VAJIRAM & RAVI
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Current Affairs (December 2021)

the RECITALS

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Ken-Betwa Link Project (KBLP)

- The Union Cabinet recently approved the funding and implementation of **Ken-Betwa Link Project (KBLP)**.

- KBLP is the **first project** under **National Perspective Plan** for interlinking of rivers. It involves transferring of water from Ken River in Madhya Pradesh to Betwa river in Uttar Pradesh, both tributaries of the Yamuna. The project will be completed in eight years.

Background

- The idea of linking Ken with Betwa got a major push in 2005, when a tripartite MoU for preparation of a detailed project report (DPR) was signed among the Centre and the two states.

- In 2008, the Centre declared KBLP a **National Project.** Later, it was included as a part of the Prime Minister's package for development of drought-prone Bundelkhand region.

- In 2009, it was decided that the DPR will be prepared in two phases. In 2018, a comprehensive DPR was prepared.

- In March, 2021, a MoU was signed among Ministry of Jal Shakti and the government of Madhya Pradesh and Uttar Pradesh to implement KBLP.
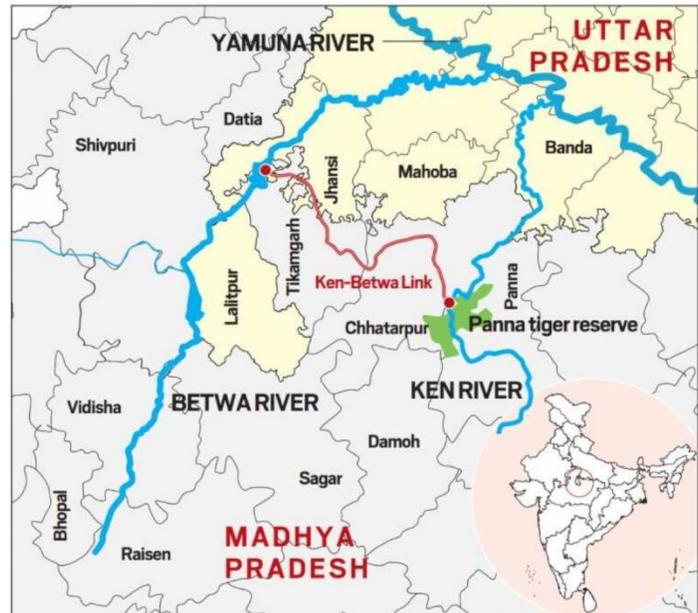
Details Of The Project

- The project has **two phases**, with mainly four components.

Phase-I	• It will involve one of the components — **Daudhan Dam complex** and its subsidiary units such as Low Level Tunnel, High Level Tunnel, Ken-Betwa Link Canal and power houses.
Phase-II	• It will involve three components — Lower Orr Dam, Bina Complex Project and Kotha Barrage.

- The total **cost** of KBLP has been assessed at **Rs.44,605 crore**. The Centre would fund Rs 39,317 crore for the project, with Rs 36,290 crore as a grant and Rs 3,027 crore as a loan.

- The Ken-Betwa Link Canal will be 221 km long, including a 2-km long tunnel.

- A Special Purpose Vehicle (SPV) called Ken-Betwa Link Project Authority (KBLPA) will be set up to implement the project.

  ✓ In fact, the Centre has initiated the process to create the **National Interlinking of Rivers Authority (NIRA).**

  ✓ NIRA would be an independent autonomous body for planning, investigation, financing and implementation of the interlinking of river projects in the country. It will have powers to set up SPV for individual link projects.

Special Purpose Vehicle (SPV)

- An SPV is an entity which is formed for a single, well-defined purpose and can be formed for any lawful purpose.

- It is, primarily, <u>a business association of persons or entities</u> eligible to participate in the association. Technically, an SPV is a company and has to follow the rules of formation of a company laid down in the Companies Act.

Benefits Of The Project

- It is expected to <u>irrigate 10.62 lakh hectares annually, provide drinking water supply to 62 lakh people and generate 103 MW of hydropower and 27 MW of solar power</u>.

- In doing so, it will accelerate the development of water-starved Bundelkhand region and will help <u>improve the socio-economic condition</u> of the people. This would eventually help in <u>reducing distress migration from the region</u>.

- It will pave the way for more river interlinking projects to ensure that scarcity of water does not become an inhibitor for development in the country

Issues With The Project

- Protesting environmentalists claim that the project will destroy the Panna Tiger Reserve in Madhya Pradesh.

- According to National Water Development Agency, the reservoir of Daudhan dam will <u>submerge an area of 5803 ha under Panna Tiger Reserve (PTR)</u>. This includes 4141 ha of forest area which is about 7.6% of the total PTR area. To mitigate this, three WildLife Sanctuaries (WLS), viz Nauradehi, Rani Durgawati of MP and Ranipur WLS of UP are planned to be integrated with PTR.

- According to draft National Water Policy (NWP) 2020, <u>there have been huge delays and massive cost increases in the construction of large and medium dam projects</u>, along with unacceptable social and environmental costs.

- Thus, the <u>government should shift its focus from building dams towards better management and distribution of water</u>.

A Brief About Interlinking Of Rivers In India

Background

Interlinking of Rivers in India

- In the 1970s, the idea of transferring surplus water from a river to water-deficit area was initiated by the then Union Irrigation Ministry.
- It also suggested construction of a National Water Grid for transferring water from water-rich areas to water-deficit areas. Similarly, a Garland Canal was proposed to redistribute water from one area to another.
- However, the government did not pursue these two ideas. Later, in 1980 the Ministry of Irrigation prepared a **National Perspective Plan (NPP)** for water resources development for inter basin water transfer in the country.
- The NPP comprised two components: **Himalayan Rivers Development** and **Peninsular Rivers Development**.
- Based on the NPP, the National Water Development Agency (NWDA) identified **30 river links**—16 under Peninsular component and 14 under Himalayan Component. KBLP is a part of the Peninsular component.
- The following **clearances** are required for the interlinking of river projects:
  - Techno-economic (given by the Central Water Commission);
  - Forest Clearance and Environmental clearance (Ministry of Environment & Forests);
  - Resettlement and Rehabilitation (R&R) Plan of Tribal Population (Ministry of Tribal Affairs);
  - Wildlife clearance (Central Empowered Committee).

Advantages of River Interlinking

- Interlinking of rivers will help in **water availability throughout the year** considering that rainfall is concentrated in few months of the year.

- The river linking project on one hand will r**educe water shortages in western and southern India,** on other hand it will **mitigate the impacts of recurrent floods** in eastern India.

- This will also **reduce farmers dependence on monsoon** rains for purpose of irrigation.

- These projects can help India to meet its clean energy production (hydro project) as required under Paris climate agreement.

- These projects also have potential to **promote inland water transportation** as well as increasing income sources in rural areas through fishing.

- **Diversion of water from water surplus basins to water deficit basins**/regions and the use of the surplus water which is otherwise flowing into the sea unutilized.

Issues And Challenges

- **Political Challenges:** Water is the sign of wealth for a state as its basic need of every kind thus several states do not want to go with national river linking project in fear of losing surplus of water to the other states.

- **Economic Challenges:** National river linking project is a dream project for the Indian government which has a vast impact on the national economy as the programming cost of this project is very high nearly \$87 billion. It seems rather difficult to arrange this vast money from the market itself.

- **Environmental Challenges:** The project may have negative ecological effect as it may impact fisheries, flora/ fauna, wetlands and may lead to possible diversion of forest land.

- **International Challenges:** Himalayan rivers like the Ganga and the Brahmaputra are transboundary rivers. India's neighbours especially Bangladesh will resist this project because the flow of Ganga in Bangladesh will be reduced which will create a problem in implementing NRLP.

- **Social unrest/Psychological damage:** Building of dams and reservoirs under the project will lead to displacement of people. For ex- Tehri dam led to submersion of 72 villages.

Conclusion

The river linking project is a great challenge as well as an opportunity to address the water issues arising out of climate change. The long-term solution to water scarcity lies in investing in water conservation, efficient irrigation practices etc. Moreover, interlinking of river should take place after a detailed study and feasibility

Prohibition of Child Marriage (Amendment) Bill 2021

Prohibition of child marriage (Amendment) Bill was introduced in Lok Sabha. The bill has been referred to Parliamentary standing committee for discussion. The bill has been decided on recommendation of four-member committee led by **Jaya Jaitly**.

The bill states that the present laws do not sufficiently secure the constitutional mandate of gender equality. It seeks to **fix 21 years** as the **uniform age of marriage for women and men**. The bill once become act will amend the prohibition of Child Marriage Act 2006 and following six personal laws.

Special Marriage Act → Muslim Personal Law (Shariat) Application Act → Hindu Marriage Act → Parsi Marriage & Divorce Act → Foreign Marriage Act → Indian Christian Marriage Act

Increases Window For Filing A Petition To Declare A Child Marriage Void

- Presently, **section 3(4) of the Prohibition of Child Marriage Act** allows a woman to file for declaration of child marriage as a void before she turns 20 and for the man before he turns 23.

- Prohibition of Child Marriage (Amendment) Bill 2021 proposes to extend this window for both the woman and the man to **five years** after attaining the **age of 18.**

Background

- In India, the minimum age of marriage was prescribed for the first time (14 years for girls and at 18 years for boys) by the law known as the **Sarda Act, 1929**. It was later renamed as the **Child Marriage Restraint Act (CMRA), 1929.**
- In 1978, the law was amended to raise tminimum age of marriage to 18 years for girls and 21 years for boys.
- This position remains the same even in the new law called the **Prohibition of Child Marriages Act (PCMA), 2006,** which replaced the CMRA 1929.

Current Law On Marriage Age

- ➢ The **Special Marriage Act, 1954** and **Prohibition of Child Marriage Act 2006**, prescribes 18 and 21 years as minimum age of consent for marriage for women and men respectively.
- ➢ The **Muslim Personal Law (Shariat) Application Act**: The marriage of a minor who has attained puberty is allowed according to Muslim personal law.
- ➢ **Hindu Marriage Act**: It sets 18 years as minimum age for bride and 21 for groom. Child marriage is not illegal but can be declared void at the request of minor in the marriage.

Justification Behind The Proposal

1. Increase age of marriage will help women to get proper education and job prospects, thus economic independence.
2. It will increase gender parity.
3. It will help to reduce maternal mortality rate and early pregnancy.

Criticism Of Bill

1. It will push large part of population into *illegal marriage*. By making marriages under 21 years invalid, we are criminalising those who marry under this age and ***depriving them of protections under law***. Tweaking the definition of a child by amending the age criteria should be done only when it enables, and not when it deprives someone of their rights.
2. 70% of early marriages take place in ***deprived communities*** such as SCs and STs, and the law will simply push these marriages underground instead of preventing them.
3. It was criticized by the minority communities saying that the bill ***interferes with their personal law*** and is also a violation of Article 25 of the Indian Constitution.
4. It ***contradicts laws where the legal age of competence is recognised as 18.*** Under the Indian Contract Act, 1872 a person should have attained the age of majority in order to be able to enter into a contract. At one level, we say that the age to enter into contracts and to vote is 18 years. We are recognising that a person has the mental capacity to make decisions that will affect her life commercially or as a citizen, but at the same time when it comes to her personal life, she doesn't have the right to make decisions. The proposed law makes an artificial distinction.
5. It ***won't fight child marriage problem.*** Even with prevailing law, there is only marginal change in child marriage. According to 5th survey of National Family Health Survey (NFHS), the child marriage is reduced only from 27% in 2015-16 to 23% in 2019-20. Further, NFHS-5 data revealed that 7% of girls aged 15-18 were pregnant.

Conclusion

Uniform age of marriage for both men and women is a progressive move. But the problem of women in our country will not be solved only by raising the age of marriage. The problem should be addressed holistically.

Boosting education, increasing accessibility to schools, and mass awareness programmes should be implemented.

Child Marriage: A Perspective

Provisions Related To Child Marriage

- Domestic Provisions

  ✓ The **PCMA 2006** was intended to be a positive step forward from India's prior legislation on child marriage, the 1929 Child Marriage Restraint Act.

  ✓ Further, as per our constitutions, child marriage constitutes a **violation of fundamental rights** which guarantees every Indian citizen right to live with human dignity and good health, *freedom of life and personal liberty, non-discrimination and equality, free education between ages six to 14 years, and freedom from forced labor*.

  ✓ The Constitution also establishes **DPSP** to provide children the opportunity to develop in a healthy manner with freedom and dignity, without exploitation or abandonment in addition to promoting the interest of marginalized groups and protecting them from social injustice and improving public health.

- India's Global And Regional Policy Commitments

  ✓ **Sustainable Development Goals:** For the first time, a standalone Gender Equality Goal (Goal 5) was included in Sustainable Development Goals. Target 5.3 of Goal 5 enjoins upon all States to "eliminate all harmful practices, such as child, early and forced marriage and female genital mutilations."

  ✓ **South Asian Association for Regional Cooperation (SAARC):** India is a member of the South Asian Initiative to End Violence Against Children, an apex body of SAARC that adopted a **Regional Action Plan to End Child Marriage.**

Current Scenario

- However, despite the PCMA and other constitutional, legal and policy commitments to end the practice, **India continues to account for the highest number of child marriages in the world**. The **5th National Family Health Survey (NFHS**) 2015-16 showed that **23 %** women were married off before they turned 18.

- The incidence is also much higher than the national average in rural areas (31.5 percent) as compared to urban areas (17.5 percent). The incidence of child marriage also varies by other factors, including caste, religion and education.

Factors Contributing To Child Marriage

1. *Patriarchy:*
   o Child marriage in India is rooted in **gender inequality**, including **patriarchal social norms** that value women less than men and consider married women and girls to belong to their husband's family.
   o Further, child marriage is also linked to **barriers in access to girl's education**, **concerns about girls' safety**, and the view that **women are an economic liability**, a belief fuelled in part by practices such as dowry and the high cost of weddings.

2. *Loopholes in India's Laws on Child Marriage*
   o PMCA makes contracting a marriage by a man who is over 18 years of age with a woman under 18 years, a **cognizable and non-bailable offence** punishable with imprisonment of two years and a fine of Rs one lakh, **but recognizes the union as valid and voidable**.
   o In India, rights and obligations within the context of marriages are governed by **dual legal systems**, **general laws** that are applicable to the population as a whole versus **religion based personal**

status laws which only apply to certain communities. This leads to a state of confusion as to whether the PCMA has primacy over religion based personal laws, which establish their own standards and procedures concerning solemnization and dissolution of marriage.

- o These gaps are compounded by **weaknesses in criminal and civil laws** on women's rights, including laws on dowry, rape, domestic violence, and child sexual assault; guardianship laws; and laws on reproductive rights, education, and child labor.

3. *Loopholes in Implementation Of Laws*
   - o Child marriage is fuelled by **failure to strengthen and implement laws and policies to eliminate discrimination faced by women and girls**, including within marriage and in seeking maintenance and inheritance, freedom from and remedies for physical and sexual violence, education, employment, and reproductive health services.
   - o Child marriage in India is also linked to **low awareness of the law and consequences of violations**, limited capacity and willingness to report child marriages, and limited trust in institutions enforcing child marriage laws.

Way Forward

Child marriage affects **girls' ability to enjoy their rights and freedoms**, especially due to the **serious risks of sexual and reproductive harms** associated with this practice, exposing women and girls to an increased risk of coerced sex, early unintended pregnancy, maternal mortality and morbidity and sexually transmitted infections. Child marriage prevents girls from accessing education, including comprehensive sexuality education, thereby trapping generations of women and girls into a cyclical pattern of poverty. The solution is to:

- Develop a **comprehensive curriculum** for engaging the judiciary, police, and public prosecutors concerning child marriage and girls' rights under the PCMA and allied laws.
- **Strengthen implementation of laws on violence against women and children**, recognizing that child marriages often occur due to fears of increased risk of sexual violence when girls remain unmarried.
- Review and amend the definition of trafficking in relevant provisions of Indian Penal Code and anti-trafficking legisations to explicitly include child marriage for the purpose of trafficking.
- Increase women's and girls' **access to information** regarding legal remedies, including awareness raising campaigns for women and girls on their rights.
- Provide girls seeking to prevent or leave child marriages with **access to protection measures and other referral mechanisms**, including residence, medical support, and psychosocial counseling.

Conclusion

Child marriage is actually 'a **solemnised invasion**' of a girl, her bodily integrity, her sexuality and her mind. Putting an end to the 'solemnised invasion' cannot be resolved through slogans and tokenism. It has to be resolved through education, health services, nutritional support and by providing protection to girls which will create the desired ecosystem for the girl child to blossom into a healthy and successful woman.

Beti Bachao, Beti Padhao (BBBP) Scheme

A parliamentary committee on empowerment of women has flagged **under-utilisation** of central funds for the flagship Beti Bachao, Beti Padhao scheme from **2014 to 2019.**

About BBBP Scheme

- The Beti Bachao scheme was launched in January 2015 at Panipat, Haryana, with the aim to address sex selective abortion and the declining child sex ratio which was at 918 girls for every 1,000 boys in 2011. The programme is being implemented across 405 districts in the country.
- This is a joint initiative of the Ministry of Women and Child Development, Ministry of Health and Family Welfare and Ministry of Human Resource Development.

Other Objectives Regarding Girl Child

| Ensuring their survival & protection | Ensuring their education & participation | Protecting their rights |

Positive Outcomes (Period From (2014-15) to (2019-20))

Sex Ratio at Birth	• It has improved by 16 points from 918 to 934, as per the Health Management Information System (HMIS) data.
	• Notable Examples:
	Mau (UP): 694 to 951 → Karnal (Haryana): 758 to 898 → Mahendergarh (Haryana): 791 to 919
Health	**ANC Registration**	% of 1st Trimester ANC (AnteNatal Care) Registration has shown an improving trend from 61% to 71%.
	Institutional Deliveries	Shown an improving trend from 87% to 94%.
Education	**Gross Enrolment Ratio (GER)**	GER of girls in the schools at secondary level has improved from 77.45 to 81.32 as per Unified District Information System for Education (UDISE) provisional data
	Toilet for girls	% of schools with functional separate toilets for girls has shown improvement from 92.1% to 95.1%.
Attitudinal Change	Scheme has been able to bring the focus on important issue of female infanticide, lack of education amongst girls and deprivation of their rights on a life cycle continuum.
	• Use of BBBP logo in popular Indian festivals i.e. Lohri, KalashYatra, Rakhi, Ganesh Chaturdashipandal etc.
	• BetiJanmotsav is one of the key programmes celebrated in each district

Issues Still Unaddressed

- **Under-utilisation:** The Committee found that since the inception of BBBP in 2014-15 till 2019-20, total Budgetary allocation under the scheme was ₹848 crore, excluding COVID-stricken financial year of 2020-21. During this period, an amount of ₹622.48 crore was released to States but only _25.13% of the funds_, i.e. ₹156.46 crore, have been spent by the States and Union Territories.

- **Improper Spending**: The Committee finds that out of a total of ₹446.72 crore released during the period 2016- 2019, a whopping _78.91% was spent only on media advocacy_.

- The massive spend on advertisements was despite the clearly laid down formula for utilisation of funds – **₹50 lakh per year is earmarked for a district** for utilisation under **six different components.**

- 16% of funds are for inter-sectoral consultation or capacity building
- 50% for innovation or awareness generation activities
- 6% for monitoring and evaluation
- 10% for sectoral interventions in health
- 10% for sectoral interventions in education
- 8% as flexi funds

- Over the last six years, through focused advocacy, BBBP has been able to capture the attention of political leadership and national consciousness towards valuing the girl child. Now, it is time to focus on **other verticals** by making ample financial provisions to **help achieve measurable outcomes** related to education and health envisaged under the scheme.

- **Reduction in Budget Allocation:** The proposed budget for the Union Women Child Development Ministry was reduced by over 18% in present budget as compared to the last fiscal. Also, there is no allocation earmarked for the BBBP scheme

- **Lack of Proper Monitoring**: Incidences of non-compliance with the issued guidelines, such as the Task Force meetings do not take place frequently and monthly reports or statement of expenditure from districts are often not submitted timely.

- **High Dropout Rates**: The average dropout rate of girls was 17.3% at the secondary education level and 4.74% at the elementary level in 2018-19 are still high. Also caste based discrimination thrives to push Dalit and Adivasi children, especially girls, out of school.

- **Challenges Posed by-COVID**: The pandemic may have impacted female literacy rates due to issues such as gender-based digital divide, increased burden of household chores on girls etc

US Law to Block Imports from Xinjiang over Forced Labour

President Joe Biden has signed a bill into law to **block imports from China's Xinjiang region** unless businesses can prove that the items were made without forced labour. The law -**Uighur Forced Labor Prevention Act** - is part of the U.S. pushback against Beijing's treatment of the China's **Uighur Muslim minority.**

Key Highlights Of The Law

Onus Transferred to Businesses

- The act **creates a presumption** that goods coming from Xinjiang are made with forced labour.

- Hence, businesses will have to prove that forced labour, including by workers transferred from Xinjiang, was not used in manufacturing the product. Only then, it will be allowed into the US.

- Some goods — such as <u>cotton, tomatoes, and polysilicon used in solar-panel manufacturing</u> — are designated **"high priority" for enforcement action**.

- In January 2021, the Trump administration announced a ban on all Xinjiang **cotton and tomato products.**

- As per the estimates of U.S. Customs & Border Protection agency, about $9 billion of cotton products and $10 million of tomato products were imported from China in the past year.

- An estimated 20% of garments imported into the United States each year include some cotton from Xinjiang.

Government Agencies To Expand Their Monitoring

- The law requires US government agencies to expand their monitoring of the use of forced labour by China's ethnic minorities.

- It also requires the US president to **impose sanctions on Chinese officials** responsible for human rights abuses in the region.

Why US Has Taken This Action

- The US says <u>China is committing genocide</u> in its treatment of the Uighurs.

- That includes reports by rights groups and journalists of <u>forced sterilisation</u> and <u>large detention camps</u> where many Uighurs allegedly are forced to work in factories.

- Different Human Rights group have claimed that, in Xinjiang, the **government is the trafficker**. Authorities use threats of physical violence, forcible drug intake, physical and sexual abuse, and torture to force detainees to work in adjacent or off-site factories.

- These worksites produce garments, footwear, carpets, yarn, food products, holiday decorations etc. These goods are then finding their way into businesses and homes around the world.

- The Indian government has maintained near silence on the Uighur crisis.
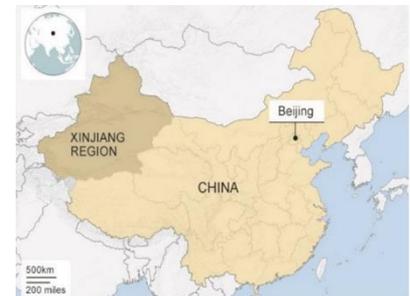
Forced Labour in China's Xinjiang Region
- Over the last four years, the People's Republic of China (PRC) has carried out a mass detention and political indoctrination campaign against Uyghurs.
  - This was highlighted by the report of the US Department of State.
- Uyghurs are predominantly Muslim, and they live in the Xinjiang Uyghur Autonomous Region (Xinjiang), a large region in western China.

Charges against China
- Many international groups have thoroughly documented the PRC's discriminatory practices like:
  - Discriminatory use of surveillance technologies and
  - Trumped-up administrative and criminal charges to abduct and detain more than one million Muslims, including Uyghurs.
- These Muslims are detained in as many as 1,200 state-run internment camps throughout Xinjiang.
- Detention in these camps is intended to erase ethnic and religious identities under the pretext of vocational training. Forced labour is a central tactic used for this repression.

What Has Been Chinese Response To This Law

- China denied abuses in Xinjiang, a major cotton producer that also supplies much of the world's materials for solar-panels. It said the steps it has taken in this region are necessary to combat <u>terrorism and a separatist movement.</u>

- China said that the act ignores the truth and maliciously slanders the human rights situation in Xinjiang.
- It has termed this law as a severe violation of international law and norms of international relations, and a gross interference in China's internal affairs.

International Response

- In January 2021, the **U.S. State Department** declared that the Chinese Communist Party was committing genocide against the Muslim ethnic minority Uyghurs.
  - After that, US government introduced a ban on cotton and tomato products from Xinjiang.
  - Finally, in December 2021, it passed the **Uyghur Forced Labour Prevention Act**.
- Later, parliaments in **Europe and Canada** passed resolutions calling on their governments to follow the United States.
- Countries around the world, led by **G7**, are starting to more closely regulate corporate labour treatment. They are using tools ranging from import restrictions and public due diligence requirements to stern import guidance documents.
- In March 2021, **UN human rights experts** raised serious concerns about the alleged detention and forced labour of Muslim Uyghurs in China.

3ʳᵈ India-Central Asia Dialogue

Key Highlights of India-Central Asia Dialogue

- The meeting was held at New Delhi under the chairmanship of External Affairs Minister of India.
- **Participants** - Ministers of Foreign Affairs of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan & Uzbekistan.
- As India interacted with the Central Asia republics in New Delhi, Islamabad hosted the 17th extraordinary session of the **Organisation of Islamic Cooperation's** (OIC) Council of Foreign Ministers.
  - ✓ It should be noted that the foreign ministers of the five Central Asian countries are also members of the OIC grouping.
  - ✓ However, they **skipped meeting in Islamabad** to attend the dialogue in New Delhi.

India-Central Asia Dialogue

The 1ˢᵗ India-Central Asia Dialogue was held in Samarkand in January 2019.

The 2ⁿᵈ meeting was organized by India in October 2020 in digital video-conference format.

Key Summary Of Joint Statement

A. Assessed Steps Taken To Implement The Decisions Taken At Previous Dialogue

- This includes signing of MoUs for implementation of **High Impact Community Development Projects** (HICDPs) for socio-economic development in Central Asian countries. It is based on grant assistance by India.
- The leaders also noted the ongoing discussions with regard to utilization of US$ 1 bn Line of Credit announced in 2020 for infrastructure development projects in Central Asia.

B. **Role of Indian Technical and Economic Cooperation (ITEC) Programme Appreciated**

- Leaders of Central Asian countries appreciated the important role of ITEC programme in **capacity building and human resource development** of their countries, especially in IT and Communication Skills in the English language.
- India offered to increase the number of ITEC slots as per the requirements of Central Asian countries.
- It also offered to organize **customized training programmes** in India for the professionals from Central Asian countries in the fields of counter-terrorism, cyber security, space, energy, WTO etc.

C. **Noted The Need To Strengthen And Expand Interconnectivity**

- In this context, Turkmenistan stressed on the importance of **TAPI gas pipeline project**. The leaders emphasized on optimum usage of the **International North-South Transport Corridor (INSTC)** as well as **Ashgabat Agreement** on International Transport and Transit Corridor to enhance connectivity between India and the Central Asian countries.
- Leaders welcomed the proposal to include Chabahar Port within the framework of INSTC.
- India welcomed the interest of Central Asian countries to utilize the **services of Shahid Beheshti Terminal at Chabahar Port** for facilitating their trade with India and beyond.

D. **International Solar Alliance (ISA) And Coalition for Disaster Resilient Infrastructure (CDRI)**

- India highlighted the role of ISA initiative in collective, rapid and massive deployment of solar energy for effective implementation of the Paris Agreement.
- India also underlined the role of CDRI in promoting disaster resilient infrastructure for reducing economic losses.

E. **Permanent Membership at UNSC**

- Reiterated support of their countries for permanent membership of India in an expanded and reformed UNSC)
- Welcomed the ongoing non-permanent tenure of India in the UNSC and its priorities.

F. **Discussed The Current Situation in Afghanistan**

- The Ministers reiterated strong support for a peaceful, secure and stable Afghanistan while emphasizing the respect for **sovereignty, unity and territorial integrity** and **non-interference** in its internal affairs.
- They also discussed the current humanitarian situation and decided to continue to provide immediate **humanitarian assistance** to the Afghan people.
- The Ministers reaffirmed the importance of **UNSC Resolution 2593** (2021). This resolution unequivocally demands that Afghan territory not be used for sheltering, training, planning or financing terrorist acts and called for concerted action against all terrorist groups.

India – Central Asia
Central Asia's location at the heart of Eurasia, its geographical proximity, and historic linkages, render the region highly relevant to India's strategic interests. India has taken steps to devise policies focusing on Central Asia after the Central Asian Republics (CARs) became independent in the 1990s, but these have produced limited results.

Significance of Central Asia for India

Geostrategic Importance	Being placed in the middle of the Eurasian Continent, Central Asia is one of the most convenient routes of transit.
Geopolitical Interest	Today, Europe, US, China, and Iran are trying to increase their influence in this region. All this is likely to bring in high-stakes **power politics** in Central Asia.

Energy Security	• Central Asia contains vast hydrocarbon fields and Uranium reserve.
	• With India projected to become ever more reliant on imported energy, cultivating alternative sources of energy has become a vital concern.
Commercial Interest	• Both India and Central Asia have economic complementarity in terms of resources, manpower, and markets.
	• Trade between India and Central Asia are much below its potential. It lies at a measly **US $2 billion** compared to Chinese trade with the CARs, which roughly amounts to a **US $100 billion**.
	• On the other hand, increased access to **India's huge markets** would also be highly beneficial for Central Asian countries.
Internal Security	• India sees this region as a source of religious extremism and is concerned to check the rise of radical Islamist groups which may present a terrorist threat.
	• These security concerns are compounded by the proliferation of drug-trafficking in Central Asia.
After Taliban Takeover	• Central Asia's importance has been accentuated post the Taliban takeover of Afghanistan because of the threat of terrorism and drug-trafficking spilling over into these countries (India and Central Asian countries) from Afghanistan.

Challenges Faced by India

Despite all this, relationship between these two regions has not progressed to the desired level due to various challenges. These are:

i) Geographical connectivity is the biggest challenge faced by India in this region.

ii) Recently, Russia is seeking convergence with China in the Central Asian region. It is affecting India's interest in the region.

iii) India lacks in-depth understanding of Central Asia's political, linguistic and above all intricate socio-tribal structural underpinnings.

iv) Central Asian *economies are weak*, their societies are infected with corruption. They perilously suffer from social polarization, poverty and lack the rule of law.

v) Central Asian political systems are not institution-based, they are not accountable to their peoples and they are unstable.

