

### NITI Aayog's Proposal for Little Andaman:

- Recently, a plan named the Sustainable Development of Little Andaman Island Vision Document by NITI Aayog for the sustainable and holistic development of the 680 sq km, fragile Little Andaman Island in the Andaman and Nicobar island group has raised alarm among conservationists.
- Earlier in 2020, the Prime Minister declared that the Andaman and Nicobar islands will be developed as a "maritime and startup hub".
- Building a new Greenfield coastal city, that will be developed as a free trade zone and will compete with Singapore and Hong Kong.

### Bharat Parv 2021:

- The annual event Bharat Parv was celebrated from 26th to 31st January, 2021 on a virtual platform created by the Ministry of Tourism.
- On the occasion, the Ministry dedicated three virtual pavilions - Dekho Apna Desh, Statue of Unity & Incredible India.
- Bharat Parvenvisages generating patriotic fervor and showcases the rich and varied cultural diversity of the country. This event celebrates the "Essence of India".
- The Ministry of Tourism organizes Bharat Parv every year since 2016.

### Periyar Tiger Reserve:

- For the first time in the country, the Periyar Tiger Reserve (PTR) in Kerala has taken up training of a tiger cub to equip it to naturally hunt in the forest environment.
- Declared a Sanctuary during 1950 and declared as Tiger Reserve during 1978. It gets its name from the River Periyar which has its origin deep inside the reserve.
- The major rivers through the reserve are Mullayar and Periyar.

### Ageing Dams of India: UN Report:

- According to a United Nations (UN) report "Ageing water infrastructure: An emerging global risk", over 1,000 large dams in India will be roughly 50 years old in 2025 and such ageing embankments across the world pose a growing threat.
- India is ranked third in the world in terms of building large dams.
- Global Scenario is that the most of the 58,700 large dams worldwide were constructed between 1930 and 1970 with a design life of 50 to 100 years.
- By 2050, most people on Earth will live downstream of tens of thousands of large dams built in the 20th century, many of them already operating at or beyond their design life.
- At 50 years, a large concrete dam "would most probably begin to express signs of ageing."

### Vaghai-Bilimora Heritage Line:

- The Western Railway has decided to not stop the services of three trains, including the 107-year-old narrow gauge heritage train between Vaghai and Bilimora, in Gujarat permanently.
- Other two narrow gauge trains run between Miyagam, Choranda and Malsar, and Choranda junction and Moti Karal.
- In rail transport, track gauge or track gage is the spacing of the rails on a railway track.
- The Ministry of Railways, previously issued a letter to the Western Railway ordering permanent closure of 11 "uneconomic branch lines" and narrow gauge sections of the Western Railway, including three from Gujarat.
- Vaghai-Bilimora Train started in 1913 was a remnant of Gaekwad dynasty who ruled the princely state of Baroda. Tribal people from the interior commute by this train regularly. The train covers a distance of 63 kilometres.

**15th Finance Commission Recommendations: Resource Allocation**

- Recently, the government accepted the 15th Finance Commission's recommendation to maintain the States' share in the divisible pool of taxes to 41% for the five-year period starting 2021-22.
- It has recommended maintaining the vertical devolution at 41% - the same as in its interim report for 2020-21.  
It is at the same level of 42% of the divisible pool as recommended by the 14th Finance Commission.
- It has made the required adjustment of about 1% due to the changed status of the erstwhile State of Jammu and Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir.
- Finance Commission (FC) is a constitutional body that determines the method and formula for distributing the tax proceeds between the Centre and states, and among the states as per the constitutional arrangement and present requirements.
- Under Article 280 of the Constitution, the President of India is required to constitute a Finance Commission at an interval of five years or earlier.
- The 15th Finance Commission was constituted by the President of India in November 2017, under the chairmanship of NK Singh. Its recommendations will cover a period of five years from the year 2021-22 to 2025-26.

**Military Coup in Myanmar:**

- Recently, the Myanmar military has grabbed power in a coup - the third time in the nation's history since its independence from British rule in 1948.
- A one-year state of emergency has been imposed and democratically elected leader Aung San Suu Kyi has been detained.
- 'Coup' is generally described as a sudden, violent, and illegal seizure of power from a government.
- In the November 2020 parliamentary election, Suu Kyi's party National League for Democracy (NLD) secured the majority of the seats.
- In the Myanmar's Parliament, the military holds 25% of the total seats according to the 2008 military-drafted constitution and several key ministerial positions are also reserved for military appointees.
- When the newly elected Myanmar lawmakers were to hold the first session of Parliament in 2021, the military imposed a state of emergency for one year citing massive voting fraud in the parliamentary elections.

**Centre for Wetland Conservation and Management:**

- Recently, on the occasion of the World Wetland Day, the Minister of State for Environment, Forest and Climate Change announced the establishment of a Centre for Wetland Conservation and Management (CWCM), as a part of the National Centre for Sustainable Coastal Management (NCSCM).
- World Wetlands Day is celebrated every year on the 2nd of February.
- The year 2021 also commemorates the 50th anniversary of the Convention on Wetlands signed on 2nd February 1971 in the Iranian city of Ramsar.
- The theme for 2021 is 'Wetlands and Water'.
- It was first celebrated in 1997.
- India has nearly 4.6% of its land as wetlands, covering an area of 15.26 million hectares and has 42 sites designated as Wetlands of International Importance (Ramsar Sites).
- Recently, India has added Tso Kar Wetland Complex in Ladakh as its 42nd Ramsar site.

**Jal Jeevan Mission (Urban):**

- In the Budget 2021-22, Jal Jeevan Mission (Urban) has been announced under the Housing and Urban Affairs Ministry to provide universal coverage of water supply to all households through functional taps in all statutory towns in accordance with Sustainable Development Goal- 6.

- It complements the Jal Jeevan Mission (Rural) which envisages supply of 55 litres of water per person per day to every rural household through Functional Household Tap Connections (FHTC) by 2024.

### Fishing Cat Conservation Alliance:

- Recently, the Fishing Cat Conservation Alliance started a worldwide campaign to raise awareness for conservation of fishing cats.
- The Fishing Cat Conservation Alliance is a team of conservationists, researchers and enthusiasts working to achieve functioning floodplains and coastal ecosystems that ensure survival of the fishing cat.
- Its Scientific Name is *Prionailurus viverrinus*.
- It is twice the size of a house cat.
- The fishing cat is nocturnal (active at night) and apart from fish also preys on frogs, crustaceans, snakes, birds, and scavenges on carcasses of larger animals.
- Fishing cats have a patchy distribution along the Eastern Ghats.
- IUCN Red List: Vulnerable.
- CITES: Appendix II
- Indian Wildlife Protection Act, 1972: Schedule I

### Pradhan Mantri Matru Vandana Yojana:

- Recently, the government's maternity benefit scheme, or Pradhan Mantri Matru Vandana Yojana (PMMVY), has crossed 1.75 crore eligible women till the financial year 2020.
- A total sum of Rs. 5,931.95 crore was paid to 1.75 crore eligible beneficiaries between financial year 2018 and 2020.
- PMMVY is a maternity benefit programme being implemented in all districts of the country with effect from 1st January, 2017.
- It is a centrally sponsored scheme being executed by the Ministry of Women and Child Development.

### Concerns over DNA Bill, 2019:

- Recently, the Parliamentary Standing Committee on Science and Technology, Environment, Forests and Climate Change has recommended that the government should address the concerns raised over the DNA Technology (Use and Application) Regulation Bill, 2019, including over creation of a national databank of crime scene DNA profiles and fears of communities being targeted.
- While the Bill speaks of regional databanks apart from a central one, the Parliamentary Standing Committee strongly recommends only one National Data Bank, to minimise chances of misuse of data.
- DNA Technology (Use and Application) Regulation Bill, 2019 (Key Provisions):
- The Bill allows the use of the technology to establish the identity of persons in matters of crime, parentage dispute, emigration or immigration and transplantation of human organs.
- It provides for establishment of national and regional DNA (Deoxyribonucleic Acid) data banks and each databank will maintain crime scene index, suspects' or undertrials' index and offenders' index separately.
- The Bill talks of a DNA Regulatory Board that would advise the Centre and state governments on issues such as setting up of DNA laboratories and databanks; and laying down of guidelines, standards and procedures for the same.

### Centenary of the Chauri Chaura Incident:

- On the occasion of the centenary of the Chauri Chaura incident, a postage stamp was released by the Prime Minister.
- Chauri Chaura is a town in Gorakhpur district of Uttar Pradesh.

