



drishti

Current Affairs (CONSOLIDATION)

FEBRUARY 2020
(PART – II)

Drishti, 641, First Floor, Dr. Mukherjee Nagar, Delhi-110009
Phone: 87501 87501, WhatsApp: 92058 85200, IVR: 8010-440-440
Email: engweb@groupdrishti.com

Contents

Polity and Governance	1
● Women Eligible for Permanent Commission	1
● Treating a Child Witness	2
● International Judicial Conference 2020	3
● Shyama Prasad Mukherji Rurban Mission	4
● One Year of PM-KISAN	5
● National Commission for Scheduled Tribes	6
● PMEGP and CGTMSE	7
● 22 nd Law Commission of India	8
● Revamp of the Crop Insurance Schemes	8
● Worldwide Education for the Future Index 2019: EIU	9
● 23 rd National Conference on e-governance	10
● Central Administrative Tribunal (CAT)	11
● Central Vigilance Commission	11
● National Statistical Commission	12
● Consultative Committee	12
● Statehood Day of Mizoram and Arunachal Pradesh	13
● Initiatives for Tribal Communities	14
Economic Scenario	15
● Pradhan Mantri Kisan SAMPADA Yojana	15
● National Technical Textiles Mission	15
● Eastern Dedicated Freight Corridor	16
● Mission Purvodaya: Accelerated Development of Steel Sector	17
International Relations	18
● G20 Meeting in Saudi Arabia	18
● USA President's Visit to India	19
● Portuguese President's Visit to India	20
● India and Myanmar Ink Various Pacts	21
● Visit of Home Minister of Maldives	22
● India-Norway Task Force on Blue Economy	23
● ICRG Recommends Continuation of Pakistan in Grey List	24
● 3 rd Global Ministerial Conference on Road Safety	25
Science and Technology	28
● Aditya-L1 Mission	28
● Habitable-Zone Planet Finder	29
● National Science Day 2020	30
● Biofuel from Microorganisms	31
● Krishi Vigyan Kendra (KVK) Conference 2020	32
● Tirur Vettala	32

● Arab World's First Nuclear Power Plant.....	32
● SUTRA-PIC	33
● NASA's InSight Mars Mission	33

Environment and Ecology34

● CMS COP-13	34
● Species Included in Appendix I of UNCMS	34
● Renewable Energy Management Centers (REMCs)	35
● National Conference on Coastal Disaster Risk Reduction and Resilience	35
● Analysis of Water in Ulsoor Lake	36
● International Conference on 'Ensemble Methods in Modelling and Data Assimilation (EMMDA)'	37
● State of India's Bird 2020	38
● Fire Lines in Mukurthi National Park.....	39
● Madhav National Park	39
● Pakke Tiger Reserve (PTR)	40
● Malai Mahadeshwara Wildlife Sanctuary	40
● Kawal Tiger Reserve	40
● Olive Ridley Turtles	41
● New Species of Urban Lizard	41
● Craspedotropis Gretathunbergae.....	42
● Henneguya Salminicola	42
● Kalasa-Banduri Nala Project.....	42

Art & Culture44

● Battle of Gallipoli.....	44
● Archaeological Site near Varanasi.....	44
● Kambala.....	45
● Hampi	46
● Yakshagana.....	46
● Korcu Tribe	46

Social Issues47

● GoM Reviews Amendments to the JJ Act, 2015	47
● Assisted Reproductive Technology Regulation Bill, 2020	48
● Cabinet Approves Bill to Regulate Surrogacy.....	49
● Private Member Bill for Two-Child Policy Norm	50
● 'A Future for the World's Children' Report	51
● Increasing Neonatal Deaths in MP	51
● CHILDLINE India Foundation.....	52

Security54

● Exercise Indradhanush	54
-------------------------------	----

Miscellaneous55

● 100 years of Jamshedpur City	55
● SPICe+ Web Form	55
● International Mother Language Day	55

Polity and Governance

Highlights

- Women Eligible for Permanent Commission
- Treating a Child Witness
- International Judicial Conference 2020
- Shyama Prasad Mukherji Rurban Mission
- One Year of PM-KISAN
- National Commission for Scheduled Tribes
- PMEGP and CGTMSE
- 22nd Law Commission of India
- Revamp of the Crop Insurance Schemes
- Worldwide Education for the Future Index 2019: EIU
- 23rd National Conference on e-governance
- Central Administrative Tribunal (CAT)
- Central Vigilance Commission
- National Statistical Commission
- Consultative Committee
- Statehood Day of Mizoram and Arunachal Pradesh
- Initiatives for Tribal Communities

Women Eligible for Permanent Commission

Why in News

The Supreme Court has ruled that the **Short Service Commission (SSC) women officers are eligible for the permanent commission and command posts in the Army** irrespective of their years of service.

- The verdict came on a nearly 10-year-old appeal filed by the government against the 2010 decision of the Delhi High Court to grant SSC women officers permanent commission.
- The court ordered the government to implement its judgment in **three months**.

Highlights of the Judgement

- **All Serving Women Officers will be eligible for the Permanent Commission (PC).**
 - The court dismissed the government's stand that only women officers with less than 14 years of service ought to be considered for permanent commission, and those with over 20 years service should be pensioned immediately.
 - The court has **done away with all discrimination on the basis of years of service** for grant of PC in 10 streams of combat support arms and services, bringing them on a par with male officers.

Background

- Under the **Short Service Commission (SSC) scheme**, women were commissioned into the Army for a period of 10 years, extendable up to 14 years.
- Women were, however, **restricted to roles in specified streams** such as Army Education Corps, Corps of Signals, Intelligence Corps, and Corps of Engineers. These specified streams **excluded combat arms** such as infantry and armoured corps.
- While **male SSC officers could opt for permanent commission** at the end of 10 years of service, this **option was not available to women officers**. Women officers were, thus, **kept out of any command appointment, and could not qualify for a government pension**, which starts only after 20 years of service as an officer.
- However, in the **February 2019** policy statement, the **Government endorsed the permanent commission for SSC women officers in 10 streams** of the 'Combat Support Arms' and 'Services' sections. But it was said that the **women officers would not be offered any command appointments**, and would serve only in staff posts.
- **Eligible for Command Posts**
 - The court held that **women officers will also be eligible for command posts** in non-combat areas since "an absolute bar on women seeking criteria or command appointments would not go with the **guarantee of equality under Article 14**".

Note:

- The court held that since command appointments were not automatic for men officers, so would it be for women. It was left to the Army to take a call on a case to case basis.
- **SC's stand on Combat Role**
 - The exclusion of women from combat operations was not examined by the court as it was not contested in the appeal.
- **Criticized the Government's Note**
 - **Reflects Poorly on Women:** The note had shown women officers in a poor light, saying isolation and hardships would eat into their resolve and that they would have to heed to the call of pregnancy, childbirth and family. The note had mentioned that women ran the risk of capture by the enemy and taken prisoner of war.
 - **Patriarchal Notion:** The court held that the note reflected the age-old patriarchal notion that domestic obligations rested only with women.
 - **Sex Stereotype:** The court also dismissed the point that women are physiologically weaker than men as a "sex stereotype".
 - **Offence to the dignity of Indian Army:** The court noted that challenging abilities of women on the ground of gender is an offence not only to their dignity as women but to the dignity of the members of the Indian Army – men and women – who serve as equal citizens in a common mission.
- **Appreciated the Government's February 2019 Decision**
 - The court noted that the policy decision of the Union government is a recognition of the right of women officers to equality of opportunity.

Implication of the Judgement

- The women officers will be eligible to occupy all the command appointments, at par with male officers, which would open avenues for further promotions to higher ranks for them.
 - If women officers had served only in staff, they would not have gone beyond the rank of Colonel.
- After the implementation of the judgement, a **woman can rise to the rank of Colonel and above based on merit**, like their male counterparts.
 - At the rank of Colonel, an officer picks up a substantive command and would be delegated to carry out independent tasks.

- A Colonel commands a battalion, which typically consists of 850 men. A woman officer who is successful in this position could technically rise to the highest ranks of the Army, though, **women officers will not be inducted into the combat arms** such as the infantry, artillery or armoured corps.

Way Forward

- The court observed that women were being kept out of command posts on the reasoning that the largely rank and file will have problems with women as commanding officers. Thus, **changes have to take place in the culture, norms, and values** of not only the rank and file of the Army but also that of society at large. The responsibility to usher these changes lies with the senior military and political leadership.
- The **United States, Israel, North Korea, France, Germany, Netherlands, Australia and Canada** are among the global militaries that employ women in front-line combat positions.
- It is the right of every woman to pursue a career of her choice and reach the top. **Equality is a constitutional guarantee.**

Treating a Child Witness

Why in News

A **Public Interest Litigation (PIL)** has been filed in the Karnataka High Court, asking for guidelines to be issued to police regarding interrogation of minors in criminal proceedings in accordance with the **Juvenile Justice Act and United Nations (UN)** resolutions.

Relevant UN Resolutions

- **Convention on the Rights of the Child, 1989:** It states that 'in all actions concerning children, whether undertaken by public or private social welfare institutions, courts of law, administrative authorities or legislative bodies, the **best interests of the child shall be a primary consideration**'
 - **India** has been a **signatory** to this Convention since 1992.
- **Guidelines with respect to Child Witnesses (2009)**
 - Authorities should treat children in a **caring and sensitive manner**, with interview techniques that "minimise distress or trauma to children".

Note:

- An investigator specially trained in dealing with children be appointed to guide the interview of the child, using a **child-sensitive approach**.
- The investigator shall, to the extent possible, avoid repetition of the interview during the justice process in order to **prevent secondary victimisation of the child**.
 - **Secondary victimisation** is defined as victimisation that occurs not as a direct result of a criminal act, but through the response of institutions and individuals to the victim.

Age of Witnesses in India

- **Definition:** Any person who appears before a court or tribunal so as to give evidence or testimony, for or against any person involved is called a witness.
- **Age:** Under **Section 118 of the Indian Evidence Act, 1872**, there is no minimum age for a witness. Children as young as three years old have been witnesses before trial courts in cases of sexual abuse.
 - Any person may be a witness who can understand the questions put to him and rationally answer them.
 - The nature of the section is disqualificatory in nature, meaning, that it disqualifies any person from testifying in the event that person is unable to comprehend or rationally respond to the questions put to them.
- Usually during a trial, the court, before recording the testimony of a child witness, determines his or her competency on the basis of their ability to give rational answers.

Relevant Indian Laws Related to Children

- **Article 39 (f) of the Constitution:** The State shall, in particular, direct its policy towards securing that children are given opportunities and facilities to develop in a healthy manner and in conditions of freedom and dignity and that childhood and youth are protected against exploitation and against moral and material abandonment.
- **Juvenile Justice (JJ) Act:** The primary legislation in the country pertaining to children is **the Juvenile Justice (Care and Protection of Children) Act, 2015**. The Act **does not provide guidelines specifically** relating to questioning or interviewing children as witnesses. However, it advocates for the following:

- **Child-friendly approach** in the adjudication and disposal of matters. This implies, for the police to not be in their uniform while dealing with children.
- **Special Juvenile Police Unit:** Interviews of children are done by specialised units of police who are trained to sensitively deal with them.
- Provides for a **Child Welfare Committee** in every district to take cognisance of any violations by the authorities in their handling of children.
- **POCSO Act: The Protection of Children from Sexual Offences (POCSO) Act, 2012** has specific guidelines regarding interviewing children as witnesses, though the guidelines pertain to child sexual abuse victims.
 - Interviews should be conducted in a safe, neutral, child-friendly environment, including allowing for them to be done at homes.
 - It says a child should not be made to recount the incident in question multiple times.
 - The Act also allows for a support person, who could be trained in counselling, to be present with the child to reduce stress and trauma.

Way Forward

- The Delhi High Court has come up with guidelines for recording evidence of vulnerable witnesses in criminal matters. A vulnerable witness is defined as anyone who has not completed 18 years of age.
- The guidelines underline the importance of the criminal justice system needing to respond proactively, sensitively, and in an age-appropriate manner when dealing with children.

International Judicial Conference 2020

Why in News

The **International Judicial Conference 2020** was held from 21st-23rd February, 2020 in New Delhi.

- The Conference was **organized by the Supreme Court of India**.
- The **theme** of the Conference was '**Judiciary and the Changing World**'.
- Important Topics of discussion at the Conference included:
 - Gender Justice,

Note:



- Contemporary Perspectives on Protection of Constitutional Values,
- Dynamic Interpretations of the Constitution in a Changing World,
- Harmonisation of Environment Protection vis-à-vis Sustainable Development and
- Protection of Right to Privacy in the Internet Age.

Highlights from the Conference

- **Sustainable Development:** The Indian judiciary was appreciated for its balance between development and environment, and continued guidance in it.
 - E.g. Judgement on Sardar Sarovar Project
- **Increased Accessibility:** The Supreme Court was hailed for the “extraordinary effort” to make its judgments more accessible to the common man by making them available in nine vernacular languages, keeping in mind the nation’s linguistic diversity.
- **Gender Justice:** The recent directives for [granting equal status to women in the Army](#), guidelines for preventing sexual harassment at the workplace, etc. were appreciated.
- **Global Reference:** The Chief Justice of India said that the Supreme Court’s judgments are cited by courts of other countries and have served as a “beacon of hope” to independent and developing nations.
 - A 2001 verdict of the **South African court** cited the Indian case of **Narain Das Jain v Agra Nagar Mahapalika** decided by the Supreme Court in 1991 to benchmark the compensation to be provided while acquiring land.
- **Use of ICT:** The need for technology was highlighted to deliver speedy justice.
 - The Government is making an effort to connect every court of the country to the E-court Integrated Mission Mode Project. The establishment of the National Judicial Data Grid will make court procedures easier.
- **Future Challenges:** It was highlighted that issues like data protection and cyber crimes pose new challenges for the judiciary.

E-court Integrated Mission Mode Project

- The E-Courts Project was conceptualised on the basis of "[National Policy and Action Plan for Implementation of Information and Communication Technology \(ICT\) in the Indian Judiciary - 2005](#)"

submitted by e-Committee of the Supreme Court of India (set up in 2004).

- The main objectives of the e-Court Project are as follows:
 - To provide efficient & time-bound citizen centric service delivery.
 - To develop, install & implement decision support systems in courts.
 - To automate the processes to provide transparency of Information access to its stakeholders.
 - To enhance judicial productivity both qualitatively & quantitatively, to make the justice delivery system affordable, accessible, cost effective & transparent.
- The e-Courts National portal (ecourts.gov.in) was launched in **2013**. This provides Case Status, daily Case-list, Cases Filed and Cases Registered through the Case information System (CIS) Software.
- The **National Judicial Data Grid (NJDG)** is a part of the e-Courts Integrated Mission Mode Project. It was launched in **2015**. The aim is to track judicial performance across different courts in the country.
 - The NJDG is working as National data warehouse for case data including the orders/judgments for Courts across the country.
 - NJDG works as a monitoring tool to identify, manage & reduce pendency of cases.
 - It also helps to provide timely inputs for making policy decisions to reduce delay and arrears in the system, facilitate better monitoring of court performance and systemic bottlenecks, and, thus, facilitate better resource management.
 - NJDG has specifically helped India improve its ranking in [World Bank's Ease of Doing Business Report](#).

Shyama Prasad Mukherji Rurban Mission

Why in News

The 4th Anniversary of the launch of Shyama Prasad Mukherji Rurban Mission (SPMRM) was observed on 21st February, 2020.

- SPMRM is a scheme launched by the **Ministry of Rural Development (MoRD)** in **2016** to deliver integrated

Note:



drishti

project based infrastructure in the rural areas, which will also include development of economic activities and skill development.

- A predecessor to SPMRM was the Provision of **Urban Amenities to Rural Areas (PURA)**, announced in **2003**.

Provision of Urban Amenities to Rural Areas

- Provision of Urban Amenities to Rural Areas (PURA) was aimed at provision of urban **amenities and livelihood opportunities in rural areas** to bridge the rural urban divide thereby reducing the migration from rural to urban areas.
- PURA was treated as a **“Project”** and not a government scheme – **Private sector partners** had to prepare a detailed business plan.

Key Points

- **Objectives:** Bridging the rural-urban divide-viz: economic, technological and those related to facilities and services.
- **Rurban Clusters:** There are 2 categories of clusters: **Non-Tribal and Tribal**.
 - Rurban clusters are identified across the country's rural areas showing increasing signs of urbanization - i.e. increase in population density, high levels of non-farm employment, presence of growing economic activities and other socioeconomic parameters.
 - For the purposes of SPMRM, **Rurban areas** refer to a cluster of **15-20 villages having about 30 to 40 lakh population**. The clusters will be **geographically contiguous** Gram Panchayats with a population of about **25000 to 50000 in plain** and coastal areas and a **population of 5000 to 15000 in desert, hilly or tribal areas**.
- **Role of states:** The **State Government** identifies the clusters in accordance with the Framework for Implementation prepared by the MoRD.
 - For the selection of clusters, the MoRD is adopting a scientific process of cluster selection which involves an objective analysis at the district, sub district and village level, of the demography, economy, tourism and pilgrimage significance and transportation corridor impact.
- **Funding:** SPMRM is a **Centrally Sponsored Scheme**.
 - The Mission has **2 fund streams:** Convergence through various schemes (Central sector, centrally

sponsored schemes, State sector/ sponsored schemes/ programmes, CSR funds etc) and Critical Gap Funds (CGF).

- **Progress:** Under the mission 300 Rurban clusters are envisaged to be developed in a time bound manner. Of these 296 clusters have been selected and **Integrated Cluster Action Plans (ICAPs)** approved.
 - The Mission is seeking extension by 2 years to complete all the identified works.
 - Spurred by the success of Rurban clusters, NITI Aayog has proposed a new and extended programme for over a 1,000 clusters in next 3 years.

Background

- As per Census of India, the rural population in India, stands at 833 million, constituting almost **68% of the total population**.
- Further, the rural population has shown a **growth of 12%** during the 2001-2011 period and there has been **an increase** in the absolute number of villages.
- Ensuring availability of amenities to rural populace is one of the top priorities of the central government.
- Large parts of rural areas in the country are not stand-alone settlements but part of a cluster of settlements, which are relatively proximate to each other. These clusters typically illustrate potential for growth, have economic drivers and derive locational and competitive advantages.
 - Hence, making a case for concerted policy directives for such clusters. These clusters once developed can then be classified as 'Rurban'.
 - Therefore, taking cognizance of this, the Government of India, has launched the SPMRM aimed at developing such rural areas by provisioning of economic, social and physical infrastructure facilities.

One Year of PM-KISAN

Why in News

The **Ministry of Agriculture & Farmers' Welfare** observed the **1st anniversary of the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) Scheme** on 24th February, 2020.

- The **PM-KISAN** was launched on **24th February in 2019**.
- All states are implementing the scheme, **except West Bengal**.

Note:

- The **PM-KISAN Mobile App** developed and designed by the National Informatics Centre in collaboration with the Ministry of Electronics and Information Technology has been launched.
 - The farmers can check the **history of credits** to their bank accounts and also update or carry out corrections of their Aadhaar cards.

PM-KISAN

- **Pradhan Mantri Kisan Samman Nidhi (PM-KISAN)** is a **Central Sector Scheme** with 100% funding from the Government of India.
- It is being implemented by the **Ministry of Agriculture and Farmers' Welfare**.
- Under the scheme, the Centre transfers an amount of **Rs 6,000 per year**, in three equal instalments, **directly into the bank accounts of all landholding farmers** irrespective of the size of their land holdings.
- It intends to supplement the financial needs of the Small and Marginal Farmers (SMFs) in procuring various inputs to ensure proper crop health and appropriate yields, commensurate with the anticipated farm income at the end of each crop cycle.
- The entire responsibility of **identification of beneficiary farmer families rests with the State / UT Governments**.