Steps Taken By The Government To Overcome These Challenges

Central Asia can be the next Middle East for India in terms of employment and to fuel India's growth and serve domestic needs. Hence, India has taken various steps to increase its presence in this region. Some of these include:

i) The government has initiated '**Connect Central Asia' policy** in 2012.

ii) The **membership to SCO** is further providing India an opportunity to gain deeper access to Central Asia.

iii) In January 2019, the **First India-Central Asia Dialogue** at the level of Foreign Ministers was held in Samarkand, Uzbekistan. This will help in institutionalization of dialogue process.

iv) India extended an additional **US $1 billion line of credit** in 2020 for development projects in various spheres.

v) In order to address the challenges related to connectivity, government is implementing various **connectivity plans** including Chabahar Project, International North South Transit Corridor (INSTC) etc.

- Although China has the largest regional presence in Central Asia, by far beyond India's reach in the near future. However, the CARs are interested in diversifying their economic linkages so that no single country dominates the region.

- This, coupled with the goodwill that it possesses amongst the CAR countries, could be utilised majorly by India to expand its influence.

- India could also look to deploy its time-tested friendship with Russia, one of the most influential countries in the region, to make progress on this front.

Maiden 2+2 India-Russia Ministerial Dialogue

The inaugural 2+2 dialogue of the **defence and foreign ministers** from India and Russia was held. Also, Russian President Vladimir Putin visited India and met with Indian PM Modi.

Facts

- Russia is the **first non-Quad member country** with which New Delhi now has the 2+2 mechanism.

- Other countries are - United States, Japan, and Australia.

Agreements Signed

A. Joint manufacturing of AK-203 rifles

- Both sides concluded a deal for the joint production of more than 500,000 AK-203 assault rifles at a facility in Uttar Pradesh's Amethi district. These rifles would be produced under a joint venture called the **Indo-Russian Rifles Private Limited.**
- The domestic manufacturing of the rifles is crucial to meet the shortfall of small arms and will replace the old INSAS rifles.

B. Military-technical cooperation arrangement for 2021-31

- Two countries also renewed their military-technical cooperation arrangement for 2021-31.

C. On the issue of Afghanistan

- Both sides outlined priorities which include ensuring formation of a truly inclusive and representative government in Afghanistan; combating terrorism and drug trafficking and preserving the rights of women, children and minorities.
- They also discussed the current humanitarian situation and decided to provide immediate humanitarian assistance to the Afghan people.
- Both sides emphasised that **Afghanistan's territory should not be used** for sheltering, training, planning or financing any terrorist groups.

D. On the S-400 deal and the US threat of sanctions

- Both sides reaffirmed the commitment to the S-400 deal despite the threat of US sanction. Russian side hailed India for not listening to the US.

E. Multiple agreements signed

- India and Russia signed 28 agreements, including 9 government-to-government agreements and those that spanned areas of defence, space, finance, power, culture, scientific research, education and health among others.

F. On reciprocal logistics support agreement (RELOS)

- The two sides **could not conclude** the RELOS. It has been put off for the time being since there were some issues pending. Finalization of RELOS would allow Indian ships or aircraft to use Russian ports or airfields without having to take permission or make immediate payments.

Vladimir Putin's Visit to India

The visiting Russian President Vladimir Putin met with Indian PM Modi and discussed various aspects of the bilateral relations between the two countries. This was **the 21st annual summit** between the leaders of ~~the~~ two countries.

1. **Strategic Significance**

   - This is **Putin's second foreign visit since the Covid-19 outbreak** – He travelled to Geneva in June for his first meeting with US President Joe Biden.
   - Putin's decision to travel to New Delhi reflects the importance attached by Russia to its special and privileged strategic partnership with India.

2. **Balancing China**

   - The Chinese aggression in border areas of eastern Ladakh, brought India-China relations to an inflection point, but also demonstrated that Russia is capable of contributing to defusing tensions with China.
   - Russia organized a trilateral meeting among the foreign ministers of Russia, India, and China following deadly clashes in Galwan Valley in the disputed territory of Ladakh.

3. **Strengthening Bilateral Relationship**

   - India has a historical relationship with Russia. The strongest pillar of the strategic partnership is of the defence basket.
   - Estimates say 60 to 70% of India's supplies are from Russia. New Delhi **needs regular and reliable supply from Russia** for the spare parts from the Russian defence industry.

4. **Shared Concern Over Afghanistan**

   The two sides also have a shared concern of terrorism, as the security situation emanating out of Taliban-ruled Afghanistan remains challenging.

5. **Members of Various Multilateral Groupings**

   Delhi and Moscow have worked together on at least three major multilateral groupings — **Russia-India-China (RIC), BRICS, and SCO (Shanghai Cooperation Organisation).**

6. **Support At Multilateral Forums**

   Russia supports India's candidacy for permanent membership of a reformed United Nations Security Council and of the Nuclear Suppliers Group.

7. **Emerging New Sectors of Economic Engagement**

   Apart from traditional areas of cooperation such as weapons, hydrocarbons, nuclear energy, and diamonds, new sectors of economic engagement are likely to emerge — mining, agro-industrial, and high technology, including robotics, nanotech, and biotech.

In a fast-changing world, this visit assumes significance in order to decide the common future course of action.

Factors Which Continue To Limit The Possibilities For The Bilateral Partnership

Continuing Conflict Between The Kremlin And The West

New Delhi is more aligned towards USA, while Russia is inclined towards China. That the US and China are now at each other's throats makes the equation a lot more complicated for India and Russia.

Ukraine Crisis

For India, the Ukraine crisis has introduced a new element of discomfort as it seeks to maintain its traditional relationship with Russia without spoiling its growing partnership with the US.

- In 2019, total bilateral trade in goods between the two countries from January-September, 2019 stood at USD 7.55 billion. Russia comprises around 1% of India's total trade, while India accounts for a minuscule 1.2% of Russia's overall trade.

- Intensifying the trade and economic relations has been identified as a priority area by both the sides as is clear by the revised targets of increasing bilateral investment to US $ 50 billion and bilateral trade to US $ 30 billion by 2025.

    The overall investment target of 30 bn USD that was set for 2025 has been already achieved in 2018.

Russia's Rapprochement With Pakistan

Russia's alignment with Pakistan has been a major cause of concern for India. Some of the important developments highlighting this trend are:

- Russia is a member of *Trioka plus grouping* with Pakistan. It is actively deliberating on the current issue of Afghanistan. Other members include USA and China. In November 2021, 'Troika plus' group held conference on Afghanistan & India was not invited.

- In April 2021, Russian Foreign Minister, for the first time ever, visited Pakistan after India, thereby signaling hyphenation to the bilateral relationship.

    It is to be noted that Indian Foreign Minister, in July 2021, visited Georgia. This was seen as a rare message to Russia given the hostile relation between Russia and Georgia.

- In August 2018, Pakistan and Russia signed an agreement that allows for **training of Pakistani troops** at Russian military training institutes.

- In 2016, Russia announced the first-ever mutual special drills in mountainous terrain with Pakistan. Russia-Pak Military Exercise "Friendship 2016" was also called **"Druzba".**

- In 2014, Russia removed its arms embargo against Islamabad and in 2015 it agreed to sell 4 Mi-35M helicopters to Pakistan.

Countering America's Adversaries through Sanction Act (CAATSA)

- In August 2017, CAATSA was signed into law by President Donald Trump which aims to counter the aggression by Iran, Russia and North Korea through punitive measures.

- Analysts feel that the CAATSA has the potential to affect the Indo-Russian military ties as India is a major importer of Russian arms and defence technologies.

UNGA Grants Observer Status on Solar Alliance

International Solar Alliance (ISA) has got an **'observer' status** in the United Nations General Assembly (UNGA). This will help this treaty-based international organisation usher in a new era of green energy diplomacy for increasing its solar power footprint.

United Nations Membership

- UN Charter, Chapter II, **Articles 3-6 concern Membership** in the UN. **Only states can be members** of the United Nations.
- Membership of the principal organs is determined by the Charter of the UN and the Statute of the International Court of Justice (ICJ). There are 6 principal organs of the UN (established under the UN Charter).

Membership In 6 Different Organs Of The UN Varies

- **General Assembly**: Consist of **all the Members** of the United Nations. The President of the General Assembly is elected each year by assembly to serve a one-year

- **Security Council**: Consist of **15 Members** of the UN; there are **5 permanent members** and **10 non-permanent members**, 5 of which are elected each year by the General Assembly for a **two-year term.**

- **Economic and Social Council**: Consist of **fifty-four Members** of the UN elected by the General Assembly; **eighteen Members are elected each year for a three-year term**

- **ICJ:** According to the Statute of ICJ, it is composed of **15 "independent judges**, elected regardless of their nationality from among persons of high moral character, who possess the qualifications required in their respective countries for appointment to the highest judicial offices, or are juris-consults of recognized competence in international law"; **five members are elected every three years for nine year terms**. The General Assembly and Security Council independently elect the judges and candidates must obtain an absolute majority in both organs

- **UN Secretariat**: Consisting of staff representing all nationalities working in duty stations all over the world, carries out the day-to-day work of the Organization. The Secretariat services the other principal organs of the United Nations and administers the programmes and policies established by them

- **Trusteeship Council**: Made up of the 5 permanent members of the Security Council -- China, France, the Russian Federation, the United Kingdom and the United States. The aims of the Trusteeship System have been fulfilled to the extent that all Trust Territories have attained self-government or independence, either as separate States or by joining neighbouring independent countries.

Permanent Observer

- The status of a Permanent Observer is based purely on practice, and there are **no provisions** for it in the United Nations Charter. The practice dates from 1946, when the Secretary-General accepted the designation of the Swiss Government as a Permanent Observer to the UN.

- Permanent Observers have <u>free access to most meetings and relevant documentation</u>.

- Non-Member States of the United Nations, which are <u>members of one or more specialized agencies</u>, can apply for the status of Permanent Observer.

- Non-Member States having received a standing invitation to participate as Observers in the sessions and the work of the General Assembly are:

Holy See	State of Palestine

Granting Observer Status in General Assembly

- UNGA has granted observer status to <u>international organizations, entities, and non-member states</u>. This is to enable them to participate in the work of the United Nations General Assembly, though with limitations.

- The General Assembly determines the privileges it will grant to each observer.

  E.g., the EU was, in 2011, granted the right to speak in debates, to submit proposals and amendments, the right of reply etc.

- UNGA grants observer status <u>through a resolution</u> brought for the purpose. This practice has been incorporated to distinguish between **state** and **non-state observers.**

State observer	• It has already been mentioned that the **non-member states** who are members of one or more specialized agencies, can apply for permanent observer state status
Non-state observers	• These are international organisations, multilateral/regional blocs etc.

International Solar Alliance (ISA)

- ISA is a *treaty based inter-governmental organization*. It is working to create a global market system to tap the benefits of solar power and promote clean energy applications.
- HQ - Gurugram
- ISA was conceived as a coalition of solar-resource-rich countries (which lie either completely or partly between the **Tropic of Cancer and the Tropic of Capricorn**) to address their special energy needs.
- It was launched jointly by India and France at the side-lines of COP 21 (held in Paris) in 2015. The Paris Declaration had established the ISA.
- Currently there are 101 members, after being joined by the US.
- 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

ISA

ISA Represents:
* 73% of global population, 36% of world GDP
*55% of total energy consumption world wide,
*23% of installed solar capacity

$83 bn
India's requirement to meet its 175 GW goal

What is International Solar Alliance?
It is an Inter-governmental organisation to promote solar energy among member countries. It is headquartered in Gurgaon

How many have joined in?
As of now, 61 nations have joined the alliance while 32 have ratified the Framework Agreement

Who's behind it?
The idea was conceived and articulated by Prime Minister Narendra Modi during his Wembley Stadium speech at London in 2015

What is the concept?
It is meant to bring together 121 countries that lie either completely or partly between the two tropics so as to harness solar energy and make the technology freely available to all nations

ISA TARGET
1,000 GW
Solar generation capacity globally by 2030
$1 trillion
Investment required to achieve the 2030 goal

175 Gigawatts (GW) generation from renewable energy is India's target for 2022

20 GW solar power capacity already installed in India, says Modi

- The objective of ISA is to collectively address key common challenges to the scaling up of solar energy in line with their needs. To meet this objective, it aims to pave the way for future solar generation, storage and technologies for Member countries' needs by mobilising over USD 1000 billion by 2030.

Summit for Democracy

- US President Joe Biden hosted the **first-ever** Summit for Democracy. It was two-day virtual summit, for which **India was an invitee.** Many other countries including China & Russia were not invited to this summit.
- This summit brought together leaders from government, civil society, and the private sector to set forth an **affirmative agenda for democratic renewal** and to tackle the greatest threats faced by democracies today through collective action.
- A total of 111 countries were invited for this summit.

Aim: To show how open, rights-respecting societies can work together to effectively tackle the challenges of our time such as the COVID-19 pandemic, the climate crisis, and inequality.

Principal Themes: It is centered around **three** principal themes:

Defending against authoritarianism

Addressing and fighting corruption

Advancing respect for human rights

Key Highlights: Excerpts from Speech of US President

- **Called For Safeguarding Rights And Freedoms**
  - Global freedoms were under threat from autocrats seeking to expand power, export influence, and justify repression.
  - The world stood at an **inflection point in the contest between democracy and autocracy.** Therefore, he called for safeguarding rights and freedoms in the face of rising authoritarianism.
- **Democracy Needs Champions**

  Democracy can, at times, be fragile. But it also is inherently resilient and capable of self-correction and self-improvement. To strengthen democracy, it needs champions.

- **Pledged to Invest In Democratic Resiliency**

  The US President pledged to work with Congress to invest in democratic resiliency overseas. This new initiative **will invest about $424 million to support**:

| independent news media overseas | combat corruption | aid activists | advance technology | defend fair elections |

- **Combat Digital Authoritarianism**
  - He emphasised that US administration will combat **digital authoritarianism**.
  - This will be done through greater **export controls of technologies** that can empower surveillance states.

India's Stand	Pakistan Skipped The Summit

• PM Modi stressed on the need for democratic nations to deliver on **values enshrined in their constitutions**. He stressed that principles of democracy should also guide global governance.
 	
• **Urged tech firms to contribute in efforts to preserve- open and democratic societies.** This is due to the abilities of technology to impact democracy positively or negatively.
 	
• Democracies should jointly deal with **social media and crypto currencies**, so that they are used to empower democracy, not undermine it.
	• Pakistan declined to participate in President Joe Biden's democracy summit. Reasons given by Pakistan:
	
	  ✓ Pakistan desired not to become part of any political bloc.
	  ✓ Instead, it wanted to play a role in <u>bridging gaps between the US and China.</u>
	
	• The US invitation to the virtual democracy summit had put Pakistan in a difficult situation as Washington had invited Taiwan, instead of Beijing, to represent China. **Islamabad could not risk upsetting China**, its closest ally.

What Is US Trying To Achieve With This Summit

- Analysts believe that this conference is *a test of Biden's assertion*, announced in his first foreign policy address in February 2021. He had announced that the current administration would return the United States to **global leadership to face down authoritarian forces.**
- It should be noted that the country's global standing took a beating under predecessor Donald Trump.
- Through this summit, US intended to rally the world's democracies against the **authoritarian models of Russia and China.**

Criticism of This Summit

1. **Questions Over Some Invitees' Democratic Credentials**

   The summit extended invitation to those countries whose leaders are accused by human rights groups of harboring authoritarian tendencies. E.g., Philippines, Poland and Brazil.

2. **Invitation of Taiwan Angered China**

   The summit also included Taiwan, stoking anger from China, which considers the democratically governed island part of its territory.

3. **W- eaponsing Democracy**

   - Russia and China accused Washington of "w- eaponsing democracy". They accused the Biden administration of exhibiting a Cold-War mentality. This will stoke up <u>ideological confrontation and a rift in the world</u>.

   - These countries said that US is lecturing the world when its own democracy, particularly the conduct of elections at home, is ragged and inconsistent. The January 6 Capitol riot (after the US Presidential election) is given as an example to criticise American style of democracy. The millions of Americans still believe the 2020 election result was fraudulent

4. **Summit was ill-advised**

   Many analysts believe that the summit was ill-advised as:

   - US needs **non-democracies** to work with on regional & global challenges;

   - Invite list filled with inconsistencies;

   - US is not in a position to preach or provide model - America's republic is straining under political polarization, racial injustice and discord, voting rights restrictions and domestic extremism, among other issues.

Deposit Insurance and Credit Guarantee

- The Prime Minister recently shared that *Rs 1,300 crore had been paid to over 1 lakh depositors* who could not access their money as their banks faced financial crises.

- Furthermore, the PM noted that the *deposits worth Rs 76 lakh crore were insured* under the **Deposit Insurance and Credit Guarantee Corporation (DICGC) Act** providing full coverage to around 98% of bank accounts.

Deposit Insurance	• It offers protection to the deposits of bank customers in case a bank becomes insolvent
Credit Guarantee	• It is the guarantee that often provides for a specific remedy to the creditor if his debtor does not return his debt

Deposit Insurance

- A bank becomes insolvent when its total liabilities exceed its total assets, usually as a result of poor investing or lending decisions. So, an insolvent bank may not be able to repay all the money that it owes its depositors. In such cases, the government steps in to compensate depositors, usually up to a certain threshold amount.

- In India, deposits in *public and private sector banks, local area banks, small finance banks, regional rural banks, cooperative banks, Indian branches of foreign banks and payments banks* are all **insured by the DICGC**, a fully owned subsidiary of RBI.

  o However, primary cooperative societies are not insured by DICGC.

  o Moreover, the deposit insurance scheme is compulsory and none of the above-mentioned banks can withdraw from it.

- The **premium** for this insurance is *paid by banks to the DICGC and is not passed on to depositors*. It has been raised from 10 paise for every Rs 100 deposit, to 12 paise and a <u>limit of 15 paise</u> has been imposed.

- DICGC insures all deposits such as **savings, fixed, current, recurring, etc. except** the following:

  - Deposits of foreign Governments
  - Deposits of Central/State Governments
  - Inter-bank deposits
  - Deposits of State Land Development Banks with the State co-operative bank
  - Any amount due on account of and deposit received outside India
  - Any amount, specifically exempted by the corporation with the previous approval of RBI

- All funds held in the **same type of ownership** at the **same bank** are added together before deposit insurance is determined. If the funds are in **different types of ownership** (savings, current etc.) or are **deposited into separate banks** they would be **insured separately**.

Background

- In the recent past, troubles faced by depositors in getting immediate access to their funds in banks like Punjab & Maharashtra Co-operative Bank, Yes Bank and Lakshmi Vilas Bank had raised concerns around deposit insurance.

- Thus, in August 2021, the Centre passed an amendment to the DICGC Act to ensure that account holders can access their insured deposit.

Changes After The Amendment

- Under the new amendments, *bank deposits of up to ₹5 lakh are insured* by the government. Earlier, deposits of only up to ₹1 lakh were insured. The cover of Rs 5 lakh per depositor is provided by **DICGC**.

  Damodaran Committee on 'Customer Services in Banks' (2011) had recommended a five-time increase due to rising income levels & increasing size of individual bank deposits.

- Depositors having more than Rs 5 lakh in their account have no legal recourse to recover funds in case of a bank collapse.

- Moreover, DICGC must <u>return money owed to depositors within **90 days**</u>. Earlier, depositors normally had to wait for 8-10 years before they could get their deposits in a distressed bank only after its complete liquidation or restructuring.

- This covers banks already under moratorium and those that could come under moratorium.

➤ Within the first 45 days of the bank being put under moratorium, the DICGC would collect all information relating to deposit accounts.

➤ In the next 45 days, it will review the information and repay depositors within a maximum of 90 days.

DEPOSIT INSURANCE AND CREDIT GUARANTEE CORPORATION (AMENDMENT) BILL, 2021

KEY FEATURES

- Interim payment to be made by DICGC to depositors in those banks for whom any restrictions/ moratorium have been imposed by RBI under the BR Act
- Depositors will be able to access their own money (ordinarily payable on demand) without waiting for years till liquidation, etc.
- Clear-cut timeline of maximum of 90 days provided for interim payment to depositors
- Provision to cover existing cases where banks are already under restrictions
- Enables timely repayment to DICGC and expedites recoveries
- Enables ceiling on premium to be notified by DICGC, with the prior approval of RBI

After the passage of this bill, the deposit insurance coverage in India has gone up to **98.3%** and covered deposit value has increased to **50.9%**, while the corresponding figures globally are only **80%** and **20% - 30%**.

Pros and Cons of Deposit Insurance

- It can help to boost the confidence; depositors have in the banking system which in turn, can help reduce the risk of a bank run.

➢ A **bank run** is a situation in which a large number of worried depositors demand their money from a bank at the same time.

- However, critics of deposit insurance, claim that it leads to **moral hazard**. When depositors know that their deposits will be protected by the government, they do not conduct due diligence on the banks in which they deposit their money.

- In fact, bank failures have increased since countries began adopting deposit insurance.

- Studies show that banks in countries with the highest deposit insurance coverage were five times more fragile than countries offering the lowest coverage.

- Furthermore, government-backed deposit insurance is also criticised for being very different from private sector insurance. For instance, government agencies such as DICGC charge uniform premiums to insure deposits held in different banks with varying risk profiles.

- This is different from how insurance generally works. Private sector insurers try to separate customers according to their risk profile and charge appropriate premiums. They also try to reduce moral hazard more effectively.

- Thus, government-backed deposit insurance is seen by critics as just a bailout scheme for depositors.

Nagaland Killings And The Debate on AFSPA

The recent killings of civilians by security forces in a case of alleged mistaken identity in Nagaland have once again **rekindled the debate over the AFSPA**.

What Happened in Nagaland?

- Army para commandos were lying in wait for militants in Nagaland's Mon district.

o The commando team was deployed at a site between Tiru and Oting, about 100km from the Myanmar border.

- They apparently mistook the coal mine workers for their targets in the dark and ~~started firing~~ shot and killed six villagers instead, ~~all of them coal mine workers~~ returning home in a van singing song.

- Soon after, a village search party attacked the soldiers, leading to firing in which seven more civilians died. A soldier was also killed.

- Later, another civilian was killed in Mon, **dominated by the Konyak tribe**, when security forces repelled a mob attack on an **Assam Rifles camp**.

Konyak tribe

- Konyaks are one of the **major ethnic groups of Nagaland** who reside mostly in the Mon district.

- With a population of roughly 3 lakhs, the Konyaks also extends into Arunachal Pradesh, with a sizeable population in Myanmar.

- In the past the Konyaks were **renowned head-hunters**, they would often carry back the heads of their rivals as war trophy. They were the last to give up the practice of head-hunting.

- They are skilled artisans and are experts in the art of making firearms and handicrafts like basket making,

- bamboo works and weaving.
- The Konyaks also have **institutions of learning** like the morung of other Naga tribes.

Controversial provisions

Section 3	• It empowers the Centre to declare any area as Disturb Area **without taking consent of the concerned state**
Section 4	• Accords certain power to an authorised officer which also includes **power to open fire** at any individual even if it results in death • The officer has also been given the power to (a) **arrest without a warrant**; and (b) seize and **search without any warrant any premise**
Section 7	• It mandates prior executive permission from central or state authorities for prosecution of a member of the security forces

About Armed Forces (Special Powers) Act (AFSPA), 1958

- It was enacted in 1958 to bring under control what the government of India considered disturbed areas.
- Under its provisions, the armed forces have been empowered to:

Open fire	Enter and search without warrant	Arrest any person who has committed a cognisable offence

- Prosecution of the officer on duty needs prior permission of the Central Government.

Historical Background of AFSPA

- **Need of AFSPA 1958**: Normal CrPc and IPC provision are not able to address these violent situations and terrorist activities.
- The law is based on the Armed Forces (Special Powers) Ordinance of 1942, which was issued during the Quit India movement.
- Enacted by Parliament on September 11, 1958, AFSPA was first implemented in the Northeast, and then in Punjab.
- AFSPA 1958 is combination of two legislations. First is for handling the insurgency in North–East in1958. Second one is for handling the situation in Kashmir in 1990.

Historical Background of AFSPA

- AFSPA can be implemented in an area after it has been declared as "disturbed".
- States under AFSPA includes:
  - Assam, Nagaland, Manipur (excluding 7 assembly constituencies of Imphal),
  - Arunachal Pradesh (only the Tirap, Changlang and Longding districts plus a 20-km belt bordering Assam), and Jammu and Kashmir.
  - It was completely lifted from Meghalaya in April 2018. It was repealed in Tripura in 2015

Disturbed Area

- The state or central government considers those areas as 'disturbed' by reason of differences or disputes between members of different religious, racial, language or regional groups or castes or communities.
- Once declared 'disturbed', the region has to maintain status quo for a minimum of three months, according to The Disturbed Areas (Special Courts) Act, 1976.
- The state governments can suggest whether the Act is required to be enforced or not.
  But under Section (3) of the Act, their opinion can still be overruled by the governor or the centre.

Various Judgements and Committee reports on AFSPA

Naga People's Movement of Human Rights v. Union of India, 1997 case	Supreme Court **upheld the constitutionality of the law**. However, the judgment made some notable conclusions such as: ▪ Although Central Government is empowered to declare an area disturbed on its own, it is **desirable** that it consults the state before making such declaration. ▪ The act is not conferring any arbitrary powers to declare an area as a 'disturbed area' ▪ The declaration should be for a limited duration and there should be periodic review at 6 months. ▪ The officers should use minimal force necessary for effective action. The SC also laid down *a number of dos and don'ts for AFSPA*. These are: ▪ Any person arrested and taken into custody should be handed over to the nearest police station with the least possible delay. ▪ The property seized during the course of a search conducted must also be handed over to the officer-in-charge of the nearest police station. ▪ The provisions of the CrPC governing search and seizure have to be followed during the course of search and seizure conducted under AFSPA. ▪ A complaint containing an allegation about misuse or abuse of the powers conferred under this Act shall be thoroughly inquired into.
Santosh Hegde Committee	o Constituted by SC, it reported the use of disproportionate force and intrusion of security forces in areas which are not notified as disturbed areas. o The Commission even went to the extent of saying that AFSPA was an impediment to achieving peace in regions such as Jammu and Kashmir and the northeast.
B P Jeevan Reddy Committee	o It was appointed in 2004 to review the provisions of the act in the north eastern states. o This committee recommended that the AFSPA should be repealed and its appropriate provisions should be included in the UAPA. o Further, the powers of the army / paramilitary officers should be clearly demarcated. o Moreover, the committee recommended that grievance cells should be created in each district where such law is in force. o The report was *endorsed by the 2nd ARC* report also.

Why Is The Law Controversial

- AFSPA has often been criticised as a draconian Act for which gives

| Unbridled power to the armed forces | Impunity that security personnel enjoy for their actions |

- Under AFSPA, the armed forces may shoot to kill or destroy a building on mere suspicion.
- Irom Sharmila, known as the Iron lady of Manipur, has been a towering figure who is well-known for her 16-year-long hunger strike against AFSPA.

Way Forward

- Frequent misuse of AFSPA by security forces has led to the widespread resentment against this act. However, the annulment of the law would seriously affect the governance in the insurgency-affected states.

- Hence, the need of the hour is to provide certain safeguards so as to prevent its misuse. This can include steps like:

- Establishing grievance cells in each district where such law is in force
- Ensuring accountability of the officer in charge
- Investigation by independent and impartial authorities

Assam Rifles' Dual Control Structure, And Its Role

The killing of over a dozen civilians in Mon district of Nagaland saw angry crowds vandalise camps of Assam Rifles in the district.

Extra Mile

Assam Rifles

- Assam Rifles is one of the six Central Armed Police Forces (CAPFs) that come under the MHA's administrative control.
- Its history dating back to 1835 when its precursor, **Cachar Levy**, was formed in the Northeast to protect British Tea estates and their settlements against tribal raids.
- Over the period of time, it was expanded and rechristened as Assam Military Police Battalion, with additional battalions.
- It was later **renamed as Assam Rifles**. This is where the dual structure was perhaps born because even as it continued to operate as a police force, the **Rifles** tag indicated it was on a par with Army units.
- Besides maintaining law and order in the Northeast (a task it performs together with the Army), the Assam Rifles also guards the border with Myanmar in the region.

Dual Control of Assam Rifles

- Under the existing mechanism, Assam Rifles comes under **both the Ministry of Defence (MoD)** and **Ministry of Home Affairs (MHA)**.
  - The MHA only exercises administrative control of the Assam Rifles;
  - Its operational control is with the MoD (Army).
- Although, the Assam Rifles personnel operate alongside the Army on similar duties, there is a disparity in the pay scale.
- Many believe that this dual control structure is arbitrary, unreasonable and in violation of the rights of Assam Rifles personnel.

Issues Associated With Dual Control

- Many analysts believe that this dual control structure is <u>arbitrary, unreasonable and in violation of the rights</u> of Assam Rifles personnel. It also leads to **problems of coordination**.
- Salaries and infrastructure for this force is provided by the MHA, but the deployment, posting, transfer and deputation of the personnel is decided by the Army
- Although, the Assam Rifles personnel operate alongside the Army on similar duties, there is a **disparity in the pay scale**.
- Army personnel enjoy better perks and retirement benefits which are far higher

> **Other Central Armed Police forces(CAPF):**
>
> Central Reserve Police Force (CRPF); Border Security Force (BSF); Indo-Tibetan Border Police (ITBP); Central Industrial Security Force (CISF) and Sashastra Seema Bal (SSB).

o compared to CAPFs under MHA.

o On the other hand, Army personnel also retire early, at 35, while the retirement age in CAPF is 60 years.

o Army personnel also get **one rank one pension** which is not available to CAPFs.

- CAPF officers have recently been <u>granted</u> **Non-functional financial upgradation (NFFU).**

o NFFU is a provision that allows officers a raise in salary and perks in keeping with the pay grade of the next rank when they cannot be promoted because of a lack of vacancies.

o NFFU has been granted to financially address the issue of stagnation in their careers due to lack of avenues for promotion.

