constraint on the RBI, the SDF strengthens the operating framework of monetary policy. The SDF is also a financial stability tool in addition to its role in liquidity management. The SDF will replace the fixed-rate reverse repo (FRRR) as the floor of the liquidity adjustment facility corridor. Both the standing facilities — the MSF (marginal standing facility) and the SDF will be available on all days of the week, throughout the year.

Coal Gasification: It is the process of producing syngas, a mixture consisting of carbon monoxide (CO), hydrogen (H₂), carbon dioxide (CO₂), natural gas (CH₄), and water vapour (H₂O). During gasification, coal is blown with oxygen and steam while also being heated under high pressure. During the reaction, oxygen and water molecules oxidize the coal and produce syngas. Benefits:

- Transporting gas is a lot cheaper than transporting coal.
- Help address local pollution problems.
- Has greater efficiency than conventional coal-burning because it can effectively use the gases twice: the coal gases are first cleansed of impurities and fired in a turbine to generate electricity. The exhaust heat from the gas turbine can be captured and used to generate steam for a steam turbine-generator.

PM-DAKSH: Pradhan Mantri Dakshta Aur Kushalta Sampann Hitgrahi Yojana is launched by Ministry of Social Justice and Empowerment and implemented from the year 2020-21. Under this, eligible target groups are provided with the skill development training programmes on Short Term Training Program; Up-Skilling/Reskilling; Entrepreneurship Development Programme, and Long Term Training Programme. These training programmes are being implemented through the government training institutes, sector skill councils that have been constituted by the Ministry of Skill Development and Entrepreneurship, and other credible institutions. **Eligibility:** Marginalized persons of SC (Scheduled Caste), OBC (Other Backward Classes), Economically Backward Classes, Denotified tribes, Sanitation workers including waste pickers, manual scavengers, transgenders and other similar categories. **Implementation:** It is implemented by the three Corporations under the Ministry: National Scheduled Castes Finance and Development Corporation (NSFDC), National Backward Classes Finance & Development Corporation (NBCFDC), National Safai Karamcharis Finance and Development Corporation (NSKFDC).

INCOIS: INCOIS is an autonomous organization under the Ministry of Earth Sciences (MoES). It is located in Hyderabad & was established in 1999. It is a unit of the Earth System Science Organization (ESSO), New Delhi. It is mandated to provide the best possible ocean information and advisory services to society, industry, government agencies and the scientific community through sustained ocean observations and constant improvement through systematic and focused research.

Pinaka missile systems: Pinaka Mk-1 (Enhanced) Rocket System (EPRS) and Pinaka Area Denial Munition (ADM) rocket systems have been successfully flight-tested by Defence Research and Development Organisation and Indian Army at Pokhran. The new Pinaka ER gives it a range of around 70 km, over the 45 km existing range of the missile which has been with the Indian forces for nearly a decade. The Pinaka is a Multi-Barrel Rocket-Launcher (MBRL) system which can fire a salvo of 12 rockets over a period of 44 seconds.

13.04.2022

Microplastic: Microplastics refers to plastic products that are less than 5mm in size and include microfibrils (most abundant), fragments, pellets, flakes, sheets or foams. They enter water bodies through different pathways, including atmospheric deposition, run-off from contaminated land or through municipal wastewater.

Micro-swimmers: Recent research is aiming at moving microbots/micro-swimmers into the bloodstream to deliver drugs. These micro-swimmers are microbots, made from two-dimensional compound poly (heptazine imide) carbon nitride. They range from 1-10 micrometre (a micrometre is one-millionth of a metre) in size, and can self-propel when energised by shining light. These ions move around the particle and make the fluid around it, causing the microbots (micro-swimmers) swim.

Intelligent Transportation Systems (ITS): Ministry of Electronics and Information Technology (MeitY) has launched several applications India's traffic scenario. ITS are control and information systems that use integrated communications and data under the Intelligent Transportation System (ITS) as part of the InTranSE- II program to improve processing technologies for the purposes of:

- Improving mobility of people and goods.
- Increasing safety, reducing traffic congestion and managing incidents effectively.
- Meeting transport policy goals and objectives.
- Minimising impacts of environmental, highway and human factors that contribute to accidents.

H1N1: Also called as pig influenza, swine flu, hog flu and pig flu. It is an infection caused by any one of several types of swine influenza viruses. Swine influenza virus is any strain of the influenza family of viruses that is endemic in pigs. Influenza A (H1N1) virus is the subtype of influenza A virus that is the most common cause of human influenza. It is an orthomyxovirus that contains the glycoproteins haemagglutinin and neuraminidase. H1N1 influenza (or swine flu) is a highly contagious acute respiratory disease of pigs caused by type A influenza virus that regularly causes outbreaks of influenza in pigs. Swine flu viruses do not normally infect humans. However, sporadic human infections with swine flu have occurred. Most commonly, these cases occur in people with direct exposure to pigs (e.g., children near pigs at a fair or workers in the swine industry). However, there have been cases of human-to-human spread of swine flu.

PM eVidya: is a unique and innovative venture by the Ministry of Education, Government of India to facilitate multi-mode access to digital/online teaching-learning contents of various types among students and teachers. The scheme was launched under the One Nation One Digital Platform with the objective of protecting the education of children during the Covid-19 pandemic. Other than that a TV channel called one class one channel will also be launched for students who are studying in class 1st to 12th. For visually and hearing impaired students the government will also do radio podcasts.