National Commission for Scheduled Tribes

Why in News

Recently, the **National Commission for Scheduled Tribes (NCST)** organised its **16th foundation day**.

- On this occasion, the NCST has also decided to institute a national award named as **"NCST Leadership Award"** which will be conferred for significant and exemplary services towards Scheduled Tribes (STs) in the country.

Schedule Tribes

- As per **Census-1931**, Schedule tribes are termed as **"backward tribes"** living in the "Excluded" and "Partially Excluded" areas. The Government of India Act of 1935 called for the first time for representatives of "backward tribes" in provincial assemblies.
- The **Constitution does not define the criteria for recognition of Scheduled Tribes** and hence the

definition contained in 1931 Census was used in initial years after independence.

- However, **Article 366(25)** of the Constitution only provides a process to define Scheduled Tribes: "Scheduled Tribes means such tribes or tribal communities or parts of or groups within such tribes or tribal communities as are deemed under Article 342.
 - **342(1)**: The President may with respect to any State or Union Territory, and where it is a State, after consultation with the Governor, by a public notification, specify the tribes or tribal communities or part of or groups within tribes or tribal communities as Scheduled Tribe in relation to that State or Union Territory.
- There are over 700 tribes which have been notified.
- The **largest number of tribal communities (62) are found in Odisha**.

Few Related Committees

- **The Lokur Committee (1965)** was set up to look into **criteria for defining Schedule Tribes**. The Committee recommended 5 criteria for identification, namely, primitive traits, distinct culture, geographical isolation, shyness of contact with the community at large, and backwardness.
- **Bhuria Commission (2002-2004)** focused on a wide range of issues from the 5th Schedule to tribal land and forests, health and education, the working of Panchayats and the status of tribal women.
- **A High-Level Committee (HLC) in 2013, under chairmanship of Prof. Virginius Xaxa** was constituted to study the 5 critical issues related to tribal communities: (1) livelihood and employment, (2) education, (3) health, (4) involuntary displacement and migration, (5) and legal and constitutional matters.

Key Points

- **Constitutional Body**: NCST was set up with effect from 19th February, 2004 by amending Article 338 and by inserting a new article 338A in the Constitution through the **89th Constitution Amendment Act, 2003**.
- **Objective**: Article 338A inter-alia gives powers to the to NCST oversee the implementation of various safeguards provided to STs under the Constitution or under any other law for time being in force or under

Note:

any other order to the Government and to evaluate the working of such safeguards.

- It presents to the President, annually and at such other times as the Commission may deem fit, reports upon the working of those safeguards.
- **Composition:** It consists of a Chairperson, a Vice-Chairperson and 3 other Members who are appointed by the President by warrant under his hand and seal.
 - At least one member should be a woman.
 - The Chairperson, the Vice-Chairperson and the other Members hold office for a term of 3 years.
 - The members are not eligible for appointment for more than two terms.

PMEGP and CGTMSE

Why in News

The Ministry of Micro, Small & Medium Enterprises (MSMEs), Finance Ministry and senior management of all banks held a meeting to review some of the key schemes of the Ministry of MSME which generate a large number of jobs with low capital investment.

- The focus of the meeting was on the **Prime Minister's Employment Generation Programme (PMEGP) and Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE)**.
- It was also emphasised that there is a need for providing support to the MSMEs by suitably restructuring the stressed loans at an early stage with the help of the banks.

Prime Minister's

Employment Generation Programme

- **Launched in 2008-09**, it is a credit-linked subsidy scheme which promotes self-employment through setting up of micro-enterprises, where **subsidy up to 35%** is provided by the Government through Ministry of MSME for **loans up to ₹25 lakhs in manufacturing and ₹10 lakhs in the service sector**.
 - The balance amount of the total project cost will be provided by the banks in the form of term loan and working capital.
- It is a flagship scheme of the Ministry of MSME.
- **Implementation:**

- **National Level: Khadi and Village Industries Commission (KVIC)** as the nodal agency.

- **State Level:** State KVIC Directorates, State Khadi and Village Industries Boards (KVIBs), District Industries Centres (DICs) and banks.

➤ **Eligibility:**

- Any individual above 18 years of age, Self Help Groups, Institutions registered under Societies Registration Act 1860, Production Co-operative Societies and Charitable Trusts are **eligible**.
- Existing Units and the units that have already availed Government Subsidy under any other scheme of Government of India or State Government are **not eligible**.
 - Only new projects are considered for sanction under PMEGP.

➤ **Discussions on PMEGP in the meeting:**

- Banks have supported setting up a large number of enterprises under PMEGP and it has particularly seen a **two-fold increase in last Financial Year (2019-20)** when more than 73,000 micro-enterprises were assisted.
- Further, to boost the PMEGP, the target in the current year has been increased to support the establishments of 80,000 units.

Credit Guarantee Fund Scheme (CGS) for Micro and Small Enterprises

- It was **launched in 2000** by the Government of India (GoI) to make available collateral-free credit to the micro and small enterprise sector.
 - **Both the existing and the new enterprises** are eligible to be covered under the scheme.
- The corpus of CGTMSE is being contributed by the GoI and SIDBI in **the ratio of 4:1 respectively**.
- The Ministry of MSMEs, GoI and Small Industries Development Bank of India (SIDBI) established a trust named Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) to implement the CGS.
- **Discussions on increasing the reach of CGTMSE in the meeting.**
 - Government has set a target of increasing credit guarantee to ₹50,000 crores under this scheme, which is a jump of about 67% over the last year.

Note:



22nd Law Commission of India

Why in news

Recently, the Union Cabinet has approved the constitution of the **22nd Law Commission of India** for a period of **three years**.

Key Points

- The Law Commission of India is a **non-statutory body** constituted by the Government of India from time to time.
- The first Law Commission of independent India was established in **1955** for a **three-year term**. Since then, twenty one more Commissions have been established.
 - The **first Law Commission** was established during the British Raj era in 1834 by the **Charter Act of 1833** and was **chaired by Lord Macaulay**.
- It works as an **advisory body** to the **Ministry of Law and Justice**.
- The Law Commission undertakes research in law and review of existing laws in India for making reforms therein and enacting new legislations on a reference made to it by the Central Government or suo-motu.

Important Recommendations by Law Commission of India

- Law Commission in its 262nd Report recommended **abolition of the death penalty** for all crimes except terrorism-related offences and waging war against the state.
- Its report on electoral reforms (1999) had suggested **simultaneous Lok Sabha and state assembly elections** to improve governance and stability.
- The 267th report of the Law Commission had drafted a new law — The Criminal Law (Amendment) Bill, 2017 — inserting new Sections to fortify democracy **against hate speeches**.
- The Law Commission had also recommended the **implementation of the Uniform Civil Code (UCC)** in the country.

Revamp of the Crop Insurance Schemes

Why in News

Recently, the Union Cabinet has approved the revamp of the **Pradhan Mantri Fasal Bima Yojana (PMFBY)** and the **Restructured Weather Based Crop Insurance Scheme (RWBCIS)**.

- The revamped scheme will be effective from **2020 Kharif season**.

Key Changes

- **Reduced Share of the Centre:**
 - The Centre has slashed its share of the premium subsidy from the current **50% to just 25% in irrigated areas and 30% for unirrigated areas**.
 - Farmers pay a fixed share of the premium: 2% of the sum insured for Kharif crops, 1.5% for rabi crops and 5% for cash crops.
 - Currently, the Centre and State split the balance of the premium equally. However, the revamp now reduces the burden on the Centre and increases the share of States.
- **Voluntary Enrollment:**
 - The enrolment in these schemes has been made **voluntary for all farmers, including those with existing crop loans**.
 - When the PMFBY was launched in 2016, it was made mandatory for all farmers with crop loans to enrol for insurance cover under the scheme.
- **Flexibility to Select Risk Cover:**
 - It has also allowed states the **flexibility to select varied additional risk covers, with or without opting for the base PMFBY cover**.
 - Andhra Pradesh, West Bengal and Bihar had decided to exit the scheme citing high costs and the need to customise it based on geographical diversities.
- **Cut-off Dates for State to Release its Share:**
 - It has also introduced **cut-off dates for states to release its share of premium subsidy**.
 - If states don't release their share **before March 31 for the Kharif season and September 30 for**

Note:

rabi, they won't be allowed to implement the scheme.

- Data shows a large number of states that participate in the scheme don't release their share on time, which leads to a delayed compensation paid to farmers.
- **Compulsory Serving Time Period for Insurance Firms:**
 - The government has made it compulsory for the States to allow crop insurance firms to operate for three years.
 - Currently, the tenders floated by the States are for one-year, two-year or three-year periods.

Pradhan Mantri Fasal Bima Yojana (PMFBY)

- The Pradhan Mantri Fasal Bima Yojana was launched in 2016 and is being administered by the **Ministry of Agriculture and Farmers Welfare**.
- It provides a comprehensive insurance cover against the failure of the crop thus helping in stabilising the income of the farmers.
- **Scope:** All food & oilseed crops and annual commercial/horticultural crops for which past yield data is available.
- **Premium:** The prescribed premium is 2% to be paid by farmers for all Kharif crops and 1.5% for all rabi crops. In the case of annual commercial and horticultural crops, the premium is 5%.
- The scheme is implemented by empanelled general insurance companies. The selection of the Implementing Agency (IA) is done by the concerned State Government through bidding.

Restructured Weather Based Crop Insurance Scheme

- Restructured Weather Based Crop Insurance Scheme (**RWBCIS**) was launched in 2016 and is being administered by **the Ministry of Agriculture and Farmers Welfare**.
- It aims to mitigate the hardship of the insured farmers against the likelihood of financial loss on account of anticipated crop loss resulting from adverse weather conditions relating to rainfall, temperature, wind, humidity etc.
- WBCIS uses weather parameters as "proxy" for crop yields in compensating the cultivators for deemed crop losses.

Worldwide Education for the Future Index 2019: EIU

Why in News

India ranked 35th in the **Worldwide Educating for the Future Index (WEFFI) 2019**, as per a report published by **The Economist Intelligence Unit**.

- This year, India scored **53** and has jumped five ranks from the 40th rank with an overall score of 41.2 across categories in 2018.
- **Finland topped** the index followed by **Sweden**.

Worldwide Educating for the Future Index

- The index and report are commissioned by the **Yidan Prize Foundation**.
- It was developed to assess the effectiveness of education systems in preparing students for the demands of work and life in a rapidly changing landscape.
- It is the first comprehensive global index to evaluate inputs to education systems rather than outputs such as test scores and concentrates on the 15-24 age band in 35 economies.

Key Points

- WEFFI ranks countries based on their **abilities to equip students with skill-based education**.
- The rankings are based on **three categories**:
 - Policy environment.
 - Teaching environment.
 - Overall socio-economic environment.
- The report analyses the education system from the perspective of skill-based education in areas such as critical thinking, problem-solving, leadership, collaboration, creativity and entrepreneurship as well as digital and technical skills.
- Among the world's largest economies, the US, UK, France and Russia fell back in the index while China, India and Indonesia took steps forward.

Reasons for the Growth

- The report attributes India's growth to the **new national education policy** introduced and published in 2019 that mentions future-oriented skills such as critical thinking, communication and entrepreneurship.

Note:

- The education policy was **highlighted in the Union Budget 2020** and it will come under 'Aspirational India' which will focus on skill-based education, a greater inflow of finance to attract talented teachers and innovate and build better labs.
- A **degree level full-fledged online education programme** along with **apprenticeship embedded degree or diploma courses** in 150 higher educational institutions is also proposed which will begin by March 2021.

Aspirational India

- It is one of the three prominent themes of Union Budget 2020, the other two being **economic development (for all)** and **building a caring society that is humane and compassionate**.
- Under the Aspirational India theme, the budget covers rural, **water and sanitation, and education**.

Challenges

- The report highlights the **inability of the Indian education system to utilise the opportunity of internationalising the higher education system**.
- Another challenge is a decentralised education system according to the report.
 - Well-intentioned policy goals relating to future skills development **often do not get filtered downward** which is a problem in economies like the US and India.

Solutions

- India should develop its education system so that it **becomes a preferred destination for higher education**.
 - For this, under the **Study in India Programme, Ind-SAT exam will be held for Asian and African students for scholarships**.
 - The programme will be used for **benchmarking foreign candidates who receive scholarships for studying in Indian higher education centres**.

Study in India Programme

- It is a project under the **Ministry of Human Resource Development** with the primary objective to **target foreign students by branding India as an attractive education destination**.
- It offers **fee waivers to meritorious foreign students** studying in Indian educational

23rd National Conference on e-governance

Why in News

Recently, the **23rd National Conference on e-Governance** was organised by the Department of Administrative Reforms and Public Grievances (DARPG) along with the Ministry of Electronics and Information Technology (MeitY) in **Mumbai**.

Key Points

- The theme for the conference was "**India 2020: Digital Transformation**".
- The discussion at the conference was broadly divided under **6 sub-themes**:
 - **Digital Platforms and Digital Economy**
 - **Improving Service Delivery**
 - **Building Digital Trust - Transparency, Security and Privacy**
 - **Digital Payments and Fintech**
 - **National e-Governance Service Delivery Assessment (NeSDA)**
 - **Skilling and Capacity Building**
- The conference adopted the **10-fold Mumbai Declaration** on e-governance.
- The Mumbai Declaration seeks to take forward the roadmap for e-Governance outlined in the **Shillong Declaration** adopted during the 22nd National Conference on e-Governance (NCeG) 2019.
- During the conference, **Blockchain Sandbox and Draft Sandbox Policy** for Maharashtra was launched. Maharashtra became the **first state of India to have dedicated Fintech policy**.
- The Maharashtra state government will hold the **India Fintech Festival** in Mumbai, in March 2020.

National e-Governance Awards 2020

- The Ministry of Health and Family Welfare received Gold for **Ayushman Bharat Pradhan Mantri Jan Arogya Yojana**.
- **Antyodaya Saral Haryana** of the Department of IT, Haryana received the Gold for Excellence in providing citizen-centric delivery.

Note:

Note:

- e-Governance can be defined as the application of information and communication technology (ICT) for providing government services, exchange of information, transactions, integration of previously existing services and information portals. The “e” in e-Governance stands for ‘electronic’.
- The establishment of the **Department of Electronics in 1970** was the first major step towards e-governance in India.
- In 2015 with the vision of “**Transforming e-Governance for Transforming Governance**” India adopted **e-Kranti: National e-Governance Plan 2.0**.
- In the background of Digital India Initiative, India has launched various e-governance initiatives like My Gov, PRAGATI, DARPAN, Common Service centre etc.
- In the **United Nations E-Government Development Index (EGDI) 2018**, India ranked 96 by making a giant leap of 22 positions from 118 in 2016.
- E-governance is critical in realising the PM's vision of “**Minimum Government and Maximum Governance**”.

Central Administrative Tribunal (CAT)

Why in News

The annual **All India Conference** of the Central Administrative Tribunal (CAT) was held in **New Delhi** on 16th February, 2020.

- The Conference was presided over by the Union Minister for Law and Justice.
- Apart from central services issues, the CAT will soon have **jurisdiction** to handle disputes and other issues related to the **non-central services** in the Union Territory of **Jammu and Kashmir**.

Central Administrative Tribunal

- **Article 323 - A:** The Central Administrative Tribunal was established under **Article 323 - A of the Constitution** for adjudication of disputes and complaints with respect to recruitment and conditions of service of persons appointed to public services and posts in connection with the affairs of the **Union**.

- In pursuance of Article 323-A, the Parliament has passed the **Administrative Tribunals Act in 1985**. The act authorises the Central government to establish one Central Administrative Tribunal and the state administrative tribunals. This act opened a new chapter in the sphere of providing speedy and inexpensive justice to the aggrieved public servants.
- **Benches:** There are **17 Benches and 21 Circuit Benches** in the Central Administrative Tribunal all over India.
- **Objective and Composition:** The CAT is a specialist body consisting of Administrative Members and Judicial Members who by virtue of their specialized knowledge are better equipped to dispense speedy and effective justice. It was **established in 1985**.
 - A Chairman who has been a sitting or retired Judge of a High Court heads the Central Administrative Tribunal.
- **Operating Principles:**
 - It exercises jurisdiction only in relation to the service matters of the parties covered by the Administrative Tribunals Act, 1985.
 - The Tribunal is **guided by the principles of natural justice** in deciding cases and is not bound by the procedure, prescribed by the Civil Procedure Code.
 - Under Section 17 of the Administrative Tribunal Act, 1985, the Tribunal has been conferred with the power to exercise the **same jurisdiction and authority in respect of contempt of itself as a High Court**.
- **Independence:** The conditions of service of the Chairman and Members are the same as applicable to a Judge of High Court as per the Administrative Tribunals (Amendment) Act, 2006.
- **Appeals against Orders:** The orders of Central Administrative Tribunal are challenged by way of Writ Petition under Article 226/227 of the Constitution before respective High Court in whose territorial jurisdiction the Bench of the Tribunal is situated.

Central Vigilance Commission

- There are 3 principal actors at the national level in the fight against corruption: the **Lokpal**, the **Central Vigilance Commission (CVC)**, and the **Central Bureau of Investigation (CBI)**.
- Central Vigilance Commission is the **apex vigilance** institution, free of control from any executive

Note:



authority, monitoring all vigilance activity under the Central Government and advising various authorities in Central Government organizations in planning, executing, reviewing and reforming their vigilance work.

- The CVC was set up by the Government in February, 1964 on the recommendations of the **Committee on Prevention of Corruption, headed by K. Santhanam**.
- The Parliament enacted **Central Vigilance Commission Act, 2003 (CVC Act)** conferring statutory status on the CVC.
- It is an **independent** body which is **only responsible** to the **Parliament**.
- It is a **multi-member** Commission consisting of a Central Vigilance Commissioner (Chairperson) and not more than 2 Vigilance Commissioners (Member).
 - The Central Vigilance Commissioner and the Vigilance Commissioners are **appointed by the President** on the **recommendations of a Committee** consisting of the **Prime Minister (Chairperson)**, the **Minister of Home Affairs (Member)** and the **Leader of the Opposition** in the House of the People (Member).
- The term of office of the Central Vigilance Commissioner and the Vigilance Commissioners is **4 years** from the date on which they enter their office or till they attain the **age of 65 years**, whichever is earlier.
- It exercises superintendence over the functioning of the **Delhi Special Police Establishment (CBI)** insofar as it relates to the investigation of offences under the **Prevention of Corruption Act, 1988**.
 - The CVC receives complaints on corruption or misuse of office and recommends appropriate action. Following institutions, bodies, or a person can approach CVC: Central government, Lokpal and **Whistle blowers**.
- CVC has **no investigation wing** of its own as it depends on the CBI and the Chief Vigilance Officers (CVO) of central organizations, while CBI has its own investigation wing drawing its powers from Delhi Special Police Establishment Act.

National Statistical Commission

Recently the Ministry of Statistics and Programme Implementation released the **draft National Statistical Commission (NSC) Bill** in public domain for feedback.

- The Bill seeks to establish **NSC as the nodal, autonomous and statutory body** for all core statistical activities. It also proposes the NSC to be a body corporate. The current body lacks statutory backing.
- **Formation:** The Government of India through a resolution dated 1st June, 2005 set up the National Statistical Commission (NSC), on the recommendations of the Rangarajan Commission, which reviewed the Indian Statistical System in 2001.
- **Present Status of the NSC:**
 - **Composition:** It has a **part-time Chairperson, 4 part-time Members** and an ex-officio Member, each having specialization and experience in specified statistical fields.
 - The **Chief Statistician of India** is the Secretary of the Commission.
 - He is also the Secretary to the Government of India in the **Ministry of Statistics and Programme Implementation**.
 - **Mandate:** To evolve policies, priorities and standards in statistical matters.
 - To improve the data quality in the statistical products and processes and work closely with the statistical agencies in the central and state government to ensure its implementation.
 - The NSC is a **recommending body** that helps the national statistical system in evolving better strategies to improve the functioning of the system.