- On 4th February, 1922, this town witnessed a violent incident - a large crowd of peasants set on fire a police station that killed 22 policemen. Due to this incident Mahatma Gandhi called off the Non-Cooperation Movement (1920-22).
- On 4th February, volunteers congregated in the town, and after the meeting, proceeded in a procession to the local police station, and to picket the nearby Mundera bazaar.
- The police fired into the crowd killing some people and injuring many volunteers.
- In retaliation, the crowd proceeded to set the police station on fire.
- The British Raj prosecuted the accused aggressively. A session court quickly sentenced 172 of the 225 accused to death. However, ultimately, only 19 of those convicted were hanged.
- Mahatma Gandhi condemned the crime of the policemen's killing. The volunteer groups in nearby villages were disbanded, and a Chauri Chaura Support Fund was set up to demonstrate "genuine sympathy" and seek atonement.
- Gandhi decided to stop the Non-Cooperation Movement, which he saw as having been tainted by unforgivable violence. He bent the Congress Working Committee to his will, and on 12th February, 1922, the satyagraha (movement) was formally suspended.

### **Pandit Bhimsen Joshi Jayanti:**

- Recently, the Prime Minister paid homage to Pandit Bhimsen Joshi, the classical music vocalist, on his centenary birth anniversary.
- Pandit Bhimsen Joshi was born on February 4, 1922.
- Important Recognition: He received the Bharat Ratna in 2008.
- Work: He is remembered for his famous ragas including Shuddha Kalyan, Miyan Ki Todi, Puriya Dhanashri and Multani etc.
- He belonged to the Kirana Gharana.

### **CCTNS Hackathon & Cyber Challenge:**

- Recently, the inaugural function of the 2nd CCTNS Hackathon and Cyber Challenge 2020-21 of the National Crime Records Bureau (NCRB) was held in New Delhi.
- This hackathon is in continuation to the Hackathon & Cyber Challenge which concluded in March 2020.
- It aimed to deepen understanding and enhance skills of the law enforcement personnel across all ranks and file, empowering them to adopt smart strategies for effectively addressing the evolving threats.

### **Aero India 2021:**

- Recently, the 13th edition of the Aero India show began at Bengaluru's Yelahanka Air Force Station (Karnataka).
- Aero India is a biennial international military and civil airshow.
- It is a premier event that draws international and Indian military and civil aircraft makers, their support industries, military brass and government dignitaries, and business visitors.
- Bengaluru based Yelahanka air base, about 30 km from the city centre, has been hosting the air show in February since it was started in Bengaluru in 1996.

### **Consumer Welfare Fund:**

- Union Minister of State for Consumer Affairs, Food and Public Distribution has informed the parliament about Consumer Welfare Fund (CWF).
- It was set up under the Central Goods and Services Tax (CGST) Act, 2017. The consumer welfare fund rules of 1992 have been subsumed under the CGST rules, 2017.
- The Fund has been set up by the Department of Revenue (Ministry of Finance) and is being operated by the Department of Consumer Affairs (Ministry of Consumer Affairs, Food & Public Distribution).



### Justice Rohini Commission:

- Recently, the Centre has extended the tenure of the Rohini Commission until 31st July, 2021 to submit its report on Sub-categorisation of Other Backward Classes (OBCs).
- The Rohini Commission was constituted in October 2017 under Article 340 of the Constitution. At that time, it was given 12 weeks to submit its report, but has been given several extensions since, the latest one being the 10th.
- Article 340 deals with the appointment of a commission to investigate the conditions of backward classes.

### Square Kilometre Array Telescope:

- Recently, the Square Kilometre Array Observatory (SKAO) Council held its inaugural meeting and approved the establishment of the world's largest radio telescope.
- The new venture is being deemed as important following the collapse of one of the most prolific radio telescopes in the world, the Arecibo in Puerto Rico, in December last year.
- SKAO is a new intergovernmental organisation dedicated to radio astronomy and is headquartered in the UK.
- Square Kilometer Array (SKA) Telescope is proposed to be the largest radio telescope in the world, will be located in Africa and Australia.
- Significance is that some of the questions that scientists hope to address using this telescope:
  - The beginning of the universe.
  - How and when the first stars were born.
  - The life-cycle of a galaxy.
  - Exploring the possibility of detecting technologically-active civilisations elsewhere in our galaxy.
  - Understanding where gravitational waves come from.

### Three New Fighter Jets:

- According to the Ministry of Defence, three new fighter jets will be flying by 2026, of which two will be for the Air Force and one for the Navy.
- This includes a new LCA (the Mk-2 version) and AMCA (Advanced Medium Combat Aircraft) for the Air Force and the TEDBF (Twin-Engine Deck-Based Fighter) for the Navy.
- Earlier, the Cabinet Committee on Security (CCS) had cleared a deal worth Rs. 48,000 crore for the acquisition of 83 Tejas Light Combat Aircraft (Mk-1A and Mk-1 versions) for the Indian Air Force.

### Unified Portal of Gobardhan:

- Recently, a Unified Portal of Gobardhan has been launched to ensure smooth implementation of Biogas schemes/initiatives and their real time tracking.
- Ensure close coordination with various Departments/Ministries for smooth implementation of Biogas schemes/initiatives and its real time tracking.
- The Department of Drinking Water and Sanitation under the Swachh Bharat Mission – Grameen (SBMG).

### Ratha Saptami:

- This years' Ratha Saptami festival is being celebrated on 19th February 2021.
- Ratha Saptami is an annual Hindu festival that is dedicated to Surya, the sun god.
- It is made of two words- 'Ratha' means Chariot and 'Saptami' means seventh.
- A one-day Brahmotsavam is held in Tirumala (Andhra Pradesh) on this day.
- Ratha Saptami is also called Surya Jayanti as it marks the birth of Surya and referred as Magha Saptami as it falls on the seventh day (Saptami) of the Hindu month Magha.

- Ratha Saptami also marks the change of season to spring and the start of the harvesting season.

### Uttarakhand Flash Flood:

- Recently, a glacial break in the Tapovan-Reni area of Chamoli District of Uttarakhand led to massive Flash Flood in Dhaulti Ganga and Alaknanda Rivers, damaging houses and the nearby Rishiganga power project.
- In June 2013, flash floods in Uttarakhand wiped out settlements and took lives.
- It occurred in river Rishi Ganga due to the falling of a portion of Nanda Devi glacier in the river which exponentially increased the volume of water.
- Rishiganga meets Dhaulti Ganga near Raini. So Dhaulti Ganga also got flooded.
- Major Power Projects Affected:
  - Rishi Ganga Power Project It a privately owned 130MW project.
  - Tapovan Vishnugad Hydropower Project on the Dhaultigangawas a 520 MW run-of-river hydroelectric project being constructed on Dhaultiganga River.

### Registered Unrecognised Political Parties Increased: ADR

- According to a report by Association for Democratic Reforms (ADR), the number of registered unrecognised political parties has increased two-fold from 2010 to 2019.
- ADR is an Indian non-governmental organization established in 1999 situated in New Delhi.
- Registered Unrecognised Political Parties are either newly registered parties or those which have not secured enough percentage of votes in the assembly or general elections to become a state party, or those which have never contested elections since being registered are considered unrecognised parties.
- Such parties don't enjoy all the benefits extended to the recognised parties.

### Clean Fuel Hydrogen:

- Recently, researchers at the Indian Institute of Technology, Delhi (IIT-D) have come up with a way to generate clean fuel hydrogen from water at a low-cost.
- Hydrogen gas is a viable choice as a renewable substitute for fossil fuels, and can help mitigate emissions to reduce pollution.
- The researchers at IIT-D have successfully split water by a process known as Sulphur-Iodine (SI) thermochemical hydrogen cycle (SI Cycle) to generate low-cost, clean hydrogen fuel for industrial consumption.
- It could help India to adhere to its commitment in the Paris Climate Agreement and its Intended Nationally Determined Contribution (INDC) Targets and ensure that its mobility in the future is with zero emissions.
- It will complement the implementation of the FAME India Scheme launched with the objective to support hybrid/electric vehicles market development and manufacturing ecosystem.

### Odisha's Border Disputes:

- Recently, a border dispute between Odisha and Andhra Pradesh once again resurfaced when Andhra Pradesh announced panchayat polls in three villages of Kotia panchayat in Koraput district of Odisha.
- Odisha was carved out of the Bengal-Bihar-Odisha province on 1st April, 1936, but the inter-state border disputes continue even today.
- Odisha continues to have unresolved border disputes with four neighbouring States in its 8 out of 30 districts.
- Odisha and Andhra Pradesh are involved in a territorial dispute over Kotia gram panchayat since 1960. Disputes pertain over 21 villages in Kotia gram panchayat.

**Mission Innovation 2.0:**

- Recently, the Union Minister of Science & Technology addressed the Mission Innovation (MI) to mark the beginning of phase-2 of the mission or Mission Innovation 2.0.
- India played a leadership role in MI Steering Committee and is a member of the Analysis and Joint Research and Business & Investor Engagement sub-groups.
- Mission Innovation was announced on 30th November 2015, on the sidelines of the Paris Climate Agreement to undertake ambitious measures to combat climate change.
- It is a global initiative of 24 countries and the European Union to accelerate global clean energy innovation.
- Commitment by all members to seek to double their clean energy innovation investments over five years in selected priority areas.