14.04.2022

SVANIDHI SE SAMRIDDI: .SVANidhi se Samridhi, additional program of PM SVANidhi (Prime Minister Street Vendors AtmaNirbhar Nidhi), launched in January 2021 in 125 cities in Phase 1, covering approximately 35 Lakh Street vendors and their families. Later, post success of phase 1, Ministry of Housing and Urban Affairs (MoHUA) launched the program expansion with an aim to cover 28 Lakh Street vendors and their families, with a total target of 20 Lakh scheme sanctions for FY 2022-23. Quality Council of India (QCI) is the implementing partner for the programme. Under the scheme vendors can avail working capital loan of up to Rs. 10,000, which is repayable in monthly instalments in the tenure of one year. Interest subsidy @ 7% per annum on regular repayment of loan. Promotes digital transactions through cash back incentives up to an amount of Rs. 100. Vendors can avail the facility of escalation of the credit limit on timely/ early repayment.

Dornier (Do-228) Aircraft flight: Ministry of Civil Aviation has announced the launch of first commercial flight of the made-in-India Dornier-228. Do-228 has been made by Hindustan Aeronautics Limited (HAL) delivered to Alliance Air. Alliance Air will be India's first commercial airline to fly an India- made aircraft for civil operations. Aircraft will link five remote towns of Arunachal Pradesh to Assam's Dibrugarh, boosting air connectivity in the north-eastern region of the country. It is part of government's Ude Desh ka Aam Naagrik (UDAN) regional connectivity scheme.

El Nino: El Nino is a climate pattern that describes the unusual warming of surface waters in the eastern tropical Pacific Ocean. It is the “warm phase” of a larger phenomenon called the El Nino-Southern Oscillation (ENSO). It occurs more frequently than La Nina. The El Nino event is not a regular cycle, they are not predictable and occur irregularly at two- to seven-year intervals. The climatologists determined that El Nino occurs simultaneously with the Southern Oscillation (The Southern Oscillation is a change in air pressure over the tropical Pacific Ocean). During El Nino rainfall increases drastically in South America, contributing to coastal flooding and erosion. Strong El Nino events contribute to weaker monsoons and even droughts in India Southeast Asia.

UTSAV Portal: Ministry of Tourism launches the Utsav Portal at the inaugural day of Amrit Samagam Conference. Utsav Portal website, digital initiative, aims to showcase all the events, festivals and live darshans across India to promote different regions of the country as popular tourist destinations worldwide. Objective is to increase tourism awareness, attractions, and opportunities by providing tourists with contextual digital experiences in the form of visually appealing photographs and stills from the events.

BharatNet Project: BharatNet is a flagship mission implemented by Bharat Broadband Network Ltd. (BBNL). Currently, it is being implemented by the Department of Telecommunication under the Ministry of Communications. It was envisaged as an information superhighway through the creation of a robust middle-mile infrastructure for reaching broadband connectivity to Gram Panchayats. The implementation of the rural internet connectivity scheme, BharatNet, has slowed and is likely to miss the 2025 completion deadline owing to a number of factors.

16.04.2022

Ujamaa: Ujamaa ideology focused heavily upon the practices of communal living and brotherhood. Even though it was necessary that Tanzania became an independent economy, the local practices of Ujamaa promoted reliance upon communities. The most important part of society according to Ujamaa ideology was the community. Former Tanzanian president Julius Nyerere propagated the Ujama ideology. Nyerere was a Tanzanian anti-colonial activist. PM Modi recently paid tributes to former Tanzanian president Julius Nyerere on his 100th birth anniversary.

Rashtriya Gram Swaraj Abhiyan (RGSA): The Cabinet Committee on Economic Affairs (CCEA) approved a proposal to continue the Rashtriya Gram Swaraj Abhiyan (RGSA), a scheme for improving the governance capabilities of Panchayati Raj institutions, till 2025-26. It was started in 2018 – 19. The scheme would work towards “poverty-free and enhanced livelihood in villages; healthy villages, child-friendly villages; water-sufficient villages; clean and green villages; self-sufficient infrastructure in villages; socially-secure villages; villages with good governance and engendered development in villages.”

Domestic Waste Water Management (DWWM): Cabinet approved signing of Memorandum of Cooperation between India and Japan in DWWM. • The DWWM systems treat wastewater of individual houses, apartment blocks or small communities close to their origin. It is used for recycling both "grey" and "black" domestic wastewater. This systems include: Primary treatment, which includes pre-treatment and sedimentation in settlement tank or septic tank; Secondary anaerobic treatment in baffled reactors; Tertiary aerobic/anaerobic treatment in reed bed system; and polishing in Ponds.

Tight Monetary Policy: A contractionary monetary policy is focused on contracting (decreasing) the money supply in an economy. This is also known as Tight Monetary Policy. A contractionary monetary policy is implemented by increasing key interest rates thus reducing market liquidity (money supply). Low market liquidity usually negatively affect production and consumption. This may also have a negative effect on economic growth. When RBI adopt a contractionary monetary policy, the central bank:

- increase Policy Rates (Interest Rates) like Repo, Reverse Repo, MSF, Bank Rate etc.
- increase Reserve Ratios like Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR)
- sells government securities from the market as part of Open Market Operations (OMO) – taking out liquidity from the market

Green Energy Corridor: Cabinet Committee on Economic Affairs approved the scheme on Green Energy Corridor (GEC) Phase-II for Intra-State Transmission System (InSTS). Phase 1 of the Green Energy Corridor is already under implementation in Gujarat, Andhra Pradesh, Karnataka, Himachal Pradesh, Maharashtra, Madhya Pradesh, Tamil Nadu, and Rajasthan. It is working for the grid integration and power evacuation of about 24GW of Renewable Energy. Phase 2 will facilitate grid integration and power evacuation of approximately 20 GW of Renewable Energy (RE) power projects in seven States namely, Gujarat, Himachal Pradesh, Karnataka, Kerala, Rajasthan, Tamil Nadu and Uttar Pradesh. The transmission systems will be created over a period of five year from Financial Year 2021-22 to 2025-26. It is targeted to be set up with a total estimated cost of Rs. 12, 031 crores, and the Central Finance Assistance (CFA) will be 33% of the project cost. The CFA will help in offsetting the Intra-State transmission charges and thus keep the power costs down.

