



# CURRENT AFFAIRS

# OCTOBER 2021

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## Current Affairs | October 2021

### 1. 16<sup>th</sup> East Asia Summit:

- The Prime Minister of India has participated in the 16th East Asia Summit (EAS) through a video conference on October 27, 2021, during which he re-affirmed India's focus on a free, open and inclusive Indo-Pacific and the principle of ASEAN Centrality in the region.
- The 16th EAS was hosted under the Chairmanship of Brunei. This was the 7th East Asia Summit for Prime Minister Narendra Modi.

#### About the Summit:

- The Summit ended with the adoption of three Statements by EAS leaders, which includes, Mental Health, Economic recovery through Tourism and Sustainable Recovery.
- Established in 2005, the East Asia Summit is the premier leader-led forum in the Asia-Pacific region to deal with issues relating to security and defence for the strategic, geopolitical and economic evolution of East Asia.
- The members of EAS includes **10 ASEAN** member states, and India, China, Japan, the Republic of Korea, Australia, New Zealand, the United States and Russia.

### 2. 5<sup>th</sup> edition of India-Japan Maritime Bilateral Exercise:

- Recently, India and Japan held the fifth edition of the bilateral maritime exercise, JIMEX, in the Arabian Sea from October 6 to 8.
- JIMEX series of exercises commenced in January 2012 with special focus on maritime security cooperation.

#### Highlights:

- The last edition of JIMEX was conducted in September 2020.
- The Indian Navy fielded its indigenous guided missile destroyer, INS Kochi, with Sea King MK 42B helicopter, and guided missile frigate INS Teg, with Chetak helicopter, a P-8I long range maritime reconnaissance aircraft and MiG 29K fighters. The JMSDF deployed its Izumo class helicopter carrier Kaga and guided missile destroyer Murasame along with their integral SH60K helicopters.

#### Objective:

- JIMEX-21 is being conducted with the aim of developing a common understanding of operational procedures and enhancing an inter-operability by conducting a multitude of advanced exercises, in the entire spectrum of maritime operations. These multi-faceted tactical exercises will consolidate the coordination developed by both the navies.

#### About JIMEX Exercise:

- JIMEX series of exercises was started in January 2012. It mainly focuses on maritime security cooperation. These exercises are conducted between Indian Navy and Japanese Maritime Self-Defense Force, biennially.

#### Other Military Exercises between both the countries:

- Besides JIMEX, India and Japan conduct a joint land military exercise called 'Dharma Guardian', annually. They also conduct a Joint Air Force exercise called 'Shinyuu Maitri'. India and Japan are also involved in a Trilateral Maritime Exercise called Malabar with the USA.

### 3. Annual International G-20 Conference:

- Recently, the 13th Annual International G-20 conference was held (October 6, 2021). India was represented by the Finance Minister (FM).

#### Highlights:

- During the conference, the FM informed that India is working for identifying the vacuum areas in international policy coordination, in the backdrop of assuming the G20 presidency in 2023.
- India is also working for strengthening the effectiveness of institutions such as FATF (Financial Action Task Force) and IMF (International Monetary Fund).
- According to FM, G20 presidency will provide an excellent platform for India for putting forward its vision regarding the future reflecting sustainability, innovation, inclusiveness and justice. Road to India's 2023 presidency is interesting and challenging.

#### **Themes and Priorities set by India:**

- Themes and priorities that India has placed before the G20 reflects those issues wherein emerging market economies can work jointly in order to enable G20 to play a more constructive role across the global policy arena.
- The theme will also reaffirm the importance of multilateral cooperation and ensure that multilateralism leads to expansion of opportunities. It will also provide direction to G20 in reaching out to global community beyond the G20 membership.

#### **Impact of US taper tantrum on India:**

- In 2013, when erstwhile chairman of the Federal Reserve (Ben Bernanke) spoke of possible financial tightening, investors dumped financial assets in emerging markets en masse and moved their capital to safe-haven assets in developed markets. This came to be known as the '**taper tantrum**'. This collective reactionary panic that triggered a spike in U.S. Treasury yields.
- The main worry behind the taper tantrum stemmed from fears that the market would crumble, as the result of the cessation of Quantitative easing (QE).
- The five members of the Fragile Five include Turkey, Brazil, India, South Africa and Indonesia.
- On US 'taper tantrum' impact on India, FM said, India has learnt its lessons from the taper tantrum that led India to being included in 'fragile five' economies.
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#### **Presidency of G20:**

- Emerging market economies will hold the presidency for G20 presidency till 2025. Indonesia will hold it in 2022 while India in 2023.

#### **What is Quantitative Easing?**

- When economic times are hard, people worry about losing their jobs, and grow wary about spending money. Businesses see their customers staying away. They start losing money, and may have to lay off workers.
- In such a situation, central bank i.e. RBI would try to make things better by cutting interest rates.
- Lower rates mean people get less interest on savings, so it's less attractive to save money than to spend it. And lower interest rates make it cheaper to borrow money, so it's easier to buy a new house, or car, or expand business.
- It usually involves a country's central bank purchasing longer-term government bonds, as well as other types of assets.

#### **4. India-Croatia joins hands for research in Traditional Medicine Systems:**

- Recently, India and Croatia have signed an agreement for academic collaboration in traditional medicine systems, especially in the field of ayurveda.
- The Memorandum of Understanding was signed between the All India Institute of Ayurveda and Croatia's Kvarner Health Tourism Cluster. AIIA is an autonomous body under the Ministry of Ayush.

#### **Importance:**

- The agreement is significant because it will help in promoting Indian traditional medicine system across European countries. It is a significant step to boost India's ties with other countries and

promote academic research, medical education, clinical & educational activities, training, and competency building.

#### **India-Croatia Relations:**

- India-Croatia Relations have been friendly since the era of former Yugoslavia.
- Yugoslavia disintegrated into six new countries during 1990s due to political upheavals & conflicts during early 1990s. These six countries are- Bosnia & Herzegovina, Macedonia, Montenegro, Serbia, Croatia and Slovenia. Croatia is an important Central European country because of its geo-strategic location and membership of the European Union & NATO. The country is a significant Gateway to Europe through the Adriatic coastline.

#### **5. India-Australia inked 'Terms of Reference':**

- Recently, India and Australia signed the terms of reference (ToR) on September 29, 2021 to conduct navy to navy talks. It is the first such document, which was signed by the Indian Navy with any country.
- Termed as 'Joint Guidance' document, it sets Navy to Navy talks as the principal medium of the bilateral relationship.
- As per the pact, navy to navy talks will be conducted under the framework of 'Joint Guidance for the India-Australia Navy to Navy Relationship'.
- This document will be significant in consolidating the shared commitment in order to promote security, peace, stability and prosperity across the Indo-Pacific region.
- The ToR sets out several broad objectives to achieve deeper mutual understanding, trust and transparency in the bilateral talks. It also seeks to improve goodwill & understanding of each other's concerns & future directions. It will provide detailed guidance on "conduct of the talks" between both the countries.
- ToR also provides flexibility over implementation of separate agreements on the basis of specific outcomes of the talks.

#### **India-Australia Navy-to-Navy relations:**

- In 2005, the first Navy-to-Navy meeting with Australia took place. Since then, the two countries' navies have grown closer at all levels, and after more than a decade of bilateral negotiations, they are more devoted than ever to strengthening and deepening this vital Navy-Navy partnership.

#### **6. India, UK sign Forward Action Plan on power:**

- Recently, India and the United Kingdom have inked pact on 'Forward Action Plan on power & clean transportation, renewables, green finance, and green energy research' under its 2030 roadmap.
- 'Forward Action Plan' was discussed at the "3rd India-UK Energy for Growth Partnership-Ministerial Energy Dialogue", in the backdrop of "United Nations Climate Change Conference (COP-26)" which is set to start from October 31 in Glasgow.
- The action plan covers several topics such as energy storage, smart grids, charging infrastructure, green hydrogen, battery storage and need of mobilising investments across renewable energy.
- This action plan was agreed upon in the backdrop of India and the UK plan of exploring the possibility to set up a "world bank for green energy".
- Energy transition was also a major area of discussion. Both the ministers discussed regarding the ongoing energy transition activities in their respective countries. Primary focus area in the meeting was renewables like solar, wind, EVs and other alternative fuels.
- There hasn't been much grip on the Green Climate Fund that was set up to provide \$100 billion annually to the developing nations by 2020 in a bid to counter climate change.
- The UK had also announced a \$1.2 billion package for public and private investment earlier, in green & renewable energy projects. It also expressed its plan to collaborate with India on green hydrogen.

#### **Green hydrogen:**

- Green hydrogen is hydrogen that is generated entirely by renewable energy. Green hydrogen has significantly lower carbon emissions than grey hydrogen, which is produced by steam reforming of natural gas and represents 95% of the market.
- Most of the gas that is already widely used as an industrial chemical is either brown, if it's made through the gasification of coal or lignite; or gray, if it is made through steam methane reformation, which typically uses natural gas as the feedstock. Neither of these processes is exactly carbon-friendly.
- A purportedly cleaner option is known as blue hydrogen, where the gas is produced by steam methane reformation but the emissions are curtailed using carbon capture and storage. This process could roughly halve the amount of carbon produced.
- Green hydrogen could almost eliminate emissions by using renewable energy-increasingly abundant and often generated at less-than-ideal times -to power the electrolysis of water.

#### **7. India agrees to \$200 mn LoC to support Kyrgyzstan:**

- Recently, India agreed to provide a USD 200 million Line of Credit support for development projects in Kyrgyzstan. This line of credit was agreed upon after meeting between EAM S. Jaishankar and Kyrgyz Foreign Minister Ruslan Kazakbaev in Bishkek.

#### **India-Kyrgyz Republic Relations:**

- Diplomatic relations between India and Kyrgyz Republic Relations have become more significant in the 21st century. Initially in 1990s, it has remained passive. Both the countries seek to develop an extensive commercial and strategic partnership in Central Asia region. India recognised independence of Kazakhstan from the Soviet Union after Soviet Union got dissolved in 1992. In recent years, India is working towards increasing its commerce and strategic ties with Kazakhstan. Kazakhstan is significant because it occupies a major territory in Central Asia comprising of extensive oil, natural gas and mineral reserves. India seeks to expand its ties in the backdrop of increasing economic & strategic influence of China.
- India is working for the development of nuclear energy industry as a clean alternative for satisfying its huge energy needs. Kazakhstan has huge uranium required for nuclear energy. Thus, India is developing a strong relationship with Kazakhstan.
- Kazakhstan is the current Chair and initiator of CICA Forum.
- The Conference on Interaction and Confidence-Building Measures in Asia (CICA) is an inter-governmental forum for enhancing cooperation towards promoting peace, security and stability in Asia. It is a forum based on the recognition that there is close link between peace, security and stability in Asia and in the rest of the world. The key idea of the Conference is based on the priority of the indivisibility of security, joint initiative and mutually beneficial interaction of small and large states.

#### **8. G20 Leaders' Summit:**

- Recently, Leaders of Group of 20 (G20) nations meet in Rome, Italy at the 16th gathering at the level of Heads of State and Government.
- The leaders had elaborate deliberations on issues of global importance such as fighting the pandemic, improving health infrastructure, boosting economic cooperation and furthering innovation.
- The G20 leaders during their two-day summit, adopted the 'Rome Declaration' and the countries agreed that the COVID-19 immunisation is a global public good.
- They also, have agreed that the World Health Organisation would be strengthened to fast-track the process for emergency use authorisation for Covid-19 vaccines.

#### **Group of Twenty (G20):**

- The G20 is the international forum that brings together the world's major economies. Its members account for more than 80 per cent of world GDP, 75 per cent of global trade and 60 per cent of the population of the planet.
- **G20 has 19 countries and European Union (EU).** The group addresses major issues related to global economy like climate change mitigation, international financial stability and sustainable development. This grouping was founded in 1999 in the backdrop of several world economic crises.
- Since 2008, the group meets at least once a year. The G20 summits involves head of government or state, foreign minister, finance minister, and other high-ranking officials. EU is represented by European Commission and European Central Bank.

#### **9. IEA invites India to become full-time member:**

- Recently, the International Energy Agency (IEA) has invited India, the world's third-largest energy consumer, to become its full-time member.
- India became an Associate member of IEA in March 2017 but it was in engagement with IEA long before its association with the organization.
- Earlier in 2021, India also inked a Strategic Partnership Agreement with the IEA to strengthen cooperation in global energy security, stability and sustainability.
- As a natural corollary to the India IEA strategic partnership, IEA invited India to deepen its cooperation with IEA by becoming a full Member.

#### **Why membership is has been offered to India?**

- India is becoming increasingly influential in global energy trends. Its in-depth report on India's energy policies, which was released in January 2020, states that the country's demand for energy is set to grow rapidly in the coming decades, with electricity use set to increase particularly fast.
- The country's reliance on fuel imports makes further improving energy security a key priority for the Indian economy.

#### **International Energy Agency:**

- It is an autonomous Intergovernmental Organisation established in 1974 in Paris, France.
- The IEA is made up of 30 member countries. It also includes eight association countries. Four countries are seeking accession to full membership, Chile, Colombia, Israel and Lithuania.
- A candidate country to the IEA must be a member country of the Organisation for Economic Co-operation and Development (OECD).

#### **Eligibility Criteria:**

- A candidate country to the IEA must have:
- Crude oil and/or product reserves (Strategic Oil Reserves) equivalent to 90 days of the previous year's net imports, to which the government has immediate access (even if it does not own them directly) and could be used to address disruptions to global oil supply.
- India's current strategic oil reserves equal 9.5 days of its requirement.
- A demand restraint programme to reduce national oil consumption by up to 10%.
- Legislation and organisation to operate the Coordinated Emergency Response Measures (CERM) on a national basis.
- Legislation and measures to ensure that all oil companies under its jurisdiction report information upon request.
- Measures in place to ensure the capability of contributing its share of an IEA collective action.
- An IEA collective action would be initiated in response to a significant global oil supply disruption.

#### **10. Velyat: Iran's annual Air Defence Drill:**

- On 12 October 2021; Iran kicked off a massive, two-day air defense drill Velyat in the country's extensive central desert. The report said both the army and the paramilitary Revolutionary Guard were taking part in the annual maneuvers.



- Iran regularly holds such drills in order to assess the troops' combat readiness and demonstrate its military capabilities.

**Background:**

- Earlier in October, Iran had held a drill near its border with Azerbaijan. During the drill, it displayed military capabilities near a neighbour, for which Iran is increasingly skeptical for its ties to the West and Israel.
- This military drill was conducted in the light that, Azerbaijan and Israel have strengthened their military alliance in the recent months. Israel supplies high-tech drones to help Azerbaijan in its conflict with Armenia on Nagorno-Karabakh region.
- The Nagorno-Karabakh region remained on edge over Iran's escalating nuclear programme.

**2015 Nuclear Deal:**

- The nuclear deal with Iran is also known as the Joint Comprehensive Plan of Action (JCPOA).
- The JCPOA was the result of prolonged negotiations from 2013 and 2015 between Iran and P5+1 (China, France, Germany, Russia, the United Kingdom, the United States, and the European Union, or the EU).
- JCPOA was signed in 2015, but former US President Trump has withdrawn from it (in 2018) and embarked on a policy of 'maximum pressure' to coerce Iran back to the negotiating table.

**11. Northern Ireland Protocol:**

- The Northern Ireland Protocol aimed to avoid checks along the border between Republic of Ireland which comes under the EU and the Northern Ireland which comes under United Kingdom, after Brexit. However, since it came into force in the year early 2021, this protocol has sparked disagreements between the EU and the UK because it disrupted trade between Northern Ireland and the United Kingdom.

**The Protocol in details:**

- In the Brexit negotiations, all parties agreed that the protection of the 1998 Northern Ireland Peace Agreement (Good Friday Agreement) is a priority. This meant land border were kept open while avoiding the creation of new infrastructure. This was easily possible when both Northern Ireland and Ireland were part of the EU. Both parties automatically shared the same EU rules regarding trade and no controls were required on the goods which were moving between them. With the occurrence of Brexit a new arrangement regarding trade was needed.
- The EU requires that many products, such as eggs and milk, be checked on arrival from the various non-EU countries, while certain products, such as chilled meat, cannot be imported at all. The protocol agreed that Northern Ireland would continue to follow the rules which are related to EU on product standards to avoid all the checks occurring along the border. Instead, controls would be carried out on all the goods entering Northern Ireland from Scotland, England or Wales.

**How are checks done?:**

- There are checks in the ports of Northern Ireland and customs related documents must be completed. This has drawn criticism for the fact that a new border has been created in the Irish Sea. Until now, the full effect of the protocol has been limited by the suspension of the conducted checks which are so-called grace periods in some certain areas.

**Changes asked for by the UK:**

- The UK has made proposals to modify the protocol. These include the abolition of checks between the Northern Ireland and the. The UK has also proposed a new system that allows goods to circulate freely in Northern Ireland if they comply with UK or the EU regulations. They currently have to meet the EU standards. The UK government also wants to eliminate the role of the Court of Justice of the European Union and the European Commission in overseeing the operation of the protocol.

**Proposal of the European Union:**

- The EU said that the renegotiation is not possible and both the parties should honor the agreement. However, it has made proposals that it believes would reduce the checks which are conducted on food arriving in Northern Ireland by 80% and cut associated paperwork by half. The European Union also proposed reducing customs related information that companies must provide and intends to enact laws allowing drug trade between the Northern Ireland and the UK.

## **12. BRICS Joint Statistical Publication:**

- The 13th Meeting of Heads of National Statistical Offices of BRICS (Brazil, Russia, India, China, South Africa) Countries was held virtually under the Chairship of India on Thursday. Dr. G. P. Samanta, Chief Statistician of India and Secretary, Ministry of Statistics and Programme Implementation (MoSPI), Government of India chaired the meeting.
- The meeting was attended by representatives from the National Statistical Offices (NSOs) of BRICS Countries. During the meeting, the Joint Statistical Publication (JSP) 2021 and JSP Snapshot 2021 for BRICS Countries were released.
- The theme of the meeting was NSOs efforts in monitoring Sustainable Development Goals (SDGs) wherein speakers from BRICS NSOs highlighted efforts taken so far as well as future plan in terms of data and methodologies in monitoring of SDGs.

### **Joint Statistical Publication 2021 (JSP 2021):**

- First chapter of JSP 2021 highlights a general information with comparable statistics of the BRICS countries namely, Brazil, Russia, India, China and South Africa. On the other hand, other 14 chapters provides different aspects of the past development as well as current status of the individual nations.

### **JSP Snapshot 2021:**

- National Statistical Office (NSO) of India also brought the first BRICS JSP Snapshot 2021. It is a shorter version of Joint Statistical Publication. It is released for engagement of wide range of users, in accordance with the agreement by member countries.

## **13. US issues passport with 'X' gender marker:**

- Recently, the United States issued first passport with an "X" gender marker, recognising the rights of people who are not identified as male or female.
- The United States joins a handful of countries, including Australia, New Zealand, Nepal and Canada, in allowing its citizens to designate a gender other than male or female on their passports.
- This step was taken following the fight of Dana Zzyym, who is an intersex activist from Fort Collins. Zzyym has battling legally with the US State Department since 2015 to get a passport that did not require Zzyym to lie about gender by selecting either male or female.

### **What is the issue with Zzyym?**

- Zzyym was born with ambiguous physical sexual characteristics but was raised as a boy. Zzyym underwent several surgeries that failed to make Zzyym appear fully male. In the Navy, Zzyym served as a male but later came to identify as intersex while studying and working at Colorado State University.
- US state department denial of Zzyym's passport, stopped Zzyym from attending two Organization Intersex International meetings.

### **LGBT rights in US:**

- In the United States, 'Lesbian, gay, bisexual, and transgender (LGBT) rights' have evolved significantly with time. All 50 states in USA had criminalized same-sex sexual activity until 1962. However, by 2003, USA had invalidated all the remaining laws against same-sex sexual activity.
- By 2015, they won the right to marry in all 50 states in USA. In many states and municipalities of US, LGBT are explicitly protected from discrimination in housing, employment, and access to public accommodations.

#### **14. Ecuador: Emergency declared over crime wave:**

- Recently, Ecuador has declared a state of emergency because of crime wave.
- The President of Ecuador, Guillermo Lasso, announced a 60-day state of emergency on October 19, 2021 because of rise in violent drug crimes.
- The announcement was made on the eve of a visit by US Secretary of State Anthony Blinken.
- Both the leaders are set to discuss questions of defence, security, and trade.
- With the announcement of state of emergency, soldiers in riot gear reached to reinforce authorities following the protest by street merchants.
- Ecuador is currently grappling with a surge in violent crime and deadly prison riots.
- Government of Ecuador has pointed to drug trafficking and its consumption as the underlying cause and problem.

#### **About Ecuador:**

- Ecuador is located in north-western South America. It is bordered by Colombia, Peru and Pacific Ocean. The country also includes the Galapagos Islands in the Pacific. This island is located at about 1,000 kilometres west of the mainland. Quito city is the capital of Ecuador.
- The territories of present-day Ecuador were once home to several Amerindian groups. They were gradually incorporated into the Inca Empire during 15th century. During the 16th century, the territory was colonized by Spain. It achieved independence in 1820 as part of Gran Colombia. Ecuador emerged as its own sovereign state in the year 1830.
- Spanish is the official language of Ecuador. It is spoken by majority of the population. However, country has recognised 13 Native languages including Shuar and Quechua.

#### **15. Russia to help India tackle Coal Shortage:**

- Recently, India and Russia have signed a memorandum of understanding (MoU) to collaborate in mining and steel sector.
- The MoU specially focuses on coking coal.
- Signing of the deal is part of India's National Steel Policy 2017. Under National Steel Policy 2017, India aims to reach 300 million tonne steel production by 2030. It is also working on forward and backward integration.
- The MoU envisages on the implementation of commercial activities and joint projects in coking coal. Commercial activities include:
  1. Long-term supplies of high-quality coking coal to India
  2. Development of coking coal deposits as well as logistics
  3. Sharing of experience in technologies of mining & coking coal production management, Beneficiation, processing and training.
- MoU is significant as it was signed at a time when India's non-power industries like cement, aluminium and secondary producers of steel are facing severe thermal coal shortage.
- Presently, India imports its coking coal from Australia, which places the domestic steel industry at the receiving end with respect to pricing power. Almost all the primary producers of steel in India rely on imported coking coal for meeting their supplies.
- India has large coking coal reserves in Jharia district of Jharkhand. But the region continuously suffers from fire as a result, it remains unexplored for mining. Jharia region is estimated to have coking coal reserves of around 19.4 billion tonnes.

#### **Discussion of OVL with Russia:**

- ONGC Videsh Ltd (OVL) is also discussing to buy a stake in Russia's planned liquefied gas project Arctic LNG-2 and massive Vostok oil project. In the year 2018, Russia-owned Essar Oil sold India assets to Russian government owned Rosneft-led consortium for \$12.9 billion.

#### **16. India, US, UAE, and Israel form a new QUAD:**

- Recently, in a bid to counter China's 'expansionist' ambitions, India has teamed with United States (US), United Arab Emirates (UAE) and Israel to form a new 'quad' in the Middle East (West Asia).

#### **Abraham Accords:**

- The Abraham Accords are a joint statement between State of Israel, the United Arab Emirates, and the United States of America, reached on August 13, 2020.
- The term was also used to refer to normalisation agreements between Israel & UAE and Israel & Bahrain collectively. It is the first public normalization of relations between any Arab country and Israel since 1994. The accords have been named after Abraham, emphasizing the shared belief between Judaism and Islam. Both of them are Abrahamic religions which strictly support monotheistic worship of the God of Abraham.

#### **Key Points:**

- The meeting is being described in some quarters as a “new Quad”.
- This meeting is the first to bring four countries together on a single platform.
- Meeting will also be linked with India’s efforts of building new plurilateral and multilateral partnerships which focuses on cooperation in areas including security, connectivity and energy.

#### **Trilateral Cooperation:**

- India, Israel and the UAE have also stepped-up a trilateral cooperation, especially in trade and investment, after US negotiated for Abraham Accords in August 2020 between two West Asian countries.
- Under this partnership, an Israel-based company will produce a robotic solar cleaning technology in India which will be used for a project in the UAE.

#### **17. Pandora papers leak case:**

- Recently, several prominent Indian names have been included in the Pandora Papers leak.
- Pandora Papers are 11.9 million leaked files from 14 global corporate services firms which set up about 29,000 off-the-shelf companies and private trusts. There are over 300 Indian names in the leak, including over 60 prominent ones.
- The Pandora Papers reveal how trusts are used as a vehicle in conjunction with offshore companies set up for the sole purpose of holding investments and other assets by business families and ultra-rich individuals.
- The trusts can be set up in known tax havens which offer relative tax advantages.
- For Example: Samoa, Belize, Panama, and the British Virgin Islands.
- They reveal how the rich set up complex multi-layered trust structures for estate planning, in jurisdictions which are loosely regulated for tax purposes, but characterised by air-tight secrecy laws.
- Businesses have created a new normal after countries have been forced to tighten the laws on such offshore entities with rising concerns of money laundering, terrorism funding, and tax evasion.
- The Panama and Paradise Papers dealt largely with offshore entities set up by individuals and corporations respectively.