**Kuruba Community: Karnataka**

- A massive rally was organised by the Kuruba community to urge the state government of Karnataka to recommend the Centre inclusion of the community in the Scheduled Tribe (ST) list.
- From Independence, the community enjoyed the ST status. In 1977, Justice LG Havanur, who headed the backward class commission, moved the Kurubas to the 'most backward classes' category from ST list.
- The Kurubas of Karnataka are a traditional sheep rearing community.
- Presently, the Kurubas constitute 9.3% of the state's population and come under the backward classes category.
- Kurubas are the fourth largest caste in Karnataka after the Lingayats, Vokkaligas and Muslims.

**Kiran Helpline:**

- As per the data of the Ministry of Social Justice and Empowerment, 70% of callers to the 'Kiran Helpline', launched in September 2020, were men. Most of the calls have been from young adults.
- The 24/7 toll-free helpline 'Kiran' provides support to people facing anxiety, stress, depression, suicidal thoughts and other mental health concerns.

**Pong Dam Lake Wildlife Sanctuary:**

- Over a lakh migratory water birds arrived at the Pong Dam Lake Wildlife Sanctuary in Himachal Pradesh in winter 2020-21.
- Located in Kangra District, Himachal Pradesh.
- In 1975, Pong dam was built across the Beas River. It is also called the Pong reservoir or the Maharana Pratap Sagar.
- In 1983, the entire reservoir was declared as a Wildlife Sanctuary by the Himachal Pradesh government.
- In 1994, the Government of India declared it a "Wetland of National Importance".
- Pong Dam Lake was declared as Ramsar Site in November 2002.

**Hunter Syndrome: MPS II**

- Two brothers suffering from Mucopolysaccharidosis II or MPS II (Hunter Syndrome, Attenuated Type) have approached the Delhi High Court seeking direction to the Centre and AIIMS to provide them free treatment.
- MPS II is a rare disease that is passed on in families.
- MPS II mostly affects boys and their bodies cannot break down a kind of sugar that builds bones, skin, tendons and other tissues.

- Cause: It is caused by changes (mutations) of the IDS gene that regulates the production of the iduronate 2-sulfatase (I2S) enzyme.
- This enzyme is needed to break-down complex sugars, known as glycosaminoglycans (GAGs), produced in the body.
- Its impact is that many tissues and organs are enlarged in this disorder.

### NDMA Guidelines to Tackle Glacial Bursts:

- A Glacial Lake Outburst Flood (GLOF) is suspected to have caused the flash floods in Chamoli district of Uttarakhand.
- Glacial Lake Outburst Flood (GLOF) refers to the flooding that occurs when the water dammed by a glacier or a moraine (accumulations of dirt and rocks fallen onto the glacier surface) is released suddenly.
- When glaciers melt, the water in glacial lakes accumulates behind loose, natural “glacial/moraine dams” made of ice, sand, pebbles and ice residue.

### UN Human Rights Council:

- Recently, the United States announced that it would rejoin the United Nations (UN) Human Rights Council that it left in 2018.
- The Human Rights Council is an inter-governmental body within the United Nations system responsible for strengthening the promotion and protection of human rights around the world.
- The Council was created by the United Nations General Assembly in 2006. It replaced the former United Nations Commission on Human Rights.
- OHCHR is headquartered in Geneva, Switzerland.
- It is made up of 47 United Nations Member States which are elected by the UN General Assembly (UNGA).

### UAE's Hope Mars Mission:

- Recently, the United Arab Emirates' (UAE's) first-ever interplanetary Hope Probe mission has successfully entered orbit around Mars.
- The UAE's Mars Mission called 'Hope' was announced in 2015 with the aim of creating mankind's first integrated model of the Red planet's (Mars) atmosphere.
- 'Hope' was developed by UAE scientists in the USA and was launched in July 2020 from the Tanegashima Space Centre in Japan.

### Arka Shubha: New Marigold Variety

- The Indian Institute of Horticultural Research (IIHR) has developed a new marigold variety named Arka Shubha.
- Arka Shubha has carotene content of around 2.8% (for all marigolds, it's maximum upto 1.4%) which is the highest among all plant sources.
- Carotenes are carotenoid pigments that are oxygen-free. Mostly they are unsaturated hydrocarbons that contain only carbon and hydrogen.
- Carotene is responsible for the orange colour of carrots.

### Privatisation of Banks:

- The Union Budget 2021 has announced the privatisation of two public sector banks and one general insurance company in the upcoming fiscal 2021-22.
- The move, coming after 51 years of nationalisation of government-owned banks in 1969, will give the private sector a key role in the banking sector.
- Presently, India has 22 private banks and 10 small finance banks.



- The government decided to nationalise the 14 largest private banks in 1969. The idea was to align the banking sector with the socialistic approach of the then government.
- State Bank of India (SBI) had been nationalised in 1955 itself, and the insurance sector in 1956.
- In 2015, the government had suggested privatisation but the then Reserve Bank of India (RBI) Governor did not favour the idea.
- Many committees had proposed bringing down the government stake in public banks below 51%:
  - The Narasimham Committee proposed 33%.
  - The P J Nayak Committee suggested below 50%.

### Low Convictions Rate under UAPA Act:

- According to data recently presented by the Ministry of Home Affairs in the Rajya Sabha, only 2.2% of cases registered under the Unlawful Activities (Prevention) Act, 1967 between the years 2016-2019 ended in convictions by court.
- The Ministry quoted figures from the 2019 Crime in India Report compiled by the National Crime Records Bureau (NCRB).
- Till the year 2004, "unlawful" activities referred to actions related to secession and cession of territory. Following the 2004 amendment, "terrorist act" was added to the list of offences.

### Gaganyaan Mission:

- Recently, the Union Minister of Science and Technology informed that the human spaceflight module of Gaganyaan will be launched after the second unmanned mission planned in 2022-23.
- It was initially envisaged that the Rs. 10,000 crore Gaganyaan mission aims to send a three-member crew to space for five to seven days by 2022 when India completes 75 years of independence.
- First unmanned mission is planned in December 2021.
- GSLV Mk III, also called the LVM-3 (Launch Vehicle Mark-3,) the three-stage heavy lift launch vehicle, will be used to launch Gaganyaan as it has the necessary payload capability.
- Human Space Flight Centre of the ISRO and the Russian government-owned Glavkosmos signed a contract for the training, which includes Russian support in the selection of candidates, their medical examination, and space training.

### TROPEX 21:

- Indian Navy's largest biennial Theatre Level Operational Readiness Exercise (TROPEX 21) commenced recently.
- Exercise commenced in early January, which was culminated by the third week of February.
- Theme was 'Combat Ready, Credible and Cohesive force'.
- Indian Navy, Coast Guard, Marine Police of 13 coastal States and Union Territories along with other stakeholders in the maritime domain.

### Saksham Portal and Seaweed Mission: TIFAC

- The Technology Information, Forecasting and Assessment Council (TIFAC) has launched two new initiatives - SAKSHAM (Shramik Shakti Manch) Job Portal and a Seaweed Mission.
- SAKSHAM Portal: is a dynamic portal for jobs/mapping the skills of Shramiks (workers) vis-a-vis requirements of Micro, Small and Medium Enterprises (MSMEs) and other industries all across the country. It is an all India Portal. It will facilitate creation of 10 lakh blue collar jobs.
- Seaweed Mission has been launched for commercial farming of seaweeds and its processing for value addition towards boosting the national economy.
- TIFAC is an autonomous organization set up in 1988 under the Department of Science & Technology to look ahead in the technology domain, assess the technology trajectories, and support innovation by networked actions in select areas of national importance.

### **The Lancet Countdown on Health and Climate Change:**

- New research from ‘The Lancet Countdown on Health and Climate Change’ highlights the benefits to health if countries adopt climate plans - Nationally Determined Contributions (NDCs) - that are consistent with the Paris Agreement aim of limiting warming to "well below 2°C".
- The Lancet Countdown on Health and Climate Change, published annually, is an international, multidisciplinary collaboration, dedicated to monitoring the evolving health profile of climate change, and providing an independent assessment of the delivery of commitments made by governments worldwide under the Paris Agreement.
- The countries considered in the modelling study represent 50% of the world’s population and 70% of the world’s emissions – Brazil, China, Germany, India, Indonesia, Nigeria, South Africa, the UK and the US.

### **National Coal Index:**

- Recently, the Ministry of Coal has started commercial auction of coal mines on a revenue share basis using the National Coal Index (NCI).
- NCI was rolled out in June 2020.
- It is a price index which reflects the change of price level of coal in a particular month relative to the fixed base year.
- The base year for the NCI is Financial Year 2017-18.