18.04.2022

National Monetisation Pipeline (NMP): In India, the idea of asset monetisation was first suggested by the Vijay Kelkar committee(2012) on the roadmap for fiscal consolidation. The Central Government announced the National Monetisation Pipeline (NMP) in August, 2021. The project has been developed by NITI Aayog. Objective: To serve as a roadmap for the asset monetisation of several brownfield infrastructure assets across sectors. The NMP targets to raise Rs 6 lakh crore through asset monetisation of the Central Government, over a four-year period, from FY22 to FY25.

Colour Blindness: also known as colour deficiency, is the inability to see colours in the normal way. Colour blind individuals often cannot distinguish between certain colours — usually greens and reds, and sometimes blues as well. Two types of cells in the retina detect light — the “rods”, which distinguish between light and dark, and the “cones” that detect colour. There are three types of cones that see colour — red, green, and blue — and our brains use the information from these cells to perceive colour. Colour blindness can be the result of the absence of one or more of these cone cells, or their failure to work properly. Vitamin A deficiency may also cause color blindness. The Supreme Court has directed the Film and Television Institute of India (FTII) not to exclude candidates suffering from colour blindness from its courses on film making and editing and asked it to make changes to its curriculum instead.

Eco tourism: Ecotourism is a form of tourism involving “responsible travel to natural areas, conserving the environment, and improving the well-being of the local people“. Ecotourism is about uniting conservation, communities, and sustainable travel. This means that those who implement, participate in and market ecotourism activities should adopt the following ecotourism principles: Minimize physical, social, behavioral, and psychological impacts. Build environmental and cultural awareness and respect. Provide positive experiences for both visitors and hosts. Provide direct financial benefits for conservation. Generate financial benefits for both local people and private industry.

Vaquita porpoise: Global population of Vaquita porpoise (porpoise family) declined by 98% in 2 decades. It World's smallest cetacean and most endangered marine mammal. Known as "panda of the sea" for the distinctive black circles around its eyes. Habitat: Found in Gulf of California in Mexico. IUCN status: Critically endangered. Threat: Gillnet fishing for totoaba, endangered fish threatened by illegal fishing for international markets.

Parakh Unified Laboratory System: A unified mapping of the network of laboratory infrastructure -- Parakh -- has been created to overcome the fragmented nature of digitised information about testing facilities, he added. Speaking at Udyog Manthan, an industry webinar. The unified laboratory network has been developed by the Department for Promotion of Industry and Internal Trade (DPIIT) with the support of ministry of electronics and information technology (Meity) and Bhaskaracharya Institute for Space Application and Geo-informatics (BISAG). To enhance competitiveness of Indian goods and services, building a quality culture is of utmost importance. Access to information about testing laboratories is the first step. The portal makes it possible to search labs for a particular product in a state or a city. It also enables finding the scope of accreditation and test methods of a laboratory. Facility for booking a test online has been developed and is being pilot tested for Textile Committee Laboratories

19.04.2022

Oil Bonds: An oil bond is a promissory note issued by the government to the oil marketing companies (OMCS), in lieu of cash that government owes them. When fuel prices are high for consumers, government directs oil marketing companies (OMCS) to charge consumers less prices and the balance is to be paid by the government. However, if government pays in cash, it would have to tax the same people to collect the money to pay.

El Nino Modoki: El Niño Modoki is a coupled ocean-atmosphere phenomenon in the tropical Pacific. It is different from another coupled phenomenon in the tropical Pacific namely, El Niño. El Niño Modoki is associated with strong anomalous warming in the central tropical Pacific and cooling in the eastern and western tropical Pacific. Such zonal gradients result in anomalous two-cell Walker Circulation over the tropical Pacific, with a wet region in the central Pacific.

Schengen Area: EU has reportedly decided to "punish" the UK by requiring non-EU citizens to get a transit Schengen visa to fly to the UK on transit flights operated by its airlines. A Schengen visa is a short-term visa that allows its holder to travel freely throughout the Schengen area. Schengen Area signifies a zone where 26 European countries, abolished their internal borders, for the free and unrestricted movement of people. These countries are Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, and Switzerland.

'Tree City of the World' (TCW) Tag: Mumbai and Hyderabad have been jointly recognised as '2021 TCW'! TCW programme started by United Nations' Food and Agriculture Organisation and American non-profit organisation Arbor Day Foundation. It provides direction, assistance, and worldwide recognition for a community's dedication to its urban forest. Also, provides framework for healthy, sustainable urban forestry programme in town or city. City was evaluated based on five standards i.e. Establish Responsibility, Set the Rules, Know What You Have, Allocate the Resources, and Celebrate the Achievements.

CHAMPIONS Portal: The CHAMPIONS stands here for Creation and Harmonious Application of Modern Processes for Increasing the Output and National Strength. It is a technology driven Control Room-Cum-Management Information System which utilises modern information and communication technology (ICT) tools. In addition to ICT tools including telephone, internet and video conference, the system is enabled by Artificial Intelligence, Data Analytics and Machine Learning. It is also fully integrated on a real time basis with the Government of India's main grievances portal Centralized Public Grievances Redress and Monitoring System (CPGRAMS) and the Ministry's other web based mechanisms. The entire ICT architecture is created in house with the help of the National Informatics Centre. A network of control rooms is created in the Hub & Spoke Model. The Hub is situated in New Delhi in the Secretary MSME's office. The spokes will be in the States in various offices and institutions of the Ministry. **Aim:** To assist Indian MSMEs march into the big league as National and Global CHAMPIONS by solving their grievances and encouraging, supporting, helping and hand holding them. Three basic objectives:

- Support: To help the MSMEs in this difficult situation in terms of finance, raw materials, labour, permissions, etc.
- Explore: To help them capture new opportunities like manufacturing of medical accessories and products like Personal Protection Equipments (PPEs), masks, etc.
- Promote: To identify the sparks, i.e., the bright MSMEs who can not only withstand but can also become national and international champions.