Stand of MHA, MoD, Centre On This Issue

Stand of MHA	Stand of MoD	Stand of Centre
o MHA believes that there is **no reason to make an exception** for the Assam Rifles given all other CAPFs are under the total control of the MHA. o It argues that **all the border guarding forces are under the operational control of the MHA**. Hence, Assam Rifles coming under MHA will give border guarding a <u>comprehensive and integrated approach.</u> o MHA also contend that Assam Rifles continues to function on the pattern set during the 1960s and the ministry would want to make guarding of the Indo-Myanmar border on the lines of other CAPFs.	o Army believes that the Assam Rifles has worked well in coordination with Army and frees up the armed forces from many of its responsibilities. This **enables army to focus on its core strengths**. Hence, there is no need to fix what isn't broken o It has also argued that Assam Rifles was always a military force and not a police force and has been built like that. o It has argued that giving the control of the force to MHA or merging it with any other CAPF will confuse the force and <u>jeopardise national security.</u>	• In 2013 MHA first made a proposal to take operational control of the Assam Rifles and merge it with the BSF. However, it was not executed as no agreeable ground could be found. • In November 2019, MHA called for the merger of the Assam Rifles with ITBP. It proposed that the former should serve under the operational control of the MHA. • Now, the Indian Army has started pushing for not only <u>total control of Assam Rifles</u> but also <u>operational control over ITBP</u>, which guards the Sino-Indian border • The matter is said to be pending with the **Cabinet Committee on Security** and discussions are ongoing between the two ministries concerned.

Matter Sub-judice

- A petition was filed by Assam Rifles Ex-Servicemen Welfare Association seeking direction to the government to bring Assam Rifles under one control, preferably under Indian Army (MoD).

- In September 2020, the Delhi High Court asked the Union government to decide on whether to scrap or retain the dual control structure for Assam Rifles.

Contributions of Assam Rifles

- Since its formation in 1835, Assam Rifles has gone on to fight in two World Wars

- It is used as an anti-insurgency force against militant groups in the North East.

- The **Post-Independence role** of the Assam Rifles continued to evolve ranging from

  o conventional combat role during **Sino-India War 1962,**

- o operating in foreign land as part of the Indian Peace Keeping Force (IPKF) to Sri Lanka in 1987 (Op Pawan), to
  - o Peacekeeping role in the North-Eastern areas of India.
- It remains the <u>most awarded paramilitary force in both pre- and post-independent India</u>.

Phishing Attacks on Central Ministry Officials

- Phishing attacks through compromised Government IDs have become more targeted. Recently, several employees of various central ministries received mysterious emails.
- This included **one from a government domain email address** claiming an internal hand in General Bipin Rawat's death.

Examples of Latest Cyber Phishing Attempts

A. Internal Hand In General Bipin Rawat's Death

- This latest round of cyber attempts was launched following the deaths of CDS and other in a helicopter crash.
- The phishing email with the **Subject**, "<u>Internal report: Gen Bipin Rawat's incident-inside job</u>", was sent to employees of a ministry department.
- It asked the recipients to click a phishing link that claimed to be an internal report. It was sent through a <u>malicious email ID with the domain name nic.in</u>.

Government domain email IDs

- Government domain email IDs are "<u>gov.in and nic.in</u>".
- The **National Informatics Centre (NIC)** runs the official email service.
- It hands out email accounts to departments, ministries and public sector units of the central and state governments.

Increased number of cybersecurity incidents

In a written reply to a question in the Rajya Sabha, the govt revealed that

- a total of **11.5 lakh and 12.1 lakh cybersecurity incidents** were reported during 2020 and 2021 (up to October) respectively.
- Of these, 54,314 and 32,736 incidents involved various government organisations in these two years, respectively.

B. Viral Video PM Modi Slapped in USA Visit

- In October, another cyber-attack bid was made through a <u>compromised gov.in email ID</u> targeting the central government employees.
- An email was sent with the subject, "Viral Video PM Narendra Modi slapped in USA Visit". It was sent soon after PM Modi's September visit to the USA.

C. Attempts to lure officials into sharing their passwords

- An email, using compromised government accounts, targeted groups of officials to lure them into sharing their passwords. It could let the attackers gain access to sensitive credentials and files.

D. PM Modi's Twitter account was also compromised

- Earlier this month, PM Modi's Twitter account was also "compromised" briefly.

Current Attack Is Different

- Experts contend that the current phishing attempt is different from regular phishing emails.
- In regular phishing emails usually, **emails are sent without an agenda**. However, in the current case, mails are more contextual where the user would be interested and curious to click.
- o This type of phishing is also known as **Spear Phishing**.
- Due to the sophistication involved, the IT officials have not ruled out the possibility of **"nation states" being involved** in such targeted attempts.

o An initial internal probe following the breach discovered the <u>role of specific countries</u> with capacity to carry out such attacks. The investigations are not complete yet.

Challenges Involved In Dealing With Such Threats

- There is actually very little that an organisation or the receiving party can do if such things are happening from outside the servers.

- There are technologies and software like antispam etc that can help mitigate the attack. However, the best thing one can do is make sure that the **users are completely aware and avoid opening the mails**.

- Also, to control all compromised emails, NIC will have to do a forensic audit which will require the server to be restarted. A clean slate will take <u>no activities for one week, which is not possible</u>.

Steps Taken To Tackle The Current Incidents

- NIC plays a prominent role in detecting such emails as well as in spreading awareness and fixing the problems.

- E.g., in the current case, <u>NIC unit of the ministry concerned issued a security alert</u>, telling users not to open and click on the phishing emails from at least five such compromised email IDs.

- NIC suspects that several such government email addresses to have been sold on the "Dark Web". Hence, it is planning to bring in security measures **including multi-factor authentication** for at least 3 lakh officials.

- Also, the NIC had taken back its administrative controls from nearly all its teams engaged with different ministries. Any approvals for the creation of new email IDs or any changes to the server are thus done now only at the headquarters of NIC.

o This has been done as part of its plan to track and control these phishing attempts.

Phishing

- Phishing attacks are the practice of sending fraudulent communications that appear to come from a reputable source. It is usually done through email.

- The goal is to steal sensitive data like credit card and login information, or to install malware on the victim's machine.

Threats from Phishing

1. **Phishing Threats to Businesses**

- Phishing is often used to steal Data, threaten operations and to deliver ransomware.

o Ransomware is malware that employs encryption to hold a victim's information at ransom. The massive data breaches at Target, Anthem and Sony Pictures have all been attributed to successful spear phishing attacks.

2. **Identity theft or financial loss to individual/organisations**

- Phishing often lures individuals into providing sensitive data such as personally identifiable information, banking and credit card details, and passwords.

- This information is then used to access important accounts and can result in identity theft and financial loss.

3. **Disrupting society**

- Although citizens/individuals are most likely to fall victim to such cyber-crimes.

- However, the failure in responding risk undermines <u>public confidence in the rule of law</u>. This, in turn, leads to disruption of society.

4. **Threat to national security**

- Governments face significant risk exposure especially from spear phishing. It leads to data breach, espionage, cyber war/cyber-terror.

- This puts government officials/organisations in a vulnerable situation.

Steps Taken By The Indian Government

- Establishment of **National Critical Information Infrastructure Protection Centre** (NCIIPC) for protection of critical information infrastructure in the country

- All organizations providing digital services have been mandated to report cyber security incidents to CERT-In expeditiously

- **Cyber Swachhta Kendra** has been launched for providing detection of malicious programmes and free tools to remove such programmes

- Issue of guidelines for **Chief Information Security Officers** (CISOs) regarding their key roles and responsibilities for securing applications / infrastructure and compliance

- Provision for **audit of the government websites and applications** prior to their hosting, and thereafter at regular intervals

- Formulation of **Crisis Management Plan for countering cyber-attacks** and cyber terrorism

- **Conducting cyber security mock drills** regularly to enable assessment of cyber security posture and preparedness of organizations in Government and critical sectors

SOCIAL ISSUES

NHA Estimates On Health Expenditure

- **Out-of-pocket expenditure (OOPE)** as a share of total health expenditure & **foreign aid for health** has both come down as per the findings of National Health Accounts (NHA) estimates for India for 2017-18.

- This is the 5th consecutive NHA report produced by **National Health Systems Resource Centre**, designated as **National Health Accounts (NHA) Technical Secretariat in 2014** by the Health Ministry. This was a major landmark in systematic maintenance of health records for policy making.

- The NHA estimates are prepared by using an accounting framework based on **internationally accepted System of Health Accounts 2011**, provided by the WHO.

Key Findings

Foreign aid for health	• It has come down to **0.5%,** showcasing India's economic self-reliance
OOPE as a share of total health expenditure	• It has come down to **48.8%** in 2017-18 from **64.2%** in 2013-14
Per capita OOPE	• Declined from **₹2,336 to ₹2,097** between 2013-14 to 2017-18

Factors Attributing To This Decline

- There is an increase in utilisation and reduction in cost of services in Government health facilities.

- Comparing NHA 2014-15 and 2017-18, there has been a decline in OOPE for Government hospitals to the tune of 50%.

- **Increase in the share of Government health expenditure in the total GDP** of the country: NHA estimates for 2017-18 clearly showed that it has increased from **1.15%** in 2013-14 to **1.35%** in 2017-18.

- **Share of Government Health Expenditure in total health expenditure** has also increased. In 2017-18, the share of Government expenditure was **40.8%,** which is much higher than **28.6%** in 2013-14.

- **Government health expenditure in per capita terms** has increased from ₹1,042 to ₹1,753 between 2013-14- 2017-18.

- S**hare of primary healthcare in current Government health expenditure** has increased from **51.1%** in 2013-14 to **54.7%** in 2017-18.

  ➢ The primary and secondary care accounts for more than **80%** of the current Government health expenditure. There has been an increase in **share of primary and secondary care** in case of Government health expenditure.

  ➢ In case of private sector, **share of tertiary care** has increased but primary and secondary care show a declining trend.

  ➢ Between 2016-17 and 2017-18 in Government sector the share of primary and secondary care has increased from **75% to 86%.** In private sector, the share of primary and secondary care has declined from 84% to 74%

- **Share of social security expenditure on health,** which includes the social health insurance programme, Government financed health insurance schemes, and medical reimbursements made to Government employees, has increased.

  ➢ As a per cent of total health expenditure, the increase is from 6% in 2013-14 to around 9% in 2017-18.

Issues With Health Sector

Limited Primary Healthcare Services	Inadequate Funding	Less than Required Doctors	Overlapping Jurisdiction	Supply-Side Deficiencies
• Even where there is a well-functioning public primary health centre, only services related to **pregnancy care, limited childcare and certain services related to national health programmes** are provided.	• India spent **1.8% of its GDP** on health in FY 2020-21 and **1-1.5% in the previous years**. OECD countries' average of 7.6% and other BRICS countries' average of 3.6% • India's total OOPE is around **2.3 % of GDP**	• India currently has one doctor over the population of 1,445 against the WHO norm of 1:1000	• There is no single authority responsible for public health that is legally empowered to issue guidelines and enforce compliance of the health standards	• Poor health management skills and lack of appropriate training and supportive supervision for health workers prevent desired quality of health services

*{For more regarding **Health insurance** refer the topic "Health Insurance for India's Missing Middle" from November Recitals}*

Pradhan Mantri Shram Yogi Maan-dhan (PM-SYM) Scheme

According to the Ministry of Labour & Employment, nearly 46 lakh Unorganised Workers (UW) have been registered under the **Pradhan Mantri Shram Yogi Maandhan (PM-SYM) pension scheme**. In order to provide old age protection in the form of a monthly pension, Government of India launched PM-SYM pension scheme in 2019.

About PM-SYM

PM-SYM is a Central Sector Scheme administered by the Ministry of Labour and Employment and implemented through LIC of India and Community Service Centers (CSCs).

Eligibility

- Should be an **Unorganised Worker** with Monthly Income **Rs 15000 or below**
- Entry age: **18-40** years
- Should not be an income tax payer
- Should possess a **mobile phone, savings bank account and Aadhaar number**
- Should not be covered under New Pension Scheme (NPS), Employees' State Insurance Corporation (ESIC) scheme or Employees' Provident Fund Organisation (EPFO)

Salient Features

- Each subscriber shall receive a minimum assured pension of **Rs 3000/- per month** after attaining the age of **60 years**.
- **During the receipt of pension, if the subscriber dies,** the spouse of the beneficiary shall be entitled to receive **50% of the pension** received by the beneficiary as family pension. Family pension is applicable only to spouses.
- If a beneficiary has given regular contribution and **died due to any cause (before age of 60 years)**, his/her spouse will be entitled to join and continue the scheme subsequently by payment of regular contribution or exit the scheme
- The subscriber's contributions shall be made through 'auto-debit' facility from the savings bank account/ Jan-Dhan account.
- It functions on **50:50 basis** where prescribed age-specific contribution shall be made by the beneficiary and the **matching contribution** by the Central Government.

Evauation

- Nearly 46 lakhs unorganized workers have been registered under this scheme, whereas in Uttar Pradesh nearly 6.5 lakhs workers of unorganized sector have been enrolled under the PM-SYM pension scheme.
- All the States/UT Governments have been requested to popularize the scheme and mobilize the target groups/eligible workers for enrolment. Most of the States/UT Governments have extended the support in implementation of PM-SYM Scheme
- The Central Government has also taken several initiatives to increase the enrolment under PM-SYM Scheme such as **periodic review** of the progress of the scheme with States/UTs, publicity of the scheme through IEC activities, constitution of **State Level Monitoring Committees** (SLMC) and **District Level Implementation Committees** (DLIC) to ensure mobilization of beneficiaries through State Governments.

Related Pension Topic

SAMPANN project

Over one lakh people have received pensions directly in their bank accounts through the SAMPANN (System for Accounting and Management of Pension) project.

About

- Launched in 2018 and being implemented by the Ministry of Communications.

- It is a seamless **online pension** processing and payment system for Department of Telecommunications pensioners.

- It has helped the Department in faster settlement of pension cases, improved reconciliation (grievances)/auditing, timely SMS alerts and ease of accounting by e-Pension payment orders.

- It has also been instrumental in settling close to 76000 BSNL **Voluntary Retirement Scheme** 2019 cases in a short span of 6 months.

- Every pensioner gets access to key information like payment history along with a login option.

SMILE Scheme

Ministry of Social Justice and Empowerment has formulated a scheme "SMILE - **Support for Marginalized Individuals for Livelihood and Enterprise**",

- It includes a sub-scheme - 'Central Sector Scheme for Comprehensive Rehabilitation of persons engaged in the act of Begging'.

Comprehensive Rehabilitation of Persons Engaged in The Act of Begging

- The scheme has been implemented in the selected cities on pilot basis having large concentrations of the Beggar community.
- During the year 2019-20, this Ministry had released an amount of Rs. 1 Crore to National Institute of Social Defence (NISD) and Rs. 70 Lakh to National Backward Classes Finance & Development Corporation (NBCFDC) for skill development programmes for beggars.
- Ministry had identified 10 cities for undertaking pilot project on Comprehensive Rehabilitation of persons engaged in the act of Begging. Currently, pilot project is ongoing in 7 cities namely Delhi, Bangalore, Hyderabad, Indore, Lucknow, Nagpur and Patna. However, due to COVID pandemic, project couldn't start in three cities.

About SMILE

- It provides for the use of the existing **shelter homes** available with the State/UT Governments and Urban local bodies for rehabilitation of the persons engaged in the act of Begging.

- In case of non-availability of existing shelter homes, new dedicated shelter homes are to be set up by the implementing agencies.

- It is a new Scheme after the merger of existing Schemes for Beggars and Transgenders. It is estimated that an approximate 60,000 poorest persons would be benefited under this scheme for leading a life of dignity

- It covers several comprehensive measures including **welfare measures** for persons who are engaged in the act of begging.

- The focus of the scheme is extensively on survey and identification, mobilization, rehabilitation, provision of medical facilities, counseling, basic documentation, education, skill development, economic linkages and sustainable settlement.

- Scheme is to be implemented on pan-India basis.

- **Implementation:** These pilots are being implemented with the support of State Governments/UTs/Local Urban Bodies and Voluntary Organizations etc

Status of Beggars in India

Recently, the Supreme Court has agreed to examine a plea for decriminalizing begging which has been made an offense in various states under Prevention of Begging Act 1959.

Census 2011	• Total number of beggars in India is 4,13,670 (2,21,673 males and 1,91,997 females) and the number is increasing
Among states	• West Bengal tops the chart followed by UP and Bihar at number two and three respectively
Among UTs	• New Delhi had largest number of beggars 2,187 followed by 121 in Chandigarh. Lakshadweep merely has 2 vagrants according to 2011 census
Among Northeastern states	• Asam topped the chart with 22,116 beggars, while Mizoram ranked low with 53 beggars.

Baby Friendly Hospital Initiative (BFHI)

- A new initiative will now help mothers identify "**breastfeeding-friendly" hospitals** before they give birth.
- The Breastfeeding Promotion Network of India (BPNI) in collaboration with Association of Healthcare Providers of India (AHPI), which comprises more than 12,000 private hospitals, has launched an **accreditation programme** that will enable hospitals to get a "breastfeeding-friendly" tag.
- This programme is called "Baby Friendly Hospital Initiative (BFHI)".
- The certification process involves two stages — the first stage includes self-assessment by a hospital, followed by an external assessment by an authorised appraiser who interviews doctors, nurses and patients as well as reviews different practices and training of staff. The accreditation process costs ₹17,000 per hospital.

About

- The initiative is only for **private hospitals** and is based on the Ministry of Health and Family Welfare's **MAA programme** for government hospitals launched in 2016.
- The tools for this evaluation process have been developed in partnership with the Health Ministry and WHO.
- The **BFHI programme** is a worldwide programme of the WHO and UNICEF. Though India adopted it in 1993, it fizzled out by 1998 and is now being revived after more than two decades.
- The programme will evaluate hospitals on how well they counsel and support mothers in lactation, whether they have adequate skilled support persons and if they adhere to the law that **bans promotion** of infant formula, feeding bottles and infant food under Infant Milk Substitute Act, 1992 and Amendment Act 2003.
- Hospitals with the top grade will be accredited and others will be guided to improve their practices
- Chennai's Bloom Healthcare has become the first hospital to be recognised as "breastfeeding-friendly" under this programme.

Golden Hour Realted Data

- Early initiation of breastfeeding continues to be low in the country. According to the **National Family Health Survey-5 (2019-2021),** while there were 88.6% institutional births, only **41.8% of infants were breastfed within the first one hour and provided skin-to-skin contact shortly after birth**.
    - This has improved only marginally from **41.6% during NFHS-4** (2015-2016).
- Going by approximately 24.5 million births annually, 14.2 million are deprived of the mother's milk and its benefits to the newborn and moms, violating the human rights of mother and child

- Many States such as Maharashtra, Karnataka, Gujarat, Uttar Pradesh, Jharkhand and Chhattisgarh have shown a **decline** in the proportion of children breastfed within the first hour.

- Lack of support and counselling for expectant mothers during pregnancy and at birth as well as aggressive promotion of baby foods are the reasons for poor early breastfeeding rates.

- A rise in caesarean sections is also known to negatively impact breastfeeding rates

Significance

- Provision of mother's breast milk to infants within one hour of birth ensures that the infant receives the **colostrum**, or "first milk", which is rich in protective factors, according to the WHO.

- The protein present in breast milk is easily digested by the baby rather than in **formula or cow's milk**. Also, **calcium and iron present in breast milk are more easily absorbed**

- It is said that for mothers, breastfeeding helps the **uterus to contract and bleeding to cease** more quickly after delivery.

- Also, it reduces the **risk of breast and ovarian cancer** and helps to generate a great bond for mothers with their babies.

C-section delays

- During **caesarean operations** everyone is focused on recovery, wound surgery, infection control and breastfeeding within the golden hour is missed.

- Evidence shows that improving breastfeeding rates in hospitals reduces neonatal mortality and infant mortality rates. Therefore, it is important that we train our nurses, doctors and allied health staff.

➢ Neonatal mortality is defined as death within the **first 28 days** of life.

BPNI is a 30-year-old organisation for protection, promotion and support of breastfeeding in India. It is a national organisation that works towards protecting, promoting and supporting breastfeeding and appropriate complementary feeding of infants & young children

Vernacular Innovation Program (VIP)

- With an ambition to empower innovators and entrepreneurs across the country, Atal Innovation Mission (AIM), NITI Aayog has come up with a first of its kind Vernacular Innovation Program (VIP).

- It which will enable innovators and entrepreneurs in India to have access to the **innovation ecosystem in 22 scheduled languages** by the Government of India.

- To build the necessary capacity for the VIP, AIM has identified and will be training a **Vernacular Task Force (VTF)** in each of the 22 scheduled languages.

➢ Each task force comprises of vernacular language teachers, subject experts, technical writers, and the leadership of regional Atal Incubation Centers (AICs).

Significance

- VIP strengthens the **design and innovation capabilities** of our communities, thereby assisting local entrepreneurs, artisans and innovators to seamlessly assimilate the knowledge cum technical materials that AIM will develop. This would assist India in building a strong local network of design experts and innovation practitioners

- It will be a stepping stone in the journey of the Indian innovation and entrepreneurship ecosystem which will cement the cognitive and design thinking attitude in young and aspiring minds.

- According to 2011 census, only 10.4% of Indians speak English, most as their second, third, or fourth language.

- **Only 0.02% of Indians spoke English as their first language.** Ten years later these numbers are not likely to be very different.

- Thus, creating equal opportunity for the vernacular innovators who represent the staggering 90% of our population

India may be the first nation in the world to launch such an initiative where an innovation ecosystem catering to 22 languages plus English is being built. By providing access to learning in one's language and culture, AIM looks forward to enriching the local, regional, national and global innovation pipelines.

Worldwide Cost of Living 2021

- The survey released by **Economic Intelligence Unit (EIU)** tracks cost of living in US dollars of more than **200 everyday products and services** across 173 global cities.
- The cost of living is compared against prices in New York City, hence cities with currencies that are stronger against the US dollar are likely to appear higher in the rankings.

Rankings

- As per the report, Israel's <u>Tel Aviv is the world's most expensive city to live in</u>. Paris and Singapore came joint second, followed by Zurich and Hong Kong in the top five. New York was in sixth place.
- Tel Aviv's rise is due to the strength of the Israeli shekel against the dollar, as well as increases in transport and grocery prices.
- <u>Tehran climbed the most in the rankings</u>, jumping from 79th to 29th, as US economic sanctions continued to cause shortages of goods and rising import prices in Iran.
- The Syrian city of <u>Damascus once again ranks as the cheapest city</u> in the world, as its war-torn economy continues to struggle. Tripoli, Tashkent, Tunis and Almaty complete the list of five cheapest cities.
- <u>Ahmedabad is the cheapest city to live in India</u> and is placed at the 7th position in the list of cheapest cities.
- Other than Ahmedabad no other city was ranked from India either in the list of costliest or the cheapest cities.

Key Findings

- The report shows that the **upper rankings** continue to be <u>dominated by European and developed Asian cities</u>. The **lowest-ranking** cities are mainly in the <u>Middle East, Africa and less wealthy parts of Asia</u>.
- <u>Supply chain issues, fluctuations in currency exchange rates and changes in consumer demand</u> led to this rise in prices for commodities and other goods. Moreover, inflation is the fastest recorded over the past 5 years
- On average, prices for the goods and services covered by the index have <u>risen by 3.5% year on year in local-currency terms</u>, compared with an increase of just 1.9% last year.
- <u>Cost increase was the biggest for transport</u> as higher oil prices increased the price of unleaded petrol by 21%.

Way Ahead

- Over the coming year, the cost of living may rise further in many cities as wages increase in many sectors.
- However, it is expected that central banks will raise interest rates, to contain inflation. So the price increases should start to moderate from this year's level.

Wage Rate Index

- The **Ministry of Labour** recently released a **new series of Wage Rate Index (WRI)** with **base year 2016**, being compiled and maintained by the **Labour Bureau**.
  - The new series of WRI <u>will replace the old series with base 1963-65</u>.
- The government periodically revises the base year for major economic indicators to <u>reflect the changes in the economy</u> and to <u>capture the wage pattern of workers</u>.
- Thus, as per the recommendations of International Labour Organization, National Statistical Commission etc. the base year of WRI has been revised <u>to enhance the coverage and to make index more representative</u>.

- The changes will be <u>crucial in policy making</u> and coming up with minimum wages and national floor wages along with other parameters.

> A floor wage is a minimum wage established by law. It functions as a benchmark for wages to ensure that the wages do not fall below the set limit. The current floor wage, which was fixed in 2017, is at Rs 176 a day, but some states have minimum wages lower than it

Highlights of The New WRI

- The new series of WRI has increased the <u>scope and coverage</u> in terms of number of industries, sample size, occupations under selected industries, weightage of industries etc.

- It presents wage rate indices, average daily absolute wage rates and real wages at 2001 prices by occupation, industry and all-India level.

- It would be <u>compiled twice a year on half-yearly basis</u>, on January 1 and July 1.

- In the new WRI basket, the current wage data has been collected from 2,881 units under 37 selected industries as against 1,256 units under 21 industries in the old series.

- About 700 occupations have been covered under 37 industries in the new series.

- Of the 37 industries covered in the new series, 16 new ones have been added under the manufacturing sector - including textile garments, footwear and petroleum

- In the new series, the **oil mining industry has been introduced** in the basket in place of **mica mines industry**, to make the mining sector more representative of 3 different kinds of mining namely coal, metal and oil.

- Total 3 plantation industries (tea, coffee and rubber) have been retained in the new WRI basket with enhanced coverage

- The sector level weights under new series has also changed in comparison to old series. (See fig.)

Sector	No of Industries covered	
	1963-65	**2016**
Manufacturing	14	30
Mining	4	4
Plantation	3	3
Total	**21**	**37**

Exhibit 3.10: Weights in 2016=100 vis-a-vis 1963-65=100
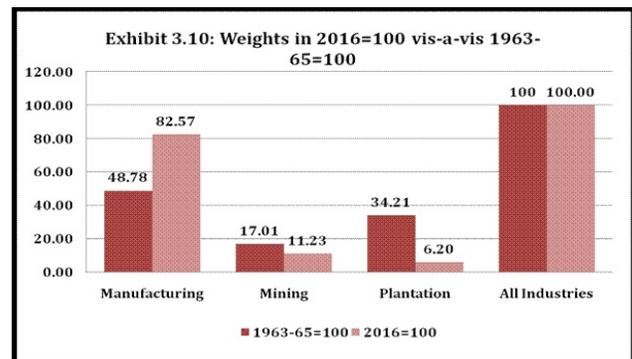
WRI 2020

- The All India Wage Rate Index Number for all the 37 industries stood at **119.7** in the second half of 2020 which shows an increment of 1.6% over the index in 2020 (half yearly 1).

- At sector level, the highest Wage Rate Index in 2020 (half yearly 2) was reported in the Plantation Sector followed by the Manufacturing Sector and Mining Sector

All India Average Daily Absolute Wage Rate	All India Real Wages at 2001 prices
- It stood at Rs. 588.5 in the second half of 2020 (half yearly 2) as compared to Rs. 576.1 in 2020 (half yearly 1), registering a growth rate of 1.6%. - During 2020 (half yearly 2), the highest Average Daily Absolute Wage Rate was recorded in Mining Sector (Rs. 1604.3).	- It stood at Rs. 174.3 in 2020 (half yearly 2). The highest Average Daily Real Wage Rate at 2001 prices was reported in Mining sector (Rs. 477.5)

AQEES: Job Losses In Lockdown

- The Ministry **of Labour and Employment** recently released the data on job losses during the lockdown in 2020 due to Covid 19.

- The findings are part of the **All India Quarterly Establishment based Employment Survey (AQEES)**.

AQEES

- It was launched with the objective of collecting employment data on **quarterly basis** form all the establishments.

- It has two parts: **Quarterly Employment Survey** (QES) and **Area Frame Establishment Survey** (AFES).

QES	• **It provides the employment estimates for establishments employing 10 or more workers**

AFES	• **It provides the employment estimates for establishments recruiting 9 or less workers**

- The earlier version of QES was suspended in 2018, due to a gap in numbers with the payroll data. The revamped QES was conducted during the first quarter (April-June 2021) to collect information on the impact of the Covid-19 pandemic on **9 key sectors** given in the table.

SECTORS	NUMBER OF EMPLOYEES (IN LAKH)			
	Prior to Lockdown (before March 25, 2020)		As on July 1, 2020	
	Male	Female	Male	Female
Manufacturing	98.7	26.7	87.9	23.3
Construction	5.8	1.8	5.1	1.5
Trade	16.1	4.5	14.8	4
Transport	11.3	1.9	11.1	1.9
Education	38.2	29.5	36.8	28.1
Health	15	10.6	14.8	10.1
Accommodation & Restaurants	7	1.9	6.2	1.7
IT/BPOs	13.6	6.3	12.8	6.1
Financial Services	11.5	5.9	11.3	5.7
Total*	217.8	90.0	201.5	83.3

Key Findings

- About **7.5% job losses** were seen between the pre-lockdown (March 25, 2020) and post-lockdown (July 1, 2020) period.

- The manufacturing, construction, education and trade sectors were affected more than white-collared employment in IT/BPOs, financial services and health sectors.

- The number of job losses in various sectors: manufacturing sector (14.2 lakh), education (2.8 lakh), trade (1.8 lakh), construction (1 lakh), IT/BPOs (1 lakh) and financial services (0.4 lakh).

- In the organised non-farm segment, employment decreased in 27% of the establishments due to the pandemic.

- Female workers registered a job loss of 7.44% among the nine key sectors, while the job loss figure for male workers stood at 7.48%.

- As much as 81% of the workers received full wages during the lockdown period, 16% received reduced wages and only 3% were denied any wages.

Global Arms Trade Report

Stockholm International Peace Research Institute (SIPRI) recently released a report titled 'Top 100 arms-producing and military services companies, 2020'.

Highlights Of The Report

- International arms sales increased even as the global economy contracted by 3.1% during the first year of the pandemic. The industry giants were largely protected by sustained government demand for military goods and services.

- Overall, the arms sales of the top 100 arms-producing and military services companies totalled **$531 billion** in 2020, an increase of 1.3% compared to 2019.

- US once again hosted the highest number of companies ranked in the top 100 and arms sales of these 41 US companies amounted to $285 billion.

- US companies accounted for 54% of the combined arms sales of the top 100. China was second at 13%, followed by the UK at 7.1%. Russia and France were fourth and fifth with 5%and 4.7% respectively.
- The 26 European arms companies in the top 100 jointly accounted for 21% of total arms sales, or $109 billion.
- The rise of China as a major arms producer has been driven by its aim to become more self-reliant in weapons production and by the implementation of ambitious modernisation programmes.
- Russia has been slipping down in the rankings since 2017. In 2020, Russian companies' arms sales reached USD 26.4 billion, a decrease of 6.5% on an annual basis.
- Collectively, the arms sales of companies in the top 100 based outside the USA, China, Russia and Europe totalled $43.1 billion in 2020. This represents 8.1% of the top 100's total arms sales.