### **World Sustainable Development Summit 2021:**

- Recently, the World Sustainable Development Summit, the annual flagship event of The Energy and Resources Institute (TERI) was held.
- The theme of the 2021 Summit was ‘Redefining our common future: Safe and secure environment for all’.
- The World Sustainable Development Summit (WSDS) is the annual flagship event of The Energy and Resources Institute (TERI).
- It was earlier known as Delhi Sustainable Development Summit.
- TERI is a non-profit research institute, established in 1974. It conducts research work in the fields of energy, environment and sustainable development for India and the Global South.

### **Centre Withdrew Draft Heritage Bylaws on Jagannath Temple:**

- The Centre has withdrawn the draft heritage bylaws issued by the National Monuments Authority (NMA) for Shree Jagannath Temple in Puri, Odisha.
- The Odisha Government is demanding withdrawal of the bylaws for temples in EkamraKshetra area of Bhubaneswar as well.
- The government in 2010 formed the National Monuments Authority under the Ancient Monuments and Archaeological Sites and Remains (Amendment and Validation) Act, 2010.
- NMA’s primary role was to prepare heritage bylaws for the Archaeological Survey of India (ASI) listed structures.
- Jagannath Temple is believed to be constructed in the 12th century by King Anantavarman Chodaganga Deva of the Eastern Ganga Dynasty.
- This temple was called the “White Pagoda” and is a part of Char Dham pilgrimages (Badrinath, Dwaraka, Puri, Rameswaram).

## Tholpavakkoothu: Kerala

- Recently, a shadow leather puppet in Kerala's famous temple art Tholpavakkoothu has been animated by a robot.
- It is a traditional temple art in Kerala having its roots in Palakkad and neighbouring regions.
- In Malayalam, Thol means leather, pava means doll and koothu the play. Though the origin of this ritualistic art form is not known exactly, some believe it to be as old as 1200 years.

Regional Names of Shadow Puppetry in India	
State	Name
Andhra Pradesh	Tholu bommalata
Karnataka	Togalu gombeyaata
Maharashtra	Charma bahuli natya
Odisha	Ravanachhaya
Kerala	Tholapavakkoothu
Tamil Nadu	Thol bommalata

## Falling Numbers of SC & ST Students in IITs:

- Recently, data collected from a series of Right to Information (RTI) applications pertaining to five older Indian Institutes of Technology (IITs), has indicated that the acceptance rate is skewed against students from the Scheduled Caste (SC), Scheduled Tribe (ST), and Other Backward Classes (OBC) communities.
- SC and ST applicants are half as likely to get selected for a Ph.D. programme at IITs as aspirants from the General Category (GC) are.
- Acceptance Rate refers to the number of students selected for every 100 students who applied.
- It stood at 4% for students from General Category (GC).
- It falls to 2.7% for OBC students and further down to just 2.16% for SCs and 2.2% for STs.

## Major Port Authorities Bill, 2020:

- Recently, the Parliament has passed the Major Port Authorities Bill, 2020. The Bill seeks to provide greater autonomy in decision-making to 12 major ports in the country and professionalise their governance by setting up boards.
- It also seeks to replace the Major Port Trusts Act, 1963.
- India has 12 major ports - Deendayal (erstwhile Kandla), Mumbai, JNPT, Marmugao, New Mangalore, Cochin, Chennai, Kamarajar (earlier Ennore), V O Chidambarnar, Visakhapatnam, Paradip and Kolkata (including Haldia).
- The Bill provides for the creation of a Board of Major Port Authority for each major port. These Boards will replace the existing Port Trusts.
- Under the 1963 Act, all major ports are managed by the respective Board of Port Trusts that have members appointed by the central government.
- An Adjudicatory Board will be created to carry out the residual function of the erstwhile TAMP (Tariff Authority for Major Ports), to look into disputes between ports and PPP concessionaires.
- TAMP has been a multi-member statutory body with a mandate to fix tariffs levied by major port trusts under the control of the Centre and private terminals, therein.



**Arbitration and Conciliation (Amendment) Bill, 2021:**

- The Lok Sabha has passed the Arbitration and Conciliation (Amendment) Bill, 2021 to check misuse by “fly-by-night operators” who take advantage of the law to get favourable awards by fraud.
- The Bill intends to replace the Arbitration and Conciliation (Amendment) ordinance issued in November, 2020.
- Constitutional Background: The Constitution of India, Article 51, India is obliged to endeavour to:
- Foster respect for international law and treaty obligations in the dealings of organised peoples with one country.
- Encourage settlement of international disputes by arbitration. ACI is a step in realisation of this constitutional obligation.
- The Arbitration and Conciliation (Amendment) Act, 2019 seeks to establish an independent body called the **Arbitration Council of India (ACI)** for the promotion of arbitration, mediation, conciliation and other alternative dispute redressal mechanisms.
- Arbitration: It is a process in which disputes resolve between the parties by appointing an independent third party who is an impartial and neutral person called arbitrator. Arbitrators hear both the parties before arriving at a solution to their dispute.
- Conciliation: It is a process in which disputes resolve between the parties by appointing a conciliator who helps (amicable) the disputed parties to arrive at a negotiated settlement. Settling the dispute without litigation, it is an informal process. He does so by lowering tensions, improving communication, interpreting issues, providing technical help.
- ACI will consist of a Chairperson who is either:
  - A Judge of the Supreme Court; or
  - A Judge of a High Court; or
  - Chief Justice of a High Court; or
  - An eminent person with expert knowledge in conduct of arbitration.
- Other members will include an eminent arbitration practitioner, an academician with experience in arbitration, and government appointees.

**Dickinsonia: Earliest Known Living Animal:**

- Recently, researchers have discovered three fossils of the earliest known living animal, the 550-million-year-old ‘Dickinsonia’ on the roof of the Bhimbetka Rock Shelters.
- The fossils were found in the roof of the Auditorium Cave at Bhimbetka Rock Shelters.
- In September 2018, an international team of researchers claimed to have discovered the world’s oldest fossil of Dickinsonia, which first appeared around 571 million to 541 million years ago.
- Current fossil evidence dates back around 100 million years from Dickinsonia





### Exercise Aman-2021:

- The Pakistan Army is holding a month-long exercise code-named 'Jidar-ul-Hadeed' in the Thar Desert. The aim is to prepare for conflict in extreme desert environments.
- A multinational naval exercise hosted by Pakistan, Aman-2021, has also begun in the Arabian Sea. 45 countries, including the USA, Russia, China and Turkey, will be participating in the exercise.

### Report on Road Accidents: World Bank:

- Recently, the Union Minister for Road Transport and Highways released the World Bank Report titled "Traffic Crash Injuries And Disabilities: The Burden on India Society".
- The Report has been prepared in collaboration with the NGO-Save Life Foundation.
- The survey data was collected from four Indian states i.e. Uttar Pradesh, Bihar, Tamil Nadu and Maharashtra.
- Report find out that Road Traffic Injuries (RTIs) are Eighth leading cause of death.
- Road Crash Fatality Rate - Three times higher in low-income countries compared to high-income countries.
- Road Accidents and Related Deaths in India accounts for 11% of the global death in road accidents, the highest in the world.
- Accounts for about 4.5 lakh road crashes per annum, in which 1.5 lakh people die.

### Corruption Perception Index 2020:

- India's rank has slipped six places to 86th among 180 countries in Corruption Perception Index (CPI) released by Transparency International.
- India was ranked 80th out of 180 countries in 2019.
- Transparency International is an international non-governmental organisation founded in 1993 based in Berlin, Germany
- Its non profit purpose is to take action to combat global Corruption with civil societal anti-corruption measures and to prevent criminal activities arising from corruption.
- Its most notable publications include the Global Corruption Barometer and the Corruption Perception Index.
- The top countries on the Corruption Perception Index (CPI) are Denmark and New Zealand, with scores of 88, followed by Finland, Singapore, Sweden and Switzerland, with scores of 85 each.
- South Sudan and Somalia is the bottom Countries with scores of 12 each, followed by Syria (14), Yemen (15) and Venezuela (15).

### Bhuvan Portal:

- Recently, Indian Space Research Organisation (ISRO) and MapmyIndia have partnered to come up with an indigenous geospatial portal known as 'Bhuvan'.
- This is in line with the above discussed new guidelines for the Geo-Spatial Sector in India.
- It is a type of web portal used to find and access geographic information (geospatial information) and associated geographic services (display, editing, analysis, etc.) via the Internet.
- MapmyIndia's database will be connected with ISRO's high-end satellite catalogue and earth observation data, which it generates through a constellation of its satellites.

### Digital Intelligence Unit:

- Recently, the Ministry of Communications has decided to set up a Digital Intelligence Unit (DIU) as a nodal agency to deal with complaints of unsolicited commercial communication (UCC) and cases of financial fraud, especially in the digital payments space.