Consultative Committee

Why in News

The meeting of the **Consultative Committee** of the Members of Parliament for the Ministry of Steel was held on 24th February 2020.

Key Points

- Formation
 - These committees are constituted by the **Ministry of Parliamentary Affairs**.
 - These are normally constituted after the **new Lok Sabha is constituted**.
 - This implies that these committees stand dissolved upon dissolution of every Lok Sabha and thus, are reconstituted upon the constitution of each Lok Sabha.

Note:



➤ Composition

- The guidelines regarding the composition, functions and procedures of these committees are formulated by the Ministry of Parliamentary Affairs.
- These consist of members of **both the Houses of Parliament**.
- However, the **membership** of these committees is **voluntary** and is left to the choice of the members and the leaders of their parties.
- The **maximum membership** of a committee is **30** and the **minimum is 10**.

➤ Functions

- These committees are attached to various ministries/ departments of the Central Government.
- The Minister/Minister of State in charge of the Ministry concerned acts as the chairman of the consultative committee of that ministry.
- These provide a forum for informal discussions between the ministers and the members of Parliament on policies and programmes of the government and the manner of their implementation.
- The Consultative Committees are not Parliamentary Committees. A parliamentary committee:
 - Is appointed or elected by the House or **nominated by the Speaker/Chairman**.
 - Works under the direction of the Speaker/Chairman.
 - Presents its report to the House or to the Speaker/Chairman.
 - Has a secretariat provided by the Lok Sabha/ Rajya Sabha.

Statehood Day of Mizoram and Arunachal Pradesh

Why in News

On the **Statehood Day of Mizoram and Arunachal Pradesh (21st February)**, the Prime Minister and other leaders praised the traditions and culture of the two northeast states.

- On **21st February 1987** two new States of Mizoram and Arunachal Pradesh came into being as the **23rd and 24th states of the Indian Union** respectively.

Mizoram

- The Mizo hills area became the **Lushai Hills district within Assam at the time of independence**. In **1954**, it was renamed the **Mizo Hills District of Assam**.
- The growing discontent due to the **Mautam famine (1959-1961)**, the movement began for independence under a Mizo leader named, **Laldenga**.
- The **Mizo National Front (MNF)** under Laldenga's leadership intensified the movement for secession from Assam when **Nagaland** was given separate status as a **Central Government Administrative Agency in 1957** and **statehood in 1963**.
- After signing an accord with the moderates of the MNF the Union Government established **Mizoram** with the status of a **Union Territory in 1972**.
- The **Union Territory of Mizoram** was conferred the status of a full state after signing of a **memorandum of settlement (Mizoram Peace Accord)** between the **Central government and the Mizo National Front**, ending the two-decade-old Insurgency.
- **Mizoram** was granted statehood by the **State of Mizoram Act, 1986**.



Facts on Mizoram

- **Capital:** Aizawl
- **Sex Ratio:** 975 female per 1000 male (National: 943)
- **Literacy:** 91.58 % (National: 74.04%)
- Mizoram shares the **International Border** with **Myanmar and Bangladesh**.
- It has the **highest concentration (percentage) of tribal population** among all states of India.
- According to the **India State of Forest Report (ISFR) 2019**, **Mizoram has the maximum forest cover (85.4%)** as a percentage of their own geographical area.

Arunachal Pradesh

- The area of Arunachal Pradesh was **integrated into Assam at the time of independence**. But the presence of China with an unsettled border made the area militarily important for the government.

Note:



- The area was **upgraded to the Union Territory of Arunachal Pradesh in 1972** and was granted **statehood** by the **State of Arunachal Pradesh Act, 1986 in 1987**.

Facts on Arunachal Pradesh

- **Capital:** Itanagar
- **Sex Ratio:** 938 female per 1000 male (National: 943)
- **Literacy:** 65.38 % (National: 74.04%)
- Arunachal Pradesh **shares an international border** with **Bhutan, China and Myanmar**.
- It is the **largest state area wise in the north-eastern region**, even larger than Assam which is the most populous.
- It is inhabited by the **world's largest variety (diversity) of ethnic tribal groups** and subgroups.

Initiatives for Tribal Communities

Why in News

The **Ministry of Tribal Affairs** has launched the “Programme for Capacity Building of Scheduled Tribe Representatives in Local Self Governments” along with “1000 Springs Initiatives”.

- An online portal on GIS-based Spring Atlas has also been launched.

Capacity Building Initiative

- It is aimed at **empowering tribal Panchayati Raj Institution (PRI) representatives** by enhancing their decision-making capabilities at the local government level.
- Apart from tribal development, it also focuses on **constitutional and legal provisions** that protect

and promote the rights and welfare of the tribal population.

1000 Springs Initiative

- The initiative aims at improving **access to safe and adequate water for the tribal communities** living in difficult and inaccessible parts of rural areas in the country.
- The initiative will help in **harnessing the potential of perennial springs' water** to address the natural scarcity of water in tribal areas.
 - Springs are **natural sources of groundwater discharge** and have been used extensively in the mountainous regions across the world, including India.
 - 60% of the Indian Himalayan region residents depend on springs, though, 50% of the springs in the Indian Himalayan region have already dried up.
 - However, in the central and eastern Indian belt with more than 75% tribal population, springs remain largely unrecognized and under-utilized.
- It includes the provision of infrastructure for piped water supply for drinking, provision of water for irrigation, community-led total sanitation initiatives and provision for water for backyard nutrition gardens, generating sustainable livelihood opportunities for the tribal people.

Online portal on GIS-based Spring Atlas

- It has been developed to make the **data, about hydrological and chemical properties of the Springs**, easily accessible from an online platform.
- As of now, data of more than 170 springs have been uploaded on the Spring Atlas.



Note:



drishti

Economic Scenario

Highlights

- Pradhan Mantri Kisan SAMPADA Yojana
- National Technical Textiles Mission
- Eastern Dedicated Freight Corridor
- Mission Purvodaya: Accelerated Development of Steel Sector

Pradhan Mantri Kisan SAMPADA Yojana

Why in News

32 projects have been sanctioned under the **Pradhan Mantri Kisan Sampada Yojana (PMKSY)** of the **Ministry of Food Processing Industries (MoFPI)**.

- The projects are spread across almost 17 States, leveraging an investment worth ₹406 crores.
- These projects envisage the creation of direct and indirect employment, especially in rural areas.

Key Points

- Food processing plays an important role in **connecting Indian farmers to domestic and international consumers and markets**.
 - The introduction of modern processing techniques for food results in improved shelf-life of the agricultural produce and ensures steady revenue to farmers.
- The processed food market is **expected to grow to \$543 billion by 2020 from \$322 billion in 2016**, at a **Compound Annual Growth Rate (CAGR)** of 14.6%.

Compound Annual Growth Rate

- CAGR is the mean annual growth rate of an investment over a specified period of time longer than one year.

Pradhan Mantri Kisan SAMPADA Yojana

- In 2016, MoFPI introduced an umbrella **Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters or SAMPADA**, which was proposed to be implemented with an allocation of **₹6,000 crores for the period of 2016-20**.
- In **2017**, SAMPADA was renamed as the **Pradhan Mantri Kisan Sampada Yojana (PMKSY)**.

- It is a **Central Sector Scheme**.
- **Objectives:**
 - To supplement agriculture.
 - To create processing and preservation capacities.
 - To modernise and expand existing food processing units with a view to increase the level of processing.
 - To add value leading to the reduction of wastage.
- **Seven component schemes under PMKSY:**
 - Mega Food Parks.
 - Integrated Cold Chain and Value Addition Infrastructure.
 - Infrastructure for Agro-Processing Clusters.
 - Creation of Backward and Forward Linkages.
 - Creation/Expansion of Food Processing & Preservation Capacities.
 - Food Safety and Quality Assurance Infrastructure.
 - Human Resources and Institutions.
- Under PMKSY, **capital subsidy** in the form of **grants-in-aid** ranging from **35% to 75%** of the eligible project cost **subject to a maximum specified limit** is provided to investors under the various schemes for **undertaking infrastructure, logistic projects and setting up of food processing units** in the country.

National Technical Textiles Mission

Why in News

The **Cabinet Committee on Economic Affairs (CCEA)** has approved the setting up of a **National Technical Textiles Mission** at a total outlay of ₹1,480 crores.

Note:



Key Points

- It aims to position the country as a **global leader in technical textiles** and **increase the use of technical textiles in the domestic market**.
 - The Mission will aim at taking **domestic market size to \$40-\$50 billion by 2024**.
- A Mission Directorate will be operational in the **Ministry of Textiles**.
- It will be implemented for four years starting from 2020-2021 and will have four components:
 - **First component:** It will focus on **research, development and innovation** with an outlay of ₹1,000 crores.
 - The research will be at both fibre level and application-based in geo, agro, medical, sports and mobile textiles and development of biodegradable technical textiles.
 - Research activities will also focus on the development of indigenous machinery and process equipment.
 - **Second component:** It will be for the **promotion and development of the market for technical textiles**.
 - **Third component:** It will focus on **export promotion** so that technical textile exports from the country reach from the ₹14,000 crores to ₹20,000 crores by 2021-2022 and ensure 10% average growth every year till the Mission ends.
 - An export promotion council for technical textiles will be set up.
 - **Fourth component:** It will focus on education, training and skill development.
 - The Mission will promote technical education at higher engineering and technology levels related to technical textiles and its application areas.
- **Data on the Indian Technical Textiles Segment:**
 - It is estimated at **\$16 billion** which is approximately 6% of the \$250 billion global technical textiles market.
 - The penetration level of technical textiles in India varies between **5% and 10%** against the level of 30% to 70% in developed countries.

Technical Textiles

- Technical textiles are **functional fabrics** that have applications across various industries including automobiles, civil engineering and construction,

agriculture, healthcare, industrial safety, personal protection etc.

- Based on usage, there are **12 technical textile segments**; Agrotech, Meditech, Buildtech, Mobiltech, Clothtech, Oekotech, Geotech, Packtech, Hometech, Protech, Indutech and Sportech.
- For example, 'mobiltech' refers to products in vehicles such as seat belts and airbags, airplane seats; geotech, which is incidentally the fastest growing sub-segment, used to hold back soil, etc.

Eastern Dedicated Freight Corridor

Why in News

The **World Bank** has offered financial assistance to the last remaining portion of the **Eastern Dedicated Freight Corridor (EDFC)** between **Sonnagar (Bihar)** and **Dankuni (West Bengal)**, which India is originally slated to construct in the private public-private partnership (PPP) mode.

- Currently, the entire EDFC is being built with **loan from World Bank**, except for the last portion between **Bihar and West Bengal**.



Note:

Key Points

- The **Eastern Dedicated Freight Corridor (EDFC)** with a route length of **1856 km** runs from **Dankuni in West Bengal to Ludhiana (Punjab)**.
- It covers **Punjab, Haryana, Uttar Pradesh, Bihar, Jharkhand and West Bengal**.
- The railway is one of the multiple freight corridors.
- It has **two components**: First component is to provide additional rail transport capacity, improved service quality and higher freight throughput.

Dedicated Freight Corridor Corporation of India Ltd. (DFCCIL)

- DFCCIL under the **Ministry of Railways** is a special purpose vehicle tasked with planning and completion of 3,306 kms of Dedicated Freight Corridors (DFCs), consisting of **western freight corridor** and **eastern freight corridor (1,856 kms)**. The total project cost is estimated at over ₹81,000 crore.
- Western Dedicated Freight Corridor: The 1,504-km western freight corridor begins at **Dadri in Uttar Pradesh** and stretches till the country's largest container port — Jawaharlal Nehru Port Trust, near Mumbai — passing through Uttar Pradesh, Haryana, Rajasthan, Gujarat and Maharashtra.

Mission Purvodaya: Accelerated Development of Steel Sector

- The Mission Purvodaya was launched in 2020 for the **accelerated development of eastern India** through the establishment of an **integrated steel hub in Kolkata, West Bengal**.
- The **focus** will be on eastern states of India (**Odisha, Jharkhand, Chhattisgarh, West Bengal**) and **northern part of Andhra Pradesh** which collectively hold ~80%

of the country's iron ore, ~100% of coking coal and significant portion of chromite, bauxite and dolomite reserves.

- The **Eastern belt** has the potential to add more than **75% of the country's incremental steel capacity**. In India's march towards a **\$5 trillion economy**, the eastern states can play a major role where the steel sector can become the catalyst.
- The **Integrated Steel Hub** would focus on **3 key elements**:
 - Capacity addition through easing the setup of Greenfield steel plants.
 - Development of steel clusters near integrated steel plants as well as demand centres.
 - Transformation of logistics and utilities infrastructure which would change the socio-economic landscape in the East.

Iron & Steel Industry

- Steel is an **alloy of iron and carbon** in which the carbon content ranges up to 2%. **Iron ore, coking coal and limestone** are required in the ratio of approximately **4 : 2 : 1**. Some quantities of manganese are also required to harden the steel.
- The iron and steel industry is the basic industry since all the other industries — heavy, medium and light, depend on it for their machinery. Iron and steel is a heavy industry because all the raw materials as well as finished goods are heavy and bulky entailing heavy transportation costs.
- **India** is currently the **2nd largest producer of crude steel** in the world.
- The Government has launched the **National Steel Policy 2017** that aims to increase the per capita steel consumption to 160 kgs by 2030-31.
- **Odisha** is the **highest steel** producing state in the country.



Note:

International Relations

Highlights

- G20 Meeting in Saudi Arabia
- USA President's Visit to India
- Portuguese President's Visit to India
- India and Myanmar Ink Various Pacts
- Visit of Home Minister of Maldives
- India-Norway Task Force on Blue Economy
- ICRG Recommends Continuation of Pakistan in Grey List
- 3rd Global Ministerial Conference on Road Safety

G20 Meeting in Saudi Arabia

Why in News

Recently, the ministers and central bankers from the world's largest economies participated in the **G20 meeting** held in **Riyadh (Saudi Arabia)**.

- It was **presided over by Saudi Arabia**. Saudi Arabia is the **first Arab nation to hold the G20 presidency**.
- The 2020 G20 Presidency will focus discussions, forums, working groups and Ministerial Meetings under the theme of **"Realizing Opportunities of the 21st Century for All"**.

Key Points

- **Global Economy:**
 - The global economic growth remains slow and there are downside risks due to geopolitical trade tensions, and policy uncertainty.
 - However, the economic growth is expected to increase in 2020 and 2021 due to loose monetary policy and an easing of trade tensions.
- **IMF' Views at the Meeting:**
 - It projects a **"V-shaped, rapid recovery"** for the global economy, but it warns about the uncertainty around the spread of the **coronavirus (COVID 19)**.
 - The **International Monetary Fund (IMF)** also warned about other risks including rising debt levels in some countries as well as **climate change**.
- **Demand for Global Taxation System:**
 - It discussed ways to achieve consensus on a global taxation system for the digital era by the end of 2020.

- It aims to allow governments to tax digital companies where they do business, rather than where they are registered for tax purposes.
- India has also demanded closer collaboration between international revenue agencies to investigate tax affairs of offenders who cross borders to escape tax investigation.

G-20

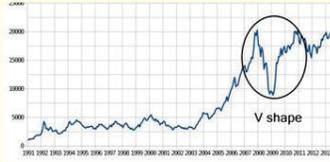
- **About**
 - The **G20** is an **informal group of 19 countries and the European Union**, with representatives of the International Monetary Fund and the World Bank.
 - The G20 membership comprises a mix of the world's largest advanced and emerging economies, representing about two-thirds of the world's population, 85% of global gross domestic product, 80% of global investment and over 75% of global trade.
- **Headquarter**
 - The G20 **operates as a forum and not as an organisation**. Therefore, it does not have any permanent secretariat or management and administrative structure.
- **Members**
 - The **members** of the G20 are Argentina, Australia, Brazil, Canada, China, France, Germany, **India**, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the United States, and the European Union.
 - **One nation holds the Chair every year**, known as the 'G20 Presidency'. Argentina chaired the G20 summit of 2018 and Japan for 2019.

Note:



V-Shaped Recovery

- A V-shaped recovery is characterized by a **sharp economic decline followed by a quick and sustained recovery**.
- The recession of 1953 is an example of a V-shaped recovery.
- A V-shaped recovery is different from an L-shaped recovery, in which the economy stays in a slump for a prolonged period of time.



USA President's Visit to India

Why in News

The **President of the USA, Donald Trump, visited India** from 24th - 25th February, 2020.

- India and the USA intended to upgrade their bilateral relationship to a **Comprehensive Global Strategic Partnership (CGSP)**.
- The CGSP will include issues such as defence, security cooperation and revitalisation of the Indo-Pacific with quadrilateral dialogue.

Economic Relations

- **Free Trade Agreement (FTA)**

- The USA has proposed the Free Trade Agreement (FTA) between the two countries.
- FTA will include the restoration of benefits of low or zero duty to certain Indian exports under the **Generalised System of Preferences (GSP)** and market access for each other's agricultural products.
- The Trade Policy Forum will be set up as a joint study group to facilitate smooth framing of FTA.

Proposed Totalisation Agreement

- The signing of this agreement will allow Indian professionals working in the USA to get a **refund of social security contribution** that they make while working in the USA.

Intellectual Property Rights

- India and the USA have decided to come up with a comprehensive agreement on Intellectual Property Rights (IPR).
- A comprehensive deal on the IPR front would be a major development as **India has slipped to the 40th position on the US Chamber's International IP Index, 2020**.

Energy Trade

- Both countries intend to come with an energy deal in the future.
- India imports a significant portion of its energy needs from the US, which has only increased in the past few years. **The USA is the sixth-largest oil supplier to India.**

Deal done

India and the U.S. concluded agreements for the purchase of 24 MH-60R Seahawk and six AH-64E attack helicopters

The six Apaches and associated equipment will cost about **\$800 million**

MH-60R SEAHAWK HELICOPTERS

- The procurement is through the Foreign Military Sales (FMS) route of the U.S. government and is worth **\$2.12 bn**
- MH-60R is the mainstay of the U.S. Navy's Anti-Submarine Warfare (ASW) capability
- These helicopters are being procured as replacement for 15 Sea King Anti-Submarine Warfare (ASW) helicopters de-inducted in 1991 and one Sea King 42B MRH lost in an accident. The current MRHs in service, Sea King 42Bs, were inducted in the 1980s and are in need of replacement
- They are capable of carrying out anti-ship, anti-submarine, electronic warfare, net-centric over-the-horizon offensive and defensive roles

APACHE

- These will be operated by the Army and deployed with its strike Corps in the western sector
- In September 2015, India contracted 22 AH-64E attack helicopters at a cost of **₹13,951.57 crore** for the IAF and the entire fleet will be in service in 2020
- In August 2017, the government approved the procurement of six Apaches under the optional clause for the Army
- On June 12, 2018, the Defence Security Cooperation Agency notified the U.S. Congress of the possible sale to India
- Apache is a heavy attack helicopter and the most advanced craft currently in service globally
- India is the 16th nation to select the Apache and the AH-64E is its most advanced variant, Boeing said
- The Apache is the most advanced multi-role heavy attack helicopter in the world



Note:

➤ **Bilateral Trade**

- The **United States** has become India's top trading partner surpassing China.
- The **bilateral trade between the US and India** stood at nearly 88 billion dollars in 2018-19 compared to China which was at 87.1 billion dollars.

Security and Terrorism

➤ **Cross border Terrorism**

- Both the countries condemned cross-border terrorism in all its forms.
- They also called on Pakistan to ensure that no territory under its control is used to launch terrorist attacks and to expeditiously bring to justice the perpetrators of such attacks.

➤ **Kashmir Issue**

- The USA president reiterated its offer to mediate on the **Kashmir issue** during the visit.
- However, India stated that it is a bilateral matter between India and Pakistan and there is no scope for any third-party mediation.

➤ **Cyber Security**

- India and the United States recognised the need for an innovative digital ecosystem that is secure and reliable and facilitates the flow of information and data.