India's position

- Three Indian companies are among the world's top 100 for combined arms sales in 2020.
- The three companies are: Hindustan Aeronautics Limited (HAL)-ranked 42, Indian Ordnance Factories-ranked 60, and Bharat Electronics Limited (BEL)- ranked 66. Their aggregate arms sales of $6.5 billion was 1.7 % higher in 2020 than in 2019, and accounted for 1.2% of the top 100 total.
- In 2020 the Indian government announced a phased ban on imports of more than a hundred different types of military equipment to support domestic companies and enhance self-reliance in arms production.
- This helped to protect the Indian companies against the negative economic consequences of the pandemic.
- However, India has the smallest share among the top 11 defence manufacturing nations.
- India's share of arms sales globally in 2020 was **1.2%**.

Stockholm International Peace Research Institute (SIPRI)

- Based in Stockholm, SIPRI is an independent international institute dedicated to research into conflict, armaments, arms control and disarmament.
- Established in 1966, SIPRI provides data, analysis and recommendations, to policymakers, researchers and media.

Saryu Canal National Project

- The Prime Minister recently inaugurated the **Saryu Canal National Project** in Balrampur district of Uttar Pradesh.
- The work on the project **started in 1978** but due to lack of continuity of budgetary support, interdepartmental coordination and adequate monitoring, it got **delayed** and was not completed.
- Consequently in 2016, the project was brought under Pradhan Mantri Krishi Sinchayee Yojana with a target to complete it in a time-bound manner.
- The project involves **interlinking of five rivers** – Ghaghara, Saryu, Rapti, Banganga and Rohin. It starts from the Saryu Barrage at Bahraich. The main canal is **318 km long** and many sub canals with a length of over 6600 kilometres have been linked to it.
- It has been completed at a cost of around 10 thousand crore rupees.

Benefits
- The project has come as a new hope to the farmers of the water-deficient eastern Uttar Pradesh.
- It will benefit the following nine districts in Eastern Uttar Pradesh – Bahraich, Shravasti, Balrampur, Gonda, Siddharthnagar, Basti, Sant Kabir Nagar, Gorakhpur and Maharajganj.

- It will provide assured water for irrigation purposes for over 14 lakh hectares of land and will benefit about 29 lakh farmers in over 6200 villages.
- These farmers will now be able to grow crops on a larger scale and maximize the agri-potential of the region.

Main Bhi Digital 3.0 Campaign

- The Ministry of Housing and Urban Affairs (MoHUA) recently shared details of the **Main Bhi Digital 3.0 campaign** conducted recently.
- Launched jointly by Ministry of Electronics and Information Technology and MoHUA, the campaign is aimed at **digital onboarding and training (DOaT) of street vendors** who have been provided loans under PM SVANidhi Scheme.
- Digital onboarding and training of street vendors is an integral part of PM SVANidhi Scheme. Lending Institutions (LIs) have been instructed to issue a durable QR Code & UPI ID at the time of disbursement and to train the beneficiaries in handling digital transactions.
- Thus, the campaign was conducted to complement the efforts of LIs in adoption of digital transactions by the scheme beneficiaries.

PM Street Vendor's AtmaNirbhar Nidhi (PM SVANidhi) Scheme
- Launched in June 2020, it is a **micro-credit scheme**, funded by the Ministry of Housing and Urban Affairs.
- Aims: To provide loans for working capital to around 50 lakh street vendors who were affected due to the Covid-19 crisis.
- On timely/early repayment of the loan, an interest subsidy of 7% per annum will be credited to the bank accounts of beneficiaries through Direct Benefit Transfer on a quarterly basis. It promotes digital transactions through **cash-back incentives** up to an amount of Rs. 1,200 per annum
- Vendors can take working capital loan of up to ₹10,000 that is repayable in **monthly instalments within one year.**
- A timely repayment will also ensure that the vendor gets a credit score and is eligible for a higher loan.
- All street vendors who have been in business on or before March 24, 2020, are eligible under the scheme.

Evaluation of the scheme
- As of 31st January 2021, the PM SVANidhi scheme has disbursed loans to 13.82 Lakh beneficiaries amounting to Rs 1,363.88 Crores.
- Several banks are seeking applications on stamp papers worth between Rs. 100 and Rs. 500.
- There have also been instances of banks seeking PAN cards and even checking the CIBIL or Credit score of applicants or state authorities asking for voter ID cards, which many migrant vendors do not carry with them.

Street vendors in India
- Any person selling goods or services, who does not have a permanent shop is considered a street vendor.
- There are estimated 50-60 lakh street vendors in India, with the largest concentrations in the cities of Delhi, Mumbai, Kolkata, and Ahmedabad. Most of the street vendors across the country are migrants.

Atmanirbhar Hastshilpkar Scheme

- The North Eastern Development Finance Corporation Ltd. (NEDFi) recently launched the Atmanirbhar Hastshilpkar Scheme under the Ministry of Development of North Eastern Region for grass roots artisans of the North Eastern region

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- **Objective**: To develop the petty artisans of the region by providing financial assistance in the form of term loan for income generating activities for setting up, expansion, modernization, working capital requirement etc.

- Credit assistance of Rs.1 lakh per artisan was given to several artisans at the launch.

- The credit facility is **collateral free** and carries a subsidized interest rate of 6% p.a., which is repayable in 24 months.

- For regular repayment, an incentive of 1% on the interest rate is provided, which will be refunded to the artisans on successful repayment of loans.

Eligibility Criteria

- Registered/ unregistered artisan/ Individual
- Having valid qualification or practicing any art form
- No existing loan from any other bank/ financial institution
- Bank Account

North Eastern Development Finance Corporation (NEDFi)

- Established in 1995, NEDFi is a premier financial institution in the North-Eastern Region.

- Over the years, the Corporation has provided loans to over 7500 projects and taken up several development initiatives through its Corporate Social Responsibility (CSR) activities in the 8 states of North-East.

Extension of Pradhan Mantri Krishi Sinchayee Yojana

- The Union government recently approved the extension of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) till 2026.

- Accelerated Irrigation Benefit Programme (AIBP), Har Khet ko Paani (HKKP) and Watershed Development components have also been approved for continuation till 2026.

- The extension will cost ₹93,068 crore and benefit 22 lakh farmers(including 2.5 lakh SC's and two lakh ST's farmers)

PMKSY
- Launched in 2015, PMKSY is a **Centrally Sponsored Scheme**, providing central grants to state governments to improve farm productivity and to ensure better utilization of water resources in the country. Centre- States will be 75:25 per cent. In the case of the north-eastern region and hilly states, it will be 90:10.
- It was launched by subsuming ongoing schemes like: Accelerated Irrigation Benefit Programme (AIBP), River Development and Ganga Rejuvenation, Integrated Watershed Management Programme (IWMP) and On-Farm Water Management (OFWM).
- It is implemented in an **area development approach**, adopting decentralized state level planning and allowing the states to develop their irrigation development plans based on district/blocks plans.
- In 2020, the Ministry of Jal Shakti launched a mobile application for **Geo-Tagging** of the components of projects under PMKSY.

Objectives of PMKSY
- Achieve convergence of investments in irrigation at the field level.
- Integration of water source, distribution and its efficient use.
- Improve on - farm water use efficiency to reduce wastage and increase availability both in duration and extent.
- Enhance the adoption of precision - irrigation and other water saving technologies.
- Ensure the integrated development of rain fed areas.

PMKSY Components

Accelerated Irrigation Benefit	- It was launched in 1996 with the aim of **accelerating the implementation** of irrigation projects that exceed the resource capabilities of states.
	- Implemented by **Department of Water Resources, River Development and Ganga**

Programme (AIBP)	**Rejuvenation,** AIBP provides central assistance to State Governments to complete ongoing irrigation projects.
	• Total additional irrigation potential creation targeted during 2021-26 under AIBP is **13.88 lakh hectare.**
	• Apart from focused completion of 60 ongoing projects, additional projects can also be taken up. The inclusion criteria have been relaxed for projects under tribal and drought prone areas.
	• Two large, long-pending projects - **Renukaji Dam project** in Himachal Pradesh and the **Lakhwar project** in Uttarakhand - will receive new funding.
	• They will help supply water to Delhi, Himachal Pradesh, Uttarakhand, U.P., Haryana and Rajasthan and play a role in rejuvenating the Yamuna.
Har Khet Ko Pani (HKKP)	• It aims to create new water sources through Minor Irrigation
	• Implemented by **Department of Water Resources, River Development and Ganga Rejuvenation**, HKKP focuses on expanding physical access on farms and increasing the cultivable area under assured irrigation.
	• HKKP consists of **four sub - components**:
	Command Area Development (CAD) → Surface Minor Irrigation (SMI) → Repair, Renovation and Restoration (RRR) of Water Bodies → Ground Water Development
	• Surface minor irrigation and repair-renovation-restoration of water bodies will target to bring another **4.5 lakh hectares** under irrigation by 2026.
	• The government has now expanded inclusion criteria for water body rejuvenation projects, including both urban and rural water bodies, and enhancing Central assistance from 25% to 60%.
Watershed Development	• **Implemented by Department of Land Resources,** it aims to conserve soil and water in rainfed areas and regenerate ground water resources, prevent run-off and promote water harvesting.
	• An extra 2.5 lakh hectares will be brought under protective irrigation during 2021-26 under this component.
Per Drop More Crop (PDMC)	• Implemented by **Department of Agriculture, Cooperation and Farmers Welfare**, PDMC focuses on efficient water conveyance (transportation) and precision water application devices like drips, sprinklers, pivots, rain - guns in the farm.

Co-lending Model

The State Bank of India (SBI) recently signed an agreement with Adani Capital, a Non-Banking Financial Company (NBFC) to form a **Co-Lending partnership**. Similar such Co-lending partnerships between banks and NBFCs have been struck over the past year.

Background

➤ In 2018, the RBI had announced '**co-origination of loans**' by banks and NBFCs for lending to the priority sector. The arrangement required **joint contribution of credit** by both the lenders and sharing of risks and rewards.
➤ Subsequently, to better utilize the respective advantages of the banks and NBFCs, the RBI launched the **Co-Lending Model (CLM) scheme in November 2020.**
➤ CLM was an improvement over the co-origination model as it provided greater operational flexibility to the lending institutions.
➤ CLM's primary aim is to improve the flow of credit to the **unserved and underserved** segment of the economy at an affordable cost. This happens as banks have lower cost of funds and NBFCs have greater reach beyond tier-2 centres.

Details of CLM

- Under CLM, banks are permitted to co-lend with all registered NBFCs (including **Housing Finance Companies)** based on a **prior agreement.**

- <u>NBFCs have to retain at least 20% share of the individual loans</u> on their books. The remaining loan is maintained on the books of the bank involved.

- <u>NBFCs act as the single point of interface for the customers</u> and a tripartite agreement is done between the customers, banks and NBFCs.

- All transactions (disbursements/ repayments) between the banks and NBFCs have to be routed through an **escrow account** maintained with the banks, in order to avoid inter-mingling of funds.

Issues With The Model

- Some of the main hurdles have been **IT integration of systems** as both banks and NBFCs operate on different systems, <u>different underwriting processes and parameters</u>.

- Most of these arrangements are with NBFCs that have **sizeable distribution** but are low on capital. Most of the mid-sized well-rated NBFCs still <u>opt for term loans over entering into CLMs</u>, to avoid complexities around integration and processes.

- ➢ While the RBI has referred to "the greater reach of the NBFCs", the **small NBFCs with 100-branch networks** will fall short in serving underserved and unserved segments.

- Beyond technology challenges, the **sustainability of the model** is also not yet clear. Entering into an agreement is one thing, but to emerge as a functional model it will have to prove its sustainability over a longer period.

- As NBFCs act as the single point of interface for customers this leads to a scenario where the <u>bank funds the major part of the loan but the NBFC decides the borrower</u>. Moreover, as banks have to bear 80% of the risk, it can <u>worsen the problem of NPAs</u> in case of defaults.

- While the RBI hasn't officially allowed the entry of big corporate houses into the banking space, NBFCs — mostly floated by corporate houses — were already accepting public deposits.

- ➢ Now, the CLM model provides them more opportunities for lending.

- This has come at a time when <u>four big finance firms</u> — IL&FS, DHFL, SREI and Reliance Capital — which collected public funds, <u>have collapsed in the last three years</u> despite tight monitoring by the RBI.

Way Ahead

- The real gap of credit exists with the segments such as small and medium businesses, credit to lower and middle-income groups, rural areas, etc.

- By addressing challenges around tech integrations and ground-level executions, CLM will be able to improve lending to these sections and lead to greater financial inclusion.

Priority Sector Lending (PSL)

- As per PSL norms, commercial banks, including foreign banks, are required to give **40%** of their loans to certain specified sectors. Similarly, Regional rural banks and small finance banks have to allocate 75% of their loans for PSL.

- This is to ensure that certain vulnerable sectors of the economy, who generally find it difficult to borrow loans from banks, are able to do so.

- The sectors under PSL include, agriculture, micro, small and medium enterprises (MSMEs), export credit, education, housing, social infrastructure, renewable energy etc.

Ban On Agri Derivative Contracts

Securities & Exchange Board of India (SEBI) has recently suspended trading in derivative contracts in seven key farm commodities namely, [paddy (non-basmati), wheat, chana, mustard seeds, soya bean, crude palm oil and moong] for a year.

Derivative Contracts

- Derivative contracts are between two or more parties where the derivative value is based upon an underlying asset, in this case agri commodities.
- The prices of the derivatives are established by the price fluctuations of the underlying assets.
- Derivative trading takes place when **traders speculate on the future price** of an asset through buying or selling of derivative contracts to maximise profit, as compared to actually buying the underlying asset right away.
- Derivatives can be traded on an exchange or over the counter (OTC). The exchange on which the trading takes place **guarantees for the quality of goods and financial commitment.**
- Commodity derivative markets have an immense potential in the Indian economy as they enable price discovery, facilitate better risk management, act as a price barometer for agriculture commodities and help in price integration.

Reasons For Current Suspension

- In November, Wholesale Price Inflation (WPI) reached a three-decade high of 14.23% primarily due to rise in food prices.
- This comes after Consumer Price Inflation (CPI) in November spiked to a three-month high of 4.91%, despite a cut in excise duty on fuels.
- The **wide gap between WPI and CPI reflects the price pressures on the inputs side**, which are expected to pass on to the retail level in coming months.
- It is believed that speculators have a role in increasing the prices and this needed to be discouraged to curb inflation and support growth as the economy is recovering from COVID-19.

Impact Of The Move

- Similar bans in the past show, that commodity prices in the spot market do not fall after banned futures trading. In fact, it affects investors' sentiment, and they tend to invest in other commodities that are allowed to be traded.
- Retail prices are not expected to decrease unless the **supply side issues** are addressed. The unseasonal rain and recent cyclone in different parts of the country have caused major damage to road transportation besides crop damage.
- Incidentally, the supply of commodities cannot be improved through imports as the price of many commodities in the international markets are also high.
- As agri futures play a critical role in helping farmers sell the agricultural produce and in hedging against adverse price movement, the suspension will take away an effective tool to protect users from price volatility and inflation.
- Moreover, trading suspensions in the past have discouraged corporates and large institutional investors from participating in these contracts due to an **uncertain regulatory environment**.
- As a result, turnover in agri-derivatives has been constantly declining with the share of agri commodities declining to just 4.7% of overall commodity derivatives turnover in 2020-21.
- Further, the trading is concentrated in a handful of agri commodities, with the top 10 most-traded contracts accounting for around 94% of the volume.

Way Ahead

- A liquid market has in-built checks that prevent excessive speculation. Trading suspensions act negatively in free markets and should be avoided.
- If the Centre is worried about speculation, <u>prices can be curbed through other means such as imposing tighter daily limits on sensitive commodities or by increasing trading margins very steeply</u>.
- The regulator should also speed up efforts to increase trading volumes and participation on exchanges through <u>creation of higher awareness among the users and farming community</u>.

World Inequality Report 2022

The **World Inequality Report 2022** was released recently by the **World Inequality Lab** along with some prominent economists.

Key Findings

- <u>Income and wealth inequalities</u> have been on the rise nearly everywhere since the 1980s, following a series of deregulation and liberalization programs.
- Global inequalities are about as great today as they were at the peak of Western imperialism in the early 20th century.
- The poorest half of the global population barely owns any wealth at just 2% of the total, whereas the richest 10% owns 76%.
- The Middle East and North Africa (MENA) are the most unequal regions in the world, whereas Europe has the lowest inequality levels.
- Inequalities within countries are now greater than those between countries. In Europe, the top 10%'s income share is around 36%, and in MENA, it is 58%; in East Asia, it is 43%, and in Latin America, 55%.
- Also, even as countries have become richer over the last 40 years, their governments have become significantly poorer, a trend magnified due to the pandemic.

Other Key Inequalities

- Women's share of total incomes from work was about 30% in 1990, and is less than 35% now.
- Global income and wealth inequalities are strongly connected to ecological inequalities and to inequalities in contributions to climate change.
- The top 10% of emitters are responsible for close to 50% of all emissions, while the bottom 50% contributes 12%.

FIGURE 1 GLOBAL INCOME AND WEALTH INEQUALITY, 2021

FIGURE 2 THE POOREST HALF LAGS BEHIND — Bottom 50%, middle 40% and top 10% shares out of national income globally in 2021

Inequality in India

- India stands out as a poor and very unequal country, where the top 10% holds 57% of the total national income, including 22% held by the top 1%, while the bottom 50% holds just 13% in 2021.
- The average national income of the Indian adult population is ₹2,04,200. While the bottom 50% earns ₹53,610, the top 10% earns more than 20 times (₹1,166,520).
- The average household wealth is Rs 9,83,010, of which the bottom 50% owns Rs 66,280, a mere 6%.
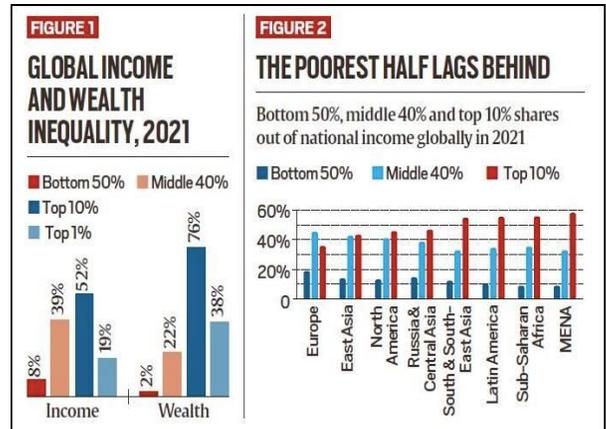
World Inequality Lab (WIL)

- It is a research laboratory focusing on the study of inequality worldwide.
- It hosts the World Inequality Database, the most extensive public database on global inequality dynamics.

Assam Editor Charged With Sedition

Assam's newspaper editor and co-owner were charged with Sedition under (**section 124 A**) and section **501,** for editorial believed to promote hostility between the <u>Assamese and Bengali- speaking people</u> of the state.

History of Sedition Law
- Lawmakers during 17thcentury England wanted only **pro government** opinion to survive. The British used this law to suppress opinions against the government. It was used to suppress the freedom movement.
  - The law was originally drafted in **1837** by Thomas Macaulay, the British historian-politician, but was omitted when the Indian Penal Code (IPC) was enacted in 1860
  - The rule was first used to prosecute Bal Gangadhar Tilak in 1897.After independence Constitution Amendment Act, 1951 introduced **new grounds of public order** to the sedition law. Sedition is defined as an **offense committed under section 124 of IPC.**

Section 124A of the IPC
- It defines sedition as crime when "any person by words, either spoken or written, or by signs, or by visible representation, or otherwise, brings or attempts to bring into **hatred or contempt, or excites or attempts to excite disaffection towards the government** established by law in India."
  - Disaffection includes disloyalty and all feelings of enmity. However, comments without exciting or attempting to excite hatred, contempt or disaffection, will not constitute an offence under this section.

Punishment for Offense of Sedition
- Sedition is a **non-bail able** offense. The sentence ranges from imprisonment up to three years to life term, to which a fine may be added.
  - The person charged under this law is not eligible to work in the government sector as a government employee.
  - They have to live without passports and must produce themselves in court whenever required. Amnesty International was also charged under sedition in 2016 for their programme that showcased human suffering of the Kashmir conflict.

Section 501 of IPC
- It says, whoever prints or engraves any matter, knowing or having good reason to believe that such matter is defamatory will be punished with simple imprisonment for a term that may extend up to two years or fine or both.

Issues Associated With Imposition Of Sedition Law

- As per **Kedar Nath judgment in 1962**, the sedition law was supposed to be applied in <u>rare cases where the security and sovereignty of the country is at stake</u>.
  - ✓ Supreme Court of India interpreted the section to apply **only if** there is, "**incitement to violence" or "intention or tendency to create disorder, or disturbance of law and order" or "overthrowing a democratically elected government through violent means.**
  - ✓ Thus, invoking sedition charges against academicians, lawyers, socio-political activists and students is in disregard of the Supreme Court's order
- But the rise in the number of cases from 47 in 2014 to 93 in 2019 (NCRB DATA) and many more voices were suppressed during the pandemic are matters of grave concern.
- The Supreme Court in June 2021 said "it is time to define the limits of sedition". There are arguments in favour and arguments against sedition law.

Arguments In Favour Of Sedition Law	Argument Against In Sedition Law
• Rea**sonable restrictions:** The constitution of India prescribes reasonable restrictions (**under Article 19(2)**) that can always be imposed on this right in	• It is **colonial law** and is not suitable for democratic setup. • **Stand of Constituent Assembly**: The Constituent

order to ensure its responsible exercise and to ensure that it is equally available to all citizens. • **Unity & Integrity:** It has great utility in **combating anti national, secessionist and terrorist elements**. • **Stability of State:** It helps the government to rule without attempts to overthrow the government with violence and illegal means. • **Handling insurgencies:** Many areas face insurgencies and security issues. E.g. Maoist insurgency.	Assembly did not agree to include sedition in the Constitution. The members felt it would curtail freedom of speech and expression • Vague terms like '**disaffection**' in section 124 are subject to different interpretations. • The sedition law is being misused as a tool to **persecute political dissent**. • **Repressing Democratic Values:** India is being described as an **elected autocracy** primarily because of the callous and calculated use of sedition law

Sedition laws have empowered the executive branch of the government to use these laws to regulate **public opinion and extensively apply power**. Freedom of speech and expression under **article 19** of the constitution is the hallmark of a democracy. It is being compromised due to the sedition law. It has become a tool to suppress the voice of citizens. Growing misuse of sedition law has put Indian democracy in danger.

The Need To Reopen Anganwadis

Due to the Covid pandemic, Anganwadis were closed owing to lockdown. There is need to reopen Anganwadis Government has proposed to roll out **Early Childhood Care And Education** (ECCE) programme in all Anganwadi centers in **phased manner** with 2021 -22 as beginning financial year

- According to NFHS-5, in 2019-20, less than 15% of five-year-olds attended any pre-primary school. 58% of women cited home-schooling as the biggest contributor behind an increase in unpaid work at home.

- Therefore, National education policy 2020 places Anganwadis at the center of the push for universal access to early childhood care and education (ECCE).

About Anganwadi Center

It is a type of rural child care center. They were started as part of Integrated child development service (ICDS) scheme in 1975.This is world largest early childhood service provider. Anganwadis perform an essential role in developing a child's mental, physical and social health. National Education Policy has made anganwadis an important platform to provide early childhood care and education.

Integrated Child Development Service (ICDS) Scheme

- The scheme provides additional nutrition, immunization and preschool education to the children. It is a widespread programme run by the Ministry of Women and Child Development (MWCD), Government of India.

- It is a **centrally sponsored scheme** implemented by state government and union territories. The programme is funded under 60:40 ratio (central: state). The scheme has been renamed as Anganwadi service.

- There are **six services** provided under ICDS. The services are provided by the Ministry of women and child development (MWCD) and the Ministry of Health and family welfare (MHFW).

Following table shows the component of ICDS:

Services	Target Group	Service provided by
(i) Supplementary Nutrition	Children below 6 years, Pregnant & Lactating Mothers (P&LM)	Anganwadi Worker and Anganwadi Helper (MWCD)

(ii) Immunization	Children below 6 years, P&LM	(MHFW)
(iii) Health Check-up	Children below 6 years, P&LM	(MHFW)
(iv) Referral Services	Children below 6 years, P&LM	(MHFW)
(v) Pre-School Education	Children 3-6 years	(MWCD)
(vi) Nutrition & Health Education	Women (15-45 years)	(MHFW & MWCD)

Purpose of Anganwadi ecosystem

1. To support low-income group family

2. To improve the nutritional and health status of **zero- to six-year-old children**.

3. To reduce the incidence of **mortality, morbidity, malnutrition**.

4. To lay a strong foundation for proper physical emotional growth of children.

5. To **educate young mothers** about early childhood development.

Beneficiaries of Anganwadi

Zero- to six-year-old children ⟩ **Pregnant women** ⟩ **Lactating mothers**

Challenges Faced By Anganwadis

- **Lack of sanitation and hygiene knowledge**: The anganwadi workers don't have knowledge of early childhood development. E.g. Only 49 % Anganwadi workers have key knowledge about washing hands and supplementary feeding.

- **Lack of infrastructure**: NITI Ayog found that only 59 % of anganwadis had adequate seating for children and workers.

- **Anganwadi workers are burdened with administrative work** and they could spend only 10 % on pre-school education compared to the recommended daily 120 minutes.

Reviving of Anganwadis

There are various successful models from the country and globally about early childhood development. This can help to revamp anaganwadi effectively

- Improving status of child nutrition and development. Odisha and Andhra Pradesh have shown positive results.

- **Home visits**, where volunteers work with children and caregivers have shown positive results. There has been significant improvement in cognition, language, motor development and stunting reduction.

- Reducing workload by **hiring more trained workers** as shown in case of **Tamil Nadu** is going to help the Anganwadi eco system effectively.

- **Linking Anganwadis and primary schools** to strengthen convergence will also impact positively.

Government must invest vigorously in the world's largest social programme on early childhood development. This will not only shape the future of the country but also help India to attain Target 4.2 of sustainable goal 2030.

Stress-Free Teachers

Mental health and wellbeing are the state of happiness in which a human being comprehends his or her own abilities, can handle normal stresses of life, can work efficiently and is able to make an input to his or her community.

Challenges Faced by Teachers

1. **Inequality in teaching profession:** India is land of **9 million teachers** working in different socio-economic settings. Large section of teachers works in bad situations, despite spending 85% of Sarva Siksha Abhiyan budget on salaries of staff in the past (NITI Aayog).

2. **Paradigm shift in teaching profession**: With covid 19, the stress of teachers has amplified due to coping with change of digital class to not having physical classroom interaction and facing a big disruption in their profession.

3. **Lack of effective training and support system**: India does not have a dedicated policy for the mental health of teachers.

4. **Overburden with administrative work:** Covid 19 duty, managing queues outside liquor shops etc has made teachers over burden physically and mentally.

Government Initiatives

1. **National Mental health programme in 1982** to improve the status of mental health in India. It consists of 3 components --

   ✓ Availability of easy and pocket friendly treatment for mentally ill patients
   ✓ Rehabilitation of severe patients
   ✓ Prevention and promotion of positive mental health.

2. **District mental health programme (DMHP), 1996** aims to provide community mental health services at the primary health care level.

3. **New education policy 2020:** New education policy focuses on **teacher's mental well-being** and encourages providing a holistic environment to grow under teacher's training programme. Teachers will be trained to identify stress and mental health problems in students at an early stage.

4. **Mental health Act** was enacted in 1987.This was repealed and Mental Health Care Act 2017 came into force. This act **decriminalized suicide** due to mental stress. This way it has ended a taboo associated with both suicide and mental illness.

Global Initiatives

- WHO's comprehensive mental action plan 2013- 2020 was adopted by 66th world Health assembly.
- Sustainable Development Goals target **3.4 and 3.5** emphasis on mental illness reduction.

Way forward

- **Professional training** to handle stress and mental well being

- **Digital accessibility, availability and affordability**: Subsidy for purchasing smartphones and internet connectivity. **Eg. Chandrababu Naidu Committee recommendation**

- **Digital literacy and awareness**: Crash courses, bridge program and enrichment program for teachers to be more tech savvy.

- **Dedicated policy and program** regarding wellbeing of teacher including mental wellbeing

Assisted Reproductive Technology (ART) Bill 2020

- Lok Sabha passed the Assisted Reproductive Technology (Regulation) Bill, 2020. It makes provisions for the safe & ethical practice of assisted reproductive technology service in country.

- The Government had been working on the bill to regulate the ART industry since 2008 when it was first drafted by the ICMR.

- The bill was first introduced in Lok Sabha in 2020 but the House had referred it to a standing committee.

- Assisted reproductive technology comprises of modern technique such as in vitro fertilization, intra uterine insemination, oocyte and sperm donation, cryopreservation that can help infertile couple.

Key Point of The Bill

1. The bill will provide for **regulation and supervision of ART clinic**.

   - **Formation of National Board**: It will advise centre on policy matters. It determines **minimum standard of physical infrastructure, laboratory and diagnostic equipment and expert manpower to be employed by clinics and banks.**
   - **State Boards** will coordinate the implementation of the guidelines.
   - **Formation of National Registry**: It will have central database for all clinics and medical professionals serving in the field to provide data to National board.
   - **Formation of Registration Authority**: It will have a chairperson an officer above the rank of joint secretary in the health department, a vice chairperson above the rank of the Joint director in health department, an eminent woman representing a women's organisation, an officer of the law department and an eminent registered medical practitioner
     - Registration authority's functions: To grant, suspend, or cancel the registration of ART centres; to enforce the standards and supervise implementation of the law; to investigate complaints of any breach of provisions, to take legal action against the misuse of ART and initiate independent investigations; and to recommend to the National and State Boards on modifying the regulation with changes in technology and social conditions.
     - State governments will appoint registration authorities for facilitating the registration process. The registration will be valid for 5 years and can be renewed for a further 5 years.

2. **Regulate ART Services:** It seeks to regulate and supervise ART clinics and ART banks, prevent misuse, adopt safe and ethical practice and so on

3. It makes genetic testing of embryo mandatory.

4. Stringent punishment for those practising sex selections, sale of human embryo, gametes or found running agencies, rackets and organisations for such practices in violation of the law.