#### **Reasons for Setting up Trusts Overseas:**

1. **To maintain secrecy:** Overseas trusts offer remarkable secrecy because of stringent privacy laws in the jurisdiction they operate in.
2. **Maintain a degree of separation:** Businesspersons set up private offshore trusts to project a degree of separation from their personal assets.
3. **Avoid Tax in the Guise of Planning:** Businesspersons avoid their Non-resident Indians (NRI) children being taxed on income from their assets by transferring all the assets to a trust.
4. **Prepare for Estate Duty Eventuality:** There is a pervasive fear that estate duty, which was abolished back in 1985 will likely be re-introduced soon. Also, setting up trusts in advance will protect the next generation from paying the death/inheritance tax, which was as high as 85% in the more than three decades after its enactment (The Estate Duty Act, 1953).

5. **Flexibility in a Capital-Controlled Economy:** India is a capital-controlled economy. Individuals can invest only USD 2,50,000 a year under the Reserve Bank of India's Liberalised Remittance Scheme (LRS). To get over this, businesspersons have turned to NRI, and under Foreign Exchange Management Act, 1999, NRIs can remit USD 1 million a year in addition to their current annual income, outside India. Also, the tax rates in overseas jurisdictions are much lower than the 30% personal Income-Tax rate in India.
6. **Grey Areas of Indian Taxation:** After the Black Money (Undisclosed Foreign Income and Assets) and Imposition of Tax Act, 2015, came into existence, resident Indians have to report their foreign financial interests and assets.

#### **18. Italy unveils G20 Innovation League:**

- The current Italian Presidency of the G20 has unveiled G20 Innovation League. It is a new and unique initiative designed to drive forward innovative projects that help create a sustainable future.
- The initiative brings together the most promising startups from G20 countries together with institutions and investment funds so they can collaborate and develop innovative sustainable business projects.
- **G20 Innovation event** was held in **Sorrento, Italy**. It was supported by Ministry of Foreign Affairs & International Cooperation of Italy, Ministry of Economic Development of Italy and Ministry of Technological Innovation & Digital Transition of Italy.
- This movement is significant and has been given focus in the backdrop of Covid-19 pandemic and global challenges the pandemic has presented. In this situation, the real challenge is to encourage new international investments and strengthen cooperation among the public & private actors on innovation.
- Start-ups called to present their projects. In order to propose sustainable technological solutions, they took part in five challenges. At the first stage of competition, G-20 countries nominated their promising start-ups. At the second stage, 100 start-ups who made it to finals, were evaluated.
- Start-ups competed in five categories namely, Clean technology, Artificial Intelligence, Smart Cities & New Mobility, IoT Technology & Wearable Devices and the Future of Healthcare.

#### **19. Nano Nitrogen Liquid Fertilizer:**

- Recently, Sri Lanka has received the first consignment of 3.1 million litres high quality non-harmful Nano Nitrogen liquid fertiliser from India to help the island nation's Eastern province in the cultivation of maize and paddy(OCTOBER 20).
- The import of Nano Nitrogen liquid fertiliser came months after President Gotabaya Rajapaksa's decision in May to stop chemical fertiliser imports sparked anger and widespread protests in the farmland districts of the country.

#### **Background:**

- Sri Lanka imported the Nano Nitrogen liquid fertiliser, after Sri Lankan President Gotabaya Rajapaksa decided to stop chemical fertilizer imports.
- President took this decision in May 2021 which sparked anger and widespread protests in farmland districts of the Island country.

#### **Nano Nitrogen Liquid Fertiliser:**

- Nano Nitrogen Liquid Fertilizer was developed by Indian Farmers Fertiliser Cooperative Limited (IFFCO), with the objective of addressing imbalanced and excessive use of conventional Urea.
- It has been developed indigenously, for the first time in the world.
- It was developed at Nano Biotechnology Research Centre (NBRC) of IFFCO at Kalol, Gujarat by means of a proprietary patented technology.

#### **Nano Urea (Liquid):**

- It is a source of nitrogen and a major essential nutrient that are required for proper growth and development of plants.
- Nitrogen is a key constituent of amino acids, genetic materials, enzymes, energy transfer compounds and photosynthetic pigments in a plant.
- Usually, in a healthy plant, nitrogen content is present in the range of 1.5 to 4%. Application of Nano Urea (Liquid) at critical crop growth stages of the plant fulfils its nitrogen requirement and increases its productivity and quality as compared to conventional urea.

#### **20. Barbados elects first ever President:**

- Recently, Barbados has elected its first-ever president to replace Britain's Queen Elizabeth as head of state in a decisive step toward shedding the Caribbean island's colonial past..
- This is a key step in preparations for becoming a republic. This move will also remove Britain's Queen Elizabeth II as head of state of Barbados.
- Sandra Mason, who is the current governor-general of the island, will sworn in as president on November 30, 2021.
- November 30 marks the 55th anniversary of independence of Barbados from Britain.

#### **Background:**

- Sandra Mason had announced the break with Britain in September 2020 and said that, time has come to fully leave the colonial past behind.
- Barbados was claimed by the British in the year 1625. It has been referred as "Little England" sometimes, because of its loyalty to British customs.

#### **About Barbados:**

- Barbados is an island country, located in Lesser Antilles of the West Indies, it is the most easterly part of the Caribbean Islands. The country has a length of 34 kilometres & width of 23 km. It covers an covering an area of 432 km<sup>2</sup>. The country is outside the principal Atlantic hurricane belt. Its largest city is Bridgetown, which also happens to be its capital.
- The island country is relatively prosperous and a popular tourist destination. Before the covid-19 pandemic, more than a million tourists used to visit its idyllic beaches and crystalline waters every year. The island is also well-known for the birthplace of superstar singer Rihanna.

#### **21. UN sets up Special Trust fund for Afghanistan:**

- On October 21, 2021, the United Nations set up a special trust fund for Afghanistan to provide urgently needed cash directly to Afghans.
- According to the United Nations, Afghanistan is on the brink of a humanitarian catastrophe, with more than half of its population at risk of not having enough to eat during the coming winter.
- The main donors were the United States, European countries and Japan, who helped reached the total funding goal of \$606 million.

#### **Highlights:**

- This special trust fund was set up through a system by tapping into donor funds which was frozen since the Taliban takeover in August 2021.
- It was set up with the aim of injecting liquidity into Afghan households in a bid to permit them to survive the upcoming winter and remain in their homeland.
- Germany is a first contributor to the fund. It had pledged 50 million euros (\$58 million) for it. Germany was also in touch with other donors to mobilise the resources.
- Recently, UN raises \$600 mn for Afghanistan aid.
- The main donors were the United States, European countries and Japan, who helped reached the total funding goal of \$606 million.

#### **Why this fund was created?**

- According to United Nations Development Programme (UNDP), about 97% of Afghan households might be living below the poverty line by mid-2022. Thus, fund was set up to stabilise people's economy and save their lives & livelihood.

#### **Economy of Afghanistan:**

- As per International Monetary Fund (IMF), economy of Afghanistan was set to contract up to 30% in the year 2021. It will further fuel the refugee crisis which will also be affecting neighbouring countries like Turkey and Europe.

#### **Economic impact of Taliban's takeover:**

- As the Taliban took over Afghanistan, billions of the assets in central bank got frozen and several international financial institutions suspend their access to funds. Though humanitarian aid continued. As a result of this, banks in Afghanistan are running out of money, food prices have increased and civil servants have not been paid.

## **22. Turkey joins Pakistan in FATF Grey List:**

- Global terror financing watchdog, Financial Action Task Force (FATF), retained Pakistan on the 'Grey List of countries'.

#### **Highlights:**

- This time, the watchdog had added three new countries namely Turkey, Jordan & Mali, to the Grey List.
- As per FATF, there was no question of blacklisting Pakistan for now as Pakistan is cooperating and only four action items remain to be completed.
- FATF asked Pakistan to investigate and prosecute UN-designated terror terrorists like Hafiz Saeed and Masood Azhar.
- It also asked Pakistan to address its strategically important deficiencies.

#### **Background:**

- FATF had retained Pakistan on its 'Grey List' in June 2021 as it failed to check money laundering, that lead to terror financing. Pakistan was first placed on the Grey List in June 2018. Since then, it continues to be in this list as it fails to comply with the mandates of FATF.

#### **What does inclusion in the list mean?**

- With the placing on the Grey list, it has become increasingly difficult for Pakistan to get financial aid from any international institutions like World Bank, International Monetary Fund (IMF), European Union and Asian Development Bank (ADB).

#### **Financial Action Task Force (FATF):**

- FATF is an intergovernmental organisation. It was founded in the year 1989 following the initiative of G7 grouping for developing the policies to combat money laundering. FATF mandate was expanded in the year 2001, to include terrorism financing.

#### **Financial Action Task Force:**

- The Financial Action Task Force (FATF) is an inter-governmental body established in 1989 during the G7 Summit in Paris.
- The objectives of the FATF are to set standards and promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and other related threats to the integrity of the international financial system.
- Its Secretariat is located at the **Organisation for Economic Cooperation and Development (OECD)** headquarters in Paris.
- Member Countries: it consists of thirty-seven member jurisdictions.
- India is one of the members.

#### **FATF has two lists:**

- **Grey List (Jurisdictions under Increased Monitoring):** Countries that are considered safe haven for supporting terror funding and money laundering are put in the FATF grey list. This inclusion serves as a warning to the country that it may enter the blacklist.

- **Black List** (High-Risk Jurisdictions subject to a Call for Action): Countries known as Non-Cooperative Countries or Territories (NCCTs) are put in the blacklist. These countries support terror funding and money laundering activities. The FATF revises the blacklist regularly, adding or deleting entries.
- The FATF Plenary is the decision making body of the FATF. It meets three times per year.

**The key objectives of FATF include:**

- Setting standards and promote effective implementation of regulatory, legal, and operational measures to combat terrorist financing, money laundering and other related threats.
- Generating necessary political will for bringing national legislative and regulatory reforms across these areas.

**23. India hands over Jaynagar-Kurtha rail link to Nepal:**

- Recently, India has handed over 34.9 km long cross-border rail link to Nepal government, that connects Jayanagar in Bihar to Kurtha in Nepal.
- The Jaynagar-Kurtha section of rail link is the part of 68.7 km Jaynagar – Bijalpura- Bardidas rail link. It was built under the grant assistance programme of Indian government. Under the grant assistance of India, gauge conversion of 34.9 km narrow gauge has been completed. The project has completed at a cost of Rs 619 crore.
- It has five stations in the section namely, Jayanagar, Khajuri, Inarwa, Baidehi and Kurtha near Janakpur in Nepal. The highest fare will likely be Rs 70 for general class and Rs 300 for AC for the entire journey. The train will run at 115 km per hour and the distance will be covered in 23 minutes.
- This operationalised cross-border rail link is likely to enhance trade and commerce activities. It will also enhance people to people linkage between both the countries.
- Jainagar(Jaynagar) is a town and a notified area in the Madhubani district of Bihar. As per 2011 census, Jainagar had a population of 1,77,556. Males account for 53% of the population while females account for 47%. The town has an average literacy rate of 58%.

**24. China adopts New Border Law:**

- Recently, China has enacted a national law on “protection and exploitation” of the country’s land border areas. It is the first time such as law has been enacted by China.
- The timing of the new border law is significant as China continues to be at loggerheads with India across the Line of Actual Control (LAC), separating both the countries.
- As per Chinese media, the new law has been enacted with the aim of maintaining national security and managing border-related matters at the legal level amid the regional tensions”.
- The new border law will come into effect from January 1, 2022. It mandates People’s Liberation Army (PLA) of China to counter any “invasion, encroachment, infiltration, [or] provocation” across the land borders of China.
- The law also provides a legal framework for hard border closures, if needed.
- The law requires the Chinese government to take measures for “strengthening border defence, supporting economic & social development and opening-up in border areas”.
- It also calls for improvements in public services and infrastructure in border areas in a bid to “encourage and support people’s life and work there”.

**How will the law impact India?**

- The announcement of new law at this time sends a clear signal to New Delhi that Beijing is in no mood to quickly end the 18-month-long crisis along the LAC.
- India has reacted sharply, telling China that it must not use legislation as a pretext to formalise the PLA’s actions to unilaterally alter the LAC.
- The Chinese Foreign Ministry said the law would not affect the implementation of existing agreements.
- It makes the negotiations more difficult and the Chinese are clearly indicating that they will resolve the boundary through use of force.



- China has been building border defence villages across the LAC in all sectors to use the civil population to reinforce their claims.
- The law is the latest signal that the continuing deployments by both sides in forward areas and a build-up of infrastructure is likely to continue over the longer term.

#### What is the status of China's land border dispute?

- China shares its 22,457-km land boundary with 14 countries including India, the third longest after the borders with Mongolia and Russia.
- Unlike the Indian border China's borders with these two countries are not disputed.
- The only other country with which China has disputed land borders is Bhutan (477 km).



#### 25. India-Sweden Celebrate Innovation Day:

- The 8th annual India Sweden Innovation Day 2021 was concluded successfully on 26th October 2021.
- The one day virtual event was organized in association with the Embassy of India to Sweden & Latvia, Sweden-India Business Council (SIBC), and Confederation of Indian Industry (CII). The seminar was a massive success as it was attended by over 1300 participants from across the world.
- The main highlight of the event was the implementation of the partnership of Vinnova, Sweden's Innovation Agency, the Indian Department of Science and Technology as well as The Department of Biotechnology.
- In the session, they also exchanged the ideas for implementing digital technology and Artificial Intelligence in order to introduce climate-friendly solutions.
- The online event was organised under the theme 'Accelerating India Sweden's Green Transition'.

#### India-Sweden relations:

- Relation between Sweden and India dates to 8th century CE and the era of Vikings. During archaeological excavations of an 8th century Viking ship in 1954, in Sweden, a small bronze Buddha statuette was discovered. Statue is thought to have been made around 5th century CE, in present-day Kashmir.
- Sweden is among the countries that recognised India's independence from the United Kingdom in the year 1947. Both the countries established their formal diplomatic relations in 1949. India has established an embassy in Stockholm. On the other hand, Sweden established an embassy in New Delhi. Sweden also established honorary consulates in Kolkata, Chennai, and Mumbai.
- Around 10000 Indian citizens are living and work in Sweden. There are also around 9000 persons of Indian origin. Both the groups are employed in business or professional fields.

## **26. UN on Iran's Death Penalty:**

- Recently, a human rights expert from United Nations has described the Iran's Death penalty as "an arbitrary deprivation of life".
- UN described that the executions carried out in Iran is often used as a political tool. The death penalty is often imposed on arbitrary and vague grounds.
- Capital punishment, also called as death penalty, is a legal penalty in Iran. Crimes on which capital punishment is imposed include murder, child molestation, rape, drug trafficking, kidnapping, paedophilia, armed robbery, kidnapping, burglary, terrorism, prohibited sexual relations, incestuous relationships, fornication, sodomy, prostitution, sexual misconduct, adultery etc. Laws are established by the Islamic Consultative Assembly in Iran. These laws must be consistent with the Sharia laws.
- UN asked Iran to reform laws and abolish the death penalty.
- As per expert, three criminal charges are used to target peaceful demonstrators and political opponents namely- corruption on earth, armed rebellion, and waging war against God.
- In the fourth annual report on human rights in Iran, UN expert briefed that, practice in Iran of imposing death penalty to children is "extremely disturbed". Iran is one of few countries that continues this practice, even though international law prohibits such practices.
- Apart from that, there are other key human rights concerns in Iran such as- discrimination against religious, ethnic & sexual minorities, dire conditions inside prisons and repression of civic space.

## **27. India applies for vaccine loans from ADB & AIIB:**

- Recently, the Government of India has applied for loans from the Asian Development Bank (ADB) and the Asian Infrastructure Investment Bank (AIIB) to procure as many as 667 million doses of COVID-19 vaccines.
- India applied for the loan as it seeks to boost immunisation rate of eligible population here.
- This application was meant to leverage India's membership of the multilateral financing institutions (ADB & AIIB).
- These financing institutions are expected to process India's loan request soon.
- This loan amount will be used to purchase which will be used to purchase 667 million Covid-19 vaccines to immunize at least 317 million people across 19 states in India.
- ADB has agreed to provide \$1.5 billion while AIIB will provide another \$500 million.
- Government of India will put in around \$58 million for the vaccine project.
- Project will support the procurement of safe & effective vaccines against Covid-19. it implemented under Asia-Pacific Vaccine Access Facility, mechanism of ADB.

### **Asia Pacific Vaccine Access Facility (APVAX):**

- The Asia Pacific Vaccine Access Facility is worth \$9 billion vaccine initiative by ADB. This initiative provides equitable support to its developing member countries in procurement of Covid-19 vaccines.

### **Asian Infrastructure Investment Bank (AIIB):**

- AIIB is a multilateral development bank, set up with the aim of improving economic and social outcomes in Asia. Bank comprises of 103 members, including 16 prospective members from the world. It started operating on December 25, 2015.

### **Asian Development Bank (ADB):**

- This regional development bank was established on December 19, 1966. Its headquarter is in Philippines. It also has 31 field offices across the world for promoting social & economic development in Asia.

## **28. India-Kyrgyzstan hold First Strategic Dialogue:**

- Recently, India and Kyrgyzstan held their first strategic dialogue on Tuesday in New Delhi and agreed to address common threats and challenges faced by both countries arising out of the situation in Afghanistan.
- During the summit, both the countries agreed to enhance security & defence cooperation. The cooperation seeks to address common threats and challenges faced by them.
- Both, India & Kyrgyzstan, are facing threat and challenges due to situation in Afghanistan.
- They also held discussions on regional security environment with special reference to Afghanistan. Both agreed upon steps for enhancing bilateral security cooperation among relevant bodies, such as fields of counterterrorism, narcotics control, combating radicalisation, and defence cooperation.

#### **India-Kyrgyzstan Relations:**

- India shares close relations with Central Asia, especially with the countries that were part of ancient Silk Route, including Kyrgyzstan. Both had limited political, economic, and cultural ties. In the year 1985, former Prime Minister Rajiv Gandhi visited Bishkek and Issyk Kul Lake. India established diplomatic relations with Kyrgyzstan in 1992 after the independence of Kyrgyzstan on August 31, 1991. India set up resident Mission in 1994.

#### **Political relations:**

- India's political relations with Kyrgyz Republic is traditionally warm and friendly. Leaderships of Kyrgyz have been supportive of India's stand on Kashmir. They have also welcomed the ongoing peace process. It also supported India's bid for permanent seat at the United Nations Security Council as well as full membership in Shanghai Cooperation Organization (SCO).
- Both countries share common concerns like threat of terrorism, drug-trafficking, and extremism. They have also signed several framework agreements like on Culture, Trade & Economic Cooperation, Investment Promotion & Protection, Civil Aviation, Avoidance of Double Taxation, etc.

#### **29. China-Russia 'Joint Sea 2021 Naval Exercise:**

- China and Russia are holding Joint naval drills called "Joint Sea 2021 naval exercise" in the Sea of Japan.
- The joint naval drill was kicked off from October 14, 2021.
- It highlights the latest sign of growing political and military alignment between Russia and China.
- The drill started in Russia's Peter the Great Gulf in Sea of Japan. It will run through October 17, 2021.
- This joint naval drill would encompass communications, joint manoeuvring & firing on seaborne targets, anti-air, anti-mine, and anti-submarine operations, joint manoeuvring and firing on seaborne targets.

#### **China in the drill:**

- For the first time China will be represented by anti-submarine warfare planes and destroyers of greater than 10,000 tons in displacement for exercises abroad.
- China will also be represented by warships such as Type 055 large destroyer Nanchang, Type 054A frigates Binzhou & Liuzhou, Type 052D destroyer Kunming, Type 903A comprehensive supply ship Dongpinghu, vessel-borne helicopters and fixed wing anti-submarine warfare aircraft. On the other hand, Russia will be represented by anti-submarine ships, aircraft and frigates.

#### **China-Russia cooperation:**

- China and Russia are jointly holding the drill as they are united in opposing the dominance of United States in global affairs. Both the countries have been harsh critics of foreign policy of Washington in Afghanistan.
- China generally follows Russia's lead on matters like Iran. It has become increasingly assertive in defending its vital interests regarding Taiwan, South China Sea and the Indo-Pacific.
- China has also strongly criticized an agreement for Australia in order to obtain eight nuclear-powered submarines which are built with US technology.

### 30. India-US Economic & Financial Partnership Dialogue:

- Recently, the eighth ministerial meeting of the India-U.S.A. Economic and Financial Partnership Dialogue was held at Washington D.C.
- During the meeting, both sides held discussions on a range of subjects, such as macroeconomic outlook, financial regulatory & technical collaboration, recovery from COVID-19 pandemic, climate finance & anti-money laundering, multilateral engagement, and combating the financing of terrorism (AML/CFT).
- They affirmed their commitments for continue collaboration at bilateral as well as multilateral fora in order to address mutual and global economic issues and strive towards friendly strategies and solutions.
- The bilateral trade between India and the USA was at USD 88.75 billion, in 2019-20. USA is among those few countries with which India is having a trade surplus. In the year 2019-20, India's trade surplus with the USA rose to USD 17.42 billion as compared to USD 16.86 billion in 2018-19. India is the sixth largest supplier of services imports for USA. India's large market, progress towards development and economic growth make it an essential market for USA exporters.

### India-US Trade-related Issues:

- Market barriers including tariff and non-tariff barriers as well as multiple practices & regulations are the biggest concerns in the bilateral relation between both the countries
- Generalised System of Preferences (GSP) Programme is another issue as under this system, USA decided to withdraw duty-free benefits to Indian exporters.
- For India, another issue is USA's temporary visa policies. It affects Indian nationals working in the United States.

### 31. People's Plan Campaign 2021:

- Recently, the Union Minister for Panchayati Raj and Rural Development has launched People's Plan Campaign 2021– Sabki Yojana Sabka Vikas and Vibrant Gram Sabha Dashboard.
- **Timeline:** This year's campaign will be rolled out in all the States from 2nd October 2021 to 31st January 2022.
- **Aim:** To help Gram Panchayats(GPs) in the preparation of a convergent and holistic Gram Panchayat Development Plan(GPDP) through the identification of sectoral infrastructural gaps in respective areas.
- During the campaign, structured Gram Sabha meetings will be held for preparing Panchayat Development Plans for the next financial year 2022–2023. The structured Gram Sabha meetings will include physical presence and presentation by frontline workers/supervisors on 29 sectors. These sectors represent the 29 subjects listed in the Eleventh Schedule of the Constitution.

### What is Vibrant Gram Sabha Dashboard?

- It is a dashboard that will help in increasing maximum participation from Panchayats through the meeting of Gram Sabha, the Standing Committee meeting of Gram Panchayat, meeting of elected Panchayat public representatives throughout the year.

### Panchayats:

- Panchayats are the centre points of grassroots democracy. There are 31.65 lakh elected Panchayat representatives across the country of which 14.53 lakh are women. Panchayats have a significant role to play in the effective and efficient implementation of flagship schemes for the transformation of rural India.

### About Gram Panchayat Development Plan (GPDP):



## GPDP Creation Process



PPC is co-ordinated by Department of Panchayati Raj (DoPR) at State Level. DoPR shall process the implementation of following activities in time bound manner:



### 32. Telangana to test Mobile-based e-voting system:

- The Telangana State Election Commission has planned to conduct a dry run of a “Mobile-Based e-voting system”.
- The development of this system is guided by the necessity of holding polls in India amid the Covid-19 pandemic.
- This system, if successful, will facilitate to vote using smartphones from home.
- The dry run will be held in Khammam district of Telangana on October 20.
- It will be India’s first smartphone-based e-voting process.
- Voters can register themselves for the dry run, using the smartphone application in between October 8 and 18.

#### Implementing Agency:

- The state election commission of Telangana is implementing the system in association with the emerging technologies wing of IT Electronics and Communications (ITE&C) department of Telangana government and technical development by ‘Centre for Development of Advanced Computing (CDAC)’.

#### Use of Artificial Intelligence:

- Mobile-based e-voting system will make use of Artificial Intelligence for a three-factor authentication of the valid voter. System will match the voter’s name with the Aadhaar, detect individual liveness and match image using EPIC database comprising of around 20-year-old records.

#### Blockchain (Distributed Ledger) technology:

- This technology has been used to secure de-identified and encrypted votes in order to maintain them as immutable records.

#### TSEC eVote App:

- This smartphone application follows a minimalist design approach, supporting both English and Telugu languages. It comprises of a detailed help section for tutorial videos and a helpline number to aid the citizens.
- It is a security-hardened mobile application that will prevent any type of tampering. System cannot be misused because it binds a device ID and phone number to a specific citizen registration process. Only that device can be used during voting.

### 33. Supreme Court on National Green Tribunal’s (NGT) position:

- Recently, the Supreme Court has declared the National Green Tribunal’s (NGT) position as a “unique” forum endowed with suo motu (on its own motion) powers to take up environmental issues across the country.