Defence Relations

- USA and India have concluded the agreement for the purchase of 24 MH-6OR Seahawk, and six AH-64E attack helicopters.

International Issues

- **Quad Dialogue:** U.S. and India stressed to revitalise the **quadrilateral initiative** consisting of Japan, the U.S., India and Australia.
- **Indo-Pacific Region:** Both the countries discussed to develop and evolve the **Indo-Pacific region** collaboratively.
- **South China Sea Region**
 - Both sides took note of the efforts of the **ASEAN** region to create a code of conduct in the **South China Sea region**.
 - A code of conduct in the South China Sea region will be a set of rules outlining the norms and rules and responsibilities of, or proper practices for, an individual, party or organisation in the region.

Portuguese President's Visit to India

Why in News

The **Portuguese President Marcelo Rebelo de Sousa** visited India from **13th-16th February 2020**.

- The last visit by a Portuguese President to India was in 2007.

Highlights of the Visit

- **14 agreements and understandings** were signed between India and Portugal in the fields of maritime heritage, maritime transport and port development, migration and mobility, start-ups, Intellectual Property Rights, aerospace, nano-biotechnology, audiovisual co-production, yoga, diplomatic training, scientific research and public policy.
 - One of the agreements included cooperation in setting up a **national maritime museum heritage complex in Lothal, Gujarat**.
- **Permanent Seat at UNSC:** Portugal provided its support to India to become a permanent member of the Security Council of the United Nations.
- **India-Portugal Joint Economic Committee:** It has been decided to hold the next session of the India-Portugal Joint Economic Committee in India soon to review the gamut of the bilateral trade and economic relations.
- Portugal also extended its support for the **commemoration of Mahatma Gandhi's 150th birth anniversary**.
- **Visit to Goa**
 - Portuguese president visited churches in Old Goa, including the Basilica of Bom Jesus where relics of St. Francis Xavier are preserved. He also paid a visit to Institute Mater Dei Santa Monica, a church in the Old Goa heritage complex, and the Christian Art Museum located on the premises.
 - All these structures at Old Goa, located about nine km from Panaji, are part of the complex certified as **world heritage monuments by UNESCO**.
 - Santa Monica Church is over 450 years old, having been one of the first churches the Portuguese built in Goa in 1525.
- **Upcoming Collaborations**

Note:

- Portugal could join the **International Solar Alliance** in the near future.
- India as an Associate Observer of the **Community of Portuguese Language Countries**, so that both the countries can amplify their developmental partnerships in Africa and elsewhere.
- India's deepening engagement with the European Union (**EU**), especially when Portugal assumes the Presidency of the EU in 2021.

Note:

- **St. Francis Xavier** was the greatest Roman Catholic missionary of modern times who was instrumental in the establishment of Christianity in India, the Malay Archipelago, and Japan.
- **Community of Portuguese Language Countries (CPLP)** is a multilateral forum whose objective is to deepen the mutual friendship and cooperation among its members.
 - It was created on 17th July 1996.
 - It has eight member states which have Portuguese as their official language: Angola, Brazil, Cape Verde, East Timor, Guinea Bissau, Mozambique, Portugal, São Tomé and Príncipe.

India-Portugal

- Diplomatic relations between the two countries were established in **1949**.
- Bilateral relations, however, went **into decline after 1950 over Portugal's refusal to surrender its enclaves of Goa, Daman Diu and Dadra and Nagar Haveli** on India's west coast.
 - By 1955, the two nations had cut off diplomatic relations which were followed by Indian military forces **liberating Goa in 1961 through Operation Vijay**, ending over 450 years of Portuguese rule in India.
- In **1974**, India and Portugal signed a treaty recognising India's sovereignty over Goa, Daman & Diu, Dadra & Nagar Haveli and related matters. With the signing of this treaty, diplomatic relations were re-established.
- **Bilateral S&T cooperation** is being actively fostered between the two countries under the Agreement for



Cooperation in Science and Technology signed on 3rd December 1998.

- The Centre for Indian Studies at the University of Lisbon was inaugurated in April 2016 by the Portuguese Minister of Foreign Affairs Augusto Santos Silva. It is the first centre in any university in Portugal dedicated to the study of India.

India and Myanmar

Ink Various Pacts

Why in News

India and Myanmar signed 10 agreements with a focus on socio-economic development of Myanmar, during Myanmar President U Win Myint's visit to India.

- Myanmar stands at the confluence of **India's Neighbourhood First and Act East Policy** and India-Myanmar partnership is at the heart of India's vision to create a **connected and cooperative neighbourhood**.

Key Points

- **Connectivity:**
 - The two countries will start a coordinated bus service between Manipur's Imphal and Myanmar's Mandalay from April 2020.
 - India will assist Myanmar in the construction of **Integrated Checkpoint at Tamu**, Myanmar, bordering Manipur.
 - The two countries signed the **Land Border Crossing Agreement in 2018**, which allowed bona fide travellers with valid documents to cross the border at two international points of entry/exit- Moreh-Tamu and Zokhawthar-Rih.
- **Rakhine State Development Programme:**
 - More projects will be added to this programme.
 - India signed a **development programme for Rakhine State in Myanmar** in late 2017 which was designed to assist the Myanmar government in Rakhine State to build housing infrastructure for displaced Rohingyas.



Note:

- India had committed \$25 million grant assistance to Myanmar and phase-I involved completion of 250 prefabricated houses in Rakhine State.

➤ Infrastructure Development:

- India will also support the establishment of **Myanmar's diplomatic academy**, and extend the **National Knowledge Network to Myanmar**.
- Both countries have decided to extend the Quick Impact Project schemes to Myanmar.
 - Under this, India will take up capacity development work in the form of small projects which yield quick beneficial results for the local people.

➤ International Cooperation:

- Both sides agreed to work together to promote principles of openness, inclusiveness, transparency, respect for international law and Association of Southeast Asian Nations (ASEAN) centrality in Indo-Pacific.

➤ Cooperation under other sectors:

- India will offer medical **radiation equipment Bhabhatron II** for the treatment of cancer patients and strengthen cooperation in the health sector.
- Both countries agreed to have government-to-government cooperation in petroleum, including in refinery, stockpiling, blending and retail.
- In governance, India will help Myanmar with the **project of e-ID cards**, which is modelled after the Aadhaar project.
- The two sides showed commitment to continue negotiations on **pending treaties** like **Mutual Legal Assistance Treaty (MLAT) and Extradition Treaty**.
- An MoU has also been signed on '**Cooperation for Prevention of Trafficking in Persons; Rescue, Recovery, Repatriation and Reintegration of Victims of Trafficking**' between the two countries.

Mutual Legal Assistance Treaties

- These are agreements between governments allowing for the exchange of evidence and information in criminal and related matters between the signing countries.

Extradition Treaty

- This is an agreement or arrangement made by India with a Foreign State, relating to the **Extradition of fugitive criminals**.
- Extradition treaties are **traditionally bilateral** in character.

Visit of Home Minister of Maldives

Why in News

The Home Minister of Maldives, Mr. Sheikh Imran Abdulla, met Indian Home Minister on 21st February, 2020.

- The Ministers welcomed the expansion of bilateral cooperation between India and Maldives in diverse fields including policing and law enforcement, counter-terrorism, counter-radicalization, organized crime, drug trafficking and capacity building.

- The **Directorate of Enforcement** will assist Maldives in setting up a probe agency like itself and guide the island nation on raising a



Prevention of Money

- Laundering Act, 2002 (PMLA) infrastructure.
- The Directorate of Enforcement is a **multi disciplinary organization** mandated with the task of enforcing the provisions of two special fiscal laws – Foreign Exchange Management Act, 1999 (FEMA) and Prevention of Money Laundering Act, 2002 (PMLA). It is **headquartered in New Delhi**.

India-Maldives

- **Significance of Maldives for India**

- **Maldives' proximity to the west coast of India**—Maldives is barely 70 nautical miles away from Minicoy -the southernmost island of Lakshadweep.
 - Lakshadweep group is separated from Maldives by Eight Degree Channel.
- It is **situated at the hub of commercial sea-lanes** running through Indian Ocean. More than 97% of India's international trade by volume and 75% by value passes through the region.
- Its potential to allow a third nation's naval presence in the area.
- Since China's naval expansion into the Indian Ocean, Maldives significance has steadily grown and now it's at the heart of international geopolitics.
- Moreover, the **Maldives is an important aspect of India's 'Neighbourhood First' policy**.

Note:

- 'India First' has been a stated policy of the Government of Maldives.
- Maldives is a member of the **South Asian Association for Regional Cooperation (SAARC)** and the **South Asia Subregional Economic Cooperation (SASEC)**.
- There is a **significant Indian diaspora in the Maldives**. Innumerable Indians work across the hospitality, education, and health-care sectors of the Maldives economy.

South Asian Association for Regional Cooperation

- SAARC was **established** with the signing of the SAARC Charter in Dhaka (Bangladesh) on **8th December 1985**.
- **Eight Member States:** Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.
- **Secretariat:** Kathmandu (Nepal).
- **Objective:** To promote the welfare of the people of South Asia and to improve their quality of life, and to accelerate economic growth, among other things.
- **SAARC Summits:**
 - These are usually held biennially and hosted by member states in alphabetical order.
 - The last SAARC Summit in 2014 was held in Kathmandu (Nepal), which was attended by India.

South Asia Subregional Economic Cooperation

- The South Asia Subregional Economic Cooperation (SASEC) Program, set up in 2001, brings together **Bangladesh, Bhutan, India, the Maldives, Nepal, and Sri Lanka** in a project-based partnership to promote regional prosperity by improving cross-border connectivity, boosting trade among member countries, and strengthening regional economic cooperation.
- The **Asian Development Bank (ADB)** serves as **Secretariat** to the SASEC Program.

➤ Relations Between the Two Countries

- **History:** India and Maldives share ethnic, linguistic, cultural, religious and commercial links. India was among the first to recognize Maldives after its independence in 1965 and later established its mission at Male in 1972.
- **Defence:** India provides the largest number of training opportunities for Maldivian National Defence Force (MNDF), meeting around 70% of their defence training requirements.

- **'Ekuverin'** is a joint military exercise between India and Maldives.

- **Disaster Management:** The Government of India has provided large-scale assistance to Maldives in the aftermath of the 2004 Indian Ocean tsunami and during the 2014 Male water crisis.
- **Trade and Tourism:** India is Maldives' 4th largest trade partner after UAE, China and Singapore. In 2018, India was the 5th largest source of tourist arrivals in Maldives.
 - The Maldivian economy is heavily dependent on its tourism sector, which is the major source of foreign exchange earnings and government revenue.
- **Operation Cactus:** In 1988, in response to a request from the Maldives, India activated Operation Cactus to deploy its military and ensure regime continuity in Male.

India-Norway Task Force on Blue Economy

Why in News

Recently, the **India-Norway Task Force on Blue Economy for Sustainable Development** was launched jointly during **Norwegian Prime Minister's visit to India** in January 2020.

- The purpose of the task force is to develop and follow up joint initiatives between the two countries.
- The two countries also commenced a new **collaboration on Integrated Ocean Management & Research**.
- The India-Norway cooperation in the field of oceans is based on a **shared interest in the blue economy** and the sustainable use of marine resources.

Note:

- **Norway is an expert on the subject of the Ocean Economy** as 70% of Norway's export is from Norway's maritime industry.
- Starting the bilateral ocean dialogue has added a new dimension in India-Norway relations and will help India to understand the know-how of the maritime industry.

Note:

India-Norway Relations

- India and Norway have been enjoying a **cordial and friendly relationship** since the establishment of relations in 1947.



- In recent years, both countries have been **increasing their engagements** in the field of trade and technology.
- Norway has **supported India's membership to export control regimes** the **Missile Technology Control Regime (MTCR)**, the **Wassenaar Arrangement (WA)** and the **Australia Group (AG)**.
- India has signed a **Double Taxation Avoidance Agreement (DTAA)** with Norway in 1986 which was revised in February 2011.
- **India's Polar Research Station "Himadri"** is located at Ny Alesund, Spitsbergen Island, Norway.

Blue Economy

- The concept was **introduced by Gunter Pauli** in his 2010 book – "The Blue Economy: 10 years, 100 innovations, 100 million jobs".
- It is the sustainable use of ocean resources for economic growth, improved livelihoods and jobs, and ocean ecosystem health.
- It comprises renewable energy, fisheries, maritime transport, tourism, climate change, waste management.
- It is **also reflected in Sustainable Development Goal (SDG 14)**, which calls to conserve and sustainably use the oceans, seas and marine resources for sustainable development.
- Blue Economy can help to generate livelihoods, to achieve energy security, to build ecological resilience and to improve living standards of coastal communities.
 - **India has a long coastline of 7,517 km** covering nine states and two union territories – with an Exclusive Economic Zone (EEZ) of 2.02 mn. sq. km.

ICRG Recommends Continuation of Pakistan in Grey List

Why in News

The International Co-operation Review Group (ICRG) of the Financial Action Task Force (FATF) has recommended that **Pakistan be retained on the "Grey List"**, given the country's failure to completely implement the 27-point action plan to check terror financing.

- It needs to be noted that a recommendation by the ICRG is a precursor to the final decision at the FATF plenary session, and is usually not overturned. Since 2007, the the ICRG has analysed high-risk jurisdiction and recommended specific action to address the money laundering/terror financing risks emanating from them.
- The **FATF Plenary is the decision making body of the FATF**. It meets three times per year. The latest meeting will conclude on 21st February, 2020 in which final decision with respect to Pakistan will be taken.
- The FATF meeting is being held a week after an anti-terrorism court in **Pakistan sentenced Hafiz Saeed**, the mastermind of the 2008 Mumbai attack and founder of Lashkar-e-Taiba (LeT), to 11 years in two terror financing cases.

Background

- The **FATF plenary held in October 2019** had noted that Pakistan addressed only five out of the 27 tasks given to it in controlling funding to terror groups like the Lashkar-e-Taiba, Jaish-e-Mohammad (JeM) and Hizbul Mujahideen, responsible for a series of attacks in India.
 - The FATF, then, strongly urged Pakistan to swiftly complete its full action plan by February, 2020.
- **Pakistan was placed on the grey list by the FATF in June 2018** and was given a plan of action to complete by October 2019, or face the risk of being placed on the black list with Iran and North Korea.

Current Scenario and India's Stand

- In the **FATF Asia Pacific Joint Group** meeting in Beijing in January 2020, **Pakistan was adjudged to have cleared 14 points**.

Note:

- The Asia Pacific Group on Money Laundering was established in 1997 as an autonomous regional anti-money laundering body by unanimous agreement among 13 original founding members. Presently, it has **41 active members including India**.
- **Pakistan's Current Stand**
 - Since the 2019 meeting, it has taken all possible measures against terror financing.
 - It has convicted an unprecedented number of persons, which includes Lashkar-e-Taiba (LeT) chief Hafiz Saeed.
 - It has also recently informed the FATF that JeM founder Masood Azhar and his family are "missing".
- **India's Stand**
 - India has been maintaining that Pakistan extends regular support to terror groups and has urged FATF to take action against Pakistan.

The Financial Action Task Force

- **Formation:** The Financial Action Task Force (FATF) is an inter-governmental body established in 1989 during the G7 Summit in Paris.
- **Objectives:** 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.
- **Secretariat:** Its Secretariat is located at the Organisation for Economic Cooperation and Development (OECD) headquarters in Paris.
- **Member Countries:** The FATF currently has 39 members including two regional organisations — the European Commission and Gulf Cooperation Council. India is a member of the FATF.
- **Lists under FATF:**
 - **Grey List:** 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:** 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.

- India counters Pakistan's claims, saying the recent action taken by Islamabad against Saeed and others was an attempt to evade further FATF sanctions.
- India asserts that the terror funding operations are still on and outfits such as the LeT and Jaish-e-Mohammed, whose chief Masood Azhar's location as per Pakistan is "missing", are having a free run in Pakistan.
- **Pakistan's Status on Grey List**
 - Pakistan needs 12 votes out of 39 (total members in the FATF) to exit the 'Grey List' and move to 'White List'. To avoid 'Black List', it needs the support of three countries.
 - In the Beijing 2020 meeting, Pakistan got support from Malaysia and Turkey besides FATF current chair China.
 - India has lobbied with several countries, from the US to Europe, Australia to West Asian countries, to make the case for blacklisting of Pakistan.
- **Impact on Pakistan**
 - If Pakistan continues on the grey list, it would be very difficult for the country to get financial aid from the International Monetary Fund (IMF), the World Bank and the European Union, making its financial condition even more unsteady.

3rd Global Ministerial Conference on Road Safety

Why in News

Recently, the Minister of Road Transport & Highways represented India at the **3rd Global Ministerial Conference on Road Safety in Stockholm (Sweden)**.

- It is organised by the **World Health Organization (WHO)** in association with the **World Bank** and minister-led delegations from more than 80 countries.

Key Points

- **Theme:**
 - The **theme** of the conference is '**Achieving Global Goals 2030**'.
- **Objectives:**
 - It intends to **bring road safety on the global agenda** and renew the world community's commitment to safer roads.

Note:

- It also aims to define ways to accelerate action on proven **strategies to save lives**.

➤ **Highlights:**

- The conference adopted the “**Stockholm Declaration**” which calls for a **new global target for road safety for 2030** and a set of innovative solutions to save lives on the world’s roads.
- It also aims to share successes and lessons from the implementation of the **Global Plan for the Decade of Action for Road Safety 2011–2020**.
- India has reaffirmed its commitment to the United Nations goal set under the **UN Decade of Action of drastically reducing road accidents by the year 2030** during the event.

Numerics on Road Accidents

➤ **Worldwide Scenario:**

- **Number of Deaths:** The number of deaths on the world’s roads remains unacceptably high, with an estimated 1.35 million people killed each year.
- **Leading Cause of Deaths:** Road traffic crashes are the eighth leading cause of death globally for people of all ages, and the leading cause of death for children and young adults aged 5–29 years.
- **Economic Burden:** The road accidents cost countries around 3% of their respective GDP.

➤ **National Scenario:**

- **Number of Deaths:** It kills almost 1.5 lakh people annually in India.
- **Drastic Drop:** The accidents, as well as accident-related deaths in the period 2010-2018, dropped drastically compared with the previous decades, despite the very high rate of growth of automobiles.
- **Severity:** The road accident severity (the number of persons killed per 100 accidents) has increased by 0.6% in 2018 compared to 2017.

Global Initiatives for Road Safety

➤ **Brasilia Declaration on Road Safety**

- The declaration was **signed in 2015 at the second Global High-Level Conference on Road Safety held in Brazil**. The **first conference** was held in **Russia (2009)**.

- Through the **Brasilia Declaration** countries plan to achieve the **Sustainable Development Goal 3.6** i.e. to half the number of global deaths and injuries from road traffic accidents by 2030.

- The United Nations has also declared **2010-2020 as the decade of action for Road Safety**.

➤ **UN Global Road Safety Week**

- It is celebrated every two years, the fifth edition of the UN Global Road Safety Week (6-12 May 2019) highlighted the need for strong leadership for road safety.

➤ **The International Road Assessment Programme (iRAP)**

- It is a registered charity dedicated to saving lives through safer road

National Initiatives for Road Safety

➤ **4 E’s for Road Safety:**

- Ministry of Road Transport & Highways had formulated a multi-pronged strategy based on **4 'E's – Education, Engineering, Enforcement, Emergency Care**.

- **Education:** Awareness is generated through various Road Safety Campaigns utilizing audio-visual and other print media and through NGOs.

- **Engineering:** The engineering measures are considered essential for adoption to help in improving road safety leading to reduction of accidents.

- **Enforcement:** The enforcement of road transport-related rules and regulations (like The Motor Vehicles Act 1988 and Central Motor Vehicles Rules 1989) is an important aspect to ensure road safety.