- Apart from the DIU a Telecom Analytics for Fraud Management and Consumer Protection (TAF COP) will also be set up at all the 22 license service area levels.
- It would also ensure strict compliance of the Telecom Commercial Communications Customer Preferences Regulations (TCCCPR) 2018 which provides a revised regulatory framework aimed at regulating 'unsolicited commercial communication' (UCC) in India.
- the Delhi High Court (HC) ordered the Telecom Regulatory Authority of India (TRAI) to ensure "complete and strict" implementation of the regulation issued by it in 2018 for curbing Unsolicited Commercial Communications (UCC).
- Objective of Digital Intelligence Unit is to coordinate with various law enforcement agencies, financial institutions and telecom service providers in investigating any fraudulent activity involving telecom resources.

### Arjun MBT MK-1A:

- Recently, the Prime Minister of India has handed over the indigenously developed Arjun Main Battle Tank (MBT) MK-1A to the Indian Army.
- The Arjun MBT Project was initiated by Defence Research and Development Organisation (DRDO) in 1972 with the Combat Vehicles Research and Development Establishment (CVRDE) as its lead laboratory.
- Objective: To create a "state-of-the-art tank with superior fire power, high mobility, and excellent protection".

### Karlapat Wildlife Sanctuary, Odisha:

- Six elephants died of Haemorrhagic Septicaemia (HS) in Karlapat Wildlife Sanctuary located in Odisha's Kalahandi district.
- Haemorrhagic septicaemia (HS) is a disease which infects animals that come in contact with contaminated water or soil by a contagious bacteria (*Pasteurellamultocida*).
- Karlapat Wildlife Sanctuary Location: It is spread over 175 square kilometre area in Odisha's Kalahandi district.

### World Trade Organisation:

- Nigeria's Ngozi Okonjo-Iweala was appointed as Director-General of the World Trade Organisation (WTO), the leading international trade body.
- Ngozi Okonjo-Iweala is the first African official and the first woman to hold the position.
- The WTO is the successor to the General Agreement on Tariffs and Trade (GATT), which was created in 1947.
- The Uruguay Round (1986-94) of the GATT led to the WTO's creation. WTO began operations on 1st January, 1995.
- The Agreement Establishing the WTO, commonly known as the "Marrakesh Agreement", was signed in Marrakesh, Morocco in 1994.

### Pollution from Coal Burning: IEACCC:

- A study by the International Energy Agency's Clean Coal Centre (IEACCC) has stated that coal burning is responsible for heavy air pollution in India.
- Recently, a Delhi-based think tank Centre for Science and Environment (CSE) has also discussed the measures to reduce carbon dioxide (CO<sub>2</sub>) footprints of India's coal-based power sector and cautioned the Union Ministry of Environment, Forest and Climate Change (MoEF&CC) against extending the deadline of meeting emission norms for coal-based thermal power plants in the country.

- Coal-based thermal power stations contribute over half sulphur dioxide (SO<sub>2</sub>), 30% oxides of nitrogen (NO<sub>x</sub>), about 20% particulate matter (PM), etc.
- Coal is a large contributor to Global Warming.

### **Maharaja Suheldev:**

- The Prime Minister has laid the foundation stone of a Maharaja Suheldev memorial and the development work of Chittaura lake in Uttar Pradesh's Bahraich district.
- He was the erstwhile ruler of Shravasti in Uttar Pradesh's (UP) Bahraich district, who ruled in the 11th century.
- He is known in history for waging guerrilla warfare against Mahmud Ghazni's large army.

### **New York Convention:**

- Recently, Cairn Energy has filed a case, in accordance with the New York Convention, in the USA district court to enforce a USD 1.2 billion arbitration award it won in a tax dispute against India.
- The Convention on the Recognition and Enforcement of Foreign Arbitral Awards, also known as the "New York Arbitration Convention" or the "New York Convention", is one of the key instruments in international arbitration.
- The Convention's principal aim is that foreign and non-domestic arbitral awards should not be discriminated against by courts asked to enforce them.

### **Coelacanth:**

- Recently, a group of palaeontologists have discovered fossils of coelacanth, a giant fish regarded as an iconic example of a "living fossil."
- The discovered fossil of Coelacanth is believed to be 66 million years old belonging to the Cretaceous era.
- Coelacanths are elusive, deep-sea creatures, living in depths up to 2,300 feet below the surface.
- These were thought to have gone extinct with the dinosaurs 65 million years ago. But its discovery in 1938 started a debate about how this lobe-finned fish fits into the evolution of land animals.
- IUCN Status: Critically Endangered
- Sulawesi Coelacanth is listed as 'vulnerable'.
- CITES Status: Appendix

### **Sandes: Government Instant Messaging System:**

- The National Informatics Centre (NIC) has launched an instant messaging platform called Sandes on the lines of WhatsApp.
- NIC is under the aegis of the Ministry of Electronics and Information Technology. It provides network backbone and e-Governance support to the Central Government, State Governments and UT Administrations
- It is a Government Instant Messaging System (GIMS) that can be used for official or casual use by any Government employee or public user having a valid Mobile No./Email ID.

### **India Energy Outlook 2021: IEA**

- The International Energy Agency (IEA) has released the India Energy Outlook 2021 Report which explores the opportunities and challenges ahead for India as it seeks to ensure reliable, affordable and sustainable energy for a growing population.
- The India Energy Outlook 2021 is a new special report from the IEA's World Energy Outlook series.
- Report find out that India will make up the biggest share of energy demand growth at 25% over the next two decades, as it overtakes the European Union as the world's third-biggest energy consumer by 2030.

- Presently, India is the fourth-largest global energy consumer behind China, the United States and the European Union.

### Draft Blue Economy Policy:

- Recently, the Ministry of Earth Sciences (MoES) has rolled out the draft Blue Economy policy, inviting suggestions and inputs from various stakeholders.
- It is in line with the Government of India's Vision of New India by 2030.
- The policy document highlighted the blue economy as one of the ten core dimensions for national growth.
- It emphasizes policies across several key sectors to achieve holistic growth of India's economy. It recognizes the following seven thematic areas:
  - National accounting framework for the blue economy and ocean governance.
  - Coastal marine spatial planning and tourism.
  - Marine fisheries, aquaculture, and fish processing.
  - Manufacturing, emerging industries, trade, technology, services, and skill development.
  - Logistics, infrastructure and shipping, including trans-shipments.
  - Coastal and deep-sea mining and offshore energy.
  - Security, strategic dimensions, and international engagement.
- Sustainable Development Goal (SDG)- 14 seeks to conserve and sustainably use the oceans, seas and marine resources for sustainable development.

### Certified Jute Seeds:

- The Ministry of Textiles has launched a Certified Jute Seed Distribution Plan under Jute ICARE Program.
- Jute Corporation of India (JCI) had in 2019, signed an MoU (Memorandum of Understanding) with National Seeds Corporation for commercial distribution of 1,000 Metric Tonne certified jute seeds for the year 2021-22.
- It will expand usage of certified seeds to over 55% area under Jute Cultivation.
- It will extend the benefit of certified seeds to nearly 5 lakh farmers.
- Usage of certified jute seeds has resulted in improved quality of jute by 1 grade and enhanced productivity by 15% thereby increasing income of jute farmers by about Rs. 10,000/hectare.

### Gangetic River Dolphin:

- Recently, a Gangetic Dolphin was beaten to death in Pratapgarh, Uttar Pradesh.
- Killing the Gangetic River Dolphin is a punishable offence under the Wildlife Protection Act, 1972.
- The Ganges River Dolphin was officially discovered in 1801.
- Ganges river dolphins live in the Ganges-Brahmaputra-Meghna and Karnaphuli-Sangu river systems of Nepal, India, and Bangladesh.
- The Ganges river dolphin can only live in freshwater and is essentially blind.
- They hunt by emitting ultrasonic sounds, which bounces off of fish and other prey, enabling them to "see" an image in their mind. They are also called 'susu'.
- Population of Gangetic River Dolphin is 1200-1800.
- Indian Wildlife (Protection), Act 1972: Schedule I.
- International Union for the Conservation of Nature (IUCN): Endangered.
- Convention on International Trade in Endangered Species (CITES): Appendix I (most endangered).
- Convention on Migratory Species (CMS): Appendix II (migratory species that need conservation and management or would significantly benefit from international co-operation)



- Project Dolphin: The Prime Minister announced the government's plan to launch a Project Dolphin in his Independence Day Speech 2020. It will be on the lines of Project Tiger, which has helped increase the tiger population.
- Dolphin Sanctuary: Vikramshila Ganges Dolphin Sanctuary has been established in Bihar.

### Mandarin Duck:

- Recently, Mandarin ducks have been sighted in the Maguri-Motapungbeel in Assam's Tinsukia district after a century.



- Mandarin duck was first identified by Swedish botanist, physician and zoologist Carl Linnaeus in 1758.
- It is considered the most beautiful duck in the world.
- The MaguriMotapung wetland, an Important Bird Area as declared by the Bombay Natural History Society is located close to the Dibrusaikhowa National Park in Upper Assam.