#### The Judgement:

- **Not limited to Adjudicating Role:** The role of the NGT is not simply adjudicatory in nature. The Tribunal has to perform equally vital roles that are preventative, ameliorative or remedial in nature.
- The functional capacity of the NGT is intended to leverage wide powers to do full justice in its environmental mandate.
- Article 21 rights cannot stand on a narrow compass of interpretation. Article 21 of the constitution protects the right to life and personal liberty.
- **Multidisciplinary Role:** NGT, as a complimentary, competent, specialised forum, to deal with all environmental multidisciplinary issues both as original and also as an appellate authority.
- **International Commitment:** The NGT embodied the international obligation India owed to the environment.
- The NGT has been recognised as one of the most progressive Tribunals in the world.
- This jurisprudential leap has allowed India to enter a rather exclusive group of nations which have set up such institutions with broad powers.

#### **National Green Tribunal:**

- NGT is a specialised body set up under the National Green Tribunal Act (2010) for effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources.
- With the establishment of the NGT, India became the third country in the world to set up a specialised environmental tribunal, only after Australia and New Zealand, and the first developing country to do so.
- The NGT Act provided a specialized role to the tribunal to act on issues where a dispute arose under seven specified laws (mentioned in Schedule I of the Act): The Water Act, The Water Cess Act, The Forest Conservation Act, Air Act, Environment Protection Act, Public Liability Insurance Act and the Biological Diversity Act.
- NGT is mandated to make disposal of applications or appeals finally within 6 months of filing the same.
- The NGT has five places of sittings, New Delhi is the Principal place of sitting and Bhopal, Pune, Kolkata and Chennai are the other four.
- The Tribunal is headed by the Chairperson who sits in the Principal Bench and has at least ten but not more than twenty judicial members and at least ten but not more than twenty expert members.
- Decisions of the Tribunal are binding. The Tribunal has powers to review its own decisions. If this fails, the decision can be challenged before the Supreme Court within ninety days.

#### **Challenges:**

- **Persistent Vacancies:** In the last nine years, the NGT has never got the minimum strength of ten judicial and ten expert members to address the increasing number of environmental litigations across the country.
- **Implementation of Orders:** There are also serious challenges as far as implementation of the NGT's orders is concerned.
- The NGT Act specifies that the compensation amount as ordered by the tribunal should be remitted to the authority of the Environmental Relief Fund within a period of 30 days from the date of order. However, it is observed that the polluters don't abide by this rule.
- Further, there is no institutional mechanism to ensure that the environmental regulatory authorities comply with the orders of the tribunal.
- **Appeals to Supreme Court:** The NGT orders are increasingly challenged in the Supreme Court, where a heavy penalty has been imposed by the tribunal.

#### **Way forward:**

- There is a need for more autonomy and to widen NGT's scope for effective protection of the environment in balance with human developmental activities.

- The government needs to provide adequate financial and human resources — if it does not want the NGT to wither away.
- NGT offers a path for the evolution of environmental jurisprudence by setting up an alternative dispute resolution mechanism. It helps reduce the burden of litigation in the higher courts on environmental matters.

#### **34. Standing Committee on IT to examine media Ethics:**

- Recently, the Standing Committee on Information Technology has decided to review ethical standards in the media coverage.
- The standing committee also examines issues related to Ministry of Information and Broadcasting.
- Committee took this decision after looking at several public complaints in functioning of media.
- It will also study the impact of suspension of telecom services and Internet over the last five years in States like Jammu & Kashmir, Uttar Pradesh, and Delhi in the aftermath of protests against the governments.
- Functioning of the Prasar Bharati Organisation will also be reviewed.
- Committee would also take up the issue of “challenges facing Indian film industry”.
- Functioning and outreach of Doordarshan Channels and Bureau of Outreach & Communication (BOC) would also be looked upon by the committee.
- Committee will also study the growth and opportunities of community radio stations.

#### **Who heads the committee?**

- The reconstituted panel is headed by veteran Congress MP Shashi Tharoor.
- Functioning of Central Board of Film Certification
- The Committee is currently reviewing the functioning of Central Board of Film Certification because, censorship requires changes with the advent of internet platforms like Netflix and Amazon Prime. Committee will discuss the issues involved because many films and programmes are being released on such platforms.

#### **Other subjects to be reviewed:**

- Panel will take up the subject like “Citizens’ data security & privacy” and “Digital Payment & Online Security measures for data protection”. for review.
- Functioning of Unique Identification Authority of India will also be reviewed.
- The panel will also review cyber security scenario as well as Information Technology Act of 2000.

#### **35. Indian Telegraph Right of Way (Amendment) Rules, 2021:**

- Recently, the Central Government has notified the Indian Telegraph Right of Way (Amendment) Rules, 2021.
- The rule aims to incorporate the provisions related to nominal one-time compensation and uniform procedure for establishment of Overground Telegraph Line in the Indian Telegraph Right of Way Rules, 2016.

#### **Key Points:**

- **Compensation:** The amount of one-time compensation for establishment of an overground telegraph line will be a maximum one thousand rupees per kilometre.
- **Right of Way (RoW):** These amendments will ease RoW related permission procedures for establishment and augmentation of digital communications infrastructure across the country.
- Earlier, the RoW Rules had covered only underground Optical Fibre Cable (OFC) and mobile towers.
- **Fees:** There will be no fee other than Administrative fee and Restoration charges for establishing, maintaining, transferring or shifting the underground and overground telegraph infrastructure.

#### **Significance:**

- The digital divide between rural-urban and rich-poor will be bridged, in line with the Digital India mission and BharatNet project.
- E-governance and financial inclusion will be strengthened.

- Doing business will be easy.
- Information and communication needs of citizens and enterprises will be fulfilled (including 5G).
- The dream of India's transition to a digitally empowered economy and society will be translated into reality.

### 36. State of the Education Report for India-2021:

- On the occasion of World Teacher's Day, the United Nations Educational, Scientific and Cultural Organization (UNESCO) released its "State of the Education Report (SOER)-2021 for India: No Teachers, No Class", on October 5, 2021.
- This report is the annual flagship publication of UNESCO New Delhi. Report is prepared on the basis of extensive research.
- This is the third edition of the State of Education Report.
- This year, report focuses on the theme of "teachers, teaching and teacher education", highlighting that work of teaching is complex.
- The report attempts to provide understanding on the key aspects of the teaching profession and also provides a profile of 9.6 million teaching workforce.
- Report also highlights the challenges of intricate teaching routine as well as their professional development.
- Findings in the report were prepared on the basis of analysis of Periodic Labour Force Survey (PLFS) and Unified District Information System for Education (UDISE) data.

#### Findings of the report:

- As per report, there are around 1.2 lakh single-teacher schools in India. It accounts for 7.15 percent of 11.51 lakh schools. Out of this, 89 per cent are in rural areas.
- 51 percent of total schools are employing 95 lakh teachers.
- Report notes that, India requires 11.16 lakh additional teachers to meet the current shortfall.
- States with high percentage of single-teacher schools are- Arunachal Pradesh (18.22%), Goa (16.08%), Telangana (15.71%), Andhra Pradesh (14.4%), Jharkhand (13.81%), Uttarakhand (13.64%), Madhya Pradesh (13.08 %) and Rajasthan (10.08 %).



of

#### Major Recommendations:

##### UNESCO suggests:

- Increase the number of teachers and improve working conditions in North Eastern states, rural areas and 'aspirational districts'.
- Increase the number of physical education, music, art, vocational education, early childhood and special education teachers.
- Value the professional autonomy of teachers.
- Build teachers' career pathways.
- Provide teachers with meaningful Information and Communication Technology (ICT) training.
- Develop teaching governance through consultative processes, based on mutual accountability.

### 37. Comprehensive Handicrafts Cluster Development Scheme:

- Ministry of Textiles has approved the continuation of Comprehensive Handicrafts Cluster Development Scheme (CHCDS) on October 5, 2021.
- CHCDS was approved with a total outlay of Rs 160 crore.
- Scheme will continue up to March 2026 now.



- Under the scheme, infrastructural support, design & technology upgradation, market access etc will be provided to handicrafts artisans.

**Scheme Objectives:**

- CHCDS was launched to create world-class infrastructure which will cater to the business needs of local artisans & SMEs in order to boost production and export. These clusters have been set with the objective of assisting the artisans & entrepreneurs in setting up world-class units with modern infrastructure, adequate training, latest technology, and human resource development inputs. It is also coupled with market linkages and production diversification.

**Provisions under CHCDS:**

- Under CHCDS, interventions such as Baseline Survey & Activity Mapping, Skill Training, Marketing events, Improved Tool Kits, Publicity, Seminars, capacity building, Design workshops, etc will be provided. Scheme will also provide for Emporiums, Common Facility Centres, Raw Material Banks, Trade Common Production Centres, Facilitation Centres, Design & Resource Centres.

**Who will undertake the projects?**

- Integrated projects will be taken up for development with the help of **Central or State Handicrafts Corporations**, Autonomous body Council Institute, Registered Co- operatives, Registered SPV, Producer company of artisans, that are having good experience in handicrafts sector.

**Focus of the projects:**

- These products will focus on integration of scattered artisans, building grass root level enterprises for them and linking them to SMEs in the handicrafts sector in order to ensure economies of scale.
- Mega handicraft clusters comprising of 10,000 artisans will be selected for overall development under the scheme.

**38. 'Electronic Pension Payment Order' integrated with Digi Locker:**

- Department of Ex-servicemen welfare working under 'Ministry of Defence' has integrated 'Electronic Pension Payment Order' (EPPO) with the Digi Locker.
- Electronic Pension Payment Order is generated by Principal Controller of Defence Accounts (PCDA) Pension, Allahabad.
- EPPO has been integrated with Digi Locker for enhancing Ease of Living of Defence Pensioners.

**Significance of the move:**

- This move will enable all the Defence Pensioners to obtain the latest copy of Pension Payment Order, instantly from Digi Locker. Initiative would create a permanent record of Pension Payment Order in the Locker.
- It will also do away with the "time eliminate delays" in reaching the Pension Payment Order to new pensioners. Necessity to hand over a physical copy for the order will also be eliminated with the new initiative.
- It will also enable the Defence Pensioners to access Electronic Pension Payment Order from anywhere on the globe.

**Service provider:**

- Principal Controller of Defence Accounts (PCDA) Pension, Allahabad was registered as a Service Provider. It will provide Electronic Pension Payment Orders of more than 23 lakhs Defence Pensioners using the Digi Locker platform.

**What is DigiLocker:**

- DigiLocker offers a dedicated personal storage space, linked to each resident's Aadhaar number. DigiLocker can be used to securely store e-documents as well as store Uniform Resource Identifier (URI) link of e-documents issued by various issuer departments. The e-Sign facility provided as part of DigiLocker system can be used to digitally sign e-documents.
- The DigiLocker can be accessible via web portal or mobile application.

**Key components of DigiLocker:**

- Each resident's DigiLocker account has the following sections:

- **Dashboard** – This section is the first page you see when you login and shows a summary of all your documents.
- **Issued Documents** – This section shows the URIs (links) of the documents or certificates issued to you by the Govt. department or other agencies participating in DigiLocker.
- **Uploaded Documents** – This section shows all the documents which are uploaded by you. You can update the document type, eSign and share these uploaded documents.
- **Shared Documents** – This sections shows the list of documents which you share with others (via email).
- **Activity** – This section is a log of the activities you performed in you DigiLocker account. The log included the details about the activities such as file upload, download, eSign etc.
- **Issuers** – This section lists the departments and agencies that are registered on DigiLocker as Issuers. If these departments have issued any document/certificate to you, it will appear in the form of a URI (link) in your Issued Documents section.

### 39. GI tagged Mihidana exported to Bahrain:

- Recently, to promote indigenous & Geographical Identification (GI) tagged products, first consignment of GI tagged sweet dish Mihidana from West Bengal was exported to Bahrain.
- GI tagged Mihidana was sourced from Bardhaman, West Bengal.
- Consignment of the sweet dish Mihidana was exported by APEDA registered M/S DM Enterprises, Kolkata.
- To commemorate the historical legacy of century old sweet delicacy and GI certified Jaynagarer Moa, India post released a specially designed envelope in collaboration with APEDA. The Jaynagarer Moa is prepared from popped-rice ball & fresh date-palm jaggery in the Jaynagar city of West Bengal. A consignment of Jaynagar Moa was exported to Bahrain in January 2021 from Kolkata.

### What is a Geographical Indication?

- It is an indication
- It originates from a definite geographical territory.
- It is used to identify agricultural, natural or manufactured goods
- The manufactured goods should be produced or processed or prepared in that territory.
- It should have a special quality or reputation or other characteristics.

### What goods can be GI tagged?

- GI tag can be issued for agricultural, natural or manufactured goods with unique quality, reputation or characteristics, unique to its geographical origin.

### Examples of possible Indian Geographical Indications:

- Basmati Rice
- Darjeeling Tea
- Kanchipuram silk saree
- Nagpur orange
- Kolhapuri chappal
- Bikaneri bhujia
- Agra petha

### What is the benefit of registration of geographical indications?

- It confers legal protection to Geographical Indications in India
- Prevents unauthorised use of a Registered Geographical Indication by others
- It provides legal protection to Indian Geographical Indications which in turn boost exports.
- It promotes economic prosperity of producers of goods produced in a geographical territory.

### Registration of Geographical Indications:

- In December 1999, the Parliament had passed the Geographical Indications of Goods (Registration and Protection) Act,1999.

- This Act seeks to provide for the registration and better protection of geographical indications relating to goods in India.
- The Act would be administered by the Controller General of Patents, Designs and Trade Marks- who is the Registrar of Geographical Indications.
- The Geographical Indications Registry would be located at Chennai. The Act has come into force with effect from 15th September 2003.

**How long the registration of Geographical Indication is valid?**

- The registration of a geographical indication is valid for a period of **10 years**.
- It can be renewed from time to time for further period of 10 years each.
- If a registered geographical indication is not renewed it is liable to be removed from the register.

**40. SVAMITVA Scheme:**

- Recently, the Prime Minister Narendra Modi interacted with the beneficiaries of Svamitva scheme in Madhya Pradesh on October 6, 2021.
- On the occasion, PM also distributed e-property cards to 1,71,000 beneficiaries under the SVAMITVA scheme.

**SVAMITVA Scheme:**

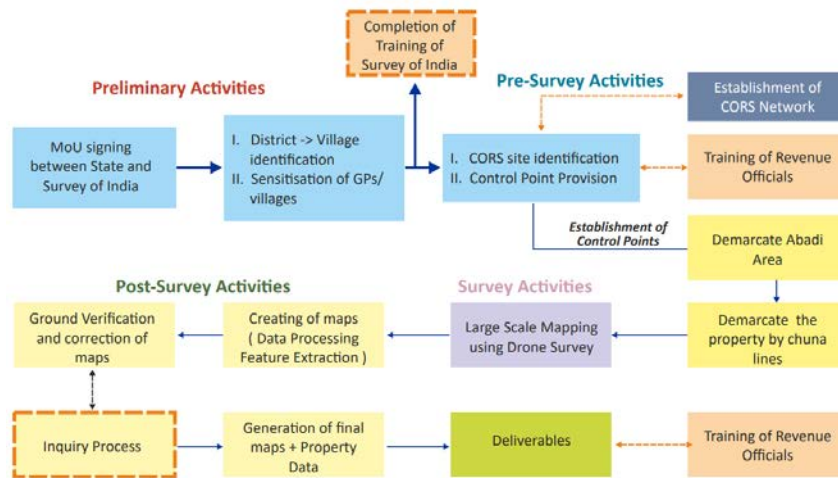
- SVAMITVA (Survey of villages and mapping with improvised technology in village areas) scheme is a new initiative of the Ministry of Panchayati Raj.
- It aims to provide rural people with the right to document their residential properties so that they can use their property for economic purposes.
- The scheme is for surveying the land parcels in rural inhabited area using Drone technology.
- The survey shall be done across the country in a phase wise manner over the period 2020 -2025.
- The scheme is proposed as a Central Sector scheme with a projected outlay of Rs 79.65 crores for the pilot phase (FY 2020 -21).

**Objectives:**

1. To bring financial stability to the citizens in rural India by enabling them to use their property as a financial asset for taking loans and other financial benefits.
2. Creation of accurate land records for rural planning.
3. Determination of property tax, which would accrue to the GPs directly in States where it is devolved or else, add to the State exchequer.
4. Creation of survey infrastructure and GIS maps that can be leveraged by any department for their use.
5. To support in preparation of better-quality Gram Panchayat Development Plan (GPDP) by making use of GIS maps.
6. To reduce property related disputes and legal cases

**Coverage:**

- There are about 6.62 lakh villages in the country which will be eventually covered in this scheme. The entire work is likely to be spread over a period of five years.



### Background:

- The Union Government had launched the SVAMITVA scheme on April 24, 2021 marking the National Panchayati Raj Day.
- This scheme is a collaborative effort of the Ministry of Panchayati Raj, State Revenue Department, State Panchayati Raj Departments and Survey of India. It aims to provide an integrated property validation solution in rural India.

### 41. Government approves 7 PM MITRA Parks:

- Recently, the Union Cabinet has given its approval, on October 6, 2021, to set up seven PM MITRA parks, accomplishing the vision of Prime Minister Narendra Modi to establish Atmanirbhar Bharat.
- PM MITRA parks will be set up with an outlay of Rs 4445 crores in five years.
- Announcement to establish such parks was made in Union Budget 2021-22.
- This move will help India to stand at par with Global textile giants.

### About PM MITRA:

- PM MITRA parks stands for “Mega Integrated **Textile** Region and Apparel” parks. These parks will be established at Greenfield or Brownfield sites at different states.
- Establishment of the parks will benefit unemployed with seven lakh direct jobs as well as 14 lakh indirect jobs. Under the project, parks will be established through a special purpose vehicle, owned by state governments and Centre under a public-private partnership (PPP) model.
- Till date, 10 states have shown their interest in establishing the PM MITRA parks namely, Punjab, Odisha, Tamil Nadu, Andhra Pradesh, Assam, Gujarat, Rajasthan, Telangana, Karnataka and Madhya Pradesh.

### Capital Support:

- Maximum Development Capital Support (DCS) of Rs 500 crore will be provided to **Greenfield PM MITRA** while Rs 200 Crore will be provided to **Brownfield PM MITRA**, in order to develop a Common Infrastructure.
- Apart from that, Rs 300 crore of Competitiveness Incentive Support (CIS) will also be provided to these parks for early establishment of textiles manufacturing units there.

### PM’s 5F Vision:

- PM MITRA initiative is motivated by PM Modi’s 5F vision of- “farm to fibre; fibre to factory; factory to fashion; and fashion to foreign”.

### Greenfield and Brownfield investments:

- Greenfield investments is investment in new plants. It is establishing new production capacity by an investor or company. On the other, Brownfield investment is an investor investing in an existing plant. Brownfield investment is mainly made through merger and acquisitions.

### Greenfield and Brownfield FDI:

- Applying the same criteria, Greenfield FDI in India is investment by a foreign investor in fresh production facilities. It is a situation where an MNC starts a new venture in India by constructing new operational facilities.
- This new production capacity creation will bring new physical assets (like plants and machineries), creates fresh employment and adds to more production of the concerned good. Often Greenfield FDI has a merit that it brings superior technology by the MNC.
- **Brownfield** FDI is investment made by a foreign company in existing production arrangements. An important form of Brownfield investment is merger and acquisition by foreign MNCs in India. Here, a domestic company is taken over by the MNC.
- **Greenfield** FDI makes additional production capacity, whereas Brownfield FDI is purchase of existing production capacities. The latter is just a transfer of ownership of existing firm from a domestic entrepreneur to a foreign one.
- **Disadvantage** of Brownfield FDI as a source of investment is that it doesn't create expansion of production capacities or employment generation etc.

#### 42. Moody's upgrades outlook on India's sovereign rating to Stable:

- Rating agency Moody's Investors Service upgraded the sovereign rating outlook of India to stable from negative.
- This rating was upgraded citing reduced risks from COVID-19 as well as negative feedback between real economy & financial system.
- Moody's has retained India's rating at Baa3. It reflects the lowest investment grade rating.
- Moody's further expects that real GDP will surpass pre-pandemic levels of 2019-20 in the year 2021 itself. This is because the ongoing economic recovery is picking up as the activity are broadening across sectors.
- Moody's expects that 2021-22 will record a growth of 9.3% in GDP.
- Moody's had **downgraded** India's sovereign rating to Baa3 from Baa2 in June 2020 with a negative outlook.

#### Why Moody's has upgraded the rating?

- As per Moody's, downside risks on growth because of coronavirus infection waves are lowering because of rising vaccination rates and selective use of restrictions on economic activity. Furthermore, higher capital cushions and greater liquidity highlights that banks & non-bank financial institutions have a lesser risk to the sovereign now.

#### Impact on fiscal deficit:

- According to Moody's, economic environment will lead to a gradual reduction of general government fiscal deficit in next few years. It will also prevent further deterioration of sovereign credit profile.

#### Real GDP:

- In the medium term, Moody's predicts that real GDP will increase to around 6%, reflecting a rebound in activity to levels at potential. This growth was predicted by taking into account the weak infrastructure, structural challenges as well as rigidities in labour, land & product markets.

#### Debt Burden:

- As per Moody's, higher debt burden and weaker debt affordability will persists as compared to pre-pandemic times. It will contribute to 'lower fiscal strength'. This is why Moody's has given Baa3 rating.

#### What Is a Sovereign Credit Rating?

- A sovereign credit rating is the evaluation of the credit risk of a sovereign entity to determine its ability to pay back debts due.
- The sovereign credit rating of a country may determine its ability to access funds in the national and international bond markets.
- The three influential credit rating agencies include Moody's, Fitch Ratings, and Standard & Poor's.

- Standard & Poor's gives a BBB-or higher rating to countries it considers investment grade, and grades of BB+ or lower are deemed to be speculative or "junk" grade.
- Moody's considers a Baa3 or higher rating to be of investment grade, and a rating of Ba1 and below is speculative.
- The country's foreign reserves determine its ability to pay.

#### **Determinants of Sovereign Credit Ratings:**

1. **Per capita income:** It is calculated by taking the total income earned by individuals in a given area divided by the number of people residing in that area. A high per capita income increases the potential tax base of the government, which subsequently increases the government's ability to repay its debts.
2. **GDP Growth:** Gross Domestic Product is defined as the total market value of all final goods and services produced within a country in a given period. The GDP growth rate of a country refers to the percentage growth in the GDP of a country from one quarter to another as the economy navigates a business cycle. Strong GDP growth means that a country will be able to meet its debt obligations since the growth in GDP results in higher tax revenues for the government.  
In contrast, if the growth rate is negative, it means that the economy is experiencing a contraction, and the country may fail to honor its debt obligation if the situation continues.
3. **Rate of inflation:** A high inflation rate points to structural problems in a country's finances, and it is likely to cause political instability as the public becomes dissatisfied with the increasing inflation.
4. **External Debt:** Some countries rely heavily on external debts to finance their development and infrastructure projects. Increasing debt levels translate to a higher risk of default, which may affect its ability to access funding from international lenders. This burden increases if the foreign currency debts exceed the foreign currency income earned by a country in the form of exports.
5. **Economic Development:** Level of economic development is also considered by agencies for determining the sovereign credit rating of a country. Usually, once a country has reached a certain level of development or per capita income, it is considered less likely to default on its debt obligations. For example, economically developed nations are considered less likely to default compared to developing countries.
6. **History of Defaults:** A country that defaulted on its debt obligations in the past is considered to have a high sovereign credit risk by rating agencies. It means that countries with a record of defaults receive low ratings, making them less attractive to investors looking for low-risk investments.

#### **India's Status:**

- India's foreign exchange reserves, as of 15 January 2021, were at \$584.24 billion compared to its total external debt, including that of the private sector, at \$556.2 billion.
- Its reserves to debt ratio, which was at 78.4% in 2016-17, rose to 85% in 2019-2020, and appears to have further risen to 105% in 2021. The short-term debt owed by the private sector as a proportion of total forex reserves was 19.1% in September 2020.
- Further, our forex reserves were sufficient to cover 12 months of imports in 2020, as opposed to 11.1 months in 2016.
- Clearly, India has done reasonably well in terms of its external sector vulnerability, despite a pandemic.

#### **43. GST Compensation to States:**

- The Union Government released an amount of Rs 40,000 crore on October 7, 2021 to states and union territories (UTs) with legislature.

- The amount was released under back-to-back loan facility for meeting the shortfall in GST compensation.
- This release is expected to help states in planning their public expenditure, for improving health infrastructure and launching new infrastructure projects.

#### **What is GST Compensation?**

- Under the GST law, states are compensated for any loss of revenue arising on account of implementation of GST for five years till June 2022.
- The compensation amount to be paid from the compensation fund which is arrived at by levying cess on top of the highest tax slab on luxury, demerit and sin goods.
- GST compensation for financial years 2017-18, 2018-19 and 2019-20 has already been paid to the states.
- Since collections in the compensation fund are falling short of requirement, for 2020-21 and 2021-22 fiscals the Centre has borrowed funds worth Rs 1.10 lakh crore and Rs 1.59 lakh crore, respectively and passed it on to the states as back-to-back loans.