- **Emergency Care:** The scheme like National Highway Accident Relief Service Scheme (NHARSS) has been implemented to provide cranes and ambulances to States/UTs/NGOs for relief and rescue measures in the aftermath of accidents.

➤ **Justice K.S. Radhakrishnan Committee**

- Supreme Court had set up the three-member KS Radhakrishnan panel on road safety in **2014**. The SC had termed the roads in India as “**giant killers**”.

➤ **Motor Vehicles Amendment Act, 2019**

Note:



- It hikes the penalties for traffic violations, defective vehicles, juvenile driving, etc.
 - It provides for a Motor Vehicle Accident Fund, which would provide compulsory insurance cover to all road users in India for certain types of accidents.
- It also provides for a National Road Safety Board, to be created by the Central Government through a notification.
 - The act also provides for the protection of good samaritans.



Note:



drishti

Science and Technology

Highlights

- Aditya-L1 Mission
- Habitable-Zone Planet Finder
- National Science Day 2020
- Biofuel from Microorganisms
- Krishi Vigyan Kendra (KVK) Conference 2020
- Tirur Vettala
- Arab World's First Nuclear Power Plant
- SUTRA-PIC
- NASA's InSight Mars Mission

Aditya-L1 Mission

Why in News

The **Indian Space Research Organisation (ISRO)** is preparing for its **first scientific expedition to study the Sun, Aditya-L1**.

- **Aditya L1** will be **ISRO's 2nd space-based astronomy mission** after **AstroSat (2015)**.
- Aditya 1 was **renamed as Aditya-L1**. As it would be placed into a point in space known as the **L1 Lagrange point**.
 - The Aditya 1 was meant to observe only the solar corona.

AstroSat

- AstroSat, was launched in 2015, by PSLV-C30 from Sriharikota (Andhra Pradesh).
- It is the first dedicated Indian astronomy mission aimed at studying celestial sources in X-ray, optical and UV spectral bands simultaneously.

Key Points

- **Launch Vehicle:** Aditya L1 will be launched using the **Polar Satellite Launch Vehicle (PSLV) XL** with 7 payloads (instruments) on board.
- **Objective:** Aditya L1 will study the **Sun's corona** (Visible and Near infrared rays), **Sun's photosphere** (soft and hard X-ray), **chromosphere** (Ultra Violet), solar emissions, solar winds and flares, and **Coronal Mass Ejections (CMEs)**, and will carry out round-the-clock imaging of the Sun.

- **Challenges:** The distance of the Sun from Earth (approximately 15 crore kms on average, compared to the only 3.84 lakh kms to the Moon). This huge distance poses a scientific challenge.
 - Due to the risks involved, payloads in earlier ISRO missions have largely remained stationary in space; however, Aditya L1 will have some **moving components** which increases the risks of collision.
 - Other issues are the **super hot temperatures** and radiation in the solar atmosphere. However, Aditya L1 will stay much farther away, and the heat is not expected to be a major concern for the instruments on board.

Importance

- The Solar weather and environment affects the weather of the entire solar system. Therefore, it is important to study the Sun.
- Variation in Solar Weather System can change the orbits of satellites or shorten their lives, interfere with or damage onboard electronics, and cause power blackouts and other disturbances on Earth.
- Knowledge of solar events is key to understanding space weather.
- To learn about and track Earth-directed storms, and to predict their impact, continuous solar observations are needed.
- Many of the instruments and their components for this mission are being manufactured for the first time in the country.

Note:

Lagrange Point 1

- Lagrange Points, named after Italian-French mathematician Joseph-Louis Lagrange, are positions in space where the gravitational forces of a two-body system (like the Sun and the Earth) produce enhanced regions of attraction and repulsion.
- The L1 point is about 1.5 million km from Earth, or about 1/100th of the way to the Sun.
- L1 refers to Lagrangian/Lagrange Point 1, one of 5 points in the orbital plane of the Earth-Sun system.
- These can be used by spacecraft to reduce fuel consumption needed to remain in position.
- A Satellite placed in the halo orbit around the Lagrangian point 1 (L1) has the major advantage of continuously viewing the Sun without any occultation/ eclipses.
- The L1 point is home to the Solar and Heliospheric Observatory Satellite (SOHO), an international collaboration project of **National Aeronautics and Space Administration (NASA)** and the European Space Agency (ESA).

Other Missions to the Sun

- **NASA's Parker Solar Probe's** aim is to trace how energy and heat move through the Sun's corona and to study the source of the solar wind's acceleration.
 - It is part of NASA's 'Living With a Star' programme that explores different aspects of the Sun-Earth system.
- The earlier **Helios 2 solar probe**, a joint venture between **NASA and space agency of erstwhile West Germany**, went within 43 million km of the Sun's surface in 1976.

Habitable-Zone Planet Finder**Why in News**

The **Habitable-zone Planet Finder (HPF)** has confirmed its **first planet (exoplanet) called G 9-40b**, orbiting a nearby **low mass** bright M-dwarf star (100 light years from Earth) with an orbital period of **6 Earth-days**.

- Earlier, **NASA's Kepler mission** had observed a dip in the host star's light, suggesting that the planet was crossing in front of the star during its orbit. To confirm the HPF was used.

Key Points

- **G 9-40b:** G 9-40b is amongst the top 20 **closest transiting planets** known.
- **Habitable-zone Planet Finder:** HPF is an **astronomical spectrograph**, built by Penn State University scientists, and recently installed on the 10m Hobby-Eberly Telescope at McDonald Observatory (US).
 - The HPF searches for **exoplanets** by using the **Doppler effect**.
 - A spectrograph is an instrument that splits light into its component wavelengths. Scientists measure the properties of light over a specific portion of the spectrum, and draw conclusions on what is responsible for the trends they observe.
 - The HPF provides the **highest precision measurements** of infrared signals from nearby **low-mass stars**, and astronomers use it to validate the candidate planet by excluding all possibilities of contaminating signals to a very high level of probability.
 - It is designed to detect and characterise planets in the **habitable-zone also known as 'Goldilocks zone'** - the region around the star where a planet could sustain liquid water on its surface.
 - HPF is currently surveying the **nearest low-mass stars, also called M-dwarfs**, which are the most common stars in the galaxy - with the goal of discovering exoplanets in our neighborhood.

Doppler Effect

- An **increase (or decrease) in the frequency of sound, light, or other waves** as the source and observer move towards (or away from) each other.
- The effect causes the sudden change in pitch noticeable in a passing siren, as well as the red shift seen by astronomers.

Exoplanet

- An exoplanet or extrasolar planet is a planet **outside the Solar System**. The first confirmation of detection of exoplanet occurred in **1992**.
- Exoplanets are very hard to see directly with telescopes. They are hidden by the bright glare of the stars they orbit.
- So, astronomers use other ways to detect and study exoplanets such as looking at the effects these planets have on the stars they orbit.

Note:



M-dwarfs

- M dwarf or M-type star, also called Red Dwarf Star are the most numerous type of star in the universe and the smallest type of hydrogen-burning star.
- These have masses from about 0.08 to 0.6 times that of the Sun.
- In the Milky Way Galaxy, about 70% of the stars are red dwarfs.

National Science Day 2020**Why in News**

National Science Day (NSD) is celebrated every year on **28th February** to commemorate the discovery of the 'Raman Effect'. The **first NSD** was celebrated on **28th February 1987**.

Key Points

- **Basic Objective:** To propagate the message of the importance of science and its application among the people.
- **Theme:** On this occasion, theme-based science communication activities are carried out all over the country. The **theme of NSD 2020: 'Women In Science'**.
- **Nodal Agency to Support Celebration: National Council for Science & Technology Communication (NCSTC)** of Ministry of Science and Technology.
- **Awards:** On the occasion of the NSD-2020, 5 women scientists received awards under two categories – **SERB Women excellence awards** and National Award for Young Woman Showing Excellence through Application of Technology for Societal Benefits.
- Initiatives for Gender Equality in Science were also taken.
 - **Vigyan Jyoti Scheme:**
 - Vigyan Jyoti Scheme is launched by the **Department of Science & Technology (DST)**.
 - It is intended to create a level-playing field for the meritorious girls in high school to pursue **Science, Technology, Engineering, and Mathematics (STEM)** in their higher education.
 - It also offers exposure for girl students from the rural background to help to plan their journey from school to a job of their choice in the field of science.

○ **GATI Scheme:**

- The **Gender Advancement for Transforming Institutions (GATI)** will develop a comprehensive Charter and a framework for assessing Gender Equality in STEM.

Women in Science

- Women represent only **about a fifth of senior authors** in all published research.
- A study, published in the journal PLOS One in 2018, assessed 293,557 research articles from 54 journals and found that only 29.8% of all research authors were women.
- Another study by the UK's Intellectual Property Office (IPO) noted that women inventors account for just under **13% of patent applications globally**.
- In India, out of the 560 awardees of **Shanti Swarup Bhatnagar Prize for Science and Technology**, **only 18 recipients have been women**. The prize is one of the highest multidisciplinary science awards in India.

Raman Effect

- The Raman Effect is a phenomenon in spectroscopy discovered by the eminent physicist **Sir Chandrasekhara Venkata Raman** in 1928.
- In 1930, he got a **Nobel Prize for this remarkable discovery** and this was the **first Nobel Prize for India in the field of Science**.
- The **Raman Effect** is a change in the wavelength of light that occurs when a light beam is deflected by molecules. When a beam of light traverses a dust-free, transparent sample of a chemical compound, a small fraction of the light emerges in directions other than that of the incident (incoming) beam. Most of this scattered light is of unchanged wavelength. A small part, however, has wavelengths different from that of the incident light; its presence is a result of the Raman Effect.

SERB Women Excellence Award- 2020

Dr. Niti Kumar, a senior scientist from the **CSIR- Central Drug Research Institute (CDRI)**, Lucknow has received **SERB Women Excellence Award-2020**.

- SERB Women Excellence Award is a **one-time award** given to **women scientists below 40 years of age** and who have received recognition from national academies such as Young Scientist Medal, Young Associate etc.

Note:



- The women researchers will be supported by a research grant of **5 lakhs per annum for 3 years** by the Science and Engineering Research Board (SERB), **Ministry of Science and Technology**.
- Niti Kumar's research group is trying to understand **the protein quality control machinery in human malaria parasite** for exploration of alternative **drug targets** for malaria intervention.
- Dr. Niti Kumar has many awards and recognitions in her credit including, Innovative Young Biotechnologist Award (DBT-IYBA, 2015), INSA Medal for Young Scientist (2010) by Indian National Science Academy, etc.

Biofuel from Microorganisms

Why in News

Researchers at the **International Centre for Genetic Engineering and Biotechnology (ICGEB)** are developing a method to improve the growth rate and **sugar content** of a **marine cyanobacterium** called **Synechococcus sp. PCC 7002**.

Key Points

- **Biofuel** production is dependent on the availability of low-cost and sustainable supply of sugars and a nitrogen source. The **sugars typically come from plants**.
- However, **some bacteria**, such as the **cyanobacteria** (also known as **blue-green algae**), too can **perform photosynthesis** and **produce sugar** by fixing the carbon dioxide in the atmosphere.
- The yield of sugars from cyanobacteria could potentially be much higher than that of land-based crops, unlike plant-based sugars.
- Cyanobacterial biomass provides a nitrogen source in the form of proteins.
- Use of marine cyanobacteria has been preferred as freshwater is increasingly getting scarce.

Cyanobacteria

- These are **microscopic organisms found naturally in all types of water**.
- These **single-celled organisms** live in fresh, brackish (combined salt and freshwater) and marine water.
- These organisms use sunlight to **make their own food**.

- In **warm, nutrient-rich** (high in phosphorus and nitrogen) environments, cyanobacteria can multiply quickly.

Biofuels

- Biofuels are the **fuels that can be produced from organic matter** or biomass, such as corn or sugar, vegetable oils or waste feedstocks. **Example:** Bioethanol and Biodiesel.
- As biofuels emit less carbon dioxide (CO₂) than conventional fuels (eg:- Petrol) they can be blended with existing fuels as an effective way of reducing CO₂ emissions in the transport sector.
- The use of biofuels has grown over the past decade, driven largely by the introduction of new energy policies in Europe, the USA and Brazil that call for more renewable, lower-carbon fuels for transport. Today **biofuels represent around 3% of road transport fuels in use around the world**.
- In **India**, the **National Policy on Biofuels**, released by the Government of India in 2018, envisages production of biofuel from **Used Cooking Oil (UCO)**. Also, the policy has the **objective** of reaching **20% ethanol-blending** and **5% biodiesel-blending** by the year **2030**.

International Centre for Genetic Engineering and Biotechnology

- It is a unique **intergovernmental organisation** initially established as a special project of the **United Nations Industrial Development Organization (UNIDO)**.
 - UNIDO is the **specialized agency of the United Nations** that promotes industrial development for poverty reduction, inclusive globalization and environmental sustainability.
- Fully **autonomous since 1994**, it runs 46 state-of-the-art laboratories in **Trieste, Italy** (also Headquarters of the Centre), New Delhi, India and Cape Town, South Africa and forms an interactive network with over 65 Member States.
- It plays a **key role in Biotechnology worldwide** for excellence in Research, Training and Technology Transfer to industry to contribute in concrete terms to the achievement of sustainable global development and operates within the United Nations System.

Note:



Krishi Vigyan Kendra (KVK) Conference 2020

Why in News

The 11th National Krishi Vigyan Kendra (KVK) Conference was held in New Delhi.

Krishi Vigyan Kendra (KVK)

- KVK is an integral part of the **National Agricultural Research System (NARS)**.
- It aims at assessment of location specific technology modules in agriculture and allied enterprises, through technology assessment, refinement and demonstrations.
- KVKs also produce quality technological products (seed, planting material, bio-agents, livestock) and make it available to farmers.
- The KVK scheme is **100% financed by the Government of India** and the KVKs are sanctioned to Agricultural Universities, ICAR institutes, related Government Departments and Non Government Organizations (NGOs) working in Agriculture.
- The **first KVK** was established in **1974 at Puducherry**.
- KVKs act as a bridge between the laboratories and farmland. These are crucial to fulfilling the target of doubling farmers' income by 2022.

Developments in Agriculture

- R&D has been done in the Agriculture sector.
 - Superior crop varieties have been released. (Eg:- Wheat: HD 4728 (Pusa Malvi)).
 - 171 mobile apps developed for farmers. (Eg:-Kisan Suvudha).
 - More than three lakh Common Service Centres (CSCs) opened.
 - eNAM portal has been created so that the farmer gets a better price for his produce.

Note:

- It is estimated that India's agriculture and allied sector accounts only for around 14% of the country's economy but for 42% of total employment.
- It is a matter of concern that within this sector, the contribution of Agriculture alone is lower than that of Horticulture, Fisheries and even Animal Husbandry.

Tirur Vettilla

Tirur vettilla has obtained a **Geographical Indication (GI) tag**.

- Tirur Vettilla is a type of betel leaf which is grown in **Tirur and nearby areas of Malappuram district of Kerala**.

- Tirur Vettilla is unique for its significantly **high content of total chlorophyll and protein** in fresh leaves.



- Tirur vettilla possesses some special biochemical characters like **unique flavour and aroma**.
- **Eugenol** is the major essential oil in Tirur betel leaf contributing to its pungency.
- The leaves are **nutritive and contain anticarcinogens**, showing future opportunities in anticancer drugs.
- Betel vine was reported to have immunosuppressive activity and antimicrobial property.
- The Intellectual property rights (IPR) Cell of Kerala Agricultural University has received National IP Award, 2019 of Government of India its efforts in the facilitation of GI Registration.

Other GI Products from Kerala

- Kaipad rice, Pokkali rice, Wayanad Jeerakasala rice, Wayanad Gandhakasala rice, Vazhakulam pineapple, Marayoor jaggery, Central Travancore jaggery and Chengalikodan nendran.

Arab World's First Nuclear Power Plant

Why in News

Recently, the **United Arab Emirates (UAE)** has issued an **operating licence** for the **Arab world's first nuclear power plant**, paving the way for it to start production in 2020.

Note:

Key Points

- The **Barakah nuclear power plant** in **Abu Dhabi** is being built by **Korea Electric Power Corporation (KEPCO)**, was originally due to open in 2017.
- Barakah will have **four reactors** with a **total capacity of 5,600 megawatts**. It will be almost a **fifth of the country's current installed generating capacity**.
- The plant is located on a sparsely populated **strip of desert on the Persian Gulf coast**.

SUTRA-PIC

Why in News

Recently, the **Ministry of Science and Technology** has launched the **"Scientific Utilization through Research Augmentation-Prime Products from Indigenous Cows" (SUTRA-PIC India)**.

- It is one of the research programmes into indigenous cattle announced during the **2019-20 Union Budget**, which aims to develop products as well as improve the genetic quality of indigenous cattle breeds.

Key Points

- It is a **collaborative effort** of the Department of Biotechnology, **the Council of Scientific and Industrial Research**, the **Ministry for AYUSH (Ayurveda, Unani, Siddha, Homoeopathy)** and the Indian Council of Medical Research.
- The department of the **Science for Equity, Empowerment and Development (SEED)**, under the Ministry of Science and Technology, is in charge of the programme.
 - It can be noted that SEED had also constituted a National Steering Committee to initiate a National Programme on **"Scientific Validation and Research on Panchagavya" (SVAROP)** in 2017.
- The programme consists of **five** themes:
 - **Uniqueness** of Indigenous Cows,
 - Prime-products from Indigenous Cows for **Medicine and Health**,
 - Prime-products from Indigenous Cows for **Agricultural Applications**,
 - Prime-products from Indigenous Cows for **Food and Nutrition**,

- Prime-products from indigenous **cows-based utility items**.
- The above themes **aim to perform**,
 - Scientific research on the complete **characterisation of milk and milk products** derived from Indian indigenous cows.
 - Scientific research on **nutritional and therapeutic properties of curd and ghee** prepared from indigenous breeds of cows by traditional methods.
 - Development of standards for traditionally processed dairy products of Indian-origin cows, etc.

Panchagavya

- Panchagavya is an Ayurvedic panacea and is a mixture of five (pancha) products of the cow (gavya) — milk, curd, ghee, dung and urine. Its proponents believe it can cure, or treat a wide range of ailments.

NASA's InSight Mars Mission

- NASA's **Interior Exploration using Seismic Investigations, Geodesy and Heat Transport (InSight)** lander touched down on Mars at the end of 2018.
- It is a two-year mission that will study the deep interior of Mars to learn how all celestial bodies with rocky surfaces, including Earth and the Moon, formed.
 - The InSight mission is part of NASA's **Discovery Program (1992)**.
- InSight is the **first mission** dedicated to looking deep beneath the **Martian surface**.
- Among its science tools are a seismometer for detecting quakes, sensors for gauging wind and air pressure, a magnetometer, and a heat flow probe designed to take the planet's temperature.
- It is being supported by a number of European partners, which include France's Centre National d'Études Spatiales (CNES), the German Aerospace Center (DLR) and the United Kingdom Space Agency (UKSA).
- **Latest Finding**
 - Mars trembles more often than expected but also more mildly. Mars doesn't have tectonic plates like Earth but it does have volcanically active regions that can cause rumbles.



Note:



drishti

Environment and Ecology

Highlights

- CMS COP-13
- Species Included in Appendix I of UNCMS
- Renewable Energy Management Centers (REMCs)
- National Conference on Coastal Disaster Risk Reduction and Resilience
- Analysis of Water in Ulsoor Lake
- International Conference on 'Ensemble Methods in Modelling and Data Assimilation (EMMDA)'
- State of India's Bird 2020
- Fire Lines in Mukurthi National Park
- Madhav National Park
- Pakke Tiger Reserve
- Malai Mahadeshwara Wildlife Sanctuary
- Kawal Tiger Reserve
- Olive Ridley Turtles
- New Species of Urban Lizard
- *Craspedotropis Gretathunbergae*
- *Henneguya Salminicola*
- Kalasa-Banduri Nala Project

CMS COP-13

Why in News

India is hosting the **13th Conference of Parties (COP) of the Convention on the Conservation of Migratory Species of Wild Animals (CMS)** from 17th to 22nd February, 2020 at Gandhinagar in Gujarat.