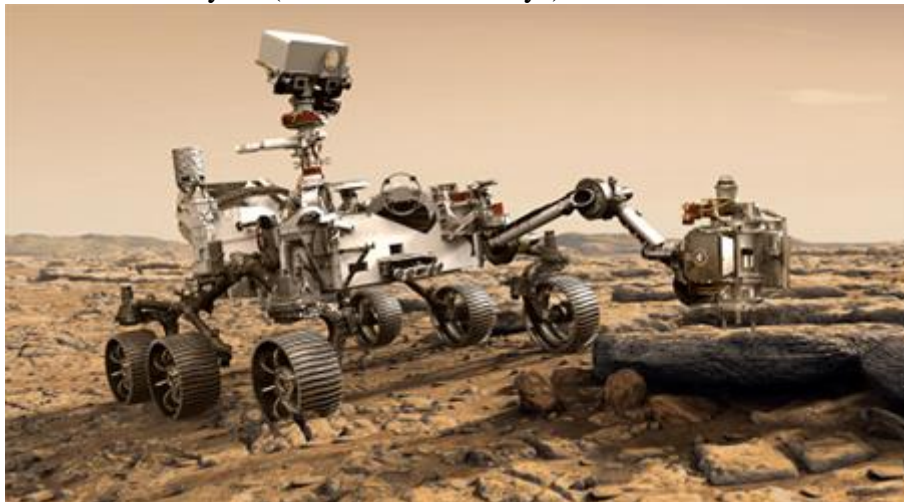
### World's Smallest Reptile:

- Scientists believe they may have discovered the smallest reptile on earth - a Chameleon subspecies that is the size of a seed.
- Two of the tiny lizards were discovered by a German-Madagascan expedition team in Madagascar.
- Chameleons (family Chamaeleonidae) are a distinctive and highly specialized Clade of Old World Lizard with 202 species described as of June 2015. Madagascar is home to nearly two-thirds of all chameleon species.
- OTT Service Providers vs Telecom Service Providers:
- The Cellular Operators Association of India (COAI) has urged the government to bring over-the-top (OTT) service providers such as WhatsApp under the licensing regime and defer net neutrality rules on telecom operators till the time 'same service, same rules' are applied on the applications.
- COAI was constituted in 1995 as a registered, non-governmental society. COAI's core membership includes private Telecom Service Providers (TSPs), namely Bharti Airtel Ltd., Vodafone India Ltd., Reliance JioInfocomm Ltd., operating across the whole country.
- OTT services refer to applications where providers deliver audio, video and other media over an IP network such as the internet, bypassing the traditional telecom operators (such as cable companies).
- Examples: Skype, Viber, WhatsApp and Hike are popular and widely-used OTT communication services.

### NASA's Mars 2020 Mission:

- National Aeronautics and Space Administration (NASA's) Perseverance Rover has landed on Mars.
- This was one of the most crucial aspects of the Mars 2020 Mission
- The mission is designed to better understand the geology of Mars and seek signs of ancient life.

- Objectives are to assess ancient habitability and to demonstrate technology for future robotic and human exploration.
- Duration: At least one Mars year (about 687 Earth days).



- Landed at Jezero Crater (an ancient river delta that has rocks and minerals that could only form in water).

### Greenpeace Analysis on Economic Cost Of Air Pollution:

- According to a Greenpeace Southeast Asia (non-governmental organisation) analysis of cost to the economy due to air pollution, PM 2.5 air pollution claimed approximately 54,000 lives in Delhi in 2020.
- PM 2.5 refers to fine particulate matter smaller than 2.5 micrometers in diameter. It causes respiratory problems and also reduces visibility. It is an endocrine disruptor that can affect insulin secretion and insulin sensitivity, thus contributing to diabetes.
- In July 2020, Greenpeace found out that of the 28 global cities studied, Delhi bore the highest economic cost of air pollution with an estimated loss of 24,000 lives in the first half of 2020 despite a strict Covid-19 lockdown.
- In 2020, air pollutant levels in Delhi remained almost six times above the prescribed WHO (World Health Organisation) limits of 10  $\mu\text{g}/\text{m}^3$  annual mean.
- Damage due to air pollution is equally worrying in other cities - Mumbai, Bengaluru, Chennai, Hyderabad and Lucknow - featured in the global analysis.

### Hyderabad: Tree City of the World:

- Hyderabad city (Telangana's Capital) has been recognised as a '2020 Tree City of the World' by the Arbor Day Foundation and the Food and Agriculture Organisation of the United Nations (FAO).
- Hyderabad has earned recognition in the Foundation's second year of the programme along with 51 other cities in the world (during 2020 & cumulative 120 cities from 63 countries).
- Most of the cities were from countries – USA, UK, Canada, Australia etc.
- It is the only City in India to get this recognition so far.
- Tree Cities of the World Programme is an international effort to recognize cities and towns committed to ensuring that their urban forests and trees are properly maintained, sustainably managed, and duly celebrated.
- At the 2018 World Forum on Urban Forests in Mantova, Italy, world leaders issued the Mantova Green Cities Challenge and a call-for-action that included joining the Tree Cities of the World programme.

- Hyderabad is the only city in India to have been selected for this recognition in response to its commitment to growing and maintaining urban forestry through Haritha Haram programme and Urban Forest Parks.
- Haritha Haram is a flagship programme of the Telangana government to increase the green cover of the State from the present 25.16 to 33% of the total geographical area.

### Transatlantic Alliance:

- The USA President Joe Biden in his first address to the annual Munich Security Conference declared that the 'transatlantic alliance is back' and stressed the need to defend democracy around the world.
- The USA President intended to improve the strained relationship between the USA and other European allies.
- The Munich Security Conference is an annual conference on international security policy that has taken place in Munich, Bavaria (Germany) since 1963.
- Transatlantic Trade and Investment Partnership (T-TIP) is an ambitious, comprehensive, and high-standard trade and investment agreement being negotiated between the United States and the European Union (EU).
- The TTIP negotiations were launched in 2013 and ended without conclusion at the end of 2016.

### Quad Meeting:

- Recently, India joined Australia, Japan and the United States for a ministerial meeting under the Quadrilateral grouping (Quad) and discussed issues across Indo-Pacific and the military takeover in Myanmar.
- Quadrilateral Security Dialogue (Quad) is an informal strategic dialogue between India, USA, Japan and Australia with a shared objective to ensure and support a “free, open and prosperous” Indo-Pacific region.

### Statehood Day of Arunachal Pradesh and Mizoram:

- The Prime Minister of India extended his wishes to the people of Arunachal Pradesh and Mizoram on their 35th Statehood Day.
- Mizoram became the 23rd state of India on the same day, with the 53rd Amendment of the Indian Constitution, 1986.
- Similarly, through the 55th amendment to the Indian Constitution in 1986, Arunachal Pradesh became the 24th state of the Indian Union on 20th February, 1987.

### Sambhar Lake: Rajasthan

- The State Government of Rajasthan will identify new tourist points at Sambhar Salt Lake.
- The Lake forms part of the desert circuit in the Centre's Swadesh Darshan Scheme. The Scheme was launched by the Ministry of Tourism in 2014 -15 for integrated development of theme based tourist circuits in the country.
- Situated about 80 km southwest of Jaipur, in east-central Rajasthan.
- Sambhar lake is the largest inland salt lake in India. It represents the depression of the Aravalli Range.
- The lake's salt supply was worked by the Mughal dynasty (1526–1857) and it was later owned jointly by the Jaipur and Jodhpur princely states.
- Ramsar Site: It is a wetland of 'international importance' under the Ramsar Convention, declared in 1990.



**NAVDEX 21 and IDEX 21: UAE**

- Indian Naval Ship (INS) Pralaya arrived at Abu Dhabi, UAE to participate in the NAVDEX 21 (Naval Defence Exhibition) and IDEX 21 (International Defence Exhibition), scheduled from 20 to 25 February 2021.
- INS Mysore (an indigenously built guided missile destroyer deployed in the Persian Gulf) is also participating in the exhibition.
- IDEX/NAVDEX takes place biennially. The exhibitions showcase the latest technologies and innovation in the global defence sector, support the growth of UAE's defence industry, and forge new relationships between major international companies.
- IDEX is the only international defence exhibition and conference in the MENA region demonstrating the latest technology across land, sea and air sectors of defence.
- MENA Region: MENA is an acronym for the Middle East and North Africa region and includes approximately 19 countries.