20.04.2022

Vidya Samiksha Kendra: The Command and Control Centre, or Vidya Samiksha Kendra are set up by the Gujarat Education Department in Gandhinagar. It tracks enrolment, attendance, learning outcomes, drop-outs, school accreditation and monitors schools, teachers and block and cluster resource centre co-ordinators. This state of the art data driven centre is based on the National Digital Education Architecture (NDEAR) Framework. The centre is aimed at leveraging data and technology to improve learning outcomes.

Algal bloom: Algal bloom or marine bloom is a rapid increase in population of algae in an aquatic system. Algae are microorganisms that grow naturally in water bodies and they have characteristics of both plants and animals. It occurs when combination of suitable environmental conditions exists for abundant algal growth (i.e., increased nutrients, warmer temperature, abundant light, and stable wind conditions). There are thousands of species of algae; most are beneficial and only a few of these produce toxins or have other harmful effects.

Autonomous District Council: ADCs are Institutions of local governance created under Sixth Schedule with Executive, Legislative and Judicial powers. Sixth Schedule consists of provisions for administration of tribal areas in Assam, Meghalaya, Tripura and Mizoram. There are 10 areas three in Assam, Meghalaya and Mizoram each and one in Tripura that are registered as autonomous districts. As per the Sixth Schedule, each ADC must have at least 30 members. Khasi Hills Autonomous District Council (KHADC) in Meghalaya has opposed the State government's deal with Assam to resolve boundary dispute.

The Energy and Resources Institute: TERI is an independent research institute and a global think tank (NGO) that specializes in the fields of energy, environment and sustainable development. The scope of the organisation's activities also includes climate change, energy efficiency, renewable energy, biotechnology, and social transformation. TERI with support from Ministry of New & Renewable Energy has developed Green Rating for Integrated Habitat Assessment (GRIHA). It evaluates the environmental performance of a building holistically over its entire life cycle, thereby providing a definitive standard for what constitutes a 'green building'. The rating system, based on accepted energy & environmental principles, will seek to strike a balance between the established practices & emerging concepts, both national & international.

Mega Integrated Textile Region and Apparel (PM MITRA) Parks: The MITRA park aims to integrate the entire textile value chain from spinning, weaving, processing/dyeing, printing to garment manufacturing at one location. PM MITRA park will be developed by a Special Purpose Vehicle which will be owned by the Central and State Government and in a Public Private Partnership (PPP) Mode. Each MITRA Park will have an incubation centre, common processing house and a common effluent treatment plant and other textile related facilities such as design centres and testing centres. The Master Developer will not only develop the Industrial Park but also maintain it during the concession period. Under the scheme, the centre will provide development capital support for the development of common infrastructure of Rs 500 crore for each greenfield MITRA park and upto Rs 200 crore for each brownfield park. Eligibility for Incentive:

- An additional Rs 300 crore will be provided as Competitiveness Incentive Support for the early establishment of textiles manufacturing units in each of these parks.
- Investors who set up "anchor plants" that employ at least 100 people will be eligible for incentives of upto Rs 10 crore every year for upto three years.

21.04.2022

NATPOLREX-VIII: It is the 8th edition of the National Level Pollution Response Exercise. Conducted by Indian Coast Guard (ICG) off Mormugao harbour, Goa. The objective of NATPOLREX-VIII is to enhance the preparedness and response capability of all the stakeholders in combating marine spills. It aims at validating the procedures and guidelines as contained in the National Oil Spill Disaster Contingency Plan (NOSDCP) at the national and regional levels.

World Heritage Site: April 18 as the International Day for Monuments and Sites. In many countries the day is also celebrated as World Heritage Day. Globally, the day is promoted by the International Council on Monuments and Sites (ICOMOS). These sites are officially recognised by the UN and the United Nations Educational Scientific and Cultural Organisation, also known as UNESCO. UNESCO believes that the sites classified as World Heritage are important for humanity, and they hold cultural and physical significance. The list is maintained by the international World Heritage Programme administered by the UNESCO World Heritage Committee, composed of 21 UNESCO member states which are elected by the General Assembly. Each World Heritage Site remains part of the legal territory of the state wherein the site is located and UNESCO considers it in the interest of the international community to preserve each site.

- India is home to 40 UNESCO World Heritage Sites.
- Harappan city of Dholavira in Gujarat as India's 40th world heritage site. Ramappa Temple (Telangana) was India's 39th.
- Khangchendzonga National Park, Sikkim has been inscribed as India's first and the only "Mixed World Heritage Site".

FSSAI Health Star Rating System: Similar to BEE ratings for electronic appliances, FSSAI Health Star Rating System will rate packaged food based on salt, sugar, and fat content. Based on a IIM-A study, ratings will be printed on the Front of Packaging Labelling (FOPL) of packaged and processed foods to: Guide consumers to opt for healthy food, and Reduce the burden of lifestyle diseases. Presently, it is in its initial stage of discussion at FSSAI.