- **Theme: 'Migratory species connect the planet and we welcome them home'.**
- **Mascot: Gibi-The Great Indian Bustard.**
 - It is a **critically endangered species** (according to the **IUCN**) and has been accorded the highest protection status (listed in **Schedule I**) under the **Wildlife Protection Act, 1972**.

Convention on the Conservation of Migratory Species of Wild Animals

- In order to protect the migratory species throughout their range countries, a **Convention on Conservation of Migratory Species (CMS)**, has been in force since 1983, under the aegis of the **United Nations Environment Programme**.
- Also referred to as **the Bonn Convention**, it provides a global platform for the conservation and sustainable use of migratory animals and their habitats and brings together the States through which migratory animals pass. It lays the legal foundation for internationally

coordinated conservation measures throughout a migratory range.

- Under this convention, migratory species threatened with extinction are listed on **Appendix I** and parties strive towards strictly protecting these animals, conserving or restoring the places where they live, mitigating obstacles to migration and controlling other factors that might endanger them.
- Migratory species that need conservation and management or would significantly benefit from international co-operation are listed in **Appendix II of the Convention**.
- India has signed a **non-legally binding** Memorandum of Understanding (MoU) with CMS on the conservation and management of **Siberian Cranes (1998)**, **Marine Turtles (2007)**, **Dugongs (2008)** and **Raptors (2016)**.
 - India is a temporary home to several important migratory animals and birds: **Amur Falcons**, **Bar-headed Geese**, **Black-necked cranes**, **Marine turtles**, **Dugongs**, **Humpback Whales**, etc.

Species Included in Appendix I of UNCMS

Why in News

The **Great Indian Bustard**, **Asian Elephant** and **Bengal Florican** have been included in **Appendix I of UN Convention on Migratory Species** at the ongoing **13th**

Note:

Conference of the Parties (COP) to the Convention on Migratory Species (CMS) in Gandhinagar (Gujarat).

- India's proposal to include all the three species in the Appendix I was **unanimously accepted** by the **13th COP to the CMS**.
- A migratory species may be listed in **Appendix I** provided that the best scientific evidence available indicates that the **species is endangered**.

Asian Elephant

- **India** is the **natural home of the largest population of Asian elephants**. It is also found in **Nepal, Bangladesh, Bhutan and Myanmar**.
- It usually resides in shrublands, artificial/terrestrial forests and grasslands.
- It is listed as **'Endangered'** on the **IUCN Red List of threatened species**. It is also listed in **Appendix I** of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (**CITES**) and **Schedule I** of the **Wildlife (Protection) Act, 1972**.
- The challenges confronting Asian elephant conservation in most elephant Range States are habitat loss and fragmentation, human-elephant conflict, and poaching and illegal trade of elephants.

Great Indian Bustard

- The Great Indian Bustard is one of the **heaviest flying birds in the world**.
- It usually resides in dry grasslands and scrublands on the **Indian subcontinent**; its **largest populations** are found in the Indian state of **Rajasthan**.
 - The Great Indian Bustard is the **state bird of Rajasthan**.
- It is listed as **'Critically Endangered'** on the **IUCN Red List**. It is also listed in **Appendix I** of CITES and **Schedule I** of the Indian Wildlife (Protection) Act, 1972.
- 90% of its population has been reduced within 50 years (six generations) majorly due to **poaching**.

Bengal Florican

- The species has two disjunct populations, one in the **Indian Subcontinent**, the other in **South-East Asia**. The former occurs in Indian Subcontinent mainly in India (**Uttar Pradesh, Assam and Arunachal Pradesh**) and **terai region of Nepal**.
- It inhabits lowland dry, or seasonally inundated, natural and semi-natural grasslands, often interspersed with scattered scrub or patchy open forest.

- It has been listed as **'Critically Endangered'** on the **IUCN Red List**. The bird is listed under **Schedule I** of the Wildlife Protection Act of India, 1972 and **Appendix I** of CITES
- It has a very small, rapidly declining population largely as a result of widespread **loss of its grassland habitat**.

Renewable Energy Management Centers (REMCs)

Why in News

Recently, the **Northern Region Renewable Energy Management Centre (NR-REMC)** was inaugurated at a function in New Delhi.

Key Points

- Renewable Energy Management Centers (REMCs)
 - They are equipped with **Artificial Intelligence based Renewable Energy (RE)** forecasting and scheduling tools.
 - They provide greater visualization and enhanced situational awareness to the grid operators.
- Presently, **55 GW of Renewable** (Solar and Wind) is being monitored through the **eleven REMCs**, located in Tamil Nadu, Karnataka, Andhra Pradesh, Maharashtra, Madhya Pradesh, Gujarat, Rajasthan.
- The Government of India had approved the implementation of the REMCs as a **Central Scheme** and had mandated POWERGRID, a Maharatna CPSE under **Ministry of Power** as an **implementing agency**.
- **Need:** The Government of India's target of **175 GW Renewable Energy (RE)** capacity by **2022** driving accelerated RE penetration poses challenges to the grid management due to intermittent and variable nature of RE generation. REMCs will help grid operators.

National Conference on Coastal Disaster Risk Reduction and Resilience

Why in News

Recently, the **first 'National Conference on Coastal Disaster Risk Reduction and Resilience (CDRR&R) – 2020'** was held in **New Delhi**.

Note:



- The one-day conference was organised by the **National Institute of Disaster Management (NIDM)**.

Key Takeaways

- **Enhancement of human capacity** in terms of a better understanding of coastal disaster risks and effective collaborative actions.
- **Dissemination of information** related to national and local strategies for coastal disaster risk reduction and resilience as well as to develop a network mode roadmap for addressing the gaps by engaging with the institutions, researchers and experts.
- Implementation of the **Prime Minister's 10-point agenda** and **Sendai Framework for Disaster Risk Reduction**.

The Prime Minister's 10-point Agenda

- The Prime Minister had listed the agenda during his inaugural speech at the **Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR) 2016**, held in **New Delhi**.
- It includes the **following elements** namely.
 1. All development sectors must imbibe the **principles of disaster risk management**.
 2. **Work towards risk coverage for all**-starting from poor households to SMEs to multinational corporations to nation-states.
 3. Encourage greater involvement and **leadership of women** in disaster risk management.
 4. Invest in **risk mapping** globally.
 5. **Leverage technology** to enhance the efficiency of our disaster risk management efforts.
 6. Develop a **network of universities** to work on disaster issues.
 7. Utilise the **opportunities provided by social media** and mobile technologies.
 8. Build on **local capacity and initiative**.
 9. Opportunity to **learn from a disaster** must not be wasted. After every disaster there are papers on lessons that are rarely applied.
 10. Bring about greater **cohesion in the international response to disasters**.

Sendai Framework for Disaster Reduction 2015-30

- It was **adopted at the Third United Nations World Conference on Disaster Risk Reduction**, held from March 14 to 18, 2015 in Sendai, Miyagi, Japan.

- It aims to guide the multi-hazard management of disaster risk in development at all levels as well as within and across all sectors.
- It is the **successor instrument to the Hyogo Framework for Action (HFA) 2005-2015**: Building the Resilience of Nations and Communities to Disasters.

National Institute of Disaster Management

- The National Institute of Disaster Management (NIDM) was constituted under the **Disaster Management Act 2005** with a vision to play the role of a premier institute for capacity development in India and the region.
- It has been assigned nodal responsibilities for human resource development, capacity building, training, research, documentation and policy advocacy in the field of disaster management.

Analysis of Water in Ulsoor Lake

Why in News

The **National Green Tribunal (NGT)** has directed the **constitution of a joint committee to take samples of water from Bengaluru's Ulsoor lake** and neighbouring areas.

- It has been reported that the water quality has come down due to illegal activities being carried out while discharging untreated sewage, effluents and the dumping of garbage into the water body.
- Such activities affect the quality of the water and the ecology and aquatic life, much required for ecological sustenance.

Components of Water Analysis

- **Biochemical Oxygen Demand (BOD)**
 - It is the amount of dissolved oxygen used by microorganisms in the biological process of metabolizing organic matter in water.
 - The more organic matter there is (e.g. in sewage and polluted bodies of water), the greater the BOD and the greater the BOD, the lower the amount of dissolved oxygen available for higher animals such as fishes.
 - The BOD is, therefore, a reliable gauge of the organic pollution of a body of water.

Note:

National Green Tribunal

- **NGT** was established in the year **2010** under the **National Green Tribunal Act 2010**.
- **Aims:**
 - Effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources.
 - Enforcement of any legal right relating to the environment.
 - Giving relief and compensation for damages to persons and property and for matters connected therewith or incidental thereto.
- It is a specialized body equipped with the necessary expertise to handle environmental disputes involving multi-disciplinary issues.
- The Tribunal is guided by **principles of natural justice**.
 - One of the **main reasons for treating wastewater prior to its discharge into a water resource is to lower its BOD** — i.e. reducing its need of oxygen and thereby minimising its demand from the streams, lakes, rivers or estuaries into which it is released.
- **Chemical Oxygen Demand (COD)**
 - It is a method of estimating how much oxygen would be depleted from a body of receiving water as a result of bacterial action.
- **Coliforms**
 - Water pollution caused by faecal contamination is a serious problem due to the potential for contracting diseases from pathogens (disease-causing organisms).
 - The presence of pathogens in the water is determined with indirect evidence by testing for an "indicator" organism such as coliform bacteria.
 - Coliforms are bacteria that are always present in the digestive tracts of animals, including humans and are found in their wastes. They are also found in plant and soil material.
- **Presence of any heavy metals like Arsenic, Phosphorus, etc.**
 - Heavy metals are known to induce cardiovascular diseases, developmental abnormalities neurologic and neurobehavioral disorders, diabetes, hearing loss, hematologic and immunologic disorders.
 - Studies have shown that toxic heavy metals can interfere with absorption and use of nutritionally

essential metals such as iron, calcium, copper, and zinc.

International Conference on 'Ensemble Methods in Modelling and Data Assimilation (EMMDA)'

Why in News

An international conference on "Ensemble Methods in Modelling and Data Assimilation (EMMDA)" is being organised by the National Centre for Medium Range Weather Forecasting (NCMRWF) from 24th -26th February, 2020 in Noida.

- Ensemble Prediction Systems (EPS) are Numerical Weather Prediction (NWP) systems that allow one to estimate the uncertainty in a weather forecast as well as the most likely outcome.
- India has recently operationally implemented two global EPS which have the highest resolution in the world and also a regional EPS of horizontal resolution 4km which covers the Indian region.
- The Ministry of Earth Sciences (MoES) provides weather and climate services. Both operational and research aspects for these services are implemented through its constituent units like **Indian Meteorological Department (IMD)**, NCMRWF, Indian Institute of Tropical Meteorology (IITM), Pune and Indian National Centre for Ocean Information Services (INCOIS), Hyderabad.

National Centre for Medium Range Weather Forecasting

- The National Centre for Medium Range Weather Forecasting (NCMRWF) is a centre of excellence in weather and climate modelling under the Ministry of Earth Sciences.
- The mission of the Centre is to continuously develop advanced numerical weather prediction systems, with increased reliability and accuracy over India and neighbouring regions through research, development and demonstration of new and novel applications, maintaining the highest level of knowledge, skills and technical bases.
- It is located in Noida, Uttar Pradesh.

Note:



State of India's Bird 2020

Why in News

Recently, the **State of India's Bird 2020** was released at the **13th Conference of Parties of the Convention on the Conservation of Migratory Species of Wild Animals** which is taking place in Gandhinagar, Gujarat.

- The **first-of-its-kind analysis** was carried out by **ten research and conservation organisations across India**.
- It used a massive database of over **10 million observations** uploaded by 15,000 birdwatchers on the **online platform (e-Bird)** and 'citizen science data' to assess the distribution and trends of **common Indian birds**.

Key Points

- **Declining trend:**
 - The groups that show the **greatest decline** are raptors, migratory shorebirds, and habitat specialists, including White-rumped Vulture, Richard's Pipit, Indian Vulture, Large-billed Leaf Warbler, Pacific Golden Plover and Curlew Sandpiper.
- **Increasing Trend:**
 - The species that have shown an **increase in numbers** include Rosy Starling, Feral Pigeon, Glossy Ibis, Plain Prinia and the Ashy Prinia.
- **Categorisation of Birds:**
 - The study categorised **101** species as "**high concern**", **319** as "**moderate concern**" and **442** into "**low concern**".
 - Out of the species categorised as a high concern, 26% are classified globally by IUCN as "least concern".

Analysis of Species

- **Indian Peacocks:**
 - The numbers of **India's national bird, the Indian Peacock**, has **increased** dramatically over the past few decades.
 - The increase in numbers of the species has been attributed to a combination of the **bird expanding its range** (earlier it was absent in Kerala), **conservation efforts** and associated **penalties for poaching** under **Schedule I of the Wildlife Act**.
 - It is listed as '**Least Concern**' on the **IUCN Red List**.
- **Indian vultures:**

- It has experienced catastrophic **population declines** starting in the early 1990s.
- The declines are almost entirely attributable to inadvertent poisoning by the livestock **anti-inflammatory drug diclofenac**.
- Surveys conducted have shown that **White-rumped Vulture** has **suffered the most severe declines**, followed by **Indian Vulture** and **Egyptian Vulture**.

➤ House Sparrow:

- The House Sparrow has been found to be **stable across the country** as a whole, although **declining in the major cities**.
 - It has been declared as the "**State Bird of Delhi**" to save the species and enhance awareness about their life and habitat.
- The reasons for the decline include **decreasing insect populations** (a key part of the diet of sparrow chicks) and **paucity** of suitable **nesting sites**.
- Moreover, the popular theory that radiation from mobile phone towers is a factor is **not supported** by the findings of this report.

➤ Bustards in India:

- All the four species of bustards in India (the **Great Indian Bustard**, Macqueen's Bustard, Lesser Florican and Bengal Florican) have suffered **continuous population declines**.
- The decline is observed due to historical hunting and widespread habitat loss, with their slow growth and reproduction.

➤ Waterbirds:

- It showed overall **long-term declines**, amongst which migratory shorebirds and gulls and terns appear to have declined the most.
- Overall, migratory species (both long-distance and within-subcontinent) show steeper declines than residents.

Key Recommendations

- Updation of global and national priorities using conservation assessments.
- Fund conservation efforts on High Concern species and habitats where species have declined.
- Support monitoring efforts by citizen scientists and researchers.
- Promote collaborations between researchers and the public at large.

Note:

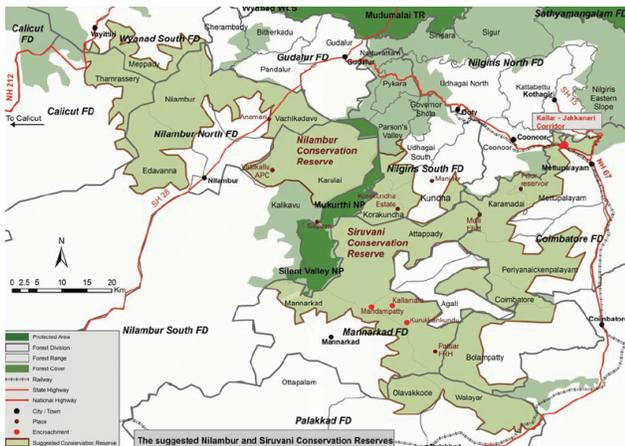
Fire Lines in Mukurthi National Park

Why in News

Ahead of summer and peak fire season, 'fire lines' or 'fire breaks', in the **Mukurthi National Park (MNP)** are being constructed by the Tamil Nadu government.

Key Points

- **Fire line** is an **artificially** formed break in foliage or forest cover **to control the spread of wildfires** by limiting the amount of combustible vegetation available.
- Other Measures Being Taken to Control Wildfires in the Park:
 - **Cool burning** is done in a controlled manner by artificially creating small, localised fires to limit the amount of vegetation available in any given area. It means that any fires will not have any build-up of "vegetative fuel" to use to become a large, uncontrollable fire.



Mukurthi National Park

- Mukurthi National Park (MNP) is located in the northwest corner of **Tamil Nadu** in the **Western Ghats**.
- It is a part of **Nilgiri Biosphere Reserve** (UNESCO World Heritage Site) along with **Mudumalai Wildlife Sanctuary**, Bandipur National Park, Nagarhole National Park, Wayanad Wildlife Sanctuary and Silent Valley.
- The park was created to protect its **keystone species**, the **Nilgiri Tahr**.

- There has been almost a 27% increase in the population of the Tahr in the Nilgiris over the last few years.

- The park is characterised by montane grasslands and shrublands interspersed with sholas in a high altitude area of high rainfall, near-freezing temperatures and high winds.
- The Park is also home to Mukurthi Peak, one of the highest peaks in the Nilgiri Hills.
- Tribes Living Inside: **Todas**
 - Todas are a pastoral tribe of the Nilgiri Hills.

Madhav National Park

- Madhav National Park is situated in **Shivpuri District, Madhya Pradesh**.
- It is a part of the **upper Vindhyan hills**.
- The Park was the hunting ground of Mughal emperors and Maharaja of Gwalior. It got the status of a National Park in 1959.
- It has a diverse ecosystem consisting of lakes, dry deciduous & dry thorn forests.
- **Tiger Corridor:** The Park falls within **one of the 32 major Tiger Corridors** of the country, which are operationalised through the Tiger Conservation Plan. Tiger Conservation Plan is implemented under the **Wildlife (Protection) Act, 1972**.
 - Madhav National Park is a part of the **Ranthambhore-Kuno-Madhav (Madhya Pradesh and Rajasthan) Tiger Corridor** of Central India & Eastern Ghats landscape.
 - India's tiger landscapes are: Shivalik Hills and Gangetic Plains, Central Indian Landscape and Eastern Ghats, Western Ghats, and North-East.
- The Park is currently facing displacement and rehabilitation issues as it is home to **Particularly Vulnerable Tribal Groups (PVTG)s** like **Saharia**.
 - PVTGs have some basic characteristics - they are mostly homogenous, with a small population, relatively physically isolated, absence of written language, relatively simple technology and a slower rate of change etc.
- **Other National Parks in Madhya Pradesh:** Bandhavgarh, Kanha NP, Panch (Priyadarshini) NP, Panna NP, Mandla Plant Fossils NP, Sanjay NP, Satpura NP, Van Vihar NP.

Note:

Pakke Tiger Reserve (PTR)

Why in News

The Government of Arunachal Pradesh is planning to build a 692.7 km highway through the 862 sq km **Pakke Tiger Reserve** in East Kameng district, **Arunachal Pradesh**.

- Named the East-West Industrial Corridor, the highway aims to connect Arunachal Pradesh with Assam. However, the project makes no mention of compensation for people likely to be displaced.
- It has been argued that corridor will also be a threat to the adjoining **Nameri Tiger Reserve in Assam**.

Pakke Tiger Reserve

- Pakke Tiger Reserve (declared in 1999 - 2000) lies in the foothills of the eastern Himalaya in the East Kameng district of Arunachal Pradesh. It is also known as **Pakhui Tiger Reserve**.
- It falls within the **Eastern Himalaya Biodiversity Hotspot**.
- It is home to over 2000 species of plants, 300 species of birds, 40 species of mammals, 30 species of amphibians and 36 species of reptiles. Many species of the flora and fauna are globally threatened, and PTR is one of the last remaining strongholds left for these species.
- It is known for its amazing sightings of four resident hornbill species.

Hornbill in India

- India is home to nine species of hornbills.
- The northeastern region has the highest diversity of hornbill species within India.
- The great hornbill is the **state bird of Arunachal Pradesh and Kerala**. It is 'vulnerable' under the IUCN Red list.
- The **Hornbill festival** celebrated in **Nagaland** is named after the bird – Hornbill which is the most revered and admired bird for the Nagas.