For First-Time Offenders	It may attract a penalty between Rs. 5 lakhs and Rs. 10 lakhs
For Subsequent Contraventions	Imprisonment for a term between 8 and 12 years, and a fine between Rs. 10 and Rs. 20 lakh.
Any Clinic or Bank Advertising or Offering Sex-Selective ART	Punishable with imprisonment between 5-10 years, or fine between Rs. 10 lakh and Rs. 25 lakh, or both

5. ART procedures are open to married **heterosexual** couples, live in partners, single women and foreigners. Foreigner can visit India under medical tourism to avail ART facility.

6. ART services will apply to women above the legal age of marriage and below 50, and to men above the legal age of marriage to 55.

Concerns

Discrimination in Accessibility	The Bill excludes single men and LGBTQ+ individuals and couples **from accessing ARTs**
Duplicacy	Both **Surrogacy and ART Bills** will set up **multiple bodies** for registration which will result in duplication, lack of regulation. For example, a surrogacy clinic is not required to report surrogacy to the National Registry
Cost of the Services	It should be effectively monitored so that even the poor can avail of its services
Violates Article 14	The bill violates Article 14 and is also silent on the rights of children.

Protect Women and Children	The oocyte donor needs to be supported by an **insurance cover**. Multiple embryo implantation needs to be regulated and children born through ART need to be protected

The growth of ART clinic in India is among the highest in the world. India does not have standard protocol of ART clinic yet. Prior versions of the Bill regulated research using embryos, which must be brought back and definitions of commissioning "couple", "infertility", "ART clinics" and "banks" need to be synchronised between the Bill and the Surrogacy (Regulation) Bill.

Delhi Special Police Establishment Amendment Bill 2021

Parliament passed the bill to extend the tenure of director of CBI to maximum period of **five years** from the earlier **fixed period of two years**. Now CBI director position can be extended for **every one year** till five years of continuous service. Now Delhi Special Police Establishment (DSPE) Act and Central Vigilance Commission (amendment) Bill is amended.

- The Delhi Special Police Establishment (Amendment) Ordinance, 2021 was promulgated on November 14, 2021.

- CBI derives power to investigate from the Delhi Special Police Establishment Act, 1946.

Motive Behind The Changes	Concerns Of Amendment Bill 2021
• The amendment is done with regard to '**Public interest**'. It will enhance stability and regulation. As head of the CBI, director has lot of information about investigation which is confidential. Change of early tenure can create hassle in the investigation and cannot be carried with same tone. • Government is working to ensure transparency to check corruption as country has faced lot of threat of corruption, black money and international crime in recent past. • Methods and technique of crime have changed to more <u>structured style, thus making investigation harder</u>. Increased flexible tenure will make CBI more institutionalized and streamlined to deal with cases. • As a member country to financial action task force, India wants to improve resources for financial investigation and international crime.	• Affect the **credibility of institution:** Since it is **not fixed term** and there is provision of tenure extend every year, there is strong possibility that Officers and directors will take sides of people in power. • Against the spirit of **Vineet Narayan case**: In Vineet Narayan case Supreme Court decided for fixed tenure of two years. With the provision of flexible extension of tenure to five years it is being feared that CBI will see more government control. • The amendment may lead to an unjust situation for officers in line of promotion. • The bill was passed during the time when opposition is <u>not effectively functioning</u> in the parliament.

Central Bureau of Investigation (CBI)

- CBI is main investigation agency of central government. It is not a statutory organization.

- CBI was setup in 1963 by a resolution of the Ministry of Home Affairs. The formation of CBI was recommended by **Santhanam Committee** on prevention of corruption act (1962-1964).It is transferred to Ministry of personal training. It enjoys the status of an attached office.

- CBI has jurisdiction to investigate offences pertaining to 69 laws, 18 state acts and 231 offences in IPC.

Challenges with CBI

- **Political interference:** Supreme Court had criticized CBI for being caged parrot. While questioning the credibility of CBI in coal scam in 2013, CBI is accused to be hand maiden to ruling party.

- **Administrative hurdle**: CBI does not have its own cadre. It is run by central police officials on deputation, therefore getting influenced by government is inevitable.

- **Internal conflict:** Issues like CBI director and joint director case in 2018 is serious concern. Rakesh Asthana vs. Alok Verma case also famously known as CBI vs. CBI made a dent on image of CBI

- **Lack of accountability**: CBI is exempted from the provision of the Right to information Act, thus lacking public accountability.

- **Credibility issue:** CBI has been in limelight due mismanagement and mishandling of cases. E.g. Bofors scandal, 2008 Noida double murder case (Aarushi Talwar).

- **Overlapping jurisdictions:** CVC, CBI and Lokpal have overlapping jurisdiction. This create haphazard situation and loop holes.

- **State government consent:** CBI has to take mandatory consent from the state to investigate against corruption cases of central government employ in the state. If state withdraws the general consent, CBI needs to take consent on <u>case to case basis</u>. Currently **eight states** have withdrawn the general consent to CBI and 150 requests for sanction to investigate have been pending since 2018. Mizoram, Maharashtra, Kerala are some of them. This will hamper timely and quality investigation.

Appointment of CBI Director

- Appointment of CBI director is done through **section 4 of DSPE act 1946.**

- Appointment is done by central government on the recommendation of committee. But it was directly done by government till 2014.

- In 2014 the Lokpal Act provided a committee for appointment of Director. The committee comprises of **Prime minister as chairperson**, the Chief Justice of India and leader of opposition in the Lok Sabha or leader of the single largest opposition party in the Lok Sabha when there is no recognized leader of opposition in the Lok Sabha.

Bullock Cart Racing Event Permitted In Maharashtra

- Supreme Court allowed Maharashtra to hold **100-year-old** traditional bullock cart racing event. It was earlier banned in 2017.

- Supreme court said "One country, one race, we need to have uniformity and there has to be one rule. If the races are going on in other states, why should it not be allowed by Maharashtra."

- The decision was grounded on amendment to the Prevention of Cruelty to Animals (PCA) Act, 1960 implemented by state in line with Karnataka and Tamil Nadu.

Background

- **In 2014**, the Supreme Court **banned traditional sports** like 'Jallikattu', bull race and bullock-cart races across the country noting that they violated provisions of the PCA Act.

- Subsequently, Karnataka and Tamil Nadu had amended the law to continue the tradition in a regulated manner, which are under challenge and pending before the Supreme Court since 2018.

- In February 2018, the Supreme Court had referred the pleas related to 'Jallikattu' to a **five-judge Constitution Bench** which would decide if the bull-taming sport fell under cultural rights or perpetuated cruelty to animals

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Bullock Cart Racing

- It is traditional racing event. It is popular sport in Maharashtra especially Pune and the western Maharashtra region. It is mean of entertainment as well as source of livelihood in rural areas of Maharashtra. E.g street vendors in rural areas used to earn during racing events.

- Here demand comes from environmentalist that such kinds of sports in name of culture are against Article 21 -Right to life which also includes right to life to animals too.

Prevention of Cruelty to Animal Act 1960

- The act intends to prevent unnecessary pain or suffering on animals.
- **Animal welfare board of India** (AWBI) was established in **1962** under **section 4** of the act.
- Headquarter of AWBI recently being shifted from Chennai to Ballabhagarh in Delhi NCR.

Other traditional sports involving animals

- Jalikattu (bull taming race) is played in Tamil Nadu during Pongal harvest festival.
- Kambala is buffalo race occurs in paddy fields of coastal areas of Karnataka from November to March.
- Camel race is famous part of festivals in Rajasthan such as Pushkar fair.
- Bulbul fights are organised in Assam during the Bihu festival.

100 Years Of PAC

Public account committee (PAC) is working since 100 years on strengthening of systems and promoting good governance ensuring citizens right to due process and value for tax-payers money.

Parliamentary Committees

- Parliamentary committees are formal and smaller groups of members of Parliament that are assigned to do specific task on behalf of parliament.

- The matter related to composition, tenure, functions etc. are dealt by the rule of two houses.

- PAC is one of the three financial parliamentary committees. The other two are the Estimates Committee and the Committee on Public Undertakings.

- Parliamentary committee draws their authority from **Article 105 (**privileges of Parliament members) and **Article 118**

(Parliament's authority to make rules for regulating its procedure and conduct of business**)** of the constitution.
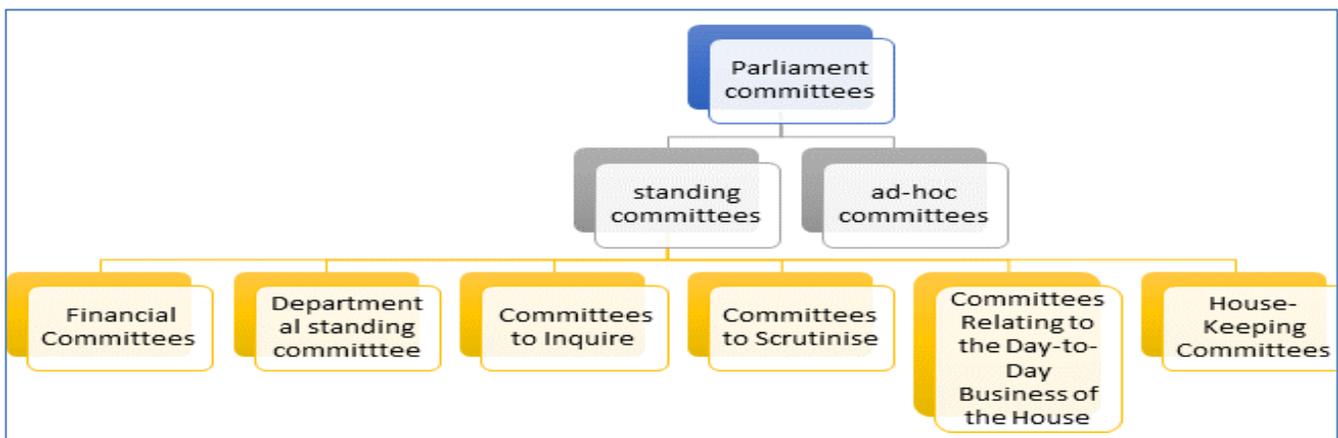
PUBLIC ACCOUNT COMMITTEE

1. It was introduced in 1921.
2. It was first mention in **Government of India Act, 1919 (Montford Reforms).**
3. It is now constituted every year under **section 308 of the Rules of Procedure and Conduct of Business in Lok Sabha.**
4. Not being an executive body, it can only make decisions that are **advisory** by nature

5. Chairman of the committee is appointed by the **speaker of Lok Sabha**. It presently comprises of 22 members (15 from Lok sabha and 07 form Rajya sabha).

6. The members of the committee are elected annually by the Parliament from amongst its members by the principle of Proportional Representation (PR) by means of Single Transferable Vote (STV.) This election method gives equal representation to all the members of the Parliament. Members are eligible for reappointment.

7. PAC restricts any Minister from being elected as a member of it.

Functions of Public Account Committee

1. It examines the **appropriation account of the annual financial statement (budget)** and such other accounts laid before the House as the Committee may think fit **except those relating to Public Undertakings** which are allotted to the Committee on Public Undertakings**.**

2. Committee examines the various **audit reports of Comptroller and Auditor General** of India on **revenue receipts expenditure** by various ministries/ department of Government and **account of autonomous bodies.**

3. To examine the **money spent** on any service during financial year **in excess of the amount granted by the Lok Sabha** for the purpose.

Dam Safety Act 2021

Dam Safety act 2021 received President's assent. The centre has brought the legislation under **Article 246** of the constitution read with **Entry 56 and Entry 97** of the union list.

➤ Although water is under the **state list** (Entry 17), the Act no way takes away the authority of the state. It provides a mechanism to ensure that the guidelines are followed.

Article 246
Article 246 empowers Parliament to legislate on any matter enumerated in **List I** of the Union list in the **7th Schedule** of the Constitution.

Entry 97
Entry 97 allows Parliament to legislate on any other matter not enumerated in List II or List III including any tax not mentioned in either of those Lists.

Entry 56
Entry 56 of List I allows Parliament to make laws on the regulation of **inter-state rivers and river valleys** if it declares such regulation to be expedient in public interest

Objective of the Act: Act proposes to help all states and union territories to adopt **uniform dam safety procedures**. Act deals for supervision, inspection, process and conservation of specified dam for prevention of dam failure related disasters.

Background

1. There are 5,254 large dams and most of dams are more than **25-year-old.** Huge siltation is taking place as a result of which the water holding capacity of dams is getting reduced.

2. There have been more than **forty large** dam failure incidences in past.

3. Lack of uniform law and administrative management for dam safety.

4. Central Water Commission (CWC) does not have statutory powers and can only make recommendation.

Salient Feature of the Act

1. **National Committee on dam safety will be constituted with three-year tenure.**

   ✓ It will be chaired by Chairman of Central Water Commission with Maximum of 10 representatives of central government in the ranks of joint secretary, maximum seven representatives of the state governments and three experts

   ✓ **Functions of the Committee** will include formulating policies and regulations regarding dam safety standards and prevention of dam failures, and analysing the causes of major dam failures and suggesting changes in dam safety practices

2. **National Dam Safety Authority (NDSA)**: It also envisages setting up of a National Dam Safety Authority to be headed by an officer not below the rank of an Additional Secretary, to be appointed by the central government. Its head office will be in New Delhi.

   ✓ The main task of **NDSA** includes <u>implementing the policies</u> formulated by the **National Committee on Dam Safety**, <u>resolving issues between State Dam Safety Organisations (SDSOs), or between an SDSO and any dam owner</u> in that state, specifying regulations for inspection and investigation of dams.

   ✓ The NDSA will also provide accreditation to agencies working on construction, design and alteration of dams

3. **State Dam Safety Organisation:** It also envisages constituting a State Dam Safety Organisation whose functions will be to keep perpetual surveillance, inspection, monitoring the operation and maintenance of dams, keeping a database of all dams, and recommending safety measures to owners of dams. It will report to **National Dam Safety Authority** in case of problem faced.

4. **Obligations of Dam Owners**: The owners of the specified dams are required to provide a **dam safety unit** in each dam. This unit will inspect the dams before and after the monsoon session, and during and after every earthquake, flood, or any other calamity or sign of distress.

   Dam owners will be required to prepare an <u>emergency action plan</u>, and carry out risk assessment studies for each dam at specified regular intervals through a panel of experts.

5. **Punishment:** The Bill provides for two types of offences - obstructing a person in the discharge of his functions, and refusing to comply with directions issued.

   ✓ Offenders will be punishable with imprisonment of up to 1 year, or a fine, or both. If the offence leads to loss of lives, the term of imprisonment may be extended up to two years.

   ✓ Offences will be cognisable only when the complaint is made by the government, or any authority constituted under the Bill

Concerns With the DAM Safety Act

1. The bill doesn't mention the payment of compensation to people affected by dam projects.

2. States have opposed it and considered it unconstitutional and encroaches upon the state's rights.

3. Central water commission will be responsible for technical appraisal of all projects and at the same it is authority to audit the same project (if the project is not successful). It is like being a judge of one's own cause

4. Dam safety is dependent upon many factors such as landscape, **land use change**, patterns of rainfall, structural features etc. All the factors have not been taken into account by the government in ensuring the safety of a dam.

Jawaharlal Nehru mentioned that Dams are modern temples of India. So proper maintenance along with considerations for all stakeholders is need of time. We should follow the model of USA and UK in that perspective.

Default Bail

• National Investigation Agency (NIA) has filed an appeal against the Bombay High Court order, which granted statutory bail to lawyer-activist Sudha Bharadwaj. She was granted **default bail** in Bhima –Koregaon case by Mumbai High court.

• Bail is the **conditional release** of a person held under legal custody by undertaking promise to appear in the court as and when required.

Default bail

• It is also known as statutory bail.

- **Supreme Court Judgment**: In **Bikramjit Singh case 2020**, observed that the accused gets an indefeasible right to 'default bail' if he **makes an application** after the maximum period for investigation of an offence is over, and before a charge sheet is filed.

➢ Right to default bail under Section 167(2), CrPC not merely a **statutory right**, but part of procedure established by law under **Article 21.**

➢ The stipulated period within which the charge sheet has to be filed <u>begins from</u> the day the accused is remanded for the first time

- It is **absolute and indefeasible**. It provides bail after the <u>expiry of specified period</u> if <u>charge sheet has not been filed</u> by the investigating agency.

- It is a right regardless of the nature of the crime.

Time Period: The issue of default bail arises where it is not possible for the police to complete an investigation in 24 hours, the police produce the suspect in court and seek orders for either **police or judicial custody**.

For Ordinary Penal Law	Special Cases
➢ For most offences, the police have 60 days to complete the investigation and file a final report before the court. ➢ However, where the offence attracts death sentence or life imprisonment, or a jail term of not less than 10 years, the period available is 90 days**.** ➢ At the end of this 60-90 days period, if the investigation is not complete, the court shall release the person "if he is prepared to and does furnish bail".	➢ In unlawful activities (prevention) Act 1967, the default limit is 90 days only that can be extended to another 90 days. ➢ In the Narcotic Drugs and Psychotropic Substances(NDPS) Act 1985, the period is **180 days**, which can be extended up to **1 year**

Constitutional Provisions Related To Arrest

Article 22 grants protection to persons who are arrested or detained. There are two type of detention

Punitive detention
- To punish a person for an offence committed by him after trial and conviction in the court**.**

Preventive detention
- Detention of a person without trial and conviction by a court. Its purpose is not to punish a person for a past offence but to prevent him from committing an offence in the near future

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Other Types Of Bail

- **Regular bail:** Direction given by any court to release a person who is already under arrest' and kept in police custody.

- **Interim bail:** Bail granted for **short period** by the court till the application seeking anticipatory bail or regular bail is pending.

- **Anticipatory Bail:** A direction issued to release a person on bail even before the person is arrested. It is issued by Session Court and high Court.

Election Amendment Bill 2021

Election laws (amendment) Bill, 2021 was passed in the Lok Sabha. It provides for amendment of **section 23 and section 14** of the Representation of People's Act 1950 and **section 20** of Representation of People's Act 1951.

Need of Amendment

- Incorporation of various electoral reforms has been pending since long time.
- **De-Duplication of Electoral Roll:** Linking Aadhar with electoral rolls will solve the problem of multiple enrolments of the same person at different places. Error free electoral roll will be achieved with the help of amendment.

Key Feature of The Bill

1. It seeks to link electoral roll data and voter ID cards with the Aadhar ecosystem.

2. January 1st as qualifying date is changed to **four qualifying date** i.e. 1st of January, April, July and October. Earlier anyone who turn 18 after January 1st was eligible for voting only after a year.

3. The language for registration of **wives of service voters** will now be replaced by **spouse.** Thus making it gender neutral.

➢ Service voters are those serving in armed forces, armed police forces of a state serving outside it and government employees posted outside India

4. Election laws (Amendment) act seeks to allow the electoral registration officers to ask for Aadhar for authentication of entries in the electoral role.

Concern Regarding The Act

1. The proposal to link electoral rolls with Aadhar can enable non-citizen to vote because Aadhar is not proof of citizenship, it is proof of residence.

2. Aadhar is itself not Mandatory: In 2015, the move to link voter ID to Aadhaar was put on the backburner after the SC Judgement where it held that "Aadhaar card Scheme is purely voluntary"

3. It can violate confidentiality of the vote undermining the principle of secret ballots and fundamental right to privacy of voter.

4. The act fails to specify the extent of data sharing between Election Commission of India (ECI) and UIDIA. Electoral data at present is held by ECI in its own database, has its own verification process, and is separate from other government databases.

5. In the absence of personal data protection bill, any move on sharing data can be problematic.

6. The bill has been passed without much discussion in the parliament.

Government's Stand

- **Voluntary Linking:** The proposed linkage between the Aadhaar and election database is voluntary.
- **No Risk of Disenfranchisement**: No application for inclusion of name in the electoral roll shall be denied and no entries in the electoral roll shall be deleted for inability of an individual to furnish or intimate Aadhaar number.

Error free electoral roll is need of hour but Government must invite public opinion and allow deeper parliamentary scrutiny before implementing the new provisions

Amendment To Mineral Rule

The **Minerals (Evidence of Mineral Contents) second Amendment Rules, 2021** and the **Mineral (Auction) Fourth Amendment Rules 2021** have been notified by Ministry of Mines. These rules will amend the minerals (Evidence of Mineral Contents) Rules, 2015 and Mineral (Auction) Rules 2015 (Auction Rules) respectively.

Aim Of The Amendment: To find more mineral blocks for auction and increase the pace of exploration and production. Thus focuses on more participation and competition.

Minerals (Evidence of Mineral Contents) Second Amendment Rules, 2021

- It will enable any person who is intending to participate in auction **to propose suitable blocks for auction for composite licence** where mineral potentiality of the blocks has been identified based on the available geoscience data.

- Committee constituted by state Government shall assess the mineral potentiality of the blocks.

Minerals (Evidence of Mineral Contents) Rules, 2015

It have been recently amended in June, 2021, to provide **for auction to grant a composite licence** in respect of areas where at least Reconnaissance Survey (G4) level has been completed or where mineral potentiality of the block has been identified based on the available geoscience data but resources are yet to be established.

➢ A Reconnaissance Survey provides a snapshot of potential historic resources in a particular location at a specific point in time.

Mineral (Auction) Rules 2015 (Auction Rules)

- It will provide the person (notified for auction), incentive of depositing **only half of the bid security** amount in auction.

- Part surrender of mining lease area has been allowed in all cases. Till now, part surrender was allowed only in case of <u>non-grant of forest clearance</u>.

- Provisions have also been added to allow disposal of overburden/ waste rock/ mineral below the threshold value, which is generated during the course of mining or beneficiation of the mineral.

- Minimum area for grant of mining lease has been revised from 5 ha (hectares) to 4 ha. For certain specific deposits, minimum 2 ha. is provided

Earlier Parliament cleared the Mines and Minerals (Development and Regulation) (MMDR) Amendment Bill, 2021.The present amendment in the Rules will supplement the recent policy reformed taken in mineral sector and facilitate auction of more blocks. It will help to increase production and mineral supply in the country.

National Drugs And Psychotropic Substances (Amendment) 2021

Parliament passed National Drugs and Psychotropic substances (Amendment) 2021. It amends the Narcotic Drugs and Psychotropic Substances Act, 1985.

Narcotic Drugs and Psychotropic Substances Act 1985 regulates certain operation (manufacture, transport and Consumption) related to narcotic drugs and psychotropic substances.

➢ Under the Act, financing certain illicit activities such as cultivating cannabis, manufacturing narcotic drugs or harbouring persons engaged in them is an offence

➢ Persons found guilty of this offence will be punished with rigorous imprisonment of at least 10 years (extendable up to 20 years) and a fine of at least Rs.1 lakh. It also provides for death penalty in some cases where a person is a repeat offender.

➢ Narcotic Control Bureau was constituted in 1986 under the NDPS Act.

➢ The act was earlier amended in 2014.

Need of Amendment 2021

- The bill would replace an **ordinance promulgated earlier this year (2021)** to correct a drafting error in a 2014 amendment to the Act.

➢ Before the 2014 amendment, clause (viii-a) of Section 2 contained sub-clauses (i) to (v), which defined the term "illicit traffic".

- In 2014, the Act was amended & clause number of **definition** for such **illicit activities** was changed.

- However, the **section (27A) on penalty** for <u>financing these illicit activities was not amended</u> and continued to refer to the earlier clause number of the definition. Thus making the section virtually inoperable.

Objective of the Amendment

1. The act helps victim of drug abuse to come out of addiction

2. The act seeks to <u>decriminalise possession of limited quantity of drugs.</u>

Concern Related to Act

- The new act will be used retrospectively from 1st May 2014.It means that a person who was involved in crime from 1st May 2014 will get punishment.

- It violates the fundamental rights in Article 20. Article 20 grants protection against **arbitrary and excessive punishment** to an accused person, weather citizen or foreigner or legal person like a company or a corporation.

Sixth Schedule And Ladakh

Member of Parliament from Ladakh demanded to include Ladakh in 6th schedule of the constitution. Ladakh became UT in 2019 and since then residents of Ladakh are demanding for 6th schedule.

Reason for The demand of 6th schedule

1. Due to **changed domicile policy**, Ladakh needs safeguards for **land, employment, demography and cultural identity** as it is predominantly **tribal (97 %).**
   - ✓ The primary Scheduled Tribes in Ladakh are <u>Balti Beda, Bot (or Boto), Brokpa (or Drokpa, Dard, Shin), Changpa, Garra, Mon and Purigpa.</u>
   - ✓ Prior to the creation of the UT of Ladakh, people in region had certain agrarian rights which restricted people from other parts of the country to purchase or acquire land in Ladakh

2. After becoming Union Territory administration of the region is hap hazard. It is completely in hands of bureaucrats. The government now looks even more distant than Srinagar.

3. There are two **autonomous Hill councils** in **Leh and Kargil**, but none is under the sixth schedule and has limited power. Inclusion will help in democratic devolution of powers and will also enhance the transfer of funds for speedy development of the region.

4. National Commission for Scheduled Tribes (NCST) has recommended that UT of Ladakh be included in the 6th Schedule

Difficulty Behind Ladakh's Inclusion

- 6th Schedule is for the Northeast. For tribal areas in the rest of country, there is the 5th Schedule.

- No region outside the Northeast has been included in the Sixth Schedule.

- In fact, even in Manipur, which has predominantly tribal populations, the autonomous councils are not included in the Sixth Schedule. Nagaland and Arunachal Pradesh, which are totally tribal, are also not in the Sixth Schedule

If included, Ladakh will be the only UT in 6th Schedule. Also, bestowing such a status to Ladakh would require a constitutional amendment

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Sixth Schedule

1. Article 244(2) and 275 (1) of constitution has provisions relating to the administration of tribal areas in the state of **Assam, Meghalaya, Tripura, and Mizoram**. As of now 10 autonomous councils are constituted in these states.

2. It allows formation of autonomous administrative divisions, autonomous District councils (ADCSs) and have legislative, judicial and administrative autonomy within a state.

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3. **Autonomous Districts:** The Governor is empowered to organise and re-organise the **autonomous districts.**

4. **District and Regional Council:** Each autonomous district has a **district council** consisting of **30 members** except Bodoland territorial council. Bodoland territorial council has 40 members.

   ✓ Out of 30, **4 is nominated by governor** and **remaining 26 are elected** on the basis of adult franchise.
   ✓ The elected members hold office for a term of 5 years (unless the council is dissolved earlier) and nominated members hold office during the pleasure of the governor.
   ✓ Each autonomous region also has a separate regional council.

5. **Village Council:** District and regional councils within their territorial jurisdictions can constitute **village councils** or courts for trial of suits and cases between the tribes.

NIPER Amendment Act 2021

- President gives his assent to the National Institute of Pharmaceutical Education And Research (Amendment) Act, 2021 (NIPER).

- It amended the National institute of Pharmaceutical Education and Research Act 1998 which established the National Institute of Pharmaceutical Education and Research at Mohali in Punjab and declared it an institution of national importance.

Aim of The Amendment

NIPER will enhance research and development. It will benefit India to get more patents that in turn will make India able to produce high-cost pharmaceuticals.

Key Points of Act

1. It declares **six** additional National Institute of Pharmaceutical Education and Research as **Institute of National Importance**. These institutes will be located in Ahmadabad, Hajipur, Hyderabad, Kolkata, Guwahati and Raebareli.

2. It seeks **establishment of advisory council**, which will be a central body to coordinate the activities of all institutes.

   The functions of the council include: Advising on matters related to course duration, formulating policies for recruitment, examining and approving development plans of the institutes, examining annual budget estimates of the institutes for recommendations to the central government for allocation of funds.

3. It rationalises the board of Governor of each NIPER from existing 23 to 12.

4. It widens the scope and number of courses run by the institute.

5. NIPER will be governed on lines of the Indian Institute of Technology.

Concerns With the Act

1. Over centralisation of power with regard to financial, administrative and managerial matters of these institutes will hamper the functioning of institutes.

2. Schedule caste and schedule tribes, other backward caste and women have not been included in the apex council of NIPERs.

3. The act may hamper the **autonomy of institutes** due to composition of the council. The council will be largely made up of central government, bureaucrats and member of parliaments.

National Institute of Pharmaceutical Education and Research is the top most pharmaceutical research institute in India under India's Ministry of Chemical and Fertilizers. It was established in 1998.

Jharkhand Passed The Prevention Of Mob Violence And Mob Lynching Bill 2021

Jharkhand passed the prevention of Mob violence and Mob lynching bill. Jharkhand will become the fourth state to bring law against mob violence. The first three states are **West Bengal, Rajasthan, and Manipur.**

Objectives of The Act

It aims "to provide effective protection of the constitutional rights of weak persons and to prevent the mob violence and lynching"

Key Point of The Act

1. The Act provides punishment for varying jail terms ranging from three years to life imprisonment and monetary fine up to Rupees 25 lakh against those involved in mob lynching.

2. The Act aims to put in place a top to the bottom mechanism, with inspector General Rank Police officers to be appointed as nodal officers in different areas.

3. The act also seeks to punish those responsible for irresponsibly sharing information.

Concern with The Act

1. The word weak person is vague

2. The bill is silent on compensation to the victim or victim's family.

3. District magistrates have been given undue powers to act in case of an 'apprehension of lynching'.

Mob Violence and Mob Lynching

It can be defined as acts of targeted violence by a large group of people. The violence against any person, property, etc. can be planned or spontaneous. The mob believes that they are punishing the victim for doing something wrong. They take the law into their own hands to punish.

Law Against Mob Lynching

- IPC and CRPC do not have a separate definition for such incidence. However, it is nowhere mentioned in the law of the land and is hence simply put as murder since it has not been yet incorporated under the IPC. These incidences are dealt with under sections 300 and 302 of IPC.

- In July 2017, the Supreme Court in the case of **Tahseen s. Poonawala v. UOI** had laid down several preventive, remedial and punitive measures to deal with lynching and mob violence. The SC in this case aptly referred to mob lynching as a 'horrendous act of mobocracy.'

- **Designated Fast Track Courts**: States were directed to set up designated fast track courts in every district to exclusively deal with cases involving mob lynchings.

- **Special Task Force:** The court had also mooted the setting up of a special task force with the objective of procuring intelligence reports about the people involved in spreading hate speeches, provocative statements and fake news which could lead to mob lynchings.

Lynching has become a social menace all across India. All state governments should implement Supreme Court guidelines and bring a law that deals strictly with mob violence. There should be mass awareness among people against digital hate spreader.