State Energy and Climate Index: Recently, the NITI Aayog launched the SECI. It is the first index that aims to track the efforts made by states and UTs in the climate and energy sector. The parameters of the index have been devised keeping in mind India's

goals for climate change and clean energy transition. Gujarat, Kerala and Punjab have been adjudged as top three performer states in the NITI Aayog's SECI. The top three performers among smaller states are Goa, Tripura and Manipur. Objectives: The objectives of the index are:

- Ranking the States based on their efforts towards improving energy access, energy consumption, energy efficiency, and safeguarding the environment.
- Helping drive the agenda of the affordable, accessible, efficient and clean energy transition at the State level,
- Encouraging healthy competition among the states on different dimensions of energy and climate.

Kavach: It is India's own automatic protection system, which is in development since 2012, under the name Train Collision Avoidance System (TCAS), which got rechristened Kavach or "armour". It is a set of electronic devices and Radio Frequency Identification (RFID) devices installed in locomotives, in the signalling system as well as the tracks. They connect to each other using ultra high radio frequencies to control the brakes of trains and also alert drivers, all based on the logic programmed into them. It will also carry features of the high-tech European Train Control System Level-2 in future. The Kavach system was announced in the 2022 Union Budget as a part of the Atmanirbhar Bharat initiative. Around 2,000 km of rail network is planned to be brought under the indigenous system to enable safety and capacity augmentation in 2022-23.

22.04.2022

Vagsheer: Vagsheer, the sixth submarine of the P75 project of the Indian Navy was launched recently. It is the last of the Scorpene class submarines made under the P75 project. Under P75, INS Kalvari, INS Khanderi, INS Karanj and INS Vela have been commissioned. Sea trials are on for Vagir. Vagsheer is named after the sand fish, a deep sea predator of the Indian Ocean. The first submarine Vagsheer, from Russia, was commissioned into the Indian Navy on December 26, 1974, and was decommissioned on April 30, 1997.

AYUSH Visa & AYUSH Mark: PM Modi announced that the government is deliberating on launching AYUSH Visas for foreign nationals wanting to visit India to avail AYUSH medical treatment. This announcement was made while addressing the inaugural session of the Global AYUSH Investment and Innovation Summit 2022. The government is planning of set up a digital platform to connect AYUSH manufacturers with farmers across the nation who grows medicinal plants. India will soon launch 'AYUSH mark' which will provide authenticity to AYUSH products made in India. The mark will be given to products vetted using the latest technology.

The RS-28 Sarmat: is reported to be able to carry 10 or more warheads and decoys and has the capability of firing over either of the Earth's poles with a range of 11,000 to 18,000 km. It is expected to pose a significant challenge to the ground-and-satellite-based radar tracking systems of the western powers particularly the USA. The 10 warheads are having Multiple Independently Targetable capability. The Sarmat will also be the first Russian missile that can carry smaller hypersonic boost-glide vehicles. These are maneuverable and hard to intercept Upgraded electronic countermeasures, guidance systems and alternative warhead carrying capacity. Some reports say that while the height and weight of Sarmat ICBM is the same as in the older one, it has faster speed and higher throw weight. However, the Sarmat is a liquid fuelled missile as compared to US ICBMs, which have moved on to solid fuel systems. The Sarmat is named after nomadic tribes that roamed the steppes of present day Southern Russia, Ukraine and Kazakhstan in the early medieval period. Sarmatians were highly developed in horsemanship and warfare. NATO has named it Satan II.

Green Hydrogen: Oil India Limited (OIL) has commissioned India's first 99.999% pure green hydrogen plant in Jorhat, Assam. Defined as hydrogen produced by splitting water into hydrogen and oxygen using renewable energy such as wind or solar power that does not entail greenhouse gas emissions. Hydrogen gas can be used as a fuel in transportation, power generation, and industrial activities.

Unnat Bharat Abhiyan Scheme: It is a flagship program of the Ministry of Education. It was. It aims to link the Higher Education Institutions (HEIs) with a set of at least (5) villages, so that these institutions can contribute to the economic and social betterment of these village communities using their knowledge base. It covers two major domains for holistic development of villages – human development and material (economic) development - in an integrated way. The Indian Institute of Technology Delhi (IIT, Delhi) has been designated as the National Coordinating Institute (NCI) for the UBA scheme. Objectives:

- Identify & select existing innovative technologies, enable customisation of technologies, or devise implementation methods for innovative solutions, as required by the people.
- To engage the faculty and students of HEIs in identifying development issues in rural areas and finding sustainable solutions for the same.
- To allow HEIs to contribute to devising systems for smooth implementation of various Government programmes.

UBA 1.0 or UBA Phase-1 (launched in 2018) was the Invitation Mode in which Participating Institutions were invited to be a part of UBA. Whereas UBA 2.0 is the Challenge Mode of Unnat Bharat Abhiyan programme where all HEIs are required to willingly adopt at least 5 villages. Currently, UBA 2.0 Mode is going on.

23.04.2022

Fincluvation: India Post Payments Bank (IPPB), a 100% government owned entity under Department of Posts (DoP) has announced the launch of Fincluvation– a joint initiative to collaborate with Fintech Startup community to co-create and innovate solutions for financial inclusion. Fincluvation is an Industry first initiative to create a powerful platform to mobilize the start-up community towards building meaningful financial products aimed at financial inclusion. Fincluvation will be a permanent platform of IPPB to co-create inclusive financial solutions with participating start-ups.

‘India Out’ campaign: Maldives has issued a decree banning the ‘India Out’ campaign. Opposition parties and a section of the media in the Maldives have been engaged in renewed efforts to whip up anti-India sentiments. In this regard, “India Out” slogan was first used on social media platforms last year. This campaign alleged that the cooperation between the governments of the two countries is undermining the national security and sovereignty of the Maldives.