#### **44. Guidelines for PM-CARES for Children Scheme:**

- Ministry of Women and Child Development issued a detailed guidelines for “PM CARES for Children Scheme” on October 7, 2021.
- Guidelines were issued in the backdrop of announcement made by Prime Minister Narendra Modi on May 29, 2021 regarding a comprehensive support for children who lost both their parents amid the Covid-19 pandemic.

#### **About PM CARES for Children Scheme:**

- PM CARES for Children Scheme has been launched with the objective of ensuring comprehensive care and protection of those children who lost their parent(s) due to the pandemic, in a sustained manner.
- Scheme would also enable their wellbeing by providing them health insurance, empower them by education and equip them with financial support for self-sufficient existence when they will reach 23 years of age.
- Scheme will provide support to these children through convergent approach and gap funding to ensure health, education, monthly stipend from the age of 18 years. They will also be given a lump sum amount of Rs. 10 lakhs, at the age of 23.

#### **Enrolment Procedure:**

- Eligible children are required to register themselves from May 29, 2021 to December 31, 2021 in order to avail benefits of the Scheme. Scheme will run till every identified beneficiary attains 23 years of age.

#### **Entitlements under the scheme:**

- Support will be provided for Boarding and Lodging by arranging suitable rehabilitation of the child within extended family etc, or arranging foster care or placing them in gender appropriate Child Care Institution (CCI).
- Assistance will be given for Pre-school and School Education
- Child will be assisted to obtain education loan for Professional courses or Higher Education across India. If beneficiary is unable to avail interest exemption, then interest on this loan will be paid from PM CARES for Children Scheme.
- The lump sum amount will be transferred in post office account of beneficiaries directly.

#### **45. World Bank Report on Digitization:**

- As per World Bank’s report titled “Shifting Gears: Digitization and Services-Led Development”, Indian economy is expected to increase by 8.3% in the fiscal year 2021-2022.
- As per report, in the next financial year, India’s economic prospects will be determined by its pace of vaccination against covid-19 and successful implementation of agriculture & labour reforms.

- India's Gross Domestic Product (GDP) increased by 20.1% in first quarter (April-June quarter) of financial year 2021-22 in the backdrop of "a significant base effect, limited damage to domestic demand and strong export growth".
- In the first quarter of financial year 2020-21, GDP of India was contracted by 24.4% because of nationwide coronavirus lockdown.
- The World Bank also observed that the disruption in India's economy during the second wave of the pandemic was limited, compared to the first.

#### **World Bank on economic recovery:**

- As per World Bank report, economic recovery across various sectors in India has been unequal. Manufacturing & construction sectors recovered steadily in 2021. But, low-skilled individuals, self-employed people, women and small firms were left behind.

#### **Base Effect:**

- Economic data such as 'GDP growth rate' are calculated on year-on-year basis. Thus, a low growth rate in the previous year leads to low base for the number in current year.

#### **How India will recover?**

- As per report, the extent of recovery in financial year 2021-'22 will depend on how faster household incomes recover and activity across informal sector & smaller firms normalizes.
- Risks associated with the extent of recovery include- worsening of financial sector stress, slowdown in vaccination, higher inflation constraining monetary-policy support etc.

#### **46. RBI Monetary Policy Committee Announcements:**

- Three-membered Monetary Policy Committee (MPC) of the Reserve Bank of India (RBI) maintained an accommodative stance and kept the repo rate unchanged at 4 per cent, in order to revive & sustain growth and reduce the impact of Covid-19 pandemic.
- Monetary Policy Committee has also ensured that inflation remains within the target.
- Reverse repo rate was also kept as earlier at 3.35 per cent.
- Marginal Standing Facility (MSF) rate and bank rate also remain unchanged at 4.25 per cent.

#### **Policy rate revision:**

- This was the eighth consecutive time that RBI has maintained a status quo on policy rate. The central bank had last revised its policy rate on May 22, 2020, in an off-policy cycle in order to boost the demand by cutting interest rates.

#### **What Monetary Policy Committee (MPC)?**

- The RBI has a government-constituted Monetary Policy Committee (MPC) which is tasked with framing monetary policy using tools like the repo rate, reverse repo rate, bank rate, cash reserve ratio (CRR).
- It has been instituted by the Central Government of India under Section 45ZB of the RBI Act that was amended in 1934.
- Usually, the MPC meets six times a year. But, in FY20, it had an extra meeting in view of the pandemic and the urgent need to assess the current and evolving macroeconomic situation.

#### **Functions:**

- The MPC is entrusted with the responsibility of deciding the different policy rates including MSF, Repo Rate, Reverse Repo Rate, and Liquidity Adjustment Facility.

#### **Composition of MPC:**

- The committee will have six members. Of the six members, the government will nominate three. **No government official** will be nominated to the MPC.
- The other three members would be from the RBI with the governor being the ex-officio chairperson. Deputy governor of RBI in charge of the monetary policy will be a member, as also an executive director of the central bank.



- **Selection:** The government nominees to the MPC will be selected by a Search-cum-Selection Committee under Cabinet Secretary with RBI Governor and Economic Affairs Secretary and three experts in the field of economics or banking or finance or monetary policy as its members.
- **Term:** Members of the MPC will be appointed for a period of four years and shall not be eligible for reappointment.

#### How decisions are made?

- Decisions will be taken by majority vote with each member having a vote.
- RBI governor's role: The RBI Governor will chair the committee. The governor, however, will not enjoy a veto power to overrule the other panel members, but will have a casting vote in case of a tie.

#### What is RBI Monetary Policy?

- The term 'Monetary Policy' is the Reserve Bank of India's policy pertaining to the deployment of monetary resources under its control for the purpose of achieving GDP growth and lowering the inflation rate.
- The Reserve Bank of India Act 1934 empowers the RBI to make the monetary policy.

#### 47. Coal Shortage Crisis in India:

- As per data of "Central Electricity Authority of India". India is facing an unprecedented shortage of coal stocks across the thermal plants which might lead to a power crisis.
- Of total 135 thermal plants using coal for power generation, 106 or nearly 80 per cent were either in critical or supercritical stage, on October 5. These power plants had stocks for next 6-7 days only.
- As of now, three thermal power stations in Punjab, thirteen in Maharashtra, four in Kerala are shut due to shortage of coal.
- However, Union Power Minister R K Singh stated that there is no shortage of power Delhi. He also assured that coal supply will be maintained in times to come.
- The Coal Ministry also said that India has adequate coal stocks. As per coal ministry, low inventory doesn't mean power generation would stop because stock of coal is being continuously replenished.

#### Why there is shortage of coal?

- **Increase in Power Demand:** Economy recovering from the Covid-19 pandemic coupled with supply issues have led to the current coal shortage. India is suffering from the impacts of a sharp surge in electricity demand, a squeeze on domestic mine output and surging prices of seaborne coal.
- **Increased Share of Thermal Power Plants:** Coal fired thermal power plants have also supplied a higher proportion of the increase in demand leading the share of thermal power in India's power mix increasing to 66.4% from 61.9% in 2019.
- **Flooding and Rainfall:** Lower than normal stock accumulation by thermal power plants in the April-June period and continuous rainfall in coal bearing areas in August and September which led to lower production and fewer despatches of coal from coal mines.
- **Lowering Imports:** A consistent move to lower imports coupled with high international prices of coal have also led to plants cutting imports.

#### Possible Impacts of Coal Shortage:

- Coal shortage and electricity shortage might delay the economic reopening in India. It will hit hard the underdeveloped energy infrastructure in India.

#### Coal:

- This is the most abundantly found fossil fuel. It is used as a domestic fuel, in industries such as iron and steel, steam engines and to generate electricity. Electricity from coal is called thermal power.
- The leading coal producers of the world include China, US, Australia, Indonesia, India.
- The coal producing areas of India include Raniganj, Jharia, Dhanbad and Bokaro in Jharkhand.

- Coal is also classified into four ranks: anthracite, bituminous, subbituminous, and lignite. The ranking depends on the types and amounts of carbon the coal contains and on the amount of heat energy the coal can produce.

#### **What is Coking coal?**

- Metallurgical (met) coal (or coking coal) is a naturally occurring sedimentary rock found within the earth's crust.
- Coking coal is used to create coke, one of the key irreplaceable inputs for the production of steel.
- The property that really sets coking coals apart from other coals is its caking ability, which is the specific property required in order to make coke suitable for steel making.
- Metallurgical coal is an essential ingredient in the production of steel, one of the most widely used building materials on earth. It takes around 770 kilograms of coal to make one ton of steel with approximately 70 per cent of global steel produced in basic oxygen blast furnaces.
- The challenge for steelmaking is to produce this vital commodity to enable sustainable growth, while reducing the greenhouse gas emissions footprint of the production process itself.

#### **48. Nationwide River Ranching Programme:**

- Union Minister for Fisheries, Animal Husbandry & Dairying, Parshottam Rupala, launched the River Ranching Programme on October 8, 2021.
- River ranching programme was introduced as special activity under the 'Pradhan Mantri Matsya Sampada Yojana (PMMSY) scheme to augment and enhance fish production and productivity by expanding, intensifying, diversifying and utilizing land & water productively.
- The programme was launched at Brijghat, Garh Mukteshwar, Uttar Pradesh
- Along with Uttar Pradesh, other 4 states namely, Orissa, Uttarakhand, Tripura and Chhattisgarh also participated in the launch of 'nationwide River Ranching program'.
- 3 lakhs fingerlings were ranched at 3 sites in UP, namely, Brijghat, Tigri, Meerut, Garhmukteshwar and Bijnor.
- In Uttar Pradesh, about 500 people participated in the national level launching of River Ranching program.
- 1 lakh fingerlings were ranched at Chandi Ghat, Ganga River in Haridwar district of Uttarakhand.
- 85 lakh of fingerlings were ranched at 4 sites of Tripura namely, Gomati River in Udaipur; Khowai river in Teliamura; Dhalai river in Kamalpur and Deo River in Dashamighat. About 218 participants attended the program.

#### **Who is the implementing agency?**

- National Fisheries Development Board, Hyderabad is the nodal agency under central component of the PMMSY. The board has been designated by the "Department of Fisheries, Ministry of Fisheries".

#### **What is the need of programme?**

- As the human population is growing, requirement of high-quality protein & demand of fish is increasing gradually. Thus, to promote sustainable use and conservation of fishery resources in an economical and environmentally responsible manner, River Ranching Programme was launched.
- This programme will help in achieving sustainable fisheries, conserving biodiversity, assessing ecosystem services, reducing habitat degradation and maximizing social-economic benefits.
- It will also ensure the upgradation of traditional fishery, trade & social protection of Inland communities and ecosystem sustainability.

#### **Fishing Industry in India:**

- Fisheries is an important sector in India. It provides employment to millions of people and contributes to food security of the country.
- India contributes about 7.7% to the global fish production and country ranks 4th in global exports of fish products.

- The sector envisioned to increase the farmers' income through enhancement of production and productivity, improving the quality and reduction of waste.
- The Fisheries sector has contributed about 1.24% to the national GVA and about 7.28% of the agricultural GVA in 2018-19.
- Presently, the country ranks second in the world in total fish production in the world after **China**.
- Taking into account the Centrally Sponsored Scheme “Blue Revolution” which was launched in December, 2015 had made vital contributions towards the development of the sector.

#### **49. PM Gati Shakti:**

- Recently, the Prime Minister launched PM Gati Shakti-National Master Plan for Multi-modal Connectivity.
- It is a digital platform to bring 16 Ministries including Railways and Roadways together for integrated planning and coordinated implementation of infrastructure connectivity projects.
- The multi-modal connectivity will provide integrated and seamless connectivity for movement of people, goods and services from one mode of transport to another. It will facilitate the last mile connectivity of infrastructure and also reduce travel time for people.

#### **Background:**

- Traditionally, there was lack of coordination between different Departments, for example, once a road was constructed, other agencies dug up the constructed road again for activities like laying of underground cables, gas pipelines etc. This not only caused great inconvenience but was also a wasteful expenditure.
- To address this, efforts were made to increase coordination so that all cables, pipelines etc. could be laid simultaneously. Steps have also been taken to address other issues like time-taking approval process, multiplicity of regulatory clearances etc.
- In the last few years, the Government has ensured unprecedented focus on infrastructure through a holistic outlook. This helps to address the past issues through institutionalizing holistic planning for stakeholders for major infrastructure projects. Instead of planning & designing separately in silos, the projects will be designed and executed with a common vision.

#### **PM Gati Shakti is based on six pillars:**

- **Comprehensiveness:** It will include all the existing and planned initiatives of various Ministries and Departments with one centralized portal. Each and every Department will now have visibility of each other's activities providing critical data while planning & execution of projects in a comprehensive manner.
- **Prioritization:** Through this, different Departments will be able to prioritize their projects through cross-sectoral interactions.
- **Optimization:** The National Master Plan will assist different ministries in planning for projects after identification of critical gaps. For the transportation of the goods from one place to another, the plan will help in selecting the most optimum route in terms of time and cost.
- **Synchronization:** Individual Ministries and Departments often work in silos. There is lack of coordination in planning and implementation of the project resulting in delays. PM Gati Shakti will help in synchronizing the activities of each department, as well as of different layers of governance, in a holistic manner by ensuring coordination of work between them.
- **Analytical:** The plan will provide the entire data at one place with GIS based spatial planning and analytical tools having 200+ layers, enabling better visibility to the executing agency.
- **Dynamic:** All Ministries and Departments will now be able to visualize, review and monitor the progress of cross-sectoral projects, through the GIS platform, as the satellite imagery will give on-ground progress periodically and progress of the projects will be updated on a regular basis on the portal. It will help in identifying the vital interventions for enhancing and updating the master plan.

#### **Special economic zone (SEZ):**

- SEZ is a geographical region having economic laws that are more liberal than the domestic economic laws of that country. India also has specific laws for its SEZs.
- SEZ covers a huge range of more specific zone types such as free-trade zones, free zones, export processing zones, industrial estates, free ports, urban enterprise zones etc. Such zones are created to increase foreign direct investment by foreign investors.
- SEZ is territory which is typically duty-free and comprises of different business & commercial laws. It is created to administer these areas better and increasing ease of doing business.
- Asia's first Export Processing Zone was established at Kandla, Gujarat in 1965.
- Government started establish SEZs in 2000 under the Foreign Trade Policy in order to redress infrastructural and bureaucratic challenges.
- Special Economic Zones Act was passed in 2005 and SEZ Rules came in force in 2006.
- Currently, 379 SEZs are notified in India of which 265 are operational.
- Around 64% of the SEZs are located in five states namely, Maharashtra, Tamil Nadu, Karnataka, Telangana and Andhra Pradesh.

#### **50. Kalamkari paintings & Kallakurichi wood carvings:**

- The traditional dye-painted figurative called Karuppur Kalamkari Paintings, and Kallakuruchi wood carvings have received the Geographical Indication (GI) tag.
- Highlights
- Kallakuruchi wood carvings is done using pens, palm stem, date trees, brushes made of bamboo stick and coconut tree stems.
- This certificate was issued the Geographical Indications Registry on the basis of an application filed by Tamil Nadu Handicrafts Development Corporation (Poompuhar).

#### **About Kalamkari:**

- The Karuppur Kalamkari Paintings are done in Thanjavur region. These are traditional dye-painted figurative and patterned clothes. They are made for temples like ceiling cloth, cylindrical hangings, umbrella covers and chariot covers.
- Thanjavur tradition of Kalamkari had canopies, umbrella covers, thombai (cylindrical hangings), and 'thoranams' (door hangings) comprising of motifs of yazhi, peacock, swan, flowers, and images of deities. They are used in temples and mutts.
- Artisans from Sikkalnaikkanpettai near Kumbakonam have been practicing this traditional art form for many generations. Artisans enjoyed royal patronage in times of yore. Presently, this traditional art form is practised at Karuppur in Udayarpalayam taluk of Ariyalur district as well as in villages around Sikkalnaikkapettai and Tiruppanandal in Thanjavur district.
- **Kallakurichi** Wood Carvings are done for designs and ornaments. These are indigenous to Madurai region.

#### **51. Global Multidimensional Poverty Index 2021:**

- Global Multidimensional Poverty Index 2021 was released by "United Nations Development Programme (UNDP)" and "Oxford Poverty & Human Development Initiative (OPHI)".
- This report examines the level and composition of multidimensional poverty across 109 countries covering 5.9 billion people.
- It also takes into account several deprivations that people experience in their day to day lives such as poor health, inadequate education and poor standard of living.

#### **World Scenario:**

- As per report, 1.3 billion people are multidimensionally poor, of which around 644 million are children under age 18.
- 85 percent of them live in Sub-Saharan Africa (556 million) or South Asia (532 million).
- 67 percent of the poor live in middle-income countries.
- 1 billion poor are exposed to solid cooking fuels, inadequate sanitation and substandard housing.

- 788 million poor people live in household with at least one undernourished person.
- 568 million poor people do not have improved drinking water within a 30-minute round trip walk.

#### **Indian Scenario:**

- Scheduled Tribe group in India, which accounts for 9.4 percent of the population, is poorest. Out of 129 million people, 65 million are living in multidimensional poverty.
- Out of 283 million scheduled caste group people, 94 million are living in multidimensional poverty.
- In all, five out of six multidimensionally poor people live in households whose head is from a Scheduled Tribe, a Scheduled Caste or Other Backward Class (OBCs).

#### **About MPI:**

- The Multidimensional Poverty Index (MPI) was launched by the UNDP and the OPHI in the year 2010. MPI uses **three dimensions** and ten indicators including:
  1. **Education:** Years of schooling and child enrolment (1/6 weightage each)
  2. **Health:** Child mortality and nutrition (1/6 weightage each)
  3. **Standard of living:** Electricity, drinking water, flooring, sanitation, cooking fuel and assets (1/18 weightage each).

#### **52. Nobel Prize in Economics 2021:**

- Three United States-based economists namely, David Card, Joshua D Angrist and Guido W Imbens have been conferred the “Nobel prize in Economics 2021”.
- They were conferred with the prize for their work on “use of natural experiments” on the impact of minimum wage, immigration and education on the labour markets.
- One half of the prize was awarded to David Card, while the other half of the prize is shared by Joshua Angrist and Guido Imbens.

#### **Sveriges Riksbank Prize in Economic Sciences:**

- Sveriges Riksbank Prize in Economic Sciences, is conferred in memory of Alfred Nobel and is widely known as **Nobel Prize for Economics**.
- This prize was started in the year 1968 by donation from central bank of Sweden called “Sveriges Riksbank” to the Nobel Foundation in order to commemorate the 300th anniversary of the central bank.
- Prize comprises of a 10 million Swedish kronor award money which roughly accounts for Rs 8.33 crore.
- It is officially titled as “Sveriges Riksbank Prize in Economic Sciences” in the Memory of Alfred Nobel”.

#### **2021 Edition:**

- In the year 2021, David Card has been conferred the award “for his empirical contributions to labour economics”. He analysed the effects of minimum wages, immigration and education on the labour market.
- Angrist and Imbens have been awarded “for their methodological contributions to the analysis of causal relationships”. Both of them developed a research framework which have been adopted by many researchers who work with observational data.

#### **53. IMF’s World Economic Outlook:**

- In its World Economic Outlook, which was published on October 12, 2021, International Monetary Fund (IMF) improved its growth forecasts of the Latin American and Caribbean economy in the year 2021.
- As per IMF report, a recovery of 6.3% is expected by 2021 and 2.5% by 2022.
- These figures indicates that international credit organization observes a little increase in Gross Domestic Product (GDP) for the region against what was evaluated in July. In July 2021, it estimated an increase of 5.8%.
- IMF expects a growth of 3.2% for year 2022, 0.2% lower than its previous analysis.

- IMF noted the worse performance of Brazil and Mexico, which are considered as the strongest economies in the region.
- According to IMF, Brazil's GDP expansion will be 5.2% in 2021 while 1.5% in 2022.
- For Mexico, GDP expansion will be 6.2% in 2021 and 4.0 % in 2022.

#### **World Economy:**

- According to IMF, world economy will grow by 9% in 2021. In July 2020, it expected an increase by 6%. Growth is still conditioned by prolongation of covid-19 pandemic.
- IMF projected a growth by 4.9% in 2022.
- As per IMF, in mid-2022 headline inflation will likely to return to pre-pandemic levels, for advanced economies and emerging & developing economies, amid high uncertainty.

#### **Vaccine Gap:**

- The agency noted a huge vaccine gap and big disparities between economically advanced countries and developing countries. More than 60% of the population are vaccinated in advanced economies while 96% of the population in are unvaccinated in low-income countries.

#### **54. EU's first Green Bond Issuance:**

- The European Union (EU) attracted huge demand from investors for its first green bond on October 12, 2021.
- Huge demand was there as Brussels kicked off its efforts for becoming world's biggest issuer of sustainable debt.
- Euro 12bn sale of 15-year debt attracted about Euro 135bn of orders.
- This was the largest green bond deal, eclipsing the UK's £10bn debut in the month of September.
- The sale happened as Europe continues to battle an energy crunch, which also illustrate that there is a growing need for diverse and renewable sources of power.

#### **First Issue by EU:**

- This issue of recent bond is the first of an expected €250bn of "European Commission green bonds". It makes about a third of the EU's €800bn Covid-19 recovery fund.

#### **How EU will use the amount?**

- Proceeds through the green bond will be given to the member states who can spend it on areas such as transport, energy efficiency and nature protection. This bond will help in strengthening the role of EU and euro in sustainable finance market.

#### **Partnering Member States:**

- Brussels has joined several member states such as France, Italy, Germany, Spain and Poland in issuing green debt. Demand for green securities is intense because of focus of fund management industry on environmental, social and governance factors.

#### **Greenium:**

- The EU has joined other recent issuers with respect to attracting a price premium called as greenium. Yield of 0.45 per cent represented a borrowing cost of around 0.025 of percentage point.

#### **Green Bond:**

- Green bond is a debt instrument through which capital is raised to fund 'green projects'. Green projects usually include projects related to renewable energy, sustainable water management and clean transportation etc.

#### **55. India at 3rd position in RE Investment attractiveness Index:**

- Ernst & Young's (EY) Renewable Energy (RE) Country Attractiveness Index was recently published in which India has been ranked at 3rd position.
- RE Investment attractive index ranks the world's top 40 nations with respect to attractiveness of their deployment opportunities and renewable energy.
- In the index, India retains its third position while US retains the top position.
- China has been ranked at second position.

- As per report, conditions are ripe for rapid growth across renewables generation. The major challenge will be inadequate grid investments.
- According to Index, corporate power purchase agreements were the key driver of clean energy growth in the light that, environment, social, and governance measures are becoming top agenda for companies and investors.

#### **India's Rank in PPA Index:**

- Among the top 30 power purchase agreement (PPA) markets, India has been ranked at sixth position. PPA Index focuses on attractiveness of renewable power procurement. It ranks the growth potential of country's corporate PPA market.

#### **India's renewable energy market:**

- Renewable energy market conditions in India, including policy decisions, investment & technology improvements focus on self-reliant supply chains. It has taken India's clean energy transition to new heights.
- Report notes that the drive to integrate volumes of variable resources will put the grid infrastructure under significant strain.
- It also notes that, investment required to upgrade and expand energy transmission infrastructure will be a key challenge across the world.

#### **Which countries have transitioned towards clean energy?**

- France and the UK have switched to clean energy, while Germany has edged back ahead of Australia as its onshore wind market was fruitful in first half of 2021.
- Germany has added 971 MW, accounting for a rise of 62 per cent as compared to first half of 2020.

#### **56. India re-elected to UN Human Rights Council:**

- India got re-elected to the UN Human Rights Council for 2022-24 term on October 14, 2021 with the overwhelming majority in United Nations General Assembly (UNGA).
- These new members will serve for a period of three years, starting from January 2022.
- India secured its selection by 184 votes in the 193-member assembly, way ahead of the majority of 97. India's current term was to end on December 31 2021. There were five vacant seats in Asia-Pacific States category namely Kazakhstan, Malaysia, India, Qatar and United Arab Emirates, for election for the term of 2022-2024.

#### **What are the new members?**

- The 193-member General Assembly elected Argentina, Cameroon, Benin, Finland, Eritrea, Honduras, Gambia, Lithuania, India, Kazakhstan, Malaysia, Luxembourg, Montenegro, Qatar, Paraguay, UAE, Somalia, and the USA by secret ballot for 2022-2024 term.

#### **Term of office of members:**

- Members of the Council will serve for a period of three years. They will not be eligible for immediate re-election following two consecutive terms.

#### **How membership is given?**

- The membership is given on the basis of equitable geographical distribution. Seats are distributed among regional groups Group of Asia-Pacific States, Group of African States, Group of Eastern European States, Group of Western European & other States and Group of Latin American & Caribbean States.