Karnataka Passes Anti-Conversion Bill In Assembly

Karnataka Assembly adopts the **Karnataka Protection of Right to Freedom of religion** bill. Other states which have passed bills to restrict religious conversion are Arunachal Pradesh, Chhatisgarh, Gujrat, Himachal Pradesh, Odisha, Uttar Pradesh, and Uttrakhand.

Salient Features of The Act

1. The Act prohibits conversion from one religion to another by misrepresentation, force, fraud, allurement, or marriage.

2. The offense of conversion is **cognizable and non-bailable**. It will attract a jail term of three to five years and a fine of Rs 25,000 for people found violating the law and a jail term of three to 10 years, and a fine of Rs. 50,000 for people converting minors, women and persons from the SC and ST communities.

3. Locus Standi Doesn't Apply: Complaints of conversions can be filed by family members or relatives or any person in association.

4. It provides an exemption in the case of a person who reconverts to his immediate previous religion.

5. Any person intending to convert to another religion will have to inform the district magistrate at least thirty days in advance.

Criticism

- These laws do not have any constitutional or legal basis.

- There is undue interference of the state in people's matters in the guise of implementing this kind of law.

Anti-Conversion Laws In India

- There has been no central legislation restricting or regulating religious conversion.

- **Article 25** guarantees the freedom to profess, propagate and practice religion. However, no person shall force their religious belief on others.

- **Article 21** of the Indian constitution says that the right to marry a person of one's choice is integral. Supreme Court in **Hadiya Judgement 2017** says that neither the law nor state can dictate a choice of partners.

- Supreme Court in various judgments has said that the state and the court have no jurisdiction over an adult's absolute right to choose a life partner.

The government while implementing such laws needs to ensure a balance between the law and not curbing one's fundamental rights.

Belagavi Border Dispute

Prohibitory orders have been imposed in the Belagavi region of Karnataka. The socio-political party from Maharashtra claims to represent the interest of Marathi-speaking people of Belgavi and demands to unify Marathi-speaking villages in Belagavi with Maharashtra. The issue has generated political clashes on both sides of the border many times.

Background

1. Belagavi, located in Karnataka was earlier part of the erstwhile Bombay Presidency. It was included in Karnataka after independence

2. In 1948 the Belagavi municipality requested that the district having a predominantly Marathi speaking population be incorporated into the proposed Maharashtra

3. State reorganization Act of 1956 divided the state into linguistic and administrative lines, made Belagavi part of the then Mysore state (renamed Karnataka in 1973).

Later Development

- **Mahajan Commission** report (1967) recommended that 264 villages be transferred to Maharashtra and that Belagavi and 247 villages remain with Karnataka. The recommendation was not welcomed by Maharashtra. Successive government in Maharashtra have demanded their inclusion within the State

- In 2006, the Supreme Court held that the issue should be resolved through mutual negotiation and that linguistic criterion should not be considered as it may create more practical problems.

- The case is still being heard by the Supreme Court.

Article 3 of the Indian constitution authorizes the parliament to create a new state, increase or reduce the area of the state, alter the name of any state. But the bill dealing with changes can be introduced only prior recommendation of the president.

State Reorganization Act 1956

1. The act was created to provide for the reorganization of states of India and matters connected therewith.

2. The Act was formed after the recommendation of the **Fazl Ali committee**.

3. The commission recommended the acceptance of **language** as the basis of reorganization but rejected the theory of 'one language one state'.

4. Zonal councils are formed under the act of state reorganization Act 1956.

Border disputes are one of the biggest problems in interstate and center-state relations. There are seven inter-state border disputes in-country at present. Central Government should cooperate with the state government and try to resolve the border disputes. Zonal council should work to achieve emotional integration of the country.

Selection Of Speaker

Maharashtra Governor and the government are locked in a tussle over the election of the speaker of the assembly. Government wants to hold **voice vote** instead of a secret ballot on the basis of amendments to **Rules 6**(election of assembly speaker) .But Governor has questioned the constitutionality of this decision.

The amendment excludes the words "**holding of the election**" and included the words "**to elect speaker on recommendation of the Chief Minister**" in **Rule 6** of Maharashtra Legislative Assembly Rule.

Concern With The Amendment

- The amendment was opposed as the Rules cannot be amended in the absence of the speaker. As currently the post of speaker is vacant.

- The situation is odd and confusing as the rule says, Governor should fix the date for the election, The amendment says that the Governor should fix the date on the advice on the chief minister. It is a conflict between two constitutional entities

Constitutional Provision

- **Article 178** provides for the selection of speaker and deputy speaker of state legislative assembly. But it does not specify the process of holding elections.

- It also does not set a timeframe other than to say the elections should be held "as soon as may be

- The Speaker is elected by the assembly itself from amongst its members. The speaker remains in office during the life of the assembly.

INTERNATIONAL AFFAIRS

New Chancellor of Germany

- **Olaf Scholz has been sworn in as Germany's new chancellor**, ending 16 years of conservative rule under Angela Merkel.
- Scholz, who served as vice chancellor and finance minister in coalition with Merkel, got a clear majority of 395 votes from lawmakers in the Bundestag lower house of parliament.

About The Election of German Chancellor

- The chancellor of Germany is the **head of the federal government of Germany**. He/she is also the commander in chief of the German Armed Forces during wartime.
- The chancellor is the chief executive of the Federal Cabinet and heads the executive branch.
- He/she is **elected by the Bundestag** (the legislative branch of the German government based in Berlin) on the proposal of the federal president.
- o The Federal Chancellor is elected by the Bundestag after each Parliamentary election.

Parliamentary Election

- Every **four years**, Germans vote to decide how **the 598 base seats in the Bundestag** will be divided among members of Germany's various political parties.
- German parliamentary system follows a **personalized proportional representation** system.
- o I.e., Germans cast two votes: **one for a candidate in their constituency** and **one for a political party**.
- o The two votes boil down to what is their favourite candidate who represents them in their districts and what is their favourite party that will represent them in the Bundestag.

Process Of Election Of Chancellor	Removal Of Chancellor
• The newly-elected Bundestag votes for Germany's chancellor. A chancellor **needs to receive an absolute majority**, more than half, of the votes in parliament to be elected. • A candidate is **proposed by the Federal President**, as provided for by the Basic Law (known as constitution of Germany). • The election is then held **exclusively among the Members of the German Bundestag**, who vote in a secret ballot **without any prior debate**.	• It is only possible for the Federal Chancellor to be **voted out of office by Parliament** - by means of what is known as a **constructive vote of no confidence**. o It means, parliament can withdraw confidence from a head of government only if there is a positive majority for a prospective successor. • At the same time, it must elect a successor by the majority of its members, requesting that the Federal President dismiss the current Federal Chancellor and appoint the newly elected candidate. • The Federal President must comply with this request.

Israeli PM's First Official Visit To UAE

- Israel's Prime Minister, Naftali Bennett, made the **first official visit to the United Arab Emirates**.
- This visit was part of a blitz of regional diplomacy amid the backdrop of struggling nuclear talks with Iran.

Background

Normalization of ties	• Israel and the UAE, in 2020, signed a normalization deal under **Abraham Accord**. It was brokered by the administration of former U.S. President Donald Trump. • In just one year since normalizing the relationship between these two countries, this official visit was made highlighting the potential of this deal.
Concerns over Iran nuclear program	• This trip took place against the backdrop of struggling nuclear talks with Iran. • Iran has pushed for sanctions relief in Vienna as world powers try to revive the 2015 Iran nuclear deal. **Both Israel and the UAE have long shared fears** over Iran's nuclear activities.

Israel-UAE Peace Deal (Abraham Accord)

After Egypt's peace treaty with Israel in 1979, followed by Jordan's in 1994, **Abraham Accord** makes the **UAE only the third Arab country to normalise relations with Israel.**

Key Highlights Of The Deal

- The deal promises to establish normal relations between the two countries.
- o This includes business relations, tourism, direct flights, scientific cooperation, and, full diplomatic ties at the ambassadorial level.
- An important component of the deal is **enhanced security cooperation against regional threats, especially from Iran and its proxies**.
- Israel, on its part, has **agreed to suspend declaring sovereignty over territories** it occupies in the West Bank, as highlighted in the Joint Statement released after the signing of peace deal.

Why This Deal Took Place

A. Iran Factor

- While Israel insists that concerns emanating from the Iranian nuclear programme are an existential threat, the UAE has long accused Iran of playing the sectarian card to destabilise the Gulf Arab states.
- The UAE and Iran also have a long-standing territorial dispute, with Iran's occupation of the islands of Greater Tunb, Lesser Tunb and Abu Musa a sore issue.
- o These islands were occupied by the Shah of Iran in November 1971, just two days prior to the UAE gaining independence from Britain.

B. Islamism or Political Islam

- It is a transnational concept often backed by the Muslim Brotherhood. Certain Gulf Arab rulers view **Islamism as an existential threat to their dynastic monarchies**.
- This has led to the formation of an unofficial partnership of conservative Middle Eastern governments.
- Israel, with its formidable intelligence capabilities, is now being admitted in this unofficial partnership as an associate member.

C. Ambitions of UAE

- UAE has ambitions globally, and beyond. It has just become the **first Arab country to send a mission to Mars**.
- Israel is by far the most technologically advanced country in the Middle East, with cutting-edge inventions.
- If this alliance works out it could propel the UAE to a new level of prosperity and international prestige

Significance Of This Deal For India

- This deal provides India an **unexpected opportunity to play a bigger role** in a region which is its strategic

backyard. India already enjoys a very good relationship with UAE and Israel.

- Keeping this in mind, **India should ramp up defence and security relations with UAE**. Israel is already a very close defence partner. India should restart joint exercises with UAE, and even Saudi Arabia.

- India can also use its good relationship to ensure that any **future deal on a regional security framework gives adequate space to Iran**.

- Recently, China has indicated its willingness to play a larger role in this region, and is close to both UAE and Israel and, increasingly, Saudi Arabia.

- **India should make its moves** before this market and extended neighbourhood comes under the Chinese sphere of influence.

New Caledonia Choose To Stay Part Of France

In a referendum, voters in the **French island territory** of New Caledonia chose to remain part of France. Voters rejected independence overwhelmingly, with 97% electing to stay part of France.

Background

- New Caledonia was **colonised by France in the mid-19th century** and won greater autonomy and the right to hold up to three referendums on its political status under the **Noumea Accord**, signed between French and local leaders in 1998.

- The agreement followed a 1988 peace deal (**Matignon Accord**) that ended decades of conflict between the **Indigenous Kanak** people and the descendants of European settlers known as the **Caldoches**.

- This vote was the **third of three independence referendums** promised by France.

New Caledonia Profile

- A French overseas territory comprising dozens of islands in the South Pacific, New Caledonia has seen deep divisions between its indigenous Kanak population and Europeans.

- Kanaks represent around 39% of the population, while Europeans, most of whom were born in the territory, make up about 27%. Most of the remainder are from other Pacific islands, which are of mixed heritage, called Caledonians.

- They vote in French elections and have French nationality

- New Caledonia is rich in resources and accounts for around 10% of the **world's nickel reserve**.

Significance for India

- The results of this referendum are particularly important for India in the double context of growing **India-France relations** and **Indo-China conflicts**.

- France is urging Australia and India to form a new "strategic axis" in the Indo-Pacific with it and New Caledonia to counter China's rise.

Pillar of Shame

- Pillar of Shame - a **famous statue at the University of Hong Kong** - marking the Tiananmen Square massacre was removed recently.

    The sculpture stood as a memorial to the victims of the **1989 Tiananmen Square massacre**, in which the Chinese military crushed protests led by college students in Beijing with deadly force.

- Its removal comes as Beijing has increasingly been cracking down on political dissent in Hong Kong.

[For detailed discussion on political system of Hong Kong, please refer the topic *"Hong Kong to Adopt China's Anti-Sanctions Law"* from August 2021 edition of the CA magazine]

India Finalizes Cooperation Plan To Revive Lanka's Covid Hit Economy

- As Sri Lanka battles to revive its Covid-battered economy, New Delhi and Colombo have agreed on a **four-pronged cooperation package**.

- It was finalised during a two-day visit by Sri Lankan Finance Minister Basil Rajapaksa to New Delhi.

Four-pillar Initiative

Urgent food and health security package	• This includes **extension of a line of credit** to cover the import of **food , medicines** and other essential items from India to Sri Lanka.
Addressing the balance of payment issues	• It includes a **currency swap agreement** to deal with Sri lanka's balance of payment issues. • Earlier, in July 2020, the RBI had signed an agreement for extending a $400-million currency swap facility to Sri Lanka.
Energy security package	• It includes a line of credit to cover **the import of fuel from India**, and an early **modernisation project** of the **Trinco oil farms** that India has been pursuing for several years. • The Trincomalee Harbour, one of the **deepest natural harbours** in the world, was developed by the **British during World War II**
Growth and employment generation	• It involves facilitation of **Indian investments** in different sectors that would contribute to growth and expand employment. • The ministers also agreed to open direct lines of communication to coordinate the initiatives.

A Number Of Differences On Economic Issues

- Steps Taken by Sri Lanka Which Antagonised India
  - ✓ India believes that the Rajapaksa Government has favoured Chinese companies on projects that it expedites.
  - ✓ The projects to develop **oil infrastructure in Trincomalee** have been hanging fire since 2017.
  - ✓ This year President Gotabaya cancelled a MoU signed with India and Japan for the **East Coast Terminal project**.
- Indian Stand Which Was Not Liked by Sri Lanka
  - ✓ President Rajapaksa's request for a $1 billion swap, made directly to PM Modi in May 2020, has not yet materialised.
  - ✓ India has also delayed a decision on a request PM Mahinda made in February 2020, for a debt moratorium waiver.
  - ✓ This request was made to help Sri Lanka tide over its economic problems that have been exacerbated by the pandemic.

> **Currency Swap Agreement**
> - In the swap arrangement, a country provides dollars to a foreign central bank, which, at the same time, provides the equivalent funds in its currency to the former.
> - This is **based on the market exchange rate** at the time of the transaction.
> - The parties agree **to swap back these quantities** of their two currencies at a specified date in the future using the same exchange rate as in the first transaction.

Hybrid Renewable Energy Systems Project Awarded To India

- Recently, Sri Lanka decided to award the hybrid renewable energy systems project to India.

- It took India almost a year to get China out a contract from this project.

Background

- In January 2021, a contract for building hybrid renewable energy systems was awarded to a Chinese company, Sino Soar Hybrid Technology.

- These systems were to be built at three islands off Jaffna peninsula in Sri Lanka.

Why India Got Worried?

- The three northern islands (off Jaffna peninsula), Delft, Nagadeepa and Analthivu, are strategically positioned.

o Due to its location, India's security concerns were aggravated.

- The initial survey showed that such systems were bound to fail environmental scrutiny, since diesel was part of the mix.

- The company, to which the contract was awarded, was only nominally private. It was under greater control of Chinese government.

India's Counter Offer

- India offered to build the same systems, but **more environment friendly and at a fraction of the cost**.

- The Chinese project was going to be carried through with an ADB loan as part of the Supporting Electricity Supply Reliability Improvement Project.

- India offered a big chunk of the money as a grant, with a very small loan component on easy terms. Sri Lanka had an offer it could hardly refuse.

- As a result, during the recent visit of finance minister Basil Rajapaksa to India, Sri Lanka had agreed to give the project to India, after cancelling out the Chinese.

[For detailed discussion about economic crisis faced by Sri Lanka, please refer the topic *"Food and Forex Crisis in Sri Lanka"* from September 2021 edition of CA magazine.]

Pakistan Allows Afghan Trucks To Carry Food Aid From India To Afghanistan

- Pakistan has allowed **Afghan trucks** to ferry over land the **humanitarian assistance New Delhi is offering Afghanistan**.

- In October, India had made a formal request to Pakistan to allow 50,000 metric tonnes of wheat and life-saving drugs for the Afghan people to be ferried over land into Afghanistan.

What Has Been Allowed By Pakistan

- The Afghan trucks have been allowed to come to the Wagah crossing on the India-Pakistan border to collect the material.

- These trucks will then transport it into Afghanistan via the **Torkham crossing** on the Afghanistan-Pakistan border.

- In other words, Indian trucks would require the wheat to be unloaded and loaded again into Afghan trucks at **Zero Point on the Wagah-Attari border**.

- The modalities announced by Pakistan are a near replica of the arrangements allowed for Afghanistan to trade with India over Pakistani territory under the **Afghanistan-Pakistan Transit Trade Agreement**.

    Trucks from Afghanistan **bring Afghan products to Wagah** but **return empty** as Pakistan has refused to allow access to Indian goods into Central Asia through this land route.

Bhutan Confers its Highest Civilian Award on PM Modi

- PM Modi has been conferred with the highest civilian award of Bhutan, Order of the Druk Gyalpo' also known as **Ngadag Pel gi Khorlo**, on the occasion of the country's National Day.

- Recently, Bhutan celebrated its 114th National Day on December 17.

- This day commemorates the **Coronation of the First King of Bhutan**, Druk Gyalpo Ugyen Wangchuck on December 17, 1907.

- This award has been given in the recognition of all the unconditional friendship and support Indian PM extended over the years and particularly during the pandemic.

SUMMITS AND ORGANISATIONS

OIC Summit On Afghanistan

Recently, Islamabad hosted the 17th extraordinary session of the Organisation of Islamic Cooperation's (OIC) Council of Foreign Ministers. It was an extraordinary conference on Afghanistan.

Key Highlights Of The Summit

1. **No Direct Announcement Of Economic And Humanitarian Assistance**
- The conference concluded without any direct announcement of economic and humanitarian assistance for the war-ravaged country.

- It was referred indirectly as members of OIC **pledged to set up a humanitarian trust fund** for Afghanistan as millions face hunger and poverty.

- This trust fund will be set up under the aegis of the Islamic Development Bank. It would provide a cover for countries to donate without dealing directly with the country's Taliban rulers. It was unclear how much fund the trust would contain.

2. **Did Not Give Formal Recognition To New Taliban government**
The participating Afghan Foreign Minister Amir Khan Muttaqi was excluded from the official photograph taken during the event.

3. **Urged To Unlock Financial And Banking Channels**
- The participating leaders urged the international community, especially USA, to unlock the financial and banking channels of Afghanistan.

- 75% of the Afghanistan's budget was supported by foreign aid. The Taliban takeover of Afghanistan in August 2021 had prompted the international community to freeze the country's billions of dollars in aid and asset.

> **Grave Humanitarian crisis in Afghanistan**
>
> - Twenty-three million people are already facing hunger;
> - Health facilities are overflowing with malnourished children;
> - Some 70 percent of teachers are not getting paid and
> - Millions of children, Afghanistan's future, are out of school

About Organisation of Islamic Countries (OIC)

- OIC (formerly Organization of the Islamic Conference) is the second largest inter-governmental organization after the United Nations.

- OIC is the collective voice of the Muslim world to ensure and safeguard their interest on economic socio and political areas.

- It has membership of 57 states spread over four continents.

- It has a permanent secretariat in Jeddah, Saudi Arabia.

OIC- Organization of the Islamic Cooperation
It was founded in **1969**
First OIC Charter Adopted in **1972**
Number of Member Countries **57**
Founding Members **30**
Key Bodies of OIC:
➤ Council of Foreign Ministers
➤ General Secretariat
➤ Islamic Summit
➤ Al-Quds Committee
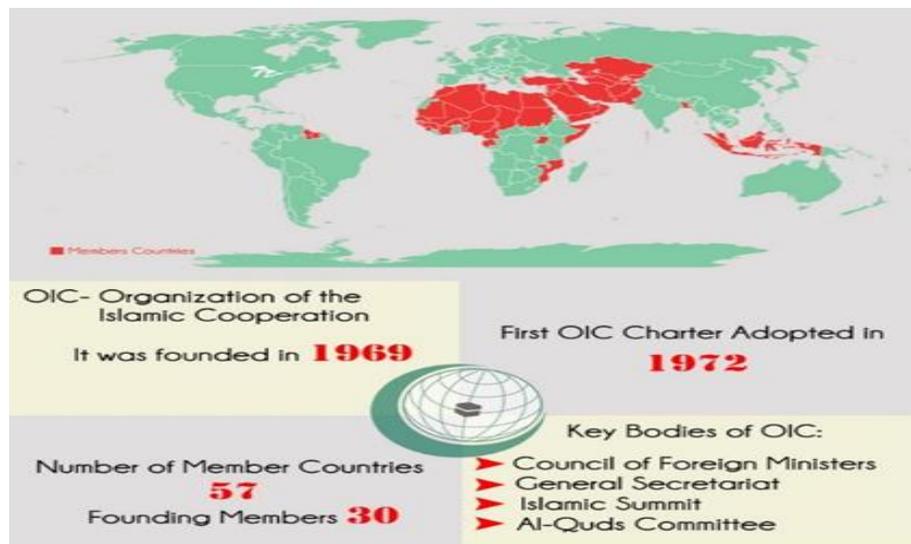
Background

- The Organization was established upon a decision of the historical summit which took place in Rabat, Kingdom of Morocco on 25 September **1969.**

This summit was a result of criminal arson of Al-Aqsa Mosque in occupied Jerusalem.

- This organization has been termed a **toothless tiger** by many analysts when it comes to dealing with squabbles among member states.
- Every member has a veto. As a result, the organization fails to take a critical stand on serious disputes that are shaping in the middle east.

India's Relationship With OIC

- At the 45th session of the summit in 2018, Bangladesh suggested that India should be given observer status. It was vetoed by Pakistan. This suggestion was on the basis that more than 10% of the world's Muslim population live in India.
- It was Qatar that first proposed 'Observer' status for India at the OIC Foreign Ministers' meet in 2002.
- India was invited to attend the OIC meeting in 1969 but Pakistan prevailed upon and got the invite withdrawn.
- However, India, in 2019, made its maiden appearance at the OIC summit, as a guest of honour. The then External Affairs Minister Sushma Swaraj addressed the inaugural plenary in Abu Dhabi.

5th Indian Ocean Conference

- External Affairs Minister S Jaishankar addressed the **fifth Indian Ocean Conference** held at Abu Dhabi, UAE.
- **Theme** - "Ecology, Economy, Epidemic"
- This year the conference dealt with the challenges faced by the Indian ocean due to the effects of the pandemic, economic decline and climate change.
- The event was organised by the India foundation and was **chaired by Sri Lankan President**.

International Institute for Democracy and Electoral Assistance

- Former chief election commissioner Sunil Arora has been invited to join the board of advisers at the **International Institute for Democracy and Electoral Assistance** (also known as International IDEA).
- Established in 1995, International IDEA is an **intergovernmental organisation based in Stockholm**, Sweden. It has a mission to **support sustainable democracy worldwide**.
- It currently has 34 member countries from all continents.

India re-elected to International Maritime Organisation Council

- India has been re-elected to the International Maritime Organisation (IMO) Council **for the 2022-23 biennium**. The elections were held during 32nd IMO's Assembly in London.
- India's election falls under the **Category of 10 states** with "*the largest interest in international seaborne trade*". The other 9 countries are:
o Australia, Brazil, Canada, France, Germany, the Netherlands, Spain, Sweden and the United Arab Emirates (UAE).

Works of IMO Council

- The Council is the **executive organ of IMO.** It is responsible, under the Assembly, for supervising the work of the organisation.
- Between sessions of the Assembly, the Council performs the functions of the Assembly, except that of making recommendations to governments on maritime safety and pollution prevention.

About IMO

- It is a **specialized agency of the United Nations**. It is **headquartered at London**, UK.
- The IMO's governing body is the Assembly which meets every two years, with the **first meeting held in 1959**.
- It is responsible for measures to improve the safety and security of international shipping and to prevent marine pollution from ships.
- It also oversees every aspect of worldwide shipping regulations, including legal issues and shipping efficiency.

8th Indian Ocean Dialogue

- Recently, India hosted the 8th Edition of the Indian Ocean Dialogue virtually.
- **Theme** - *Post Pandemic Indian Ocean: Leveraging Digital Technologies for Health, Education, Development and Trade in IORA Member States*
- It was organised with the assistance of the Indian Council for World Affairs and Indian Ocean Rim Association (IORA) Secretariat.
- It was aimed at triggering **cooperation among IORA Member States** in the field of digital technologies while ensuring digital inclusion and bridging the digital device.
- The Indian Ocean Dialogue is a premier track 1.5 forum for open and free flowing dialogue among various stakeholders.
- India has hosted the 1st and the 6th Edition of the Indian Ocean Dialogue in Kerala and New Delhi in September 2014 and December 2019 respectively.

DEFENSE AND SECURITY

Different Exercises

Exercise Ekuverin	• The **11th edition** of **Joint Military Exercise EKUVERIN** between **India & Maldives** was conducted at Kadhdhoo Island, Maldives. • India and Maldives have been conducting this Exercise since 2009.
PANEX-21	• Recently, PANEX-21 was conducted at College of Military Engineering in Pune. • It was the 3rd edition of this exercise and was organised by the Southern Command of the Indian Army. • PANEX is the Tri-services **Humanitarian Aid and Disaster Relief Exercise** for **BIMSTEC Member State**s. • The first BIMSTEC Disaster Management Exercise was organized by India in October 2017 in New Delhi, and the second edition in February 2020, in Odisha
India-ITU Joint Cyberdrill 2021	• Department of Telecommunications (DoT) and International Telecommunication Union (ITU) had conducted India-ITU Joint Cyberdrill 2021. • This Cyberdrill was intended for Indian entities especially Critical Network Infrastructure operators. • During this event, participants highlighted significant achievement of India in securing **10th rank in the ITU Global Cybersecurity Index**.

ASIGMA

- Indian Army has launched a **WhatsApp-like instant messaging application** called ASIGMA.

- ASIGMA stands for **A**rmy **S**ecure **I**ndi**G**eneous **M**essaging **A**pplication.

- It is a new generation, state-of-the-art, web-based application which is being deployed as a replacement of the **Army Wide Area Network** messaging application.

- The application will meet the army's real-time data transfer and messaging requirements. The app is in line with the **government's Make in India initiative**.

GEOGRAPHY AND ENVIRONMENT

Great Green Wall

Recently, Food and Agriculture Organization (FAO) of the United Nations said in a study, that Africa's Great Green Wall (GGW) programme is an important contribution towards combating climate change.

About Great Green Wall

- The Great Green Wall is an African-led movement with an epic ambition to grow an **8,000-kilometre-long and 15-km-wide** mosaic of trees, grasslands, vegetation and plants across the entire width of Africa.
- The Great Green Wall is a symbol of hope in the face of one of the biggest challenges of our time that is desertification.
- It was launched in **2007 by the African Union**, this green wall snakes the **Sahel region** from Senegal in the West to Djibouti in the East of Africa.
- Once complete, the Great Green Wall will be the largest living structure on the planet, 3 times the size of the Great Barrier Reef.

Objectives

- By 2030, the ambition of the initiative is to **restore 100 million ha** of currently degraded land.
- ➢ So far between 2007 and 2019, the Great Green Wall initiative has restored only four million hectares of land.
- Sequester 250 million tons of carbon and create 10 million green jobs.
- This will support communities living along the Wall to grow fertile land, grow economic opportunities, grow food security and grow climate resilience in a region where temperatures are rising faster than anywhere else on Earth.

Species in News

Chocolate-bordered Flitter	Recently, a researcher has discovered a new butterfly species named Chocolate -bordered Flitter from Dzongu, Sikkim.
	About Chocolate-bordered Flitter
	• It is a golden yellow butterfly with brown borders and spots.
	• The butterfly has been named 'Chocolate-bordered Flitter' as it has a chocolate-coloured border around both wings.
	• Its closest relatives are found in Guangdong, and Hainan, both in southeastern China.
	Significance of butterfly
	• A very large quantity of butterflies in any area represents the rich biodiversity.
	• The butterfly acts as an indicator species, which provides information on the overall condition of the ecosystem and of other species in that ecosystem. They also acts as a pollinator.
Kyhytysuka Sachicarum	International team of researchers has discovered a new **marine reptile** named Kyhytysuka sachicarum.
	About
	• It is an **extinct species** discovered from fossils found in **central Columbia**.
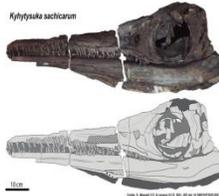
	• Kyhytysuka translates to '**the one that cuts with something sharp'** in an indigenous language from the region in central Colombia
Kyhytysuka sachicarum	• Earlier scientists believed that it belonged to Platypterygius genus. But recently, it was discovered that it is a different species. And thus, now it is named as Kyhytysuka sachicarum.
	• It has been named so to honour the ancient Muisca culture.
	• The fossil is a stunningly preserved meter-long skull, is one of the last surviving ichthyosaurs – ancient animals that look eerily like living swordfish.
	➢ Ichthyosaurs are the members of an extinct group of aquatic reptiles.
	• This species comes from a critical transitional time during the **Early Cretaceous period** when the Earth was coming out of a relatively cold period, sea levels were rising, and the supercontinent Pangea was splitting into northern and southern landmass.

Lesser florican
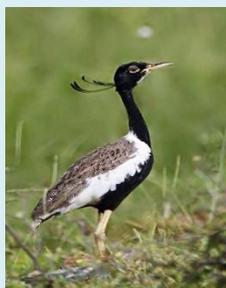
In a recent study the longest in-country migration route of lesser floricans, has been tracked for the first time from Rajasthan to Maharashtra.

About The Study

• The study on lesser floricans' migration has been launched as part of the bustard recovery programme.

➢ Bustard recovery programme is a conservation initiative for the Great Indian Bustard and the lesser florican.

• The Wildlife Institute of India (WII) is implementing the project in partnership with Forest Departments of several States and the International Fund for Houbara Conservation.

• This study would help experts understand the ecology and seasonal movements between breeding and non-breeding areas of Lesser Florican.

About Lesser Florican

• The lesser florican, also known as the likh or kharmore, is the smallest in the bustard family.

• It is endemic to the **Indian Subcontinent** where it is found in tall grasslands.

• The bird is listed as critically endangered on the IUCN Red List and protected under Schedule I of the Wildlife (Protection) Act, 1972.