Nameri Tiger Reserve

- Nameri Tiger Reserve (declared in 1999-2000) is located in the foothills of the eastern Himalayas in the Sonitpur district of the state of **Assam**.
- It is on the **interstate border with Arunachal Pradesh**. The Pakke Tiger Reserve of Arunachal Pradesh adjoins it on its north-eastern point.

- The river **Jia-Bhareli (a tributary of Brahmaputra River) with its tributaries**, the Nameri, Upper Dikorai and Bor Dikorai flow through the Reserve.
- Besides Tiger, the reserve is also home to the sambar, barking deer, wild boar and bison.

Malai Mahadeshwara Wildlife Sanctuary

Why in News

The **Malai Mahadeshwara Wildlife Sanctuary will be declared as a tiger reserve soon**.

- Also, with this notification, **Karnataka will have six tiger reserves**, the others being Nagarahole, Bhadra, and Anshi-Dandeli, **Bandipur** and Biligiri Ranganatha Temple (BRT) Tiger Reserves.

Key Points

- Malai Mahadeshwara Wildlife Sanctuary is **located in the Chamara Nagar district of Karnataka**.
- It is **spread over 906.18 sq km** – is contiguous to BRT Tiger Reserve, Sathyamangalam Tiger Reserve (Tamil Nadu) and the **Cauvery Wildlife Sanctuary** (Karnataka).
- The **area was declared as Wildlife Sanctuary in 2013**.
- It consists mainly of **dry deciduous type** degrading to scrub forest in the fringe areas, and are interspersed with patches of moist deciduous, semi-evergreen, evergreen and shola forests occurring at varying altitudes.
- **Animals** including tiger, elephant, leopard, wild dog, bison, sambar, spotted deer, barking deer, sloth bear, wild boar, four-horned antelope, black-naped hare, common langur, bonnet macaque, honey badger (ratel), varieties of reptiles, birds, etc. are found in the wildlife sanctuary.

Kawal Tiger Reserve

- Kawal Tiger Reserve is located at **Adilabad district in Telangana state of India**.
- The Government of India **declared** Kawal wildlife sanctuary as **Tiger Reserve in 2012**.
 - The Kawal wildlife sanctuary was established in 1965 and later declared as the Protected Area (PA) in 1999 under the Wildlife Protection Act, 1972.

Note:

- **Flora:** Dry Deciduous Teak Forests mixed with Bamboo.
- **Fauna:** Mammal species that have been sighted include tiger, leopard, gaur, cheetal, sambar, nilgai, barking deer, chowsingha, sloth bear.
- The River **Kadam (a tributary of Godavari)** flows through this area.
- The area is increasingly getting threatened by growing human encroachments, rampant poaching, illegal wood felling and habitat loss.

Olive Ridley Turtles

Why in News

Preparations are almost done at the Rushikulya rookery on the Odisha coast to welcome and protect olive ridley turtles during mass nesting.

Key Points

- Olive Ridley Turtles are the **smallest and most abundant of all sea turtles** found in the world, inhabiting warm waters of the Pacific, Atlantic and Indian oceans.
- These turtles, along with the Kemps ridley turtle, are best known for their **unique mass nesting called Arribada** (An arribada is a mass-nesting event when thousands of turtles come ashore at the same time to lay eggs on the same).
- They are carnivores.
- **Protection**
 - **Vulnerable** according to the **International Union for Conservation of Nature and Natural Resources (IUCN)**.
 - Listed in **Appendix I** of **CITES**.
 - Under **Schedule 1** of the **Wildlife Protection Act, 1972**.
- **Threats**
 - Unfriendly fishing practices.
 - The accidental killing of adult turtles through entanglement in trawl nets and gill nets due to uncontrolled fishing during their mating season around nesting beaches.
 - The Odisha government has made it mandatory for trawls to use **Turtle Excluder Devices (TEDs)**, a net specially designed with an exit

cover which allows the turtles to escape while retaining the catch.

- However, this has been strongly opposed by the fishing communities as they believe TEDs result in loss of a considerable amount of the catch along with the turtle.
- Development and exploitation of nesting beaches for ports and tourist centres.

Note:

- The **coast of Odisha in India** is the **largest mass nesting site** for the Olive-ridley, followed by the coasts of Mexico and Costa Rica.

Rushikulya River

- It originates from **Rushikulya hills** of the Eastern Ghats in Phulbani district (**Odisha**).
- It is 165 kms. long with 8900 sq.kms of catchment areas.
- It covers the entire catchment area in the districts of Kandhamal and Ganjam district of Odisha.

New Species of Urban Lizard

- A new species of lizard, the urban **bent-toed gecko (Cyrtodactylus urbanus)** was discovered in **Guwahati, Assam**.
- The bent-toed gecko was earlier thought to be the same as the Khasi Hills lizard.
 - All bent-toed geckos in Northeast India were thought to be a single species, the *Cyrtodactylus khasiensis* found primarily in the Khasi Hills of Meghalaya.
- Although the urban bent-toed gecko falls within the *khasiensis* group, it differs from other members of this group in mitochondrial sequence data and aspects of morphology (Branch of biology that deals with form and structure of plants and animals).



Gecko

- Geckos are (suborder Gekkota), any of more than 1,000 species of lizards making up 6 families of the suborder Gekkota.
- Geckos are mostly small, usually nocturnal reptiles with soft skin.

Note:

Craspedotropis Gretathunbergae

A group of scientists have recently discovered a **new species of land snail in Brunei**.

- The new species reside in tropical rainforests and are sensitive to drought and extreme temperatures (which have become more frequent due to climate change).
- Hence as an honour to **Swedish Climate Change activist Greta Thunberg**, who has been making efforts to raise awareness about climate change, the new snail species was named as *Craspedotropis Gretathunbergae*.
- Recently, a **tiny species of beetle** was also named after her as *Nelloptodes Greta*.
 - In 2018, a **new species of beetle (Grouvellinus Leonardo DiCaprio)** was named after the actor Leonardo DiCaprio (an American actor, producer, and environmentalist).

Henneguya Salminicola

- Scientists have discovered an animal *Henneguya Salminicola* which does not need oxygen to produce the energy needed for its survival.
- It is a tiny, less than **10-celled parasite** which lives in the muscles of salmon fish.
- It **does not have a mitochondrial genome**.
 - Mitochondria is the “powerhouse” of the cell, which captures oxygen to make energy.
 - Its absence indicates that the parasite does not breathe oxygen.
- It is a relative of jellyfish and corals and as it evolved, it gave up breathing and consuming oxygen or became anaerobic to produce energy.
- However, it is not yet clear how the parasite generates energy. It may be drawing it from the surrounding fish cells or it may have a different type of respiration such as oxygen-free breathing, which typically characterises anaerobic non-animal organisms like fungi, amoebas or ciliate lineages.
- The discovery bears enormous significance for evolutionary research.

- Aerobic respiration was thought to be prevalent in animals but now it is confirmed that animals can survive with anaerobic respiration.

Kalasa-Banduri Nala Project

Why in News

The cost of the **Kalasa-Banduri Nala project on the Mahadayi basin** has risen from about ₹94 crores (2000) to ₹1,677.30 crores (2020) due to the ongoing inter-State river water dispute.

Mahadayi River

- Mahadayi or Mhadei, the west-flowing river, originates in **Bhimgad Wildlife Sanctuary (Western Ghats)**, Belagavi district of **Karnataka**.
- It is essentially a rain-fed river **also called Mandovi in Goa**.
- It is joined by a number of streams to form the Mandovi which is one of two major rivers (the other one is Zuari river) that flows through Goa.
- The river travels 35 km in Karnataka; 82 km in Goa before joining the **Arabian Sea**.



Kalasa-Banduri Nala Project

- It is undertaken by the Government of Karnataka to improve drinking water supply to the three districts of Belagavi, Dharwad, and Gadag.
- It involves **building across Kalasa and Banduri, two tributaries of the Mahadayi river to divert water to the Malaprabha river (a tributary of Krishna river)**.
- Malaprabha river supplies the drinking water to Dharwad, Belgaum, and Gadag districts.

Note:

- Kalasa-Banduri project was **planned in 1989**; Goa raised an objection to it.
 - The **Mahadayi Water Disputes Tribunal** was set up in **2010**. Goa, Karnataka and Maharashtra are parties to the tribunal.

Paparva Island

- Paparva Island is **located between Kandla port and Navlakha port**, in the **Gulf of Kutch** (Gujarat).

- The island is **uninhabited** but local fishermen go there to dry their fish.
- **Gulf of Kutch**: It is the northeastern arm of the **Arabian Sea**, extending between the Rann of Kachchh (a saline mudflat) and the Kāthiāwār Peninsula of west-central India.
- **Kandla**, also known as the **Deendayal Port Trust** is a seaport in Kutch District of Gujarat, near the city of Gandhidham.
 - It is **one of the major ports** on the west coast.



Note:



drishti

Art & Culture

Highlights

- Battle of Gallipoli
- Archaeological Site near Varanasi
- Kambala
- Hampi
- Yakshagana
- Korku Tribe

Battle of Gallipoli

Why in News

India has objected to **Turkey President's comparison of the Kashmir situation to the Battle of Çanakkale/Gallipoli of World War I (1914–18)**. He has compared the struggle of Kashmiris with that of Turkey during World War I.

- Earlier in September, 2019 Turkey had raised the Kashmir issue in the United Nations General Assembly.

Key Points

- **Gallipoli Campaign (1915-16):** The Battle of Gallipoli or the Dardanelles Campaign was an **unsuccessful attempt by the Allied Powers** to control the sea route from Europe to Russia during World War I.
- The campaign began with a failed naval attack by British and French ships on the Dardanelles Straits (connecting the Sea of Marmara to the Aegean Sea and the Mediterranean Sea) involving British and French troops as well as divisions of the Australian and New Zealand Army Corps (ANZAC). ANZAC corps was created early in World War I (1914–18).
- **Failure:** Lack of sufficient intelligence and knowledge of the terrain, along with a fierce Turkish resistance (Ottoman army), hampered the success of the invasion.
- **Result:** It is considered to be **one of the bloodiest battles of World War I** leading to the death of tens of thousands of soldiers on both sides.
- **Legacy of the Battle:** The Battle resulted in the downfall of Winston Churchill (British) and the emergence of the Turkish military hero, Mustafa Kemal Atatürk.
 - The event is today one of the central pillars of the modern Turkish identity.



- The campaign is also seen to have seeded Australian and New Zealand national consciousness.
- The date of the Gallipoli landings i.e April 25, 1915 is observed by Australia and New Zealand as ANZAC Day, the day of national remembrance for the war dead.

World War I

- **World War I** was fought between the Allied Powers and the Central Powers.
- **Allied Powers:** The main members were France, Russia, and Britain. The United States joined the Allies after 1917.
- **Central Powers:** The main members were Germany, Austria-Hungary, the Ottoman Empire, and Bulgaria.

Archaeological Site near Varanasi

Why in News

A nearly **4,000-year-old urban settlement** has been unearthed in **Babhaniyav village (13 km from Varanasi,**

Note:



drishti

Uttar pradesh) by a team of surveyors from the Banaras Hindu University (BHU).

- The unearthed site could be one of the craft villages mentioned in ancient texts.
 - During the age of Buddha, there were suburban villages which were in the nature of craft villages, for instance, a carpenter's village, or chariot-maker's village in the vicinity of Varanasi.
 - Crafts villages have been earlier unearthed in Sarnath, Tilmapur and Ramnagar - Uttar Pradesh.
- Initial survey of the site in **Babhaniyav village** had found a temple dating back to the **5th Century AD through 8th Century AD**, potteries which are 4000-year-old and walls which are 2000-year-old.
- Surveyors have also found a pillar with a two-line text in the **Kushan-Brahmi script**.
 - The **Kushan dynasty** ruled over most of the **northern Indian subcontinent**, Afghanistan, and parts of Central Asia during 1st century AD - 3rd Century AD.
 - The inscriptions issued by the Kushan rulers or in areas under their rule include texts in Bactrian, written in Greek script, and in Prakrit written in Brāhmī or Kharoṣṭhī script.
- The findings are important as Babhaniyav could have been a satellite town and feeding centre for the **Varanasi-Sarnath region**.
 - A satellite town is a smaller city that is near a large(r) metropolis. It has all the necessary amenities and facilities present within its limits except for a few purposes like employment and sometimes education, it has to depend on the larger city.

Kambala

- Kambala is a traditional buffalo race in paddy fields filled with slush and mud which generally takes place in coastal Karnataka (Udupi and Dakshina Kannada) from November to March.
 - Traditionally, it is sponsored by local Tuluva landlords and households in the coastal districts. Tuluva people are an ethnic group native to Southern India. They are native speakers of the **Tulu language**.
 - During the race, the racers try to bring the buffaloes under control by holding their reins tight and whipping them.

- **Tradition:** In its traditional form, Kambala was non-competitive and buffalo pairs raced one after another in paddy fields.
 - It was also observed as thanksgiving to gods for protecting the animals from diseases.
- **Concerns:** Animal activists criticize the sport and argue that the Kambala involves acts of cruelty on animals which are not physiologically suited for racing and they run in the race due to fear of being beaten.
 - According to them, it **violates the Prevention of Cruelty to Animals (PCA) Act, 1960**. The Act prevents practices which involve unnecessary pain to the animal amounting to cruelty.



Recent Controversy

- The **Supreme Court had banned** jallikattu, bullock-cart races, and kambala events in its judgement on May 7, 2014.
- The judgement upheld the Constitution of India read with legislation under the Prevention of Cruelty to Animals Act, 1960 and provided animals with the fundamental right to be treated with compassion and dignity and to be free from unnecessary pain and suffering
- However, the **Prevention of Cruelty to Animals (Karnataka Amendment) Ordinance, 2017** approved the organising of kambala event, provided steps are taken to avoid cruelty to the participating bulls.

Jallikattu

- **Jallikattu** is a **traditional bull-taming event** that is organised in the **Tamil Nadu** every year as part of the harvest festival Pongal.
- The sport requires fighters to pounce on a running bull, try to hold on to its hump and move along with the animal without falling or getting hurt.

Note:

Hampi

Why in News

The Archaeological Survey of India (ASI) is about to install a wooden barricade around the stone chariot inside Vittala Temple complex at the **UNESCO World Heritage site** of Hampi to protect it from damage.

Hampi

- Hampi is the 14th century capital of the Vijayanagar Empire, located in the Tungabhadra basin in Central Karnataka.
- Vittala Temple Complex is the finest example of Vijaynagar Temple Architecture, raised by Krishnadeva Raya (A.D. 1509-30) .

Vijayanagar Empire

- Vijayanagara or “city of victory” was the name of both a city and an empire.
- The empire was founded in the fourteenth century (1336 AD) by Harihara and Bukka of Sangama dynasty. They made Hampi as the capital city.
- It stretched from the river Krishna in the north to the extreme south of the peninsula.
- Vijayanagar Empire was ruled by four important dynasties and they are:
 - Sangama
 - Saluva
 - Tuluva
 - Aravidu
- Krishnadevaraya (ruled 1509-29) of the Tuluva dynasty was the most famous ruler of Vijayanagar.
- He composed a work on statecraft in Telugu known as the Amuktamalyada.
- Temples of Hampi are noted for their large dimensions, florid ornamentation, bold and delicate carvings and stately pillars which include subjects from the Ramayana and the Mahabharata.
- Majority of these temples in Hampi were provided with widespread bazaars flanked on either side by storied Mandapas.

- The Mahanavami Dibba, a variety of ponds and tanks, and the row of pillared Mandapas are some of the important architectural remains of Hampi.
- In 1986, Hampi was declared a World Heritage site by UNESCO.

Yakshagana

- It is a **traditional theatre** form of **Karnataka**.
- It is a **temple art** form that depicts **mythological stories** and **Puranas**.
- It is performed with massive headgears, elaborate facial make-up and vibrant costumes and ornaments.
- Usually recited in **Kannada**, it is also performed in Malayalam as well as Tulu (the dialect of south Karnataka).
- It is performed with **percussion instruments** like chenda, maddalam, jagatta or chengila (cymbals) and chakratala or elathalam (small cymbals).

Korku Tribe

- The Korku mostly resides in the Madhya Pradesh, Chhattisgarh, and adjoining Melghat region of Maharashtra.
- The Korku are primarily cultivators. They are also excellent agriculturalists and have pioneered the cultivation of potato and coffee.
- They live in small groups of huts made of grass and wood.
- **Korku is one of the 196 languages termed endangered by UNESCO.**
 - A few groups have been more successful in preserving their language, especially the **Potharia Korku** (from the Vindhya mountains).
- The community has a distinct cultural heritage. The traditional healing methods are still widely practiced among them.
- The Korku regard their dead as Gods. To commemorate the dead, they install a memorial pillar, which is called **Munda**.



Note:



drishti

Social Issues

Highlights

- GoM Reviews Amendments to the JJ Act, 2015
- Assisted Reproductive Technology Regulation Bill, 2020
- Cabinet Approves Bill to Regulate Surrogacy
- Private Member Bill for Two-Child Policy Norm
- 'A Future for the World's Children' Report
- Increasing Neonatal Deaths in MP
- CHILDLINE India Foundation

GoM Reviews Amendments to the JJ Act, 2015

Why in News

Recently, a **Group of Ministers (GoM)** chaired by the Home Minister met to discuss **proposed amendments to the Juvenile Justice (Care and Protection of Children) (JJ) Act, 2015**.

- The GoM meeting was convened **to create greater synergy** between ministries on the Juvenile Justice (Care and Protection of Children) Amendment Bill, 2018

Juvenile Justice (Care and Protection of Children) Act, 2015

- **Improvement Over the Act of 2000:**
 - The Juvenile Justice (Care and Protection of Children) Act, 2015 **replaced the Juvenile Justice (Care and Protection of Children) Act, 2000** to comprehensively address children in conflict with law and children in need of care and protection.
- **Change in Nomenclature:**
 - The Act changes the nomenclature from 'juvenile' to 'child' or 'child in conflict with law'. Also, it **removes the negative connotation** associated with the word "juvenile".
 - It also includes several **new and clear definitions** such as orphaned, abandoned and surrendered children; and petty, serious and heinous offences committed by children
- **Special Provisions for Age 16-18 years:**
 - Included special provisions to tackle child offenders

committing heinous offences in the **age group of 16-18 years**.

- **Mandatory Constitution of the JJ Board:**

- It **mandates setting up Juvenile Justice Boards and Child Welfare Committees in every district**. Both **must have at least one woman** member each.

- **Adoption Related Clauses:**

- A separate new chapter on Adoption to streamline adoption procedures for an orphan, abandoned and surrendered children,
- Also, the **Central Adoption Resource Authority (CARA)** was granted the status of a **statutory body** to enable it to perform its function more effectively.
- The Act states that the adoption of a child is final on the issuance of an adoption order **by the court**. Currently, there are **629 adoption cases pending** in various courts.

- **Inclusion of New Offences:**

- The Act included several new offences committed against children (like, illegal adoptions, use of child by militant groups, offences against disabled children, etc) which are **not adequately covered under any other law**.

- **Child Care Institutions (CCI):**

- All Child Care Institutions, whether run by State Government or by voluntary or non-governmental organisations are to be **mandatorily registered** under the Act within **6 months** from the date of commencement of the Act.