#### **57. Govt launches 'One Health Consortium':**

- The Department of Biotechnology launched a 'One Health' consortium on October 14, 2021 in virtual mode. It was launched by secretary of Department of Biotechnology, Dr Renu Swarup.
- One Health Consortium has been empowered to carry out surveillance of important viral, bacterial, & parasitic infections of zoonotic and transboundary pathogens in India.
- This project will also look into use of existing diagnostic tests and development of additional methodologies to conduct surveillance and understand the spread of emerging diseases.

- This consortium was launched in the backdrop of Covid-19 pandemic, that showed the relevance of 'One Health' principle in governance of infectious diseases. One Health principle is relevant to prevent and contain the zoonotic diseases across the world. Thus, this holistic approach will be taken in order to understand the health of human, animals and wildlife for minimising the damage caused by covid-19 like pandemics.

#### **Organisations under Consortium:**

- One Health Consortium comprises of 27 organisations, led by DBT-National Institute of Animal Biotechnology, Hyderabad. It is one of the biggest health programmes that Indian government has launched in post-Covid times.
- It comprises of AIIMS Delhi, AIIMS Jodhpur, GADVASU Ludhiana, IVRI Bareilly, TANUVAS Chennai, Assam agricultural & veterinary university, MAFSU Nagpur, ICAR and ICMR centres & wildlife agencies.

#### **One Health Approach:**

- One Health approach notes that health of people, health of animals, and the health of environment are interconnected. Due to this, activities & practices in these domains will inevitably affect the others.
- Primary goal of 'One Health' is to encourage the collaborative efforts of stakeholders across the stated three domains in order to achieve best health outcomes for humans, animals, and environment.

#### **58. Global Hunger Index: India at 101st rank:**

- Global Hunger Index 2021, which is prepared jointly by Irish aid agency called 'Concern Worldwide' and German organisation called 'Welt Hunger Hilfe', was released on October 14, 2021. The Index termed the hunger level in India as alarming.

#### **Where India has been placed?**

- In the index, India has been placed to 101st position out of 116 countries.
- In 2020, India's was positioned at 94th.
- In 2021 edition, India has been placed behind its neighbour countries Pakistan, Bangladesh and Nepal.
- GHI score of India has also decreased. It was 38.8 in 2000 but now has been decreased to the range of 28.8 – 27.5 between 2012 and 2021.
- Share of wasting among children increased from 17.1 per cent during 1998-2002 to 17.3 per cent during 2016-2020.

#### **World scenario:**

- In the index, eighteen countries such as China, Brazil and Kuwait, shared the top rank. They got the GHI score of less than five.

#### **How GHI Score is calculated?**

- GHI score is calculated on the basis of four indicators namely:
- **Undernourishment:** Child wasting (share of children aged under five who are wasted i.e., those having low weight for their height).
- Child stunting (children aged under five who are having low height for their age).
- Child mortality (mortality rate of children aged under five).

#### **Improvement in India:**

- India has improved with respect to indicators like under-5 mortality rate, prevalence of undernourishment and prevalence of stunting among children.

#### **Global Hunger Index (GHI):**

- GHI is a tool to measure and track hunger across the world, by region as well as by country. It is calculated annually and its results are published in a report issued in the month of October each year.



### **59. India's foreign exchange reserves increased:**

- As per RBI data, India's foreign exchange reserves increased by USD 2.039 billion in the first week of October 2021.
- Foreign exchange now stands at USD 639.516 billion.
- In the last week of September, reserves had dropped by USD 1.169 billion, accounting for a reserve of USD 637.477 billion.
- It had increased by USD 8.895 billion to a life time high, accounting for USD 642.453 billion during July end and September first week.
- India's reserve position with the IMF decreased by USD 3 million, accounting for USD 5.225 billion in the reporting week.

### **Foreign Currency Assets (FCAs):**

- During the reporting week. Foreign reserves rose account of an increase in the Foreign Currency Assets (FCAs). FCA increased by USD 1.55 billion, accounting for USD 577.001 billion the week RBI reported.

### **What is FCA?**

- FCA is expressed in dollar terms. It comprises of the effect of appreciation or depreciation of non-US units such as euro, pound and yen held in the foreign exchange reserves.

### **Gold reserves:**

- In the reporting week, gold reserves increased by USD 464 million to USD reach at 38.022 billion.

### **Special Drawing Rights (SDRs):**

- SDR with the International Monetary Fund (IMF) increased by USD 28 million, accounting for USD 19.268 billion.

### **What are foreign exchange reserves?**

- Assets held on reserve by central bank in foreign currencies are called as foreign exchange reserves. These reserves are used to influence monetary policy and back liabilities. It includes any foreign money held by a central bank, for instance, U.S. Federal Reserve Bank.

### **60. MGNREGS out of Funds in 21 states:**

- According to the financial statement of "Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) scheme", it is running out of funds in 21 states.
- The scheme has run out of funds halfway in the financial year 2021, and supplementary budgetary allocations will not be provided to compensate till the next Parliamentary session starts.
- It is showing a negative net balance of Rs 8,686 crore.

### **What does it imply?**

- Shortage of funds mean that, payments for MGNREGA workers and material costs will be delayed, unless States use their own funds.

### **Centre's take:**

- Centre is accusing some of the states with "artificially creating demand" for work.

### **Why there is shortage of funds?**

- The MGNREGA is a demand driven scheme. It guarantees 100 days of unskilled work to any rural household in need.
- During the lockdown period in 2020 amid covid-19 pandemic, this scheme was given its highest budget of Rs 1.11 lakh crore. This fund was used to provide a critical lifeline for 11 crore workers. But in Union Budget 2021-22, the scheme was allocated Rs 73,000 crore, as nationwide lockdown was over. Centre also announced that supplementary budgets will be allocated if money ran out.
- As of October 29, total expenditure including payments due already reached to Rs 79,810 crore.
- 21 states including Andhra Pradesh, West Bengal and Tamil Nadu are showing negative net balance.

### **About MGNREGA:**

- MGNREGA is among the largest work guarantee programmes across the world. This scheme was launched with the objective of providing 100 days of employment in each financial year to the adult members of rural household.
- It aims to address the causes of chronic poverty using a rights-based framework.
- Under the scheme, wages are paid in accordance with the statutory minimum wages which is specified for agricultural labourers under Minimum Wages Act, 1948.

**The core objectives of the MGNREGS are:**

- Providing not less than one hundred days of unskilled manual work as a guaranteed employment in a financial year to every household in rural areas as per demand, resulting in creation of productive assets of prescribed quality and durability;
- Strengthening the livelihood resource base of the poor;
- Proactively ensuring social inclusion and
- Strengthening Panchayati Raj Institutions.

**61. PMFBY: Working Group set up:**

- The Central Government has set up a working group, with the aim of rolling out an overhauled Pradhan Mantri Fasal Bima Yojana (PMFBY) from kharif Season 2022.

**Key Points:**

- This working group has been constituted comprising of officials from Centre, top executives of public sector insurance companies and key crop-producing states.
- Working group will suggest “sustainable, financial and operational models.”
- It was constituted after several states quit the scheme, which in turn defeats the objective of protecting income of farmers.

**Function of working group:**

- This working group is expected to address the demand of alternative model, in order to achieve sustainable capacities of insurers as well to achieve rationalised premium pricing in order to cut subsidy burden on the government. It will submit its report in next six months.

**Why this group was set up?**

- The working group will be set up as centre identified a hardening of premium market, inadequate underwriting capacity of insurers and lack of sufficient participation in tenders as major issues, impacting PMFBY during implementation of the scheme.

**Premium under the scheme:**

- Under the scheme, premium that farmers are required to fix is 1.5% of the sum insured for rabi crops while 2% for Kharif crops. It is 5% for cash crops under PMFBY. Rest of the premium is split between the Centre and states.

**State's demand:**

- Some of the states have demanded to cap their share of the premium subsidy at 30%, while some states are demanding the Centre to bear entire subsidy.

**Which states have exited the scheme?**

- Gujarat, Telangana, Andhra Pradesh, West Bengal, Jharkhand and Bihar have exited the scheme, till date. Punjab did not implement the crop insurance scheme. Bihar, Andhra Pradesh and West Bengal have launched their own schemes under which farmers do not pay any premium, however they receive a fixed compensation amount in case of crop failure.

**62. NITI Aayog launches Geospatial Energy Map of India:**

- Government think tank, NITI Aayog, launched the Geospatial Energy Map of India on October 18, 2021.
- This Geospatial Energy Map of India provides a holistic picture of all energy resources like oil & gas wells, petroleum refineries, conventional power plants, coal fields and coal blocks.

**Use of GIS-based Energy Map of India:**

- GIS mapping of energy assets will be helpful in ensuring real-time and integrated planning of energy sector in India, considering its interdependence and large geographical distribution.
- Energy markets have huge potential in bringing efficiency gains.
- Such mapping of energy assets will be helpful for all concerned stakeholders.
- It will also help in accelerating policy-making process.
- Using this, fragmented data has been brought together and will prove to be a great research instrument.

#### **Who has developed this Map?**

- The Geospatial Energy Map of India has been launched by NITI Aayog in collaboration with the Indian Space Research Organisation (ISRO). Energy ministries of the Government of India has also provided its support in developing this platform.

#### **Significance of GIS Map:**

- The GIS map will provide a holistic picture of all energy resources India, which in turn will help in visualising energy installations like conventional power plants, petroleum refineries, oil and gas wells, petroleum refineries, coal fields and coal blocks, renewable energy resource potential and district-wise data on renewable energy power plants through 27 thematic layers.
- Map will also identify and locate all primary and secondary sources of energy as well as their transportation/transmission networks in order to provide a comprehensive view of energy production and distribution in India.
- This platform has been launched with the aim of integrating energy data scattered across several organizations. It will present consolidated data in visually appealing graphical manner.

#### **63. BC Commission begins Enumeration Exercise:**

- As per Chairman of Andhra Pradesh Commission for Backward Classes, Justice A. Sankara Narayana, the enumeration & enlistment programme has been undertaken for the enrolment of deserving castes and remove inequity.
- This commission was established on October 18, 2021.
- Panel was also asked to look after caste names like Pinjari, Uppara and Pichiguntla. These caste names were allegedly being used in a derogatory manner.
- Members from Dasari community sought for the revival of ancient practice of 'Dasari blowing the conch' at Tirumala at the dawn. Following this, 'Sannidhi Golla' of Yadav community opened the main door of Lord Venkateswara temple.

#### **Venkateswara Temple:**

- It is a Hindu temple located in the hill town of Tirumala in Chittoor district of Andhra Pradesh.
- It is dedicated to Venkateswara (a form of Vishnu). He is believed to have appeared in the town for saving mankind from trials and troubles of Kali Yuga. Thus, this place has been named as Kaliyuga Vaikuntha, while the Lord here is referred "Kaliyuga Prathyaksha Daivam".

#### **Different names to the temple:**

- The temple is also called by different names such as Tirumala Temple, Tirupati Balaji Temple or Tirupati Temple.

#### **Different names of the Lord:**

- Lord Venkateswara is known by other names like Govinda, Balaji and Srinivasa.

#### **Who runs the temple?**

- The temple is run by "Tirumala Tirupati Devasthanams (TTD)". TTD is under the control of Andhra Pradesh Government. Head of the TTD is appointed by Andhra Pradesh Government.

#### **64. Global Food Security Index 2021:**

- Tenth edition of the Global Food Security Index was published recently. In the index, India has been ranked at 71st position.
- The Global Food Security (GFS) Index 2021 was prepared by analysing data from 113 countries.

- On the other hand, recently, India was ranked at 101st position in the Global Hunger Index (GHI) 2021.

#### **About Global Food Security Index (GFS):**

- The GFS Index is sponsored by Corteva Agriscience while it is designed & constructed by London-based Economist Impact. The index is published every year. GFS measures the underlying drivers of food security on the basis of understated factors:
  1. Affordability
  2. Availability
  3. Quality and Safety
  4. Natural Resources and Resilience
- Index considers 58 unique food security indicators like income & economic inequality. It also calls for attention to the systemic gaps and actions which are required to accelerate the progress toward Sustainable Development Goal of Zero Hunger by 2030.

#### **Key Findings of the report:**

- Countries like Ireland, Austria, Finland, the UK, Switzerland, the Netherlands, Japan, Canada, the US and France shared the top rank. Their overall GFS score was in the range of 77.8 and 80 points.
- India has been ranked at 71st position out of 113 countries. Its overall score is 57.2 points.
- India performed better than Pakistan (75th), Sri Lanka (77th), Nepal (79th) and Bangladesh (84th).
- China has been ranked way ahead of India at 34th.
- However, incremental gains by India in overall food security score were lagging behind of Pakistan, Nepal and Bangladesh, over the period of ten years.

#### **What are the Concerns?**

- Global food security has decreased for the second consecutive year after seven years of progress with respect to Sustainable Development Goal of zero hunger.
- Though countries have made significant progress towards addressing food insecurity in last ten years, but food systems still remain vulnerable to climatic, economic, and geopolitical shocks.

#### **65. SAKSHAM Centres:**

- Ministry of Rural Development launched 152 SAKSHAM centres under the Deendayal Antyodaya Yojana – National Rural Livelihoods Mission (DAY-NRLM). These centres were launched as a part of Azadi ka Amrit Mahotsav.
- About 152 Centre for Financial Literacy & Service Delivery (or SAKSHAM Centres) were launched across 77 districts in 13 states, during October 4 to 8, 2021.
- These centres would act as one stop solution or single window system for the basic financial needs of Self-Help Group (SHG) households across the rural areas.
- Objectives of the centre
- These centres were launched with the objective of providing financial literacy and facilitating the delivery of financial services like credit, savings, pensions, insurance, etc. These facilities will be provided to SHG members and rural poor.

#### **Who will manage these centres?**

- These centres will be managed by SHG network, at the level of “Cluster Level Federations (CLFs)”. Trained Community Resource Persons (CRPs) will also help in maintaining the centres.

#### **Trained Community Resource Persons (CRPs):**

- Trained CRPs are given six days residential training at the Rural Self Employment Training Institutes (RSETIs), which are established by the Lead Bank of the district.

#### **SAKSHAM App:**

- This mobile & web-based application has been launched by Ministry of Rural Development.
- The community resource person of the Centre will use this application for knowing the penetration of several financial services for each SHG & village, identifying major gaps as well as for providing training & delivering the required financial services.

- Application will also measure the impact of the programme for mid-course correction in the strategy on regular interval.

#### **66. New Rules notified to ensure Sustainability:**

- The ministry of power announced new rules to ensure sustainability in the economic viability of the power sector.
- New rules will also ease the financial stress of various stakeholders.
- It will also ensure timely recovery of costs incurred in the electricity generation.
- It will promote clean energy for ensuring the suitability and meet commitment made by India towards climate change.

#### **What were the concerns?**

- Investors and other stakeholders across the power sector had been concerned about the timely recovery of costs incurred due to change in law and curtailment of renewable power.

#### **Electricity Act, 2003:**

- Ministry has notified new rules under the Electricity Act, 2003. They are in the interest of electricity consumers and stakeholders. The rules comprise of:
  1. Electricity (Timely recovery of costs due to Change in Law) Rules, 2021.
  2. Electricity (Promotion of generation from renewable sources of energy by addressing Must Run and other matters) Rules, 2021.
  3. As per ministry, timely recovery of the costs because of change in law is important because investment in the power sector depends on timely payments.

#### **Energy transition:**

- The energy transition is happening across the world. India has also made commitments for bringing energy transition. India also announced international commitment for setting up 175 GW of renewable energy (RE) capacity by 2022 and 450 GW of energy by 2030.

#### **Significance of new rules:**

- New rules will help in achieving the goal of RE generation. Rules will also help in ensuring that the consumers get green and clean power. They will also secure a healthy environment for future generation.

#### **67. Goa achieves ODF and Electricity for every household:**

- Information and Broadcasting Minister, Anurag Thakur, recently complimented Goa as it achieved ODF and Electricity for every household.
- Goa has also become the first state to provide tap water to every household under the “Har Ghar Jal Mission”.
- Apart from that, Goa achieved 100 per cent target to provide free ration to the poor and needy.
- It has also completed 100 per cent first dose of covid-19 vaccination.

#### **What is ODF?**

- The original ODF protocol was issued in the year 2016. According to it, a city or ward is notified as ODF city or ward if not a single person is found defecating in the open, at any point of the day. The ODF tag is provided under Swachh Bharat Mission (SBM)

#### **What is ODF+?**

- ODF+ was launched in August 2018 to scale up and sustain the work that cities have undertaken after achieving the ODF tag under Phase I of SBM-Urban. Cities that had been given ODF tag at least once, are eligible for SBM-ODF+ status. A city or ward or work circle can be declared ODF+ if not a single person is found to be defecating or urinating in open. Furthermore, to get this tag, all community & public toilets are required to be functional & well-maintained.

#### **What is ODF++?**

- The ODF++ was launched in August 2018. Those cities or ward or work circle are eligible to get the tag, which have achieved ODF tag under Phase 1 of the SBM-Urban. However, ODF++ protocol adds

one condition that “faecal sludge/septage and sewage is safely managed & treated and there is no discharging and/or dumping of untreated faecal sludge/septage in water bodies, drains, or open areas.”

**68. ‘PM Atma Nirbhar Swasth Bharat Yojana’:**

- Prime Minister Narendra Modi is set to visit Uttar Pradesh on October 15, 2021 and launch Pradhan Mantri Atma Nirbhar Swasth Bharat Yojana in Varanasi.
- PMASBY is going to be one of the largest pan-India schemes to strengthen healthcare infrastructure across India. This scheme is being launched in addition to the National Health Mission. It is a central sector scheme, that targets for building an IT enabled disease surveillance system by means of developing a network of surveillance laboratories at national, regional, district and block levels.
- PMASBY will be launched with the objective of filling critical gaps in public health infrastructure, with special focus on critical care facilities & primary care across the urban and rural areas.

**Facilities under PMASBY:**

- The scheme will be providing support to 17,788 rural Health and Wellness Centres across 10 High Focus States.
- Under it, around 11,024 urban Health & Wellness Centres will be established across all the States.
- Critical care services will be made available through Exclusive Critical Care hospitals, in all the districts of India having more than 5 lakh population. Remaining districts will be covered by means of referral services.
- People will get access to full range of diagnostic services in Public Healthcare system using a network of laboratories in India.
- Integrated Public Health Labs will be set up under the scheme, in all the districts.
- Institutions to be set up under PMASBY
- Under PMASBY following institutions would be set up:
  1. A National Institution for One Health
  2. 4 New National Institutes for Virology
  3. 9 Biosafety Level III laboratories
  4. Regional Research Platform for WHO South-East Asia Region and
  5. 5 New Regional National Centre for Disease Control.

**69. Govt to set up panel for National Employment Policy:**

- The central government has planned to set up a committee for National Employment Policy (NEP), which seeks to create a roadmap for improving job opportunities in India.
- The committee will comprise of representatives from Ministry of labour and other ministries.
- It will also include prominent people from industry.
- It will be a high-powered committee, of which views and recommendations will be taken.

**National Employment Policy (NEP):**

- The NEP seeks to create a sector-wise strategy to improve the potential of job creation by pulling investments towards employment-intensive sectors, attracting new industries by creating an enabling environment and by policy interventions.
- It will be created based on data from five all-India labour surveys and E-Shram portal for facilitating evidence-based policymaking to generate employment. Following the consultations, it will be sent for cabinet approval.

**AQEES survey:**

- The first All-India Quarterly Establishment-based Employment Survey (AQEES) was launched in September 2021, for the April-June 2021 quarter. This survey is conducted by Labour Bureau, an office of Ministry of Labour & Employment.

- As per Centre for Monitoring Indian Economy (CMIE), unemployment rate had touched a record high of 23.52%, in April 2020. During April-June 2020-21 quarter, around 121 million jobs were lost, the highest ever monthly job loss on record since it started compiling employment data.

#### **eSHRAM Portal:**

- The Ministry of Labour & Employment has developed eSHRAM portal for creating a National Database of Unorganized Workers (NDUW) for optimum realization of their employability and extend the benefits of the social security schemes to them.
- It is the first-ever national database of unorganised workers including migrant workers, construction workers, gig and platform workers, etc.

#### **Objectives of eSHRAM Portal:**

- Creation of a centralized database of all unorganized workers (UWs) including Construction Workers, Migrant Workers, Gig and Platform workers, Street Vendors, Domestic Workers, Agriculture Workers, etc., to be seeded with Aadhaar.
- To improve the implementation efficiency of the social security services for the unorganized workers.(ii) Integration of Social Security Schemes meant for UWs being administered by MoLE and subsequently those run by other ministries as well.
- Sharing of information in respect of registered unorganised workers with various stakeholders such as Ministries/ Departments/ Boards/ Agencies/ Organisations of the Central & State Governments through APIs for delivery of various social security and welfare schemes being administered by them.
- Portability of the social security and welfare benefits to the migrant and construction workers.
- Providing a comprehensive database to Central and State Governments for tackling any National Crises like COVID-19 in future.

#### **70. PM Ayushman Bharat Health Infrastructure Mission:**

- Prime Minister Narendra Modi launched the Ayushman Bharat Health Infrastructure Mission on October 25, 2021, in Varanasi, Uttar Pradesh.
- This scheme is of worth Rs 5000-crore and is India's largest scheme launched to scale-up health infrastructure.
- The mission was launched to improve the public health infrastructure in urban as well as rural areas.
- It will work in addition to the National Health Mission.

#### **Ayushman Bharat Health Infrastructure Mission:**

- The Ayushman Bharat Health Infrastructure Mission was announced by PM. It is expected to extend support to 17,788 rural Health & Wellness Centres across 10 high focus states. Under the scheme, 11,024 urban Health & Wellness Centres will be established. The mission will be launched with the aim of strengthening the critical healthcare network in India.

#### **Objective of Mission:**

- This mission was launched with the objective of filling critical gaps in public health infrastructure. It will bridge the gap between critical care facilities and primary care across urban and rural areas.

#### **Second Aspect of mission:**

- Second aspect of the Ayushman Bharat Health Infrastructure Mission is related to "testing network for diagnosis of diseases". Necessary infrastructure will be developed under the mission for the diagnosis and monitoring of diseases. Under it, 730 districts in India will get Integrated to Public Health labs. Apart from that, 3 thousand blocks will be provided Block Public Health Units.

#### **Significance of the scheme:**

- Scheme will investigate the expansion of existing research institutions that are studying pandemics. It will also help in strengthening 80 Viral Diagnostic and research labs. It will also set up "WHO regional research platform for South Asia" in a bid to strengthen this network.

### **71. The Changing Wealth of Nations 2021 report:**

- World Bank recently published its report titled “The Changing Wealth of Nations 2021”. As per report, South Asia suffers the most in terms of loss of human capital loss because of air pollution.
- Latest edition of the report has measured wealth creation and distribution among 146 countries. It covers a 20-year period from 1995 to 2018.
- World Bank included gross domestic product, human capital, human-produced capital, and natural capital such as renewable & non-renewable natural resources to measure the wealth.
- According to the bank, human capital is defined as “earnings over a person’s lifetime.”

#### **Key findings of the report:**

- As per report, human capital was the largest source of worldwide wealth. In the year 2018, it comprised of 64 per cent of total global wealth.
- Middle-income countries increased their investment in human capital as a result, their share of global human capital wealth increased significantly.
- In South Asia, human capital accounts for 50 per cent of total wealth in the region. This figure did not change during the survey period. Thus, report highlights the importance of a healthy workforce.

#### **Concerns highlighted in the report:**

- As per report, air pollution was impacting this significant wealth generator. South Asian region was most severely affected by estimated human capital loss because of air pollution.
- No such human capital loss due to air pollution was quantified in other regions.
- Wealth in South Asia has increased since 1995. But its per capita wealth is among the lowest across the world due to population growth, as compared to sub-Saharan Africa.
- Gender disparity: about 80 per cent of wealth in the region was attributed to men.

### **72. Four Year Integrated Teacher Education Programme:**

- Central government has notified a four-year “Integrated Teacher Education Programme”, in line with the New Education Policy (NEP).
- With this new notification, BEd course will be integrated. It will be of four-year duration.
- Students pursuing a four-year BEd degree, will get BA & BEd or BSc & BEd or BCom & BEd degrees together.
- Earlier, these students were getting these two degrees in five years. But the integrated degree will provide both degrees in four years and thus, save a year for students.

#### **Significance of the scheme:**

- New integrated course will help in creating teachers who are in sync with the new education policy. New education policy introduced several changes in the curriculum such as teaching in regional language, teaching coding to school kids etc. Thus, the new integrated degrees will prepare teachers according to the need. It will have a new curriculum. New BEd courses will also bring in specialisation in the education of ‘special children’.

#### **Objective:**

- The government has a aim of making four-year integrated Bed, the minimum degree required for teaching by 2030. National Council for Teacher Education (NCTE), working under the aegis of Ministry of Education, has created the curriculum of this course in a way that it enables student-teacher to get degree in education and specialised discipline like science, mathematics, history, arts, economics, or commerce.