Other Bustard Birds

Great Indian Bustard	Bengal Florican	Houbara Bustard
• It is one of the heaviest flying birds in the world. • It is usually found in dry grasslands and scrublands on the Indian subcontinent. • Its largest populations are found in the Indian state of Rajasthan. It is the state bird of Rajasthan.	• The species has two disjunct populations, one in the **Indian Subcontinent**, the other in **South-East Asia**. • It inhabits lowland dry, or seasonally inundated, natural and semi-natural grasslands, often interspersed with	• It lives in arid climates, comes in two distinct species, one residing in **North Africa** and the other in **Asia**. • The Asian houbara bustard is a bird native to Central Asia that migrates to the Indian subcontinent, including Pakistan, during winter months.

• It is listed as Critically Endangered on the IUCN Red List and Schedule I of the Indian Wildlife (Protection) Act, 1972.	scattered scrub or patchy open forest. • It has been listed as Critically Endangered on the IUCN Red List and Schedule I of the Wildlife (Protection) Act of India, 1972	• It has been listed as Vulnerable on the IUCN Red List

Threats To The Bustard Birds

- Collision with power transmission lines: Due to their poor frontal vision, the bustards can't detect power lines in time and their weight makes in-flight quick manoeuvres difficult.

- Poaching and unregulated hunting.

- Degradation of its natural habitat.

- Wind turbines and Solar farms (photovoltaic power stations)

Acute Bladder Snail

Recently, Physella acuta alo known as acute bladder snail is found in Kochi, and it has been flagged as an invasive.

About acute bladder snail

- Acute bladder snail is a tiny snail with a striking, pellucid golden-yellow shell.

- This snail is considered native to North America but is now found in all continents except Antarctica.

- The snail was first reported in India in the early 1990s. It is believed to have reached Kerala through the **aquarium trade**.

- It plays host to worms that can cause food-borne diseases and skin itches in humans

- Rapid growth rate of the snails, air-breathing capability, and tolerance to pollution makes them a potential competitor to native fauna.

Invasive species

- Invasive species or invasive exotics are the non-native or non-indigenous plants and animals that affect the habitats and bioregions they invade economically, environmentally and ecologically.

Issues with invasive species

- Perhaps the most significant negative effect of these is the widespread loss of habitat.

- Some invaders can physically alter the habitat in addition to destruction.

- Other invasive species may not destroy habitat but can have an impact by killing large numbers of endemic species.

Flatbill Flycatcher

Recently, a team of ornithologists from Brazil and Finland has discovered a cryptic new species of flatbill flycatcher living in the Amazonian lowlands.

About flatbill flycatcher

- They are aggressive insect eaters and are named flatbill for their flat body.

- They prefer to live in seasonally flooded plains. This includes degraded forest patches close to human settlements.

	• They are distributed in Brazil, eastern Venezuela, north eastern Bolivia and Mexico. **Threats** • The main threats are deforestation caused by rapid **progress of livestock farms, monocultures**. • Another threat is the implementation of large hydroelectric dams, the high and low tide levels in dams do not provide a stable habitat.
Bryde's Whale	Recently, the carcass of endangered Bryde's whale (one male and the other female) washed ashore near the border of Puri and Ganjam districts of Odisha. **About Bryde's whale** • Bryde's whales are members of the baleen whale family. • These whales are found in warm, temperate oceans including the Atlantic, Indian, and Pacific Ocean. • Some populations of Bryde's whales migrate with the seasons, while others do not migrate, making them unique among other migrating baleen whales. **Threats** • Killed by hunter and also sometimes vessel strikes can injure or kill Bryde's whales. • Low-frequency underwater noise pollution can disrupt the normal behavior of Bryde's whales, inhibiting their ability to use sound.
Thrips Parvispinus	• Recently, the production of the chilli crop in a few districts in **Telangana and Andhra Pradesh**, affected with a **new invasive pest** called Thrips parvispinus. • The genus Thrips is one of the largest genera of the **insect order** Thysanoptera in the family Thripidae. • There are 295 species found worldwide of which 44 species are reported from India. • In order to bring down pest population we can promote natural enemies of the pest and also, farmers can spray **neem oil** and should consider planting **sunflower crop** next to the chilli fields in order to promote natural enemies of the pest.
Tiger Spotted At Buxa Reserve After 23 Years	• Recently, a Royal Bengal Tiger has been spotted in Buxa tiger reserve in Alipurduar, North Bengal, after at least 23 years. • Last year in 2020, a report released by the Ministry of Environment said Buxa tiger reserve has no tiger. **Significance of sighting** • It has raised hopes among wildlife enthusiasts as it dismisses claims of the reserve's tiger population going extinct. **Further Step to be taken after sighting** • The infrastructure of the reserve forest is not up to the mark for tiger habitation. "Buxa need to be rebuilt as a tiger habitat. • There are 11 villages inside the core area of the tiger reserve. These villages are the main obstacle to build infrastructure of the tiger reserve, they need to be shifted to a new place.

	• The Centre can give compensation for this type of rehabilitation **About Buxa tiger reserve**
	• Buxa Tiger Reserve is located in northern West Bengal, which covers an area of 760 km2.
	• It was established, as the 15th tiger reserve of India, in 1983 & declared as a National Park in January 1992.
	• This reserve is home to around 284 bird species and also home to mammals like Asian elephant, gaur, clouded leopard, Sambar deer and Indian leopard.
	• The main rivers flowing across the Tiger Reserve are **Sankosh**, Raidak, Jayanti, Churnia, Turturi, Phashkhawa, Dima and Nonani.
Gharials	Recently, the Department of Punjab Forest and Wildlife Preservation, in collaboration with the World-Wide Fund for Nature-India released 24 gharials into the Beas River.

About Gharial

• The Gharial is a fish-eating crocodile is native to the Indian subcontinent.

• The population of Gharials are a crucial indicator of clean river water.

• Found in Chambal River (Primary habitat), Girwa River, Ken River, Son River, Mahanadi River, Ramganga River.

• Listed as Critically Endangered in the IUCN Red List and Schedule I under the Indian wildlife protection act, 1972.

Threats

• Gharials are hunt for their **skins** and to make **indigenous medicine.**

• Some part of country their **eggs** are collected for consumption.

• Their habitat is drastically decreasing due to the construction of dams, barrages, irrigation canals.

Reintroduction programmes

• In 1975, the **Indian Crocodile Conservation Project** was initially set up in the **Satkosia Gorge Sanctuary in Odisha,** with financial assistance from the United Nations Development Fund (UNDP) and the Food and Agriculture Organization (FAO).

• The country's first gharial breeding center was built in **Nandankanan Zoological Park.**

• **Kurail Gharial breeding center** project was established in 1978 by the Uttar Pradesh Forest department.

• Other breading centre- National Chambal Sanctuary (Gharial Eco Park, Madhya Pradesh) |
| **Indian Desert Cat** | It has been spotted for the first time in Madhya Pradesh's Panna Tiger Reserve.

About Indian desert cat

• It is also known as the Asiatic Wildcat or the Asian Steppe Wildcat. They are found in deserts and can survive without water.

• The toes of the species have cushion-like hair which helps it <u>balance the fluctuating desert temperatures.</u>

• The species has sandy-brown fur and small, round spots covering the upper part of its body.

• The animal is in the **Least Concern** category of the IUCN Red List and Schedule-I in the Wildlife Protection Act 1972. |

	• The species is highly adaptable and can be found in forests as well as arid and semi-arid regions. **Threats** • These cats are hunted for their beautiful soft fur. • Conflict with humans, Habitat destruction and loss of habitat quality.
Albino Indian Flapshell Turtle	Recently, an Albino Indian Flapshell Turtle was sighted by mountaineers in Sirnapalli forest of Nizamabad, Telangana. **About Albino Indian Flapshell Turtle** • It is a fresh water turtle commonly found in South Asian countries. ➢ Indian flapshell turtles are usually only 9 to 14 inches long, and prefer to eat frogs, mollusks and aquatic vegetation. • Listed as Vulnerable in the IUCN Red List and Schedule I under the Indian wildlife protection act, 1972. • The varying coloration of turtles may be due to albinism – a genetic disorder that causes a complete lack of a pigment called 'tyrosine'. ➢ Tyrosine is an **amino acid** that plays a vital role in the formation of melanin. ➢ Melanin is the pigment that gives color to **eyes, hair and skin.** It's also the same pigment that's responsible for the color of turtles shells or colour.
Blue Bull	• Recently, the Bihar government has decided that, to control the increasing population of blue bull, they will sterilise them instead of culling them. • Nearly 4,729 blue bulls were culled from 2016-2019, according to data by the forest department. **About Blue bull** • Blue Bull, locally known as the **nilgai or ghurparas**, usually found in India, Nepal and Pakistan • It listed as Least Concern in the IUCN Red List of Threatened Species and in Schedule III of the Wildlife (Protection) Act, 1972. • These bulls live in forests, wooded grasslands, scrub areas and agricultural areas and also in the human settlements. • Major threats: farmers kill them for destroying their crops and habitat loss.

Elephants Killing

According to the Union Ministry of Environment, Forest and Climate Change (MoEFCC), 1,160 elephants were killed in the country due to reasons other than natural causes in the past 10 years.

Data Related To The Death

Cause of Death	Electrocution	Train hits	Poaching	Poisoning
Number	741	186	169	64

- Karnataka and Odisha lost 133 elephants each due to electrocution during the period and Assam reported 129 deaths.
- Among elephant casualties due to train hits, Assam stood first with 62 deaths, followed by West Bengal at 57.
- Assam reported the highest number of elephants poisoned - 32, and Odisha stood second with 15 deaths.
- India had a total of 29,964 wild elephants as per an estimate done in 2017. The southern region comprising Tamil Nadu, Kerala, Karnataka, Andaman and Nicobar Islands, Andhra Pradesh and Maharashtra accounted for the highest population — 14,612 elephants.

Step Taken To Reduce Killing

- A Permanent Coordination Committee has been constituted between the MoEFCC and the Ministry of Railways for preventing elephant deaths due to train hits.
- The MoEFCC has released ₹212.5 crore under the **Project Elephant** to 22 States in the 10 years between 2011-12 and 2020-21.
- Elephant was declared a '**national heritage animal**' in **2010**, considering the valuable ecological services rendered by the species.
- Guidelines for the management of human-elephant conflict had been issued by the MoEFCC in October 2017.
- Critical elephant habitats are notified as 'elephant reserve' for focus and synergy in elephant conservation and to reduce conflict.

Perform, Achieve and Trade (PTA) Scheme

Recently, a report released by the **Centre for Science and Environment (CSE)** mentions that the Perform, Achieve and Trade scheme introduced in 2008 is not effective.

Key Findings In The Report

- The CSE analysis found thermal power plants under this scheme in the last decade had reduced just 1-2% of overall carbon dioxide emissions emitted by them.
- The report attributed the inefficiency of the scheme to **non-transparency, loose targets and overlooked deadlines.**
- The industrial sector consumes the most energy in India, accounting for 43% of overall consumption, making it the major contributor to the country's energy and environmental footprint.

About PTA Scheme

- Perform Achieve and Trade (PAT) scheme is a flagship programme of **Bureau of Energy Efficiency** under the National Mission for Enhanced Energy Efficiency (NMEEE).
- NMEEE is one of the eight national missions under the National Action Plan on Climate Change (NAPCC) launched by the Government of India in the year 2008.
- The scheme is a **market-based mechanism** wherein energy saving certificates (ESCerts) are given as incentives to industries that overachieve their targets. ESCerts were introduced in India in 2011 under the PAT
- These certificates can be **traded** in two **energy exchange- Indian Energy Exchange (IEX) and Power Exchange India Limited (PXIL).**
- The certificates can be bought by other designated consumers that have not achieved their prescribed targets under the scheme.

- Units that are unable to achieve the targets either by their own actions or by buying the ESCerts are liable to pay the prescribed penalty

- PAT covered about **13 energy-intensive sectors:** Thermal power plants (TPP), cement, aluminium, iron and steel, pulp and paper, fertiliser, chlor-alkali, petroleum refineries, petrochemicals, distribution companies, railways, textile and commercial buildings (hotels and airports)

National Action Plan on Climate Change (NAPCC)

It is a Government of India's programme launched in 2008 to mitigate and adapt to the adverse impact of climate change. The plan aims at fulfilling India's developmental objectives with focus on **reducing emission intensity of its economy**. The 8 missions under NAPCC are :

> National Solar Mission
> National Mission for Enhanced Energy Efficiency
> National Mission on Sustainable Habitat
> National Water Mission
> National Mission for Sustaining Himalayan Ecosystem
> Green India Mission
> National Mission for Sustainable Agriculture
> National Mission on Strategic Knowledge for Climate Change

Graded Response Action Plan (GRAP)

- Recently, the Delhi Government decided to shut down schools due to high pollution.

- Closing of schools, odd-even vehicle rationing scheme and banning construction activities are actions under the "**emergency**" category of GRAP.

About GRAP

- It is a set of emergency measures that was approved by the Supreme Court in **2016**.

- Plan comes into effect when the air quality index (AQI) in Delhi and the NCR breach certain thresholds.

- The plan does not include action by various state governments to be taken throughout the year to tackle industrial, vehicular and combustion emissions.

Has GRAP Helped?

GRAP has been successful in doing two things that had not been done before -

Creating a step-by-step plan for the entire Delhi-NCR region

It has gathered several agencies: All pollution control boards, industrial area authorities, municipal corporations, regional officials of the India Meteorological Department, and others

- The biggest success of GRAP has been in **fixing accountability and deadlines**. For each action to be taken under a particular air quality category, executing agencies are clearly marked.

- In a territory like Delhi, where a multiplicity of authorities has been a long-standing impediment to effective governance, this step made a crucial difference.

- 3 major policy decisions that can be credited to GRAP are –

Closure of the thermal power plant at Badarpur

Bringing BS-VI fuel to Delhi before the deadline set initially

Ban on Pet coke as a fuel in Delhi-NCR

Actions Under GRAP

Severe+ or Emergency
- PM 2.5 over 300 µg/cubic metre or PM10 over 500 µg/cu. m. for 48+ hours
- Stop entry of trucks into Delhi (except essential commodities)
- Stop construction work
- Introduce odd/even scheme for private vehicles and minimise exemptions
- Task Force to decide any additional steps including shutting of schools

Severe
- PM 2.5 over 250 µg/cu. m. or PM10 over 430 µg/cu. m
- Close brick kilns, hot mix plants, stone crushers
- Maximise power generation from natural gas to reduce generation from coal
- Encourage public transport, with differential rates
- More frequent mechanised cleaning of road and sprinkling of water

Very Poor
- PM2.5 121-250 µg/cu. m. or PM10 351-430 µg/cu. m
- Stop use of diesel generator sets
- Apartment owners to discourage burning fires in winter by providing electric heaters
- Advisories to people with respiratory & cardiac conditions to restrict outdoor movement

Moderate to poor
- PM2.5 61-120 µg/cu. m. or PM10 101-350 µg/cu. m
- Heavy fines for garbage burning
- Close/enforce pollution control regulations in brick kilns and industries
- Strictly enforce ban on firecrackers

Depletion Of Groundwater Level

- Recently, an analysis of water level data by the Central Ground Water Board (CGWB) indicates about 33% of the wells monitored have registered decline in ground water levels in the range of 0 – 2 m.

- Decline of more than 4.0 m has also been observed in few pockets of the major cities in India.

Ground Water

- It is the water found underground in the cracks and spaces in soil, sand and rock.

- It moves slowly through geologic formations of soil, sand and rocks called aquifers. Groundwater is responsible for providing up to 40% of freshwater in the world.

- Worldwide, 2.5 billion people depend solely on groundwater resources to satisfy their basic daily water needs.

Groundwater Extraction in India

- India is the largest user of ground water in the world, extracting ground water to the tune of 253 bcm per year, which is about 25% of the global ground water extraction.

- Ground water extraction in India is primarily for irrigation, accounting for nearly 90% of the annual ground water extraction.

- The remaining 10% of extraction is for drinking & domestic as well as industrial uses.

Causes Of Groundwater Depletion	Effects Of Groundwater Depletion
• Green Revolution enabled water intensive crops to be grown in water deficit regions, leading to over extraction of groundwater.	• It will force us to pump water from deeper within the Earth. • As the depth to water increases, more energy is

• Frequent pumping of water from the ground than it can renew itself, leads to a dangerous shortage in the groundwater supply.	required to drive the pump. Using the well can become prohibitively expensive.
• Subsidies on electricity and high MSP for water intensive crops.	• Large bodies of water will become shallower from groundwater depletion. A groundwater shortage keeps additional water from flowing into lakes, rivers and seas.
• A small portion of groundwater depletion also occurs naturally, due the change in our climate.	• Groundwater that is deep within the ground often intermingles with saltwater that we shouldn't drink.
• Inadequate regulation of groundwater encourages the exhaustion of groundwater resources without any penalty	• The less water is available, the less food we have and we will be faced with the issue of great demand and very little supply.

Steps Taken To Control Groundwater Depletion

- Government of India launched **Jal Shakti Abhiyan** in 2019, intended to improve water availability including groundwater conditions in the water stressed blocks of 256 districts.
- **Atal Bhujal Yojana scheme** is for sustainable management of groundwater, with community participation, in identified over-exploited and water scarce areas.
- **Aquifer Mapping and Management Program** aims at aquifer status and their characterization for preparation of aquifer/area specific ground water management plan with community participation.
- **Master Plan for Artificial Recharge to Groundwater - 2020**: It is prepared by CGWB in consultation with the state governments. It envisages construction of about 1.42 crore Rain water harvesting and artificial recharge structures in the Country to harness 185 Billion Cubic Metre (BCM).

Way forward

- The contribution of groundwater to national gross domestic product should be measured.
- The pumping of groundwater should be regulated. Laws that are in place for the pumping of groundwater should be stricter and follow specific regulations.
- One of the most effective ways to address the issue of groundwater depletion is to find alternative sources of water. Like we can capture the rain water, use atmospheric water generation, use the same water after purifying it

Project RE-HAB

Khadi and Village Industries Commission (KVIC) launched Project RE-HAB at Village Mornoi in Goalpara district of Assam.

About Project RE-HAB (Reducing Elephant-Human Attacks using Bees)

- Under the Project **Bee fences** are created. The honey bees in these fences' thwart elephant attacks in human territories.
- The boxes are attached to a string, so when the elephants try to pass through the string, a pull or tug leads the bees into the swarm towards the elephant and prevents them from moving further.
- It is scientifically recorded that elephants are annoyed by the honey bees.
- The project is a sub-mission of **KVIC National Honey Mission.**
- It was first launched in Karnataka (Nagarahole National Park and Tiger Reserve). After its huge success in the state this project is launched in many other states.

Why This Project Is Needed

- According to Union Ministry of Environment, Forest and Climate Change (MoEFCC), 1,160 elephants were killed in the country due to reasons other than natural causes in past 10 years.

Significance Of This Project

- The project RE-HAB is highly cost effective as compared to erecting fences or digging trenches.
- The project simultaneously increases honey production and increases farmer income.
- It helps in minimizing the loss of lives of both humans as well as elephants.
- It helps in maintaining a balance in nature, along with the conservation of biodiversity.

Khadi and Village Industries Commission (KVIC)

- It is a statutory body established under Khadi and Village Industries Commission Act, 1956.
- It comes under the **Ministry of Micro, Small and Medium Enterprises**.
- The main function of KVIC is to plan, promote, organize and implement programmes for the development of **village industries in rural areas.**

Landslide Warning System

- Scientists at Geological Survey of India (GSI) are hopeful of activating the **landslide early warning system** in some parts of India as soon as 2025 which is currently in experimental phase.
- The newly developed system will work on the lines of cyclone warning systems providing crucial information to authorities to initiate preparedness activities.
- The tool will forecast **slope specific and site-specific** landslide possibilities once operational.

How Does The Early Warning System Work

- The system uses data generated from previous landslides and rainfall in the region to predict the possibility of slope movement.
- Over 80% of landslides in India are triggered by rains and researchers will create rainfall threshold data. The threshold data will indicate the amount of rainfall that might trigger a landslide.
- The GSI is working with IMD, ISRO and other sister organisations to monitor rainfall forecasts in various regions and compare it with threshold data to predict landslides in the area.
- The threshold data is different for different places and therefore requires at least **five years** of observations to predict slope movements.

Why India Needs This System

- Landslides are the 3rd biggest natural disasters in the world, with India experiencing the biggest bulk of them. 15% of the country is prone to landslides.
- India has the highest number of landslides and deaths due to it in the world.
- Due to landslides, people are not only losing their lives but they also have to bear the economic loss. A major part of India's tourism routes falls in the land slide prone area.
- The system will inform people about potential slope failures – giving them enough lead time to move them to a safer location as well as prevent vehicular movement in the area.

Challenges In Developing An Early Warning System

- GSI his currently started the pilot system in Bengal and Tamil Nadu, work is yet to start in other states as there are delays in collecting the threshold numbers.

- When it comes to rainfall, another challenge is the <u>lack of data across India as it is not recorded equally in every state</u>
- The unpredictable nature of the Indian weather has made it more difficult for researchers to prepare data

Way forward

- Risk areas should be identified in addition to monitoring and early warning systems installed at selected sites and threshold data collected at one place.
- Landslide education, awareness and capacity building among residents and local administration should be an important preparedness strategy.

{For CSIR landslide and flood Early warning System refer October Recitals}

World Soli Day (WSD)

Recently, ICAR (Indian Council of Agriculture Research) – Central Coastal Agricultural Research Institute (CCARI) celebrated World Soil Day (WSD).

About

- World Soil Day, observed every year on December 5, it brings people's attention to the importance of soil and its sustainable management.
- The international observance was recommended by the International Union of Soil Sciences (IUSS) in 2002.
- The day aims to raise awareness about the degrading condition of the soil, its impact and its prevention.
- FAO had supported the day to be celebrated as a global awareness-raising platform under the leadership of the Kingdom of Thailand and within the framework of the Global Soil Partnership
- UN General Assembly designated December 5, 2014, as the first official World Soil Day.

Kasturirangan Committee on Western Ghats

Recently, the Karnataka Government has informed the Centre government that the state is opposed to the Kasturirangan Committee report on Western Ghats.

Recommendations of Kasturirangan Committee Report

- **Area Covered:** It proposes **37%** of the total area of Western Ghats which is roughly **60,000 square kilometres**, to be declared as **eco-sensitive area (ESA).**
- **Activities Banned:**-It recommended a <u>blanket ban on mining, quarrying, setting up of red category industries and thermal power projects.</u>
- ➢ It also stated that the <u>impact of infrastructural projects</u> on the forest and wildlife should be studied before permission is given for these activities.
- **UNESCO tag:** It also stated that the <u>UNESCO Heritage tag</u> is an opportunity to build global and domestic recognition of the enormous natural wealth that exists in the Western Ghats.
- ➢ The 39 sites are located across Western Ghats and distributed across the states (Kerala 19), Karnataka (10), Tamil Nadu (6) and Maharashtra (4).
- **Role of state government:** The state governments should view this development and build a plan to protect, conserve and value the resources and opportunities of the region.

Why Have The Karnataka Rejected The Report

- The state of Karnataka has the highest percentage of the ESA- **46.50%.** The state government believes that implementation of the report will halt the developmental activities in the region. 20,668 sq km of the area falls in Karnataka covering 1,576 villages.

- The Kasturirangan report has been prepared based on the **satellite images**, but the ground reality is different. People of the region have adopted agriculture and horticultural activities in an eco-friendly manner.

- Karnataka believes that priority has been accorded for environment protection under the Forest Protection Act 1980. In this background bringing one more law that would affect the livelihood of the local people is not appropriate.

What Will Be The Impact On The Western Ghats If The Report Is Not Implemented

- Considering the changes in climate, if report is not implemented, it would affect the livelihood of all people and hurt the nation's economy.

- We will have to spend more money and resources to **rejuvenate the ecosystem** after it is destroyed, so it is prudent to preserve the fragile ecosystem.

- About 22 crore people are sustained by the Western Ghats, if the report is not implemented in good manner, it will hurt all those who depend on the Western Ghats.

Way Forward

- A holistic view of threats and demands on forest land, products and services, with clearly stated objectives for the officials involved, and strategies to deal with them.

- We must implement this report at the earliest because any delay in implementation will only deplete the country's most valuable natural resources.

Eco-Sensitive Areas

- Eco-Sensitive Areas (ESAs) are located within **10 kms around Protected Areas, National Parks and Wildlife Sanctuaries.**

- ESAs are area notified by the Ministry of Environment, Forest and Climate Change (MoEFCC) under Environment Protection Act 1986.

- The purpose of declaring ESAs is to create some kind of "shock absorbers" to the protected areas by regulating and managing the activities around such areas.

- They also act as a transition zone from areas of high protection to areas involving lesser protection.

Haiderpur Wetland

Recently, India has designated the Haiderpur wetland as the country's **47th Ramsar site and 10th** in Uttar Pradesh**.**

About Haiderpur wetland

- It is spread over an area of **6908 hectares** on the Muzaffarnagar-Bijnor border between the Ganges and the Solani River in **Western Uttar Pradesh**

- It is a **man-made lake** which was formed in 1984 and located within the boundaries of Hastinapur Wildlife Sanctuary.

- It provides habitat for numerous animal and plant species, including more than 30 species of plants, over 300 species of birds and many fish and mammal species.

- This diverse habitat supports more than 15 globally threatened species, such as the critically endangered gharial, endangered hog deer, steppe eagle and gold mahseer.

About Wetland

- A wetland is an area of land that is saturated with water either permanently or seasonally.
- Wetlands can be freshwater, brackish, or saline, which either be natural or human-made.

Importance of Wetland

- Wetlands (known as the Earth's kidneys) act as natural water purifiers, filtering sediment and absorbing many pollutants in surface waters.
- Wetlands along rivers and streams absorb energy and store water during storms, reducing flood damage and the risk of flash floods.
- They provide habitat for many species of amphibians, reptiles, birds and mammals that are uniquely adapted to aquatic environments.
- They cover a small portion of the planet, but they can store 50 times more carbon than rain forests.

Ramsar Site

- A Ramsar site is a wetland site designated to be of international importance under the Ramsar Convention.
- It is an intergovernmental environmental treaty established in 1971 by UNESCO, which came into force in 1975.
- It provides for national action and international cooperation regarding the conservation of wetlands and the intelligent sustainable use of their resources.

Earth's Black Box

Currently, a black box is being built, that will record the Earth's warming weather patterns.

- The vault will be constructed in **Tasmania, an Australian island state** off the south coast.

- The data will be stored on a giant, automated, **solar-powered hard drive** with a capacity to collect information for about **50 years**.

- The device aims to provide an unbiased account of the events that caused the planet's death, hold accountability for future generations, and prompt immediate action

- If civilization does crash, this box will survive with a completely objective data story.

- The box will be designed to be resilient to hazards including cyclones, earthquakes and attacks by sabotage, with its sloping walls.

- **Two different types of data will be collected** and stored inside the monolith.

  - ✓ On one hand, it will collect climate-change-related data like land and sea temperature measurements, species extinction, energy consumption, human population, ocean acidification, and atmospheric $CO2$ levels.
  - ✓ On the other, it will collect contextual data, like newspaper headlines and trending stories, key news stories and social media posts.

Solar Hamam

The Solar Hamam is essentially a heating system developed with the aim of generating heat in a **clean, environmentally-friendly way** to the households across mountainous regions. The Solar Hamam had won the "Himachal Pradesh State Innovation Award for 2016-17

How Does This System Work

- Within the first solar illumination of the day in the morning of around 30-35 minutes, it has the capacity to heat anywhere between 15-18 litres of water.

- It uses a solar panel to facilitate this heating process.

- The Solar Hamam consists of a unique anti-freezing outlet.

Significance

- It generates employment for the local population, thus boosting the region's economy.

- It is a cost-effective alternative for regular heaters. Locals have claimed to save a significant amount of money on electricity bills.

- It is also locally branded and patented invention which can generate revenue for the region.

- Residents do not have to bear the brunt of collecting firewood from the forests anymore. In the higher Himalayan region, 50% of fuelwood is consumed for the purpose of heating

Radioactive Pollution In Water

Recently, radioactive pollution in water and associated health impacts have been reported in many parts of the globe.

Radioactivity

- Radioactivity is the phenomenon of spontaneous emission of **particles or waves** from the unstable nuclei of some elements.
- There are three types of radioactive emissions - **Alpha, Beta and Gamma**.
- Radioactive elements are naturally found in the earth's crust.
- A small amount of radiation is found in all types of water but the extended amount of radiation is harmful to human health.

Measuring radioactive pollution

- Radioactivity is measured in **Becquerel** (SI unit) or in **Curie**.
- The unit **Sievert** measures the quantity of radiation absorbed by human tissues.
- Radioactivity in drinking water can be determined by a **gross alpha test**.

How Water Get Radioactive Contamination

- Among anthropogenic sources of radioactive pollution, nuclear weapons investigations, nuclear disasters, nuclear power houses and the dumping of radioactive waste are major sources of pollution.

- The entry of **naturally occurring radioactive substances (**NORMs) into the aquifer from soil sediments contaminates groundwater.

  - ✓ Uranium, thorium and actinium are three NORM series
  - ✓ Radium, a descendant of the NORM series, is one of the radiotoxic elements found in aquatic systems and can be penetrated into groundwater. Radium is formed by the decay of uranium (U) and thorium (Th) in the environment

- Sometimes, magma also releases radioactive gases into the environment. The deposition of these radioactive gases in waterbodies also causes radioactive contamination.

Concerns of Radioactive Contamination

- Have an effect on environment and can cause a risk to human healthiness if inhaled, injected or exposed.

- In the soil it react with and destroy various nutrients, making the soil highly toxic and infertile.

- Radioactive contamination prevents the stomata from evaporating. When the radiation reaches the chromosomes, reproduction is inhibited. In plants, this results in altered type, size and health.

- Causes various disorders in human physiology, including cancer, leukaemia, genetic mutations, osteonecrosis, cataracts and chromosomal disruption.

Way forward

- The proper analysis and monitoring of radioactive pollutants are required for a safe water supply.

- Prevention and precaution measures can check the anthropogenic sources
- Various treatment methods like aeration, reverse osmosis, ion exchange and granule carbon adsorption are effective remedial measures for treating the radioactive contaminated water.

India's First Green Hydrogen Microgrid Project

Recently, State-run NTPC Ltd has awarded India's first green hydrogen microgrid project at its Simhadri plant in Andhra Pradesh.