Indian SARS-CoV-2 Consortium on Genomics (INSACOG): The Indian SARS-CoV-2 Genomics Consortium (INSACOG) is jointly initiated by the Union Ministry of Health and Family Welfare, and Department of Biotechnology (DBT) with Council for Scientific & Industrial Research (CSIR) and Indian Council of Medical Research (ICMR). It is a consortium of 28 National Laboratories to monitor the genomic variations in the SARS-CoV-2. It carries out whole genome sequencing of SARS-CoV-2 virus across the nation, aiding in understanding the spread and evolution of the virus. INSACOG also aims to focus on sequencing of clinical samples to understand the disease dynamics and severity.

GO 111: The GO 111 order, issued by the government of erstwhile (undivided) Andhra Pradesh on March 8, 1996, prohibited the setting up of industries, residential colonies, hotels, etc in the catchment area of the Osman Sagar and Himayat Sagar lakes up to a radius of 10 km. The reservoirs were created by building dams on the Musi (also known as Moosa or Muchkunda) river, a major tributary of the Krishna, to protect Hyderabad from floods. The lakes came into being during the reign of the last nizam, Osman Ali Khan (1911-48). Environmentalists and activists are criticising the Telangana government for withdrawing this order. They say this will destroy the fragile surrounding ecosystem.

Jan Shikshan Sansthan: The Scheme of JSS formerly known as Shramik Vidyapeeth was a unique creation of the Government of India and has been implemented through Non-governmental Organizations (NGOs) in the country since 1967. The scheme was renamed as JSS in 2000. It was transferred from the Ministry of Education (erstwhile Ministry of Human Resource Development) to the Ministry of Skill Development & Entrepreneurship in July, 2018. The JSSs are imparting vocational skill training programmes at the door step of the beneficiaries with a minimum cost and infrastructure. JSSs are unique in the sense that they do not provide only vocational skills but also include an element of life skills which can help the beneficiary in day to day life. They are not working in isolation but also conduct convergence programmes with different departments. JSSs are registered under the Societies Registration Act, 1860. The affairs of Jan Shikshan Sansthan are managed by the respective Board of Management approved by the Government of India. The annual coverage of the beneficiaries is around 4 lakh, out of which 85% are women. Aims:

- To provide vocational skills in non-formal mode to non-literate, neo-literates, persons with rudimentary level of education upto 8th and school drop-outs upto 12th standard in the age group of 15-45 years.
- The priority groups are women, Scheduled Caste, Scheduled Tribe, minorities and other backward sections of the society. It is implemented through NGOs with 100% grants from the Government of India.

25.04.2022

Fincluvation: India Post Payments Bank (IPPB), a 100% government owned entity under Department of Posts (DoP) has announced the launch of Fincluvation– a joint initiative to collaborate with Fintech Startup community to co-create and innovate solutions for financial inclusion. Fincluvation is an Industry first initiative to create a powerful platform to mobilize the start-up community towards building meaningful financial products aimed at financial inclusion. Fincluvation will be a permanent platform of IPPB to co-create inclusive financial solutions with participating start-ups.

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26.04.2022

Raisina Dialogue: President of the European Union Ursula Von Der Leyen is the chief guest at the Dialogue. The three-day Dialogue is based on the theme - Terranova, impassioned, impatient, imperiled. There are six broad thematic pillars of the Dialogue including Rethinking Democracy, End of Multilateralism, Water Caucuses, and Achieving Green Transitions. Raisina Dialogue will have around 100 sessions with over 210 speakers from 90 countries. The Raisina Dialogue is a multilateral conference committed to addressing the most challenging issues facing the global community. Every year, global leaders in policy, business, media, and civil society are hosted in New Delhi to discuss cooperation on a wide range of pertinent international policy matters. The conference is hosted by the Observer Research Foundation in collaboration with the Ministry of External Affairs.

First carbon-neutral panchayat: Palli in Jammu becomes India's first carbon-neutral panchayat. Carbon neutrality means having a balance between emitting carbon and absorbing carbon from the atmosphere in carbon sinks. Removing carbon oxide from the atmosphere and then storing it is known as carbon sequestration.

Khelo India University Games (KIUG): The second edition of KIUG 2021 started off in Karnataka. KIUG was introduced in 2020 in Odisha, as part of Khelo India Games to revive sports culture in India. It is a national level multi-sports annual event, wherein athletes from different sporting fields from across the country compete in different sporting events. It is the largest University level sports competition to identify and train athletes in the age group 18 to 25 years for Olympics and Asian Games.

Pradhan Mantri Bhartiya Jan Aushadi Kendras (PMBJK): Government has set a target to increase the number of Janaushadhi Kendra's to 10,000 by March 2024 with a budget of Rs 15000 crore set aside for this. They have been operationalised under 'Pradhan Mantri Bhartiya Janaushadhi Pariyojana' campaign, 2008 of Department of Pharmaceuticals, Ministry of chemicals and fertilisers. Objective is to provide quality generic drugs at affordable prices to the masses through dedicated janaushadi outlets. It is implemented by Pharma and medical bureau of India (society).