#### **Integrated Teacher Education Programme (ITEP):**

- Four Year ITEP will start from the academic session 2022-23. Admission for the course will be carried out by National Testing Agency (NTA) by means of a National Common Entrance Test (NCET). Multidisciplinary institutes will offer the course. It will be the minimal degree qualification for schoolteachers.

### **73. ‘Knock every door’ Campaign:**



- Union Health Ministry has asked states and Union Territories to come up with district-level plan and launch a “Har Ghar Dastak” (Knock every door) campaign across poor performing districts.
- Central government has also asked states & union territories to set up the ante, in those areas where first & second dose vaccination coverage is below the national average.
- Har Ghar Dastak campaign will be initiated with the aim of scaling up the Covid-19 vaccination drive.
- Under the campaign, vaccine vans will be introduced, and exercise will be reviewed on daily basis.

**Vaccine coverage:**

- In India, currently 10.38 Crore people are due to get their second dose of vaccine from 17 states, as of October 27, 2021.

**Other steps to boost vaccination:**

- Centre is preparing special initiative to sensitise people and tell them that covid-19 vaccine is the only protection against covid-19 disease.
- Centre might ask states to launch a special drive for vaccination.
- States under focus
- Bihar, Jharkhand, West Bengal, and Uttar Pradesh are the states under focus because of low vaccination rate. For instance, In Bihar, vaccination coverage stands at 39% for first dose while 13% for second dose.

**Vaccine Hesitancy:**

- WHO defines Vaccine hesitancy as a delay in acceptance or refusal of vaccines despite the availability of vaccination services. Vaccine hesitancy has been reported in more than 90% of countries in the world.

**Reasons for Vaccine Hesitancy:**

- The main issue with Vaccine hesitancy is **misinformation**.
- **Religious propaganda** that the vaccine may contain microbes, chemicals and animal-derived products which is forbidden by religious laws.
- **Social media** is used in stirring fear in people by falsely blaming vaccines for unrelated diseases is the bedrock of the Vaccine hesitancy all across the globe.
- For example, recently some sections in India are refraining from the polio vaccine. This is due to the misconception that the polio vaccine caused illness, infertility and was ineffective.
- **Vaccine-derived diseases:** Oral Polio Vaccines (OPV) contains weakened but live poliovirus. This virus from the vaccine is excreted by immunized children which can move from one person to another. This allows the virus to stick around and mutate to a more virulent form, raising the threat of vaccine-derived poliovirus (VDPV).
- **Inconvenience in accessing** vaccines is also the leading cause of Vaccine hesitancy.

**Benefits of Vaccine:**

- According to WHO, vaccination prevents between two-three million deaths each year, a figure that will rise by another 1.5 million if vaccine coverage improves.
- Vaccination protects children from serious illness and complications of vaccine-preventable diseases which can include amputation of an arm or leg, paralysis of limbs, hearing loss, convulsions, brain damage, and death.
- A study in 2017 that looked at flu seasons between 2010 and 2014 found that vaccination reduced flu-associated deaths by 65% among healthy children.
- The vaccine can also prevent hospitalization (thereby it can check out of pocket expenditure), reduce the severity of illness and prevent severe, life-threatening complications in children.

**74. Open Network for Digital Commerce Initiative:**

- Indian government is to set up a private sector-led non-profit company to fast-track the implementation of proposed “Open Network for Digital Commerce (ONDC) initiative”.

- Open Network for Digital Commerce Initiative will be implemented by the Department for Promotion of Industry & Internal Trade (DPIIT).
- Entity is also expected to provide a start-up mindset, enabled by management with a futuristic vision, comfort with cutting edge technology, deep understanding of commerce and a missionary outlook to drive change.

#### **About ONDC:**

- ONDC will be implemented with the aim of democratising digital commerce, in a bid to move it from a platform-centric model to an open network. This is like democratization of digital payment system by Unified Payment Interface (UPI).
- The initiative will enable, buyers & sellers to be digitally visible and transact through an open network, regardless of the platform or application they use.
- Initiative also aims to empower merchants and consumers by breaking departments to form a single network for driving innovation & scale and transforming all the businesses ranging from food, retail goods, to mobility.
- It will help in developing the network by adopting & building enabling technology and encouraging voluntary participation of the eco-system players.
- It will also establish a code of conduct and rules of network to bring in discipline.
- ONDC will also provide foundational services to manage the network such as digital infrastructure for network, grievance redressal etc.

#### **Quality Council of India (QCI):**

- QCI was set up as a public private partnership model under the Societies Registration Act in 1997, for providing accreditation services to several sectors for persons, product, and services.

#### **75. Civil Aviation Minister launches Krishi UDAN 2.0:**

- The Ministry of Civil Aviation launched “Krishi Udan 2.0 scheme” on October 27, 2021.
- Under “Krishi Udan 2.0 scheme”, cargo-related infrastructure will be built in airports of hilly, tribal, and north-east regions.
- Such infrastructure will help in assisting farmers to transport agriculture products.

#### **Krishi Udan Scheme:**

- Central government had launched Krishi Udan scheme in September 2020. Under the scheme, airport charges like parking charges & terminal navigational landing charges were waived off. Charges were waived off if the agricultural cargo is more than 50 per cent of the total chargeable weight carried.

#### **Krishi Udan 2.0:**

- Under Krishi Udan 2.0, central government has planned for granting full waiver of airport charges at select airports. Waiver would be given even if agricultural cargo is lower than 50 per cent of total chargeable weight carried. Centre will also facilitate the development of hub and spoke model across India.
- The government will also create cargo terminals at the airports in phase-wise manner. Moreover, government will encourage states to reduce sales tax to one per cent on aviation turbine fuel, which is used in freighter aircraft and passenger aircraft for transporting cargo.

#### **Aim of the scheme:**

- The scheme has been launched with the aim of channelising the immense potential of Indian agriculture with logistical help of civil aviation in a bid to achieve the goal of doubling farmers’ income. It will also help in alleviating wastage of farm produce and increase its value.

#### **Cargo terminals:**

- Under the scheme, cargo terminals will be established at the airports in Agartala, Dibrugarh, Srinagar, Hubballi, Dimapur, Jorhat, Imphal, Silchar, Lilabari, Lucknow, Tirupati, Tezpur, Tirupati and Tuticorin by 2022.

- In between 2022-23, cargo terminals will be established at airports in Ahmedabad, Jharsuguda, Bhavnagar, Mysore, Kozhikode, Rajkot, Puducherry, and Vijayawada.

**e-Kushal platform:**

- This online platform would be developed under Krishi Udan 2.0 scheme for facilitating information dissemination to stakeholders with respect to transportation of agriculture produce.

**76. PM Economic Advisory Council reconstituted:**

- Government of India reconstituted the seven-member Economic Advisory Council (EAC) to the prime minister on October 27, 2021.
- New EAC was constituted after its tenure ended in the month of September 2021.
- It has been reconstituted for a period of two years.

**Chairman of the Council:**

- Bibek Debroy will continue to be the chairman of council.

**Responsibilities of the Council:**

- Council has been charged with the responsibility to analyse any issue, economic or otherwise, which are referred to it by the prime minister.
- It will also address the issues of macroeconomic importance and present its views on it, to the PM.
- These responsibilities could be either suo-motu or on reference from the PM or any other person.
- Council may attend to any other task, as PM will assign from time to time.

**About EAC-PM:**

- EAC-PM is an independent body, which advises the government on economic and policy-related matters.
- It was first constituted in September 2017 for a period of two years. It replaced the erstwhile PMEAC, which was chaired by former governor of Reserve Bank of India, C Rangarajan.

**77. NABARD approves credit plan for rearing Yak Husbandry:**

- National Bank for Agriculture and Rural Development (NABARD) approved a credit plan on September 28, 2021 for yak husbandry in Arunachal Pradesh.
- This credit plan for yak husbandry will help herders in securing loans for strengthening their livelihoods. This scheme was developed by “National Research Centre on Yak (NRCY)” located at Dirang in West Kameng district of Arunachal Pradesh. NRCY works under the Indian Council of Agricultural Research.

**Significance:**

- The credit plan started by NABARD for yak husbandry was found to be feasible in extending advances with the held commercial banks. The credit plan by NABARD has been included in potential linked credit plans (PLCP) of Tawang, West Kameng and Shi Yomi districts of Arunachal Pradesh. This credit plan will boost the livelihood of herders in the state.
- Wool comes from sheep, goat, yak and some other animals. These wool-yielding animals bear hair on their body.
- Several breeds of sheep are found in different parts of our country.
- Yak wool is common in Tibet and Ladakh. Mohair is obtained from angora goats, found in hilly regions such as Jammu and Kashmir
- Yak is one among the most prized animals in Himalayan region because of its multifarious roles in strengthening nutritional security by providing milk and meat. The animal also provides shelter and clothing through its fibres. It is also used as a beast of burden.

**Concerns:**

- In past few decades country has witnessed a decline in Yak population. Yak population has declined because of inbreeding and unscientific farming practices. Furthermore, the disillusionment of younger generation because of hardship of yak rearing is one of the major reasons of mass desertions from Yak rearing occupation.

- The credit scheme by NABARD will help in curbing the reducing trend of yak population. Credit plan will also facilitate profitable farming by promoting entrepreneurship.

#### **78. Digi Saksham Programme:**

- Recently, the Union Labour Ministry and Microsoft India have jointly launched a digital skilled platform-DigiSaksham-to enhance youth employability.
- This joint initiative is an extension of the ongoing programs to support the youth from rural and semi-urban areas.
- Under this scheme, free of cost training in digital skills including basic skills as well as advanced computing, will be provided to more than 3 lakh youths in the first year.
- Priority will be given to the job-seekers of semi urban areas belonging to disadvantaged communities, including those who have lost their jobs due to Covid-19 pandemic.
- Training would be conducted at the Model Career Centres (MCCs) and National Career Service Centres (NCSC) for Scheduled Castes (SCs)/Scheduled Tribes (STs) across the country.
- The DigiSaksham scheme will be implemented by Aga Khan Rural Support Programme India (AKRSP-I).AKRSP-I is a non-denominational, non-government development organization. It works as a catalyst for the betterment of rural communities by providing direct support to local communities.
- Role of NCS Portal: The Job Seekers can access the training through National Career Service (NCS) Portal.
- NCS Portal is a one-stop solution that provides a wide array of employment and career related services to the citizens of India. It is implemented by the Ministry of Labour and Employment.

#### **Way Ahead:**

- To bridge the gap of India's digital divide, placing the country on the path to inclusive economic recovery and preparing India's talent to thrive in a digital future catering not only to the needs of the domestic economy but also to tap the overseas employment opportunities.

#### **Other Initiatives for Youth Employment:**

- Pradhan Mantri Kaushal Vikas Yojana 3.0
- Generation Unlimited in India (YuWaah)
- National Career Service
- Prime Minister's Employment Generation Programme (PMEGP)
- Pradhan Mantri Mudra Yojana (PMMY)
- Pradhan Mantri Rojgar Protsahan Yojana (PMRPY)
- Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA)

#### **79. NITI Aayog: Assessment report of District Hospitals:**

- Recently, NITI Aayog has released a performance assessment report of district hospitals in India, titled 'Best Practices in the Performance of District Hospitals'.
- The report is an outcome of collaboration with the Ministry of Health and Family Welfare and WHO India.
- The National Accreditation Board for Hospitals and Healthcare Providers, a constituent board of the Quality Council of India, conducted the on-ground data validation.
- The Health Management Information System (HMIS) data for the year 2017–18 has been used as the baseline for this exercise.

#### **Key Findings:**

- NITI Aayog's study called "Best Practices in the Performance of District Hospitals" was released on September 30, 2021.
- This report was prepared, after assessing 707 hospitals across 36 states and Union Territories in 2018-19.
- As per study, Bihar is having the lowest average of number of six beds per 1 lakh population.
- Puducherry is having the highest number of 222 beds per one lakh population.

- District hospitals in India is having a range of 1 to 408 beds per 1 lakh population.
- In 217 district hospitals, there have at least 22 beds for every 1 lakh population.
- In 15 states and UTs, the average number of beds in a district hospital was lower than what recommended by the IPHS 2012 guidelines. These states include - Bihar, Jharkhand, Uttar Pradesh, Telangana, Haryana Maharashtra, Assam, Jammu & Kashmir, Andhra Pradesh, Gujarat, Punjab, West Bengal, Rajasthan, Chhattisgarh and Madhya Pradesh.

**Significance of the report:**

- The findings of the report are significant because it was conducted just before the outbreak of Covid-19 pandemic. Findings of the report mean that when India faced the pandemic, public health infrastructure across the nation including at district level, was not adequate.

**80. Swachh Bharat Mission-Urban 2.0 and AMRUT 2.0:**

- Recently, the Prime Minister launched Swachh Bharat Mission-Urban 2.0 and Atal Mission for Rejuvenation and Urban Transformation 2.0.

**SBM-U 2.0:**

- SBM-U 2.0 mission seeks to make all cities 'Garbage Free'. It also seeks to ensure grey and black water management across the cities that are not covered under AMRUT.
- This mission will focus on source segregation of solid waste by utilizing the principles of 3Rs that is "Reduce, reuse, recycle".
- An outlay of Rs 1.41 lakh crore has been sanctioned for SBM-U 2.0.
- This mission will pay special focus on the well-being on sanitation and informal waste workers.

**AMRUT 2.0 Mission:**

- AMRUT 2.0 mission will help in making cities self-reliant. It will ensure water security across the cities. This mission has been launched with the aim of providing 100 percent coverage of water supply to all households in 4,700 urban local bodies.
- This target will be achieved by providing 2.68 crore tap connections and 100% coverage of sewerage across 500 AMRUT cities. An outlay of Rs 2.87 lakh crore has been sanctioned for this mission.

**Swachhata App:**

- The Swachhata application is a fourth generation complaint redressal mobile and web platform. It is a quantum leap in how complaints and grievances are being redressed by Municipal Corporations in India. This solution is for all the 4041 towns and cities of India.
- The core of the Swachhata application is to use citizen participation and civic engagement to help resolve the Swachh Bharat complaints.
- It is an initiative of the Swachh Bharat Mission in association with the Ministry of Housing and Urban Affairs.

**Benefits to Citizens:**

- The app can pinpoint the location of the complaint with accuracy using the geo-location of the picture, which will lead to faster resolution of the complaint.
- Regular complaint status updates - Citizens will get regular updates on the status of the complaint in the form of a push notification.
- Push notification when resolved - Citizens will get a push notification with the 'Resolved' image uploaded by the sanitary inspector or engineer when they change the status to Resolved.
- Reopen unresolved complaint - Citizens can reopen the complaint if they are not satisfied with the resolution.
- Users can also vote up on complaints in their locality or complaints uploaded by friends and neighbours.

**81. SACRED Portal:**

- Recently, the Vice President of India launched SACRED portal, SAGE portal and Elderly Line helpline for elders on the occasion of International Day of Elder Persons(1st October).
- In a first of its kind move, the government has come up with an online employment exchange platform 'SACRED' to cater to senior citizens seeking job opportunities.
- The portal developed by the Ministry of Social Justice and Empowerment is named Senior Able Citizens for Re-Employment in Dignity (SACRED).

#### **About the Portal:**

- Citizens above 60 years of age can register on the portal and find jobs and work opportunities.
- The Employment Portal will serve not only the senior citizens seeking employment, but also the employers, the Self Help Groups (SHGs), the senior citizens gaining skills, and other agencies or individuals.
- An amount of Rs. 10 Cr would be provided for funding for the platform development along with maintenance grant of @ Rs. 2 Cr per year for 5 years.
- The portal is shaped on the recommendations of the Empowered Expert Committee (EEC) report on startups for the elderly.

#### **Why is this Portal Required?**

- There is a sharp rise in India's elderly population and thrust is on creating an ecosystem that supports their needs more holistically.
- There are 110 million elders in this country, who are above the age of 60.
- According to the Longitudinal Ageing Study of India (LASI), India will have over 319 million elderly by 2050 compared to the 120 million now.
- More than 50% senior citizens are found active as per the LASI report 2020. Many senior citizens having experience, time and energy can be used by the business enterprises looking for stable employees with experience.

#### **Other Related Initiatives:**

- **Elder Line:** The first Pan-India toll-free helpline number (14567) for Senior Citizens.
- **SAGE (Seniorcare Aging Growth Engine) Portal:** It will be a "one-stop access" of elderly care products and services by credible start-ups.

#### **82. NITI Aayog: The State Nutrition Profile:**

- NITI Aayog, in a joint effort with International Food Policy Research Institute (IFPRI), Indian Institute of Population Sciences (IIPS), UNICEF and Institute of Economic Growth (IEG) has launched 'The State Nutrition Profiles' for 19 States and Union Territories.
- Give insights on nutrition outcomes, immediate and underlying determinants and interventions based on NFHS-rounds 3, 4 and 5.
- The SNPs include a comprehensive compilation of crucial data that can positively affect policy decisions and facilitate research in the area. The trend analysis of key indicators such as wasting, stunting, anemia, underweight and overweight and NCDs (Diabetes and High blood pressure) showcase the variability of performance across districts.
- The reports highlight the best and worst performing districts, highest burden districts and top coverage districts of the country.
- The SNPs are based on the headcount-based analyses and use of data from NFHS-5 to provide evidence that helps identify priority districts and number of districts in the state with public health concern as per WHO guidelines. Each SNP has incorporated key takeaways for children, women and men and identifies areas where the state has the potential to improve further.

#### **83. IMF Report on Crypto Ecosystem:**

- The International Monetary Funds (IMF) has released its report called "Global Financial Stability Report", highlighting how digital currency assets brings in financial stability challenges.

- The IMF in its report said that challenges posed by the crypto ecosystem include operational and financial integrity risks from crypto asset providers, investor protection risks for crypto-assets and DeFi, and inadequate reserves and disclosure for some stable coins.
- In its report, IMF highlights that, crypto asset technologies are a potential tool for faster and cheaper cross-border payments. Using these technologies, bank deposits can be transformed into a stable coin, allowing instant access to financial products from digital platforms. It also allows instant currency conversion. According to IMF, the decentralised finance can become a platform for more inclusive innovative and transparent financial services.
- According to IMF, rapid growth and increasing adoption of crypto assets pose financial stability challenges.
- Such decentralised currencies could also lead to instability as they are extremely volatile. They are much more volatile than the equities or commodities or exchange rates.
- Its transaction costs are fairly expensive as compared to digital money.
- As per report, such transaction destabilizes the capital flows. It also poses several operational and financial integrity risks from the providers of crypto asset.

#### **About Cryptocurrency:**

- Cryptocurrency or crypto-currency is a collection of binary data which is designed to work as a medium of exchange or form of payment that can be exchanged online for goods and services.
- A cryptocurrency can be defined broadly by two distinctive features, firstly it is based on a distributed ledger meaning that records of its ownership are held across thousands of computers simultaneously, rather than any centralised system.
- Secondly, it is not issued by a centralised authority such as a central bank. For instance, bitcoin is created by computers solving increasingly complex mathematical problems. Thus, it limits the supply of cryptocurrency.
- Cryptocurrencies work using a technology called blockchain. Blockchain is a decentralized technology spread across many computers that manage and record transactions. What tempts people with this technology is its security.
- Some public cryptocurrencies are Bitcoin, Ethereum, and Litecoin while Monero, Zcash, and Dash are private cryptocurrencies.

#### **84. RBI's new Auto Debit Rules:**

- The Reserve Bank of India's new rules for recurring payments have adversely affected India's subscription economy from consumers, small businesses, international subscriptions, and even internet giants such as Amazon, Netflix and Google.
- ET takes stock of the new rules, the scale of disruption, as well as alternative modes, which can be used by customers to make their payments that have been failing in the month of October.

#### **What are recurring payments?**

- Recurring payment is a transaction model where customers give a one-time standing instruction to merchants to debit funds from their accounts automatically on a periodic basis. This model of payment forms core to most subscription-based businesses in India and the world.

#### **What are types of recurring payments in India?**

- There are three broad categories of recurring payments
- Standing instructions on debit and credit cards enabled between merchants and customers
- E-mandate on National Automated Clearing House (NACH)
- AutoPay on Unified Payments Interface

#### **What are the new rules by the RBI?**

- The Reserve Bank of India's new rules on recurring payments from October 1 are for one-time instructions on debit and credit cards. UPI and NACH based recurring payments have not been impacted.

#### **Merchants can enable recurring payments on cards if:**

- Customers' bank sends pre-debit notification 24 hours before the automatic payment
- Recurring payments above Rs 5000 can only be done with OTP before debit
- Only customers' card issuing banks can enforce these rules for merchants

#### **Why the friction?**

- Most issuing banks have not been able to adhere to requirements
- International merchants with foreign bank partners unable to forge tie-ups with local issuers
- Integrations by smaller banks on common platforms of BillDesk, Razorpay yet not complete.

#### **Who has been affected the worst?**

- Small businesses, media outlets, and SAAS startups running subscription services
- NGOs and charity houses that collect donations on an automatic basis
- International subscriptions such as The New York Times, Wall Street Journal others
- Big internet companies such as Amazon, Apple, Google, Netflix, Facebook
- Customers making automated bill payments, subscriptions.

#### **85. Kashmir's Walnuts:**

- Recently, the first consignment of Kashmiri walnuts was flagged off from Budgam, despatched to Bengaluru, Karnataka under the One District, One Product (ODOP) Initiative of the Ministry of Commerce & Industry.
- Kashmir accounts for 90% of India's walnut production. With their superior quality and taste, the Kashmiri walnuts are a great source of nutrients and hence widely in demand across the globe. There is immense potential for this product to make its place in the local and global markets.
- Recognizing that walnuts were being imported into India on a large scale despite the availability of Kashmir walnuts, the 'ODOP' team began an in-depth market analysis and stakeholder consultations in Kashmir.
- Further, importers of walnuts in India were contacted and through dedicated handholding at both ends, the ODOP team was able to facilitate the procurement.
- Such efforts also give a boost to the **Aatma Nirbhar Bharat** campaign as, for instance, in this case the Bangalore-based importer, who was previously sourcing walnuts from the US, is now able to distribute quality walnuts at a fraction of the import cost.

#### **One District One Product (ODOP) initiative:**

- ODOP is an initiative which is seen as a transformational step forward towards realizing the true potential of a district, fuel economic growth and generate employment and rural entrepreneurship, taking us to the goal of Atma Nirbhar Bharat.
- ODOP initiative is operationally merged with 'Districts as Export Hub' initiative being implemented by DGFT, Department of Commerce, with Department for Promotion of Industry and Internal Trade (DPIIT) as a major stakeholder.

#### **86. National Asset Reconstruction Company Ltd. (NARCL):**

- Recently, the Reserve Bank of India (RBI) granted the licence to the Rs 6,000 crore National Asset Reconstruction Company Ltd. (NARCL).

#### **Significance:**

- This move will help in starting operations of the bad bank.
- NARCL was incorporated in Mumbai in July 2021 after registration with the Registrar of Companies (RoC).
- IBA has been entrusted with the task to set up the bad bank.

#### **Background:**

- In Budget 2021-22, the Finance Minister had noted that, high level of provisioning of the stressed assets by public sector banks calls to initiate measures to clean up bank books.



- In that light, she announced to set up as “Asset Reconstruction Company Limited” and “Asset Management Company” to consolidate and take over existing stressed debt. Both was to set up for managing and disposing assets to alternative investment funds.

**Proposal for Government’s guarantee:**

- Cabinet had cleared a proposal to provide government guarantee of worth Rs 30,600 crore for security receipts issued by NARCL. NARCL will pay 15% of the agreed value for bad loans in cash while the remaining 85% will be government-guaranteed security receipts. 51% of the value will be owned by PSBs while remaining by private sector lenders.

**What is NARCL?**

- NARCL is a proposed bad bank to take over stressed assets of lenders. Government had planned to create a bad bank to house bad loans of Rs 500 crore and above. It also comprises of an asset reconstruction company (ARC) and an asset management company (AMC) for managing and recovering assets. It was created in collaboration with public and private sector banks.
- Recently, SBI, Indian Bank and Union Bank of India picked up 13.27% stake each in the NARCL. Punjab National Bank also acquired about 12% stake.

**What is a Bad Bank?**

- A bad bank is a corporate entity that alienates illiquid and risky assets held by banks and financial institutions or a group of banks. It is also called as Asset Reconstruction Company (ARC) or an Asset Management Company (AMC).
- It is created to help banks clean their balance sheets by transferring their bad loans so that the banks can focus on their core business of taking deposits and lending money.
- The first bad bank in the world was created in 1988 by US-based Mellon Bank to hold its stressed assets. Following this success, it became a phenomenon of sorts and the model was followed in several countries such as the US, Finland, Sweden, Indonesia and Belgium.
- The bad bank is not involved in lending and taking deposits, but helps commercial banks clean up their balance sheets and resolve bad loans.
- The takeover of bad loans is normally below the book value of the loan and the bad bank tries to recover as much as possible subsequently.

**87. The State of the World’s Children 2021:**

- Recently, the Union Health Minister released UNICEF’s global flagship publication - “The State of the World’s Children 2021; On My Mind: promoting, protecting and caring for children’s mental health.
- The state of World’s Children 2021 report is UNICEF’s global flagship publication.