About The Project

- It is India's first green **hydrogen-based energy storage** project.
- Under this project, hydrogen would be produced using the advanced **240 kW solid oxide electrolyser** by taking input power from the nearby **floating solar project**.
- ➢ NTPC had commissioned the development of **India's biggest** floating solar plant in **Telangana's Ramagundam**

Significance of The Project

- This project could be a precursor to large scale hydrogen-based energy storage projects.
- It would help study and deploy multiple microgrids in various off-grid and strategic locations of the country.
- Project has been implemented in line with the vision of India to become carbon neutral by 2070.

About Green Hydrogen

- Green hydrogen is hydrogen that is produced by splitting water into hydrogen and oxygen using an electrolyser powered by renewable energy sources such as wind and solar.
- Certified green hydrogen requires an emission reduction of >60-70% below the benchmark emissions intensity threshold.

Challenges With The Green Hydrogen

- We need **high energy requirement** in **compressed hydrogen** storage, due to low specific gravity.
- Only a handful of Indian companies manufacture electrolysers, which are used to generate green hydrogen
- According to The Energy and Resources Institute (TERI), the cost of green hydrogen production is **$5-$6 per kg**. At this rate, it is not easy for industries like steel, fertilizer and long-range shipping to adopt this fuel.

Way forward

- We need to cut down the production cost of green hydrogen, but this reduction in prices will not be possible unless we start manufacturing electrolysers on a much larger scale in India.
- The government could bring a Production-Linked Incentive (PLI) scheme for manufacturing electrolysers for producing green hydrogen.
- To promote clean fuels, India should consider making it mandatory for fertilizer plants and oil refineries to purchase green hydrogen.

Other Forms of Hydrogen

Brown hydrogen	• Produced using coal where the emissions are released to the air
Grey hydrogen	• Produced from natural gas where the associated emissions are released to the air
Blue hydrogen	• Produced from natural gas, where the emissions are captured using carbon capture and storage

Water Innovation Challenges Initiative

Recently, the Atal Innovation Mission, NITI Aayog and the Royal Embassy of Denmark to India announced the second edition of water innovation challenges.

About The Initiative

- It is an initiative is to address the global water woes through innovations as part of the **Indo-Danish Bilateral Green Strategic partnership.**

- The initiative aims to identify innovative & next-gen solutions to solve proposed challenges in collaboration with corporate and public partners.

- The initiative will engage young talents from leading universities and innovation hubs across the nation to build their skills and apply their technical disciplines and innovation capacity.

- The winners of the challenges will also represent India at the International Water Congress 2022.

Significance

- This collaboration will provide solutions to improve sustainable water supply and mitigate the water-related issues faced by our country and the world.

- This will aid in catalysing global cross-sectorial learning environments, innovation & impact on SDGs.

> **Indo-Danish Bilateral Green Strategic partnership**
>
> - The Prime Ministers of India and the Denmark co-chaired a virtual summit on September 28, 2020, during which the two PMs agreed to elevate India-Danish ties to a Green Strategic Partnership.
>
> - The partnership aims to advance political cooperation and expand economic ties between the two countries, including green development, creating jobs and strengthening cooperation on addressing global challenges and opportunities.

Wild Life (Protection) Amendment Bill, 2021

Recently, the government proposes an amendment to Wildlife Protection Act 1972.

What Are New Amendments

- The amendments propose to streamline wildlife management and monitoring by setting up **standing committees** of **state wildlife boards**.

- These committees will act like the National Board for Wildlife. It will be able to make decisions on wildlife management and permissions granted for projects without having to refer most projects to the NBWL.

- It also proposes to insert a **new chapter VB** in the parent Act for the regulation of international trade in endangered species of wild fauna and flora.

- The Ministry has also **rationalized Schedules** for Wildlife under the Act, bringing it **down from 6 to 4 major schedules.**

- A new **section 42A** has also been inserted. Any article or animal surrendered under this Section shall become the property of the State Government.

- The Ministry has also mandated that Wildlife Management Plans which are developed for sanctuaries and national parks across the country will now become a part of the Wildlife Act and will have to be approved by the Chief Wildlife Warden of the state. Earlier, the plans were approved through executive orders.

Need for The Amendment

- It seeks to ensure that the Wildlife Protection Act,1972 complies with the requirements of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

- CITES is a multilateral treaty to protect endangered species. One of its main objectives is to regulate the international trade of animals and plants so that it does not threaten their existence.
- India has been blacklisted by CITES once before, and if a second blacklisting were to happen, then India will no longer be able to trade in important plant specimens. This would affect the livelihood of a large section of Indian society that relies heavily on this trade.

Wildlife (Protection) Act, 1972

- India is the first country in the world which has made provisions for environmental protection in the constitution.
- The Act provides for the constitution of a wildlife advisory board, wildlife wardens, specifying their powers and duties. The Act created six schedules which gave varying degrees of protection.

Schedules of the Wildlife Protection Act

- **Schedule I** - The species is prohibited for hunting and trading throughout India, except as a threat to human life. Example - Tiger, Blackbuck, Himalayan brown bear, Dolphin, Cheetah, Hornbill etc.
- **Schedule II** - Animals under this list are also accorded high protection, trade is also prohibited. Examples - Assamese Macaque, Bengal Hanuman langur, Indian Fox, Flying Squirrel, etc.
- **Schedule III & IV** - This list is for species that are not endangered, it includes protected species but the penalty for any violation is less compared to the first two schedules. Hunting and trading isn't allowed. Examples - hyena, Himalayan rat, Malabar tree toad, etc.
- **Schedule V** - This schedule contains animals that can be **hunted (vermin).** Examples - mice, rats, common crow, fruit bats, etc.
- **Schedule VI** - The specified **endemic plants** in Schedule VI are prohibited from cultivation and planting. Examples - pitcher plant, blue vanda, red vanda etc.

Thar Desert Expanding Fast

- Recently, the Central University of Rajasthan conducted a study on desertification of the Thar region.
- The study is as part of an assessment of the environmentally sensitive areas within the framework of the UN Convention to Combat Desertification (UNCCD).

Key Findings Of The Study

- Thar desert in western Rajasthan is expanding fast because of migration of people, changes in the rainfall pattern, spread of sand dunes and unscientific plantation drives.
- Unchecked mining activities would result in the sandstorms travelling to NCR and Delhi. The sandstorms will hit this area because of the desert expanding in the eastern direction.
- Reduction in vegetation cover in the areas adjacent to the Thar desert, contributing to its expansion beyond four districts in western Rajasthan.
- The study, was focused on Barmer, Jaisalmer, Bikaner and Jodhpur districts covering more than 50% of Thar desert.
- It also found that the vegetation cover and waterbodies had increased in the area in the last 46 years and the complex sand region had decreased by 4.98%.

Reason For The Expansion

- The biggest reason contributing to desertification turned out to be water erosion, 64.69% of mapped area is facing wind erosion.

- Some other reasons for accelerated desertification are human-induced activities like fast urbanization, deforestation, mining, indiscriminate use of groundwater, rise in livestock population, and the hot summers leading to evaporation.
- Large-scale mining has been mapped in Jhunjhunu, Jalore, Jodhpur, Barmer for the minerals and building materials, which has impacted the equilibrium.

Effects of Desertification

- Reduction in crop yields
- Without farms in these areas, the food produced on those farms would be very scarce, and people living in those local areas would be much more likely to try to cope with hunger problems.
- The water quality will be much worse than before.
- Animals and people will move to other areas where they can actually thrive. This causes overpopulation.
- Habitat destruction and desertification can also contribute to the loss of biodiversity.

Way forward

- The greatest hope for immediate recovery from desertification is covering bare soil with living or dead plant material (litter) to restore soil health.
- Plantation of trees in the affected areas not only prevents desertification but also fights with additional environmental issues.
- Mining should be regulated by governments to keep nature reserves intact and protect natural habitats.
- By educating people on sustainable practices, more land will be saved from becoming a desert.

About Thar desert

- The Thar Desert, also known as the Great Indian Desert, is a large, arid region in the north-western part of the Indian subcontinent.
- In Pakistan, the desert covers eastern Sind province and the south-eastern portion of Pakistan's Punjab province.
- It has an area of more than 200,000 sq. km., and currently is the world's seventh largest desert.

Flex Fuel Vehicles

- Recently, Union Minister for Road Transport and Highways advised to start manufacturing **Flex Fuel Vehicles (FFV) and Flex Fuel Strong Hybrid Electric Vehicles (FFV-SHEV).**
- The production will comply with **BS-6 Norms** in a time bound manner within a period of six months.

About flexible-fuel vehicle (FFV)

- FFV are called as "dual-fuel vehicle". They have engines that can run on flexible fuel — a combination of petrol and ethanol, which can include up to 100% ethanol.
  - ✓ FFVs are capable to run on a combination of 100% petrol or 100% bio-ethanol and their blends.
- On the other hand, FFV-SHEVs are capable of running on strong Hybrid Electric technology.
  - ✓ Strong hybrid is another term for full hybrid vehicles, which have the capability to run solely on either electric or petrol modes.
  - ✓ In contrast, mild hybrids cannot run purely on one of these modes and use the secondary mode merely as a supplement to the main mode of propulsion.
- The FFVs are different from the bi-fuel vehicles, wherein two fuels are stored in separate tanks and the engine runs on one fuel at a time.

Advantages of FFV

- It reduced dependence on petrol/diesel and thus reduced dependence on oil imports from other country.
- It contributes fewer greenhouse gases, making it a more environmentally friendly option than traditional gasoline.
- Many FFVs run on ethanol, which is sustainably produced from ingredients such as cane sugar and corn.
- Provides employment opportunities for setting up bio-ethanol plants across India.

Challenges

- One of the main concerns about FFV is its **gas mileage**, some experts has claim FFV have lower gas mileage.
- Ethanol absorbs dirt easily, which can potentially corrode and damage to the engine.
- Diversion of food crops to ethanol production which can cause food scarcity.

Way forward

- To Introduce FFVs we will require adoption of vehicle standards, technologies and retrofitting configurations.
- We need additional investment in production lines and technology transfers to change the character of the vehicles.
- Most importantly, if we want proper implementation of FFVs we need to increase the ethanol production in India.

GJ 367b

Recently, the astronomers found **GJ 367b**, a small planet that is circling a **dim red dwarf star**. It's one of very few rocky, Earth-sized planets astronomers have found so far.

About GJ 367b

- The star lies about 31 light-years away from the sun in the constellation of Vela.
- The planet is about **three-quarters** of the size of Earth, and 55% the mass of the earth. This makes GJ 367b one of the **lightest known exoplanets**.
- It takes <u>less than eight hours</u> to complete its orbit. Thus, it is called the Ultra Short Period Planet.
- The researchers calculated that 86% of GJ 367b is composed of **iron**, with an <u>interior structure resembling Mercury.</u>
- It is way too hot to be habitable.
- Its discovery shows that we can both find Earth-sized planets around other stars and measure their properties.

TESS & HARPS

- **TESS is Transiting Exoplanet Survey Satellite.** The GJ 367b was identified using the data provided by TESS. TESS revealed the super short orbital period of GJ 367b.
- **HARPS (High Accuracy Radial Velocity Planet Searcher)** helped esearchers to calculate mass of the planet. HARPS is an instrument installed on a 3.6 m telescope located in European Southern Observatory, Chile

Mystery Behind The High Abundance Of Lithium In Stars

Recently, the abundance of lithium was confirmed after the experts conducted a large survey named **GALAH (**named after a common Australian bird)**.** The mystery is the reason behind the high abundance of Lithium in stars, which according to <u>predicted models must get destroyed in the hot plasma of the star</u>.

Key Findings

- **Research Methodology**: The research surveyed a collection of about 500,000 stars with well-determined physical and chemical properties, including lithium abundances
- Scientists from the Indian Institute of Astrophysics (IIA) Bangalore have discovered clues to the secret behind the high abundance of the element in some evolved stars.
- They have confirmed that the production of lithium is related to **burning of helium in core** of these stars.
- It is proposed to be a simple and short sequence of nuclear reactions involving a collision between the two stable helium isotopes which led to a stable lithium isotope.
- The survey revealed the rare presence of lithium-rich giants in all the Sun-like low-mass stars
- The observations were gathered on the 3.9 m Anglo-Australian Telescope at the Australian Astrophysical Observatory.

About Lithium

- Lithium is a unique soft, silvery-white fragile element. It was the only metal produced in the Big Bang that created the universe.
- Chile has the largest reserves followed by Australia and Argentina
- Recently Researchers at the Atomic Minerals Directorate have estimated lithium reserves of 14,100 tonnes

- in a small patch of land surveyed in Southern Karnataka.
- Lithium has several industrial applications, including heat-resistant glass, lithium grease lubricants, steel and aluminium production, lithium batteries, and lithium-ion batteries.
- Lithium is also used for treatment of mental illnesses, including bipolar disorder, depression, and schizophrenia.

A Plant-Based Chewing Gum That 'Traps' Coronavirus

- Recently, researchers have developed a chewing gum that can potentially reduce transmission of the SARS-CoV-2 coronavirus.
- According to the study, the SARS-CoV-2 spike protein binds with the **ACE2 protein receptors** on some human cells, facilitating its multiplication and spread.
- The researchers have developed the chewing gum containing copies of the ACE2 protein receptors with the hope that the virus particles would bind to them instead, leading to a lower viral load in the oral cavity.
- The chewing gum targets the virus in the saliva, and does so by trapping it with the ACE2 protein.
- The chewing gum is laced with a plant-grown protein, which serves as a "trap" for the virus.
- This reduces viral load in saliva and potentially tamps down transmission.

Vertical Launch Short Range Surface to Air Missile (VL-SRSAM)

DRDO tested the "vertical launch-short range surface-to-air missile" designed for deployment onboard Indian Naval warships, successfully.

About VL-SRSAM

- It is a quick reaction missile indigenously developed by DRDO for neutralising various aerial threats at medium and close ranges, including sea-skimming targets, which are assets that fly as close as possible to sea surface to avoid being detected by the radar's onboard warships.
- With lock on before launch (LOBL) and lock on after launch (LOAL) capability, the missile receives mid-course update via datalink.
- It intended to replace older **Barak 1** (surface to air missile system) onboard Indian Navy warships.
- It is based on **Astra Mark 1** (air-to-air missile) and the new system can engage targets at around 15 km.

Significance

- Launch of this system will further boost the defence capability of Indian Naval Ships against aerial threats.
- It will also pave the way for integration of weapon systems onboard the Indian naval ships.

Laser Communications Relay Demonstration (LCRD)

Recently, NASA launched its new Laser Communications Relay Demonstration (LCRD).

About

- It is the NASA's **first-ever laser communications system**.
- The LCRD payload is hosted onboard the US Department of Defense's Space Test Program Satellite 6 (STPSat-6).
- It will be in a geosynchronous orbit, over 35,000km above Earth.
- The LCRD has **two optical terminals**: one for receiving data from user spacecraft, and the other for transmitting data to ground stations.

- The modem will translate the <u>digital data into a laser signal</u>. It will then be transmitted through an encoded beam of light. These capabilities make the LCRD NASA's first two-way, end-to-end optical relay.

BRCA Gene

- BRCA (Breast Cancer) genes are **proteins** associated with **breast tissues** that play a big role in preventing breast cancer.

- They help repair damaged DNA or destroy cells if the damaged DNA cannot be repaired. Because of this, the BRCA genes are known as **tumor suppressor or caretaker genes**.

- When this gene got altered or broken, it doesn't function correctly & lose the ability to repair DNA. This is called **BRCA gene mutation.**

Risks Associated With BRCA Mutations

- BRCA mutations are primarily associated with breast and ovarian cancer. However, in some cases, they are also linked with other cancers, especially in the abdominal and thoracic cavities.

- Current research suggested that **inherited BRCA gene mutations** account for **3%** of breast cancers and 10% of ovarian cancer each year.

- Women who have strong **matrilineal family history of breast/ovarian cancers** should get tested for BRCA mutations after consulting their gynecologists.

What Can Be Done After Testing

- Once you are tested positive, you will have to manage the risk of cancer properly with the help of a doctor.

- You will be asked to opt for certain lifestyle changes like adopting a healthy diet, exercise, and weight loss as suggested by the doctor.

- You will also be asked to go for **risk-reducing surgery** that is removing the tissue (such as the breasts or ovaries) that could become cancerous via mastectomy that can further lower the risk of breast cancer.

Facial Recognition Technology

- Currently, the Airports Authority of India is working on a **project of facial recognition technology** (FRT)-based **Biometric Boarding System** as part of the first phase of **Digi Yatra scheme.**

- After this, passengers will be able to use a **face scan as their boarding pass** at four airports (Varanasi, Pune, Kolkata and Vijayawada) in the country from 2022.

About Facial Recognition Technology

- Facial recognition is a type of image identification technology. It uses distinctive features of the face to identify and distinguish an individual.

- These technologies rely on many of the processes and techniques associated with **artificial intelligence** (AI). In particular, applications tend to use machine learning to classify subjects at speed and scale.

Use	Challenges
• This technology is widely in use to unlock smartphones, tablets and other such devices.	• The biggest challenge with facial recognition is the <u>infrastructural costs, technologies like Artificial Intelligence and Big Data are costly to implement</u>.
• Law enforcement agencies can use facial recognition to locate **missing persons** and <u>identify the perpetrators of crimes</u>.	• The **size of the information** stored is huge and requires huge network and data storage facilities, which are currently not available in India.
• It can also be used to find criminal	• Facial recognition represents a further <u>eroding of</u>

Stand-Off Anti-Tank (SANT) Missile

DRDO and Indian Air Force tested the Stand-off Anti-tank (SANT) missile from Pokhran ranges.

About SANT Missile

- It is indigenously designed and developed air-to-surface missile.

- It is a **fourth generation** upgraded variant of HELINA missile developed for long distance airborne anti-armour role. HELINA (Helicopter-launched Nag) is air-launched version of Nag with extended range.

- The missile has been designed and developed by Research Centre Imarat (RCI), Hyderabad in coordination with other DRDO labs and participation from industries.

- It is equipped with a state-of-the-art millimeter wave seeker, which provides high precision strike capability from a safe distance.

- The weapon can neutralise targets in a range up to 10 kms.

- The missile has both **lock-on before launch** and **lock-on after launch** capability.

{For more on Helina, Please refer September Recitals}

NASA's IXPE Mission

Recently, NASA launched a new mission named **Imaging X-ray Polarimetry Explorer** or IXPE.

About IXPE mission

- IXPE observatory is a joint effort of **NASA** and **Italian Space Agency.**

- The IXPE observatory is dedicated to measuring the polarization of X-rays from the most extreme and mysterious objects in the universe – supernova remnants, supermassive black holes, and dozens of other high-energy objects.

  By measuring the polarization of these X-rays, we can study where the light came from and understand the geometry and inner workings of the light source.

- The mission's primary length is **two years** and the observatory will be at **600 kilometres altitude**, orbiting around Earth's equator.

- IXPE is expected to study about 40 celestial objects in its first year in space.

Pinaka Extended Range System

A series of successful test-firing of the Extended Range Pinaka rocket system (Pinaka-ER) has been carried out at various test ranges.

About Pinaka- ER

- Pinaka-ER, which is an upgraded version of the Pinaka Mk-1.

- The enhanced range version of the weapon can destroy targets at a distance beyond **45 km**.

- The system is jointly designed by laboratories of DRDO – Armament Research & Development Establishment (ARDE), Pune and High Energy Materials Research Laboratory (HEMRL), Pune.

About Pinaka

- The Pinaka, a **Multi-Barrel Rocket-Launcher** (MBRL) system, can fire a salvo of **12 rockets** over a period of **44 seconds.**

- The development of Pinaka was started by the DRDO in late 1980s, as an alternative to the multi barrel rocket launching systems of Russian make called 'Grad', which are still in use.

- After successful tests of Pinaka, it was first used in the battlefield during the Kargil war of 1999 quite successfully.

- Pinaka Mk-1 has a range of 37.5 km and the Pinaka Mk-II has a range of 60 km.

- The guided version of Pinaka has also been developed and tested multiple times and has a range of 75 km.

- An extended range version of the Pinaka Mk-II and Pinaka Mk-III are also said to be under development.

SMART System

India successfully tested a long-range **Supersonic Missile Assisted Torpedo** (SMART) system.

About SMART System

- SMART is a next-generation missile-based standoff torpedo delivery system developed by the DRDO for the Indian Navy.

- The system has been designed to enhance anti-submarine warfare (ASW) capability far beyond the conventional range of the torpedo.

- It is also a **canister-based missile system** consisting of advanced two-stage solid propulsion, electromechanical actuators and precision inertial navigation.

- It covers most of its flight in the air at **lower altitudes** with **two-way data link** from the warship or an **airborne submarine target detection system** and provides the exact location of the hostile submarine to correct its flight path midway.

- Just when it approaches close enough to the submerged submarine, missile will eject the torpedo system into the water and the autonomous torpedo will start moving towards its target.

NASA's Parker Solar Probe Enters The Sun's Atmosphere

Recently, NASA has announced that the Parker Solar Probe has flown through the Sun's upper atmosphere, the corona, for the first time.

About Parker Solar Probe

- It is a NASA space probe launched in 2018 with the mission of making observations of the **outer corona** of the Sun.

- Parker Solar Probe is making discoveries that others spacecraft couldn't, because they were too far away.

- It is set to fly into the sun's corona within 3.8 million miles from the solar surface, seven times closer than any other spacecraft.

- Parker Solar Probe will revolutionize our knowledge of the origin and evolution of the solar wind.

What Is Alfvén's Critical Surface

- Parker Solar Probe has officially touched the sun. This point is known as the Alfvén critical surface. This point basically marks the end of the solar atmosphere & beginning of solar wind

- Unlike Earth, the Sun doesn't have a solid surface. But it does have a superheated atmosphere, made of solar material bound to the Sun by gravity and magnetic forces. However, as rising heat and pressure push that material away from the Sun, it reaches a point where gravity and magnetic fields are too weak to contain it.

Primary Goals

- To trace the **flow of energy** and to understand the heating of the solar corona and to find out what accelerates the solar wind.

- Determine the composition and dynamics of **plasma and magnetic fields** at the sources of solar wind.
- Explore the dusty plasma near the Sun and its effect on the formation of the solar wind and solar energetic particles.

OSCAR 1 (Orbiting Satellites Carrying Amateur Radio)

- 12 December, 2021 was marked as the launch date of the first amateur radio satellite called OSCAR 1
- OSCAR 1, the first non-governmental satellite that was built by private citizens, was launched successfully on December 12, 1961, into the low Earth orbit.
- It lasted 22 days ceasing operation on January 3, 1962, and re-entered on January 31, 1962.
- OSCAR 1 didn't have any solar cell charging system.
- Operations of the satellite were set to last till the batteries discharged completely.

Xenobots

According to a recent study, Xenobots has become world's first living robots which can reproduce.

About Xenobots
- Xenobots are made up of a collection of **frog egg cells** instead of metals or plastics that can function as one tiny unit.
- The reason scientists classify them as robots is that they are designed and engineered to behave in very specific ways.
- They are engineered inside of a petri dish and can be programmed to move.
- The xenobot, which is a **millimeter wide**, has been described as a "**reconfigurable creature**".
- The xenobots were first designed in 2020 on a supercomputer at the University of Vermont and then assembled and tested by biologists at Tufts University in Massachusetts.

Significance Of A Xenobot
- Xenobots are allowing scientists to discover how cells come together to build a complex being.
- If xenobots are made up of human cells, rather than frog cells, they can be engineered into a useful medical device that can be implanted into a human and not trigger an immune response.
- There is some speculation that xenobots could be used to clean up our polluted oceans by collecting microplastics and also entering hazardous areas to clean up toxins or radioactive material.

Concerns Related To Xenobot
- Xenobots can help target certain diseases. However, they can also be used to hijack life functions for malicious purposes.
- Some argue that artificially creating living things is unnatural, egotistical or involves "playing God".
- Xenobots can be used for hostile biological purposes prohibited under international law.
- More advanced future xenobots could potentially malfunction and go rogue, and out-compete other species.

MicroAge Experiment

Recently, an experiment which is called MicroAge was launched to the International Space Station (ISS).

About The Experiment
- The MicroAge mission was launched by Scientists at the University of Liverpool, funded by the UK Space Agency, on a **SpaceX Falcon 9 rocket**.

- Human muscle cells will be launched into space as part of an experiment to help people live longer and healthier lives.

How Cells Will Be Sent To Space?

- Human cells have been put into small 3D holders.

- Once in space, they will be <u>electrically stimulated to induce contractions</u> in the muscle tissue.

- Researchers will then take a closer look at what happened and compare the findings with what is happening on Earth.

- The findings are expected to help solve the puzzle of why human muscle cells decrease with age.

- The experiment will return to Earth in January 2022 for further analysis.

What Led To This Experiment?

It is known for a long time that astronauts in space tend to lose muscle rapidly. So, people have speculated if that is an accelerated ageing phenomenon. Astronauts at the space station had an analogous problem. Each astronaut on space station exercises at least 2.5 hours each day. Despite this fact, they lose a significant amount of muscle. They find it difficult to walk for a while, after they return back to earth. Thus, this experiment will be conducted to study the ageing phenomenon.

Pralay Missile

India successfully conducted the flight test of indigenously developed Pralay missile.

About Pralay Missile

- Pralay is India's first conventional **quasi-ballistic** short-range **surface-to-surface** missile, developed by DRDO.

- A quasi-ballistic missile has a low trajectory, and while it is largely ballistic.

- It has the ability to change its path after covering a certain range mid-air.

- With a range of 150 to 500 km, Pralay is powered with solid propellant rocket motor and it has a payload capacity of 500-1,000 kg.

- It can be launched from a mobile launcher.

Significance

- The guidance system of Pralay consists of a state-of-the-art navigation system and integrated avionics.

- The advanced missile has been developed in a way to able to defeat interceptor missiles.

Psyche Mission

NASA has announced that the Psyche mission is going to be launched in August 2022.

About this mission

- The Psyche mission will explore, for the first time ever, a giant metal asteroid called Psyche.

- Psyche asteroid orbits the sun in the main asteroid belt, between Mars and Jupiter.

- Mission management, navigation and its operations will be looked upon by NASA's Jet Propulsion Laboratory (JPL).

- Psyche is the 14th mission selected as part of NASA's Discovery Program.

Significance of the mission

- Scientists speculate that the asteroid could be the leftover piece of a completely different kind of iron-rich body that formed from metal-rich material somewhere in the solar system.

- If it turns out to be part of a metal core, it would be part of the very first generation of early cores in our solar system

Jnanpith Award

- Assamese poet **Nilmani Phookan Jr** and Konkani novelist **Damodar Mauzo** recently won the Jnanpith Award.
  - ✓ Phookan is a renowned poet and has written Surya Henu Nami Ahe Ei Nodiyedi, Gulapi Jamur Lagna, and Kobita.
  - ✓ Mauzo is known for his novels, such as Karmelin, and Tsunami Simon, and short stories Teresa's Man and Other Stories from Goa.
- Instituted in 1961, the Jnanpith Award is <u>the highest literary award in India</u> presented annually by the **Bharatiya Jnanpith**.
- It can only be <u>conferred upon an Indian citizen</u> and is given only to writers writing in Indian <u>languages included in the Eighth Schedule to the Constitution and English</u>, with <u>no posthumous conferral</u>.
- The first recipient of the award was the Malayalam writer G. Sankara Kurup who received the award in 1965 for his collection of poems, Odakkuzhal (The Bamboo Flute).

Rani Abbakka Chowta

- The silver jubilee of Veera Rani Abbakka Utsava was recently celebrated in Ullal City.
- Rani Abbakka Chowta was the **first Tuluva Queen of Ullal** who fought the **Portuguese** in the latter half of the 16th century.
- She belonged to the **Chowta dynasty** who ruled over parts of coastal Karnataka (Tulu Nadu).
- Their capital was Puttige. The port town of Ullal served as their subsidiary capital.
- The Portuguese made several attempts to capture Ullal as it was strategically placed, but Abbakka repulsed each of their attacks for over four decades.

Aurobindo Ghose

- Prime Minister has recently set up a 53 member committee to mark the **150th birth anniversary** of spiritual leader Sri Aurobindo on 15th August, 2022.
- Aurobindo Ghose was an Indian philosopher, yoga guru, poet and Indian nationalist. Born in 1872, in Calcutta he went on to complete his education at King's College in England.
- After returning to India he took up various civil service works under the Maharaja of the Princely state of Baroda.
- Later he became increasingly involved in the nationalist politics and joined the Indian National Congress in 1906.
- He was one of the founders of the youth club **Anushilan Samiti** which protested against the atrocities of the British government
- Aurobindo, a revolutionary and a militant nationalist, was charged in the **Alipore Bomb Case** (1906-1910) and was sentenced to jail.

Spiritualism

- He decided to give up active politics after his stint in jail and devoted himself to spiritualism. He reached Pondicherry in 1910, where his spiritual movement began.
- At Pondicherry, Sri Aurobindo developed a spiritual practice he called **Integral Yoga.** He believed in a spiritual realisation that not only liberated but transformed human nature, enabling a divine life on earth.

- In 1926, with the help of his spiritual collaborator, Mirra Alfassa (referred to as "The Mother"), Sri Aurobindo Ashram was founded.
- His main literary works are The Life Divine, which deals with the philosophical aspect of Integral Yoga; Synthesis of Yoga, which deals with the principles and methods of Integral Yoga; and Savitri: A Legend and a Symbol, an epic poem.

Durga Puja on ICH

- UNESCO's Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage (ICH) recently included '**Durga Puja in Kolkata**' on the Representative List of the **Intangible Cultural Heritage of Humanity**.
- Although celebrated across the country — notably in Tripura, Bihar, Jharkhand, Odisha, Assam, Maharashtra, Delhi, and Uttar Pradesh — and in neighbouring Bangladesh, the festival is celebrated notably in Kolkata.
- It marks the ten-day worship of the Hindu mother-goddess Durga. It is not only a celebration of the feminine divinity but is also an expression of dance, music, crafts, rituals, practices culinary and cultural aspects.
- The festival overcomes the boundaries of caste, creed, economic classes and joins the people together in its celebration.
- The recognition as a world heritage will not only attract more international tourists to Kolkata and Bengal, but will also lead to foreign investment in the festival.

UNESCO's List of ICH

- UNESCO established its List of ICH in 2008, when the 2003 Convention for the Safeguarding of the Intangible Cultural Heritage took effect.
- It was established with the aim of ensuring better protection of important intangible cultural heritages worldwide and the awareness of their significance.
- India is a signatory of the 2003 UNESCO Convention and has 14 ICH elements on the list. Overall, the list has 492 ICH elements.