The Juvenile Justice (Care and Protection of Children) Amendment Bill, 2018

Note:



- The Bill provides that instead of the court, **the district magistrate will issue adoption orders** to address the high pendency of adoption cases.
- The Bill also seeks **to transfer all pending matters related to adoption before any court to the district magistrate having jurisdiction over the area.**
- The proposed amendments intend to **expedite proceedings.**

Group of Ministers

- Groups of Ministers (GoMs) have been constituted from time to time to look into different issues/subjects.
- These are **ad hoc bodies** formed to **give recommendations** to the cabinet on certain emergent issues and critical problem areas.
- Ministers heading the concerned ministries are inducted into the relevant GoMs and when the advice is crystallised they are disbanded.
- Some of these GoMs have been also **empowered to take decisions on behalf of the Cabinet** known as **Empowered Groups of Ministers (EGoMs).**
- But with time the constitution of a large number of GoMs has resulted in many GoMs not being able to meet regularly to complete their work thus leading to significant delays on many major issues. Thus, all the Groups of Ministers (GoMs) and Empowered Groups of Ministers (EGoMs) **were abolished in 2014.**
- Further in **2015, 16 informal** Groups of Ministers (GoMs) were formed to discuss key issues of the country.

Assisted Reproductive Technology Regulation Bill, 2020

Why in News

The Union Cabinet has approved the **Assisted Reproductive Technology (ART) Regulation Bill, 2020** to monitor medical procedures used to assist people to achieve pregnancy.

- The Bill will regulate the Assisted Reproductive Technology services in the country. Consequently, infertile couples will be more ensured/confident of the ethical practices in ARTs.

Assisted Reproductive Technology

- ART is used to treat infertility. It includes fertility treatments that handle both a woman's egg and a man's sperm. It works by removing eggs from a woman's body. The eggs are then mixed with sperm to make embryos. The embryos are then put back in the woman's body.
 - **In Vitro fertilization (IVF)** is the most common and effective type of ART.
- ART procedures sometimes use donor eggs, donor sperm, or previously frozen embryos. It may also involve a surrogate carrier.

Key Features of the Bill

- **Safe ART**
 - The bill makes provisions for **safe and ethical practice** of assisted reproductive technology services in the country.
 - The Bill will ensure confidentiality of intending couples and protect the rights of the child born through ART.
- **Pre-Genetic Implantation Testing Mandatory**
 - The test allows doctors to test embryos for any possible abnormal chromosomes before they are transferred to the uterus. This is to avoid any genetic diseases in the population born through these technologies.
- **A National Board**
 - It will lay down a code of conduct to be observed by those operating ART clinics.
 - The Board will also formulate **minimum standards for laboratory and diagnostic equipment** and practices to be followed by human resources employed by clinics and banks.
 - ART Bank supplies sperm/semens, oocytes/oocyte donors and surrogate mothers to Assisted Reproductive Technology clinics or the patients.
- **Regulatory Boards at State Level**
 - The **States and Union Territories** will have to form **State Boards and State authorities** within **three months** of the notification of the proposed legislation.
 - The State Board shall have the responsibility to follow the policies and plans laid by the National Board for clinics and Banks in the State.

Note:

- A national registry and registration authority, which will maintain a database to assist the national Board to perform its functions.
- **Punishment**
 - The Bill proposes for a stringent punishment for those practising sex selection, sale of human embryos or gametes, running agencies/rackets/organisations for such unlawful practices.
 - The bill has a provision that those involved in **trafficking and sale of embryos** will be **fined Rs 10 lakh at first instance** and in second instance the person could be **imprisoned for up to 12 years**.

Need for the Bill

- **Exponential Growth:** Assisted reproductive technology (ART) has grown by leaps and bounds in the last few years. India is among countries that have seen the highest growth in the number of ART centres and ART cycles performed every year.
- The select committee of the Parliament that examined **the Surrogacy Regulation Bill, 2019** has said that it would be prudent to bring the ART Bill before the Surrogacy Bill, 2019, to establish a regulatory mechanism for ART clinics.
 - The ART Regulation Bill is supposed to be more overarching and the first step to regulate the sector. Without registration and a proper database of medical institutions and clinics providing such services, it is impossible to regulate services like surrogacy and abortion (**Medical Termination of Pregnancy Amendment Bill, 2020**).
 - It needs to be noted that all the three Bills are designed around protecting and recognizing women's reproductive rights

Cabinet Approves Bill to Regulate Surrogacy

Why in News

The Union Cabinet has approved the Surrogacy (Regulation) Bill, 2020.

- The Cabinet incorporated all the recommendations of the Rajya Sabha Select Committee before approving the Bill.
- The latest Bill is a reformed version of the draft legislation, which was passed by the Lok Sabha in August 2019.

Key Points

- The Surrogacy (Regulation) Bill, 2020 aims at banning commercial surrogacy and allowing altruistic surrogacy.
 - While commercial surrogacy will be prohibited including sale and purchase of human embryo and gametes, ethical surrogacy to Indian married couples, Indian-origin married couples and Indian single woman will be allowed on fulfillment of certain conditions.
- The Bill **allows a willing woman to be a surrogate mother** and would benefit widows and divorced women besides infertile Indian couples.

Recommendations of the Committee

- Definition of **"infertility"** as the inability to conceive after five years of unprotected intercourse should be deleted. It is too long a period for a couple to wait for a child.
- It was recommended that a surrogate mother **need not be a "close relative"**.
 - Requiring the surrogate mother to be a "close relative" potentially restricts the availability of surrogate mothers, affecting people in genuine need.
- Single women (widow or a divorcee) should be allowed to avail of surrogacy.
- The insurance cover for a surrogate mother should be increased to 36 months from 16 months.

Features of the Surrogacy (Regulation) Bill, 2020

- It provides for the constitution of surrogacy boards at the national as well as state levels to ensure effective regulation.
- It seeks to allow ethical altruistic surrogacy to the intending infertile Indian married couple between the age of 23-50 years for females and 26-55 years for males.
- Only Indian couples can opt for surrogacy in the country.
- It makes it mandatory for the couple to obtain a certificate of essentiality and also a certificate of eligibility before going ahead with surrogacy.
- It also provides that intending couples should not abandon the child born out of surrogacy under any condition. The newborn child shall be entitled to all rights and privileges that are available to a natural child.
- The Bill also seeks to regulate the functioning of surrogacy clinics. All surrogacy clinics in the country

Note:



need to be registered by the appropriate authority in order to undertake surrogacy or its related procedures.

- The Bill provides for various safeguards for surrogate mothers. One of them is insurance coverage.
- It also specifies that no sex selection can be done when it comes to surrogacy.

Private Member Bill for Two-Child Policy Norm

Why in News

Recently, a **Private Member's Constitution Amendment Bill** has been introduced in the Rajya Sabha **proposing incentives in taxation, education and employment for people who limit their family size to two children.**

Key Features of the Bill

- The Bill proposes for the **incorporation of a new provision — Article 47A (Duty of the State to promote small family norm) —** in Part IV of the Constitution.
 - Part IV of the Indian Constitution deals with the Directive Principles of the State Policy.
- The proposed insertion of Article 47A intends to **withdraw all concessions from people who fail to adhere to the 'small-family-norm'.**
- The Bill also intends to offer incentives in taxes, employment, education and priority in social benefit schemes and school admissions etc to its people who keep their family limited to two children.

Note:

- **Entry 20-A in List III (Concurrent List) of the 7th Schedule** deals with population control and family planning. This provision was added through the **42nd Constitutional Amendment 1976.**
- The **National Commission to Review the Working of the Constitution**, headed by M.N. Venkatachaliah had also recommended in 2002, that **Article 47A to be inserted** into the Constitution to control population explosion.

Current Status

- Presently, **six states** including Haryana, Rajasthan, Madhya Pradesh, Andhra Pradesh and Himachal Pradesh have made the **two-child norm mandatory for all panchayat members.**

- In 2018, 412 panchayat members in Rajasthan had been removed from their posts because they failed to comply with the two-child norm.

- The Supreme Court has upheld the provision in several states that debar members with more than two children from contesting and holding panchayat posts.

Need for Two-Child Policy Norm

- **India's population has already crossed 125 crores** and India is expected to **surpass the world's most populous nation-China** in the next couple of decades.
- Despite having the National Population Control Policy (2000), India is the second-most populous country in the world.
- Thus, **India's natural resources are extremely overburdened** and facing over-exploitation.

Criticism of the Two-Child Policy

- The **problems like gender imbalance, undocumented children**, etc. faced by China (as a result of the one-child policy) might be experienced by India.
- The restricted child policy **may create a shortage of educated young people** needed to carry on India's technological revolution.
- **India's birth rate is slowing down to sustainable levels.** In 2000, the fertility rate was still relatively high at 3.2 children per woman. By 2016, that number had already fallen to 2.3 children.

Private Member's Bill

- **Any Member of Parliament (MP) who is not a minister** is referred to as a private member.
- The purpose of the private member's bill is to draw the government's attention to what individual MPs see as issues and gaps in the existing legal framework, which require legislative intervention. Thus it reflects the stand of the opposition party on public matters.
- Its introduction in the House requires **one month's notice.**
- Its **rejection** by the House has **no implication on the parliamentary confidence in the government** or its resignation.
- The last time a private member's bill was passed by both Houses was in 1970.
 - It was the Supreme Court (Enlargement of Criminal Appellate Jurisdiction) Bill, 1968.
- 14 private member's bills have become law so far.

Note:

'A Future for the World's Children' Report

Why in News

Recently, the **World Health Organization (WHO)**, the **UN Children's Fund (UNICEF)** and **The Lancet** medical journal have released 'A Future for the World's Children' report.

- The report calculates the **Flourishing Index** and **Sustainability Index** of **180 countries**.
- India secures **131st on a flourishing index** that measures the best chance at survival and well-being for children.
- Further, **India ranked 77th on a sustainability index** that takes into account per capita carbon emissions and the ability of children in a nation to live healthy lives.

Flourishing Index

- **Methodology:**
 - Flourishing is the **geometric mean of Surviving and Thriving**.
 - The parameter of Surviving considers maternal survival, survival in children younger than 5 years old, suicide, access to maternal and child health services, basic hygiene, sanitation, and lack of extreme poverty.
 - The parameter of Thriving considers educational achievement, growth and nutrition, reproductive freedom, and protection from violence.
- **Global Scenario:**
 - **Norway leads the table** for survival, health, education and nutrition rates - followed by the Republic of Korea and the Netherlands.
 - The **Central African Republic, Chad and Somalia** rank at the **bottom**.
 - It also mentioned that the world's survival depended on children being able to flourish, but no country is doing enough to give them a sustainable future.
- **Marketing of Junk Food:**
 - The Index has linked an aspect of harmful marketing of junk food and sugary beverages with the alarming rise in childhood obesity.
 - Thus to protect children, it has called for a new global movement driven by and for children.

Sustainability Index

- **Methodology:**
 - The Sustainability Index **ranks countries on the basis of excess carbon emissions compared with the 2030 target**.
 - It also states that today's national conditions for children to survive and thrive must not come at the cost of eroding future global conditions for children's ability to flourish.
- **Global Scenario:**
 - The **leading countries in the Flourishing Index trail behind in the case of the Sustainability Index**, with Norway (156th), the Republic of Korea (166th) and the Netherlands (160th).
 - Each of the three emits 210 per cent more CO₂ per capita than their 2030 target.
 - The only **countries on track in Flourishing as well as in Sustainability Index** are Albania, Armenia, Grenada, Jordan, Moldova, Sri Lanka, Tunisia, Uruguay and Viet Nam.
 - The lowest emitters are Burundi, Chad and Somalia whereas the **U.S, Australia, and Saudi Arabia are among the 10 worst emitters**.

Recommendations

- It suggests the **elimination of CO₂ emissions** with the utmost urgency and requests to place children and adolescents at the centre of global efforts to achieve **sustainable development**.
- **New policies and investment in all sectors** to work towards child health and rights with the incorporation of children's voices into policy decisions.

Increasing Neonatal Deaths in MP

Why in News

According to the **National Health Mission (NHM)** data, **Madhya Pradesh (MP)** has recorded the **highest percentage of newborn deaths at 11.5%** against the total admissions to government-run Sick Newborn Care Units (SNCUs) in the past three years across the country.

- The **country's average percentage** of newborn deaths is at 7%.

Note:



- The **neonatal deaths in India** mainly occur due to premature births and low birth weight (35.9%), pneumonia (16.9%), birth asphyxia and birth trauma (9.9%), other non-communicable diseases (7.9%), diarrhoea (6.7%), congenital anomalies (4.6%) and infections (4.2%).

Note:

According to UNICEF, in India (2018),

- **Under 5 Mortality Rate** is 39 deaths per 1000 live births.
- **Infant Mortality Rate** (under one year of age) is 32 deaths per 1000 live births.
- **Neonatal Mortality Rate** (during the first 28 days of life) is 24 deaths per 1000 live births.

Key Points

- **Madhya Pradesh Compared to the National Scenario:**
 - The admissions of neonates in the hospital of Madhya Pradesh have dropped (lower than West Bengal, Rajasthan and Uttar Pradesh) from April 2017 to December 2019 but the percentage of deaths still remained at 12.2%.
 - Within the same time period, West Bengal reported maximum neonatal deaths (34,344) in the country but reported the declining percentage of deaths (from 9.2% in 2017 to 8.9% in 2019) which coincided with a decrease in admissions at hospitals.
- **Scenario in Tribal and Rural areas of MP:**
 - Most tribal (31 out of 51) districts in Madhya Pradesh reported low nutrition and weak maternal health levels and thus death percentage of more than 10.
 - The absence of community referrals, significantly aided by **Accredited Social Health Activist (ASHA)** workers is lacking in rural and tribal areas as only one in ten sick neonates born outside a hospital is taken to an SNCU.
 - Also, with increasing institutional deliveries in the State (80.8% as per the National Family Health Survey-4, 2015-2016), the number of neonatal care units has not increased proportionally.
 - It is majorly due to the absence of transport, inability to identify a disease by parents, and lack of awareness.
- **Scenario in Urban Areas:**

- Urban areas of Madhya Pradesh report a higher death percentage as they admit several serious cases from peripheral districts.
- Staff crunch, low community referrals, absence of a special neonatal transport service to health centres, reliance on units in cities as last resort and the non-availability of enough units to cater to increasing institutional deliveries have contributed to the increase in the percentage of deaths.
- Only one against the required five (82% shortfall) of surgeons, gynaecologists, physicians and paediatricians are available at hospitals.
- **Sex Ratio in Admissions at Hospitals:**
 - Madhya Pradesh has recorded an **abysmal sex ratio in admission** (number of girls admitted against 1,000 boys) at **663** in the three years against the country average of 733.
 - More admissions of boys (almost three-fourths of the cases) show a bias against the girl child in society,
 - The other reason for the lower admissions of a girl child can be attributed to better immunity among girl children to combat diseases.
- **Cases of Underreporting:**
 - The NHM data also reveals the cases of underreporting in 43 districts where government officials didn't report more than 50% of deaths of children under five to keep clean records.

Accredited Social Health Activist (ASHA)

- ASHA is a **trained female community health activist**. Selected from the community itself and accountable to it, the ASHA works as an interface between the community and the public health system.
- The role of an ASHA is that of a **community-level care provider**. This includes a mix of tasks: facilitating access to health care services, building awareness about health care entitlements especially amongst the poor and marginalized, promoting healthy behaviours, etc.

CHILDLINE India Foundation**Why in News**

According to the data compiled by the CHILDLINE India Foundation (CIF), 35% of the total cases of sexual abuse were committed by neighbours.

Note:

CHILDLINE India Foundation

- CIF is the **nodal agency appointed by the Ministry of Women and Child Development to manage CHILDLINE helpline 1098** - a free, emergency phone service for children in need aid and assistance.
- CIF is the largest network of agencies involved in protection of children.

Key Points

- **Type of Phone Calls:** The largest number of phone calls were made to seek intervention for abuse cases (17%), followed by those pertaining to child labour

(13%), education (12%), runaways (11%) and missing children (11%).

- **Nature of Abuse:** The nature of abuse children suffered shows that 37% of the complaints were about child marriage, 27% about physical abuse and 13% regarding sexual abuse. The remaining 23% constituted emotional, corporal, domestic and cyber abuse.
- **Profile of Abusers:** The analyses show that 35% of the total 8,000 cases of sexual abuse were committed by neighbours, 25% by strangers and 11% by family members. The remaining 29% of perpetrators were friends, relatives, teachers, institutional staff, hospital staff, police and step parents.



Note:



drishti

Security

Highlights

- Exercise Indradhanush

Exercise Indradhanush

Why in News

The 5th edition of India-UK joint Air Force Exercise 'Indradhanush' began at Air Force Station, Hindan (Ghaziabad, Uttar Pradesh) on 24th February, 2020.

Key Points

- The theme of this edition of the exercise is '**Base Defence and Force Protection**'.
 - This theme is of significance considering the

recent threats to military establishments from terror elements.

- Ex Indradhanush provides a platform for the air forces of both the countries to share and jointly validate strategies and tactics to counter terror threats to their installations.



- **Other joint exercises between India and UK:**
 - Navy: Konkan
 - Army: **Ajeya Warrior**



Note:



drishti

Miscellaneous

Highlights

- 100 years of Jamshedpur City
- SPICe+ Web Form
- International Mother Language Day

100 years of Jamshedpur City

Why in News

Jamshedpur City is celebrating the completion of 100 years.

- Jamshedpur is **one of the first industrial planned cities of India** and the most populous urban agglomeration in **Jharkhand**.

Key Points

- The city, originally a village called Sakchi, was renamed as Jamshedpur by then Viceroy of India **Lord Chelmsford (1916-21) in 1919** in the honour of **Jamsetji Nusserwanji Tata**, founder of the Tata group.
- It is **located in Chota Nagpur plateau**, surrounded by the Dalma Hills and at the confluence of Kharkai and Subarnarekha Rivers.
- Jamshedji Tata had established the Tata Iron and Steel Company (TISCO) in Jamshedpur in 1907. TISCO (now Tata Steel Ltd) is the oldest iron and steel enterprise of India.

Subarnarekha River

- Subarnarekha (Line of gold) river flows through the states of Jharkhand, West Bengal and Odisha.
- **Major Tributaries:** Kanchi River and Kharkai river.

SPICe+ Web Form

Why in News

Recently, the **Ministry of Corporate Affairs (MCA)** has launched the **Simplified Proforma for Incorporating Company Electronically Plus (SPICe+) web form**.

- The SPICe+ form will replace the existing SPICe form.

- SPICe was launched in 2016 and is a single form for multiple services for incorporation of a company.
- SPICe+ would offer 10 services by 3 central government ministries & departments (**Ministry of Corporate Affairs, Ministry of Labour & Ministry of Finance**) and one State Government (**Maharashtra**).
- **SPICe+ has two parts:**
 - **Part A for name reservation for new companies** and
 - **Part B** offering a bunch of services including incorporation, **Director Identification Number (DIN)** allotment, mandatory issue of Permanent Account Number (PAN), besides allotment of Goods and Service Tax Identification Number - GSTIN (if applied for).
- The new web form will help **save many procedures, time and cost** for starting a business in India.
 - India has improved its ranking to the **63rd spot** on the **World Bank's Ease of Doing Business (EODB) survey, 2019** out of 190 countries. However, the report had cited India was lagging behind in certain parameters such as starting a business.
 - The latest step is an effort towards achieving the government's target of reaching the 50th spot.

International Mother Language Day

Why in News

International Mother Language Day is observed every year on **21st February** since 2000 to **promote linguistic and cultural diversity and multilingualism**.

Key Points

- The idea to celebrate International Mother Language Day was the **initiative of Bangladesh**.

Note:

- It was approved at the **UNESCO General Conference (1999)** and has been observed throughout the world since **2000**.
- UNESCO celebrates '**Languages without borders**' on the occasion of International Mother Language Day 2020.
- The United Nations General Assembly had proclaimed **2008 as the International Year of Languages**.
- Globally **40% of the population** does not have

access to an education in a language they speak or understand. Nevertheless, progress is being made in mother tongue-based multilingual education with growing understanding of its importance, particularly in early schooling.

- The Ministry of Human Resource and Development along with educational institutions and language institutions is celebrating the day as the **Matribhasha Diwas in the country**.



Note:



drishti

Key Points

Details

Blank area for Key Points.

Lined area for Details.

Summary

Blank area for Summary.