**Highlights:**

- The report highlights the significant impact of COVID-19 pandemic on mental health of the children.
- This report is significant because, mental health is an old issue & emerging issue. Furthermore, COVID-19 was a test of mental stress for entire world.
- As per UNICEF report, about 14 percent of 15 to 24-year-olds in India, accounting for 1 in 7, reported feeling depressed or they were having little interest in doing things.

**Findings of the report:**

- UNICEF’s state of the World’s Children Report 2021 has warned that children and young people might feel the impact of COVID-19 on their mental health and well-being for several years.
- The report highlights that, how children and young people carried the burden of mental health even before COVID-19.
- As per report, children with mental health disorders in India are mostly undiagnosed and hesitant in asking for help or treatment.
- 50 million children in India were affected by mental health issues, before the pandemic. Out of them, 80 – 90 per cent children have not asked for support.

- As per survey conducted across 21 countries, 14 per cent of respondents aged 15 to 24 years in India reported feeling depressed.

#### United Nations Children’s Fund (UNICEF):

- UNICEF is a special program of the United Nations (UN) devoted to aiding national efforts to improve the health, nutrition, education, and general welfare of children.
- UNICEF was created in 1946 as International Children’s Emergency Fund (ICEF) by UN relief Rehabilitation Administration to help children affected by World War II.
- UNICEF became a permanent part of the United Nations in 1953.
- The name was shortened to United Nations Children Fund but it is still referred to as UNICEF.
- It is mandated by the United Nations General Assembly to advocate for the protection of children's rights, to help meet their basic needs and to expand their opportunities to reach their full potential.
- UNICEF is guided by the Convention on the Rights of the Child, 1989.
- It strives to establish children's rights as enduring ethical principles and international standards of behaviour towards children.
- Awarded the Nobel Prize for Peace in 1965 for “promotion of brotherhood among the nations”.
- Headquarters: New York City.
- It works in over 190 countries and territories with 7 regional offices.

#### 88. Solar Conjunction:

- American Space Agency, National Aeronautics and Space Administration (NASA) recently decided to stop sending active commands to its missions on the MARS for next few weeks till the time “Mars solar conjunction” remains in effect.

#### What is Solar Conjunction?

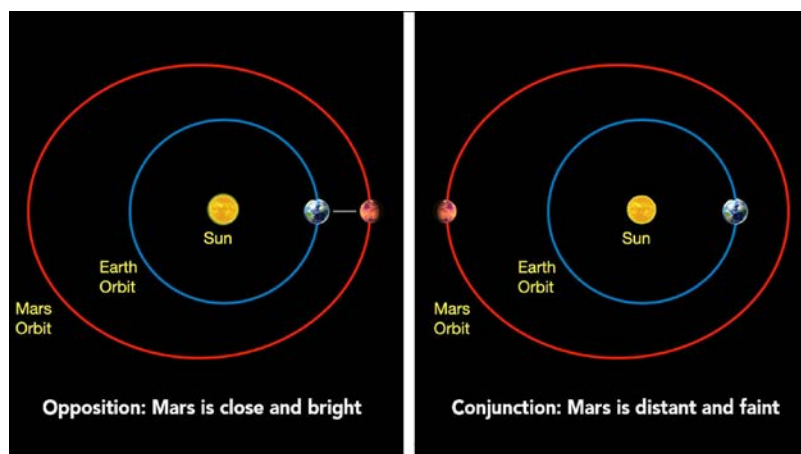
- Every day for over two decades, a country such as the U.S. has had a presence at Mars, using spacecraft to understand this extreme world and its potential as a past or present habitat for life.
- During that time, all spacecraft have become virtually incommunicado for about two weeks every two years. The reason is solar conjunction.
- Solar conjunction is the period when Earth and Mars, in their eternal march around the Sun, are obscured from each other by the fiery orb of the Sun itself. Like dancers on either side of a huge bonfire, the two planets are temporarily invisible to each other.
- As per NASA, during the Mars solar conjunction period, Earth and the MARS will be on opposite sides of the Sun.
- This position of both the planets will affect any communication attempt made by NASA for connecting with its Mars missions because Sun radiates hot & ionized gas from its corona.

#### How Solar Conjunction affects the missions on MARS?

- These gases can interfere with radio signals if the agency try to communicate with spacecraft at Mars.
- These radiations will stand in the middle of both the planets and corrupt commands. It could also result in unexpected behaviour from NASA’s deep space explorers.
- Thus, NASA has decided to stop sending signals.

#### Will it completely halt the work?

- No, this period would not halt the work on the red Planet completely because,



engineers have already sent the list of simple commands to spacecrafts to carry works few weeks.

#### **NASA's Mission on MARS:**

- At present, NASA has its Perseverance rover, Curiosity Rover, Ingenuity helicopter, stationary **InSight lander** stationed on the MARS apart from three orbiters. During the Mars solar conjunction period, these missions will work on different commands, sent to them beforehand.
- Perseverance rover will take weather measurements with the help of its Mars Environmental Dynamics Analyzer (MEDA) sensors. Rover will look for dust devils with its cameras and capture new sounds with the help of microphones.

#### **89. NOAA Report: August 2021 is the 6th-warmest in 142 years:**

- As per National Oceanic and Atmospheric Administration (NOAA)'s National Center for Environmental Information analysis, **August 2021** was the 6th hottest month on the Earth, despite the fact that, Central Texas went through a cooler than average month.

#### **Key Facts:**

- August 2021 was the 6th warmest month in 142 years.
- While analysing the August's heat, scientists found that the average global land & ocean surface temperature was 1.62 degrees F more than the average of 20th-century.
- North America witnessed its top-10 warmest August.
- Asia had its 2nd warmest August while Africa had 3rd warmest August.
- Since 2009, 9 out of 10 warmest Augusts on Earth have happened.

#### **Hottest summer in Northern Hemisphere:**

- Year 2021 was also the 2nd hottest summer on record in Northern Hemisphere. Year 2020 witnessed the hottest summer on record in the Northern Hemisphere. August end also wrapped up meteorological summer, a summer which was tied with 2019 as second hottest summer on record in the Northern Hemisphere.

#### **Meteorological summer in Northern Hemisphere:**

- June-August is known as meteorological summer in the Northern Hemisphere. June-August was the 4th warmest on record for Earth while Southern Hemisphere was going through winter. Global temperatures were recorded as 1.62 degrees F above the 20th Century.

#### **6<sup>th</sup> warmest month:**

- January-August ranks as the 6th warmest period ever recorded on Earth. The temperatures were 1.48 degrees F warmer as compared to 20th-century average.

#### **Sea ice extent:**

- In August, Arctic Sea ice witnessed the 10th smallest extent in 43-year records while Antarctic Sea ice coverage was 5th highest.

#### **National Oceanic and Atmospheric Administration (NOAA):**

- The National Oceanic and Atmospheric Administration (NOAA) is an American scientific and regulatory agency within the United States Department of Commerce.
- It forecasts weather, monitors oceanic and atmospheric conditions, charts the seas, conducts deep sea exploration, and manages fishing and protection of marine mammals and endangered species in the U.S. exclusive economic zone.

#### **90. Japan: Mount Aso volcano erupts at Kyushu Island:**

- Japan's largest active volcano Mount Aso erupted on October 20, 2021 and emitted a giant column of ash to about thousands of metres into the sky.

#### **Highlights:**

- No injuries were reported immediately and People were warned not to go towards volcano as it ejected hot gas and ash.
- The volcano ejected gas and ash up to the height of 3,500 metres.
- Pale grey torrents of ash rushed down the slopes of the 1,592-metre mountain.

- Background
- Mount Aso last erupted in the year 2016. The Japan Meteorological Agency had then raised its warning for Mount Aso to the level that was reported on October 20.

**About Mount Aso:**

- Mount Aso is the largest active volcano in Japan and one among the largest across the world. The volcano stands on the island of Kyushu, in Aso Kujū National Park in Kumamoto Prefecture. Its peak is 1,592 meters above sea level. It has a fairly large caldera, having a circumference of about 120 km. The caldera dominates the island Kyushu, where it is a popular tourist draw.

**Volcano in Japan:**

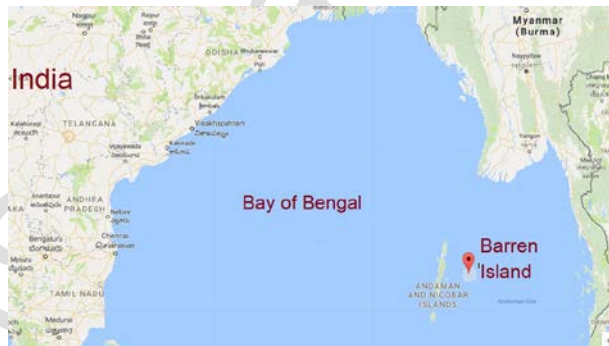
- Japan is among the world’s most volcanically active countries. It is located on the Pacific “Ring of Fire” where a large proportion earthquakes and volcanic eruptions are recorded. Japan suffered its deadliest eruption in the month of September 2014, when Mount Ontake burst unexpectedly. It killed 63 people.

**Kyushu Island:**

- It is the third largest island out of five main islands. It is mountainous and house to Japan’s active volcano called Mount Aso.

**Barren Island:**

- The Barren Island is an uninhabited possession of India in the Andaman Sea. It is the only confirmed active volcano in the Indian subcontinent, and the only active volcano along a chain of volcanoes Sumatra to Myanmar.
- The Barren Island is about 140 km from Blair.
- Historically, the first record of the volcano’s eruption dates back to 1787. It was known to have erupted at least five times over the next 100 years. Then there was silence for a century.
- In 1991, it spewed so massively that smoke billowed out for about six months. Ever since, there have been eruptions every two-three years, the last in February 2016. All of these recorded eruptions lie on the lowest end of the so-called Volcanic Explosivity Index that ranks volcanoes from 1-8 based on the quantity of volcanic material spewed and the strength with which it does so. The latest eruption was a mere ‘2’ on the scale.
- It is a tourist destination and surrounded by waters ideal for scuba diving and is home to a wide variety of aquatic life.



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**91. American bumblebee could be declared endangered:**

- According to US Fish and Wildlife Services, the American bumblebee population has decreased by 89% in past 20 years, and it could be declared as “endangered species”.
- US Fish & Wildlife Services will conduct a one-year review, after which the species would become protected under “Endangered Species Act (ESA)”.
- The ESA act provides a legal framework to safeguard endangered species from extinction.
- Background
- This announcement was made in the backdrop of a petition of August 2021 that was filed in support of listing made by “Center for Biological Diversity (CBD)” and Albany Law School student group named as “Bombus Pollinator Association of Law Students”.
- American Bumblebee is scientifically called as Bombus pensylvanicus. It is a threatened species of bumblebee and is a native to North America. It is also found in eastern Canada, eastern United

States, and Mexico. The species live and nest in open farmland & fields. It feeds on food plants like favouring sunflowers & clovers.

- As per CBD, the American bumblebee has completely vanished across eight states namely Rhode Island, Maine, New Hampshire, Idaho, Vermont, North Dakota, Wyoming and Oregon in the North America. Its population has also declined by 99% in New York. In other 19 states in Southeast & Midwest, its population has declined by 50%.
- According to CBD, population of American bumblebee has decline due to habitat destruction, climate change, exposure to disease & pesticides, loss of genetic diversity along with competition with the non-native bees.

### **92. Wildlife Week 2021:**

- Recently, the Wildlife Week 2021(from October 2nd to October 8th) has been celebrated under the theme “Forests and Livelihoods: Sustaining People and Planet”.
- This week is a sincere effort that raise awareness among people for the protection of wildlife resources.
- India observes Wildlife Week from October 2nd to October 8th every year with the aim of protecting India’s fauna. During the week, experts conduct workshops in order to make people understand the importance of wildlife conservation. During the week, several awareness-building activities are organised across different levels in order to make people aware about wildlife.
- This week is celebrated because, wildlife plays a crucial role in maintaining the ecological balance of nature. Any harm to it can pose threat to entire ecosystem. Thus, it becomes important to preserve flora and fauna.
- India is a biological hotspot. It supports a number of animal species. India is home to more than 7 percent of world’s biodiversity. Faunal wealth of India is also incredibly diverse. It accounts for 7.4% of the world’s fauna.
- First ever Wildlife Week was observed in the year 1957. Wildlife Week 2021 is the 67th edition. Wildlife Week was conceptualised by the Indian Board of Wildlife in 1952 in order to raise the awareness regarding long-term goals of protecting the wildlife across India. Initially, Wildlife Day was celebrated in 1955, but in 1957 it was upgraded as the Wildlife Week.

### **93. Odisha’s initiatives to prevent Elephant electrocution:**

- Recently, the government of Odisha has allocated Rs 445.75 crore to the distribution companies in order to increase ground clearance of electrical networks with the objective of preventing Elephant electrocution.
- With this fund, distribution companies would also replace bare conductors across elephant corridors and movement areas.
- This initiative is aimed at preventing elephant deaths because of electrocution.
- As per Energy department, 79000 interposing poles have been erected and about 2,300 circuit bare conductors have been replaced by covered ones.
- In the recent development, companies and Forest Department have been asked to interact on regular basis in a bid to achieve zero casualty of elephants.
- Officials have also been directed to involve with the local community in elephant protection and bring in scheme for rewarding the villagers, who would provide information regarding illegal hooking for poaching wild animals.
- As per the Wildlife Society of Orissa (WSO), an environment pressure group working on elephant conservation, about 862 elephants have lost their lives in between April 2010 August 2021. Out of this, about 16 % accounting for 135 elephants died due to electrocution.
- Elephant conservation in the state of Odisha is a challenging task because of inadequate patrolling and breakdown of supervision & monitoring by officers. This has made it easy for poachers to wipe out elephants from the state.

- Lack of action against electricity distribution companies has resulted into multiple electrocution cases because of overhead sagging naked wires, wild boar poaching wires and electrified fences. These elephants would have been saved if companies had installed safety devices. Most recent case “killing of seven elephants in Dhenkanal district” in the year 2018 at Kamalanga because of a low height 11 KV wire.

#### **94. Changes proposed in Forest Conservation Act:**

- Recently, the Ministry of Environment, Forest and Climate Change (MoEFCC) has proposed an amendment to the Forest (Conservation) Act, 1980, in a bid to liberalise the forest laws.
- The Ministry has sent the proposed amendments to all the state governments, asking for their objections and suggestions within 15 days. The draft proposal will be drawn and placed before Parliament after taking suggestions from states into consideration.

#### **Highlights:**

- The amendment puts forward stringent norms for the conservation of forest, by hiking the penal provisions for offenses.
- Amendment also provides for maintaining “pristine forests”. Non-forestry activity will not be allowed within the pristine forests, under any circumstances.
- Under the amendment; deemed forests, that have been listed by state governments up to 1996, will continue to be considered as forest land.
- Land acquired by the Railways and the road ministries before 1980, on which forests came up, will not be considered as forests.
- Amendment would also reduce the flow from foreign exchange for importing wood & wood derivatives of approximately Rs 45,000 crore by means of encouraging plantations and afforestation.
- FCA was promulgated in the year 1980. Before a “1996 Supreme Court judgement” in TN Godavarman Thirumulpad versus Union of India & Others case, forest land was defined by “1927 Forest Act”. But in the 1996 case, Supreme court included all areas under the definition of forest that are recorded as ‘forest’ under any government record.
- The definition of forest under the forest act was problematic in case of railways and roads. There is land that both the ministries own, but they cannot use it without getting permission from the MoEFCC. These permissions are granted in about 2-4 years, causing delays in several projects.

#### **95. The State of Climate Services 2021: Water report:**

- Recently, the World Meteorological Organization (WMO) released the State of Climate Services report 2021. It focuses on Terrestrial Water Storage.
- Earlier, on water day (22nd March), in a report released by the United Nations Children’s Fund (UNICEF), one in five children worldwide reside in areas of high or extremely high water vulnerability.

#### **Terrestrial Water Storage (TWS):**

- TWS is the sum of all water on the land surface and in the subsurface, i.e. surface water, soil moisture, snow and ice and groundwater.
- Water is a key prerequisite for human development. But only 0.5% of water on Earth is usable and available as freshwater.
- Water resources across the world are under tremendous pressure due to human and naturally-induced stressors.
- These include population growth, urbanisation and decreasing availability of freshwater.
- Extreme weather events too have been responsible for the pressure on water resources realised across sectors and regions.

#### **Global Scenario:**

- Terrestrial Water Storage dropped at a rate of 1 cm per year in 20 years (2002-2021).

- The biggest losses have occurred in Antarctica and Greenland. But many highly populated, lower latitude locations have also experienced TWS losses.

#### **Indian Scenario:**

- The Terrestrial Water Storage has been lost at a rate of at least 3 cm per year. In some regions, the loss has been over 4 cm per year too.
- India has recorded the highest loss in terrestrial water storage if the loss of water storage in Antarctica and Greenland is excluded.
- India is the 'topmost hotspot of TWS loss'. The northern part of India has experienced the maximum loss within the country.

#### **Per Capita Availability:**

- In India, per capita water availability is reducing due to an increase in population.
- The average annual per capita water availability has reduced to 1,545 cubic metres in 2011, from 1,816 cubic metres in 2001.
- It is projected to further decrease to 1,367 cubic metres in 2031, according to the Union Ministry of Housing and Urban Affairs.

#### **River Basins:**

- Five of the 21 river basins in India are 'absolute water scarce' (per capita water availability below 500 cubic metres) according to the Falkenmark Water Stress Indicator.
- Five are 'water scarce' (per capita water availability below 1,000 cubic metres) and three are 'water stressed' (per capita water availability below 1,700 cubic metres).
- By 2050, six will become absolute water scarce, six will become water scarce and four will become water stressed, according to the State of India's Environment in figures, 2020.
- The Falkenmark indicator is one of the most widely used indicators for assessing the stress on water. It relates the total freshwater resources with the total population in a country and indicates the pressure that population puts on water resources, including the needs for natural ecosystems.

#### **Major Recommendations:**

- **Investments Needed:** Integrated Resources Water Management as a solution to better manage water stress, especially in Small Island Developing States (SIDS) and Least Developed Countries (LDCs). In end-to-end drought and flood early warning systems in at-risk LDCs, including for drought warning in Africa and flood warning in Asia.
- **Fill Capacity Gap:** Fill the capacity gap in collecting data for basic hydrological variables which underpin climate services and early warning systems.
- Fill the gaps in data on country capacities for climate services in the water sector, especially for SIDS.
- **Improve Interaction:** Improve the interaction among national level stakeholders to co-develop and operationalize climate services with information users to better support adaptation in the water sector. There is also a pressing need for better monitoring and evaluation of socio-economic benefits, which will help to showcase best practices.
- **Join the Water and Climate Coalition:** Water and Climate Coalition is a platform for its members to partner on joint activities and implement solutions that address the gaps of operational water and climate challenges with a focus on data and information.

#### **Some Initiatives of the GOI:**

1. Jal Kranti Abhiyan
2. National Water Mission
3. National Rural Drinking Water Programme
4. NITI Aayog Composite Water Management Index
5. Jal Jeevan Mission
6. Jal Shakti Abhiyan
7. Atal Bhujal Yojana

#### **96. United Nations Biodiversity Summit:**

- Recently, the United Nations Biodiversity Summit concluded in China.
- The Summit is an opportunity to demonstrate leadership and commitment to improve our relationship with nature, addressing the causes of change, and ensuring that biodiversity and the contributions it provides to all people are at the heart of sustainable development and the fight against climate change.
- Though Beijing is the world's biggest polluter, it has sought to position itself as "world leader on climate issues" in the backdrop of USA's withdrawal from international commitments under Donald Trump administration.
- In the year 2021, COP-15 gathering was hosted in southwest city of Kunming. It was originally set for 2020 but got postponed due to Covid-19 pandemic.
- China recently noted that, it has given high priority to protection of biodiversity by setting a network of protected areas and national parks.
- France and Costa Rica are supporting to declare 30% of oceans & lands protected areas before 2030.
- 30 by 30 plan is being strongly opposed by Brazil and South Africa.
- About one million animal & plant species are threatened with extinction because of human encroachment on habitats, pollution, over-exploitation, climate change and spread of invasive species.

#### **30 by 30 Plan:**

- During the summit, countries will also be debating "30 by 30" plan in order to give 30% of lands and oceans protected status. This measure is supported by a broad coalition of nations. Countries will also set goal for stopping the creation of plastic waste. Though, China has not yet committed for this plan.

#### **97. India's Plastic Waste Recycling Targets:**

- Recently, the Environment Ministry has issued draft rules that mandate producers of plastic packaging material to collect all of their produce by 2024 and ensure that a minimum percentage of it be recycled as well as used in subsequent supply.
- The draft provides that, quantity of waste will have to be managed by producers, brand owners and importers, who are generate plastic packaging waste across India.
- When the draft notification will be passed, it will come into effect immediately.

#### **Extended Producer Responsibility (EPR):**

- EPR means the responsibility of producer for environmentally sound management of product and plastic packaging till the end of its life. People & stakeholders can submit objections or suggestions on draft within 60 days, to the environment ministry.

#### **Three categories of Plastic Packaging:**

- **EPR Covers Following Categories of Plastic Packaging:**
  1. Rigid Plastic Packaging
  2. Flexible Plastic Packaging of single layer or multilayer (greater than one layer with several types of plastic)
  3. Plastic sheets, carry bags (including those made up of compostable plastics) & plastic sachet or pouches
  4. Multi-layered plastic packaging.

#### **Other provisions of the draft:**

- Draft notes that, in 2021-22, producers of plastic packaging waste are required to manage 35% of the 'Q1' waste in metric tons.
- EPR target of the producers will increase to 70% in 2022-23 while it will be 100%, 2023-24 onwards.
- Similar EPR targets will be applicable for importers and brand owners but the quantity would be different on the basis of quantity of packaging waste which they are responsible for.



**Brand owners EPR Target:**

- For brand owners, EPR target in 2021-22 will be average weight of fresh plastic packaging material which have been purchased and introduced in market in last two years plus average quantity of pre-consumer plastic packaging for the same period.

**98. Climate Resilience Information System and Planning Tool:**

- Recently, the Union Minister of Rural Development & Panchayati Raj, Giriraj Singh, launched the “Climate Resilience Information System and Planning (CRISP-M) tool” through a virtual event.
- The CRISP-M tool has been launched in order to integrate the climate information in the “Geographic Information System (GIS) based watershed planning” under the MGNREGA.
- This tool will help in embedding climate information in GIS based planning as well as implementation of Mahatma Gandhi NREGA (MGNREGA).
- This tool was developed with the help of British Government and all the stakeholders. They supported the Rural Development Ministry in developing the tool.
- This tool will open up new possibilities for rural communities in dealing with the climate change issue.
- This tool will be used in seven states namely, Bihar, Uttar Pradesh, Jharkhand, Chhattisgarh, Madhya Pradesh, Odisha and Rajasthan, for developing climate resilience.

**GIS-based plans for Panchayats:**

- Ministry of Rural Development have prepared “GIS based plans” which will be implemented across 1.82 lacs Gram Panchayats (68%) out of total of 2.69 Lacs Gram Panchayats in India. GIS based plans will be implemented with the help of Remote Sensing Technology, on the basis of Ridge to Valley approach.

**99. China sets up \$233 million Kunming Biodiversity fund:**

- Recently, China pledged to inject \$233 million into a new fund called “Kunming Biodiversity Fund” for the protection of biodiversity in developing countries.
- This decision was taken during a key UN conservation summit, even though major donors disagreed on it.
- China pledged as it the world’s biggest polluter and seeks to play a prominent role internationally on biodiversity conservation.

**UN Conservation Summit:**

- China pledged as delegates from around 195 countries met in Chinese city of Kunming for a summit on safeguarding plants, animals and ecosystems.
- This summit seeks to establish a new accord, setting targets for 2030 and 2050.

**30 by 30 agenda:**

- Countries are also debating on proposal called “30 by 30 agenda” at the conference. This agenda will afford 30 percent of land and oceans protected status of Earth by 2030. Global spending on protection and restoration of nature needs to triple this decade, accounting for \$350 billion annually by 2030 while \$536 billion by 2050 in order to meet this target.

**Kunming Biodiversity fund:**

- The funding issue for the Kunming Biodiversity Fund will be taken up in January 2022 at negotiations in Geneva. China’s pledge is below the \$4 billion committed by Britain for conservation projects across the world as well as France’s commitment to spend 30 percent of its climate finance on protection of biodiversity.

**UN Convention on Biological Diversity:**

- The Convention on Biological Diversity, known informally as the Biodiversity Convention, is a multilateral treaty.
- The convention has three main goals: the conservation of biological diversity; the sustainable use of its components; and the fair and equitable sharing of benefits arising from genetic resources.

- This convention has been ratified by 195 countries and the European Union. However, United States is not ratified it even though it has been world's biggest polluter historically.