**Autism Spectrum Disorder:**

- Recently, a 12-year-old Maharashtra girl with Autism Spectrum Disorder (ASD) successfully swam across the Arabian Sea from Bandra-Worli Sea Link to Gateway of India in Mumbai.
- ASD refers to a range of conditions characterised by some degree of impaired social behaviour, communication and language, and a narrow range of interests and activities that are both unique to the individual and carried out repetitively.
- It is a complex brain development disability which makes itself visible during the first 3 years of a person's life. It is not mental retardation as people with autism may show excellent skills in spheres like art, music, writing etc. The level of intellectual functioning in individuals with ASDs is extremely variable, extending from profound impairment to superior levels.
- United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), Sustainable Development Goals deal with rights of people with disabilities including autism.
- The Right of Persons with Disabilities Act, 2016 increased the types of disabilities from 7 to 21. It also added autism spectrum disorder among others, which were largely ignored in earlier Act.

**Helina and Dhruvastra: Anti-tank Guided Missile:**

- Recently, India has successfully test-fired indigenously-developed anti-tank guided missile systems 'Helina' and 'Dhruvastra' in the Pokhran range, Thar desert (Rajasthan).
- The Helina (the Army version) and Dhruvastra (Indian Airforce version) are helicopter-launched versions of third-generation anti-tank guided missiles (the Nag missile system).
- The missile system has all-weather day-and-night capability and can defeat battle tanks with conventional armor and explosive reactive armor.
- The missile systems have been designed and developed indigenously by the Defence Research and Development Organisation (DRDO).

**Nathu La, Sikkim:**

- Recently, the Indian Army rescued several tourists caught in a snowstorm at Nathu La on the India-China border in Sikkim.
- Nathu La, one of the highest motorable roads in the world, is a mountain pass in the Himalayan peaks situated on the Indo-Tibetan border 14450 ft. above sea level.



- Nathu means 'listening ears', and La means 'pass'.
- It is an open trading border post between India and China.[Keywords]



- The other passes located in the state of Sikkim are Jelep La Pass, Donkia Pass, Chiwabhanjang Pass.

### Making Peace with Nature: UNEP Report

- The United Nations Environment Programme (UNEP) has released the 'Making Peace with Nature' report, ahead of the fifth session of the UN Environment Assembly (UNEA-5).
- The Report explains how climate change, biodiversity loss and pollution add up to three self-inflicted planetary emergencies that are closely interconnected and put the well-being of current and future generations at unacceptable risk.
- Key findings of Report:-
  - Climate change drives changes in wildfires and water stress and combines with biodiversity loss to degrade land and enhance drought in some regions.
  - More than one million of the estimated 8 million plant and animal species are increasingly at risk of extinction.
  - Every year, nine million people die prematurely due to pollution.
  - Inequity in economic growth has left 1.3 billion people poor.
  - Society is failing to meet most of its commitments to limit environmental damage.
  - Society is not on course to achieve land degradation neutrality, Aichi Targets and targets of the Paris Agreement.
  - Major Reports by UNEP Includes Emission Gap Report, Adaptation Gap Report, Global Environment Outlook, Frontiers, Invest into Healthy Planet.

### Declining Rainfall in Cherrapunji:

- A recent study that looked at the rainfall pattern in the past 119 years found a decreasing trend at Cherrapunji (Meghalaya) and nearby areas.
- The village of Mawsynram in East Khasi Hills district of Meghalaya has beaten Cherrapunji to become the wettest place in the world. Mawsynram receives over 10,000 millimetres of rain in a year.
- Mawsynram is located around 81 km by road from Cherrapunji however the straight line distance between the two is 15.2 km.



- The annual mean rainfall for the period 1973–2019 showed decreasing trends of about 0.42 mm per decade.
- It was statistically significant along seven stations (Agartala, Cherrapunji, Guwahati, Kailashahar, Pasighat, Shillong and Silchar).

#### Status of WASH in Healthcare Facilities in India: CDDEP

- A recent research from Center for Disease Dynamics, Economics and Policy (CDDEP), USA, has estimated the cost of ensuring WASH and taking related steps for infection prevention and control for one year in healthcare facilities across India.
- CDDEP aims to use research to support better decision-making in health policy.
- WASH is an acronym that stands for the interrelated areas of Water, Sanitation and Hygiene.
- The World Health Organisation (WHO) WASH Strategy has been developed in response to Member State Resolution (WHA 64.4) and the 2030 Agenda for Sustainable Development (SDG 3: Good Health and Well Being, SDG 6: Clean Water And Sanitation).

#### International Mother Language Day:

- Every year, the United Nations Educational, Scientific and Cultural Organization (UNESCO) celebrates 21st February as International Mother Language Day to promote mother tongue-based multilingual education.
- The theme of the 2021 celebrations, “Fostering multilingualism for inclusion in education and society,” recognizes that languages and multilingualism can advance inclusion, and the Sustainable Development Goals focus on leaving no one behind.
- The world has over 7,000 languages whereas India alone has about 22 officially recognized languages, 1635 mother tongues, and 234 identifiable mother tongues.

#### Silver Antimony Telluride: A Material to Tap Waste Heat:

- Scientists at the Bengaluru-based Jawaharlal Nehru Centre for Advanced Scientific Research, have found a new material, Silver Antimony Telluride ( $\text{AgSbTe}_2$ ), that can help in tapping waste heat produced by all kinds of domestic and industrial appliances, and use it to accomplish other useful work.
- Basically, the material will exploit the benefits of thermo-electric effect. The thermo-electric effect involves the process by which heat is transformed to electrical energy.

**Go Electric Campaign:**

- The central government has launched the “Go Electric” Campaign to spread awareness on the benefits of e-mobility and EV Charging Infrastructure as well as electric cooking in India.
- To push the country towards 100% e-mobility and clean and safe e-cooking.
- To create awareness at PAN-India level and reduce the import dependence of the country.
- To move ahead on the path of a low carbon economy, thereby saving the country and the planet from the adverse impact of climate change.
- Bureau of Energy Efficiency (BEE), under the aegis of the Ministry of Power has been mandated to undertake an awareness drive for promoting public charging, e-mobility & its ecosystem.

**Carbon Watch App: Chandigarh**

- Chandigarh became the first state or Union Territory in India to launch Carbon Watch, a mobile application to assess the carbon footprint of an individual.
- A carbon footprint is the total amount of greenhouse gases—primarily carbon dioxide—released into the atmosphere by a particular human activity.
- The app focuses on individuals’ actions and calculates carbon footprint on the basis of Transport, Energy, Waste and Water consumption.

**Non-Alcoholic Fatty Liver Disease:**

- Ministry of Health & Family Welfare has launched the operational guidelines for integration of NAFLD (Non-Alcoholic Fatty Liver Disease) with NPCDCS (National Programme for Prevention & Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke).
- The NPCDCS is being implemented under the National Health Mission (NHM). It was launched in 2010 to prevent and control Non-Communicable Diseases (NCDs).
- NAFLD is the abnormal accumulation of fat in the liver in the absence of secondary causes of fatty liver, such as harmful alcohol use, viral hepatitis.
- Fatty liver occurs when too much fat builds up in liver cells.

**Intensified Mission Indradhanush 3.0 Scheme:**

- Recently, the Intensified Mission Indradhanush (IMI) 3.0 scheme has been rolled out to cover children and pregnant women who missed routine immunisation during the Covid-19 pandemic.
- It’s Objective is to reach the unreached population with all the available vaccines under Universal Immunisation Programme (UIP) and thereby accelerate the full immunization and complete immunization coverage of children and pregnant women.
- It will have two rounds this year which will be conducted in 250 pre-identified districts/urban areas across 29 States/UTs.
- The districts have been classified to reflect 313 low risk, 152 medium risk and 250 high risk districts.

**6 Years of UJALA and SLNP:**

- The UJALA (UnnatJyoti by Affordable LEDs for All) and SLNP (Street Lighting National Programme) completed six years of successful implementation. The two programmes revamped household and public lighting systems across the country.
- Both schemes have been implemented by Energy Efficiency Services Limited (EESL), a joint venture of PSUs under the Ministry of Power.
- These programmes have bagged global awards like the South Asia Procurement Innovation Award (SAPIA) 2017, Global Solid State Lighting (SSL) award of excellence for the transformational contribution to the LED sector, etc.



### PagriSambhal Movement:

- The SamyuktaKisanMorcha (SKM) is celebrating 23rd February as PagriSambhalDiwas, honouring the memory of Ajit Singh-founder of the PagriSambhaal Movement of 1907.
- Farmer unions part of the ongoing protests in Delhi claim that farm laws passed by Parliament will ultimately force them to sell their land to corporates. It was a similar complaint that fueled the farm protests in 1907.
- PagriSambhal Movement was a successful farm agitation that forced the British government to repeal three laws related to agriculture back in 1907.
- The Punjab Land Alienation Act 1900, the Punjab Land Colonisation Act 1906 and the Doab Bari Act 1907.