India International Skill Centre: Government of India is keen to bridge the global shortage of labour force in the coming years by reaping the demographic dividend of young Indian labour force. To meet this objective, Ministry of Skill Development & Entrepreneurship (MSDE) under the "Skill India Mission" has set up India International Skill Centre (IISC) to provide skill

training and certification benchmarked to international standards. In the pilot phase, IISCs were set up through the National Skill Development Corporation (NSDC) to implement two schemes namely Pradhan Mantri Kaushal Vikas Yojana (PMKVY) and Pravasi Kaushal Vikas Yojana (PKVY) for youth seeking global mobility for jobs. As part of IISC Program, both domain skill training on international standards and Pre-Departure Orientation Training (PDOT) are being imparted to candidates. Key focus:

- Assessment and Certification on international standards as per best practices and recognition in different countries.
- IISCs to have Career Guidance and Counselling centres within them vis-à-vis international training and employment and act as resource centres facilitating foreign employment support. The counselling centres would help students to understand the various overseas employment opportunities available and match their interest and talent with the most relevant opportunities.
- IISCs as per new policy are expected to provide only incremental skill training if found lacking in candidates.
- Opportunity to conduct PDOT will be as sponsored by MEA under PKVY, will be provided to IISCs.

27.04.2021

Splinternet: The splinternet (also referred to as cyber-balkanization or internet balkanization) is a characterization of the Internet as splintering and dividing due to various factors, such as technology, commerce, politics, nationalism, religion, and divergent national interests. In this internet is controlled by autonomous political blocs or any other controlling power—such as tech or e-commerce companies, or countries with diverging national interests tied to nationalism or religion. Example is China's Great Firewall. Russian Sovereign Internet law passed in 2019 also cut off Russia from global internet.

Confederation of Indian Industries: CII is a non-government, not-for-profit, industry-led and industry-managed organization. It works to create and sustain an environment conducive to the development of India, partnering industry, Government and civil society, through advisory and consultative processes. Recently CII chief has highlighted Lack of Centre-State alignment, Policy instability & Poor Ease of Doing Business at state level are hampering the development of industries in India

LFPR: Labour Force Participation Rate is defined as the percentage of persons in the labour force (i.e. working or seeking or available for work) in the population. Key findings of Centre for Monitoring Indian Economy (CMIE), an independent think tank:

- Between 2017 and 2022, overall labour participation rate dropped from 46% to 40%.
- India's labour force has shrunk from about 445 million to 435 million in the six years.
- Women labour force participation has declined from 15% (2015-16) to 9.2% (2021-22)
- Among men, the participation rate declined to 67%, from more than 74%.
- Reduction in participation rate was higher in urban areas than in rural.

DAP 2020: The new Defence Acquisition Policy superseded the Defence Procurement Procedure of 2016 from October 1. The DAP contains policies and procedures for procurement and acquisition from the capital budget of the MoD in order to modernise the Armed Forces including the Coast Guard. Highlights of the new policy:

- The policy reserves several procurement categories for indigenous firms. DAP 2020 defines an "Indian vendor" as a company that is owned and controlled by resident Indian citizens, with FDI not more than 49 per cent.
- Policy stipulates indigenisation of at least 50 per cent of the overall contract value of a foreign purchase bought with the intention of subsequently building it in India with technology transfer.
- DAP-2020 stipulates 10 per cent higher indigenisation than DPP 2016.
- The "import embargo list" of 101 items that the government promulgated last month has been specifically incorporated into DAP 2020.
- The government has decided not to have an offset clause in procurement of defence equipment if the deal is done through inter-government agreement (IGA), government-to-government or an ab initio single vendor.
- The offset clause requires a foreign vendor to invest a part of the contract value in India.

SIPRI: Stockholm International Peace Research Institute is an independent international institute dedicated to research into conflict, armaments, arms control and disarmament. Latest finding of SIPRI:

- India third highest military spender in 2021
- World military spending continued to grow in 2021, reaching an all-time high of \$2.1 trillion despite economic fallout of the pandemic.
- Five largest spenders were U.S., China, India, U.K. and Russia. U.S. and China alone accounted for 52% spending.

28.04.2022

River Ranching: River Ranching is a form of aquaculture in which a population of a fish species (such as salmon) is held in captivity for the first stage of their lives. They are then released, and later harvested as adults when they return from the sea to their freshwater birthplace to spawn. In India River Ranching Programme is introduced as a special activity under Pradhan Mantri Matsya Sampada Yojana (PMMSY) for augmenting and enhancing fish production and productivity through expansion, intensification, diversification and productive utilisation of land and water. Department of Fisheries, Government of India, has designated the National Fisheries Development Board (NFDB), Hyderabad as the nodal agency under the Central sector component of PMMSY for implementing the programme across the country. Recently, over 10,000 fish fingerlings of Indian major carps — catla, rohu and mrigal — were released in the Ganga at Sangam nose under the ranching programme organised by ICAR-Central Inland Fisheries Research Institute (CIFRI), Prayagraj, recently. The exercise has been undertaken for conservation and promotion of fish species that are becoming extinct in the Ganga.

Gravitational Lensing: Gravitational lensing is an effect of Einstein's theory of general relativity – simply put, mass bends light. The gravitational field of a massive object will extend far into space, and cause light rays passing close to that object (and thus through its gravitational field) to be bent and refocused somewhere else. The more massive the object, the stronger its gravitational field and hence the greater the bending of light rays – just like using denser materials to make optical lenses results in a greater amount of refraction. Gravitational lensing is useful to cosmologists because it is directly sensitive to the amount and distribution of dark matter.

Lucy Mission: NASA's Lucy mission — set to explore a group of asteroids that follow behind and in front of Jupiter's orbit. NASA will perform two steps over the next several months to fully reveal an unfurled solar array. This is NASA's first mission to explore the Jupiter Trojan asteroids. It is a solar-powered mission. It is estimated to be over 12 years long, during the course of which the spacecraft will visit eight asteroids covering a distance of about 6.3 billion km to deepen the understanding of the "young solar system".