#### **100. Indian Project wins Eco Oscars:**

- Recently, A Delhi-based entrepreneur's agricultural waste recycling project was named among the winners of Prince William's inaugural Earthshot Prize, dubbed the "Eco Oscars", at a gala ceremony in London.
- Eco Oscars honour people who are trying to save the planet Earth.
- This award is presented with the aim of providing assistance to and inspire innovative local solutions as the climate crisis is growing globally.

#### **What is the Innovation?**

- Takachar's Innovation is led by Vidyut Mohan. This technology was recognised for its affordable technology in order to convert crop residues into sellable bio-products. It reduced smoke emissions by 98 per cent. Thus, it calls for improving air quality. Vidyut Mohan was awarded for this technology in "clean our air category". This award was among five other winners of the prize worldwide.

#### **Significance of the technology:**

- World generate around USD 120 billion of agricultural waste per year. When farmers fail to sell, they often burn the waste. Burning of waste have catastrophic consequences for human health as well as environment. Burning causes air pollution, which has reduced life expectancy in some areas by a decade. Thus, this technology is significant in mitigating this challenge.

#### **About Earthshot Prize:**

- This prize is awarded to five winners each year, whose projects help the environment. It will be awarded annually from 2021 to 2030. It is given by the Royal Foundation, which is headquartered in London, England. The prize is distributed in five separate categories that are supported by UN Sustainable Development Goals. This prize was launched in the year 2020 by Prince William, Duke of Cambridge and David Attenborough.
- For the next 10 years, the Earthshot will be awarding £1m each year to each of five projects that are working for findings solutions to the environmental problems on the planet.

#### **101. Shanti Swarup Bhatnagar Award 2021:**

- Recently, India's highest science award called "Shanti Swarup Bhatnagar Award 2021" was presented to the 11 scientists on the occasion of 80th foundation day of Council for Scientific & Industrial Research (CSIR).
- Shanti Swarup Bhatnagar (SSB) award has been named after the founder & Director of CSIR, late Dr Shanti Swarup Bhatnagar. This award has christened as 'Shanti Swarup Bhatnagar (SSB) Prize for Science and Technology'.
- It is given to scientist for their outstanding contributions to science and technology, every year.
- The SSB Prizes are awarded for notable and outstanding research, annually. The prizes comprise of Rs 5,00,000.
- It is presented in the categories of Biological Sciences, Chemical Sciences, Engineering science, Earth, Atmosphere, Ocean and Planetary Sciences, Mathematical Sciences, Physical Sciences and Medical Sciences.

#### **Dr Shanti Swarup Bhatnagar:**

- Dr Shanti Swarup Bhatnagar was the Founder Director (and later first Director General) of Council of Scientific & Industrial Research (CSIR) who is credited with establishing twelve national laboratories in as many years.
- Dr Bhatnagar played a significant role in building of post independent S & T infrastructure and in the formulation of India's S & T policies.

- Dr Bhatnagar concurrently held number of important position in the Government. He was the first Chairman of the University Grants Commission (UGC).
- He was Secretary, Ministry of Education and Educational Adviser of Government. He was the first Secretary to Ministry of Natural Resource & Scientific Research and also Secretary of Atomic Energy Commission.
- He played an instrument role in the establishment of the National Research Development Corporation (NRDC) of India. His research contribution in the areas of magneto chemistry and physical chemistry of emulsion were widely recognized. In 1936, Dr Bhatnagar was conferred with Order of British Empire (OBE).
- He was Knighted in 1941 and elected Fellow of Royal Society, London in 1943. He was awarded the Padma Vibhushan in 1954 by the President of India.

#### **102. Russia test-fires Hypersonic missile from submarine:**

- Russia has successfully test-fired Hypersonic missile from a nuclear submarine for the first time on October 4, 2021.
- The missile, named Zircon missile, was launched from the Severodvinsk. submarine. Zircon hit a designated target in the Barents Sea.
- It was Zircon's first launch from a submarine. Missile has been repeatedly test-fired from a navy frigate in the past.
- Missile would be commissioned in to Russian Navy in 2022.
- Zircon missile has been developed to arm Russian cruisers, frigates and submarines. It is one among several hypersonic missiles being developed in Russia.

#### **Zircon Missile:**

- The 3M22 Zircon or 3M22 Tsirkon missile is a scramjet powered, anti-ship hypersonic cruise missile. The missile is being testing by Russia, currently. It represents a further development of HELA (Hypersonic Experimental Flying Vehicle) which was developed by NPO Mashinostroyeniya.
- Prototypes of the Zircon missiles were test-launched in 2012-2013 from a Tu-22M3 bomber in. By April 2017, Zircon had reached a speed of Mach 8 during a flight test. Zircon was again test-fired on 3 June 2017. In November 2017, Colonel General Viktor Bondarev announced that missile was already in service.

#### **Specifications of Zircon Missile:**

- Zircon Missile have the capability to fly at nine times the speed of sound. It has a range of 1000 kilometres. Missile is believed to be a maneuvering, winged hypersonic cruise missile. The booster stage along with the solid-fuel engines accelerates it to supersonic speeds. After this stage, a scramjet motor comprising of liquid-fuel accelerates it to hypersonic speeds. It can travel at a speed up to Mach 8-Mach 9.

#### **103. NASA's Psyche Mission:**

- American Space Agency, NASA, is set to send its "Psyche Mission" to visit a giant asteroid called Psyche, which could be the frozen remains of molten core of a bygone world.
- Psyche asteroid orbits around the Sun in main asteroid belt, in between Mars and Jupiter.
- According to data gathered through Earth-based radar and optical telescopes, Psyche is made largely of metal.
- Psyche could be part or all of the iron-rich interior of any earlier planetary building block which got stripped of its outer rocky shell because of repeated collision with other large bodies during the initiation phases of formation of the solar system. The asteroid is about 280 kilometres at its widest point.

#### **NASA's Psyche mission:**

- NASA will send its Psyche Mission in August 2022 launch. This spacecraft will orbit around the asteroid for two years. In two years, it will take pictures, map the surface, and look for evidence of

an ancient magnetic field. Aircraft will also study the neutrons and gamma rays coming from the asteroid's surface in order to determine its elemental composition.

- Significance of the mission:
- This is the first mission to explore an asteroid with a surface comprising of substantial amounts of metal rather than rock or ice. It seeks to understand iron cores, which is an unexplored building block of formation of planet. It also provides first opportunity to examine the interiors of a rocky planet.

#### **104. 2021 Nobel Prize in Medicine:**

- On October 4, 2021, American scientists David Julius and Ardem Patapoutian won the prestigious "2021 Nobel Prize for Medicine".

##### **Highlights:**

- They won the prize for their discoveries of receptors for temperature and touch.
- According to award-giving body, these discoveries could make way for new pain-killers.
- These findings have allowed to understand how heat, cold and mechanical force initiate the nerve impulses which in turn allow humans to perceive and adapt to the world around.
- This development and knowledge are being used to develop treatments for a several disease conditions, including chronic pain.
- This year, the Nobel Prize for Physiology or Medicine was shared in equal parts by the two laureates.
- But medicine has been into the spotlight because of COVID-19 pandemic. There were recommendations that, those who developed covid-19 vaccines could be rewarded with Nobel Prizes.

##### **About Nobel Prizes:**

- The prestigious Nobel prizes for "science, literature and peace" were created and funded in the name of Swedish dynamite inventor and businessman Alfred Nobel. The prize is awarded since 1901. The Nobel prize for economics was first conferred in 1969. This century-old prize is worth 10 million Swedish crowns.

##### **Who is Ardem Patapoutian?**

- Ardem Patapoutian was born in 1967 in Lebanon, to Armenian parents. He moved to Los Angeles in his youth and currently he is a Professor at Scripps Research, La Jolla, California. He has done research at the University of California, San Francisco as well as at California Institute of Technology, Pasadena. He was awarded with The Nobel Prize for finding a cellular mechanism and underlying gene which translates a mechanical force on our skin into an electric nerve signal.

##### **Who is David Julius?**

- Davis Julius was born in New York. He is a Professor at University of California, San Francisco. He was awarded for his findings on the skin's sense of temperature on the basis of how certain cells react to capsaicin.

#### **105. New Biodegradable Polymer:**

- A team of Indian scientists have developed an environmentally friendly, non-toxic, biodegradable polymer using guar gum and chitosan, both of which are polysaccharides extracted from guar beans and shells of crab and shrimps.
- The fabricated guar gum-chitosan film having high water stability, high mechanical strength, and excellent resistance to harsh environmental conditions can potentially be used in packaging applications.
- Polysaccharide is one of the biopolymers with high potential for use in synthesis of packaging material. However, due to some drawbacks of polysaccharides, such as low mechanical properties, high water-solubility, and low barrier properties, they are not preferred.

##### **Guar gum-chitosan composite film:**

- To overcome the challenges associated with polysaccharide, the team of scientists fabricated a guar gum-chitosan composite film. It is a cross-linked polysaccharide that do not use any plasticizer with the help “solution casting method”.

**Properties of the Film:**

- The Fabricated biopolymer composite film had high water stability, high mechanical strength as well as excellent resistance towards harsh environmental conditions. The fabricated cross-linked film is not easily soluble in water.
- As per scientists, it did not dissolve even after 240 hours. Furthermore, the mechanical strength is higher compared to general biopolymer. It is highly water repellent or hydrophobic because of its high contact angle of 92.8°. Water vapor permeability is low as compared to the film made only from chitosan.

**106. Heli-borne Survey Technology:**

- Recently, the Union Government launched Heli-borne survey technology for groundwater management, developed by the Centre for Scientific and Industrial Research (CSIR) and the National Geophysical Research Institute (NGRI) Hyderabad, in Jodhpur.
- Heli-borne geophysical mapping technique will provide high-resolution 3D image for sub-surface up to a depth of 500 meters below the ground level and map potential groundwater sources.

**Heli Survey Technology:**

- This technology has been developed by CSIR-NGRI Hyderabad.
- The state-of-the-art technology, Heli Survey Technology, will be used to map the groundwater sources in arid regions.
- Survey will help in utilizing groundwater for drinking purposes.
- Heli-borne geophysical mapping technique will provide high-resolution 3D image for sub-surface up to a depth of 500 meters below the ground level.

**The Project:**

- This project has been developed with the aim of mapping potential groundwater sources and its management in providing safe drinking water to people in the water scarce arid regions of India.
- The mega project worth Rs. 150 crores will be implemented in two phases. To implement the project, CSIR has collaborated with the Ministry of Jal Shakti under the “National Aquifer Mapping Project”. This project will bring high visibility to CSIR to implement the Jal Jeevan Mission project.
- Water technologies of CSIR from source finding to water treatment will positively contribute towards “Har Ghar Hal se Jal” scheme as well as “doubling farmer’s income goals”.

**Arid areas in India:**

- Arid areas in north western India are spread across the States of Rajasthan, Haryana, Gujarat and Punjab. The area covers about 12% of the total geographical area in India and is home to about 8 crore people. Annual rainfall in arid areas is in the range of 100 to 400 mm. Thus, there is an acute shortage of water throughout the year.

**107. Nobel Prize 2021 for Physics:**

- The Nobel Prize 2021 for physics was awarded to three scientists from Japan, Germany and Italy. Secretary-general of the Royal Swedish Academy of Sciences, Goran Hansson, announced the winners on October 5, 2021.

**Highlights:**

- Syukuro Manabe and Klaus Hasselmann were awarded for their work in “physical modelling of Earth’s climate, quantifying variability and reliably predicting global warming”.
- Second half of the prize was awarded to Giorgio Parisi for his “discovery of the interplay of disorder and fluctuations in physical systems from atomic to planetary scales.”
- As per Nobel Prize Panel, Syukuro Manabe and Klaus Hasselmann have laid the “foundation of our knowledge of Earth’s climate and how humanity influences it”.

**Demonstration by Syukuro Manabe:**

- Since 1960s, he had demonstrated how increases in amount of carbon dioxide in the atmosphere increases the global temperatures. This demonstration laid the foundations for current climate models.

**Demonstration by Klaus Hasselmann:**

- He had created a model to link weather and climate. This model helped in explaining why climate models can be reliable despite the chaotic nature of weather. He also demonstrated ways to look after specific signs of human influence on the climate.

**Model developed by Giorgio Parisi:**

- He built a deep physical and mathematical model. This model made it possible to understand the complex systems in fields of mathematics, machine learning, biology and neuroscience.

**About Nobel Prize:**

- The award comes with a gold medal as well as 10 million Swedish kronor. Money for prize comes from a bequest left by the creator of prize & Swedish inventor, Alfred Nobel.
- In the year 2020, the prize was conferred to Andrea Ghez from America, Roger Penrose from Britain and Reinhard Genzel from Germany for their research into black holes.

**108. WHO approves world's first Malaria Vaccine:**

- Recently, the World Health Organisation (WHO) endorsed the world's first Malaria Vaccine in the hope that it will spur stalled efforts to curb the spread of the parasitic disease.
- Malaria is a life-threatening disease caused by parasites that are transmitted to people through the bites of infected female Anopheles mosquitoes. It is preventable and curable.

**About the Vaccine:**

- RTS,S/AS01, trade name Mosquirix, is an injectable vaccine targeting P. falciparum, the most prevalent malaria strain in Africa. It is the first and only vaccine to show partial protection in young children.
- It was developed by British drugmaker GlaxoSmithKline in 1987.
- The active substance in Mosquirix is made up of proteins found on the surface of the Plasmodium falciparum parasites (PFP).
- RTS,S aims to trigger the immune system to defend against the first stages of malaria when the PFP enters the human host's bloodstream through a mosquito bite and infects liver cells.
- It also helps protect against infection of the liver with the Hepatitis B virus.

**Burden of Malaria:**

- In 2019, India had an estimated 5.6 million cases of malaria compared to about 20 million cases in 2020, according to WHO.
- In 2019, there were an estimated 229 million cases of malaria worldwide, and the estimated number of malaria deaths that year stood at 4,09,000.
- Children aged under 5 years are the most vulnerable group affected by malaria in 2019, they accounted for 67% (2,74,000) of all malaria deaths worldwide.

**109. ICMR releases MUDRA Toolbox in 5 Indian languages:**

- Indian Council of Medical Research (ICMR) has released the Multilingual Dementia Research and Assessment (MUDRA) Toolbox in five Indian languages-Hindi, Bengali, Telugu, Kannada and Malayalam.

**About MUDRA Toolbox:**

- MUDRA Toolbox project is led by the ICMR Neuro-Cognitive Tool Box (ICMR-NCTB) partnership. It seeks to improve dementia and mild cognitive impairment research & therapeutic practices in India.

- To implement this project, ICMR-NCTB has collaborated with AIIMS (New Delhi), NIMHANS (Bengaluru), NIMS (Hyderabad), SCTIMST (Thiruvananthapuram), Manipal Hospital (Bengaluru), Apollo Hospital (Kolkata) and Jawaharlal Nehru Medical College.

**Use of the toolbox:**

- Toolbox comprise of several cognitive tests which can be used to examine several aspects of cognition such as executive functioning, speech, memory, and visuospatial functions. It is sensitive to the elements affective cognitive test performance like language, education, and culture.

**Dementia cases in India:**

- Dementia is a neurological illness which affects the ability of person to perform activities of daily living. It creates a loss in memory. As per Alzheimer’s and Related Disorders Society of India (ARDSIDementia), currently more than 5.29 million persons are living with dementia in India. By 2030, number of dementia patients is expected to reach 7.61 million.

**Indian Council of Medical Research (ICMR):**

- ICMR is the apex body to formulate, coordinate and promote biomedical research. It is one of the oldest and largest medical research bodies across the world. It is funded through the Department of Health Research of Ministry of Health & Family Welfare.

**110. PM Modi launched ‘Indian Space Association’:**

- Recently, the Prime Minister launched the Indian Space Association (ISpA) - the premier industry association of space and satellite companies.

**Key Facts:**

- Indian Space Association (ISpA) is the premier industry association of space and satellite companies.
- ISpA is represented by leading home grown and global corporations having advanced capabilities in space & satellite technologies.
- Founding members of ISpA include Nelco (Tata group), Bharti Airtel, Larsen & Toubro, Mapmyindia, OneWeb, Walchandnagar Industries and Ananth Technology Limited.
- Core members include BEL, Godrej, Hughes India, Centum Electronics, Azista-BST Aerospace Private Limited and Maxar India.

**Function of ISpA:**

- In line with the Prime Minister’s vision of Atma Nirbhar Bharat, ISpA aspires become the collective voice of Indian Space industry. It will undertake Policy Advocacy as well as engage with all the stakeholders in Indian Space sector. It will also engage with the Government and its Agencies for making India self-reliant, technologically advanced and a leading player in space sector.

**India’s Space industry:**

- Space industry of India is driven by the Indian Space Research Organisation (ISRO). Space industry comprise of more than 500 private suppliers and other various bodies from Department of Space.
- There are comparatively low independent private agencies. However, private sector has been gaining an increased role since 21st century. Space industry of India accounted for \$7 billion in 2019 that is 2% of the world’s space industry.

**111. India Joins High Ambition Coalition for Nature and People:**

- India has officially joined the High Ambition Coalition for Nature and People, on October 7, 2021.
- India Joined the coalition at ceremony held between the French and Indian governments in New Delhi.
- “High Ambition Coalition (HAC) for Nature and People” is a group of more than 70 countries which encourages the adoption of global goal to protect 30×30.
- The HAC coalition aims for promoting an international agreement in order to protect at least 30 percent of world’s land and ocean by 2030.

**Members of HAC:**

- HAC members presently comprise of a mix of countries in global north and south. Asia, Africa, European and Latin American countries are among the members of HAC. India became the first emerging economy from BRICS bloc to join the HAC.

#### **Biodiversity Meeting:**

- India's announcement was done in the backdrop of lead up to a high-level biodiversity meeting which will be hosted by China. This virtual meeting will take place from October 11 to October 15. Meeting will discuss the key aspects of "biodiversity treaty" which is to be finalized in 2022. Global 30x30 goal is the centrepiece of biodiversity treaty.

#### **Background;**

- India's goal to join the High Ambition Coalition for Nature and People, was initiated in January 2021 in Paris at the "One Planet Summit". On the opening of COP15, Ambassador of France to India (Mr. Emmanuel Lenain) said that on India joining the High Ambition Coalition will be a real game changer. This move will boost multilateral efforts, since India is a major player for biodiversity protection.

#### **112. Right to a Clean Environment:**

- The United Nations Human Rights Council (UNHRC) unanimously voted to recognise a clean, healthy & sustainable environment as a universal right. This right was recognised by UNHRC on October 8, 2021 in Geneva, Switzerland.
- This resolution was approved following a campaign led by 13000 civil society organisations & indigenous peoples' groups, 90,000 children, private sector stakeholders and the Global Alliance of National Human Rights Institutions.
- Once the right is recognised by all, it would be the first of its kind in 70 years, ever since the Universal Declaration of Human Rights was adopted in 1948 by the UN General Assembly.
- Right to a clean environment was first rooted in "1972 Stockholm Declaration".

#### **About the UN Resolution:**

- This resolution emphasises on "Rights to life, liberty and security" of human rights defenders who are working in environmental matters. They are referred as environmental human rights defenders. Clean-environment resolution was passed by the human rights council. The resolution also called on countries to boost their abilities of improving the environment. It was passed by 43-0. Four member states namely India, China, Japan and Russia were abstained.

#### **UDHR:**

- The 30 rights and freedoms include civil and political rights, like the right to life, liberty, free speech and privacy and economic, social and cultural rights, like the right to social security, health and education, etc.

#### **In the Indian Context:**

- The human right to a healthy environment brings together the environmental dimensions of civil, cultural, economic, political, and social rights, and protects the core elements of the natural environment that enable a life of dignity.
- The **right to life (Article 21)** has been used in a diversified manner in India. It includes, inter alia, the right to survive as a species, quality of life, the right to live with dignity and the right to livelihood.
- **Article 21** of the Indian Constitution states: 'No person shall be deprived of his life or personal liberty except according to procedures established by law.'
- Further the Constitutional (forty-second Amendment) Act, 1976 incorporated two significant articles viz. **Article 48-A and 51A (g)** thereby making the Indian Constitution the first in the world conferring constitutional status to the environment protection.
- **Article 48-A:** The State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country.
- **Article 51A(g):** It is a duty of every citizen to protect and preserve the environment.



### 113. World's First Self-Driving Train:

- German rail operator, Deutsche Bahn and industrial group, Siemens launched the first automated & driverless train of the world on October 11, 2021.

#### Key Points:

- The self-driving train was launched in the city of Hamburg.
- This train is more punctual and energy efficient as compared to traditional trains.
- Country has planned to add four such trains to the S-Bahn rapid urban rail network of northern city.
- These trains will start carrying passengers from December on the existing rail infrastructure.
- Other cities such as Paris have driverless metros on the other hand, airports often have automated monorail trains plying terminals. However, these trains run on exclusive single tracks while the Hamburg train will share tracks with other regular trains.

#### World's first self-driving train:

- This project is being developed by 'Siemens and Deutsche Bahn'. It is being dubbed as "world first". The project is part of a 60-million-euro modernisation of rapid urban rail system of Hamburg. These automated trains will offer a reliable service without laying a single kilometre of new track. These trains can transport "up to 30 percent more passengers". Besides improving the punctuality, these trains will save more than 30 percent of energy.
- Though the train is controlled by digital technology and is fully automated. But a driver will sit on the train to supervise journeys of the passengers on board.
- Deutsche Bahn is a German railway company, having its headquarter in Berlin. It is a private joint-stock company. The Federal Republic of Germany is the only shareholder in the company. It is the second-largest transport company in the world. In the year 2015, Deutsche Bahn was the largest railway company of the world by revenue.

### 114. China tested Nuclear Capable Hypersonic Missile:

- Recently, it has been reported that China tested a nuclear-capable hypersonic glide vehicle that circled the globe before speeding towards its target.
- Several countries, including the US, Russia and China, are developing hypersonic missiles which travel at a speed five times that of sound. Though they are slower than ballistic missiles, they are harder to intercept and can be manoeuvred.

#### Hypersonic Speed and Technology:

- **Hypersonic** speeds are 5 or more times the Mach or speed of sound.
- **Mach Number:** It describes an aircraft's speed compared with the speed of sound in air, with Mach 1 equating to the speed of sound i.e. 343 metre per second.

#### Types:

1. **Hypersonic cruise missiles:** These are the ones that use rocket or jet propellant through their flight and are regarded as being just faster versions of existing cruise missiles.
2. **Hypersonic Glide Vehicle (HGV):** These missiles first go up into the atmosphere on a conventional rocket before being launched towards their target.

#### Technology Used:

- Most hypersonic vehicles primarily use the scramjet technology, which is a type of Air Breathing propulsion System.
- This is extremely complex technology, which also needs to be able to handle high temperatures, making the hypersonic systems extremely costly.

#### Implications for India:

- Hypersonic technology developments, in the backdrop of growing US-China rivalry and a year-long standoff with Indian forces in eastern Ladakh, is certainly a threat for India's space assets along with the surface assets.
- The offence system operating at these speeds would mean a requirement to develop defence systems at these speeds.

### Ballistic missiles:

- It is a rocket-propelled self-guided strategic-weapons system that follows a ballistic trajectory to deliver a payload from its launch site to a predetermined target.
- It can carry conventional high explosives as well as chemical, biological, or nuclear munitions.
- The International Code of Conduct against Ballistic Missile Proliferation (ICOC), now known as the Hague Code of Conduct against Ballistic Missile Proliferation (HCCOC), is a political initiative aimed at globally curbing ballistic missile proliferation.
- India is a signatory to this convention.

### 115. Tripartite talks with Gorkhas:

- Recently, the Union Home Ministry Tuesday began tripartite talks with the Gorkha representatives from the Darjeeling Hills, Terai and Dooars region and the Government of West Bengal in order to resolve the longstanding demand of statehood in the North Bengal region.
- During the meeting, officials discussed several issues related to Gorkhas and the region.
- On this issue, last meeting was held in October 2021 when a delegation of Gorkha leaders came to meet the then MoS Home, G Kishan Reddy, for discussing the statehood issue.
- The delegation from the Gorkhaland raised their demand of separate state of Gorkhaland well as grant of Scheduled Tribe status to 11 Gorkha sub-communities. Issue of Gorkhaland Territorial Administration (GTA) was raised, the delegation noted that they will not discuss GTA as Memorandum of Agreement (MoU) that was signed between Union of India, Government of West Bengal and Gorkha Janmukti Morcha in 2011, was not welcomed by the West Bengal.

### Gorkhaland Issue:

- Gorkhaland comprise of Nepali-speaking people from Darjeeling, Kurseong, Kalimpong, and other hilly districts of West-Bengal. People of these areas have cultural, ethical, and language differences with Bengali community of West-Bengal.
- Demand of Darjeeling as a separate administrative region was first initiated in the year 1907. However, the term “Gorkhaland” was coined during 1980s by Subhash Ghising. Subhash Ghising was the founder of Gorkha National Liberation Front (GNLF).
- The **Gorkhaland Movement** is a movement that mainly focuses on the Darjeeling Hills of West Bengal, and demands the creation of a separate state of Gorkhaland.



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