### UNHRC's New Resolution Against Sri Lanka:

- Sri Lanka has made an appeal to the member states of the United Nations Human Rights Council (UNHRC) to reject the impending resolution on the island nation's human rights accountability and reconciliation.
- Sri Lanka is facing a new resolution calling on it to hold human rights abusers to account and deliver justice to victims of its 26-year civil war (1983-2009).
- The war was mainly a clash between the Sinhalese-dominated Sri Lankan government and the Liberation Tigers of Tamil Eelam (LTTE) insurgent group, the latter of which had hoped to establish a separate state for the Tamil minority.
- Sri Lankan forces and Tamil rebels were accused of atrocities during the war, which killed at least 1,00,000 people.
- As per the UNHRC report, the government of Sri Lanka had created parallel military task forces and commissions that encroach on civilian functions, and reversed important institutional checks and balances, threatening democratic gains, the independence of the judiciary and other key institutions.
- It also talks about encouraging the Sri Lankan government to implement the requirements of the previous 30/1 resolution (from which it pulled out).
- Resolution 30/1 wanted Colombo to establish a credible judicial process, with the participation of Commonwealth and other foreign judges, defence lawyers and authorised prosecutors and investigators, to go into the alleged rights abuses.
- Recently, Sri Lanka has said that Resolution 30/1 was against the country.

### Senkaku Island Dispute:

- Recently, China called the Japan-USA mutual security pact a product of the Cold War following USA's criticism of the presence of Chinese coast guard vessels in Japanese-claimed territorial waters.
- The USA criticized China as the Chinese ships have been repeatedly encroaching the Japanese territorial waters surrounding the Senkaku island.
- The Senkaku Island dispute concerns a territorial dispute over a group of uninhabited islands known as:
  - Senkaku Islands in Japan,
  - Diaoyu Islands in China, and
  - Tiaoyutai Islands in Taiwan.
- Both Japan and China claim ownership of these islands.

### National Hydrogen Energy Mission:

- The Union Budget for 2021-22 has announced a National Hydrogen Energy Mission (NHM) that will draw up a road map for using hydrogen as an energy source. The initiative has the potential of transforming transportation.



- NHM initiative will capitalise on one of the most abundant elements on earth (Hydrogen) for a cleaner alternative fuel option.
- Focus on generation of hydrogen from green power resources.
- To link India's growing renewable capacity with the hydrogen economy.
- Hydrogen is the lightest and first element on the periodic table. Since the weight of hydrogen is less than air, it rises in the atmosphere and is therefore rarely found in its pure form, H<sub>2</sub>.
- At standard temperature and pressure, hydrogen is a nontoxic, nonmetallic, odorless, tasteless, colorless, and highly combustible diatomic gas.
- Hydrogen fuel is a zero-emission fuel burned with oxygen. It can be used in fuel cells or internal combustion engines. It is also used as a fuel for spacecraft propulsion.

### PM AtmanirbharSwasth Bharat Scheme:

- Recently, the Prime Minister talked about the need to address health issues in a holistic manner and to adopt a four-pronged strategy for a healthy India that includes implementing the PM AtmanirbharSwasth Bharat scheme.
- Announced in the Union Budget 2021-22. Aims to develop capacities of primary, secondary, and tertiary care health systems even in the last miles of the nation.
- Developing a modern ecosystem for research, testing and treatment in the country itself.
- Centrally Sponsored Scheme with an outlay of about Rs. 64,180 crores.
- Duration: 6 years.
- Supporting development of 17,788 rural and 11,024 urban health and wellness centers and setting up of integrated public health labs in all districts and 3,382 block public health units in 11 states.

### Blank-Cheque Company:

- Recently, renewable energy producer 'ReNew Power' announced an agreement to merge with RMG Acquisition Corp II, a blank-cheque company or a Special Purpose Acquisition Company (SPAC).
- A SPAC, or a blank-cheque company, is an entity specifically set up with the objective of acquiring a firm in a particular sector.
- The aim of this SPAC is to raise money in an Initial Public Offering (IPO), and at this point in time, it does not have any operations or revenues.

### President's Rule in Puducherry:

- President's Rule has been imposed in the Union Territory of Puducherry, on the recommendation of the Lieutenant Governor, after the established government lost a vote of confidence.
- The President was satisfied that a situation had arisen in which the administration of the Union Territory of Puducherry could not carry on in accordance with the provisions of the Government of Union Territories Act, 1963.
- The Government of Union Territories Act, 1963 enacted by the Parliament in accordance with the provisions of article 239A.

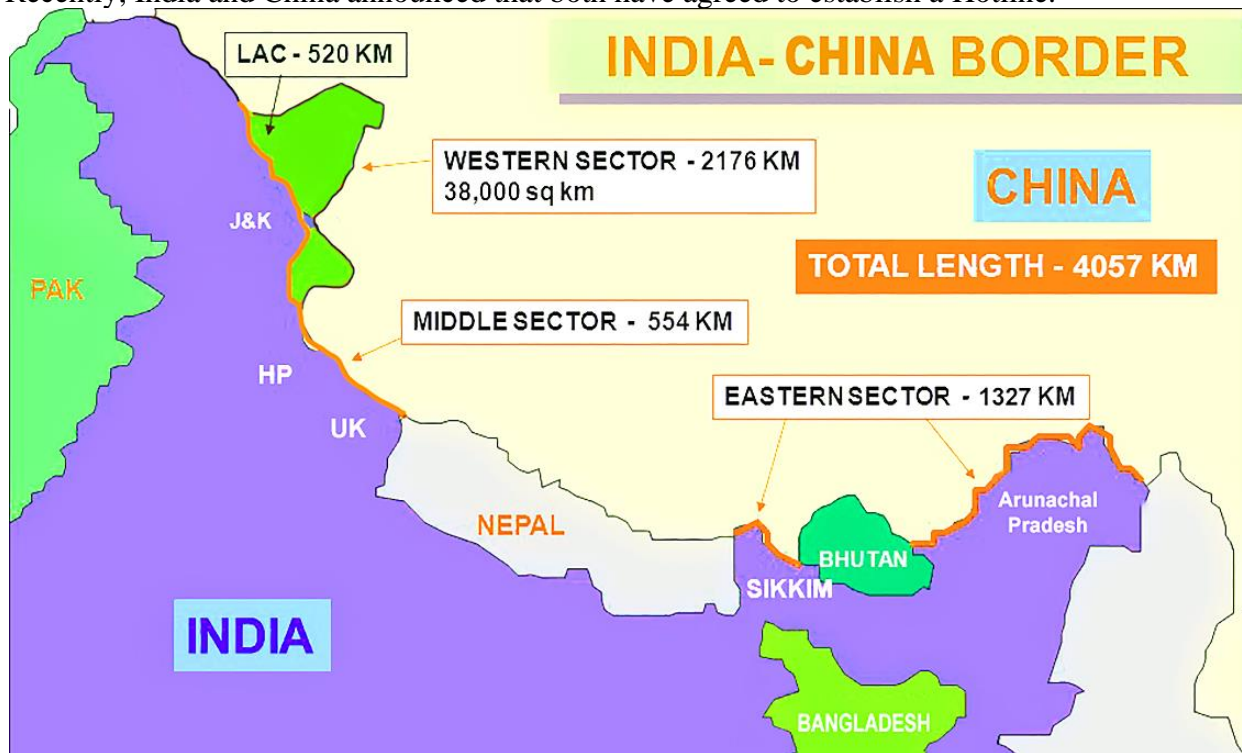
### FATF Retains Pakistan In Grey List:

- The Financial Action Task Force (FATF) has decided to retain Pakistan on the "greylist" till the next review of its performance on its recommendations during the June Plenary session.
- The FATF had issued the 27-point action plan after placing Pakistan on the 'Grey List' in June 2018. The action plan pertains to curbing money laundering and terror financing.
- FATF acknowledged Pakistan's significant progress in combating terrorism, however it was still to fully comply with three of the 27-point action plan.
- The three points pertain to effective steps in terms of financial sanctions and penalties against the terror funding infrastructure and the entities involved.



**India-China Hotline:**

- Recently, India and China announced that both have agreed to establish a Hotline.



- The decision to install a Hotline between the two countries was taken over a telephonic meeting between India's External Affairs Minister and China's Foreign Affairs Minister.
- Hotline is a direct telephone line in constant operational readiness so as to facilitate immediate communication.
- The Hotline will be helpful in timely communication and exchange of views between the two countries.

**Saras Aajeevika Mela 2021:**

- Recently, the Union Minister for Rural Development inaugurated SarasAajeevikaMela 2021 at Noida Haat.
- More than 300 rural self-help groups and craftsmen from 27 states are participating in the Mela.
- It is an initiative by the DeendayalAntyodayaYojana-National Rural Livelihoods Mission (DAY-NRLM) under the Ministry of Rural Development (MoRD) organised by the Council for Advancement of People's Action and Rural Technology (CAPART).
- CAPART is an autonomous body set up by the Ministry of Rural Development to interface between the government and Non-governmental Organizations (NGOs) that seek to improve the quality of life in India's rural areas.