Canine Distemper: The Gujarat Biotechnology Research Centre has developed and completed the first trials of the Canine Distemper Virus (CDV) vaccine for the Asiatic lion. Canine distemper is caused by the paramyxovirus virus and it spreads through body fluids like infected urine, blood and saliva. The virus attacks the respiratory, gastrointestinal and nervous systems of puppies and dogs and can be transmitted to lions, tigers, leopards and other wild cats as well as seals. There is no known cure for CDV.

TRACE Metaverse Token: Crypto trading platform Bitbns has listed the metaverse token 'TRACE' on its platform. It has become India's first crypto exchange to list this token. Metaverse tokens are the currency used by people within the metaverse. Users can create, buy and sell goods as well as tokenized funds.

29.04.2022

Heatwave: A region is considered to be under the grip of a heatwave if the maximum temperature reaches at least 40 degrees Celsius or more in the plains and at least 30 degrees Celsius or more in hilly regions. When the maximum temperature departure ranges between 4.5 and 6 degrees, the India Meteorological Department (IMD) declares a heatwave. A severe heatwave is declared when the recorded maximum temperature of a locality departure from normal is over 6.4 degrees Celsius. Also, if an area records over 45 degrees and 47 degrees Celsius on any given day, then the IMD declares heatwave and severe heatwave conditions, respectively.

SLV: Small Satellite Launch Vehicle aims to cater to the market for the launch of small satellites into Earth's low orbits that has emerged in recent years to cater to the needs of developing countries, universities for small satellites, and private corporations. It is the smallest vehicle weighing only 110-tonne. It will take only 72 hours to integrate, unlike the 70 days taken now for a launch vehicle. It can carry satellites weighing up to 500 kg to a low earth orbit while the tried and tested Polar Satellite Launch Vehicle (PSLV) can launch satellites weighing in the range of 1000 kg. SSLV is a three-stage all solid vehicle and has a capability to launch up to 500 kg satellite mass into 500 km Low Earth Orbit (LEO) and 300 kg to Sun Synchronous Orbit (SSO).

Non-compete agreements: Non Compete agreement or clause are signed when the relationship between employer and employee begins. They give the employer control over specific actions of the employee—even after that relationship ends. These agreements have specific clauses stating that the employee will not work for a competitor after their employment is over, regardless of whether they are terminated or resign. Employees are also prevented from working for a competitor even if the new job wouldn't involve disclosing trade secrets. Some of the terms of the contract may include the length of time the employee is bound to the non-compete agreement, the geographic location, and/or market. These agreements may also be called a "covenant not to compete" or a "restrictive covenant." Non-competes ensure the employee will not use information learned during employment to start a business and compete with the employer once work is over. It also ensures the employer keeps its place in the market. The validity and enforcement of a non-compete vary by jurisdiction and may require the former employer to keep paying the ex-employee a base salary during the non-compete period.

Tax/GDP ratio: A tax-to-GDP ratio is a gauge of a nation's tax revenue relative to the size of its economy as measured by gross domestic product (GDP). The ratio provides a useful look at a country's tax revenue because it reveals potential taxation relative to the economy. It also enables a view of the overall direction of a nation's tax policy, as well as international comparisons between the tax revenues of different countries. India's Tax to GDP ratio is about 12% which is less than OECD countries which has an average tax to GDP ratio of 21%. CBDT aims to increase the Tax to GDP ratio of India to 20% in 5 to 10 years time.

Consultancy Development Centre (CDC): Cabinet has approved amalgamation of CDC with Council of Scientific and Industrial Research (CSIR) of Department of Scientific and Industrial Research (DSIR). CDC is an autonomous institution of DSIR, Ministry of Science and Technology, established in 1986 as a society. It was approved as an autonomous institution in 2004. Main Objective: To promote and develop the consultancy profession in the country. CSIR was set up in 1942 under Societies Registration Act XXI of 1860 as a National R&D organization for scientific industrial research for India's economic growth and human welfare.

30.04.2022

Battery Passport: A German-funded consortium of carmakers and battery producers announced Europe's first Battery Passport Project. Battery Passport is a digital representation of a battery that conveys information about all applicable ESG (Environmental, Social, and Governance norms) and lifecycle requirements based on a comprehensive definition of a sustainable battery. Purpose: Meet European regulations on disclosure of carbon footprint (from 2024); carbon dioxide emission limits (from 2027); and use of a minimum share of recycled cobalt, lithium, nickel and lead (from 2030) etc.

Ecopreneurs: Uttarakhand is the first state to launch the plan to train 1 lakh youth in ecopreneurship. Ecopreneurs are a new class of entrepreneurs whose businesses conserve natural resources through. low-carbon, nature-based livelihood. It is a business practice driven not just by profits but also by a concern for the environment. It provides incentives to locals to conserve their natural resources.

Legal Entity Identifier (LEI): Recently, RBI has extended the guidelines on LEI to large borrowers of NBFCs and Primary (Urban) Co-operative Banks (UCBS). LEI is a 20-character alpha-numeric code which is used to create a global reference data system that uniquely identifies every legal entity in any jurisdiction that is party to a financial transaction. LEI improves the quality and accuracy of financial data reporting systems for better risk management.

Shinku La Pass: It is located between Zaskar Valley in Ladakh and Lahaul Valley in Himachal Pradesh. Border Roads Organisation will build the world's highest tunnel at Shinku La Pass to connect Himachal to Ladakh under Project Yojak by 2025. The world's longest tunnel is the Atal tunnel at Rohtang.

Digital Services Act: In a significant move, the European Union (EU) finalised Digital Services Act (DSA) to regulate harmful content including hate speech, disinformation and child sexual abuse images. It is part of the EU Commission's digital strategy aiming to reinforce the Digital Single Market and to realize the full potential of eCommerce. Advertising aimed at children, or based on sensitive data such as religion, gender, race and political opinions will be prohibited under DSA.